Business Regulations and Foreign Direct Investment in Sub-Saharan Africa: Implications for regulatory Reform

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FDI: a brief introduction

Different modes of entry to foreign markets:

- **Franchising**
- **Licensing**
- **Exports**
- **FDI**

However, problems including high transportation costs, trade barriers (exports), Need to retain strategic control, protect technological know-how (Licensing, franchising) make FDI favorable over other modes of entry.

A firm that engages in FDI becomes a multinational enterprise (MNE)

FDI: a brief introduction

- Different Sources of International Finance

1. Public Sources

- **ODA:** provided mainly by government and government-owned development finance institutions from OECD-DAC members

- **OOF:** Provided by a range of bodies including multilateral development banks, development finance institutions managed by private sector and/or by governments, and export credit agencies

- **SSC:** Provided by governments and government-owned institutions mainly from China, India, and Brazil, and focused on infrastructure and productive sectors

FDI: a brief introduction

2. **Private Sources**

- **Portfolio equity flows:** Provided mainly by institutional investors, investment funds, and banks managed by the private sector
- **Commercial loans:** Long-term loans provided by banks to developing countries
- **PDA:** Provided by NGOs, foundations, faith-based organizations and corporations
- **Remittances**: Provided by family members
- **FDI:** Provided and managed mainly by private companies with the aim of acquiring a long-term stake in a company in another country

FDI in Sub-Saharan Africa

International Capital Flows to Sub-Saharan Africa, 2013 (as % of total flows)

Resource type	**Share in %**
Short-term debt flows	1
Banks	3
Bonds	8
Portfolio equity inflows	16
ODA & OOF	6
FDI Inflows	65
Other Private flows	1

Source: World Bank

FDI in Sub-Saharan Africa

Although FDI is the primary source of international capital to Sub-Saharan Africa, the region's performance in attracting FDI flows remains poorer compared to other developing regions such as Latin America or South-East.

FDI inflows (in $billion), by region, 2012-2014

Region	2012	2013	2014
Developing Asia	401	428	465
Latin America and the Caribbean	178	186	159
Africa	56	54	54
Europe	401	326	289
North America	209	301	146

Source: World Development Report, 2014

FDI in Sub-Saharan Africa

- Top 10 FDI recipients in Sub-Saharan Africa (average 2005-2014) and Doing Business Ranking

Country	Average ratio of natural resource exports to Total merchandise exports (2005-2014)	Share of FDI inflows (average 2005-2014)	Doing Business Rank 2014 (World rank)
1. Nigeria	95.13	19.37%	147
2. South Africa	37.70	16.81%	41
3. Mozambique	64.96	6.94%	139
4. Ghana	24.60	6.34%	67
5. Congo	90.63	5.58%	185
6. DR Congo	76.54	5.04%	183
7. Eq. Guinea	94.67	4.12%	166
8. Tanzania	17.74	3.97%	145
9. Sudan	77.35	3.60%	149
10. Zambia	73.15	3.57	83

Source: calculations based on data from UNCTAD, http://unctadstat.unctad.org

Motivation

1. FDI can create and maintain productive growth, bring together know-how and technology diffusion, employment generation, and expansion of access to infrastructure and social services in host economies (Borensztein et al, 1998; Lim, 2001; UNIDO, 2008; Dams, 2009; Asiedu, 2013).

2. As the largest source of international finance to Sub-Saharan Africa, FDI is hailed to play a major role in the post-2015 context

Contribution

The study examines the impact of business regulations on FDI inflows to Sub-Saharan Africa. In particular:

- Whether improvements in business regulations as measured by the World Bank's Doing Business affect FDI inflows

- What particular elements of the business regulations determine FDI inflows in Sub-Saharan Africa

The paper uses the Doing Business distance-to-distance scores as proxies for business regulations, and controls for differences in natural resource endowments, population size, income level, level of governance, and inflation

The paper uses random effects estimation and considers the impact of time effects on FDI inflows

Classical determinants of FDI

A firm engages in FDI for four main raisons (Dunning, 2000):

1. Have access to better, larger or new markets that are attractive for their size or growth --- *Market-seeking investment*
2. Exploit the resources available in a particular location --- *Resource-seeking investment*
3. Promote long-term strategic objectives (e.g. acquisitions, alliances) --- *Strategic-asset seeking investment*
4. Take advantage of efficient production conditions (e.g. local workforce, infrastructure, and **particular government policies**) --- *Efficiency-seeking investment*

