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CONTRIBUTION OF NATIONAL IMAGE, BUSINESS CLIMATE, AND TECHNOLOGY TRANSFER TO FDI AMONG SUB-SAHARAN AFRICA NATIONS

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ABSTRACT

Purpose: The purpose of this study was to establish the contribution of National Image, Business Climate, and Technology Transfer to FDI among Sub-Saharan Africa nations.

Methodology: This study was based on positivism approach and study used a descriptive crosssectional design. The population of the study was all of SSA 46 countries and a census survey of all the countries in SSA was done hence no sampling was done. Both primary and secondary data were used in the study. A structured research questionnaire was used in collecting primary data. The questionnaire was administered to the Heads of Foreign Missions of each of the 46 SSA countries in Kenya. Secondary data was used for data on FDI obtained from the UNCTAD publications. Data was then analyzed using descriptive statistics and regression analysis. Testing of hypothesis was done through Adjusted R^2 F-ratio test (Analysis of Variance) and regression of the coefficient.

Results: The study established the synergistic contributions of national image, business climate and technology transfer to FDI among Sub-Saharan Africa countries. Adjusted R square shows that the overall model explained 88.5% of changes in FDI. The overall model was also statistically significant ($F= 95.709$, $p\text{-value} < .05$). The influence of individual variables was statistically significant for business climate ($B= 1.240$, $p\text{-value} < .05$) and technology transfer ($B= .540$, $p\text{-value} < .05$) and not statistically significant for national image ($B= .282$, $p\text{-value} > .05$).

Unique contribution to theory, practice and policy: The findings of this study support the need for Sub-Saharan Africa countries to create a national image individually as countries and as a block

as this will go a long way in attracting FDI which will eventually translate to economic development. It is therefore prudent for countries in Sub-Saharan Africa to understand the national image dimensions in the regional context in order to carry out frequent analysis and develop strategic approaches relevant to their FDI competitiveness.

Keywords: *National Image, Business Climate, Technology Transfer, FDI, international business*

1.0 INTRODUCTION

1.1 Background to the Study

The research on national image is from 1950s during Cold War (Ji, 2016), when realism mainly concerning national power is prevailing globally. Research on modern Foreign Direct Investment (FDI) can be dated back from 1960s, focusing on the motion, determinants and conditions of multinational enterprises (MNEs) (Fang, 2003), which weighs heavily on global business, developed rapidly with the trend of MNEs (Blonigen, 2005). Research on technology transfer is initiated by Vannevar Bush in 1945 then defined by Brooks (1968) that it is process by which science and technology are diffused through human activity. Business climate research is initiated by the World Bank (WB) Report on ease of doing business and a business environment indicator system is introduced to assess the business environment of the global economy. Increasingly, research (Búrcio, 2014 and Young, 2017) links FDI to national image and another research related to national image links national brand to FDI (Kalamova & Konrad, 2009). Whilst some studies (Lahimer, 2007) link FDI to business climate, others (Doytch and Narayan, 2016) link FDI to renewable energy. Although the attractiveness of a country as an investment location is influenced by the country's image, business climate as weighed by a WB report and promotion of renewable energy do moderate this relationship.

Monopolistic Advantage Theory derived from Hymer's doctoral (1960) thesis has challenged traditional theories on FDI and opens a new area for FDI research, which demonstrates FDI is different from foreign finance capital investment and becomes one of five mainstream schools of FDI theory (Fang, 2003). National image equation from International Institute for Management Development (IMD) is selected as the theoretical foundation together with these most representative FDI theories. The traditional research on FDI is restricted within a single area and lack of systematic connection with related area. This study will leverage national image equation, Monopolistic Advantage Theory and Technology Gap Theory to better understand the relationships between FDI, national image and moderating effects of business climate and technology transfer.

Foreign direct investment (FDI) in Sub-Saharan Africa region has persistently averaged 1% of global flows (Bartels, Alladina & Lederer, 2010). According to Rodriguez-Pose and Cols (2017), FDI flows are increasing fast worldwide. Sub-Saharan Africa has fallen behind global level and covered less than two percent of global FDI. Moreover, the region tends to attract more commodity driven FDI. In addition, the countries from the Sub-Saharan region with more FDI flow is the commodity endowed area. In this regard, natural resources and size of national markets have generally been considered the main drivers of FDI in the Sub-Saharan Africa (SSA).

