

MARKET ATTRACTIVENESS EVALUATION OF SUB-SAHARAN AFRICA, APPLYING SWOT ANALYSIS AND AHP METHODS

Peter Symon Nganga, Nagasaki University
Yukihiro Maruyama, Nagasaki University

ABSTRACT

Purpose: Market attractiveness of a nation is primarily driven by the macro factors Politics, Economy, Social and Technology (PEST). Generally, traditional market selection analysis emphasizes on purely macroeconomic and political factors which perceives the market attractiveness to be related only to these two sets of factors. At the outset the analysis fails to account for social/cultural dynamism which has great impact on future potential market attractiveness and the entire nation's economy. Therefore, the objective of this research is to expand the tradition model of economic & financial and political with social/ cultural issues, technology, & infrastructure and present a model which goes beyond the traditional PEST analysis to PESTI to evaluate the potential market attractiveness of 44 Sub-Saharan countries while prioritizing on social cultural issues.

Design/Methodology/approach: First, through literature review the author identifies the strengths, weaknesses opportunities and threats (SWOT) of the African continent. Secondly the author applies Analytical Hierarchy Process model to solve the complex multi-criteria decisions of evaluating the market attractiveness of a country with respect to global macro environment indicators. Statistical data from various credible sources were adopted for the weights calculation in AHP sub criteria level instead of the commonly applied intensity rating. Absolute measurement criteria are weighted independently of the evaluation of the alternative.

Findings: The resulting priorities revealed attractive market growth potential and sourcing opportunities in Mauritius that, might otherwise have been overlooked. Mauritius have integrated social cultural and politics with economic factors making it the best option among the 44 evaluated Sub-Saharan countries, various regional trading blocs are also a possibility. The analysis also helped us to gain a better understanding of the trade-offs in the decision making process and a clearer understanding of the effectiveness of AHP absolute measurements in multi criteria decision problem.

Research Limitations/ Implications: *Follow up studies with more sub-criteria will contribute to the development of a better assessment model for the market attractiveness. The choice of criteria that are considered can vary depending upon the researcher or the industry which the businesses want to engage in therefore the model depends on personal preferences.*

Practical implication: *A useful tool or road map for Multinational National Enterprises searching for new markets in developing countries.*

Originality value: *The research develops the body of knowledge on market attractiveness by addressing the shortcomings of the traditional Macro analysis (PEST) and expands the three prior studies on developing countries market potential analysis. In addition, the author adopted normalized statistical data on the sub criteria instead of the commonly applied intensity rating.*

Paper Type: *Research Paper*

Key words: *Globalization, Market attractiveness, Sub-Saharan Africa, Analytical Hierarchy Process, SWOT, criteria, decision alternatives*

INTRODUCTION

Currently, convincing argument can be made that globalization has led to advancement in technologies and this advancement has ushered a new world without boundaries. Countries are currently interconnected by flows of knowledge and information through computers, TVs, and satellites and also the web and the internet have revolutionized and hastened how business is conducted globally. (Bhandari & Heshmati, 2005). Hence, ideas exchange has increased tremendously thus altering consumer perception and preferences while boosting countries' economies, trade, technologies and improved health care. However, understanding the global business environment and its complexities is challenging especially when, each nation's market environment is composed of unique cultural, political, legal and economic characteristics that defines or dictates how business is conducted in the nation's boundaries; this set of national characteristics may differ greatly from nation to nation. Consequently, globalization can be helpful for achieving genuine development but these conditions are not sufficient, and indeed, managed poorly, the local response or lack of response to globalization can ultimately do more harm than good for developing countries. (Tadaro & Smith, 2003). Regardless, this phenomena has opened up new markets that were once closed to foreign companies, and its ultimate effect on trade will only increase the importance of standalone nations and regional trading blocs.

Although there are tons of literatures that have examined issues regarding to the selection of global emerging markets that are attractive to Multinational Enterprises (MNEs) in the developed countries. There are few academic studies that address the attractiveness of

developing countries such as in Latin America, Far East Asia, and Mediterranean Africa. However, currently, empirical research on opportunities in Sub-Saharan nations is very limited both in quantity and focus. Therefore, research expands the understanding of the potential of yet another untapped developing nations with great market attractiveness potential. Generally, traditional market selection analysis relies on purely macroeconomic and political factors at the outset of the analysis, and fails to account for a developing market's vitality and future potential resulting from rapid change, national attributes that affect specific sectors and market receptiveness. (Sakarya & Eckman & Hyllegard, 2006). Moreover, the analyzed available information for those developing countries primarily deals with economics and economic systems, which perceives the market attractiveness to be related to only two sets of factors deriving from two points of view: economic & financial and political. (Saaty 1980; Tripodo & Dazzi, 1995; Abid & Bahlouh, 2011). However, these two set of factors are not sufficient to fully analyze the complexities of market attractiveness in Sub-Saharan African nations, which differs from those of developing nations in Mediterranean Africa, Asia and Latin America in terms of social cultural, political systems the level of economic development, and geographic climatic conditions, their markets are characterized by higher degree of risk than their developed counterparts. Therefore, this research incorporates the two sets of factors deriving from two points of view: economic & financial and political and expands them with macro indicators namely, social cultural, technological factors and infrastructure in the multi criteria decision problem analysis., into few easily understandable priorities based on the degree of conformity between potential or existing market environmental factors at the macro level (national level) emphasizing on the external environment of each country's social/cultural, political/ legal, economic and technological applying AHP methodology. The research presents important opportunities for MNEs operating in the areas of financial services, mineral resources, infrastructure development, industrial sector development and various other related consultancies.

