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Effects of Factor Endowments on Local Economies of Cities within the ECOWAS Region

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Summary

This research has focussed on investigating the effects of factor endowments on local economies of cities in the ECOWAS region. As a measure of those effects, it uses the attraction of inward Foreign Direct Investments (FDI) as core determinant.

Analysing the pattern and trend of inward FDI into the region affords insights to the volume, count and growth of investments into the cities and countries of the region as well as source cities and countries worldwide in a time series of ten years. This enabled knowledge of which cities and countries were receiving FDI, from which sources, in which sectors and in what pattern and content. With the aid of appropriate software (excel, ucinet and netdraw), growth models, positional networks and distribution maps were drawn to produce the results in graphic presentation.

In identifying the important city competitors in the region, the Manhattan Distance calculation was used to determine the competitive distance between cities based on sector investments. The closer the distance values, the more intense the competition among the related cities. This forms the basis for ranking of the competitor cities and the sectors in which they are competing.

The explanatory aspect of the research draws knowledge of factor endowments from cities profiles whilst the locational factors explaining the trend of FDI are drawn from the Global Competitiveness Index Report of the World Economic Forum. This was chosen because of its comprehensive assessment of indicators using common scale values across countries. The data was found appropriate for this research; however, it was only applied after conducting Variance Inflation Factor tests to check multi-collinearity. Relationship between the two sets of variables is then determined through multiple regression analysis to assess the significance level of all locational factors in explaining FDI.

A similar exercise was performed on the Asia data to pair results and draw further lessons. It is common knowledge that Asia countries such as China, India, Singapore and Malaysia actively promote measures that attract FDI. This is therefore done in acknowledgement of growth in the economies, and improved competitiveness of Asian countries and cities over the years as a result of FDI flows. Besides most of these countries have political, economic and social circumstances similar to those of ECOWAS countries.

As discovered, the growth of FDI into ECOWAS within the period of review 2003-2012 is 11.5 per cent. Although among the lowest in terms of volume compared to similar Regional Economic Communities (REC), the growth was relatively steady. The sectors with the most prospects are resource based like agriculture, minerals, and metals, closely followed by the services sectors.

Cities and countries share of this inflow varies in count of investments depending on various factor endowments and the sector requirement. As discovered from the regression analysis, 71% of all FDI to the region is attributable to market size and business sophistication. While countries like Nigeria, Cote d'Ivoire and Ghana have attracted FDI especially due to their domestic market size, others like Senegal, Gambia and Liberia have been due to marketing and innovation. However, the extent to which the region can capitalize on these locational factors is limited by the inadequacies of the others, such as strong and viable institutions.

It is also discovered that the region lagged far behind in basic requirements for growth and competitiveness. While market size and other efficiency enhancers in the region are gradually improving, the state of infrastructure is deteriorating both in quantity and quality. Out of the 15 member countries of ECOWAS only Cape Verde has moved to the efficiency driven stage of development. This is due primarily to vast investment and improvement in her human capital. In basic infrastructure such as transportation, electricity and communication, only Gambia scored barely average in competitiveness ranking.

To sustain the modest growth, increase FDI which is hugely needed to achieve the Millennium Development Goals and enhance the positions of ECOWAS cities in the global economy, this research recommends building on existing relationships and establishing new ties to improve networks, developing fair policies on taxes and regulations, instituting transparency in government businesses, engaging public private partnerships in infrastructure provisions, developing human capital, building strong institutions and structuring diversification from over reliance on natural resources.

Major urban management interventions include, (i) creating industrial zones, farm settlements, rural planning, and landuse planning to encourage urban agriculture as response to the demands of the sector; (ii) creating specialised export processing zones in the harbours of the 12 port cities and taking advantage of maritime access; (iii) developing the peripheries to sustain core-periphery competition; and (iv) city branding and marketing for the core cities.

The ways to improve competitiveness among cities are never the same, hence it is realised that these recommendations will suit the countries and cities differently.

Keywords

FDI, competitiveness, networks, positions, nodes, ties, cities, locations, endowments

Synonyms

Nodes: points of convergence of ties; cities; countries.

Ties: networks.

FDI: foreign investments.

Trans National Companies (TNC): Multi-National Companies (MNC).

Factor Endowments: location factors; urban indicators.

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Though the subject of this research (which I consider to be related to aspects of regional planning) has always been an area of interest to me, certain insights and lectures provided at IHS reinforced and culminated to this research topic.

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Foreword

Part of managing a city is to locate its position among its peers, in other words, judge its competitiveness or positionality as it is called. This helps to draw lessons and share experiences. A competitive city tends to be able to provide higher level services, living conditions and incomes for its residents which underline the very essence of the city being regarded as the 'engine of growth'. Cities have risen or fallen because of their success or failure in playing this role. Dubai in UAE and Detroit in USA are fitted examples of these conditions. Whilst Dubai is growing into being a global city, the city of Detroit, a once prosperous city, is being declared bankrupt by the state of Michigan.

The only logical measure of comparison among cities is the FDI market data.

Without gainsaying, scholarly debates over the impacts of FDI itself have been divided. Consequently, policies on FDI have been conditional or regulated; between believe of it being beneficial or exploitative especially in the developing economies. This is further complicated because FDI spill overs can have effects beyond economics which can be social, environmental or political in host cities and even outside the host cities. There is therefore a wide field for further research. However as I have experienced cross matching the FDI output with city profiling requires sufficient time, human and financial resources.

Abbreviations

ACR – Africa Competitiveness Report 2013
DD&T – Design, Development and Testing
ECOWAS – Economic Community of West African States
FDI – Foreign Direct Investment
GCI – Global Competitiveness Index
GCR – Global Competitiveness Report 2013
IHS – Institute for Housing and Urban Development
MNC – Multi- National Companies
R&D – Research and Development.
TNC – Trans- National Companies
VIF – Variance Inflation Factor

WEF – World Economic Forum

Country Acronyms

BEN - Benin BFA – Burkina Faso CIV - Cote d'Ivoire CVD – Cape Verde GAM - Gambia GBI – Guinea Bissau GHA – Ghana GUI – Guinea LIB – Liberia MAL - Mali NIG - Niger NGR - Nigeria SEN - Senegal SIL - Sierra Leone TOG – Togo RSA – Republic of South Africa UK – United Kingdom USA - United States of America

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Chapter 1: Introduction

1.1 Background

The Economic Community of West African States (ECOWAS) is a regional group founded in 1975 and made up of fifteen (15) countries in the West African sub region. Its mission statement is to promote economic integration "in all fields of economic activity". Cape Verde joined in 1977 to make sixteen (16) countries, while Mauritania withdrew in 1999 from the union to revert to fifteen (15). This dynamism is a reflection that while it works for some countries, it has not worked for all. Three institutions have been specifically designed to drive its economic vision, apart from others which have relevance to socio-cultural integration, promotion of democracy, security and justice across the region. These are,

- i). the Commission,
- ii). ECOWAS Bank for Investment and Development,
- iii). Regional Competition Authority for ECOWAS, established in 2008.

Aside the above, there is a strategic plan to achieve common currency regime and unified stock markets by 2015 (Agyapong 2012), actively promoted by a section of the union, with prospects of further boosting foreign investment inflow to the region.

Virtually all the countries are classified as Least Developed Countries (LDC), apart from Cape Verde, Nigeria, Ghana and Cote d'Ivoire. Annual per capita GDP (PPP) in the region ranges between US\$396 in Liberia (the least) and US\$3,650 in Cape Verde (the highest).



Figure 1: Size and Economic Structure of ECOWAS members¹

Source: Von Uexkull (2012) all data from World Bank, World Development Indicators., oil and other mineral resources, and only tew have noteworthy development in the manufacturing

¹ This data does not include Guinea Bissau

and services sectors. Twelve out of the fifteen countries in the region have access to the sea excluding Burkina Faso, Mali and Niger which are landlocked. The region can therefore serve as a potential hub for logistics and transport sector activities which is important to world trade movement.

Factor endowments are the internal characteristics and elements possessed by a locale which give it uniqueness, and create bases for economic interaction with others within the global arena and hence defines its competitiveness. In this context, a major determinant of effectiveness of factor endowments is the Foreign Direct Investment (FDI). The FDI, including greenfield investments, joint ventures, mergers and acquisitions (Wall, Burger et al. 2011) provides foreign capital and injects funds into local economies, thereby creating job opportunities and boosting productivity levels of receiving cities.

In every case, location factor endowments are critical to attracting and determining volume of FDI to any economy. The Kitson Capital Model may be surmised as a classical representation of tangible factor endowments for the host (destination or receiving) countries. Since countries have these in varying degrees, commonalities and differences need be assessed for maximum effect to attain competitiveness and resilience of cities therein.

1.2 Problem Statement

According to Krugman (2011), it is a fact that economies are not dimensionless points in space and that there is a spatial dimension that responds to the nature of economic forces. Economic development therefore affects growth potentials of cities, spatial behavior of households, and corporate investment decisions within them. Indeed cities have become service centers that provide a myriad of functions to 'globalizing corporate clients' (Taylor 2004). And as noted by Hague, et al.(2006), they 'are the centres of trade, commerce and industry that underpin national and regional economic development' (p.3) and hence the wellbeing of people.

Cities constitute national urban systems with transnational linkages and their development is driven more by external activities than national. There is a global awareness of the importance of measuring a country's, region's or city's performance or competitiveness in order to share innovations, best practices, lessons or even imitations. Until recently, the economic integration envisioned in the union of ECOWAS has not quite met with the desired results as reflected in the volume of intra community trade.

According to data from ECOWAS Statistical Bulletin (2008), intra-regional trade was highly insignificant compared to total trade outcome. Between 1999 and 2006, the total intra-ECOWAS trade was 12% of the total ECOWAS trade compared to the Euro zone intra-regional trade which was about 60% of total trade. While ECOWAS total external trade was 45.7% of the regional Gross Domestic Products (GDP) over the same period, the intra-ECOWAS trade was only 5.5% of the regional GDP. This negligible intra-regional trade is reflective of lack of complementarities among the national economies of the region. Without gainsaying, a robust and expanded volume of intra-trade is an incentive for FDI.

Indeed, (as shown in Table 1) from the World Investment Report's classification of African countries by performance and potentials cited in Dupasquier and Osakwe (2006), only three

of the Countries in the region, Gambia, Mali and Togo performed above their potentials. Others are classified as under performers.

	High FDI performance	Low FDI performance			
	Front runners	Below potential			
High FDI potential	Botswana	Libya, South Africa			
	Above potential	Under-performers			
Low FDI potential	Angola, Congo, Gambia, Mali, Morocco, Mozambique, Namibia, Sudan, Togo, Tunisia, Uganda, Tanzania	Algeria, Benin, Burkina Faso, Cameroon, Dem. Rep. of the Congo, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Guinea, Kenya, Madagascar, Malawi, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Zambia, Zimbabwe			

 Table 1: Classification of African Countries by Performance and Potentials (2000-2002)

Source: World Investment Report, UNCTAD, 2004 cited in Dupasquier and Osakwe (2006)

Hanink and Owusu (1998), applying aggregate comparisons over time and analyzing specific trade intensity index in the region, in the context of such factors as market size, proximity, currency, common language and an alternative trade community, found that trade in the region has not been much affected by the ECOWAS' formation.

A major economic reason for this is regional transportation. Gbetnkom (2006) discovers from his study 'On the Empirics of Market Integration in ECOWAS' that export and trading activities decrease as distance between partners increase. This has led to other preferential arrangements along colonial identities, language and currency boundaries to foster trade, which indicate that "both trade creation and trade diversion occur simultaneously in ECOWAS" (p.301). For instance, a sub group of eight countries, which incidentally are former colonies of France, formed the West African Economic and Monetary Union (WAEMU) in 1994. This union has achieved deeper integration and closer economic relations by adopting a common currency.

However recently, it has been observed within the Region, a wider and intense cross country mobility of labor, capital and investment which has impacted on the local economies, growth and productivity of cities with varying degrees of positive and negative externalities. Aside from these cross country activities, trends of foreign investment inflow have revealed generally a favorable increase in recent years as well as some form of commonalities and progression.

In 2010, ECOWAS adopted a policy which it termed West African Common Industrial Policy (WACIP) with a key objective to increase the share of intra-regional trade from the stated 12% to 40% and create a globally competitive industrial structure by 2030 (ECOWAS, 2010).

The main purpose of this study therefore is to reveal the structure of FDI into ECOWAS countries and cities, investigate factor endowments (particularly locational and innovation capacity) causative to observed trends, and determine relational possibilities of selected cities within the region. This can contribute to developing intra-regional FDI flows and enable the

cities to evolve urban management policies and strategies that respond to the demands of globalization.

1.3 Research Objectives

From the foregoing, the specific research objectives are,

- a) Investigate the pattern and trend of inflow of FDI into the ECOWAS region,
- b) Examine city based factor endowments (locational factors) as determinants of the flow,
- c) Identify the strength of competitive and complementary relationships by situating the cities within the global value chains of leading sectors,
- d) Recommend specific governance strategies to boost investment attractiveness of the studied cities.

1.4 Provisional Research Questions and Hypothesis

These set objectives culminate in the drawing of the following research questions.

i). What is the relationship between factor endowments, local economy development and city competitiveness using the FDI metric?

ii). How has governance and institutional structure affected investment flows in the selected cities?

iii). Why do firms locate in these cities and what are the preferences?

iv). What are the relational possibilities (complementarity or competitiveness) towards boosting attractiveness of the cities?

From these propositions, the hypothesis is;

A. H₀- Improvement of local factor endowments will not significantly affect the FDI inflow into a city.

 $\mathrm{H}_{1}\text{-}$ Improvement of local factor endowments will significantly affect the FDI inflow into a city.

1.5 Significance of the Study

Several studies have highlighted concerns about the rapid rates in which the world is urbanizing. No less a reason is the growing economic demand for quantitative and qualitative urban space and structure which have led to suburbanization, development of agglomerations and mega cities, and in some cases; degradation, gentrification and retrofitting of inner cities. These trends are observable around the world as cities provide the physical space for economic transactions and serve as bridge between economies. In this era of globalization, the flow of FDI is a major metric of assessing a city's competitiveness and how these transactions are attracted.