National image has been defined by various scholars in recent years, however there is still no unified definition. The simplest and one of the earliest definitions of national image maybe from

Lippman (1922) who defines it as the ideas created in people's brain on an overseas nation. Boulding (1959) states that national image refers to a cognitive, emotional, and assessment on the overall behavior unit, which in this case is a nation. In order to have a quantifiable indicator of national and city brand image, National Brands Index (NBI) has been created by Anholt (2011) with a set of proven methods called Anholt-GFK Roper as well as City Brands Index (CBI).

Only 50 countries (regions) have been included in this index currently for measuring the nation brands including general questions and substantive questions. Anholt (2011) designed general questions to measure respondents' awareness of a country including three parts: familiarity with the country, love for the country, and experience and opinions about the country. Familiarity with the country is classified into very familiar, familiar, not so familiar, only heard the name and knew nothing.

The degree of love for a country is a 7-point Likert scale, in which 7 points are very like, 4 points are neither love nor hate, and 1 point is very dislike. The experience and opinions of dealing with the country are classified into the following: vacations in the country, business travel in the country, purchase of goods or services in the country, and deal with the current economic recession. Substantive issues include six columns: commodities, culture, governance, residence, tourism, immigration and investment. There are specific questions under each section. Respondents' responses were grouped into a 7-point Likert scale, with 7 point being strongly agreed, 4 point being neither agreeing or disagreeing, and 1 point being strongly disagreeing.

Eifert, Alan and Vijaya (2005) define the business climate as policies, institutions, infrastructure, human resources and geography that affect the efficiency of different businesses and industries. Sun (2016) argues that business climate is a relatively broad concept. Business climate has "participated" in the operation of the enterprise from the national institutional structure to road transportation. For the convenience of analysis, many scholars have divided the business climate into multiple elements. Specific tests have been conducted on the business climate influence on the establishment, operation, capital acquisition and performance. The conclusions provide a reference for how to make good use of the external business climate, and also provide policy recommendations for how the government can improve the business climate.

Worthington (2011) has divided the external environment that affects the company into two categories as follows: one is the external factors that directly affect the company's daily operations, and the other is the tendency to affect the overall corporate external factors. The ease of doing business index (WB, 2001) was created by WB Group, intending to introduce a business environment indicator system to assess the business environment of the global economy, promote the economy to improve regulatory efficiency, and improve the legal and regulatory system. After more than ten years of exploration, a set of index system for measuring the business environment of each country has been established. At present, ten important indicators are included in the evaluation system: starting a business, getting electricity and paying taxes.

The concept of Technology Transfer (TT) was initiated by Bush (1945). The first United Nations Conference on Trade Development (UNCTAD, 1964) defined technology transfer as a collective term for technology input and technology output. Technology transfer happens within countries, regions, industries or between industries and within the system itself, which emphasizes the

adaptability of technology and the environment in this transfer. In other words, technology users are not technology researchers and the users gain the technology by transference from the researchers. Combining the practice of technology transfer at home and abroad, Xue (2007) proposed five indicators for the evaluation of technology transfer, these include: efficiency of technology suppliers (universities and national research institutions).

The other indicators include conversion rate of technical results and input-output ratio, market and economic development, opportunities, costs, human capital, and government incentives. Zhang and Li (2007) argue that technology transfer can be explained by the motion of three types of knowledge: the first is the motion of the tangible knowledge system, such as the knowledge existing in products, equipment, and manufacturing enterprises; the second is the movement of the intangible knowledge system, similar information such as proprietary technology patents; the third is the macro and micro information flows that exist between countries, regions, business organizations, and individuals.

1.2 Research Problem

Foreign Direct Investment (FDI) is one of the most widely used measures of macroeconomic performance of a nation. Nations are, therefore, always seeking strategies for enhancing favorable net FDI position. Theory and practice demonstrates that national image is a key antecedent of FDI. Boulding (1959), for instance, holds that national image can determine the choice of investment destination. However, some scholars argue that national image does not directly affect FDI but that it operates through perception of the potential investor on the overall business climate. Others such as Scott (1965) posit that whereas this may be the case, the relationship between national image and FDI can be strengthened or weakened by the level of technology transfer within the FDI framework.