GENERAL PURPOSE

Traditionally, market attractiveness of a country is primarily driven by the macro factors Politics, Economy, Social and Technology (PEST). Therefore, in this research market attractiveness of the (nations) is considered to be consistent and robust growth of economic and non-economic factors at the macro level in recent years. Host market potential is considered one of the most important explanatory factors in country attractiveness and the market selection and constitutes a primary driver in a firms venture into international markets. (Yoshida, 1987). In this case the author explains, a country potential could be related to a set

of variables economics /financial and political legal, social cultural, and technology/infrastructure which have on going improvement for the business environment, exponential growth in trade and investment and of substantial improvements in the quality of human life. Due to the complexities of the Sub- Saharan political economy emphasis should be more on social/cultural factors being the major contributor of civil strife in Africa. The regions multi-ethnic composition at times causes tribal conflicts which affects economic growth. Evaluation of the market attractiveness in Sub-Saharan countries focus should be both on standalone and regional bloc attractiveness. Some standalone attractive markets also happen to be globally strategic markets and this is the arena where the current and future global competition occurs. (Gillespie et.al, 2007). Moreover, most Sub-Saharan countries are landlocked which offers them geographic proximities with identical climatic conditions.

The goals of this undertaking are to contribute to the field of research and to the business sphere in the following:

- (a) Expert knowledge which incorporates economic and non-economic factors for sound judgment arising from various sources for MNEs Senior Managers while upgrading the traditional model (PEST) to the new (PESTI)*
- (b) Incorporate conventional relative measurements with conventional absolute measurements on AHP methodology for multi-criteria decision making in the global environment*
- (c) Suggest and highlight new markets opportunities in Sub Saharan Africa.*
- (d) Stimulate academic discussion about the various problems and opportunities in Sub-Saharan Africa.*

SWOT ANALYSIS SUB SAHARAN AFRICAN REGION:

SWOT analysis is a simple widely used qualitative tool which examines a company, industry or a nation's strengths and weakness (internal factors) with opportunities and threats (external factors).The analysis provides the basic outline in which to perform analysis of decision situations. In this situation the author uses the tool to examine the strengths, weaknesses, opportunities and threats of the Sub-Saharan African continent as a block market. The strength of the African continent as a whole is its richness in natural resources; it has 50 % of the world's gold, most of the world's diamonds and chromium, 90 % of the cobalt, 40% of the world's potential hydroelectric power, 65 % of the manganese, millions of acres of untilled arable farmland as well as other natural resources. (Williams, 1997). Moreover, last year, five of the top 10 fastest growing economies globally were Sub-Saharan African countries: South Sudan, Sierra Leone, Gambia, Mozambique and the Democratic Republic of Congo. There was no doubt that, these real GDP growth figures were impressive as economies

were growing rapidly from a low base. Some were even down to one-off factors such as in the case of South Sudan where 2013 real GDP growth of 32.1% (the highest in the world) was a forecast rebound from a severe contraction of 53.0% in 2012 when the government shut down oil production. However, the region overall is expected to maintain the second fastest economic growth globally, with a forecasted real GDP growth of 47.1% in 2013-2020 (Eghbal, 2013). Therefore, MNEs senior managers should focus on targeted and tailored strategies for each country overall, the size of the Sub-Saharan African.

Last year, a markets attractiveness survey conducted by Ernest & Young, overall ranked Africa fifth out of nine other regions, ahead of the former Soviet states, Eastern Europe, the Middle East, Western Europe and Central America, the respondents ranked Africa as a more attractive place for investments a significant improvement from the survey conducted in the year 2011 which Africa was slightly ahead of Soviet states and Central America. (Ernst & Young's, 2013). The opportunities in Africa are increasingly evident, by the year 2035, the continent will have the largest workforce with over half of the population currently under the age of 20; over the last decade improvements in macroeconomics and a burgeoning and fast growing South-South trade and investment flow (with over US\$170 billion with China alone). Across various sectors Africa presents ample prospects with US\$2.6trillion of revenue expected by 2020 across resources, agriculture, consumer and infrastructure, of which US\$1.4 trillion will be solely in consumer industries. Furthermore, being the primary recipients of international development aid these countries' presents crucial opportunities for those organizations operating in areas such as infrastructure development, industrial sector development, financial services, and other consultancies.

Despite the considerable improvement over the past decade, the major threat is, extreme poverty still remains widespread in the region. Over 800; million people are still struggling against extreme poverty and the situation may worsen with the population projected to be 1.7 billion by 2050. (JICA, 2013). According to the latest global poverty update for the first time since 1981, less than half of the African population of 47% lived below \$ 1.25 a day in 2008, the rate was 51% in 1981. However, the \$1.25 a day poverty rate in Sub-Saharan Africa has fallen 10 percentage points since 1999. The facts are, severe development challenges still remains in Africa, where approximately one in every two people currently, lives on \$1.25 a day (World Bank, 2012) the level of poverty is also aggravated by the Neglected Tropical Diseases (NTDS) and HIV virus. Since the epidemic of HIV aids globally about 70 million people are affected by the HIV virus and 35 million have died from it, Sub-Saharan Africa still remains the most severely affected region with nearly every 20 adults (4.9%) living with HIV

and accounting for 69 % of the people suffering with HIV worldwide. (World Health Organization, 2013).