Since little literature exists that have empirically analyzed factors driving and deterring FDI in Africa, this study is aimed at describing 'what' and explaining 'why' FDI is attracted to the

ECOWAS region. It attempts to highlight the urban dimension of the trend. Similarly, most FDI data relating to the region are country based. As a study in urban management, it also specifically attempts to situate this within the cities.

Understanding of requirements for FDI attraction within local conditions will enable cities come up with competitiveness policies that will direct spatial planning and have positive effects on the residents. Most literature on FDI and its necessity have harped on its economic determinants and benefits for the recipient economies (Naudé and Krugell, 2007). As noted by Blonigen (2005) and Chen and Moore (2010), a large body of literature has delved on the internalization motivation of firms for FDI, the ownership-location-internalization (OLI) paradigm and the economic effects of host country attributes. A shift to its spatial dimension and interactions among cities within the region, therefore, underlines the significance of this study. Since urban competitiveness is locally made, city response to global FDI driven demands is therefore important for policy formulation and city management.

1.6 Scope and Limitations

This research adopts frameworks frequently applied in several assessment studies of urban competitiveness. Its uniqueness bears from the fact that it has seldom been applied for the ECOWAS region at the city level. These include networks and flow analyses across and among the cities. It is essentially a study in regional competitiveness.

Given the diversity of FDI, only important sectors will be assessed to prove that certain location factors explain their inflow. Similarly, factor conditions applied for this analysis will be limited to endowments that only promote competitiveness as established in the literature and not those that confer comparative advantage. These include urban indicators such as governance innovation, human capital, business environment, city branding and marketing. This therefore will technically exclude FDI deriving from the primary and extractive sectors. This is also partly because the FDI from these sectors are not usually city based. Focus will only be on counts or number of investments rather than on value.

The selected cities are not necessarily the administrative capital of their countries. Rather they attract the highest volume of economic activities and trading in their respective countries.

Perhaps, it should be mentioned that while the choice of cities is determined by the FDI inflow, profiling of the cities is limited by the amount of time allotted this exercise. This therefore leaves wide field for further research. Indeed the indicators applied are drawn basically from the GCI 2013 Report.

Chapter 2: Literature Review

2.1 Theories and Concepts of the Study

As preface, this review presents an overview of literature in key areas of the research propositions. Effectiveness of factor endowments on local economies can only be ascertained by the level of competitiveness of a city and attainment of economic aspirations of those that reside in it. Key concepts therefore relate to competitiveness, city networks, locational factors and endowments, and Foreign Direct Investments as determinants.

2.1.1 City Competitiveness

There exists today a global economy resulting in an ever increasing functional integration of the world (Wall and van der Knaap, 2011) connecting firms and cities together.

Further emphasising the importance of cities in today's world, Scott and Storper (2003) submit that cities always appear as privileged sites for economic growth because they economize on capital-intensive infrastructure (which is particularly scarce in developing areas), thus permitting significant economies of scale to be reaped at selected locations. This is complemented by the dynamics of backward and forward inter-linkages of firms in industrial systems, the formation of dense local labour markets around multiple workplaces, and the emergence of localized relational assets promoting learning and innovation effects.

Cities therefore are major economy drivers, and as Sassen (2009) explains, they function as a bridge between national economies and the global economy. She describes a global city as one with capability and platform needed to trade, finance, invest and service. Whilst a nation could do with one global city, "a global firm does not want one global city, even if it is the best in the world. Different groups of cities will be desirable, even if they have some serious negatives" (p.8). For a firm to go global therefore, it has to locate in multiple cities. Herein lies the incentive for cities to compete and forge alliances since firms need them as entry points to national economies.

In the view of Rogerson (1999), a 'competitive city' is one that is successful in attracting the attention of capital, and the ways in which quality of life factors have been identified as influential in patterns of urban growth and development. He further argues that the competitiveness of cities reflects not only their current capacity to engage with global capital, but also is a function of their heritage, resulting in a spatially differentiated pattern of competitiveness.

According to van Dijk (2006), the 'theory of urban competitiveness' is derived from "competitiveness as a yardstick for the performance of enterprise" (p.39) introduced by Porter (1990). The competitiveness measures are then applied at the national, the regional, the city or even at the local cluster as at the enterprise level (ibid). Indeed, in developing this theory, Grant (1991) submits that Porter combines inductive and deductive analysis to shifting the focus of attention from the performance of the firm to the performance of the nation. "Porter's analytical framework was developed through studying competitive performance amongst 10 Countries, each involving between 5 and 19 industry cases" (ibid). Since then, it has become a trend to assess a country's or city's competitiveness and design measures to enhance, upgrade and sustain it.

Kitson et al (2004) claim that the credo of competitiveness has attracted a veritable host of believers and followers (policy analysts, experts, economists, planners) who have elevated 'competitiveness' to the status of a natural law.

This however is not without its critiques. Begg (1999) calls competitiveness a glib notion and a very slippery concept. Kitson et al (2004) refer to it as a 'fad' and 'elusive concept' while Krugman (1996) refers to it as a 'time-honored fallacy' (p.24). He classifies its adherents as Mercantilists, mistaking 'comparative advantage' as same as competitive advantage. Short of accusing them of 'plagiarizing' and wrongly adapting Ricardo's and Mills'. Their main argument is that while the notion of competitiveness may well be meaningful for an individual firm, it is misplaced to carry the concept over to the aggregate national economy. In their opinion national economies do not go out of business in the same manner as uncompetitive firms, and that international trade is far from being a zero-sum game (Kitson et al, 2004).

However, the recent global economic crises and near collapse of national economies experienced in countries such as Italy, Greece and Cyprus portends exactly that national economies can assume 'a zero-sum game'. Cities too, do experience crisis with Detroit City (USA) becoming the latest to fall into a state of bankruptcy².

What is sure as Cellino and Soci (2012) suggest, is that competitiveness concept can apply at different scales or levels. They distinguish among macro, competitiveness of a country; micro, competitiveness of the individual firm; and meso, competitiveness of local economic systems such as regions, cities and industrial clusters. This is the most apt view of competitiveness that will apply in this research.

2.1.1.1 Application of the Concept

Despite the stark criticisms, economic development at spatial level, whether national, regional or urban in recent times thrives on competitiveness strategies. It is in the cities that these growths become evident and visible. Begg (1999) and Kitson et al (2004) submit that several nations including the USA, the UK, Belgium, Italy, the Netherlands and Japan have set up several governmental Competitiveness Policy agencies to monitor and promote the competitiveness of their economies. "In addition, numerous private organizations and consultancies concerned with measuring and lobbying the cause of competitiveness have emerged recently, such as the World Economic Forum (Geneva, Switzerland), the Competitiveness Institute (Barcelona, Spain), the Council on Competitiveness (Washington, DC, USA) and the Institute for Strategy and Competitiveness (Harvard, MA, USA)" (p.991). The outcomes of these exercises have helped nations and cities shape their economic development policies.

At a regional level, the European Commission established a European Council of Competitiveness (ECC) which undertakes the production of regular Competitiveness Report on the performance of the economy of the European Union (ibid). In the same vain, the ECOWAS established a Regional Competition Authority (RCA) for ECOWAS in 2008. The objectives are manifold and not necessarily mutually exclusive. They include protection against international cartels, economic integration, pooling of limited resources in order to

² http://www.bbc.co.uk/news/world-us-canada-23764664

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foster enforcement, promotion of foreign direct investment etc. (Bakhoum and Molestina, 2011).

The ECOWAS' RCA therefore is both protectionist and promotional of FDI, unlike the EU's ECC. This is important to note, as it would appear the several institutional agencies earlier mentioned are merely advisory and promotional rather than protectionist which is antithetical to competition in itself.

2.1.2 Factor Endowments as bases for Competitiveness

According to Kenen (1994), the factor endowments approach in trade theory was developed by Eli Heckscher and Bertil Ohlin in the 1920s, and was refined by many economists including Paul Samuelson and Stolper (ibid). The approach is based on two suppositions (i) that goods differ in their factor requirements, meaning goods can be ranked by factor intensity, and (ii) that countries or cities differ in their factor endowments, meaning countries or cities can be ranked by factor abundance. Trade or competitiveness therefore is based on differences in factor abundance (skills, technology, human capital and infrastructure). The author summarises that in the Heckscher-Ohlin model, cross country differences in relative prices are due to differences in factor endowments which becomes the basic cause of trade. The spatial angle has been developed further by economic geographers and planners.

Factor endowments refer to both static and dynamic resources possessed by a locale which act as pull factors that attract investments. To Burger, et al. (2012), the success of a region in attracting foreign investments largely depends on its relative attractiveness vis-à-vis other regions in terms of local resource availability. This relates to an abundance of natural resources, large domestic markets, special tax breaks for investors, or a large pool of skilled workers. However, the relative importance of these resources as sources of competitive advantage varies across the motives of the investors themselves. It therefore underlines that local opportunities must meet global demands.

In Helmsing's (2001) summation, local capabilities are developed from four sources. These are physical infrastructure, natural resources, specific institutional endowments (relating to governance) and knowledge and skills of available labour. In his regard, institutional endowments embrace 'the rules, practices, routines, habits, custom and conventions associated with the region supply of capital, land and labour and its markets for goods and services' (p. 292). Van Dijk (2006) classifies factor costs of production such as taxation, labour, energy, land, construction or raw materials as static endowments which only offer comparative advantage. Unlike comparative advantage, competitive advantage 'is not inherited but can be acquired through innovation' (p.40). For a city to transform therefore requires a dynamic approach, technological progress, organizational and managerial innovations.

Kitson et al (2004) differentiate these as 'hard' and 'soft' 'externalities' or 'assets'. In line with the New Public Management, Kresl and Gappert (1996) identify as strategic determinants of city competitiveness; institutional flexibility, an effective local government, and ability to engage public-private partnerships.

In his own assessment of factor conditions required for competitiveness, Grant (1991) submits that factor endowments lie at the centre of the traditional theory of international comparative advantage. He aligns with Porter's distinguishing between 'basic factors' (such as natural resources, climate, location and demographics) and 'advanced factors' (such as communications infrastructure, human skills and research facilities). Advanced factors are the

most significant for competitive advantage and, unlike factors whose supply depends on exogenous 'endowments', advanced factors are a product of investment by individuals, firms and governments.

From the foregoing, it becomes clear that scholars have marked off as distinct, factor conditions necessary for a city to acquire competitive advantage from those that confer comparative advantage.

2.1.2.1 Factor Endowments relatedness in the Region

In the process leading to the formation of ECOWAS, Onwuka (1982) reveals that diplomats were asked to give scores in order of importance to the reasons for its formation:

- (a) To secure full political independence;
- (b) To maintain regional economic development;
- (c) To safeguard the region against external influence and aggression;
- (d) To secure for West Africa a good share of world resources; and
- (e) To follow similar economic markets in Europe, Latin America and Africa. (p.18)

The results showed that 50% of respondents gave the highest score to (b), while 33.3% went to (a). It is instructive to note that all those 33.3% to (a), also chose (b) as their second in importance. By implication 83.3% considered economic development as the major reason for the formation of ECOWAS.

There is a general perception of land abundance and labour scarcity of factor conditions of African countries. In Kitson et al's (2004) factor endowment model, which they term as bases of regional competitive advantage, six variants of capitals are premised to influence regional productivity, employment and standard of living. These they call productive capital, human capital, social institutional capital, cultural capital, infrastructural capital and knowledge and creative capital.

In the particular study of developing countries factor endowments, Noorbaksh, et al. (2001) confirm that the growth of domestic markets, a stable macroeconomic environment, liberalization policies, the availability of energy and a generally supportive business environment are significant factors for FDI inflows. Though nations within ECOWAS can be easily aligned to specific natural resources where they enjoy comparative advantage, for example, Cote d'Ivoire (cocoa), Ghana (gold), Nigeria (oil and gas), Sierra Leone (diamond), the authors further specifically highlight the importance of human capital as a locational advantage.

To Fedderke and Romm (2006), differences in factor endowments between countries only encourage vertical FDI because they make possible the exploitation of comparative advantage. They define vertical FDI as when MNCs fragment their different stages of production by having headquarters at home and production plants in different foreign countries that produce different intermediate of final goods. Horizontal FDI, on the other hand, is discouraged by differences in factor endowments because they make production of the same good in different countries difficult. They rate market size of the host country, usually measured by the GDP, as an important non policy related determinant of horizontal FDI.

Nonetheless, Wall et al. (2011) establish that horizontal FDI constitutes the largest share of FDI. This concerns firms which 'duplicate' a number of home-country activities abroad, and

mainly target accessing foreign markets, while vertical FDI concerns investments in which firms decide to break up their activities geographically, essentially motivated by savings in production costs. They identify market, efficiency, resources and strategic assets seeking, following Dunning (1998) as four motivations of firms to internationalize, and pull factors that attract FDI to a receiving country. Apart from these host country determinants, they also highlight home (source) country, and bilateral determinants which are influenced by country pair specific characteristics, as equally important in directing FDI.

However, Noorbaksh et al (2001) opine that the boundaries between different types of FDI, whether market, trade, resource or efficiency seeking, become less evident as all FDI is seen as part of an overall strategy of enhancing competitiveness. Much as Wall et al. (2011) submit that the relative importance of these different factors ultimately depends on the motivation of firms to locate in the host countries.

What is certain is that the formation of a trade bloc can influence the location decisions of MNC (foreign firms). According to the new economic geography school, the three key location variables are (a) market size, (b) the cost of production and the availability of relevant production factors, and (c) market access (Krugman, 1991).

2.1.3 The City as an Economic Unit

As inferred in Kenen (1994), international trade and transnational actors such as MNCs and TNCs and their activities have significant effects on the functioning of cities and the allocations of resources within it. Though legal, monetary and fiscal systems as often may be national, city governance deliver public goods (security, infrastructure, land uses etc) that provide framework for economic activities in most countries.

