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MSc Programme in Urban Management and Development

Rotterdam, The Netherlands

Thesis

Title: Determinants of Foreign Direct Investment Inflow into Africa in Manufacturing Sector

Name: Yetmgeta Abera Demo

Supervisor: Prof.Dr. Ronald Wall

Co-supervisor: MSc Marina Salimgareeva

Specialization: UCR

UMD 12

MASTER'S PROGRAMME IN URBAN MANAGEMENT AND DEVELOPMENT

(October 2015 – September 2016)

Determinants of Foreign Direct Investment Inflow into Africa on Manufacturing Sector

Yetmgeta Abera Demo

Ethiopia

Supervisor: Prof. Dr. Ronald Wall

Co-supervisor: MSc Marina Salimgareeva

UMD 12 Report number:

Rotterdam, September 2016

Summary

The process of globalization has been intensified across developed and developing regions to connect countries in terms of economy and other areas. Currently, Foreign Direct Investment (FDI) became important source of finance and catalyst of economic growth for countries though it can also cause crowding out domestic investments and other negative effects. The distribution of FDI is uneven where majority of FDI is concentrated at developed regions the rest goes to developing regions. The comparative share of Africa in FDI attraction is least at global level. When the possible economic benefits of FDI are considered, it can be taken as important tool for Africa's economy. In order to fasten industrialization process in the continent, manufacturing oriented FDI is vital, helping to transform Africa's agricultural based economy to industrialize and creating more employment opportunities than any other sectors. However, the share of manufacturing FDI in Africa could not be improved and its pace of growth could be as fasts as the service sector. Therefore, central theme of this study will be to identify determinants of manufacturing FDI inflow into Africa compared to other global countries and cities.

Data for independent variable (MFDI inflow) and independent variables (location factors) is accessed from data sources fDi Market, World Economic Forum and euro monitor international. Research design and methods used to analyse these data are descriptive and explanatory. In analysing data of sampled African countries and cities, and global countries and cities statistical application tools (STATA, Gephi and Microsoft Excel) are employed to generate econometric models, charts, figures and tables of variables.

Based on descriptive analysis and finding, global countries and cities performed high relatively to African countries and cities in all measures of location factors. Moreover, both global countries and cities attracted more MFDI and are major investors into Africa. The Middle East is the leading region followed by Europe to invest high capital in manufacturing sector. United Araba Emirates and Unites States are leading investors in capital and number of manufacturing projects in Africa, respectively. Half of the MFDI is concentrated at Northern Africa implying that the distribution is uneven. Countries Egypt, Nigeria and Libya are among top recipients and also most connected with global countries through MFDI.

Location factors inflation, business impact rules on FDI, flexibility wage determination are shown to be significant at global countries level whereas cities MFDI inflow is found to be determined by unemployment rate, total population and consumer expenditure. Furthermore,

MFDI inflow into African countries is explained by determined such as inflation, foreign market size and working rules related FDI. Finally, total population and productivity are significant location factors for foreign investors' intending to operate in manufacturing projects. Inflation, business impact rules on FDI, and total population are common explanatory variables both Africa and global level.

The research concluded that identified determinants inflation, foreign market size, working rules related FDI, total population and productivity are vital to affect foreign investors' decisions. Therefore, in order to increase MFDI inflow into Africa, a stable macroeconomic environment should be created addressing the prevailing high inflation record. Integrating countries economy through interaction trade is also vital, as it encourages foreign investors to export their manufactured products. In addition, incentive packages and flexible rules addressing needs of foreign investors should be implemented. Lastly, cities should exploit their growing population by means of trainings in line with labour demands of manufactures. Overall, since access to data is major the challenge at various scale, results of this research should be developed by further academic studies, subsequently, governments and investors could make informed decisions.

Keywords

FDI, Manufacturing sector, Africa, determinants.

Abbreviations

GCI	Global Competitiveness Index
GDP	Gross Domestic Product
IHS	Institute for Housing and Urban Development
IGC	International Growth Centre
MFDI	Manufacturing Foreign Direct Development
MNCs	Multinational Corporations
VIF	Variance Inflated Factor

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Chapter 1: Introduction

1.1. Background

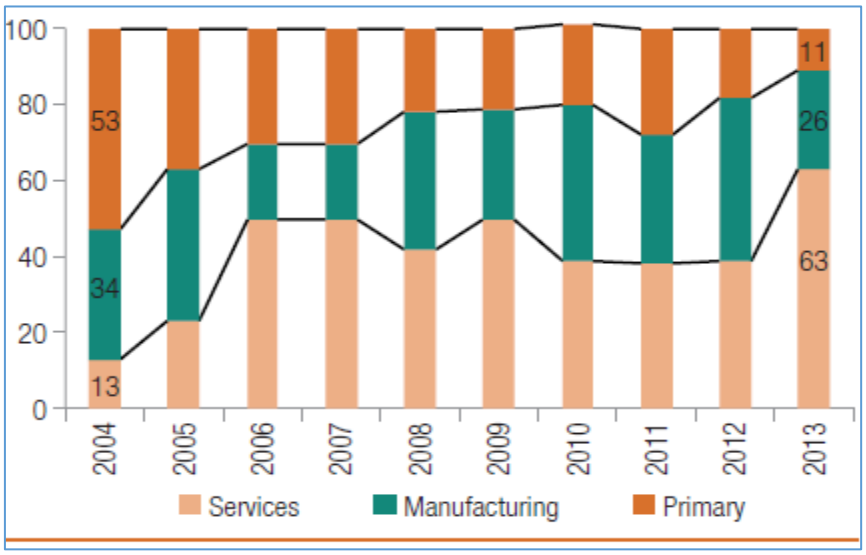
Competitiveness is at the core of globalization for countries and cities working to secure the best possible economic advantages. Together with international trade, Foreign Direct Investment (FDI) is major constituent of economic globalization and serve as measurement of competitiveness unit. Intensified globalization, mobility of sizeable capital and creation of wide domestic market open for international trade, are basic importance of competitiveness (Turok, 2004).

Though common consensus has not been reached in literature on the possible effects of FDI, experiences of many countries attested its enormous importance especially for developing countries. In general, FDI has stimulating effect on economic development of countries, particularly in the developing world (Denisia, 2010). In addition, it serves as a means to promote exports, international markets efficiency, source of capital and foreign currencies (ibid.). Foreign firms are expected to have spill-over effects on advanced knowledge technology, marketing and managing experiences, distribution network, and export channels (Abraham et al., 2010). These intangible resources are regarded as catalysts of productivity in FDI recipient countries. On the other hand, when some studies show that FDI has adverse effect on private sector investment of host countries others could not trace clear relationship. Ndikumana and Verick (2008) tested FDI flowing towards Africa crowds out domestic investment and suggest that countries could better benefit if domestic investment climate is improved. While FDI has neutral effect on the general economy, it resulted in either crowding in, crowding out or neutral effect depending on type sectors of operation (Ahmed et al., 2015).

Countries respond to FDI in different ways starting from policy adoption either for increased attraction or control its adverse effect on economy. This resulted in creation of heterogeneous platforms influencing foreign investor's decision and unevenly distributed FDI. As a matter of these reasons, trend of FDI inflow to developed countries is marked by sharp decline, the flowing FDI into developing economies rose dramatically (UNCTAD, 2015). Furthermore, substantial difference is seen between developing countries: newly industrialized block attained much of FDI while the rest (less developed countries) lagged behind (Narula and Dunning, 2000). For instance, Africa still holds only a fraction of 2 percent from the total global FDI (Wall et al., 2011). Therefore, given Africa's insufficient global share of FDI, additional efforts are highly important if improvement is needed.

FDI in Africa has been growing continuously and become an alternative source of capital and complementary to growing economy (Adeleke, 2014). However, the abundant resource endowments, recent trade improvements as well as the positive effect of FDI on the economy, could not save the sub-Saharan region from relying on Official Development Assistance (Bartels et al., 2014; UNIDO, 2009). What impeded flowing FDI not to impact Africa's economy very positively? This is partly because FDI in Africa is mainly raw material oriented characterized by minimal value addition even for countries known by their success to attract substantial inwards (Chen et al., 2015). A study undertaken by Earnest and Young (2015) suggested that African countries should give due attention for industrialization which can transform their economy to meet targets of inclusiveness and sustainability. In addition, study results of World Bank (2015) confirmed that manufacturing FDI generates extra employments than any other FDI sectors can generate. In order to reap related benefits of manufacturing FDI, meeting foreign investor's expectation at the specified sector need to the primary task of Africa.

Figure 1.1. Sectoral Distribution of Announced Greenfield FDI Projects in Africa (% of total value)



Source: Chen, Geiger and Fu (2015)

The share of manufacturing FDI stock in Africa compared to other sectors is lower measured in terms of FDI number and capital spent. As indicated in Figure 1.1, during most periods lion share of announced Greenfield FDI projects went to service sector. In 2004 the primary sector was dominant but lost the place in the following years. Relatively, the manufacturing sector took lesser share out of the total announced Greenfield projects except for few periods. According to (UNCTAD, 2015) report, in 2012 the share of manufacturing (21%) which is lower in two fold than service (48%) and the primary sector (31%). Based this report, in 2014 some 38 and 33 per cent of announced greenfield FDI projects and related capital expenditure

were in manufacturing while 60 and 43 percent recorded for service sector. From this, it can be noted that the manufacturing was overwhelmingly surpassed by service and primary sector while this slowed down the process of transforming the economic structure.

Many factors affects the outward and inward flow of FDI between global regions and countries. In general, factors identified so far fall under broad categories of political economy, infrastructure, institutions, and governance and other as attributes of FDI attraction. But the effects of these factors differ across regions, countries, cities as well as sectors of operation. Therefore, in dealing determinants of FDI in Africa, sector wise approach is highly worthwhile especially to enable exploit potentials of the promising manufacturing sector. Accompanied by the growing global value chains, Africa await an extraordinary opportunity of being hub foreign manufacturers in higher value-added and export-led manufacturing (Sutton et al., 2016).