Far from the HIV aids virus, Neglected Tropical Diseases are not necessarily serious health hazards; nonetheless they are an integral cause of poverty to many families. NTDs are primarily found in Asia, the Pacific, Central and South America. However, the majority of the people infected with NTDs live in Sub-Saharan Africa and in order to achieve the millennium goal of poverty eradication there is a greater need for NTDs control and if this can be attained it will be a huge relief on developing countries vulnerable economies. (O'Brien MP, 2008). Tribal conflicts and terrorism are other major problems, though the rate of tribal wars occurrence has subsided considerably still the problem crops up now and then due to uneven distribution of wealth from natural resources, and cattle grazing and watering pasture areas. Although terrorism is a relatively new problem brought by religion differences, the Islamist radicals have taken advantage of weak central governments, un manned porous borders, under-trained and under-paid police forces and flourishing drug cartels, for example, early this year there was shootings at an upscale shopping mall in Kenya instigated by a Somali militant group, again, early this year, an Islamic Maghreb conquered Mali (Olga Khazan, 2013). On May 20th of this year, a bomb blasted at Central Nigeria claiming over a hundred lives. Relatively, the negative image of the continent as a whole conceals the complex diversity of the economic performance and the existence of investment opportunities in individual nations. In spite of all these obstacles, economists expect to see US\$ 1.4 trillion in spending by African consumers in 2020. (Mahinda, 2013).

In historical and geographical perspective the entire continent consists of 54 small independent nations in total, 48 out of those considered as the Sub-Saharan region. Unfortunately Europe's arbitrary post-colonial demarcation left Africans bunched into countries that don't represent their heritage; a contradiction that still troubles the region even today. The artificial borders have often led to border conflicts. May be if the borders demarcation had no uncertainties' between Eritrea and Ethiopia, Mali and Burkina Faso, Nigeria and Cameroon, Senegal and Mauritania those wars could have been avoidable. (Zartman, 2001). One most common characteristic, they are landlocked therefore, supply chain requires frequent border crossings which is very difficult to manage due to poor infrastructures maintenance and lack of modern technology. This is a major hindrance for economic growth since it imposes excessive extra cost on transportation of goods. Solving these barriers may reduce the cost in supply chain as well as promote trade across industries, while attaining regional social and economic integration. Since the year 2005, the Japanese International Corporation Agency has studied and supported the development of cross-border transport

infrastructure (CBTI), in their recent research study, CBTI has defined infrastructure as the requirement for transportation that crosses multiple national borders, and the infrastructure that comprehensively includes physical “hard Infrastructure” such as ports, railroads, highways, cargo transshipment facilities, national border facilities, weighbridges (truck scales), and inland container depots (ICDs), as well as “soft Infrastructure” such as cross-border transport laws, regulations related to border crossing (e.g. Customs clearance, quarantine), and organizational systems and resources for smoothly operating and maintaining the hard infrastructure mentioned above (JICA, 2013).

According to the regional director of the African Development Bank, Africans have known for more than 50 years that, the infrastructures lags behind and it should be prioritized due to the fact that, the African growth has caused huge demographic shift from rural to the urban areas and the infrastructure has not kept pace with the growth. The director emphasizes that, over 30 countries have prolonged power problem, and transportation cost are on the rise increasing the cost of goods by approximately 75% in some of the landlocked nations. He emphasizes that, for the next decade, Africa needs to spend almost US\$90 billion a year to upgrade and maintain its crumbling infrastructure. (Faal, 2013).

APPLYING AHP MODEL, MARKET ATTRACTIVENESS:

There are various Multi-criteria decision analysis methodologies and Multivariate statistical methodologies used as geometric representations supporting multi-criteria decision making but, at times it’s hard to interpret the final result as a map of the environment due to its dependence on the measurable statistical properties of the data rather than on, more correctly, the perception of the problem and its political and social ramifications as they apply to each nation. Therefore, AHP developed by (Saaty, 1980), appeared to be the most appropriate suited model being a simple decision analysis model which combines subjective judgment and system approach. Currently, AHP model is widely used to solve various problems in Africa, such as, the suitability of community based management approach in forest reserves of Rwanda, (Masozerra & Alavalapatib & Jacobsonc & Shresthab, 2006), assessment for potential multi-airport system in Cape Town South Africa, (Zietman & Vanderschureen, 2014) and for screening urban transport projects in Accra Ghana, (Jones & Tefe & Opuku, 2013). The method applicability to multifaceted, multi-period and unrestricted problems made it the most preferred model for developing countries market attractiveness potential.

The application of AHP usually takes the following three basic steps, structuring the hierarchy, setting priorities and maintaining rational consistency. In this research, structuring the hierarchy, the decomposition of the overall goal is to find the market attractiveness

(potential) in Sub-Saharan African countries. The top level of the hierarchy refers to the goal which in this case is “market attractiveness or potential”. The subsequent levels include the elements that affect the decision (criteria or attributes), in this case Economic, Political/legal, Social/Cultural, Technology and Infrastructure these are the four main Macro-factors that most substantially influence a nation’s attractiveness. The second level includes elements (sub-criteria’s) that contribute to the definition of the first level criteria, in this case the author have prioritized factors that affects social cultural issues most. The bottom level consists of the decision alternatives (44 Sub Saharan countries, there was insufficient data for meaning analysis on four countries).