Determinants of FDI

- Government policies include particular macroeconomic policies and business regulations

- Since 2003 the World Bank has been measuring the quality of these regulations in more than 150 economies through the Ease of Doing Business Index

- The Ease of Doing Business Index quantifies business regulations in ten specific areas: starting a business, dealing with construction permits, registering property, getting credit, getting electricity, paying taxes, trading across borders, enforcing contracts, resolving insolvency

- Comparison of business regulations across countries is based on two aggregate measures: Ease of Doing Business ranking and Distance-to-Frontier

Doing Business and FDI

- Ease of Doing Business ranking: compares economies with one another, and ranks economies from 1 to 189, based on the simple average of the percentile rankings on each of the 10 topics included in the Doing Business index.

- Distance-to-Frontier: compares individual economies with the best performer (best regulatory practice) on each indicator. Scores are reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the 'frontier' (best practice observed on each of the ten indicators across all economies in the Doing Business sample).

Doing Business and FDI

Sub-Saharan Africa top 20 business-friendly economies and Share of FDI inflows (2014)

Economy	Doing Business Rank (World Rank)		Share of FDI 2014
	World Rank	Sub-Saharan Africa Rank	(% of total Sub-Saharan Africa)
Mauritius	20	1	0.9
Rwanda	32	2	0.6
South Africa*	41	3	13.3
Botswana	56	4	0.9
Ghana*	87	5	7.8
Seychelles	80	6	0.5
Zambia*	83	7	5.7
Namibia	98	8	0.9
Cape Verde	121	9	0.2
Swaziland	123	10	0.02
Ethiopia	125	11	2.7
Kenya	129	12	2.3
Uganda	132	13	2.7
Lesotho	136	14	0.1
Mozambique*	139	15	11.4
Burundi	140	16	0.07
Sierra Leone	142	17	1.0
Liberia	144	18	0.7
Tanzania*	145	19	4.9
Nigeria*	147	20	10.9

Source: Doing Business 2016

Doing Business and FDI

Distance-to-frontier scores in the top 10 FDI destinations in Sub-Saharan Africa (2014)

Economies	Starting a Business	Registering Property	Protecting Investors	Trading Across Borders	Enforcing Contract
South Africa	89.4*	66.2*	80*	71.2*	66.2*
Congo	48.9	44.2	33.3	15.9	44.1
Mozambique	80.4*	61.9*	60*	64.2*	34.6
Nigeria	73.8*	26.6	53.3*	50.1	47.7
Ghana	83.2*	79.2*	63.3*	65.5*	57.6*
Zambia	86.8*	62.9*	56.7*	21.8	57.5*
Tanzania	78.4*	60.1*	53.3*	60.7*	66.2*
DR Congo	27.6	52.7	23.3	30.4	33.5
Eq. Guinea	36.9	54	36.7	60.1*	63.2*
Sudan	74.3*	78.7*	33.3	42.7	40.4
Sub-Saharan Africa Average	66.9	56.8	44.1	51.1	49.6
Best Global Performer	(99.9) New Zealand	(99.87) Georgia	(96.7) New Zealand	(96.8) Singapore	(85.7) Luxembourg

Source: Doing Business 2014; (*) above regional average

Doing Business and FDI

Distance-to-frontier scores closer to 100 is are associated with greater inflows of FDI (World Bank, 2013).

Distance-to-frontier and FDI in Sub-Saharan Africa

Economies grouped by quality of regulations	Average Distance to frontier	Average FDI inflows in millions $ (2013+2014)
Top 10	63.44	1437.09
Middle 10	50.12	1094.06
Lowest 10	38.16	281.28

Source: Calculation based on data from Doing Business database and UNCTAD statistics database.
Note: This table is adapted from the World Bank (2013, p. 47)

Doing Business and FDI

- Countries where it takes fewer procedures for starting a foreign-owned business tend to receive greater FDI inflows (Waglé, 2006)

- FDI inflows are larger in countries where it takes less time for starting a business (Busse and Groizard, 2009).

- Costs, days and procedures required for starting a business are significantly associated with new firm registrations (Klapper and Love, 2010).

- Positive and significant association between Doing Business ranking and FDI inflows (Jayasuriya, 2011; Nnadozie and Njuguna, 2011).

Doing Business and FDI

- Getting Credit and Enforcing Contract, and all sub-indicators focusing on cost and time, are the most important for regulatory reform (Hanusch, 2012)

- Developing countries that have recorded greater improvement in Doing Business ranking after the global recession have attracted higher FDI flows Bayraktar (2013).