In the subsequent sections of this study, efforts have been made to shed light on determinants of MFDI inflow into Africa with reference to best-performing countries and cities of other global regions. It is well known that global countries are major recipients of MFDI as well as major foreign investors operating in Africa in the manufacturing sector. Given this fact, comparative based study between African and other global countries and cities would enable to see features of MFDI taking place in Africa and identify underlying factors. And hence, explaining determinants of MFDI inflow to Africa and top global recipients (countries and cities) will lead to the path to be followed for increased MFDI in Africa.

1.2. Problem Statement

Countries and cities of Africa are characterized by poor infrastructures, weak institutions, high unemployment rate and low productivity. This is partly due to continent's loose economically integration with rest of the world through trade and investments. These situations limited Africa's role in the global network system as well the possible benefits the continent could enjoy could reap from globalization. As a result, international business entities had not been attracted towards Africa as much as desired compared to performing global countries and cities of other regions. Moreover, the existing foreign investors are mostly engaged either in the primary or service sectors which could not impact much the prevailing economic structure. Cumulative effect of these shortages left Africa to be weak in global competitiveness position where inward manufacturing FDI performance could be taken as unit of measurement.

The current manufacturing sector of Africa is featured as less diversified and slow in growth. During periods when the share of manufacturing sector in the economy have doubled most developing countries, Africa's has stagnated in low single units (IGC, 2016). Then changing the existing pattern of MFDI inflow would be important for Africa at it play its part to hasten industrialization and creation of high employment opportunities. However, to get ambitions changed into reality all efforts should be backed by scientific studies as it is vital for policy formulations and decision making by government and foreign investors. In these regard, beyond the efforts made by government bodies and stakeholders, the role of scientific studies highly important.

Therefore, the focus of the study is to contribute to shortages of studies dealing on determinants of FDI flow towards Africa in manufacturing sector and hence improve continent's competitiveness at the global level.

1.3. Research objectives

The main objective of the study is to analyze the determinants of MFDI flowing towards Africa compared to top Global countries and cities to make recommendation on how to attract more FDI in manufacturing sector in Africa.

Specifically, it objected to:

- Identify the differences in location factors of inward MFDI between African and Global countries and cities.
- Explain the factors affecting inflow of manufacturing FDI into top global countries and cities.
- Explain the factors affecting inflow of manufacturing FDI into African countries and cities.

1.4. Research questions

The thesis aims to address the following research questions.

Main research question:

What are the determinants of inward FDI in manufacturing sector in Africa compared to top global countries and cities?

Sub research questions:

1. What are the differences in location factors of inward MFDI between African and Global countries and cities?
2. What are the factors affecting inflow of Manufacturing FDI into top global countries and cities?
3. What are the factors affecting inflow of Manufacturing FDI into African countries and cities?

1.5. Scope and limitations

The geographic scope of this study includes countries and cities around the world that are performing well in attracting manufacturing FDI into their economy. As the focus of the study is Africa, comparable analysis of this region held together with referenced global regions based on their competitiveness at the global level. The extent of African cities coverage is limited to the accessibility of indicators for location factors, hence, cities included in the analysis are framed to the extent data accession.

Manufacturing FDI in the study include all activities of MNCs engaged in greenfield investment which includes products passing chemical and physical change through the process of production. Therefore, MFDI is meant FDI in the manufacturing sector in general and except some sections where detail activities are examined. As it could be understood, activities of domestic investors engaged in the manufacturing sectors are not captured.

A major limitation of this study is triggered by lack of data especially at the city level for Africa. Consequently, the scope of the study is shaped in line with the data at hand. Most commonly listed constraints like time, cost and logistics have also prohibited, to some extent, study's process not to be smooth. Eventually, as discussed in the previous sections stress would be given for investment coming from foreign sources; investments from domestic sources are not part of the study.

1.6. Significance of the study

The primary initiative for the study was the observed wide difference between achievement of Africa and other global regions in attracting FDI, particularly in the manufacturing sector. The poor relative performance of Africa to attract MFDI might be attributed to several problems. Undertaking such approach that identify determinant factors of MFDI at different context will help to compare the reason why one region achieved more over another and enable to scrutinize factors contextually. This, in turn, will be useful for policy inputs for countries and cities working to enhance their share of MFDI at national and international level. Hence, this sectoral

specific approach on FDI for countries and cities at Africa level can be taken as an additional effort for policy and planning process. Therefore, generally, the research will be grateful to improve current MFDI inflow status into Africa.

In addition, the study is believed to add its part for the realm of knowledge and literature in urban competitiveness areas for the cities in Africa. Studies undertaken so far at African countries and cities level were insufficient in number, hereafter, it widens the knowledge path in this regard.

Chapter: Literature Review

2.0. Introduction

In this chapter, theories and concept related to the main words: globalization, competitiveness, Foreign Direct Investment (FDI) are discussed. As conclusion to this literature review, the conceptual framework will be formulated and discussed.

2.1. Globalization and Networking

Between 1950 and 2000, world merchandise trade grown almost twentyfold while world merchandise production increased by over six-fold (Dicken, 2011). This shows how much the flow of goods, finance, and information between regions and countries has been intensified. The complex emerging nature of our global system posed a challenge to articulate globalization in a typical manner. The combined effect of countries' geographical and functional role in the global network system is beyond simple connectivity (ibid.). Faulconbridge et al. (2008) defined globalization in a simple way as "… the widening, deepening and speeding up of global interconnectedness … it can be located on a continuum with the local, national and regional". More importantly, it is driven by chains of economic, political, and social inter-regional linkages (Egger, n.d.).

Due to the growing importance of globalization, the destiny of cities and their residents has become reliant on their relative position in the global hierarchy. However, its impact has been varying based different situations. Dreher and Gaston (2008) study result showed that globalization worsened income inequality in OECD countries such as industrial wage. The influence of economic globalization on collective bargaining of industrialized and transition countries have slowed labor unionization rates, but the level of power devolution and government involvement in mutual bargaining kept unaffected (Baskaran, 2013). On the contrary, others argue by magnifying its benefits to improve countries' wealth as well as their citizens' wellbeing. Currently, city sustainability is determined by world city network which happens as a result of increased globalization substituting the old city-region-nation paradigm (Egger, n.d.).

Globalization relies on a well-functioning network between space, economy, and infrastructures of our globe. The urban economy is integrated into the global system of markets for a flow of capital, commodities, and labor (Friedmann, 1986). Social and economic linkages which crystallize regional and global interactions are relevant features of globalization (Faulconbridge et al.,2008). The functionality interdependence lowered the cost of

transportation, communication and technologies and, hence, the productivity level and volume of manufactured goods boosted from the expanding network of fringe and central states (ibid.).

Firms disperse their subsidiaries in a quicker speed through network dynamics which reward their operations; in contrary, the rise of a network across trans-boundary global cities bears other domains such as cultural and criminal transgression (Sassen, 2005).

Usually, theories on global networking are associated with movement of global corporations across regions and cities though not demarcated well. These global corporations created integration between countries through economic networks facilitated by their distributed branches around the globe (Wall et al. 2011). In order to make cities part of the current globalization stage, clearly designed approach essential (Wall, 2009). Countries and cities being part of the interaction tend to influence the network to secure their economic advantage. (Webster, 2000).

2.2. Competitiveness in the Global Economy

The different countries of the globe found in some positions in the regional network when weighted based on specific criteria. Most of the time competitiveness is used interchangeably with 'economic competitiveness' (Kwon et al., 2012). The performance of countries' economy has found a great place in measuring competitiveness. It is the capability of countries to produce tradable goods and services at a lower price compared to partners in a region (Webster, 2000). Turok (2004) identified two factors that boosted the importance of competitiveness: rising worldwide circulation of finance and stocks; and unlimited global markets which are major characteristics of globalization. According to this study, economic development was mentioned as vital element consisting of trade, productivity, and employment which are interlinked through intensified trade exchange and FDI. The more a city has attracting capacity of investment the more powerful in the global system as it enjoys spillovers of capital, employment, knowledge, skills, and technology (Wall et al., 2015).

Some scholars have given more relevance for urban competitiveness while others give due attention for national competitiveness. Urban centers interlock economies of cities and the resulting impact (Kwon et al., 2012). It is also common by several authors to correlate competitiveness with sustainability and various indicators. The presence of strong institutions and policies determines prosperity and productivity of a nation in the long term, in addition, securing environmental and social sustainability is vital (Schwab, 2004). When ICT is integrated with existing infrastructures, cities' smartness would be magnified (Batty et al.,

2012). Innovation is necessary to make cities well competitive (Kwon et al., 2012). However, economic performance holds strong position throughout the process; indictors innovation and technology have a multiplier effect (Schwab, 2014).

Recently a model called Global the Competitiveness Index (GCI) was developed to measure the competitiveness of countries. It is an all-inclusive instrument to quantify national economic robustness at macro and micro scale (Schwab, 2014). These parameters serve to determine the competitiveness of an economy; explains the potential for productivity and ability to sustain the level of income (ibid.). Hence, the extent to which productivity and the competitiveness of countries remained to be reinforcing one another.

GCI was formulated by World Economic Forum (WEF) that measure the position of countries competitiveness at the global level. A robust economic growth and productivity efficiency are central to Global Competitiveness Index (GCI). In the report of WEF, Schwab (2014) defined competitiveness as:

> *"The set of institutions, policies, and factors that determine the level of productivity of a country Global Urban Competitiveness Index"*.

The following twelve (12) pillars of GCI which are categorized under three drivers of economies are also taken from the work of Schwab (2014).

Factor-driven economies

First Pillar: Institutions- The increasing importance of government in the legal framework, governance strengthening policies, market, and others issues affect investment productivity, private ownership and social inclusiveness.

Second Pillar: Infrastructure- It is highly vital for economic growth that determines the location of economic activities and their efficiencies tremendously. Broad and well-organized infrastructures help to reduce poverty and inequality and enable to access underdeveloped regions into market at relatively low cost. In addition, well-developed transport and communication system supports network beyond boundary connecting to the globe.

Third Pillar: Macroeconomic environment- Stable functioning of macroeconomic setup was holding attention particularly after the recent financial crisis. Competitiveness and productivity to be sustainable fiscal and monetary aspect of the economy are needed during market failure which is mainly intervened the government.

Fourth Pillar: Health and primary education- Obviously productivity is highly related with healthiness and basic education of labor force to be employed in all economic activities.