Setting the priorities entailed determining, for each level of the hierarchy, the relative importance between each pair of factors. The pairwise judgment started from the second level attributes (Economic, Political/Legal, Social/Cultural and Technology) to the lowest (Alternatives-44 Sub-Saharan Nations). However, the original Saaty’s AHP used relative measurements and had shortfalls in which it cannot deal with a situation involving many alternatives such as the 44 Sub-Saharan Nations, to overcome such predicament Saaty proposed an absolute measurement which we have incorporated with the dominant alternatives method proposed by (Kinoshita & Nakanishi, 1997) a new type of Analytical Hierarchy Process designed to deal with cases in which the weight of the criteria valley in accordance with the alternative chosen as the dominant view (Conventional absolute measurement). Finally the country is evaluated on its performance with respect to each sub-criterion using normalized data for the most appropriate rating grade. Normalization was necessary in this case since indicators such as GDP and inflation impacts the model differently, for example, highest GDP is best but a higher inflation is bad. The results were then weighted and combined to yield weights with respects to the major sub-criteria’s and the ranking of potential markets (nations) is the synthesized results or the output sought.

Criteria’s: Usually, the screening process of nations markets starts with gathering relevant information on each nations and screening out those un- desirable. The first stage involves applying macro- indicators (PEST) to discriminate between nations that present basic opportunities and those that either offers little or no opportunity or higher risk. Traditionally the Macro-Indicators describes the total market in terms, of PEST, emphasis primarily on political and economic attributes however, for the purpose of in-depth analysis the author has expanded the traditional (PEST) and included Infrastructure attribute to make (PESTI) in the methodology (AHP) with emphasis on social/cultural, **Sub-Criteria:** The second level includes elements (sub-criteria’s) that contribute to the definition of the first level criteria the

four main macro-indicators. For example, GDP, inflation contributes to economic criteria, Global peace Index, and CPIA contributes to political/legal criteria e.tc.

Alternatives: Each decision alternative (44 Sub-Saharan nations) contributes to each criterion in a unique way. Applying AHP the author specifies a mathematical process to synthesize the information on relative importance of the criteria and the preferences for the decision alternatives to provide an overall priority ranking of the decision alternatives. In the market attractiveness evaluation problem AHP will use the Authors personal preferences to provide a priority ranking of the forty four nations in terms of how well each nation meets the overall objective of being the best nation with the most appeal. Moreover, in the evaluation of the elements in the sub criteria level statistical data was adopted instead of the intensity ratings.

Establishing priorities using AHP: Pairwise comparison of the four criteria for the market attractiveness. In each of the above comparisons the author selected the most important criterion and then expressed sound judgment on how much more important the criterion is. Table 1 provides a summary of the five pairwise comparisons provided for the attractive market selection problem. However, the author notes that, the flexibility of AHP can accommodate the unique preferences of each individual researcher or analyst. The choice of criteria that are considered can vary depending upon the researcher or the industry which the businesses want to engage in. AHP methodology can accommodate any set of criteria depending with the decision maker.

(Figure 1.) (HIERARCHY FOR THE MARKET SELECTION PROBLEM

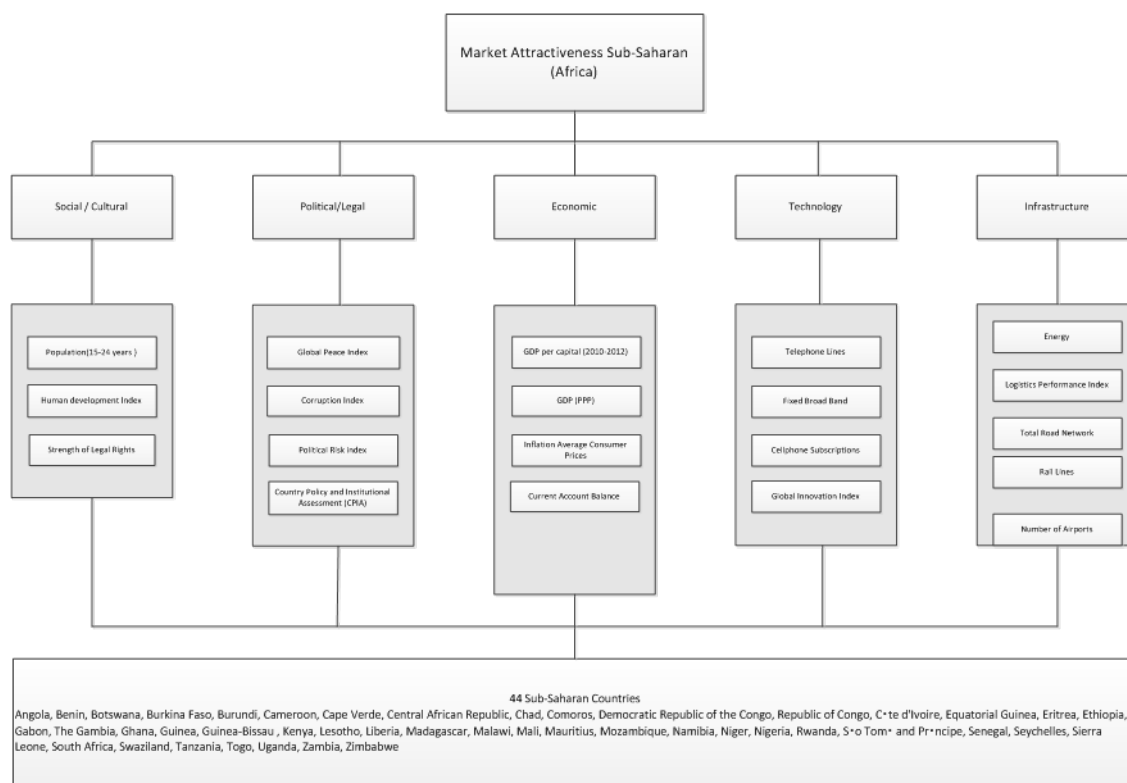


Table 1 is the summary of the five pairwise comparison Social/Cultural and politics are equally important and together these two criteria dominates the remaining criteria.