Tracing the history of cities, Taylor (2004) submits that the culmination and geographical outcome of all trading activities and the informal associations of merchants is the creation of cities. Cities therefore are primarily to serve economic purposes. Much like nations, van Dijk (2006) notes the trend that cities are increasingly becoming part, and indeed the major player, of a global economy.

Sassen (2012) suggests that the rise of cities as strategic economic spaces is the consequence of a deeper structural transformation evident in all developed economies. The transformation is so pervasive that even the most material economic sectors (mines, factories, transport systems, hospitals) in non-urban locations are being serviced by the city corporate economy. This affects cities at multiple levels, from the provincial to the global.

In Sheppard (2002) study of positionality and scale, he submits that a major intervention by geographers into debates on globalization has been to demonstrate the importance of territorial economies and governance structures, criticizing the prioritization of the nation-state scale in such analyses. In this regard, the importance of cities is stressed. 'There is widespread agreement that globalization has increased the importance and influence of such subnational territorial economies and polities' (ibid).

2.1.3.1 Importance of City Networks

There have been intercity relations even before the advent of nation states. Taylor (2004) presents varied examples of intercity relations that precede the modern 'nationalisation' of

cities. However without gainsaying, the importance of city networks is underlined by the recent globalisation trends.

Van Vliet (2002) noted that globalization is not a new phenomenon, but global connections today differ in at least four important ways. "First, they function at much greater speed than ever before. Improved technologies enable much faster transportation of people and goods and the instantaneous transmission of information. Second, globalization operates on a much larger scale, leaving few people unaffected and making its influence felt in even the most remote places. Third, the dynamic and often unmediated interactions between numerous global actors create a new level of complexity for the relationships between policy and practice. Fourth, the scope of global connections is much broader and has multiple dimensions – economic, technological, political, legal, social and cultural, among others, each of which has multiple facets. These linkages have proliferated to involve multiple, interdependent flows of a greater variety of goods, services, people, capital, information...." (p.32).

Taylor (2004) quite importantly emphasises that, cities, of course, do not themselves create economies. The nexus or dominant agents for city networks are the multinational companies (MNC), trans national companies (TNC) or service firms. Christopherson and Clark (2007) are emphatic stating that because of their size, scale, and political status as well as economic power, TNCs can shape the governance environment within which they operate at the regional, national and international scale.

Alderson and Beckfield (2004) view MNCs and their subsidiaries as key relations linking cities into a world system of cities. In their study of power and position in the world city system, they used data consisting of information on the headquarters and branch location of the World's 500 largest multinational firms to produce a matrix linking 3,692 cities across the globe. The authors find that measures of power and prestige are very highly skewed among cities, and that their positions in world city system depend on ties of networks with others in the 3 senses of outdegree, closeness and betweenness.

Representative of several authors including Sassen (2009), Scott and Storper (2003), Vliet (2002) and Helmsing (2001), Wall et al (2011) submit that several inter organizational systems connect firms and states together to form the global economy, resulting in an ever increasing functional integration of the world. In an empirical study similar to Porter's, the authors use worldwide corporate networks of MNC to assess their geographical scope and investment flows to selected home and host countries. Analysing the overall configuration of the MNC network and different cross-sections of country pairs within the network, they come up with a classification of the countries into 'the poor, the rich and the happy few' (p.918).

Christopherson and Clark (2007) also use TNC supply chains and networks to assess innovation systems in US regions. The methodology similar to Wall et al.'s include spatial identification of their locations, specific characteristics and relationships within the networks as well as survey questions and interviews of focus groups. And as noted by Akyuz (2003), competition among firms, including international firms, in developing countries becomes competition among labour located in different countries and by extension competition among cities and factors of production.

Taylor (2004) summarises that four agencies are primarily responsible for shaping city networks. These are service firms, city governments, service-sector institutions and nation-states. "However, these processes do not operate singly to sustain the network; they operate in conjunction with one another in quite complex ways" (p.58).

2.1.4 FDI flows as Determinants

According to Cellino and Soci (2012), international trade should no longer be identified with the exchange of goods and services, as it is being more and more oriented to acquisition of firms and international merging, which can represent an alternative to trade itself. Citing several authors, Wall et al (2011) include Greenfield investments; worldwide intercorporate directorships; intra firm trade; office networks; and ownership relationships between MNC headquarters and subsidiaries as part of this orientation. This is similar to Dicken (2011) which describes direct investment as an investment by one firm into another across national boundaries with the intention of gaining a degree of control over its operations or setting up an affiliate. He considers this as one indicator of growing interconnectedness of the global economy.

"The literature on FDI is used to attribute these capital movements to the existence of a higher return on capital in the host country, which is an indicator of unexploited profits, and potentiality for growth. In this respect, FDI can be rightly seen as an indicator of competitiveness, because new inbound capital is expected to act as an extra-engine for growth, thus accelerating the overall pace of expansion" (Cellino and Soci 2012, p.85). Competitiveness therefore should consist of this capacity to attract foreign capital.

An additional, very common, indicator of competitiveness is the import to GDP ratio. However this indicator more than 'competitiveness', simply reflects the different elasticities of demand components (ibid). Consenting to this assertion, Stephan and Pfaffmann (2001) submit that among all kinds of data, foreign direct investment (FDI) data are being collected systematically for years, they are available for sectors and regions with multiple degrees of disaggregation and, by far, they are the most utilized data for analyses. Hence, FDI is the most important indicator of international business activities conducted by the TNCs. Indeed international organizations such as United Nations Conference on Trade and Development (UNCTAD), Organization for Economic Cooperation and Development (OECD), International Monetary Fund (IMF), World Bank, AfDB and other regional development banks also do collate this information to facilitate international comparison.

Therefore for the purpose of this research, FDI is the significant determinant that will be focused on.

Noorbaksh et al (2001) defines FDI as 'the net foreign direct investment inflows as a percentage of GDP. Net inflows are defined as a sum of (net) equity capital, reinvestment of earnings, other long-term capital and short-term capital as shown in the balance of payments' (p.1609). This therefore disregards foreign portfolio investment (FPI).³

This is similar to the approach of Fedderke and Romm (2006) in the modeling of the determinants of FDI in South Africa, effectively excluding total portfolio investment and confining only to investors capable of exercising significant influence over the activities of the enterprise in which they have invested. Such should be investment by foreigners in South Africa comprising ownership of a branch or participation in a partnership in South Africa;

³ According to BusinessDictionary.com, *FPI is investment in securities that is intended for financial gain only, and does not create a lasting interest in or effective management control over an enterprise.*

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ownership of at least 10% of voting rights in an organization in South Africa; ownership of less than 10% of the voting rights, provided the foreigner is able to exercise effective influence over the policies of the organization.

However, there is a major challenge of paucity of information on FDI and its specifics. Though may be available, they are most times difficult to track. Stephan and Pfaffmann (2001) suggest that despite the increasing importance of FDI in the world economy, published sources or readily accessible databases that provide comparable and accurate data on the investments and other activities of TNCs and MNCs are scarce. Nevertheless there is varied country related national data on FDI kept by every country monetary systems which may require standardization and harmonization to bring to relevance, compatibility and comparability.

2.1.4.1 FDI Inflows in the Region

Naudé and Krugell (2007) argue that foreign direct investment (FDI) presents part of the solution to the challenges Africa is facing. Foreign direct investment supplies capital and provides for spill overs of foreign technology and know-how to host economies that may aid growth and development which Africa desperately desire. According to Asiedu (2006), the importance of FDI in eradicating poverty is also echoed in the New Partnership for Africa's Development (NEPAD) declaration, which stipulates that in order for the continent to achieve the MDG, the region needs to fill an annual resource gap of US\$64 billion, about 12 per cent of GDP. Since income levels and domestic savings in the region are low, a bulk of the finance is expected to come from FDI.

Onyeiwu and Shrestha (2004) reveal that despite economic and institutional reforms in Africa during the past decade, the flow of Foreign Direct Investment (FDI) to the region continues to be disappointing and uneven. While the flow of FDI to the region has increased in absolute terms during the past decade, it has declined in relative terms. Africa despite its vast endowments continues to receive the least FDI in the world.⁴ They attribute this to first, the competition for bilateral and multilateral lending between it and the transitional economies in Eastern Europe and emerging markets in Asia, thus depleting loanable funds available to African countries. And second, the perception that Africa is still a risky continent to conduct business.

In their study of worldwide corporate networks of firms, Wall and Van Der Knaap (2011) reassert that a vast territory exists that is excluded from the vital economic processes of the global economy. They establish that, although 10 percent of the world's population resides in sub-Saharan Africa, this region claims only 1 percent of multinational corporate connectivity from the evidence of their study.

Besides above, political reasons also come to play. Some African leaders see the operations of the TNCs and MNCs who incidentally are drivers of FDI inflows as inimical to their national interests. Resolution 56(III) adopted at UNCTAD III in Santiago, Chile, in 1972, dealt with FDI, placing the emphasis on the right of developing countries to regulate it in line

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⁴ This assertion is corroborated in UNCTAD (2008 p.4) thus, "the rising amounts of FDI inflows over the recent past have, however, not led to an increase in Africa's share of global FDI, as flows to other regions have grown faster".

with national development needs and to avoid its possible adverse effects, especially such that disrupt competition in the domestic markets (Fredriksson, 2003). Corroborating this assertion, Dupasquier and Osakwe (2006) submit that until recently, FDI was not fully embraced by African leaders as an essential feature of economic development. This reflects largely fears that it could lead to the loss of political sovereignty, push domestic firms into bankruptcy due to increased competition and, if entry is predominantly in the natural resource sector, accelerate the pace of environmental degradation. They cited as example, evidence that the activities of foreign oil firms in Nigeria have had perverse effects on the local environment.

According to Gibbon (2005), Africa's increasing economic marginalization is well known and has been widely commented upon. Africa has lost out because the vast majority of its enterprises lack the new competitive advantages as a consequence of greater functional differentiation across a wide range of value chains. To generate greater FDI, he submits that Africa needs to deepen regional integration, facilitate greater economies of scale, and thereby in the long run create enterprises which are more competitive on global markets.

2.1.4.2 Distribution of FDI within Africa

Asiedu (2006) reveals that in spite of the importance of FDI to the region, it is surprising that there is a dearth of research on the factors that affect FDI to Africa. While conducting a search of the Econlit database using 'foreign direct investment' and 'Africa' as keywords, she only finds five journal articles on the determinants of FDI to Africa.

Though the size of middle class remains extremely poor in Africa compared to other regions as revealed by Potts (2013), the views that there is a burgeoning middle class and that rapid urbanization is occurring are factors of much interest to MNCs and large corporations worldwide seeking new areas for profitable investments.

Using the income bands of excess of \$4 per day from the Africa Development Bank (AfDB) data, Potts constructed a classification of income classes reflecting Purchasing Power Parity across economic regions of Africa,⁵ giving insight into why the North Africa and the Republic of South Africa attract more FDI than the West African sub region. Whilst this suffices to show disparities amongst regions within Africa, she cautions that the income band classifications used are very far from what most urban scholars would consider to place an urban-based person in the 'middle class' in any sense, be it in terms of income/consumption, possible lifestyle or social status. By comparison, according to the author, the recent Global Trends 2030 report uses a global (i.e. not western) middle-class income standard of \$10–\$100 per day of disposable income. She submits that in contrast to much of Asia in the past 30 years, foreign direct investment (FDI) in urban-based productive sectors generating local jobs, as opposed to services and consumption, has been limited.

This is much like Dupasquier and Osakwe (2006) finding 'that the sector in which a country receives FDI affects the extent to which it could realize its potential benefits. In East Asia, substantial FDI went into the secondary sector thereby contributing to the diversification of the export base and to higher and sustained growth. Africa, on the other hand, receives FDI mostly in the primary sector, and so the benefits to the region have not been as significant as

⁵ See figure in Annex 1

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in East Asia. In this regard, a key challenge facing Africa is how to attract more FDI in dynamic products and sectors with high income elasticity of demand.'(p.244)

Several authors including Asiedu (2006), Onyeiwu and Shrestha (2006), Sunday Ojo (2012) and Anyanwu (2012) have used data from UNCTAD, FDI market and TNC databases to show the different performances over time of the sub regions within Africa. Of the eight (8) time series studied by most (1970-74; 1975-79; 1980-84; 1985-89; 1990-94; 1995-99; 2000-04; 2005-09), West Africa consistently performed below its potentials and more times below the North and South Africa sub regions, despite its obvious human and natural resources. The East Africa situation was explained largely by it's often restiveness, for least performance of attracting FDI among all the sub regions except in the period 1975-79 and 1985-89.⁶

Loots and Kabundi (2012) explain that the FDI inflows to ECOWAS are dominated by flows into the oil industry in Nigeria, the primary sector as well as a number of privatisation schemes and project upgrades in Burkina Faso, Côte d'Ivoire and Mali which also explain the flows to this region. They note that the top four destinations – Angola, Egypt, Nigeria and South Africa – received approximately 55% of all flows to African countries since 2000 while the four largest economies – South Africa, Egypt, Algeria and Nigeria – contributing 56% of the continent's GDP, are recipients of approximately 40% of all FDI inflows.

Most of the Authors share the opinion that corruption, political instability, poor infrastructure and weak institutions are partly responsible for deterring FDI to the region.

Naude and Krugell (2007) added a new dimension stating that the region's geography constrains economic growth as well as FDI. According to them, geography has an impact on policy and on the convergence of incomes across the world. It determines climate, endowments of natural resources, disease burden, transport costs and diffusion of new innovations. It directly affects agricultural productivity and health and indirectly impacts on the economy through distance and the quality of institutions. The remoteness of African countries from the core markets of Europe, they stated, contribute to high transport and transactions costs, which adversely impact on exports and flow of FDI into the region. Distance therefore, matters.