Bartels, Alladina and Lederer (2010) argue that Sub-Saharan Africa's foreign direct investment (FDI) has persistently averaged 1% of global flows. Others such as Rodriguez-Pose and Cols (2017) posit that FDI flows have escalated exponentially worldwide. Sub-Saharan Africa, nevertheless, falls behind and only attracts less than 2% of global FDI. In spite of this, subsequent literature such as Andoh and Cantah (2020), Wako (2018) and Okafor (2015) propose that heterogeneity among the SSA countries in Africa in terms of FDI is attributable to factors such as national image, technology transfer, and the overall business climate.

Various studies have been done on FDI, national image, business climate, and technology transfer. However, there are still knowledge gaps. Machuki, Vincent and Evans Aosa (2011) uses three dimensions of complexity, dynamism and munificence to describe Kenya's business environment and investigate the external environment on corporate performance based on a survey of 23 Nairobi-listed companies. The study established that business climate significantly affects FDI. The study, however, used time series data to investigate the phenomenon in Kenya. This is a methodological gap since variability of FDI occurs across nations. An investigation by Benn, Akan and Vijaya (2005) used panel data for the period: 2000 to 2004 to determine the relationship between business climate and competitiveness of Kenyan manufacturing industry. The findings of the study may not be generalized to the other countries in SSA whose internal factors make them different in terms of national image, business climate, and technology transfer. It is evident that

most of the previous studies have been in this area has been done in foreign, hence little has been done in the countries in SSA. Moreover, there still exist a debate as to whether it is national image that attracts of FDI or it is indeed FDI that leads to improved national image (Lu & Zhang, 2014).

1.3 Research Objective

The objective of the study was to establish the contribution of National Image, Business Climate, and Technology Transfer to FDI among Sub-Saharan Africa nations.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Soft Power Theory

Joseph Nye (1990) believes that comprehensive national power is divided into two forms: hard power and soft power. Hard power refers to dominant power, including basic resources (such as land area, population, and natural resources), military power, economic power, and scientific and technological power; soft power is divided into national cohesion, culture. The degree of general acceptance and participation in international institutions. Nye summarized soft power as guiding force, attractiveness and imitating force. It is an assimilating power--the attractiveness of a country's thoughts and its politically oriented ability.

Robert Keohane (2013) and Joseph Nye (2000) refer that the attractiveness of soft power comes from ideas, culture, or the ability to set standards, systems, or agendas that affect other countries' preferences. Huntington (2002) pointed out that the growth of hard economic and military power will enhance self-confidence and sense of ego, and firmly believe that compared with other peoples, their own culture or soft power is superior, and will greatly enhance the culture and ideology of other National attraction. Pang (1997) argues that a country with soft power radiates influence, which makes relevant external actors affected by this radiation, so that this country can use it to achieve international strategic goals.

Soft power research is on the rise in both developed and developing countries which have contributed to a great deal of interest on this topic, because soft power theory not only has a big impact in guiding the national economy development, but also pave the way on its International influence. National image is an aspect of soft power of the country. The theory of soft power and the national image have the effect of complementing and promoting each other. The soft power theory is relevant to this study as it explains the importance of soft power in a country and therefore provides a good foundation to establish the influence of national image on FDI.

2.1.2 Monopolistic Advantage Theory

Hymer (1960) postulates that monopolistic advantages of the enterprises come from the incomplete advantages of the product market and the factor market, who trusts the firms can gain and keep various monopolistic advantages in FDI to get higher profits than local companies due to the existence of imperfect competition. Advantages of management skills and economy of scale lead to low-cost operating advantages (Gillen & Lall, 2004). The monopolistic advantage theory has built the basement for the later study and development of FDI.

Pei and Zheng (2011) argues that the advantage of the enterprises comes from both domestic region and overseas area. Active intervention in the home country's industrial organization and policy incentives can enhance the international competitive capability. Industrial advantage, scale advantage, home country's national image and cultural advantage promote the domestic enterprise's advantage. In this sense, national image consists of the important elements to build monopolistic advantage of the mother land, which will lead the country to focus more on shaping the national image.

The Monopolistic Advantage Theory is applied in the proposal because it does not only open up the research field of international direct investment, but also breaks through the analysis model of FDI from the perspective of capital flow, and proposes that imperfect competition in the production factor market is the fundamental cause of FDI (Barney, 1986). Monopolistic advantages possessed by multinational companies generally have technological advantages, fund raising advantages, economies of scale advantages, management advantages, and monopolistic advantages resulting from incomplete product markets.