Efficiency-driven economies

Pillar Fifth: Higher education and training- Workers need to acquire higher knowledge and skills to adapt changing working environment and handle sophisticated challenges. In today's globalized economy, highly trained workers are demanded by business leaders for better productivity.

Sixth Pillar: Goods market efficiency- Open market based on competition paves the way for firms who follow existing demand and supply orientation for production. Efficient market, both domestic and foreign, create a conducive work environment for foreign investors however only limited government intervention might be required to protect distortion and customers.

Seventh Pillar: Labor market efficiency- productivity and efficiency of workers depend on how the labor market was efficient and flexible to enable the transition of workers from one sector to most fitting one. Efficient market ensures incentives and promotion for employees, on the other hand, rigid market leads to youth unemployment who faces barriers to entry.

Eighth Pillar: Financial market development- A sound and thoroughly effective financial market allocates existing financial resources to efficient sectors of the economy at minimum possible risk. A robust economy requires a sophisticated financial system parallel to the growing demand for capital in the private-sector investment.

Ninth Pillar: Technological readiness- It measures the extent to which information and communication technologies (ICTs) contributes to production efficiency and innovation. What matters here is not the availability of sophisticated technology rather how working ICTs accessed and integrated to the production process.

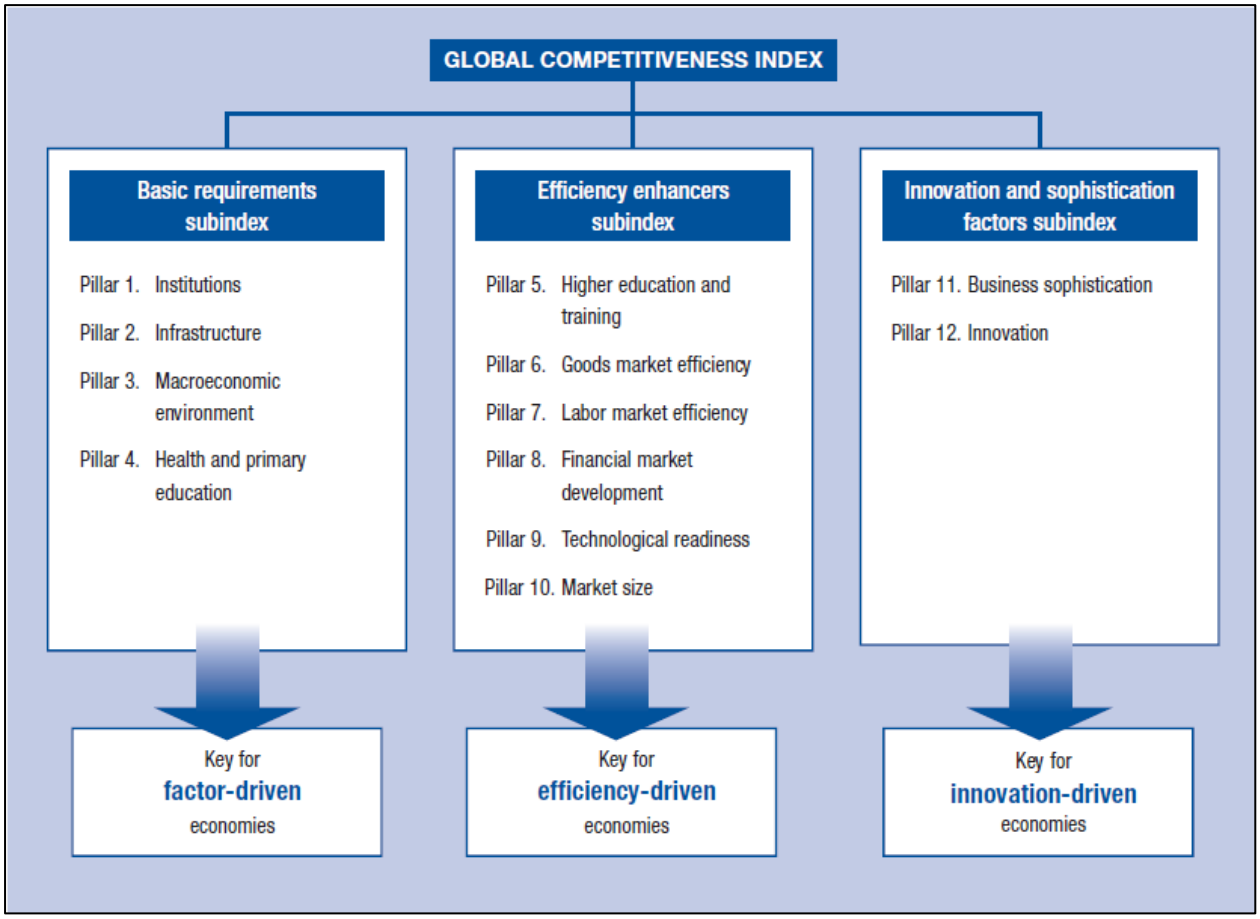
Tenth pillar: Market size- Open market enhance productivity through resulting economies of scale over nationally limited market type.

Innovation-driven economies

Eleventh Pillar: Business sophistication- After exhaustively exploiting the basic business stage, especially for advanced countries, efficiency rely on the quality of existing business networks, and operations and strategies of individual form. This is in turn measured by the level of interactions between local suppliers which is determined by their quantity and quality of involving in the network.

Twelfth Pillar: Innovation- In the long run similar to non-technological innovation, which is based on know-how and skill, technological innovations were indispensable to sustain efficiency. Economies achieving the first two driver stages and reaching the frontiers of knowledge should build a conducive environment for innovation unless escaping the productivity frontier from diminishing return would be much hard.

Figure 2.1. The Global Competitiveness Index framework



Source: The Global Competitiveness Report 2014–2015 (Schwab, 2014).

As indicated in the Fig 2.1., countries grow from the basic (factor driven) level to next higher fulfilling list of requirements. The more countries move up the economies stage, the more competitive in the global network system. Most developing countries located in factor and efficiency- driven stage while developed countries reached business sophistication and innovation stage but at various scale. Finally, drivers of key economies measuring a different aspect of competitiveness squeezed together to calculate the weighted average of competitiveness.

2.3. Contemporary Theories of Foreign Direct Investment

2.3.1. Notions of FDI

Demirhan and Masca (2008) defined FDI as a flow of capitals originated from Multinational National Corporations (MNCs) with various motives including taking advantage of economies of scale; to renovate lifecycle of products or abandon their competitor who is working on the similar area. MNCs extend their involvement into new locations to take advantage of market failure using their technology and knowledge supremacy over local operators (Denisia, 2010). In this regard developing regions, like Africa, have high market opportunities for MNCs. FDI is a global wide business activity which indicates foreign investor's target over another economy to secure their prolonged interest through an agreement made with an enterprise (Bartels et al. 2009). In general, 10% or its equivalent minimum share was expected to be held by the resident entity.

FDI can be classified it to different categories based on the scale and type of operations MNCs undertake. Demirhan and Masca (2008), Citing Dunning (1998), classified FDI from three major motives: market-seeking, *resource-seeking*, and efficiency-seeking. Frequently the types of FDI resulting from these motives can be in the form of Greenfield investment, Mergers, and Acquisitions, Brown field investment or other else. Developing countries, like African, whose primary target is to enhance production capability and create new jobs, technology spill over and know-how, and connections to the global marketplace promotes Green field FDI (Farole et al., 2014).

Denisia (2010) citing Lipsey (2001) stated, FDI to exist market inefficiency is necessary and MNCs expect two necessary conditions about foreign countries' economic environment: possession of certain advantage that confirms feasibility and imperfect market making benefits projected viable. FDI, in general, involves the flow of capital taking place between countries of origin and host initiated by investor's decision. From Lipsey (2001) point of view balance of payments, capital flow and stocks, and revenues gained from investments in the macroeconomic side whereas motivations, decisions and operations of investors and following consequences on countries of origin and hosting countries are under treated in the microeconomic side.

2.3.2. Location Factors for FDI

Several location factors are identified in literature which affects level of FDI inflow into cities scattered around the globe. These include wage rate, the level of skill acquired, trade and financial openness, profit margin to investment, natural resource endowment, the area size of countries, macroeconomic and political settings, tax incentives in hosting countries (Bayraktar 2013). The effect of these determinants subjected to vary through time and development level (Dunning, 2009). According to CLEEVE et al. (2015), this is because strategies followed by MNCs to penetrate foreign market have certain considerations which are unpredictable. Some of these factors are institutional settings; costs incurred for penetrating the market; and bargaining capacity of MNCs and recipient government (ibid.)

The great variation of these determinants between countries is the challenge posed in dealing the difference between regions. The high amount of capital injected and operational strategies followed by these MNCs was critical in determining the tendency and magnitude of FDI (Demirhan and Masca, 2008). For instance, major factors such as market size, wage rate, technically skill laborers, and repatriations of incomes are found to determine Japanese multinational decisions (Hussain and Kabibi, 2012). The different models and respective determinants recognized by different authors from the various view of points are discussed (Table 2.1).

Table 2.1. Summary of theories on FDI's determinants

Theories	Determinants of FDI	
Heckscher-Ohlin Model / MacDougall-Kemp Model	Higher return on investment, lower labor costs, exchange risk	
Market imperfections	Ownership benefits (product differentiation), economies of scale, government incentives	
Product differentiation	Imperfect competition	
Oligopoly markets	Following rivals, responding to competition in domestic market	
Product life cycle	Production function characteristics	
Behavior theory	Fear of loss of competitive edge, following rivals and increased competition at home	
Internalization	Market failures/inefficiencies	
	Know-how (leads to horizontal internalization), market failures (leads to vertical internalization)	
Eclectic paradigm (OLI – Ownership, location, internalization)	Benefit of owning productive processes, patents, technology, management skills	
	Advantage of locating in protected markets, favorable tax systems, low production and transport costs, lower risk	
New theory of trade	Market size	
	Transport costs	
	Barriers to entry	
	Factor endowments	
Institutional approach	Political	Financial and economic incentives
		Tariffs
		Tax rate

Source: Assunção, Forte and Teixeira (2011)

Eclectic paradigm (OLI) developed by John Dunning encompasses relevant concepts meeting recent features investments undertaken by enormous multinationals. Ownership makes MNCs advantageous rather than selling or renting because it is necessary to step for the next step, Location. Location advantage is strongly important factors to determine which is going to be selected as the destination for investment by multinationals companies. According to Dunning (2009), specific advantages location factors are categorized into three groups:

a) Economic advantages: that emanate from quantitative and qualitative factors of production, transport, telecommunications, market size etc.
b) Political advantages: policies and rules that impact FDI flows
c) Social advantages: includes remoteness between investment origin of countries and hosting countries, cultural diversity, hospitability of foreigners etc

2.3.3. Location Factors of FDI in Africa

Given existing difference of socio-economic, political and cultural environment conditions in Africa compared to other global regions, determinants of FDI could not be similar. However, it is possible to point out common location factors for countries which have several common features. For instance, sub-Saharan Africa political economy is central to foreign firms' location decision then followed by international favorable agreements and production inputs (Bartels et al., 2009; Bartels et al., 2014). While factors such as economic growth, inflation, openness of the economy, international reserves, and natural resource presence are found to be significant for FDI inflow to Africa, in the opposite, innovation and knowledge, democratic and human rights, and infrastructures were not important (Onyeiwu and Shrestha, 2004).