Asiedu (2006) particularly suggest that strong regional economic cooperation such as ECOWAS can enhance FDI to the region, citing promotion of political stability, coordination of policies and sanctioning of errant members as elements of regionalization that can aid

⁶ See Table in annex 2: showing that all the African sub-regions experienced an acceleration of FDI inflows from mid-1990s. Moreover, a detailed analysis at sub-regions level reveals that East Africa is the least performing sub-region in attracting FDI, for all the periods except in the period 1975-79 and 1985-89. For the latter two periods, Southern Africa was the least performing sub-region. The data show that until the 1980s, there was no single dominant sub- region in terms of FDI inflows. Indeed, from the 1980s, Northern Africa became the highest performing African sub-region in attracting FDI. However, in the early 1970s, Southern Africa was the highest performing sub-region, and in the second half of the 1970s; Western Africa was the leading sub-region as far as FDI attractiveness is concerned.

democracy, curb corruption and stabilize macro-economic policies. Herein lays the potential for countries in ECOWAS to use the platform to attract more FDI in order to be competitive.

2.2 Conceptual Framework

In assessing the effects of factor endowments on local economies of cities in the ECOWAS region, the conceptual framework drawn from the literature review is based on three key areas. These are internal (endogenous) and external (exogenous) determinants as well as benchmarking parameters. The framework therefore draws a logical path to link the three.



Figure 2: The Conceptual Framework

Based on literature and research propositions.

As established, cities are engines of growth and people move into the city for better lives and living conditions. Cities lose their attraction when they cannot meet residents' aspiration of wellbeing and appropriate infrastructure. It is therefore logical for a city to aspire to find its level within the city networks and global value chains to retain its attraction.

To be a global city, a city has to be competitive and resilient finding a balance between specialization and diversification as the ultimate goal. Resilience helps to sustain competitiveness, and equally helps to absorb shocks and respond to global economic shifts. To achieve this, the city requires factor resources both 'soft and hard'. The benchmarking parameters are the city's networks, position in the global value chains, locational factor endowments and how these impact on the local economies.

It is also established that the output of factor endowments and their effects on local economies is measured by the FDI they generate which is expressed in the global demands of multi-national firms, their headquarters and subsidiaries along production value chains.

Quite instructively as discovered, local indicators of competitive advantage can be distinguished from those that confer comparative advantage. These are 'soft', dynamic and manmade, such as innovation, governance institutions, business environment and investment climate, human capital, city branding and marketing. Ultimately, a city finds its level when its local factors meet with global demands of FDI..

It is within this framework that this research will be operationalized.

Chapter 3: Research Design and Methods

3.1 Introduction

Every research is unique in its own way and has its appropriate methods. This research relies on secondary data especially as related to the FDI metric (which is used to measure competitiveness), and the theories and concepts underlining its framework. Generally, these were sourced from several publications, books, technical journals, scholarly reports, economic market and trade records; and other necessary information including unpublished materials such as IHS documents.

The insights and evidences provided from reviewing literature have necessitated a revision of principal research questions into easily measurable ones given the designed instruments. In order to achieve the stated research objectives and answer the questions, several relevant types of data are required to provide evidence and draw meaningful conclusions. The process of this exercise therefore, will be the focus of this chapter.

3.2 Revised Research Questions

The overall research question following the research objectives is:

a) What is the pattern and trend of all FDI into the ECOWAS, and how can cities competitiveness and complementarity be enhanced within the Region?

From this, the following sub questions are drawn:

- i. What is the growth of all FDI to cities in the ECOWAS region?
- ii. What is the growth of FDI to the most important sectors?
- iii. What is the position of cities in the attraction of all FDI in the region?
- iv. What is the position of the most important sectors in attracting FDI?
- v. What is the geographic distribution of all FDI in the region?
- vi. Which cities are the most important competitors?
- vii. Which location factors are determinants for all FDI in the region?

3.3 Operationalization, Variables and Indicators

The scope of analysis is the ECOWAS region, and the study will proceed from countries analysis to cities and from total FDI to FDI by sectors. The FDI serves as the dependent variable and is observed by volume, count, growth and sector. The predictors or input variables are the locational factors which will be applied using specific urban indicators from the Global Competitiveness Report 2013.

The operationalization framework as drawn (Table 2), presents the research sub-questions, data sources and analysis type, methods, tools, outputs and dimensions of the study.

Table 2: Operationalization Framework

Sub research questions	Data source	Analy -sis type	Methods	Tools	Outputs for city and sector analysis in the ECOWAS investments networks.	Dimension
What is the growth of all FDI to cities in the ECOWAS region?	FDI markets	criptive (what)	Trend analysis	Excel	Growth volume	Time
What is the growth of FDI to the most important sectors?		De				
What is the position of cities in the attraction of all FDI in the region?	FDI markets		IN degree & Between		Nodes and Position	
What is the position of the most important sectors in attracting FDI	& Orbis	Descriptive (what)	ess	UCI net		Functional
Which cities are the most important competitors in the region?	FDI markets		Relative Manhatta n Distance		Competition and similarity	
What is the geographic distribution of all FDI into the region?	FDI markets	Descriptive (What)	GIS Mapping	Net Draw	Geographic Distribution	Spatial
Which location factors are determinant for all FDI?	dich location tors are erminant for all I? GCI Reports, Location Factors. GCI Reports, Location Factors. H Multiple Regressi on (cross section)		SPSS	Causality inference Investment (y); Location factors (x)	Causal	

3.4 Data Types, Collection Methods and Approach

Three types of data are required for the operationalization of this research. These are the network data comprising two sources viz the FDI market and the Orbis databases, and urban indicators for locational factors.

The FDI market database provide worldwide cross border information of FDI flow in all sectors and in all countries by multinational companies (MNC) and other economic development agencies. This is done through FDI intelligence and tracking of all investments worldwide by the Financial Times Limited⁷. This allows for analysis of time series trends of worldwide investments over time. The time series data used for this research is from 2003 to 2012 covering ten years. The worldwide investment data is a necessity as FDI inflows into ECOWAS come from all sources across the world which must be captured in data aggregation.

The Orbis database equally provides extensive information pertaining to MNC worldwide investments including their locations, subsidiaries, ownership and financial performance. It includes details of industries and sectors, revealing which companies are competitors along multiple dimensions. The database is produced by Bureau van Dijk. A cross – sectional analysis of the Orbis data within a cumulative period was used.

The datasets attained through these sources use consistent criteria for FDI data collection, and thereby permit unbiased assessment. Although domestic investments are equally important, there are no comparative databases of internal investments that take place within countries, hence the reliance on the FDI data for this study. The two data sources were applied majorly for the descriptive aspect of this study using software and programmes such as Excel, Ucinet, Netdraw, and SPSS to track the growth of FDI and its functional and spatial effects on cities and regions.

3.4.1 Descriptive Analysis

These data sources, from FDI market and Orbis, present a description of the trends of worldwide flows of FDI into the region which is analysed before selecting the study cases. This is necessary to capture all cross border investments between the ECOWAS region and the rest of the world in order to answer the research questions. This enables the assessment of performance of local economies, and positions of cities and countries in the region within the regional and global networks. Applying the suppositions of the factor endowments approach of trade theory that investments are profit seeking and locations are based on differences in factor requirements of sectors, the analyses include the sectors with most investment counts in the region and the location factors attracting them which then leads to profiling of the major recipient cities.

Although the FDI data include both the values and numbers of investments, roughly 60% of the investment values are based on estimates which by that percentage could distort the results. For this reason, the number or count of investments serves as a more reliable unit of analysis. Besides, a correlation analysis between number and value of investments reveals a

⁷ The right to access the FDI market database was purchased by IHS and provided for this research.

very high correlation between the two forms of data, meaning that using the number or count of investments as applied in this study, serves as a good proxy for investment values.

3.4.2 Explanatory Analysis

The explanatory part uses the location factors to explain the attraction of FDI to ECOWAS by establishing a causative relationship between the variables. In explaining locational determinants of FDI to assess competitiveness, measures are often derived from global indicators. However, scholars have stressed the need to be circumspect in the choice of indicators. The major reference data and source of indicators applied for this research is the World Economic Forum's Global Competitiveness Index (GCI) drawn from its 2013 Report. The GCI comprises of twelve (12) pillars which are essential for each of the three stages of development (factor-driven, efficiency-driven and innovation-driven) as well as several sub indicators for each of the pillars. It provides deeper insights into location conditions precedent for the attraction of investments globally and their indicators at country level.





World Economic Forum, 2013

With a network of over 150 partner institutes, common denominators and benchmarking parameters were applied making it usable for this purpose, though three of the ECOWAS countries (Guinea Bissau, Niger and Togo) were missing in the analysis. The Report features 144 countries with detail profiling of their economies and comprehensive assessment covering over one hundred (100) indicators. These therefore require sifting by performing VIF test to check multicollinearity and extract the most appropriate set of indicators. This was first applied to all the pillars and their numerous sub indicators based on coefficient value of less than ten (<10). This process produced the pillars and indicators that serve as independent variables and benchmarking parameters to explain locational factor endowments attracting, and necessary to attract investment.

The second stage is to log the FDI data in order to reduce variability and skewness given the large volume and vast dispersion observed of the data. At this point the entire FDI data of Africa is used because of its common trend and to make for reliable results. The logged FDI was then applied as the dependent variable to test the reliability and level of significance of first the GCI, the 12 pillars and the sub indicators that have already passed the VIF test using the enter and stepwise method respectively for the regression analysis. This was done for Africa and Asia to enable pair results and draw lessons from the relative success of Asia. The choice of Asia is premised on the fact that it is one of the fastest growing regions worldwide. Some of its countries like Singapore, Taiwan, Japan and South Korea which are within top 20 of competitiveness ranking, and high performers like Malaysia and Indonesia have similar circumstances with most ECOWAS countries.

3.4.3 Quantitative Analysis

This study is essentially a quantitative research. It involves the collection of a large volume of raw data pertaining to firms' investment details (greenfields, mergers and acquisitions; ownership, sectors, location and number) and their trans-national networks of regions, countries and cities of origin and destination. It also includes several urban indicators and parameters. Processing and aggregation of these were possible through statistical methods. Excel was used for the collation and analysis of the FDI worldwide data, the Ucinet application was used for network analysis and the Netdraw for its geographic structure, while the SPSS software was used to perform econometric analyses.

3.5 Sample Size and Selection

The data required for this research is worldwide. However as a study in regional competitiveness, only a sample related to cities and countries within ECOWAS were considered.

Similarly, the total number of investment sectors captured in the primary data for ECOWAS was forty two (42), topmost sectors with substantial FDI attraction were then selected after applying a series of rank filtering by volume, count and percentage.

Several urban indicators have been developed by various agencies to monitor and serve as performance criteria for assessing cities management in a comparative context. Often times, however, these are thematic (social, economic, cultural etc) based on the specific needs of the organisation developing it such as the UNCHS' Global Urban Observatory. For this research, however, a single source selection of the GCI of the WEF is preferred.

3.6 Validity and Reliability

To assure validity and reliability certain assumptions were addressed. These are

- a) Possibility of skewness usually associated with the dependent variable,
- b) Possibility of multicollinearity (similarity in correlation) associated with independent variables,
- c) Possibility of existence of outliers.

In order to address the *skewness* or heteroscedasticity, the FDI data was logged to ensure an even distribution. The Variance Inflation Factor (VIF) test was run to check for *multicollinearity* of the indicators, ensure that there was no excessive correlation amongst the indicators and that they were the ones intended to be measured. A trend line of data was drawn to detect *outliers* which might bias the outcome, and then eliminated.

3.7 Research Approach

From the foregoing, the research line of action which aided to achieve the stated objectives and research questions is summarised in figure 4.

The research was approached in three stages. Stage one, was for conceptualisation and literature reviews in which appropriate concepts and theories were identified. This was basically desk study and aided in providing background to achieving objectives 1 and 2 as set out in section 1.3. Stage 2, which involved the cleansing and extensive analyses of the collected secondary data from different sources, basically helped to answer all the research questions and solidified some assumptions from Stage 1. Whilst in Stage 3, the results were evaluated and assessed. This helped to draw logical conclusions on cities' positions in the attraction of FDI, and thereby recommend appropriate urban management responses to sustain and enhance their positions as set out in objectives 3 and 4.

Figure 4: Overview of Research Approach



Chapter 4: Assessing FDI Performance on Local Economies and Effects of Factor Endowments in the ECOWAS Region

4.1 Growth of FDI to the ECOWAS Region

In order to answer the research questions and achieve its objectives, the first step will be to determine the growth of all FDI into the ECOWAS region. The count of inflow of foreign investments into the ECOWAS region from 2003 to 2012 amounts to 723 as shown in Table 3 and graphically in Chart 1. The growth rate of 11.5% is a reflection of general growth in external trade over the years due to globalisation.



Chart 1: Total FDI inflow to ECOWAS

Based on FDI market database, 2003-2012

Table 3: Trend of FDI inflow to ECOWAS

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Volume	44	31	68	60	35	95	98	93	116	83
Grand Total- 723										
Growth per cent- 11.5										

Based on FDI market database, 2003-2012

Though this general growth is corroborated in several literatures on FDI including UNCTAD (2005) and ECOWAS Statistical Bulletin (2008), it is among the lowest compared to other similar regional blocs worldwide. Despite above, a relative growth is experienced from 2008 to 2012 which incidentally coincides with the economic meltdown of some regions in Europe and North America especially in the financial and real estate sectors.

4.1.1 Growth of FDI by Country

Analysing the dataset to determine the status of countries in the share of FDI inflow to the region reflects that Nigeria with its 'dominant economy' attracts the most in the period under review as shown by the aggregation of counts in the line chart 2.



Chart 2: Count of FDI Inflow to ECOWAS by Country

Based on FDI market database, 2003-2012.

Nigeria attracted 44% of the entire inflow, while Ghana and Senegal attracted 26% and 7% respectively to come second and third. However, applying the super rank matrix which is a combination of growth and count of investment over the period, Cote d'Ivoire and Ghana are both top with Nigeria and Liberia following respectively. While Nigeria is the strongest by count, Cote d'Ivoire (as it becomes more stable) is the fastest growing, followed by Liberia, Ghana and Mali with growth rates of 21.7, 16.9, 15.5 and 9.9% respectively. Nigeria placed 5th position with only 8.5% growth.