- What matters most for FDI is the "trading across borders" component of the World Bank's Doing Business (Corcoran and Gillanders, 2014)

Data

- Dependent variable: net FDI inflows in billion US$. Data obtained from United Nations Conference on Trade and Development (UNCTAD).

- Independent variables: distance-to-frontier scores on starting a business, registering property, enforcing contract, protecting investors, and trading across borders. Data obtained from the Doing Business data base.

- Control variables: population, natural resources, governance effectiveness, GDP per capita, inflation. Obtained from UNCTAD, World Development indicators, and WB governance database

Estimation and Discussion of Results

Random effects Model

$$FDI_{it} = \delta_{it} + \beta_1 SB_{it} + \beta_2 TAB_{it} + \beta_3 RP_{it} + \beta_4 EC_{it} + \beta_5\, PI_{it} + \beta_6\, pop_{it} + \beta_7\, NR_{it} + \beta_8\, Infl_{it} + \beta_9\, LGDP_{it} + \beta_{10} GE_{it} + \varepsilon_{it}$$

- Where net inflows of FDI are a function of Doing Business distance-to-frontier scores (***starting a business, trading across borders, registering property, enforcing contract, and protecting investors***) and log of total population, the ratio of natural resource exports to total merchandise exports, inflation rate, log of GDP/capita, and governance effectiveness

- We assume that time-specific factors influence changes in net FDI inflows

Estimation results

	(1)	(2)
VARIABLES	Random Effects	Robust Random Effects
Starting a Business	**12.16*** **	**12.16*** **
	(2.92)	(6.01)
Registering Property	-2.386	-2.386
	(0.51)	(0.92)
Protecting Investors	**18.19*** **	**18.19*** **
	(3.17)	(4.11)
Trading Across Borders	**9.316** **	**9.316*** **
	(2.49)	(8.65)
Enforcing Contract	8.666	8.666
	(1.42)	(1.30)
Log Total Population	**459.9*** **	**459.9*** **
	(7.74)	(8.98)
Natural Resources	**6.757** **	**6.757*** **
	(2.55)	(5.04)
Log GDP per capita	**224.5** **	**224.5*** **
	(2.52)	(2.97)
Governance Effectiveness	**-7.531* **	**-7.531*** **
	(1.69)	(4.62)
Inflation	-0.038	**-0.0380*** **
	(0.88)	(4.80)
Constant	**-7,167*** **	**-7,167*** **
	(8.37)	(8.73)
Observations	440	440
Number of year	10	10
Hausman chi-square	0.967	
Time effects	no	yes

Z statistics in absolute value are in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Estimation resultsn

- When account is taken of population size, natural resources, income level, governance effectiveness, and inflation, FDI inflows in Sub-Saharan Africa are influenced by improvement in business regulations related to business start-up (*starting a business*), facilitation of international trade (*trading across borders*), and protection of investors (*protecting investors*)

- The ratio of natural resource exports to total merchandise exports (resource abundance), population size (market size), and GDP/capita (level of income) are significant drivers of FDI in SS-Africa. This means that FDI to SS-Africa is resource- and market-seeking

- Inflation is detrimental to FDI flow to SS-Africa

Policy implications and conclusion

- Sub-Saharan African countries can increase their access to global FDI flows by setting the best performers on each Doing Business indicator as benchmark for their reform efforts

- Successful implementation of sound regulatory reforms is a great deal possible by learning from successful cases from countries such as New Zealand and Singapore.

- It will be necessary to learn from regulatory reforms in East Asia, which is the largest recipient region for global FDI flows

Conclusion (cont'd)

- This study encountered some limitations, in particular because the analysis was based on a small timeframe for a set of 44 cross-sections, and therefore a relatively small number of observations

- The study is based on secondary data, namely the World Bank's Doing Business data, which might have suffered from errors in their collection and calculation. Therefore, results of this analysis should be accepted with caution.

- Given the scarcity of data for some Sub-Saharan African countries, we restricted our sample to 44 countries, while initially the study intended to include 48 countries

- On the other hand, this study is interesting as it focuses on a geographic area, namely Sub-Saharan Africa, and therefore, contributes to effectively answering the question whether investors are more likely to favor Sub-Saharan African countries based on differences in business regulations, beyond classic variables such as natural resources.

THANK YOU!!!