Naude and Krugell (2014) identified robust determinants of FDI, which includes inflation rate, government spending, political stability and accountability, regulatory burden and rule of law, and basic education. Based on this study geographical location of countries does not directly influence flows of FDI towards Africa. Market size being major determining location factor of FDI in developing countries other accompanying factors stable macroeconomic environment, global linkage, accessibility of skilled labor force and advanced financial sectors are specified as promoters of FDI (Hussain and Kabibi, 2012).

2.3.4. FDI and Economic Growth

Currently, countries of the world have been connected than ever through FDI which has magnified effect in many aspects. FDI is not a only movement of capital and stocks across boundaries rather it is channeling of wealth, knowledge, and technology across geographical locations creating employment opportunities to stimulate the local economy (Wall, 2013). Numerous useful contributions are brought by FDI to economic development in terms of employment, foreign exchange and investment (Farole and Winkler, 2014). Most countries benefited from their eased policy of FDI, consequently, satisfied their international currency and export need (Carkovic and Levine, 2002). An empirical study analyzed by Silajdzica and Mehica (2015) concluded that FDI was primarily essential for knowledge spillovers, technological advancement, and research and development (R&D) which ensure economic progress. The effect of FDI technology spill over is highly dependent on the technological readiness of recipient economy (Belloumi, 2014).

Some studies also showed the degree to which FDI and economic development are interlinked. Macroeconomic constituents such as domestic saving, unemployment, interest and foreign

exchange rate are influenced by FDI. FDI is believed to act as a catalyst for productivity, employment incubator, and innovation and knowledge spillovers (Denisia, 2010). Economic prospects of countries are highly reliant on their capacity to achieve more investment inflow and international trade advantages (Gomez et al., 2015). An economy with a large connectivity of FDI will have favourable trade and balance of payment accounts due to the declining trade barriers, falling transport costs and the growth of MNCs (Turok, 2004).

Contrary to these supporting ideas, Carkovic and Levine (2002), came up with conclusion claiming some works were biased, that FDI does not always bring exhaustive economic growth rather there exist inconsistent correlation. Another commonly known negative aspect of FDI is its crowding in and out effect particularly in developing and transitional economies. FDI may crowd out domestic investments and bring adverse effect to national economic progress (Denisia, 2010). So, it can be noted here that as FDI is highly praised by its positive economic contribution possible adverse effects are also likely depending the nature of hosting economy.

2.3.5. The Impact of FDI inflows into Africa

The rise of Africa in economic growth and diversification is creating favorable conditions for foreign investors because it would minimize risk and economic vulnerability (Gui-diby and Renard, 2015). Hussain and Kabibi (2012) inferred that Africa can utilize FDI as prudent means of reducing their saving gaps and realize economic growth. Economics papers examining the determinants of FDI in developing countries revealed that FDI is a vital component of economic development in Africa (Denisia, 2010). Recently FDI is a highly important catalyst for productivity and trade in Africa and developing countries, partly because of enlargement in the range of global value chain (Farole and Winkler, 2014). Hence, FDI can be relevant for Africa as an alternative means of realizing better capital, technological and innovation spillovers, foreign currency and employment.

However, the existing barriers have been challenging overall efforts made to attract FDI to the continent. Low level of human capital, both basic and tertiary level, is a big challenge for SSA prohibiting the effort to increase FDI inflow (Cleeve, 2015). Consolidated measures taken to smooth out these obstacles could help Africa maximize the possible benefits of FDI. In realizing this, absorptive capacity of countries in terms of education, technology, institutional and liberalized market which could allow spillovers of FDI need to be increased (Adams, 2009). Building strong institutions for property right's protection and effective legal framework will create better security; minimize sunk costs of MNCs and ultimately improve productivity

(Masron, 2012). Scaling-up best experiences of countries, South-East Asia, and Latin America, which undergone basic levels of skill required to attract FDI would be important for Africa (Cleeve, 2015).

2.3.6. Why is Manufacturing FDI demanded by Africa?

It is evident that Africa is benefiting from the current rising FDI inflow as it enhances economic boost and development, in the contrary, unwise exploitation of natural resources is a threat (Chakrabarti and Ghosh, 2014). The extractive industry remained as the dominant sector in existing FDI at large though the service sector has started to rise (Adams, 2009). This phenomenon ensured only limited importance so far when compared with expected benefits that Africa could reap from FDI attracted other areas of the economy particularly the manufacturing (industry) sector.

The most important point required to be considered was the sector which absorbs a lot of labor force for production to respond ever increasing economic active population in the continent. Over the past four decades, agriculture was slightly leaving its place, in terms of value-addition, to the service sector while manufacturing has been delaying (World Bank, 2015). The report recommends that African countries need to shift towards manufacturing sector for enhanced labor productivity than the other sectors (ibid.). The industrialization process could be hastened mainly through growing record of the manufacturing sector (Gui-diby and Renard, 2015). Therefore, better success in manufacturing FDI means lifting and transforming the general economy in the continent accompanied fair distribution income.

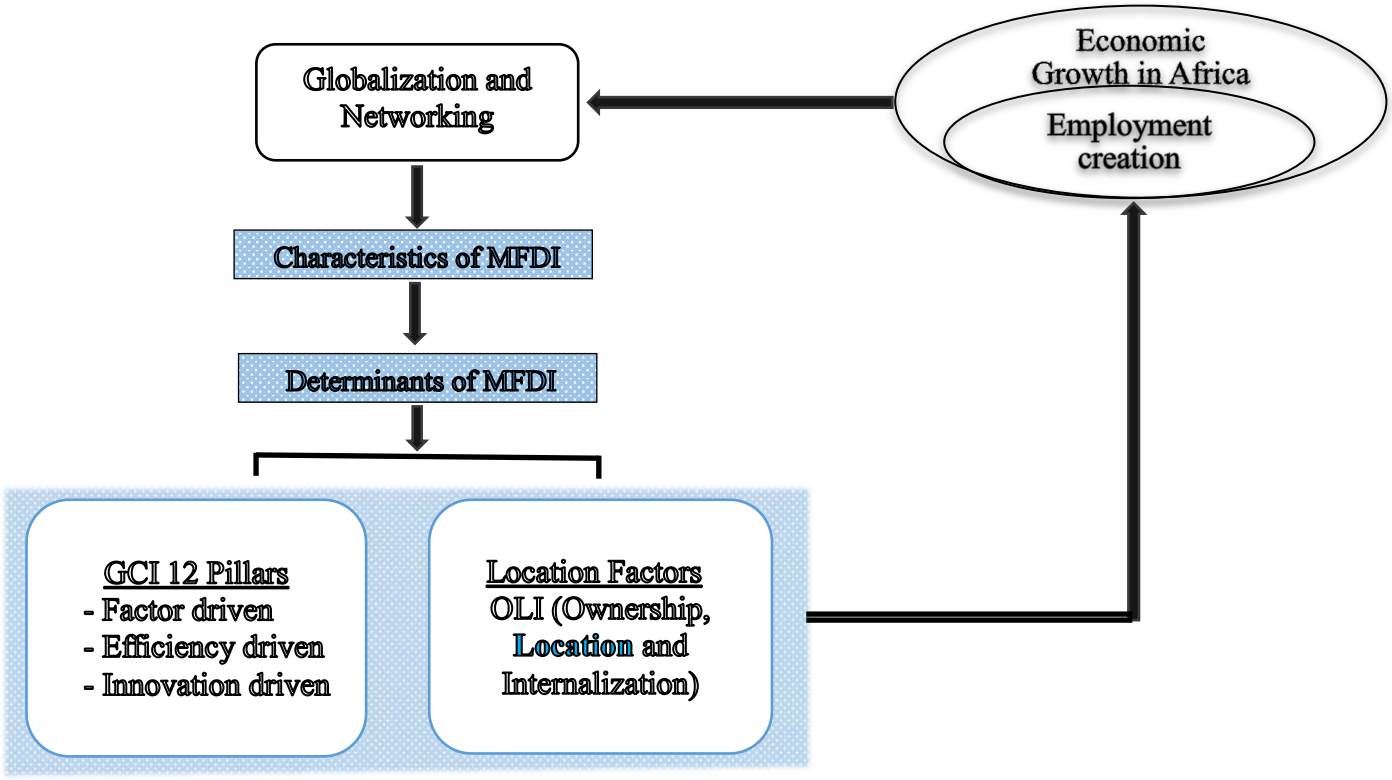
2.4. Conceptual Framework

This section is a mirror reflection of the concepts discussed in the research including literature covered so far. The overall existing causal relationships and associations between variables, indicators, and concepts were depicted in Fig 2.2.