	Social/Cul	Politics	Economic	Technology	Infrastructure	Weight Priority
Social/Cul	1	1	3	6	3	0.3491
Politics	1	1	3	6	3	0.3491
Economic	1/3	1/3	1	3	1	0.1262
Technology	1/6	1/6	1/3	1	1/3	0.0495
Infrastructure	1/3	1/3	1	3	1	0.1262

In table 2 below, is the second level which includes elements (sub-criteria) that contribute to the definition of the first level criteria or the five main macro-indicators. Population is the dominant indicator.

	population15-24	Human Developm	Strength of lega	Weight Priority
population15-24	1	3	3	0.6000
Human Developm	1/3	1	1	0.2000
Strength of legal r	1/3	1	1	0.2000

In table 3 below, the dominant indicator is the global peace.

	Global Peace Index	Corruption Index	Political Index	Country Policy	Weight Priority
Global Peace Inde	1	3	3	3	0.5000
Corruption Index	1/3	1	1	1	0.1667
Political Risk Inde	1/3	1	1	1	0.1667
Country Policy &	1/3	1	1	1	0.1667

In table 4 below, the author identified GDP per Capital, GDP (PPP), and Current Account as the dominant criteria all three are equally important.

	GDPPER capital	GDP(PPP)	Inflation Rate	Current A coun	Weight Priority
GDP Per Capital	1	1	1/3	1	0.1667
GDP (PPP)	1	1	1/3	1	0.1667
Inflation rate	3	3	1	3	0.5000
Current Account E	1	1	1/3	1	0.1667

In table 5 below, telephone lines and global innovations dominates the rest of the criteria.

	Telephone lines	Fixed Broad Ban	Cellphone Subs	Global Innovat	Weight Priority
Telephone lines	1	3	3	1	0.3750
Fixed Broad Ban	1/3	1	1	1/3	0.1250
Cellphone Subs	1/3	1	1	1/3	0.1250
Global Innovation	1	3	3	1	0.3750

In table 6 below, the dominant indicators are the Energy consumption, logistics index, and the total road network.

	Energy Consumption	Logistics Index	Total Road Net	Rail Lines	Airports	Weight Priority
Energy Consump	1	1	1	2	3	0.2601
Logistics Index	1	1	1	2	3	0.2601
Total Road Netw	1	1	1	2	3	0.2601
Rail Lines	0.5	0.5	0.5	1	2	0.1378
Airports	1/3	1/3	1/3	0.5	1	0.0819

Formula applied: Below is the formula applied for the Criteria, Sub criteria's and the alternatives (Countries) To conclude the final result the alternatives two measurements were applied conventional relative measurements and conventional Absolute measurement The criteria are weighted independently of the evaluation of the alternative. MATLAB was also used to derive the final result of the Country's ranking

$W_1^T = (w_1, w_2, w_3, w_4)$	$\begin{pmatrix} w_1 * w_{e1} \\ w_1 * w_{e2} \\ w_1 * w_{e3} \\ w_1 * w_{e4} \\ w_2 * w_{p1} \\ w_2 * w_{p2} \\ w_2 * w_{p3} \\ w_2 * w_{p4} \\ w_3 * w_{s1} \\ w_3 * w_{s2} \\ w_3 * w_{s3} \\ w_4 * w_{t1} \\ w_4 * w_{t2} \\ w_4 * w_{t3} \\ w_4 * w_{t4} \end{pmatrix}$
$W_2^T = (w_{e1}, w_{e2}, w_{e3}, w_{e4})$	
$W_3^T = (w_{p1}, w_{p2}, w_{p3}, w_{p4})$	
$W_4^T = (w_{s1}, w_{s2}, w_{s3})$	
$W_5^T = (w_{t1}, w_{t2}, w_{t3}, w_{t4})$	
	$E = S_{ij} * W^T$