Chart 3: Super Rank of Countries by Growth and Count.

The ECOWAS Statistical Bulletin (2008) reported the Nigerian economy as accounting for 62% of the regional economy, seven times the size of Cote d'Ivoire and eleven times the size of Ghana's economy with Guinea Bissau as the smallest at 0.17%. Despite the size of their economies, it is instructive to note that Cote d'Ivoire (1st by growth), Senegal (3rd by count) and Mali (4th by growth) are members of the sub regional monetary union (WAEMU) of former French colonies. This monetary union gives relative 'trade facilitation' advantage over their English and Portuguese counterparts, as it reduces the cost of currency exchange which partly explains their positions in the country super ranking. The eight member countries of WAEMU also have unified external tariffs, stock exchange and a regulatory framework for banking within their platform.

4.1.2 Growth of FDI by Economic Sector

The total FDI into the region within the period was recorded in 32 different sectors. The top sectors with most investments by count are in services (financial; communications; business; software and IT), extractive (metals; coal, oil and gas) and agricultural (food and tobacco). In terms of growth, textiles, building and construction materials, and metals respectively ranked top after communications and financial services.

Based on FDI market database, 2003-2012.

Chart 4: FDI Growth by Sector.



Based on FDI market database, 2003-2012.

Table 4: FDI Analysis by Sector

	Position by Super Rank	Position by Count	Position by Growth	Percentage of Growth
Communications	1	2	1	31.2%
Financial Services	1	1	2	18.6%
Metals	2	3	5	13.4%
Business Services	3	5	6	11.1%
Software & IT services	4	7	7	10.8%
Food & Tobacco	5	6	11	8.2%
Coal, Oil and Natural Gas	5	4	13	6.6%

Based on FDI market database, 2003-2012.

Table 4 shows the positions of sectors by super rank, volume count and growth. The super rank is the combination of volume (sectors with highest count of investment) and growth (sectors with highest rate of increase). However, the most important is the potential for growth. Though still relatively low by count which affects their super rank, textiles (3rd by growth) and building and construction materials (4th by growth) are experiencing growth due

to regulatory practices and policy reviews on restrictions on FDI in those sectors which were hitherto in place to stimulate local entrepreneurship in most of the countries.⁸

In the case of metals, most countries in the region are endowed with large deposits of minerals ranging from iron ore (GUI), uranium (NIG), gold (GHA, MAL, BFA), diamonds (LIB, TOG), zirconium (GAM), manganese (CIV), titanium (SIL), coal (NGR). Lately, the region has emerged as a preferred destination for mining and extractive activities due to relative peace, low operating costs and a near absence of climate policy. The World Mineral Production 2004-08 (2010), published by the British Geological Survey revealed that activities in several metals sector like iron ore, gold, coal and crude steel were hardly affected by the economic downturn experienced particularly in the financial services. Coupled with increased demand for metals from China, policy shifts and major new discoveries of reserves in countries like Liberia, Guinea and Niger, the metals sector by its volume has contributed to the seeming resilience of the ECOWAS economy in the face of economic meltdown experienced elsewhere in the years 2008-2011 as depicted in the analysis.

4.1.2.1 Investment Analysis by Sector Activity

A total of seventeen sector activities recorded projects in the counts of capital investments from the FDI. The top five are manufacturing (21.8%), business services (20.7%), sales and marketing (18.1%), extraction (12.8%) and retail (5.1%). The combination of R&D, DDT and headquarters only mustered 3.5%. This verifies that the economies of ECOWAS countries are still largely factor driven whilst those combined activities are innovation driven.



Chart 5: Count of Sector Activities Attracting FDI

Based on FDI market database, 2003-2012.

Based on the analysis of the sectors, it is logical that the trend of manufacturing activities is resource based, majorly in the extractives and the local mining industry. The increase in counts of activities in the business services and sales, marketing and support is indicative of the emergence of the region as an important market due perhaps to the steady growth of the middle class. With this comes improved purchasing power parity (PPP) which enhances

⁸ See annexure 3 and 4 on the Regulatory Treatment of FDI in West African Countries cited in ECOWAS Regional Investment Policy Framework (2007).

affordability. Besides, the four leading activities are known to complement one another as an economic given at every stage of developmental growth. Growth in manufacturing and extractives therefore will expectedly attract growth in the financial and business services.

4.2 Position of Cities in the Attraction of Inward FDI

In assessing the position of cities, it is imperative to start from the countries which house them, as they make national policies and play major institutional and regulatory roles in influencing the direction of FDI. Figure 4 shows positions of countries in the share of FDI inflow to the region. It also shows the source countries, indicating that USA, UK, India, South Africa and Nigeria are the countries most investing in the region. France, Germany, Canada, China, Togo and Luxemburg are in the second league of investors.

Figure 4: Nodes Network of Major Inward FDI to ECOWAS by Country



Based on FDI market database, 2003-2012

To analyse the position of cities in the flows of investments, the one moment Orbis dataset was used to assess selected top city per country as presented in Table 5. These are commercial capital cities of their countries with highest volume of FDI in their respective countries. Sassen (2012) refers to this as urban primacy. Primate cities account for a disproportionate share of population, employment and gross national products. They may therefore approximate the size of their national inward FDI.

Cities	Country code	Orbis (n)	FDI mkt.(n)	Rank by Count based
				<u>on Orbis</u>
Lagos	(NGR)	559	199	1 st
Accra	(GHA)	355	111	2 nd
Dakar	(SEN)	301	48	3 rd
Monrovia	(LIB)	232	9	4^{th}
Ouagadougou	(BFA)	141	7	5 th
Bamako	(MAL)	119	6	6 th
Cotonou	(BEN)	91	4	7 th
Santiago	(CVD)	84	-	8 th
Lome	(TOG)	81	3	9 th
Freetown	(SIL)	47	8	10 th
Conakry	(GUI)	41	6	11 th
Bissau	(GBI)	32	1	12 th
Niamey	(NIG)	30	3	13 th
Abidjan	(CIV)	13	30	14 th
Banjul	(GAM)	8	6	15 th

 Table 5: Count of Destination Investments to Cities

Based on Orbis & FDI market databases, 2012.

As shown in the combination of data sources above, the Orbis dataset recorded more details on the city based investments than the FDI market; hence it is preferred for city analysis even though the trends are similar.

Out of the total count of 2134 investment activities attracted by top cities of ECOWAS countries as recorded in the Orbis database, Lagos came top with 26.2% (559) of the investments. Accra 16.6% (355), Dakar 14.1% (301), Monrovia 10.8% (232) and Ouagadougou 6.6% (141) follow in the next order. Both Dakar and Ouagadougou are in the network of countries of former French colonies taking advantage of being in a monetary union, maintaining the French currency inherited from independence. They therefore seem to enjoy more benefits of economic integration than the Anglophone colleagues.

The two cities of former Portuguese colonies, Santiago and Bissau are distant 8th and 12th respectively. However it is noted that Cape Verde, the country of Santiago is the only country of ECOWAS mentioned in the GCR 2013 to be in the second stage of economic development which is efficiency driven. It boasts the highest GDP per capital in the region. Similar to Lagos and Abidjan that have ceased being the administrative capitals of their respective countries but yet attract the most FDI, Santiago attracts more FDI in Cape Verde than the capital city Praia.

The network of major inward investments, positions of cities sending the ties (source), and locations receiving (destination), are as presented in Figure 5.



Figure 5: Nodes Network of Major Inward FDI to ECOWAS by Cities

Based on FDI market database, 2003-2012.

The relational pattern of inward FDI to the cities, similar to the countries' is very diverse and shows strong relations developed since the colonial times. It is therefore typical that Paris invests in Dakar for instance, and London invests in Accra. Other tendencies observed apart from the huge Europe and North America influence as source points, are the emerging Afro-Asia and the increasing intra-Africa city networks. The strength of ties between Mumbai,

New Delhi and Lagos; Dubai and Dakar; Tokyo and Accra; Singapore, Seoul, New Delhi and Lagos; Lagos and Accra, Cotonou; Johannesburg, Cape Town and Lagos are remarkable.

However, it is important to note that in the analysis of destination locations of major inward FDI to ECOWAS only six of the top ranked cities (Table 5) are recipients, in a selection of fifteen top destinations in the region based on counts. The six cities as shown in Chart 6 are Lagos, Accra, Dakar, Abidjan, Monrovia and Freetown. While countries like Ghana and Nigeria have five locations each as major FDI recipients within the fifteen, (Accra, Kumasi, Tema, Tamale and Tarkwa; Lagos, Maitama, Port Harcourt, Akpo and Aba respectively), top ranked cities like Ouagadougou, Bamako and Cotonou are farther down the ladder.

This is also reflective of the fact that major FDI into the region are resource based, locations with extractive resources and manufacturing possibilities (mining, metals, coal, oil and gas) therefore predominate over the 'big cities'. Such locations are Tema, Tamale, Tarkwa, Aba and Port Harcourt.



Chart 6: Top 15 Destination Cities of Major Inward FDI to ECOWAS

Based on FDI market database, 2003-2012

Libreville though also a location within the fifteen inward recipients, is the capital of Gabon, a non-member of ECOWAS union.

Chart 7: Top 15 Source Cities of Major Inward FDI to ECOWAS



Based on FDI market database, 2003-2012.

4.2.1 Position of Sectors in the Inward FDI

The sector with the most investment attraction in the region is the financial services, and the cities investing most in this sector are Lagos, Lome, London, New York, Cape Town and Johannesburg as depicted in Figure 6. Lagos position is attributable to Nigeria leading within the region 'in the areas of macroeconomic stability, better fiscal position' (ACR, 2013 p.12) and the banking sector reforms which have seen its banks spread across countries in the region. Lome houses the headquarters of the regional bank (ECOBANK) which has a mandate and obligation to open subsidiaries in member states, while London's and New York's interests are understandable as financial sector world powers coupled with the various Anglo-American investments in the region.



Figure 6: Nodes Network of Top Sectors and Origin of Inward FDI

Based on FDI market database, 2003-2012.

The growth of the communication sector can be seen as a direct result of globalisation, a spill over from the technological advancement of western nations. The city most investing in this sector is Johannesburg and this is because of the strength of South Africa as the continent's power house of the sector. The WEF's latest Global Information Technology Report (2013) ranks South Africa among the top countries of the world. Besides, major ICT providers like Nokia, MTN, Vodacom and Telkom are based or have their Africa regional headquarters in Johannesburg. For instance, MTN Nigeria with subsidiaries in some ECOWAS countries operates under the banner of South Africa based MTN Group. The ECOWAS Statistical Bulletin (2008) reports that all member states have embraced the concept of ICT, and have thus made significant efforts in promoting the development of the industry in their respective countries, with strong policy and regulatory incentives which further explains the growth of the sector. Table 6 shows Nigeria as top recipient in the communications sector.

	Business Services	Coal, Oil & Gas	Communications	Financial Services	Food & Tobacco	Metals	Software & IT
Benin			1	1			
Burkina Faso	2			3		10	
Cape Verde	1			5			
Cote d'Ivoire	1	2	4	6	10	3	2
Gambia	1		2	9			
Ghana	16	8	28	45*	11	27*	7
Guinea	1	1		2		10	
Guinea Bissau			1	3			
Liberia	1	1	2	5	1	4	
Mali			1	1	1	5	
Niger	1	2	1			3	
Nigeria	30*	50*	37*	29	23*	5	15*
Senegal	4	2	4	4	2	5	8
Sierra Leone		1	2	5	1	7	
Togo			1				
Total	58	67	84	118	49	79	32

NOTE: *Highest count of investment in the sector.

Based on FDI market database, 2003-2012.

Paris, San Ramon (California), Irvin (Texas) and Perth (Australia) invest most in the extractives and mining activities of coal, oil, gas and metals sectors. Reasons have already been discussed for the growth. Whilst noting that developments in these sectors are dependent on inherent resource endowments, Ghana is top in the metals sector.

The growth in the food and tobacco sector emerges from renewed regional efforts to achieve the MDG goals of employment, food security and poverty reduction. With respect to the structure of the regional economy, agriculture remains the mainstay contributing about 40% on average to the entire real value added of the region (ECOWAS Statistical Bulletin, 2008). The most investing cities are Singapore, Cape Town, Vevey (headquarters of Nestle, Switzerland) and Zurich with renewed policies of recipient countries as additional impetus.

4.3 City Competitiveness within ECOWAS Region

Having analysed the trend and growth of FDI in the region, locations, and the positions of cities and sectors in the attraction of investments, this study moves to identify relational structure among the cities to answer the research question which cities are the most important competitors. Based on the FDI data, competitiveness of cities is measured using the Manhattan Distance method. Computing competitiveness by sector reflects the different shifts and positions (as shown in Table 7) that cities can occupy in global networks depending on what factor is being considered (Sassen, 2012).

The most competitive sectors are food and tobacco (agriculture), transportation and, hotel and tourism. City competitiveness in sectors can be broken to which particular activity within its delivery or value chains are cities competing. The various value added activities can also be classified majorly into primary and support activities. It thus goes to justify that competition among the quartet of Lagos, Accra, Dakar and Abidjan in business services, communications, and software and IT sectors, may specifically be related to support activities like location of regional headquarter or DDT centre which require specific location factors different from manufacturing of hardware which is a primary activity within the sector. Same way as Niamey, Bissau, Kaduna and Kpalime (hinterland transportation); Monrovia, Freetown, Praia and Libreville (maritime transportation); and Freetown, Tamale and Monrovia which all have special cultural and 'sister cities' relations with USA, which is the largest source of FDI to the region. All therefore compete for same source of inward FDI in the sectors thereby having serious market overlap.