The flow of Greenfield MFDI (dependent variable) towards Africa is characterized by its unique features in terms of volume, growth trend, and diversity when compared other global regions measured in value and number. The performance of global regions to attract MFDI is determined by location factors (independent variables) that make them primary destinations of foreign investing firms. In the skeleton, MFDI and indicators of GCI for countries and location factors of cities are directly related. As MFDI is under the direct influence of global economic dynamics and networking both variables also have a direct relationship with globalization. The

nexus of these factors not only affect the flow of MFDI towards countries and cities but also their competitiveness performance at the global level. Regions that performs well in attracting more MFDI are found more likely to satisfy political economy and infrastructural and institutional related interests of foreign investors. On the other hand, regions like Africa striving to fulfill these essentials are expected to enhance their economy and create huge employment opportunities. In the theoretical literature, it was noted that MFDI, in general, largely contributes to generating job opportunities and economy of Africa. The strong relationship between globalization, MFDI, determinants of MFDI reinforces or affect each other and will impact indirectly economic growth of hosting countries and cities.

Figure 2.2. Conceptual Framework



Source: Author (2016)

Chapter 3: Research Design and Methods

3.0. Research Question

Main research question:

What are the determinants of inward FDI in manufacturing sector in Africa compared to top global countries and cities?

Sub research questions:

1. What are the differences in location factors of inward MFDI between African and Global countries and cities?
2. What are the factors affecting inflow of Manufacturing FDI into top global countries and cities?
3. What are the factors affecting inflow of Manufacturing FDI into African countries and cities?

3.1. Operationalization: Variables and Indicators

In this theses context, global countries and cities are non-African countries and cities located in other continents of the world. It is named so just to delineate African countries and cites from rest of the world (North and Latin America, European, Middle East, Asian and Pacific…) countries and cities.

It's already pointed previously that dependent and independent variables are operationalized as green field MFDI and determinants which affect its inflow towards Africa and global countries and cities.

Dependent variable: Y= MFDI

The dependent variable, MFDI, represent inward green field investment expressed in capital and number of operating project over years. Flowing MFDI towards recipient countries and cities will be described by growth trend, diversification, attraction achievement, and inward-outward network created. The existing relationship between MFDI and selected location factors will be identified in which extensive efforts made for this regard, global countries and cities are taken for comparative purpose.

Independent variables: X= Determinants of Location Factors

The independent variables (X) are operationalized in a way of addressing the research questions. Independent variables are location factors which are objected to be determinants of MFDI. It should be noticed here that GCI (Global Competitiveness Index) pillars and passport variables are primarily compiled for other purposes. Part of these variables, presumed to have effect on MFDI inflow, are served as explanatory variables. Though thesis's ultimate focus is Africa, explanatory variables of global countries and cities are also included so as to make the analysis more robust. Therefore, selected pillars of GCI are used as explanatory variables of countries whereas location factors of cities are extracted from passport data.

3.1.1. Global Competitiveness Index

The GCI pillars were calculated, using a set of 57 sub-indicators grouped into 16 thematic categories. These indicators are drawn from the Global Competitiveness Indicators which consist of a set of institutions, policies, and factors that determine the level of productivity of a country, conditions of public institutions and technical conditions.

The single pillars have been adapted to the scale and nature of this study i.e. We selected a set of dimensions and indicators corresponding to factors that contribute to inward Greenfield FDI in countries. These subsectors have been used to construct the main pillars which have been grouped into catalysts and burdens; where catalysts are the group of sub-indicators that have a positive effect on foreign direct investments (FDI) while burdens have a negative effect. Selection of the indicators is based on theory and the P2 computation (Perez-Luque et al, 2015) is not affected by the categories used to group the pillars.

The computation of the pillars used the P2 distance index, a synthetic index that combines all of these indicators into a single value (Garcia et al., 2015). This approach has also been used to build synthetic indicators in other disciplines such as well-being and other social indicators (Garcia et al, 2015). It allows comparisons between entities (both temporal and spatial) and is considered to be an exhaustive synthetic indicator because it is not based on a reduction of information.

It considers all the valuable information contained in the variables used to build it allowing the inclusion of a large number of variables since all redundant variance is removed by the process itself, as is the multicollinearity (Montero et al., 2010; Garcia et al., 2015).

To calculate the P2 distance, we started with a matrix X of order (m, n) in which m is the number of spatial units (countries) and n, the number of variables. Each element of this matrix, xri, is the value of the variable i in the spatial entity r. The P2 distance indicator calculates the distance of each spatial entity with regard to a theoretical spatial entity of reference. Initially, a distance matrix D is calculated as:

$$dri=|Xri-X^*i|$$

where x/i is the r-th element of the reference base vector X/ = (x/1, x/2, . . ., x/n). For each variable, a reference value must be defined to compare different spatial entities. (Garcia et al. 2015).

3.1.2. Passport Data for cities

Measures of various parameters are provided for cities in the passport database. Though both indicators of GCI and passport data can serve as are indicators of location factors for FDI, their scale of measurement was different. When cities passport data are location factor for FDI at cities level GCI taken for country level. Out of listed indicators of location factors selected indicators are taken that goes with manufacturing FDI. Selection is made based on whether the indicators influence foreign investor's attraction, profit, and cost of production. This in turn greatly determined by economic performance, price and inflation indices; consumer income and expenditure measures and other variables which useful to measure competitiveness and attractiveness of cities in the specified sector.

List of sampled countries and cities are annexed (Annex 1 and 2).

Table 3.1. Overview of Research Questions, Variables, and Indicators

Research Type	Research sub-question	Variables	Indicators	Data Source	Sample
Explanatory and Descriptive	1. What are the differences in location factors of inward MFDI between African and Global countries and cities?	Selected sub-pillars of GCI and location factors	Scores of means difference	- World Economic Forum - Euro Monitor International	30 countries and 115 cities at global level 38 countries and 19 cities at African level
	2. What are the factors affecting inflow of manufacturing FDI into top global countries and cities?	MFDI inflow into top global countries and cities	Attracted MFDI (in value and number)	fDi Market	28 countries and top 15 cities at global level
		- 11 selected sub-pillars of GCI - 12 location factors	MFDI's determinants	-World Economic Forum -Euro Monitor International	28 countries and 115 cities at global level
	3. What are the factors affecting inflow of manufacturing FDI into African countries and cities?	MFDI inflow into African countries and cities	Attracted MFDI (in value and number)	fDi Market	38 countries and top 15 cities at African level
		MFDI network between global and African countries and cities	Network nodes and edges size	fDi Market	30 countries and 125 cities at global level 38 countries and 19 cities at Africa level
		- 11 selected sub-pillars of GCI - 12 location factors	MFDI's determinants	-World Economic Forum -Euro Monitor International	38 countries and 8 cities at African level

Source: Author (2016)

3.2. Research Strategy and Methodology

The volume of flowing MFDI towards sampled cities and countries that took place over the past ten (10) consecutive years (2006-2015) is part of the data analysis. For this purpose, panel data of MFDI inflow is processed. Number of coming MFDI during the study time periods is traced using descriptive statistics and network analysis aggregated at country and city level. This will give an overall picture of cities and countries attractiveness and existing linkage between them.

Second, secondary data accessed from various sources will be used to test relationships between MFDI and explanatory variables. At this stage, the location factors are analyzed for Africa and global countries and cities to investigate the underlying relationship with MFDI. Identifying of attributes of MFDI inflow is a central goal of research strategy and methodology leading towards relevant findings. Therefore, this study is quantitative in its approach based on descriptive and inferential method of analysis.

3.3. Data Collection Methods

Secondary data collection method is used to access the required quantitative data from different sources. These data sources include fDi Financial Market Ltd., World Economic Forum, and euro monitor international. Some relevant information about these international organizations and their respective websites are narrated below.

fDi Markets provides access to data on investment projects, capital investment and job creation services from Financial Times. It is an online database of cross-border Greenfield investments covering all countries and sectors worldwide but a different level of depth and thoroughness. Hence, the data available from this source covers MFDI flow data of Africa and global countries and cities during the years 2005-2014. Using the data from this source top African and global countries and cities attracting MFDI will be discussed.

Global Competitiveness Index: This database is served as source of twelve (12) pillars and related sub-pillars that measure productivity and efficiency competitiveness index at the global level. This data is examined to investigate existing relationship between MFDI and its corresponding location factors. Thus, competitive performance of African and global countries would be considered for the periods 2006-2014.

Passport Data: It is a global market research database controlled by euro monitor international. The passport database provides statistics, analysis, reports, surveys and other information on industries, countries, and consumers worldwide. According to the website, the database has in-depth analysis for 781 cities, 210 countries, and 27 industries across the world including historic data from 1997 and forecasts through 2020. From this source passport data of 125 global and 8 African cities are accessed for years between 2005 and 2014.

Official websites of data accessed organizations:

http://www.fdimarkets.com/
https://www.weforum.org/about/world-economic-forum

http://www.euromonitor.com/passport

3.4. Validity and Reliability

The strategy this thesis are data sources and instruments of analysis which are meanness of ensuring the best possible level of validity and reliability. The three web-based international organizations are accredited sources working with a high number of clients from business, academic and research communities. This attests the level of data credibility collected for MFDI and location factors that would undergo systematic statistical analysis. However, there are constraints that limit its validity to some extent. Lack of data as much as required, especially for African cities, is the big challenge. The analysis was framed to the extent complete data could be accessed to undertake a robust inferential analysis. Therefore, thoroughness data analysis for African cities may affect study's validity to some extent.

The reliability of the study is a mirror reflection of research process and data analysis techniques to determine the precision and accuracy level of measurement. Since appropriate scientific instruments are used for testing, reliability of the thesis will be ensured.

3.5. Data Analysis Techniques

The findings of the research will end with detailed description and modeling analysis of MFDI meeting thesis objectives. For inferential statistics that aim to test the relationship between a set of variables, STATA version 14.1 will be used to undertake Panel regression.

In running regression for countries at Africa and global level a total of 11 sub-pillars (listed above) are used. These independent variables selected based on their close relationship with

MFDI inflow more than any other sub-pillars. For cities, a total of 14 variables are used for the inferential analysis both at Africa and global level.

The possible influence of independent variables on dependent variable is investigated over periods of time. Hence, panel data of countries (2006-2014) and cities (2005-2014) are cleaned and managed in order to undertake regression. The regression models passed all the necessary assumption tests which are presumably necessary conditions. For instance, independent variables with high VIF (VIF > 10) are dropped. Most importantly, to decide which model should applied between fixed effects and random effects an estimator called Hausman test is used. Hausman test compares an estimator that is known to be consistent (fixed) with an estimator that is efficient under the assumption being tested (random). In analyzing the significant determinants, considering statistical result of Ch^2 (threshold is 0.05) either fixed effects model or random effects model will be performed.