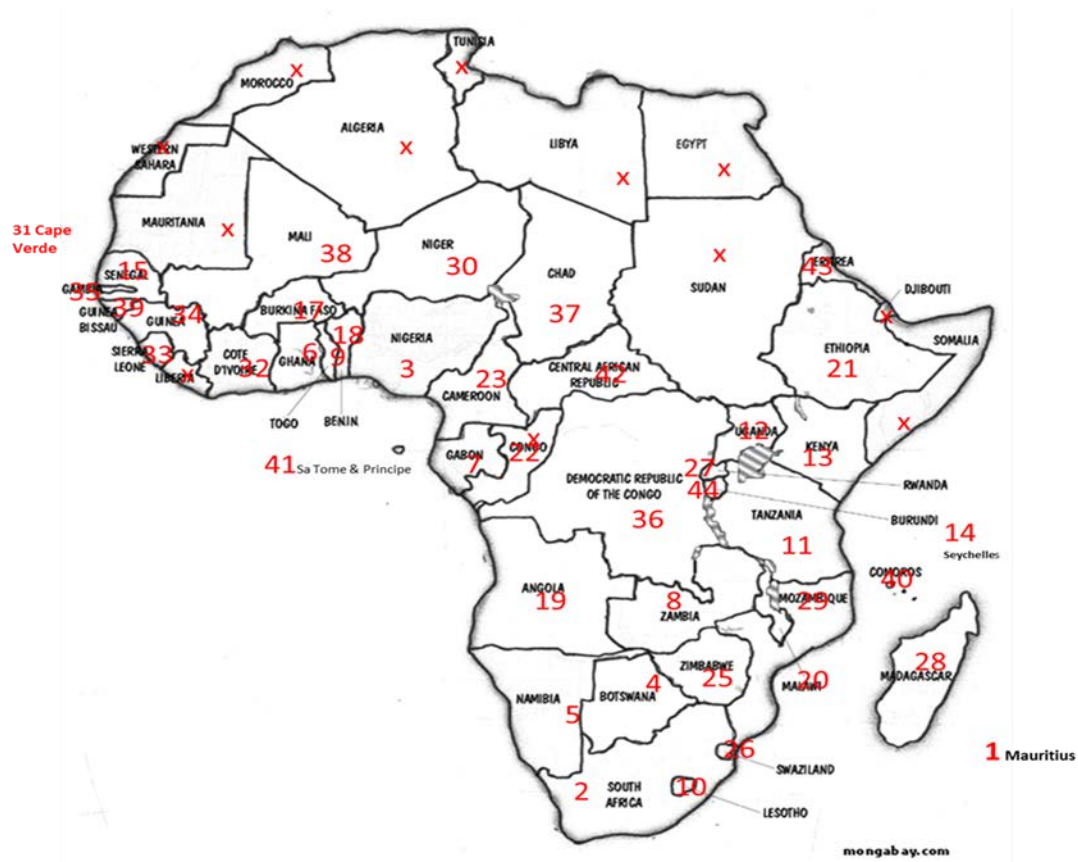
All sub-criteria and total weights

Sub-Criteria's	Weights
population15-24	0.2094
Human Development Index	0.0698
Strength of legal rights	0.0698
Global Peace Index	0.1745
Corruption Index	0.0582
Political Index	0.0582
CPIA	0.0582
GDP Per Capital	0.0210
GDP (PPP)	0.0210
Inflation rate	0.0631
Current Account Bal	0.0210
Telephone lines	0.0186
Fixed Broad Band	0.0062
Cellphone Subs	0.0062
Global Innovations index	0.0186
Energy Consumption	0.0328
Logistics Index	0.0328
Total Road Network	0.0328
Rail Lines	0.0174
Airports	0.0103

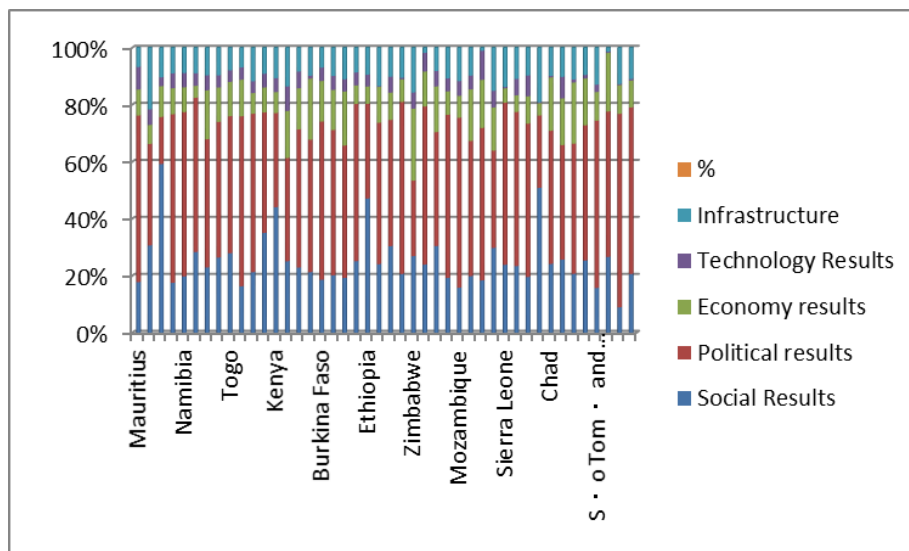
AHP ranking of the decision alternatives total weights

Ranking	Country Name	Total	Ranking	Country Name	Total	Ranking	Country Name	Total	Ranking	Country Name	Total
1	Mauritius	0.5416	12	Uganda	0.3579	23	Cameroon	0.2980	34	Guinea	0.2422
2	South Africa	0.5186	13	Kenya	0.3569	24	Liberia	0.2924	35	The Gambia	0.2404
3	Nigeria	0.4962	14	Seychelles	0.3480	25	Zimbabwe	0.2892	36	Democratic Republic of the Cong	0.2337
4	Botswana	0.4770	15	Senegal	0.3322	26	Swaziland	0.2889	37	Chad	0.2306
5	Namibia	0.4504	16	Equatorial Guinea	0.3315	27	Rwanda	0.2790	38	Mali	0.2290
6	Ghana	0.4277	17	Burkina Faso	0.3304	28	Madagascar	0.2784	39	Guinea-Bissau	0.2190
7	Cabon	0.3912	18	Benin	0.3270	29	Mozambique	0.2757	40	Comoros	0.2094
8	Zambia	0.3742	19	Angola	0.3263	30	Niger	0.2694	41	S · o Tom · and Pr · ncipe	0.1963
9	Togo	0.3695	20	Malawi	0.3199	31	Cape Verde	0.2644	42	Central African Republic	0.1787
10	Lesotho	0.3665	21	Ethiopia	0.3193	32	C · te d'Ivoire	0.2621	43	Eritrea	0.1644
11	Tanzania	0.3589	22	Republic of Congo	0.2995	33	Sierra Leone	0.2469	44	Burundi	0.1423

Figure 2 Respective countries map ranking



The map indicates visually there are tendencies within the Southern regional, East African and West African regional bloc markets. May be this could be attributed to favorable geographical locations easily accessible to the ports.