2.1.3 Technology Gap Theory

The technology gap theory initiated by Posner (1961) believes that technology is a production factor, and the real technological level has been increasing, but the development level varies in different nations, which enables the technology-intensive countries to take a lead in technology and export the products with high technology. As the technology is imitated by the importing country, this comparative advantage disappears leading to an end of trade.

The theory was extended by Krugman (1991) to the field of technology transfer. The technological gaps and technology transfer problems in various development countries are summarized into two main types in International Trade Technology Gap Theory. The first is the pure technology gap model, which simply uses the difference in wage levels between the two countries to reflect the technological gap; the second is the Commodity model, which considers that production efficiency is an important factor in determining technology transfer. Krugman argues there is a technological gap between the two countries and is a necessary condition for technology transfer. If there is no technology gap, then there is no need for technology transfer activities.

Technology transfer serves as an important topic in international business, which is also one of the key variables in the proposal. Technology Gap Theory can explain the motivation of FDI and relationships among FDI, national image, business climate. Renewable energy is developing rapidly worldwide and the representative power type of green energy trend. Technology Gap Theory can have a better explanation in the technology transfer practice.

2.2 Empirical Review

Asongu, Uduak and Isihak (2018) did a study on determinants of FDI in fast-growing economies in the BRICS and MINT regions. The results demonstrate that market size, infrastructure availability, and trade openness play the most significant roles in attracting FDI to BRICS and MINT, while the roles of availability of natural resources and institutional quality are insignificant. However, there is need to determine the influence of business climate and technology transfer as possible catalysts of the relationship between national image and FDI. In addition, most member states of BRICS and MINT are found outside, hence the need to investigate the phenomenon in an

exclusively African setting such as SSA. Saadi (2011) investigated the relationship between technology transfer, FDI, among developing countries. The study shows that developed countries with absolute advantages in production technology benefit by transferring their advanced technologies to the export sectors of developing countries.

Due to the improvement in terms of trade, developed countries will benefit from technology transfer regardless of the transfer method. The study compared disadvantaged Northern and advantaged Southern parts of Japan. This is an assumption that Japan is a developing country. A study by Newman, Rand, Talbot, and Tarp (2015) detected the connection among FDI, technology transfer and production spillover. However, the concept of productivity spillover was operationalized so as to cover both national image and business climate.

With a specially designed survey of over 4000 Vietnam manufacturing firms, the study separates out productivity gains obtained through direct transfers of knowledge/technology along the supply chain between linked firms from productivity effects through indirect FDI spillovers. The results show that the productivity gains associated with the direct connection between foreign and domestic firms in the supply chain are not captured by commonly used spillover indicators. Although the study made major contributions to knowledge, the unit of analysis was the “firm” yet national image should be analyzed across nations.

3.0 METHODOLOGY

This study was based on positivism approach and study used a descriptive cross-sectional design. The population of the study was all of SSA 46 countries and a census survey of all the countries in SSA was done hence no sampling was done. Both primary and secondary data were used in the study. A structured research questionnaire was used in collecting primary data. The questionnaire was administered to the Heads of Foreign Missions of each of the 46 SSA countries in Kenya. Secondary data was used for data on FDI obtained from the UNCTAD publications. Data was then analyzed using descriptive statistics and regression analysis. Testing of hypothesis was done through Adjusted R^2 F-ratio test (Analysis of Variance) and regression the coefficient. The analysis was conducted using Statistical Package for Social Sciences while results were presented in tables followed by pertinent discussions.

4.0 FINDINGS AND DISCUSSIONS

4.1 Descriptive Statistics National Image

This study classified the national image as political, economic, social and technological. To capture data on the various national image dimensions, descriptive statements derived from literature were presented to respondents on a 5-point Likert scale. The 5-point Likert scale was from 1(not at all) to 5 (very large extent). They were presented to respondents and were requested to indicate the extent to which the statements applied in their countries.