Similarly, the weight of competition in the food and tobacco sector is a reflection of the importance of agriculture to the economic development of the region and justified by the fact that all the countries are endowed with arable land. This is corroborated in the ECOWAS Statistical Bulletin (2008). In the transportation sector, there are at least seventeen counts of cities, listed in the table, located along the Atlantic coast almost at equal distance to one another which also explains the competition in the sector. These details would however require further research.

Generally all the cities ranked in Table 5 are assessed, highlighting top three competitors to each city by sector of FDI; meaning the cities and locations within a bracket have similar prospective pull factors and endowments for the particular sector investments as presented in Table 7 below.⁹

⁹ See annex 5 for the list of all competitors and their Countries of location.

Table 7: City Competitiveness	ss by Sector in the ECOWAS
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Name of City	Competitors by Rank		Important Sectors	
	1 st	2^{nd}	3 rd	-
Lagos	Accra	Dakar	Abidjan	Business services/ Communications/ Software & IT
Accra	Dakar	Abidjan	Kumasi	Financial services/ Transportation
Dakar	Kumasi	Monrovia	Sekondi Takoradi	Transportation/ Industrial machinery, equipment & tools.
Monrovia	Freetown	Praia	Libreville	Transportation
Ouagadougou	Conakry	Port Loko	Kalana	Food & Tobacco
Bamako	Abeokuta	Kano	Enugu	Textiles/ Metals
Cotonou	Libreville	Bafata	Bissau	Food & Tobacco/ Transportation
Praia	Lekki	Bakau	Farafenni	Hotel & Tourism
Lome	Makeni	Akure	Bafata	Food & Tobacco
Freetown	Tamale	Monrovia	Kalana	Hotel & Tourism
Conakry	Port Loko	Kalana	Ahafo	Food & Tobacco / minerals
Bissau	Kalana	Kumasi	Uyo	Food & Tobacco / consumer products.
Niamey	Bissau	Kaduna	Kpalime	Textile / Transportation
Abidjan	Kumasi	Tema	Monrovia	Transportation
Banjul	Praia	Lekki	Bakau	Hotel & Tourism

Based on FDI market database (2003-2012) and city profiles.

It is also noted that within the competitiveness network of cities presented above, not once did Lagos (as listed in the FDI market data) appear as a major competitor to any of the cities. Lagos may therefore be classified as operating at a higher level of competition, falling into the 'core' hierarchy in the region as described in Friedman's world city hypothesis (Taylor, 2004 p.22) with significant 'outdegree centrality' position (Alderson and Beckfield, 2004 p.822) given the strength of ties and investments sent to other cities from Lagos. This makes it more of a power or control centre in the ECOWAS region.



Similarly, as shown in figure 5, Lagos receives extensively from Cape Town and Johannesburg within Africa, indicating that competitiveness happens at different spatial scales. Lagos therefore seems to compete with bigger cities like Johannesburg, Cairo and other international cities in that league (regional centres) like Jakarta.

4.4 Geographic Distribution of all Inward FDI to the Region

This section depicts actual structure and location between ties (origin and destination of investments) from abroad into ECOWAS, defined by their geographic coordinates (latitude and longitude). It positions the nodes as they appear on the world map in their proper coordinates and geographic regions, from North America, Europe, Asia, Australia, Africa and South America.





Based on FDI market database, 2003-2012.

The above figure depicts that ECOWAS is attractive to all economic regions of the world even including the rest of Africa. Most of the inward investments come from North America as there is a strong cultural and historical affiliation to that region since the slave trade. Two of ECOWAS countries (Liberia and Sierra Leone) are established by citizens of the United States and Britain respectively, and populated by returnees from the region. Europe, described as the world's biggest trading area and the primary focus of global FDI' (Dicken, 2011 p.27), traditionally has always had economic and trading links with ECOWAS predating the colonial eras even as all the countries have colonial affiliations specifically with France (8), Britain (4) and Portugal (2). The global shift and economic growth being

experienced in Southeast Asia, Brazil and some parts of the Mid-east have also impacted on the generation of FDI from these sources to ECOWAS as spill overs.

Aside these, the economic pull, market size (boosted by a large emerging middle class) and resources endowment of ECOWAS are also decisive. Most FDI as shown so far are mostly market and resource seeking, coupled with cheap labour availability. The total population of ECOWAS as estimated in 2007 is 275.7 million, with an agrarian labour force of 61 per cent which can be easily tapped since they are largely subsistent. There is also a low percentage of access to tertiary education and vocational skills. These ensure that the costs of labour relative to other regions will be quite low. Figure 9 is a zoomed in position of major ECOWAS recipients of geographic distribution of FDI.

Figure 9: Directional Distribution of FDI into ECOWAS



Based on FDI market database, 2003-2012.

4.5 Locational Factor Determinants of FDI in the Region

The 12 pillars of GCI providing indicators for locational factors are divided into 3 major subindexes which are interrelated. These are;

- basic requirements (4 pillars): institutions, infrastructure, macroeconomic environment, health and primary education;

- efficiency enhancers (6 pillars): higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size;

- and innovation and sophistication factors (2 pillars): business sophistication and innovation.

Although all the 12 pillars are important for competitiveness and growth of an economy, 2 are most significant in attracting FDI to ECOWAS as shown from the results of regression analyses¹⁰. These are market size (pillar 10) and business sophistication (pillar 11).

The market size is described as the measure of the size of domestic and foreign markets. The GDP size measures the totality of domestic market while the total value of exports measures the size of foreign markets. Business sophistication is measured by the ability to compete by providing unique products, networks and marketing. It comprises indicators such as quantity and quality of local suppliers, nature of competitive advantage, value chain breadth, production process sophistication and extent of marketing. All the indicators of each of the 12 pillars are included in the regression analyses. Table 8 presents the summary of the exercise showing indicators with significant relationships with FDI.

4.5.1 Results Evaluation

The functional regression model summary indicates that 71% of total variance of FDI into the region is explained by market size (pillar 10) and business sophistication (pillar 11) factor endowments; hence they are the most important causative factors of FDI. These are pillars in the efficiency driven and innovation driven stages of economic development as classified in the GCI framework. Given the fact that all the countries of ECOWAS, apart from Cape Verde, are in the factor driven stage, it would be expected that the most critical pillars would be the ones in the basic requirement sub index group.

In terms of relationships, with significance (p-value) of .000 and .001 respectively much less than the assigned 0.05, the pillars are both sufficiently significant and have positive coefficient effect on the FDI in the region. All possible regression was conducted on the sifted non-collinear locational factors to find their significant levels across all the twelve pillars. Of note is the different tendencies displayed by the sub indicators. The coefficient relationships between FDI and the locational factors vary between positive and negative.

¹⁰ See annex 8 for the tables of the regression analysis.

Location Factors	Significance (<0.05)	Category
		Pillars
Market size (Pillar 10)	.000	
Business sophistication (Pillar 11)	.001	
		Sub indicators
Strength of investor protection	.002	1
Available airline seats	.000	2
Quality of electricity	.036	
Country credit rating	.000	3
Annual inflation	.000	
Malaria cases	.005 (-)	4
Availability of research and training services	.002	5
Quality of maths and science education	.039 (-)	
Buyer sophistication	.000	6
Imports as a % of GDP	.003 (-)	
Women in labour force ratio to men	.002 (-)	7
Reliance on professional management	.001	
Cooperation in labour employer relations	.011 (-)	
Financing through local equity market	.000	8
FDI and technology transfer	.001	9
Domestic market size index	.000	10
Extent of marketing	.000	11
Quality of scientific research institutions	.007	12

Based on SPSS analysis of GCI (2013).

Apart from the strong pillars, market size and business sophistication, the result shows that 13 other location factors are significant in promoting FDI while 5 indicators have the opposite effect. These are, strength of investor protection; available airline seats; quality of electricity; country credit rating; annual inflation; availability of research and training services; buyer sophistication; reliance on professional management; financing through local equity market;

FDI and technology transfer; domestic market size; quality of scientific research institutions and extent of marketing.

The locational factors in the negative coefficients category typify some assertions in literature that FDI in Africa is primarily self-serving and that MNCs are largely interested in their economic profit. The 'internalization motivation of firms' here becomes evident. This also points to the fact that most FDI into the region as presented in the data are horizontal, meaning source of production is elsewhere and therefore making technological spill over (a major incentive for promoting FDI) an illusion for receiving countries, which explains why location factors such as quality of maths and science education, and cooperation in labour employer relations will have a negative correlation to FDI. This situation is more of 'headquarters-subsidiary relationship', and as described by Dicken (2011), they are the local implementer, limited in geographical scope and functions, with the primary purpose to adapt to local market.

It is understandable though, that malaria cases will affect life expectancy, mortality, attitude to work and productivity. Similarly high ratio of women in labour force will affect general output given low level of education among the women folks. Besides, the primary sources of FDI in the region are the extractives (coal, oil and gas, metals and minerals) which require more men force because of their labour intensity.

The major results that will be discussed will relate to basic requirement pillars which are essential in the factor driven stage to which the countries belong as well as the key pillars (10 and 11) and their sub indicators output from the regression analysis as shown in Table 8. These are market size (pillar 10) and sub indicator, domestic market size index; and business sophistication (pillar 11) and sub indicator, extent of marketing.

4.5.1.1 ECOWAS Countries Position in Key Areas of Global Competitiveness Analysis

Of the three stages of development classification of countries, eleven out of the twelve countries sampled from ECOWAS fall into stage one which is factor driven¹¹. Only Cape Verde is in the second stage of efficiency driven. Basic requirements for take-off to competitiveness in this stage include viable institutions, infrastructure, macro-economic environment, health and primary education. Table 9 presents the top and last three performing countries of West Africa in the basic requirement for competitiveness.

a) Basic requirement pillars.

It is instructive to note that major players in the region like Nigeria and Ghana placed eighth (8^{th}) and fourth (4^{th}) positions respectively in the overall basic requirement criteria for growth and competitiveness¹².

The general aggregate score affirms that the region is still weak in basic requirements of strong and viable institutions, infrastructure development, health and primary education as well as public finance and macro-economic environment. In the overall assessment,

¹¹ Guinea Bissau, Niger and Togo are not included in the GCI Report; inferences on them are therefore drawn from ECOWAS Report.

¹² See annex 7 for the positions of all the ranked countries of ECOWAS.

considering all pillars and sub indicators within the factor driven classification, Liberia, Senegal and Benin were singled out to have performed above the sub Saharan Africa average.

Table 9: Top an	nd Last 3	Countries in	Basic	Requirements
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Country	Rank	Score (1-7)
Cape Verde	1	4.1
Gambia	2	4.0
Liberia	3	3.9
Cote d'Ivoire	10	3.3
Guinea	11	2.8
Sierra Leone	12	2.8

Based on analysis drawn from ACR Report, 2013

Nigeria particularly is far behind the smaller economies in all areas of basic requirements except for macroeconomic stability due mainly to its dependence on oil revenues, which in itself is a weakness.

In providing viable institutions (pillar 1) which relate to aspects of governance, transparency, ethical behaviours and security, Gambia, Liberia and Cape Verde are in the top 3 whilst Guinea, Cote d'Ivoire and Nigeria are in the last 3. The internal security challenges being experienced in Nigeria and government instability especially coups in Cote d'Ivoire in recent times may have weighed heavily against their scores.

The condition of infrastructure (pillar 2) in the region, which refers to transport, electricity and communication infrastructure, is generally poor. Only Gambia scored above the average mark of 3.5 of all the countries. Guinea, Sierra Leone, Burkina Faso and Nigeria are in the rear of the ranking. Some of the reasons adduced for this condition are the overly dependence on government for their provision, poor maintenance, unfavourable regulatory frameworks and absence of engagement of the private sector.

Most of the countries scored above average in the macroeconomic environment (pillar 3) except Sierra Leone, Guinea and Cote d'Ivoire. This relates to government budget balance, gross national savings, inflation, government debts and country credit rating. The relatively high scores across the board are attributable to the growing economic relevance of the region within the global economy and the resilience displayed by the countries' economies as reported earlier. Nigeria, Mali and Benin are the top 3 in the region. Nigeria particularly scored well above others because of its oil revenues, macroeconomic especially banking

Effects of Factor Endowments on Local Economies of Cities within the ECOWAS Region.

reforms which have made her banks among the strongest in Africa, the recent repayment of its debts to Paris Club and other international lenders, and her growing sovereign wealth fund which have increased the country's credit rating.

In the area of health and education (pillar 4), which include indicators such as life expectancy, infant mortality, malaria incidence, quality of primary education and enrolment, all the countries apart from Sierra Leone, Nigeria and Cote d'Ivoire scored average and above. Cape Verde scored well above the rest in this pillar which has moved her to the stage of efficiency driven economy. ECOWAS statistics reported Cape Verde as having the most favourable demographic characteristics, most urbanised, lowest percentage of population growth rate, death rate and infant mortality. The country also meets the World Health Organisation (WHO) doctor-population ratio standard of 10,000 inhabitants per doctor, as well as, the highest primary education enrolment in the region. This therefore clearly shows that investment in human capital will promote FDI. Other high performers in this pillar include Benin, Ghana, Gambia, Senegal and Liberia.

b) Significant pillars and sub indicator

Country	Rank	Score (1-7)
Nigeria	1	4.4
Ghana	2	3.4
Cote d'Ivoire	3	2.8
Gambia	10	1.4
Cape Verde	11	1.1
Liberia	12	1.1

 Table 10: Top and Last 3 Countries in Pillar10, using Domestic Market Size Index.

Based on analysis drawn from GCI Report, 2013.

The size of the domestic market is defined as the sum of the gross domestic product valued at purchasing power parity (PPP) plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services (GCR, 2013). This of course will be influenced by population, workforce, consumption rate, purchasing power, volume and potentials. Apart from Nigeria given its vast population and workforce, none of the countries of ECOWAS got even the average mark of 3.5. This underlines the imperative for positive actions to connect the markets and expand aggregate domestic market potentials which will beef up the market base of the region.