In order to compare means of sub-pillars of African and other global countries, t-test is applied. As explained in chapter three, t-test is designed to compare means of same variables between two independent groups. The test assumes that variances for these two groups are the same and interpretation based on P-value of the means differences.

For the rest of analysis part which describe level of MFDI inflow and connectivity created between countries and cities, networking software applications: Gephi version 19.1 and Microsoft excel are applied. This is important to identify cities and countries competitiveness to attract more MFDI in the global network system.

4. Chapter Four: Research Findings

4.1. Introduction

In this section, statistical results and findings are presented intending to address research's questions in detail. Descriptive and inferential statistics are mixed in order of their importance to fulfil study's objective. The content of this section is structured in respective order of sub-research questions consisting of both descriptive and inferential analysis.

In analyzing explanatory variables of MFDI econometric models are executed by means of top-down approach. Under sub-research one section, independent variables of countries and cities are compared based on their mean scores. This is followed by analysis of significant determinants at global countries and cities (non-African) level which are supposed to influence decisions of foreign investors. Lastly, determinants of MFDI inflow towards sampled Africa countries and cities are explained. In all sections, regression results are backed by relevant tables, figures and charts describing attracted MFDI in different ways.

4.1. Sub question 1: What are the differences in location factors of inward MFDI between African and Global countries and cities?

4.1.1. Mean difference between African and global countries

Among the independent variables used in analysing determinants of MFDI attraction is measures of competitiveness pillars of sampled countries. Before looking at the relationship between these variables and MFDI, this section is comparing scores of African and global countries in terms of their performance, which would be helpful to insight.

The means score of the independent African and global countries are compared in order to draw conclusion about their state of performance by their competitiveness performance. In this case, means difference between mentioned countries are compared by their scores of pillars indices. As shown in t-test result (Table 4.1), the P value for all independent variables are below threshold (0.05) which imply all independent variables are commonly significant and the null hypotheses is rejected. It means that African and global countries performed unequally when weighted by competitiveness pillars index apparently global countries (non-African) performed well (Table 4.1).

Table 4.1. T-test for independent variables by Competitiveness pillars

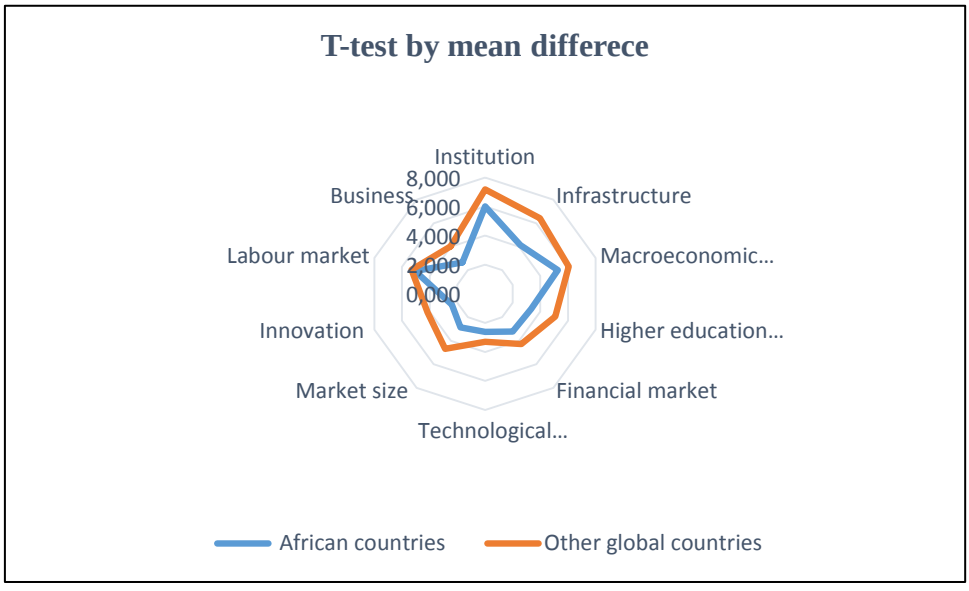
Variable (Pillars)	Obs	t	Degrees of freedom	P(|T|>|T|)	Mean difference	Std. Error difference
Institutional	538	9.675	445.144	0.000***	1.17	0.12
Infrastructure	538	15.502	393.893	0.000***	2.28	0.15
Macroeconomic environment	594	9.580	529.674	0.000***	0.77	0.08
Higher education and training	538	25.965	414.769	0.000***	1.76	0.07
Labour market	538	5.479	529.707	0.000***	0.26	0.05
Financial market	538	11.141	474.612	0.000***	1.03	0.09
Technological readiness	538	15.315	515.896	0.000***	0.69	0.04
Market size	594	29.109	514.930	0.000***	1.81	0.06
Business sophistication	593	18.715	470.506	0.000***	1.37	0.07
Innovation	593	17.120	494.222	0.000***	1.76	0.10

Standard errors in parenthesis

***p<0.01, **p<0.05, *p<0.1

Source: Author (2016) Based on GCI data from World Economic Forum (2015)

Figure 4.1. Pillar's index Mean difference between African countries and other global countries



Source: Author (2016) Based on GCI data from World Economic Forum (2015)

As it is noted in earlier sections, countries competitiveness pillar's measures consists of twelve essentials of economies. Based on Figure 4.1, Africa performed low in all pillars but the means difference varies through pillars. There is wide difference scores of the pillars: market size, higher education, infrastructure, innovation and business sophistication where Africa performed low compared to other global countries. It is worthwhile that most of these pillars are identified by studies to be significant location factors influencing decisions of foreign investors whether to operate in countries. Though, relatively small difference is observed in

scores of other pillars Africa has lower performance compared to the sample of global countries.

The means of competitiveness for African and global countries are calculated by their sub-pillars indices (Table 4.2). Based on t-test result, the P-value for all variables are below 0.05 (threshold value) then it can be concluded that all means are statistically significant and different from zero. In other words, means scores of African and global countries in their sub-pillars index are different each other where African countries are less competitive in relative terms.

Table 4.2. T-test for independent variables by competitiveness sub-pillars

Variables (sub-pillars)	Obs	t	Degrees of freedom	P(|T|>|T|)	Mean difference	Std. Error difference
Strength of investor protection	525	8.259	485.014	0.000***	1.040	0.660
Quality of roads	538	11.170	402.518	0.000***	1.165	0.104
Quality of port infrastructure	538	9.840	437.790	0.000***	0.870	0.089
Quality of electricity supply	538	18.422	517.283	0.000***	1.992	0.108
Inflation	536	-1.856	286.310	0.064*	-6.770	3.652
Tertiary education enrollment	526	21.408	338.318	0.000***	36.233	1.692
Prevalence of trade barriers	538	11.296	463.844	0.000***	0.568	0.503
Business impact of rules on FDI	538	7.470	528.793	0.000***	0.448	0.060
Flexibility of wage determination	538	4.980	535.195	0.000***	0.310	0.623
Domestic market size index	538	27.886	532.024	0.000***	2.169	0.778
Foreign market size index	538	31.642	486.508	0.000***	2.206	0.070

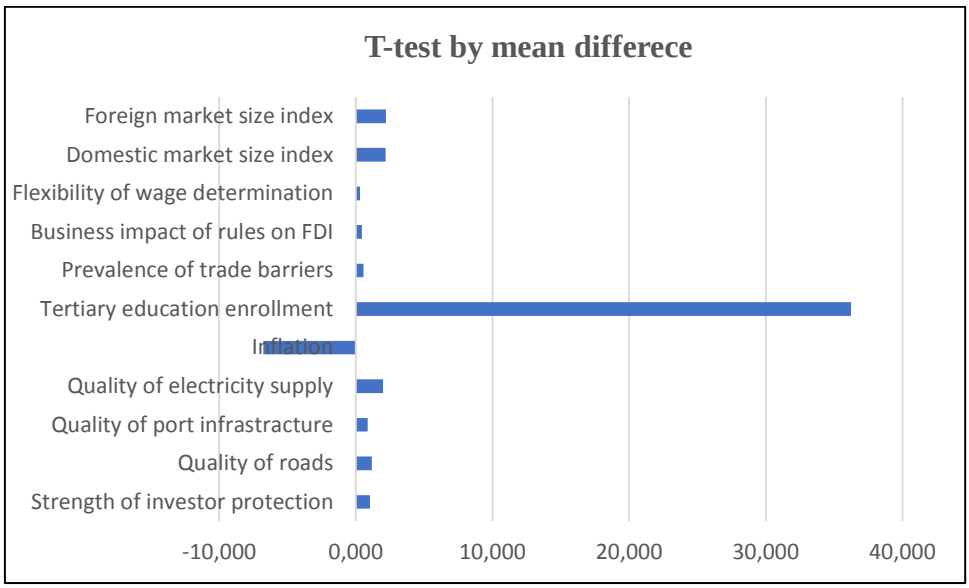
Standard errors in parenthesis

***p<0.01, **p<0.05, *p<0.1

Source: Author (2016) Based on GCI data from World Economic Forum (2015)

Observed mean difference and the finding shown in Figure 4.2 complement each other showing that Africa found in lower position in fulfilling interests of foreign investors since these pillars vital in this regard. As shown in chart 4.1, global countries surpass their counter African countries in scores of all sub-pillars except inflation which signal for unfavourable economy for investment. Average inflation rate of African countries during periods 2006 and 2014 is higher than other sampled countries of the globe costing the continent by curbing MFDI inflow. The big difference in tertiary education enrolment not only implies that Africa far lagged behind in human capacity building when compared to other global countries but also is caused by the scale of measurement. In general, observed means difference between sampled African and other global countries indicates Africa's weak position in measures of competitiveness.

Chart 4.1. Sub pillar's index mean difference between African countries and other global countries



Source: Author (2016) Based on GCI data from World Economic Forum (2015)

4.1.2. Explaining mean difference between African and global cities

Groups of the sampled cities are compared by their economic and demographic scores which are selected assuming that these variables have relationship with MFDI inflow (to be tested in later sections). In Table 4.3 the means difference of African and global countries are compared by list of variables and respective P and degrees of freedom values are calculated. Based on the result, P values of all variables except national highways and total population are significant which confirm the means difference of these variables is different from zero. For variables national highways and total population the null hypothesis is accepted which claim cities means difference is not different from zero. In conclusion, except in national highways and total population, the performance of African and global cities compared by listed variables are not equal.