Table 1: Descriptive Statistics for Political

Political	N	Mean	Std. Dev	CV
My country has strong justice system	38	2.158	1.089	0.505
My country has independent parliament	38	2.842	1.268	0.446
My country has an effective executive	38	2.579	1.091	0.423
My country's leadership respects the constitution	38	2.632	1.037	0.394
My country has strong electoral system	38	2.737	1.250	0.457
Average		2.589	0.907	0.350

The average mean score of the statements depicting the manifestations of politics in national image among the surveyed countries is 2.589, standard deviation of 0.907 and coefficient of variation of 0.350. This implies that politics manifests moderately among Sub-Saharan Africa countries. The study further revealed that the responses varied at low level with coefficient of variation (CV) ranging from 39% to 51% implying that the manifestation of politics was on equal level across the countries surveyed.

Table 2: Descriptive Statistics for Economic

Economic	N	Mean	Std. Dev	CV
My country's financial system is well developed	38	2.579	1.311	0.508
My country has clear inflation policies	38	2.263	0.965	0.426
My country has high foreign remittances generally	38	2.895	1.252	0.433
My country has reliable Forex system	38	3.000	0.973	0.324
Average		2.684	0.706	0.263

Source: Research Data (2020)

The average mean score for the statements of how economics manifests among the Sub-Saharan Africa countries implies it exists to a moderate extent (Mean=2.684, SD=0.706 and CV=0.263). On overall, the coefficient of variation ranged from 32% to 51%, which implies that there was a low variation of responses as far as the statements are concerned across the surveyed countries.

Table 3: Descriptive Statistics for Social

Social	N	Mean	Std. Dev	CV
My country has flexible work culture	38	3.368	1.037	0.308
My country has robust and diverse human resources	38	3.368	1.179	0.350
My country has country has less religious barriers to integration	38	3.395	1.226	0.361
My country has country has less cultural barriers to integration	38	3.368	0.871	0.259
Average		3.375	0.771	0.228

Source: Research Data (2020)

The average mean score for the social dimension of national image among the surveyed countries (Mean=3.375, SD=0.771 and CV=0.228) imply they statements manifest to a moderate extent. However, the low range of CV of 26% to 36% implies that the responses varied less among all the countries surveyed. This depicts that the social dimension of national image is common among the Sub-Saharan Africa countries.

Table 4: Descriptive Statistics for Technological

Technological	N	Mean	Std. Dev	CV
My country has clear policies on ICT	38	2.684	1.126	0.420
My country has robust internet supply	38	2.947	1.234	0.419
My country has high supply of ICT skills	38	3.211	1.239	0.386
Average		2.947	1.010	0.343

Source: Research Data (2020)

The average mean score for the technological dimension of national image among the surveyed countries (Mean=2.947, SD=1.010 and CV=0.343) imply they statements manifest to a moderate extent. However, the low range of CV of 26% to 36% implies that the responses varied less among

all the countries surveyed. This depicts that the technological dimension of national image is common among the Sub-Saharan Africa countries.

Business Climate.

Table 5: Descriptive Statistics for Registering Business

Registering Business	N	Mean	Std. Dev	CV
Registering a business in my country is fast	38	3.053	1.146	0.375
The processing speed of business registration applications is high	38	2.737	1.250	0.375
My country has clear public outline of requirements for business registration	38	3.316	1.216	0.375
Average		3.035	1.048	0.375

Source: Research Data (2020)

Table 5 shows that the average mean score for the manifestations of registering a business is rated to a moderate extent (Mean=3.035, SD=1.048, CV=0.375). Further there was equal variation among all the three statements on registering a business among Sub-Saharan African countries with a coefficient of variation of 37.5%. The study therefore depicts the manifestations of ease of registering business among Sub-Saharan Africa countries.

Table 6: Descriptive Statistics for Starting a Business

Statement	N	Mean	Std. Dev	CV
There are limited requirements to start a business in my country	38	3.105	1.071	0.345
My country has limited progressive laws on business registration	38	3.421	0.990	0.289
There are clear institutions that deal with start ups	38	2.474	1.094	0.442
Average		3.000	0.749	0.250

Source: Research Data (2020)

The results in Table 6 show that the average mean score for the statements depicting the manifestation of registering a business is 3.000, standard deviation of 0.749 and coefficient of

variation of 0.250. This infers that starting a business in Sub-Saharan Africa countries has been eased to a moderate extent.