The graph above shows the heat-wave of the newly designed PESTI in percentages on how each issue contributes to the final decisional making analysis.

CONCLUSION & RECOMMENDATIONS

Generally, firms prefers to venture in attractive markets that are graded higher in attractiveness with low risk, high profitability and where competitive advantage is attainable however, attaining all those mentioned factors in a globalized market environment is not a simple task. It requires various well augmented strategies to venture even into those nations classified as a high risk. Conventional wisdom may suggest that, MNEs might postpone entry of the developing markets however, some types of first –mover advantages may be higher in these economies. (Arnold & Quelch, 1998). Therefore, it is necessary for MNEs from developed nations to enter into these markets in developing countries with the proper entry and exit strategy configurations to attain, existing market expansion, strategic resource seeking, and natural resource seeking and host country's location advantages. Entry, exist strategy involves various considerations though the importance of these considerations varies by industry and by the main objective of each company.

This research addressed the need for more expansion on the traditional PEST to PESTI. The author proposed additional criteria (infrastructure) which includes energy, logistics, and communications infrastructures. However, the proposed criteria are not substitutes for existing market attractiveness evaluation method, but are intended to expand and address the shortcomings of traditional PEST. Due to the complexities of political economy and the social structure in Sub-Saharan Africa emphasis or priority should be on social/cultural issues, in the evaluation model. The multi-ethnic composition at times causes tribal conflicts which affects the entire economy. Therefore, economic growth impacted by the tribal conflicts cannot be exactly revealed by economic & financial and political criteria alone rather these criteria tend conceal the potential markets attractiveness of the region. Moreover, focus should be both on standalone attractiveness and regional bloc attractiveness. Some standalone attractive markets also happen to be globally strategic markets and this is the arena where the current and future global competition occurs. (Gillespie et.al, 2007).

The author combined SWOT analysis and AHP model to determine respectively the relative importance of the criteria and alternatives as pertaining to the social/cultural, political, economic, technology and infrastructure positions of Sub-Saharan African countries and the result provides basis for MNEs and other international businesses to make decisions regarding the potential market attractiveness of Sub-Saharan Africa. SWOT analysis highlighted the strengths and the hidden opportunities of the Sub-Saharan Africa while the potential threats

and weaknesses may help senior managers in risk hedge management. Applying AHP model, the author also analyzed and calculated percentages of the each macro indicator and its contributions to the overall goal of the countries market attractiveness. The AHP priorities results indicated that, Social cultural and political issues had the greatest impact on market attractiveness in Sub-Saharan African market attractiveness. The resulting priorities revealed attractive market growth potential and sourcing opportunities in Mauritius that, might otherwise have been overlooked applying the traditional PEST model. The government of Mauritius have integrated social cultural, infrastructure and politics with economic factors making it the best option among the 44 evaluated Sub-Saharan countries followed by South Africa and Nigeria respectively. Since 1980s, the government of Mauritius undertook social and economic reforms breaking down barriers to improve the ease of doing business. For example, personal and income tax were halved, empowered labor laws, directed lending policy and banks were obliged to led to the export processing zones at lower rates than anywhere else in Africa. (Hon Xavier Luc Duval the Vice Prime Minister of Mauritius). Thus the importance of Mauritius aligning the social/cultural and political issues with economic development may have played a central role in the final analysis criterion in the author's decision making. Various regional trading blocs were also a possibility, the Southern region as a bloc market had the best potential among other regions.

These analysis also helped us to gain a better understanding of the trade-offs in the decision making process and a clearer understanding of the effectiveness of AHP absolute measurements in multi criteria decision problem while combining both theory and practicality . However, more research is required with countries in the map with priorities between 0.2995 and 0.2190 perhaps by adding more factors to the sub-criteria level would offer the decision makers a chance to modify the weights and note the resulting map.

REFERENCES

- Amit.K. Bhandari, Almas Heshmati, (April 2005). Measurement of globalization and its variations among countries and region overtime. MTT Economic Research, Seoul National University and IZA Bonn.
- Angela Edmunds, Anne Morris, (2000). The problem of information overload in business organizations: a review of literature International Journal of Information Management 20 (2000) 17-28
- Arnold, DJ. Quelch,J.A.(1998). New strategies in emerging markets, Sloan Management Review, Vol.40,pp. 7-20
- Central Intelligence The world Fact Book. www.cia.gov/library/publications/the-world-factbook/fields/2053.html accessed Nov-26, 2013
- Davina Zietsman, Marianne Vanderschuren (2014). Analytic Hierarchy Process assessment for potential multi-airport systems -The case of Cape Town. Journal of Air Transport Management.