Table 4.3. T-test for independent variables by cities location factors

Variable	Obs	t	Degrees of freedom	P(|T|>|T|)	Mean difference	Std. Error difference
Inflation	1320	-5.462	102.566	0.000***	-2.46	0.45
GDP (at purchasing power parity)	1320	14.824	403.451	0.000***	124656.10	8409.08
Population density	1320	-3.919	105.073	0.000***	-1194.14	304.72
Unemployment rate	1188	-6.212	73.392	0.000***	-9.99	1.61
Productivity	1188	24.596	500.842	0.000***	40641.84	1652.39
Economically active population	1188	4.726	122.847	0.000***	959.53	203.03
Gini index	1320	-13.826	87.571	0.000***	-12.62	0.91
Annual disposable income	1320	15.764	1162.330	0.000***	56029.91	3554.25
Consumer expenditure	1320	14.912	1057.240	0.000***	47102.03	3158.73
Airline passengers	1179	15.237	345.906	0.000***	14991.17	983.84
National highways	999	-1.426	101.945	0.157	-163.89	114.94
Total population	1,320	1.2532	92.4334	0.213	877.5785	700.28

Standard errors in parenthesis

***p<0.01, **p<0.05, *p<0.1

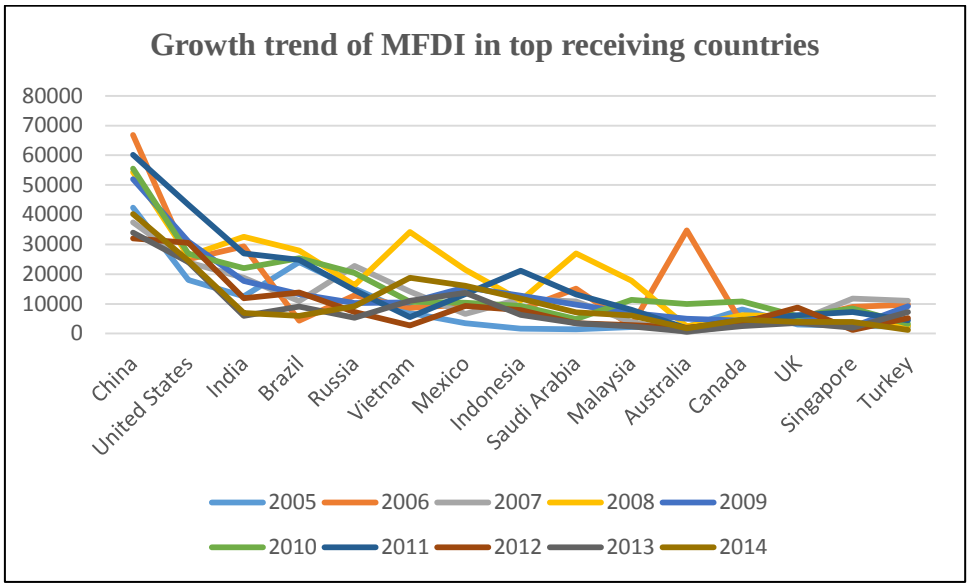
Source: Author (2016) Based on GCI data from World Economic Forum (2015)

4.2. Sub question 2: What are the factors affecting inflow of Manufacturing FDI into top global countries and cities?

4.2.1. Top MFDI destination countries in the World

When growth trend of MFDI inflow into top countries traced, there is general declining pattern between periods 2005 and 2014 (Chart 4.2). For both China and Unites States amount of capital invested in manufacturing projects fall from years to years with minor variations. Even though fluctuations are observed for countries India, Brazil, Russia, Vietnam, Mexico, Indonesia, Saudi Arabia, Malaysia and Australia in 2006 and 2007 still the overall falling pattern is unchanged. A mix of MFDI growth trend (rise, stable and decline) is observed throughout the years in Canada, UK, Singapore and Turkey.

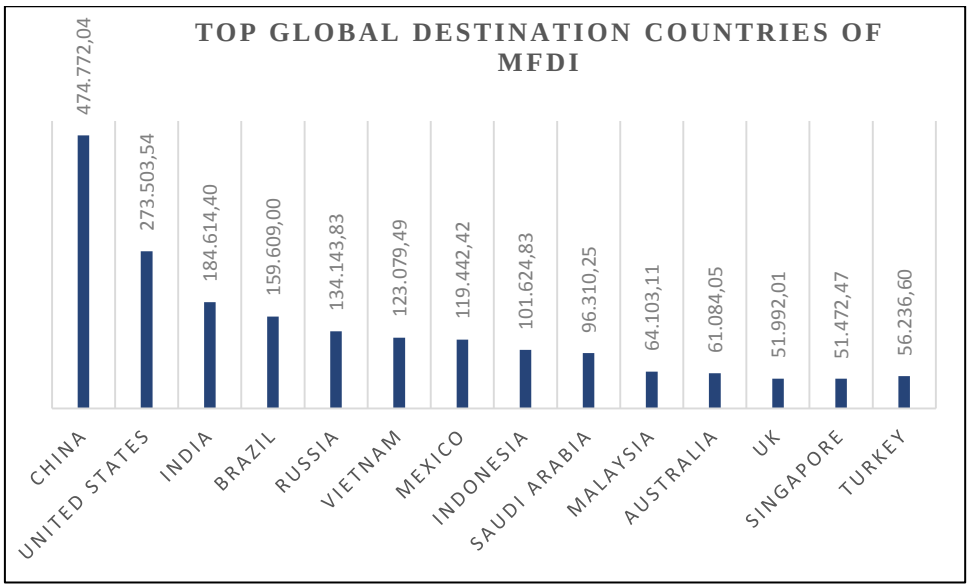
Chart 4.2. Growth trend of MFDI (in value) inflow into top destination countries



Source: Author 2016: Based on fDi market database (2015)

Looking amount of capital invested into top global recipient countries, China is the leading country followed by United States, India and Brazil and so on. In the list of top recipient countries Singapore and Turkey are least to receive MFDI. It should be noted that countries of Africa are not in this list of top MFDI destination countries.

Figure 4.1. Cumulative MFDI (value) inflow into top destination countries between 2005 and 2014



Source: Author 2016: Based on fDi market database (2015)

4.2.2. Explaining determinants at global countries level

Regression result show that Hausman test's P-value is 0.00 which accepts the null hypothesis indicating fixed effects should be applied.

Table 4.6 Regression result for determinants of MFDI inflow into Global countries

Significant X-variables	Equation 4.1
Constant	8.201***
	(0.558)
X_1=Inflation	-0.0287*
X_2=Business impact of rules on FDI	0.639***
	(0.0995)
X_3=Flexibility of wage determination	-0.547***
	(0.110)
R^2	0.110
Observations	270
Number of countryid	30

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author (2016) Based on GCI data from World Economic Forum (2015)

Based Table 4.6, independent variables inflation, business impact of rules on FDI rules and flexibility of wage determination are found to be significant. The equation (4.1) for inflow of MFDI towards global countries is function independent variables:

$$\hat{Y} = 8.201 - 0.0287\ X_1 + 0.639\ X_2 - 0.547\ X_3$$

Where $\hat{Y}$ is the predicted MFDI, X's are determinants of MFDI and constant is an error term

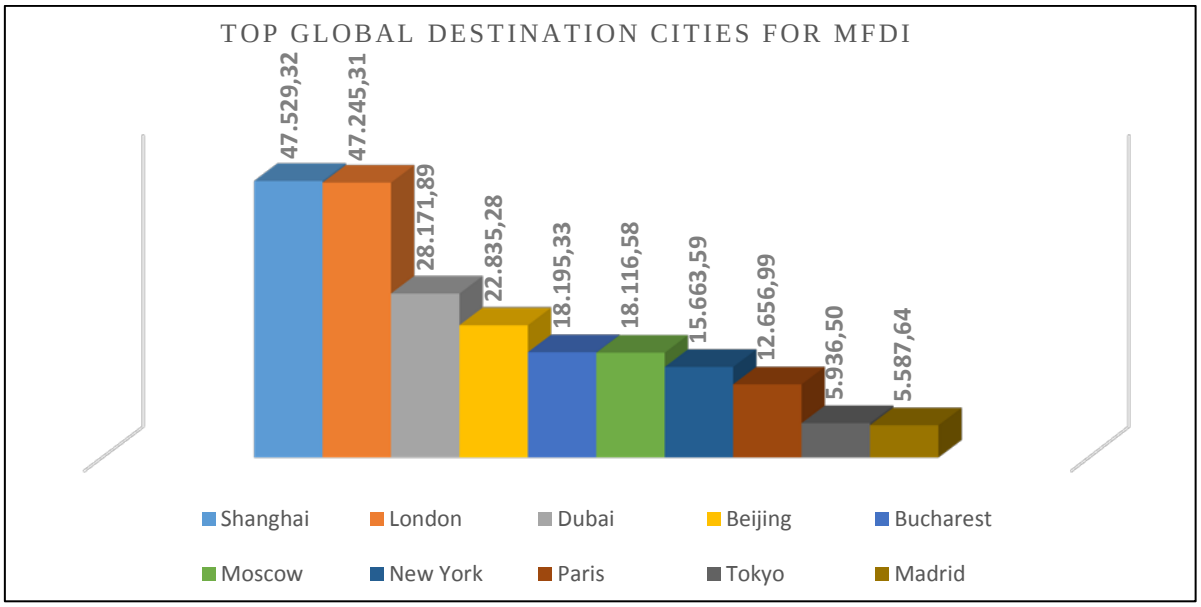
In the equation, the value of R-squared is 0.110, which means 11% of variations in MFDI is explained by the significant sub-pillars. The rest (100% - 11% = 89%) is attributed to the constant error term.