Table 7: Descriptive Statistics for Construction Permits

Construction Permits	N	Mean	Std. Dev	CV
My country has limited requirements for construction permits	38	3.237	0.901	0.278
My country has established institutions that deal with construction permits	38	2.895	0.968	0.334
My country does not have much red-tape in construction permit acquisition	38	3.000	1.076	0.359
Average		3.044	0.689	0.226

Source: Research Data (2020)

The results in Table 7 infer that to a moderate extent, there is manifestation of ease of acquiring construction permits among Sub-Saharan Africa countries (Mean = 3.044, SD = 0.689, CV = 0.226). There was also low range of coefficient of variation from 34.3% to 50.8% indicating that there was low variation in responses.

Table 8: Descriptive Statistics for Getting Electricity

Getting Electricity	N	Mean	Std. Dev	CV
My country has enough on-grid energy supply	38	3.053	1.050	0.344
My country has enough off-grid energy supply	38	2.684	0.921	0.343
My country rarely experiences electricity supply interruptions	38	2.421	1.184	0.489
The cost of electricity in my country is not prohibitive of investment	38	2.579	1.311	0.508
Average		2.684	0.914	0.340

Source: Research Data (2020)

The findings in Table 8 indicate that to a moderate extent, there is ease of access to electricity (Mean=2.684, SD=0.914 and CV=0.340)

Technology Transfer

Table 9: Descriptive Statistics for Tangible Knowledge System

Tangible Knowledge System	N	Mean	Std. Dev	CV
My country has clear skill transfer policies for all FDIs	38	2.579	1.042	0.404
My country has clear industry-academia collaboration framework	38	2.947	0.887	0.301
My country has clear internship policies	38	2.158	1.089	0.505
My country has clear indentured learnership policies	38	2.421	1.091	0.451
Average		2.482	0.656	0.349

Source: Research Data (2020)

The average mean score of tangible knowledge system is 2.482, standard deviation of 0.656 and coefficient of variation of 0.349 which implies that tangible knowledge system is being practiced to a less extent among Sub-Saharan Africa countries. The analysis revealed that the respondents varied less on the statements of tangible knowledge system with a range from 30% to 50% implying that it is a common consideration amongst the Sub-Saharan Africa countries.

Table 10: Descriptive Statistics for Intangible Knowledge System

Intangible Knowledge System	N	Mean	Std. Dev	CV
My country has adaptive social system	38	2.789	0.893	0.320
My country has adaptive institutional policies	38	2.842	0.874	0.308
My country encourages integrated learning in the industry	38	2.895	1.021	0.353
Average		2.842	0.783	0.275

Source: Research Data (2020)

The average mean score of intangible knowledge system is 2.842, standard deviation of 0.783 and coefficient of variation of 0.275 which implies that intangible knowledge system is being practiced to a moderate extent among Sub-Saharan Africa countries. Further, it can be seen that to a moderate

extent, Sub-Saharan African countries: encourages integrated learning in the industry; has adaptive institutional policies; and has adaptive social system.

Table 11: Descriptive Statistics for Macro and Micro Information Flow

Macro and micro information flow	N	Mean	Std. Dev	CV
My country freely provides information about the firms in the country	38	2.421	1.311	0.541
My country provides accurate information about the investment opportunities in the country	38	2.000	1.214	0.607
My country provide accurate information about the governance systems in the country	38	2.421	1.091	0.451
Average		2.281	1.094	0.480

Source: Research Data (2020)

Given the results, it can be inferred that to a less extent, Sub-Saharan Africa countries: freely provides information about the firms in the country; provide accurate information about the governance systems in the country; and provides accurate information about the investment opportunities in the country as shown by a mean of between 2 and 2.421. This implies that macro and micro information flow in these countries is only being practiced to a less extent.

In general, all the aspects measured under micro and macro information flow were found to be implemented to a less extent (Mean= 2.281, SD = 1.094, CV = 0.480). The variation in the responses was also high implying that respondents varied sharply among the surveyed countries on the aspect of macro and micro information flow.

Foreign Direct Investments

Table 12: Descriptive Statistics for Foreign Direct Investments

	N	Minimum	Maximum	Mean	Std. Deviation
FDI (\$)	46	-1297748899	5376210860	828982503.13	1205867119.586
Valid N (listwise)	46				

Source: Research Data (2020)

The results of the study reveal that the average FDI for the last 10 years (2009 to 2018) in Sub-Saharan Africa countries was 828,982,503.13 dollars with a standard deviation of 1,205,586, 119.586 dollars implying variability from one country to another. The lowest FDI recorded was

1,297,748,899 dollars implying that the outflows are more than the inflows while the highest value of FDI recorded was 5,376, 210,860 dollars.