Country	Rank	Score (1-7)
Senegal	1	4.1
Gambia	2	3.8
Liberia	3	3.7
Guinea	10	2.6
Mali	11	2.5
Sierra Leone	12	2.5

 Table 11: Top and Last 3 Countries in Pillar 11, using Extent of Marketing

Based on analysis drawn from GCI Report, 2013

The business sophistication pillar (11) is inclusive of indicators such as the breadth of value chain, quality and quantity of local suppliers and the state of economic cluster development. However, the extent of marketing and perceptions are most important. Hence, country and city branding are important in this regard. This analysis has shown that places compete for investments and tourists. Senegal and Gambia have created a niche in sport and recreation tourism. The Dakar Rally is an international racing sport event that ends on Dakar Beach, and has brought Senegal to the attention of the world. Gambia nicknamed 'the Smiling Coast' thrives majorly on tourism and hosts some of the best international hotels in the region. These countries have created unique products that have drawn global attention to them.

4.5.1.2 Pairing Results with Asia

Applying similar exercise on Asian FDI and regressed locational factors reveal some difference in locational parameters influencing FDI in Asia from those of Africa. Some of these shown in Table 13 are, labour market efficiency; quality of primary education and management of schools; exports as a percentage of GDP, as against import in the Africa case; local supplier quantity and availability of scientists and engineers. These are factors that have helped Asia increase its volume and growth of GDP per capital which is put at annual average of 8.5 per cent. They are also essential to generating domestic and foreign investments thereby making Asia a bigger player than Africa in the global economy.

Location Factor	Significance <0.05	Category
Market size (10)	.000	Pillars
► Labour market efficiency (7)	.003	
Available airline seat	.000	2
Country credit rating	.000	3
Quality of primary education	.036	4
Quality of management schools	.000	5
Intensity of local competition	.000	6
Reliance on professional management	.000	7
 Affordability of financial services 	.000	8
Technology transfer	.000	9
Domestic market size index	.000	10
Exports as a percentage of GDP	.001	
Local supplier quantity	.000	11
 Availability of scientists and engineers 	.000	12

Table 12: Summary of Regression Analysis of Locational Factors of FDI (Asia)

Based on SPSS analysis of GCI (2013).

NOTE:

Locational factors and indicators that ECOWAS countries can draw lessons from and develop.

Specifically, the development of human capital, growth and surplus of GDP, and efficient labour markets have turned Asia led by China, India, Japan and Singapore into not only exporters of manufactured goods into Africa but also investment capital in form of loans, bonds, sureties and advances for infrastructure development. China and Japan in particular have dedicated funds for this purpose disbursed through the China-Africa Development Fund and the Japanese International Cooperation Agency.¹³

Table 13 presents the summary average between Asia and ECOWAS showing positions of the countries.

Table 13: Summary	of GCI Scores (1-7)
-------------------	---------------------

Asian Average – 4.5		
ECOWAS Region Average – 3.6		
<u>Above Average</u> Gambia (3.8), Ghana (3.8), Liberia (3.7), Senegal (3.7)	<u>Average</u> Benin (3.6)	Below Average Cape Verde (3.5), Nigeria (3.5), Mali (3.4), Cote d'Ivoire (3.4), Burkina Faso (3.3), Guinea (2.9)
		Sierra Leone (2.8).

Based on analysis drawn from GCI Report, 2013.

It is instructive to note that whilst Nigeria and Cote d'Ivoire, the top two with largest economies in the region, score below regional average in competitiveness; Liberia and Gambia in the last three (13th and 14th respectively) position of the ECOWAS Real GDP are above average performers in the global competitiveness.

4.6.1.3 Major Constraints to FDI in ECOWAS

Though Africa is increasingly being touted as the next big investment destination, records on ground do not indicate this will happen soon. Most Africa countries fall in the rank of the least competitive economies by global assessment indicating they are yet to assume their potentials. For West Africa, only Cape Verde has moved to the efficiency driven stage of development. The most recurring constraints to inward FDI and doing business in the region are depicted in Table 14. The most important challenge a country has is given the highest score of three in that order.

All the twelve (12) countries sampled have access to finance as a major constraint. Indeed, it is the number one constraint for ten (10) of these countries. Eight (8) countries have corruption as a major challenge; whilst six (6) have tax rates as constraints to investment. In the case of Gambia and Senegal (two countries with high investment from tourism), tax rates and tax regulations are two topmost disincentives to investment. Four (4) countries including Nigeria have serious infrastructure deficit, Cote d'Ivoire particularly has issues with coups (government instability) and Liberia with inadequate educated workforce. Cape Verde and Mali, countries with appreciable achievement in basic requirements, have institutional issues of inefficient bureaucracy. In summary, all the countries have peculiar issues that constrain

¹³ The extent of their investments can be sighted in www.cadfund.com and www.jica.go.jp. respectively.

development and FDI. However, given the region's abundant human and natural resources and its fair resilience to global meltdown, possibilities abound to grow the economies better and attract more FDI.

	Constraints to Investments								
Country	Access to finance	Corruption	Tax rates	Inefficient government bureaucracy	Inadequate supply of infrastructure				
Benin	✓ (2)	✓ (3)	✓ (1)						
Burkina Faso	✓ (3)	✓ (2)	✓ (1)						
Cape Verde	✓ (3)		✓ (1)	✓ (2)					
Cote d'Ivoire	✓ (3)	✓ (2)							
Ghana	✓ (3)	✓ (2)	✓ (1)						
Gambia	✓ (2)		✓ (3)						
Liberia	✓ (3)				✓ (1)				
Mali	✓ (3)	✓ (2)		✓ (1)					
Nigeria	✓ (3)	✓ (2)			✓ (1)				
Senegal	✓ (3)		✓ (2)						
Sierra Leone	✓ (3)	✓ (1)			✓ (2)				
Guinea	✓ (3)	✓ (1)			✓ (2)				

	Table 14: Tor	o 3 Maior	Constraints to	Investment by	v Country
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Source: Developed from GCI Report, 2013.

As noted from the Asian pairing, its strong pillars indicate that FDI in that region is substantially in the secondary sectors. This gives it leverage to benefit from spill overs which has translated to solid export base and sustained growth. For Africa, FDI is majorly in the primary sector as presented thus far. The key challenge therefore is for ECOWAS to develop its human capital, stimulate and redirect FDI into the secondary sector.

4.6 Revisiting the Hypothesis

This section is intended to test whether the ideas hypothesized in section 1.4 is supported by sample from datasets applied for this research. The multiple (binary) regression analysis is used to test the hypothesis which is,

 H_0 – Improvement of local factor endowments will not significantly affect the FDI

inflow into a city.

H₁ - Improvement of local factor endowments will significantly affect the FDI inflow into a city.

into a city.

The variables are extracted from GCI, pillars 2 and 10 relating to local factor endowments. According to the GCI Report, while market size and other efficiency enhancers in the region are gradually improving, the state of infrastructure is deteriorating both in quantity and quality. This hypothesis is therefore to test whether improvement of infrastructure alongside a major factor will be significant to further attracting FDI.

y- Dependent variable: all FDI

 x_s - Independent variables: x_1 – Market size

x₂ ... Infrastructure

Regression equation: $y=a + b_1 x_{1+} b_2 x_{2+} e_1$

y= dependent variable

a= intercept (constant)

b= slope (regression coefficients)

x= independent variable

e= error

Assigned level of significance (p-value): 0.05

From the model summary,¹⁴ it is inferred that between 69% and 70% of variation in FDI can be attributed to the two variables. Also with the significant values of .000 and .006 respectively, less than the assigned p –value (level of significance) of .05, we reject the null hypothesis. Hence, improvement of local factor endowments especially infrastructure will significantly affect the FDI inflow into a city.

¹⁴ See annex 5 for the summary of the regression analysis.

Chapter 5: Conclusions and Recommendations

5.1 Conclusions

The history, geographic positions and contiguity of cities in West Africa make it imperative that some forms of relationships must exist among them. After the creation of countries by the colonial masters which cut across peoples, cultures and territories; creating a body like ECOWAS was only a matter of time. And indeed when it was created, it's most important objective was economic development which brought pressures on physical space as provided by the cities. This research has set out to identify those elements that could make the cities in West Africa attractive to a global audience, transmute them to global cities and make them respond appropriately to the need for physical space. Using the trends of inward FDI as the most important determinants of performance, the positions of the cities and location factors affecting their attraction, it is possible to determine space demands within the cities.

The preceding exercise has revealed the following:

(i) **Growth of FDI:**

As discovered, the growth of FDI into ECOWAS within the period of review 2003-2012 is 11.5 per cent. Although among the lowest in terms of volume compared to other Regional Economic Communities (REC), the growth has been relatively steady. The trend also displayed significant resistance in the periods of acute global meltdown (2008-2011). This is explained largely by the diverse resource endowments of the region, though it may be argued that the sectors in question (financial and real) are yet to fully evolve in this instance. Most growing sectors are in the services (financial, business and communications), bearing in mind however that they thrive as support to the primary sectors and the resource base of the region (agriculture, metals, minerals, coal, oil and gas). This much is reflected in the major sector activities which include manufacturing, extraction and construction as shown in the data.

- Sustaining the Growth: It is important to understand that the key driver of growth is the resource assets of the region. These assets give comparative advantage to the region and can propel it to competitiveness. More emphasis should be given to developing the vast natural resources especially agriculture which is the main stay of the region's economy.

The implication for city management is to create extractive industrial zones which will encourage manufacturing; rural planning, farm settlements and landuse planning to encourage urban agriculture. In the new form of economic globalisation driven by MNCs, a city's position depends on its functions and activities within a global value chain. Competitiveness in this sector can therefore be achieved with this orientation. In Sassen (2012) analysis, Brazil offers the most appropriate example.

(ii) **Position of Cities**

Cities and countries share of the FDI inflow varies in counts and sectors of investments. While Nigeria attracts the highest counts of investment in top sectors such as business services, food and tobacco, Ghana gets the most count in metals and financial services apparently because of its mining activities. Cote d'Ivoire which in normal times has the second largest economy is presently being affected by government instability. However, it is strong in food and tobacco,

Burkina Faso and Guinea in metals; and Gambia in financial services.

In building networks, it is important to note the sources of FDI (to the region) which include cities far and near from all the regions of the world. More of inflow is from the North America and Europe. These are areas that have had long time historical, trading and political relationships in the region. Eight (8) of the countries are former French colonies, four (4) English, two (2) Portuguese and one (1) founded by returnees from America. Significant bulk of emerging inflow is attributable to trading relationships with Asia, especially China, India, Singapore and the UAE; and also intra Africa particularly South Africa and Nigeria.

- Building on relationships and establishing new ties to improve networks: This research has discovered sources of investments and sectors of growth. It is important to encourage concessions for old ties and incentives to new ones. Policies on taxation and regulations should be fair to investors as they have been identified to constrain investment in most of the countries sampled. The changing face of global economy also implies that new alliances and partnerships are forged as new players emerge. China and India have been acknowledged as emerging powers in manufacturing and IT. As growing sectors in ECOWAS, enabling and friendly business environment should be created for the sources and sectors to thrive.

The implication for city management is to create a safe and secured urban environment. City governance and municipalities should create clear roles for community and local policing. National security policies should synergise with local tiers for intelligence to strengthen crime prevention strategies.

(iii) Core cities and Peripheries Competition

Though the region is dominated by primate cities, the FDI market datasets reveal counts of investments in the core peripheries indicating that some of the investments are both labour and resource driven. Places like Kalana (Mali), Makeni (Sierra Leone), Tamale (Ghana), Bafata (Guinea Bissau), Bakau (Gambia) and Akure (Nigeria) are quite competitive in the sector analysis of competitiveness. This is consistent with several assertions in literature typified by Friedmann's world city hierarchy hypothesis.

- Developing the peripheries: Though capital cities usually benefit from economies of scale and overbearing government patronage, the development of medium towns should be encouraged, especially areas that are attracting the FDI because of their resource base. This will relieve the cities from pressure of migration, with the attendant menace of informal housing, urban insecurity and unemployment which constitute major challenges to cities.

Expectedly, cities like Lagos (Nigeria), Accra (Ghana), Dakar (Senegal), and Monrovia (Liberia) performed to expectation in city ranking. Abidjan (Cote d'Ivoire), Banjul (Gambia) and Praia (Cape Verde) however did not meet up to the levels of their countries' performance. Deducible reasons include political instability (coups), high tax regimes and inefficient government bureaucracy respectively, as drawn from the analysis, which may have affected investments in these cities. The data also reveal Lagos as the 'hub city' of the region receiving strong ties from abroad and equally distributing strong ties within the region.

- The attractiveness and preference for a city is often influenced by perception and knowledge. Hence city branding and marketing should be encouraged. Cities should discover their unique functions and market them to a global audience. Promotional strategies and

proper dissemination of information about cities should be employed. City branding is more persuasive as it creates values beyond what functions are offered. While Dakar and Banjul market themselves for sports and recreation tourism, there is no known city branding in the region.

The implication for city management is to undertake a profiling of the historical and cultural assets of the city beyond its economy to create events and brands that are unique to the city. This is one important lesson that could be drawn from the Asian example.

- Internal competition within the region, external cooperation beyond the region; complementing and collaborating in big investments: All the major city capitals (12 of them) are located along the coast with ports and harbours, almost at equal distance to one another¹⁵. As affirmed in literature, harbours are known to be strategic to international trade. This therefore is an incentive to compete to generate investment in the transport and logistics sector to take advantage of the maritime access.

The implication for city management is to create industrial parks and export processing zones to take advantage of this location. However thought should be given to constructing specialization to avoid duplication, and enhance economies of scale because of nearness to one another. Complementarity and collaboration in this regard, is therefore highly recommended.

(iv) Location Factors

Two of the most important location factors to FDI as drawn from this research are infrastructure and market size. Though market size explains the bulk of FDI into the region, poor infrastructure limits its extent. These are in the key areas of electricity supply and transportation. Whilst electricity hampers production, transportation hampers intra-regional trade. Sometimes it is cheaper to transport products to Europe and other regions outside the zone than within, because of internal transportation and logistics problems, whereas the global market starts next door. Apart from being grossly inadequate, they are also in poor state and unaffordable. All the sampled countries scored below average in infrastructure except Cape Verde. This therefore constitute a great impediment to regional trade which would serve if vibrant, as an advantage in attracting FDI.