- Diana Layfield , Africa CEO Standard Chartered (2013). Seeking opportunity managing risk Ernst&Young`s attractiveness survey Africa 2013 Getting down to business.www.comattractiveness
- Dr. Denise Youngblood Coleman, Editor in Chief, CountryWatch Inc. www.countrywatch.com
- Ebrima Faal, (2013). Regional Director, African Development Bank The Infrastructure deficit and opportunities in Africa Ernst&Young`s attractiveness survey Africa 2013 Getting down to business.www.comattractiveness
- Eizo Kinoshita & Masatake Nakanishi, (June 1999). Proposal of new AHP Model in light of dominant relationship among alternatives. Journal of Operation Research Society of Japan Vol.42, No.2,
- Fathi Abid,& Slah Bahloul, (2010). Selected MENA COUNTRIES` ATTRACTIVENESS TO G7 INVESTORS,Working Paper No. 531 Economic Research Forum (ERF) 7 Boulus Hanna Street Dokki, Cairo Egypt.
- G.TRIPODO & N. DAZZI (1995). Market Attractiveness of Developing countries, Socio-Econ. Plann. Sci. Vol.29, Elsevier Science LTD.
- Gerald Mahinda, Managing Director BrandHouse (2013). The rise of African Consumer: Myth or reality. Ernst&Young`s attractiveness survey Africa 2013 Getting down to business. business.www.comattractiveness
- Kate Gillespie & Jean-Pierre Jeanet & H. David Hennessey (2007). Global Marketing, Houghton Mifflin Company, 222 Berkeley Street, Boston, MA 02116-3764
<http://www.transparency.org/research/cpi/overview>
- I. William Zartman, (May 2001). The Clear marking of boundaries between African nations can help prevent costly and debilitating border conflicts. Bordering on War Foreign Policy.
- IC Publications, LTD. (April 2010). FDI into Africa The iron is hot Afri Bus no363, & ColdBath SQ, London EC1R, 4LQ England.
- Japan firms look to tap high growth." The Nikkei Weekly (Japan). (May 27, 2013): 998 words. LexisNexis Academic. Web. Date Accessed: 2013/11/25.
- Kei Yoshizawa (June 2013) Achieving Economic Transformation for Inclusive and Sustained Growth in Africa: Prospect and Challenges Japan International Cooperation Agency (JICA).
- Levis R. Cabrera & German E. Giraldo (2009). A Multiple Criteria Decision Analysis for the FDI in Latin American Countries. Department of Industrial Engineering, University of Puerto Rico, Mayaguez, Puerto Rico 00680, USA.
- Media Eghbal Country Insight Managing Editor (April 2013). Why Africa`s Economic Fundamentals are Ripe for an Investment Boom. Euromonitor International.
- Melly, Paul. African telecoms to witness boom: the continent is one of the fastest growing markets for mobile providers. MEED Middle East Economic Digest (26 Apr. 2013):s26. Business Insights: Global Web, 17 Nov. 2013
- Michael P. Todaro & Stephen C. Smith (2003) Economic Development Eighth Edition, Addison Wesley.
- Professor Walter E. Williams (June 4, 1997) Economic Freedom and progress Economics, George Mason University

- Michel K. Masozera & Janaki R.R. Alavalapatib & Susan K. Jacobson & Ram K. Shresthab, (2006). Assessing the suitability of community-based management for the Nyungwe Forest Reserve, Rwanda. *Forest Policy and Economics* 8 (2006) 206– 216
- Olga Khazan, (2013). Why Africa Is the New Terrorism Hub, Retrieved May 21, 2014, from <http://www.theatlantic.com/international/archive/2013/09/why-africa-is-the-new-terrorism-hub/279956/>
- Richard M. Steers & Luciara Nardon (2006). *Managing in the Global Economy*, M.E. Sharpe, INC., 80 Business Park Drive. Armonk, New York 10504
- Rozann W. Saaty (2003). *The Analytical Hierarchy Process (AHP) for Decision Making and The Analytic Network Process (ANP) For Decision Making with Dependence and Feedback*. Creative Decision Foundation 4922 Ellsworth Avenue Pittsburgh, PA 15213.
- Sema Sakarya, & Molly Eckman & Karen H. Hyllegard, (2006). Market selection for international expansion: Assessing opportunities in emerging markets, *International Marketing Review*, Vol. 24 Iss: 2, pp.208 – 238
- Stanley A.J. & Clipsham P.S. (1997). Information overload-myth or reality? *IEE Colloquium Digest No. 97/340*
- Stephen O'Brien MP “The Neglected Tropical Diseases, A Challenge we could rise to-will we?” Report for the All-Party Parliamentary Group on Malaria and Neglected Tropical Diseases” 9House of Commons APPMG 2008/9
- Steven Jackson World Bank Group (April 2012). *Poverty Reduction and Economic Management in Sub-Saharan Africa (AFR PREM)*
- Steven Jones a, Moses Tefe, Seth Appiah-Opoku, (2013). Proposed framework for sustainability screening of urban transport projects in developing countries: A case study of Accra, Ghana. *Transportation Research Part A: Policy and Practice An International Journal*
- Thomas L. Saaty & Luis G. Vargas (2001). *Models, Methods, Concepts & Applications of the Analytic Hierarchy Process*”Springer Science + Business Media New York 1st Edition.
- TRANSPARENCY INTERNATIONAL the global coalition against corruption,
World Economic “Forum Global Information Technology Report 2013” www.weforum.org/
- World Economic and Financial Surveys World Economic Outlook
database <http://www.imf.org/external/pubs/ft/weo/2013/02/weodata/index.aspx>
- World Health Organization (2013), “Adult HIV Prevalence (15-49 years), 2011 By WHO region
- Yoshida, M. (1987). Macro-micro analyses of Japanese manufacturing investment in the United States, *Management International Review*, Vol.27 No.4, pp.250-56.