4.2 Regression Analysis

A corresponding hypothesis H_{04} ; the Contribution of national image, business climate and technology transfer on FDI among Sub-Saharan Africa countries are not significant. The findings of the tests are as per Table 13.

Table 13: The Contribution of National Image, Business Climate and Technology Transfer on FDI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946a	.894	.885	.449960
a. Predictors: (Constant), Technology transfer, National Image, Business Climate				

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.133	3	19.378	95.709	.000 ^b
	Residual	6.884	34	.202		
	Total	65.017	37			
a. Dependent Variable: FDI						
b. Predictors: (Constant), Technology transfer, National Image, Business Climate						

Regression Coefficients

Variable	B	Std. Error	Beta	T	Sig.
(Constant)	14.286	.377		37.866	.000
National Image	.282	.229	.134	1.234	.226
Business Climate	1.240	.283	.575	4.374	.000
Technology transfer	.540	.176	.292	3.064	.004

a. Dependent Variable: FDI

- b. Discuss if Betas are significant and direction (sign)

Source: Research Data (2020)

The findings in Table 13 indicate an increase in the explained variation in the model which was statistically significant. Adjusted R square shows that the overall model explained 88.5% of changes in FDI. The overall model was also statistically significant ($F = 95.709$, $p\text{-value} < .05$).

The influence of individual variables was statistically significant for business climate and technology transfer and not statistically significant for national image. The influence of business climate ($B = 1.240$, $p\text{-value} < .05$) was higher than the influence of the other two variables, that is, technology transfer ($B = .540$, $p\text{-value} < .05$) and national image ($B = .282$, $p\text{-value} > .05$).

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The influence of individual variables was statistically significant for business climate and technology transfer and not statistically significant for national image. The influence of business climate was higher than the influence of the other two variables, that is, technology transfer and national image.

5.2 Conclusion

The study established the synergistic and contributions of national image, business climate and technology transfer to FDI among Sub-Saharan Africa countries. This conclusion lends credence to the postulation that foreign direct investment is not only determined by the national image of the host country but business climate and technology transfer factors also come into play.

5.3 Recommendations for Theory, Practice and Policy

This study has advanced frontiers of knowledge from the study findings. It lends support to strategic management theories that national image, business climate and technology transfer concepts influence FDI (Huntington, 2002). This study has confirmed the contributions by the various theories and lends support for the hypothesized relationships. These are Soft Power Theory (Joseph Nye, 1990); Monopolistic Advantage Theory (Hymer, 1960) and the Technology Gap Theory (Posner, 1961).

The result contributes to the strengthening of the literature by confirming the postulations of these theories including the technology gap theory that supports the tangible and intangible knowledge system transfer as a dimension of technology transfer that influences FDI. The results indicate that technology transfer contributes more to FDI by supporting the national image dimensions.

The findings of this study demonstrate that the approach on the variables is important in Sub-Saharan Africa countries and that it helps in identifying theories unique to developing countries and increase the national image validity of theories developed in industrialized countries. The study has demonstrated that Sub-Saharan Africa countries do operate in competitive environments and their FDI inflows is subject to national image, business climate and technology transfer aspects as postulated in the various paradigms.

The dimensions of business climate and FDI as used in this study also support the soft power theory that the study findings indicated the moderating effect of business climate on the relationship between national image and FDI. This study sought to establish this relationship and how other variables influence its FDI as a strategic management concept. Other empirical research studies have proposed that national image has a positive relationship with FDI. These study findings confirmed and support the proposition of a statistically significant effect.

Manifestation of national image dimensions had varied and mixed results on FDI. The findings of this study offer suggestions that are beneficial to policy makers in the Sub-Saharan Africa countries. Sub-Saharan Africa countries have previously lacked best strategic management practices to attract FDI and hence with proper understanding of the regional dynamics, the study helps to bridge the gap. Foreign direct investments are very crucial to SSA economic development and contribution to the gross domestic product.

The findings of this study guide policy makers to develop strategies, promotion of business climate and technology transfers appropriate to the countries in Sub-Saharan Africa in order to enhance their FDI flows. It supports the need for Sub-Saharan Africa countries to create a national image individually as countries and as a block as this will go a long way in attracting FDI which will eventually translate to economic development.