- The market size of ECOWAS is fragmented because of the existence of parallel institutions. There is therefore the need for an integration strategy that will harmonise all market institutions including labour and financial markets.

Trade liberalization will also hasten integration, but has always been delicate because of the notion that it will favour the bigger economies at the expense of the small ones.

- Improvement of intra-regional transportation networks will deepen the much needed

regional integration. Mention must also be made of telecommunication services including telephony and ease of internet access. All these facilitate greater economies of scale, and thereby in the long run create enterprises which will compete on the global stage.

¹⁵ See annexure for geographic distance and location.

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Annexures



Annex 1: Africa Population By Income Classes:

North Africa and Republic of South Africa compared with the rest of Africa. *Source: Potts, D. (2013 p. 177)*

	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09
			EDI inflow	(million II)	(¢)			
	-,		FDI IIIIOw))			
Africa	24.4	22.6	30.6	55.4	83.6	171	340	1,060
Sub-regions								
Central Africa	15.7	29.9	37.8	41.3	31.2	147	647	1,670
Eastern Africa	7.6	8.6	6.4	12.7	19.3	70.7	106	265
Northern Africa	35.1	26.3	74.4	224	278	392	807	3,420
Southern Africa	95.7	-11.8	62.6	-4.4	47.7	369	544	1,280
Westerns Africa	26.7	40.1	26.9	61.3	115	147	177	613

Annex 2: Trends of FDI inflow to Africa: 1970-2009

Source: Mijiyawa, A.G., (2012 p.3). Calculations based on FDI data from the UNCTAD (www.unctad.org/fdistatistics).

Annex 3: Regulatory Practices towards FDI in ECOWAS- Restrictions & Non-Restrictions

ECOWAS Countries Non-Restrictions Regulatory Practices	Benin	Burkina Faso	Cape Verde	Cote D'Ivoire	Gambia	Ghana	Guinea	Guinea Bissau	Liberia	Mali	Mauritania	Niger	Nigeria	Senegal	ierra Leone	Togo
 Practices encouraging FDI FDI-targeted tax and other incentives Number of bilateral investment treaties (of which with OECD members) Number of bilateral tax treaties (of which with OECD members) 	N/A N/A N/A	YES 12	YES YES YES	YES N/A N/A	N/A N/A N/A	YES 07 03	N/A N/A N/A	YES 01 N/A	N/A N/A N/A	YES N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A 08 09	N/A 14 04	N/A N/A N/A	YES 07 07
 2. Enhancing Policy Transparency a) National authorities publication of regulations notification prior to regulatory changes negative lists of restricted sectors "silent and consent" authorization 	N/A N/A N/A N/A N/A		N/A YES N/A N/A YES	YES YES YES YES N/A	N/A N/A N/A N/A	YES NO NO YES	YES YES YES YES	N/A N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A YES N/A N/A	N/A N/A N/A N/A	YES YES NO YES	YES YES YES	N/A N/A N/A N/A	YES N/A N/A N/A
 3. Other measures a) Measures at sub-national level 	N/A				N/A	N/A	YES	N/A	N/A	N/A	YES		YES	N/A		

Annex 2: (Table 2) - Regulatory Practices Towards FDI: Other than Restrictions

ECOWAS Countries Restrictions Practices	Benin	Burkina Faso	Cape Verde	Cote D'Ivoire	Gambia	Ghana	Guinea	Guinea Bissau	Liberia	Mali	Mauritania	Niger	Nigeria	Senegal	Sierra Leone	Togo
1. General restrictions on entry																
a) Entry of FDI	YES	YES	YES	YES	NO	YES	YES	YES	N/A	YES	N/A	N/A	NO	NO	N/A	YES
b) Foreign purchase of shares	N/A	N/A	NO	YES	NO	YES	NO	N/A	N/A	YES	N/A	N/A	NO	NO	N/A	YES
c) IMF Article VIII status	YES	YES	NO	YES	N/A	NO	N/A		N/A	YES	YES	N/A	YES	NO	N/A	YES
d) Liquidation proceeds transfer abroad	N/A	N/A	N/A	YES	YES	NO	NO		N/A	NO	N/A	N/A	NO	NO	N/A	YES
2. Specific restrictions on entry																
a) Sectoral limitations to FDI	NO	YES	YES	YES	YES	YES	YES	YES	N/A	NO	N/A	N/A	YES	NO	N/A	YES
- financial services	N/A	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A
- other services	N/A	N/A	N/A	N/A	YES	YES	YES	N/A	N/A	YES	N/A	N/A	N/A	YES	N/A	N/A
- primary sectors	NO	N/A	N/A	N/A	YES	YES	YES	YES	N/A	YES	N/A	N/A	YES	YES	N/A	N/A
- manufacturing	NO	N/A	YES	N/A	YES	N/A	YES	NO	N/A	N/A	N/A	N/A	YES	YES	N/A	N/A
b) Acquisition of real estate for FDI purposes	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A
3. Post-entry restrictions																
a) Exceptions to national treatment of	N/A	YES	YES	YES	YES	YES	YES	NO	N/A	NO	N/A	N/A	N/A	YES	N/A	N/A
established foreign controlled enterprises	N/A	N/A	N/A	N/A	YES	N/A	YES	NO	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A
 access to local finance 	N/A	N/A	N/A	YES	N/A	YES	YES	NO	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A
 access to privatization 	N/A	N/A	N/A	YES	N/A	N/A	YES	NO	N/A	NO	N/A	N/A	N/A	YES	YES	N/A
 access to subsidies 	N/A	N/A	N/A	YES	N/A	N/A	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
 access to public procurement 	N/A	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	YES	N/A	N/A	YES	YES	N/A	N/A
- taxation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO	N/A	N/A	YES	YES	N/A	YES
 discriminatory licensing in public utilities 	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	N/A	YES
b) Other discriminatory practices	N/A	N/A	N/A	YES	N/A	YES	N/A	N/A	N/A	N/A	YES	N/A	YES	YES	N/A	YES
 nationality-based restrictions on boards 	N/A	N/A	N/A	YES	YES	YES	N/A	N/A	N/A	NO	YES	N/A	N/A	N/A	N/A	N/A
 discriminatory private practices 	N/A	N/A	N/A	N/A	N/A	YES	N/A	N/A	N/A	YES	YES	N/A	N/A	N/A	IN/A	IN/A
 entry of key personnel 	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IN/A	IN/A
c) Performance requirements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IN/A	N/A

Source: ECOWAS Regional Investment Policy Framework (2007 p. 25 & 26)

COUNTRY	COMPETITOR CITIES
Benin	Cotonou
Burkina Faso	Ouagadougou
Cape Verde	Praia
Cote d'Ivoire	Abidjan
Gambia	Banjul, Bakau, Farafenni
Ghana	Accra, Kumasi, Tamale, Tema, Sekondi-Takoradi, Ahafo
Guinea	Conakry
Guinea Bissau	Bissau, Bafata
Liberia	Monrovia
Mali	Bamako, Kalana
Niger	Niamey
Nigeria	Lagos, Abeokuta, Lekki, Kano, Akure, Kaduna, Enugu, Uyo
Senegal	Dakar
Sierra Leone	Freetown, Makeni, Port Loko
Тодо	Lome, Kpalime
Gabon* (non ECOWAS)	Libreville

Annex 4: Country Locations of Comp	petitor Cities
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Compilation based on Manhattan Distance calculations of FDI market database

Annex 5: Summary of Regression Analysis of Hypothesis

Model summary

Model	R	R Square	Adjusted R	Std. Error of			
			Square	the Estimate			
1	.839 ^a	.704	.687	105.278			

a. Predictors: (Constant), 2nd pillar: Infrastructure, 1-7 (best), 10th pillar: Market size, 1-7 (best)

ANOVA	\ ^a

Model		Sum of	df	Mean Square	F	Sig.
		Squares				
	Regression	921138.417	2	460569.209	41.554	.000 ^b
1	Residual	387924.425	35	11083.555		
	Total	1309062.842	37			

a. Dependent Variable: ALL FDI-AFRICA

b. Predictors: (Constant), 2nd pillar: Infrastructure, 1-7 (best), 10th pillar: Market size,

Coefficients ^a											
Model		Unstanc Coeffi	lardized cients	Standardized Coefficients	t	Sig.					
		В	Std. Error	Beta							
1	(Constant)	-503.560	81.511		-6.178	.000					
	10th pillar: Market size, 1-7 (best)	151.679	19.019	.746	7.975	.000					
	2nd pillar: Infrastructure, 1-7 (best)	71.850	24.622	.273	2.918	.006					

a. Dependent Variable: ALL FDI-AFRICA

Source: Imported from SPSS statistical analysis.


Annex 6: ECOWAS Countries Showing Distances Between the Major Cities

SN	City	City	Distance (Kilometers)
1	Lagos	Cotonou	106.90
2	Cotonou	Lome	135.89
3	Lome	Accra	171.75
4	Accra	Abidjan	422.23
5	Abidjan	Monrovia	756.79
6	Monrovia	Freetown	360.97
7	Freetown	Conakry	124.81
8	Conakry	Bissau	330.74
9	Bissau	Banjul	208.19
10	Banjul	Dakar	164.05
11	Dakar	Praia	653.58
12	Dakar	Bamako	1043.36
13	Bamako	Ouagadougou	703.08
14	Bamako	Niamey	1099.07
15	Lagos	Niamey	797.24

Based on distance calculation

COUNTRIES	PILLARS							
	1	2	3	4				
	INSTITUTION	INFRASTRUCTURE	MACRO-	HEALTH &	OVERALL			
			ECONOMIC	PRIMARY				
			ENVIRONMENT	EDUCATION				
Cape Verde	4.1	2.8	3.8	5.7	4.1			
Gambia	4.7	3.6	3.6	4.2	4.0			
Liberia	4.3	2.8	4.5	4.1	3.9			
Ghana	3.8	2.9	4.1	4.7	3.9			
Benin	3.5	2.6	4.6	4.7	3.8			
Senegal	3.6	2.5	4.4	4.2	3.7			
Mali	3.3	3.0	4.6	3.4	3.6			
Nigeria	3.3	2.3	5.2	3.2	3.5			
Burkina Faso	3.7	2.2	4.5	3.5	3.4			
Cote d'Ivoire	3.2	3.1	3.5	3.4	3.3			
Sierra Leone	3.6	2.1	2.5	3.0	2.8			
Guinea	3.2	1.9	2.6	3.5	2.8			

Annex 7: ECOWAS Countries Ranking in the Basic Requirements (sub- index)

Based on analysis of GCI Report, 2013.

ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
	Regression	43.377	1	43.377	55.925	.000 ^b		
1	Residual	27.922	36	.776				
	Total	71.299	37					
	Regression	51.052	2	25.526	44.126	.000 ^c		
2	Residual	20.247	35	.578				
	Total	71.299	37					

Annex 8: Logged FDI and Competitiveness Indicators

a. Dependent Variable: ALL FDI-AFRICA

b. Predictors: (Constant), 10th pillar: Market size, 1-7 (best)

c. Predictors: (Constant), 10th pillar: Market size, 1-7 (best), 11th pillar: Business sophistication, 1-7 (best)

Coefficients ^a								
Model		Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
	(Constant)	.913	.413		2.208	.034		
1	10th pillar: Market size, 1-7 (best)	3.062	.409	.780	7.478	.000		
	(Constant)	-4.127	1.429		-2.888	.007		
2	10th pillar: Market size, 1-7 (best)	2.700	.367	.688	7.352	.000		
	11th pillar: Business sophistication, 1-7 (best)	4.354	1.195	.341	3.643	.001		

a. Dependent Variable: ALL FDI-AFRICA

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	1st pillar: Institutions, 1-7 (best)	.285 ^b	3.008	.005	.453	.992
1	2nd pillar: Infrastructure, 1-7 (best)	.306 ^b	3.286	.002	.486	.984

Excluded Variables^a

Annex 8: contd.

2

3rd pillar: Macroeconomic environment, 1-7 (best)	062 ^b	561	.578	094	.903
4th pillar: Health and primary education, 1-7 (best)	.235 ^b	2.389	.022	.374	.998
5th pillar: Higher education and training, 1-7 (best)	.289 ^b	3.049	.004	.458	.982
6th pillar: Goods market efficiency, 1-7 (best)	.281 ^b	2.958	.006	.447	.996
7th pillar: Labor market efficiency, 1-7 (best)	021 ^b	194	.847	033	.931
8th pillar: Financial market development, 1-7 (best)	.276 ^b	2.847	.007	.434	.964
9th pillar: Technological readiness, 1-7 (best)	.271 ^b	2.808	.008	.429	.983
11th pillar: Business sophistication, 1-7 (best)	.341 ^b	3.643	.001	.524	.927
12th pillar: Innovation, 1-7 (best)	.220 ^b	2.099	.043	.334	.908
1st pillar: Institutions, 1-7 (best)	.135 ^c	1.194	.241	.201	.629
2nd pillar: Infrastructure, 1-7 (best)	.165°	1.444	.158	.240	.606
3rd pillar: Macroeconomic environment, 1-7 (best)	102 ^c	-1.067	.293	180	.892
4th pillar: Health and primary education, 1-7 (best)	.124 ^c	1.273	.212	.213	.842
5th pillar: Higher education and training, 1-7 (best)	.121°	.986	.331	.167	.536
6th pillar: Goods market efficiency, 1-7 (best)	.024 ^c	.148	.883	.025	.310
7th pillar: Labor market efficiency, 1-7 (best)	127 ^c	-1.315	.197	220	.857
8th pillar: Financial market development, 1-7 (best)	.049 ^c	.340	.736	.058	.398
9th pillar: Technological readiness, 1-7 (best)	.106 ^c	.918	.365	.156	.606
12th pillar: Innovation, 1-7 (best)	196 ^c	-1.185	.244	199	.295