It was discovered that there is a positive influence of social image on FDI inflows in SSA member countries. The influence is also statistically significant. The study recommends the need to come up with flexible work culture, robust and diverse human resources, less religious barriers to integration and less cultural barriers to integration as this will have an effect on the FDI inflows generated at the SSA member countries. Technological dimension of national image was also found to have a significant positive effect on FDI. A recommendation of the study is that SSA countries should have clear policies on ICT supply, robust internet supply and high supply of ICT skills knowing that they have an influence on FDI inflows.

The need for SSA countries to strengthen their business climate is critical. The SSA countries should ensure that registering a business in their country is fast, the processing speed of business registration applications is high and that the country has clear public outline of requirements for business registration if they are to be a competitive destination for FDI. The SSA countries should also ensure there are limited requirements to start a business in their country, ensure the country has limited progressive laws on business registration and that there are clear institutions that deal with startups.

For SSA countries to be a competitive destination for FDIs, there is need to ensure that the countries have limited requirements for construction permits, that the countries have established institutions that deal with construction permits and that the countries do not have much red-tape in construction permit acquisition. Further, SSA countries should ensure that they have enough on-grid energy supply, enough off-grid energy supply and that the countries rarely experiences electricity supply interruptions and also make the cost of electricity in their country not be prohibitive to investment.

National image dimensions manifest differently in the Sub-Saharan Africa. Some dimensions are significant while others are not on the different levels of FDI. It is therefore prudent for countries

in Sub-Saharan Africa to understand the national image dimensions in the regional context in order to carry out frequent analysis and develop strategic approaches relevant to their FDI competitiveness.

Investors and their managers who are responsible for cross border investments and keen on developing national image may have to either adapt to changing technology transfer dimensions or to proactively influence policy dimensions on the technology transfer and hence finding the results of this study useful.

The findings that business climate and technology transfer positively influence the relationship between national image and FDI, certainly shall be useful in making key managerial and operational decisions. The positive effects have higher contributions to the FDI and this implies that investors and their strategic managers should concentrate not only on monitoring the strategic behavior and culture but also on building on the areas that impact on FDI. This should form the basis of how decisions related to business climate have to be observed by the countries. They should not pay excessive attention to one factor as the FDI performance is imperative.

Sub-Saharan Africa countries should focus on identifying and developing technology transfer and business climate aspects that significantly related to FDI in their national image dimensions and adjust their focus and strategies accordingly. The management has to note that FDI is a constellation of factors.

The Sub-Saharan Africa countries are highly encouraged to take advantage of business climate in relation to the changes in the strategic behavior and environment. This allows them to benefit more from their unique resources and processes in order to improve its FDI performance to achieve a competitive advantage.

The results of this study are helpful to management practitioners in making long term national image and to address constraints faced by the Sub-Saharan Africa countries that could have led to low capacity utilization and productivity in the countries. They could be able to make their countries attractive to competitive FDIs. The managers may also be able to address their internal weakness for example, the inefficient and capacity to assess use of national image.

5.4 Suggestions for Further Research

Future research should also focus on countries outside the SSA market and assess other African countries and how they attract FDIs within their respective regions. This will determine whether the conclusions reached in this study are applicable in the context of other geographical areas in Africa and how they relate to SSA's business environment vis-à-vis the African market. Future research should also classify countries according to their regions such as EAC, COMESA among others. The researcher suggests future research to focus on FDI flows in specific sectors of the economies such as manufacturing, trade in services, agribusiness, SMEs, energy and infrastructure which all contribute critically to the countries' GDP.

The present study relies on a single informant who had knowledge of the country's activities and their level of national image. However, the use of multiple respondents from each country is preferable and would cure aspects of bias and possibly provide fairly more credible data. Multiple respondents could be chosen from several ministries and from various sectors, so that the analysis

could be extended to assess how respondents in separate ministries and at various sectors perceive with respect to the major variables in the study.

Finally, despite using multivariate analysis to test this study's propositions, perhaps future studies could use different statistical techniques (e.g. path analysis, structural equation modeling -SEM) that can provide better insights and understanding of the relationships among the core factors in the study. Also, future studies should consider utilizing multiple methodologies (i.e. quantitative and qualitative) to help identify the key factors behind FDI performance. The aim behind using different statistical techniques and /or plural methodologies is to validate and further strengthen the existing research findings.

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