Regarding relationship between the explanatory variables and MFDI inflow, a unit rise in the prices of goods and services in these sampled global countries discourages foreign investors' motive to invest in manufacturing sector or vice versa. On the other hand, foreign investor's decision to invest in these countries have positively related with determinants: business impact of rules related to FDI and flexibility of wage determination. It means a unit increase/decrease in these two determinants will result in proportional increase/decrease in amount of capital invested.

4.2.3. Top MFDI destination cities in the World

Figure 4.2 shows aggregate MFDI received in terms capital invested by top other global cities between the periods 2005 and 2014. During the specified periods Shanghai and London received relatively high aggregated value of MFDI followed by Dubai, Beijing and so on. On the opposite, Tokyo and Madrid are least to receive MFDI measured in capital value in the top ten global cities list.

Figure 4.2 Inward MFDI Cumulative towards Top Ten Global Cities between 2005 and 2014



Source: Author 2016: Based on fDi market database (2015)

4.2.4. Explaining determinants at global cities level

In regressing panel data of global cities, the P-value for Hausman test is found to be 0.2674 which rejects the null hypothesis implying that random effect model need to be applied. Based on random effect model regression result, explanatory variables unemployment rate, total population, and consumer expenditure are identified as determinants of inward MFDI towards global cities (Table 4.7).

Table 4.7 Regression result for determinants of MFDI inflow into Global Cities

Significant X-variables	Equation 4.2
Constant	4.485***
	(0.170)
X_1 = Unemployment rate	-0.0435***
	(0.0103)
X_2 = Total Population	0.000109***
	(1.54e-05)
X_3 = Consumer expenditure	-5.87e-06***
	(9.02e-07)
R^2	0.3552
Observations	740
Number of cityid	120

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author (2016) Based on Cities Passport data from Euro Monitor International (2015)

The dependent variable (MFDI inflow) is a function of these significant independent variables as well as the constant term, and the linear equation (4.1) for MFDI inflow is formulated using fixed effects model result is:

$$\hat{Y} = 4.485 - 0.0435X_1 + 0.000109X_2 - 5.87e\text{-}06X_3$$

Where $\hat{Y}$ is the predicted MFDI, X's are determinants of MFDI and constant is error term

The value of R-squared is 0.203, which means 35.5% of variations in MFDI is explained by the significant factors. The rest (100% - 35.5% = 64.5%) is be attributed to the constant error term.

Looking existing relationship between MFDI and identified determinants, unemployment and inward MFDI are negatively related. Since cities with stable economy are remarked by their low unemployment rate more MNCs will be attracted, on the opposite, high rate of unemployment ruin foreign investors' interest for investment proportionally. The in consumer change expenditure is also inversely related with magnitude of investment. While total population is significant but positively related to MFDI inflow and hence an increase in population size affect MNCs decision positively to invest in these cities and vice versa. Consequently, cities of high population are choice for multinational operating in manufacturing projects due to the presumption that the more residents in cities the more advantage to sell their products other reasons.

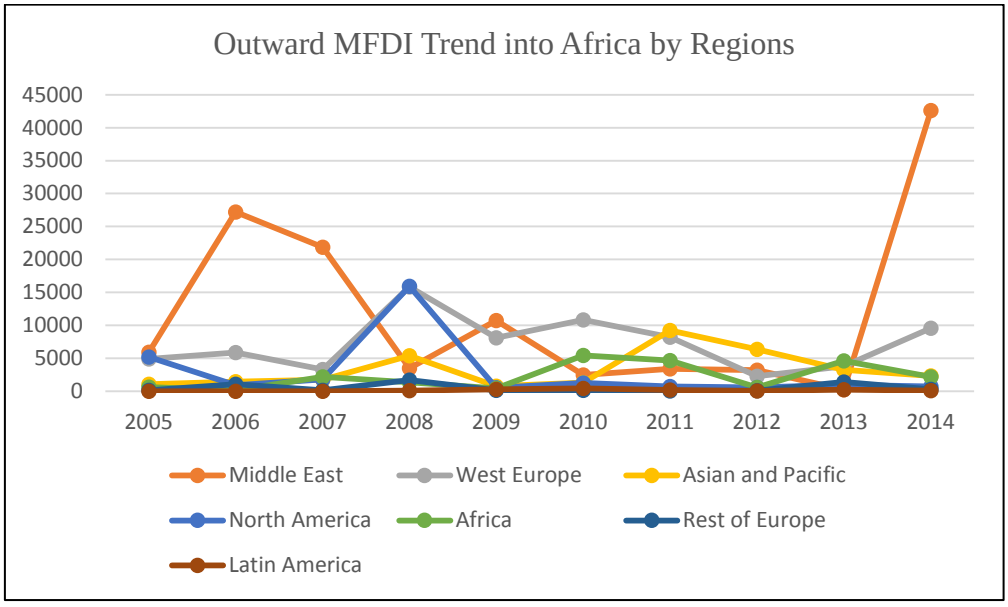
4.3. Sub question 3: What are the factors affecting inflow of Manufacturing FDI into African countries and cities?

Besides dealing explanatory factors, describing the flowing MFDI towards Africa in terms of number, value, jobs created and intensity of linkages will give general picture about which regions, countries, and cities investing and connected to Africa in the manufacturing sector. This is also supported by showing MFDI's inflow growth trend into Africa over periods.

4.3.1. Top regions and countries investing in African MFDI

Based on the trend analysis chart 4.3 there exist fluctuations throughout the periods for all regions and after 2008 general decline is recorded. MFDI flowing from the Middle East exceed other regions between periods 2005-2008 and start to rise steeply again in 2013. Relatively MNCs originating from Western Europe outlaid modest amount of capital in manufacturing sector accompanied by ups and own pattern over the periods.

Chart 4.3 Trend of MFDI inflow into Africa over periods by Regions



Source: Author 2016: Based on fDi market data base (2015)

The cumulative MFDI between 2005 and 2014 (Table 4.8) shows that the Middle East is the leading region to invest huge capital in Africa followed by West Europe, Asian and Pacific and North America respectively. The inter-Africa investment (MFDI flowing between countries and cities) occupied 7.78% of total MFDI's volume. In this regard, the contribution of Rest of Europe and Latin America regions is meager relative to other regions in the sector.

Table 4.8 Cumulative MFDI into Africa by Source Regions

	Global Regions	FDI Number	FDI Value	Computed Percentage for FDI Value (%)
1	Middle East	154	121,063.67	42.77
2	West Europe	852	72,590.52	25.65
3	Asian and Pacific	368	32,727.79	11.56
4	North America	247	28,456.65	10.05
5	Africa	238	22,021.19	7.78
6	Rest of Europe	47	4,987.76	1.76
7	Latin America	16	1,200.90	0.42
	MFDI Total	**1922**	**283,048.48**	**100.00**

Source: Author 2016: Based on fDi market database (2015)

In number of MFDI connectivity, West Europe is most connected region with Africa followed by Asian and Pacific, North America and Africa in their respective order of importance. Irrespective of the extensive capital outlay Middle East has low connectivity of MFDI into African continent.

Table 4.9 Cumulative Outward MFDI into Africa between 2005 and 2014

	Source Countries	FDI Value	FDI Number
1	UAE	83,101.05	85
2	Bahrain	20,159.8	2
3	France	17,572.27	164
4	Canada	16,089.70	27
5	India	12,654.80	80
6	United States	12,366.95	220
7	Qatar	11,865.80	4
8	UK	11,756.42	159
9	Switzerland	8,775.33	72
10	South Africa	8,337.81	98
	MFDI Total	**202,679.93**	**911**

Source: Author 2016: Based on fDi market database (2015)

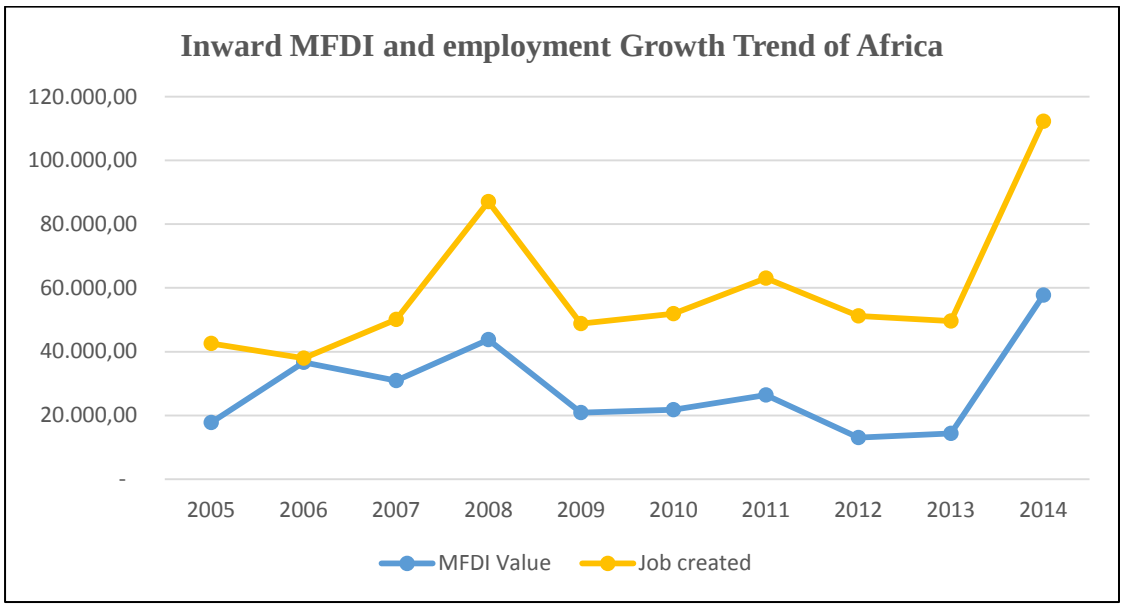
As shown in Table 4.9, MNCs coming from UAE are the prime foreign investors engaged in manufacturing sector followed by Bahrain, France, Canada and so on. South African investors

are among of top investors in Africa in the manufacturing. Complying with previous analysis United States, France, and the UK are more connected to Africa by operating a high number of manufacturing projects. In contrary to their huge capital injection into Africa, Middle East countries (UAE and Bahrain), are surpassed by South Africa.

4.3.2. MFDI inflow towards African countries

When the magnitude of FDI in the manufacturing sector is traced over periods, there is a general increasing pattern accompanied by fluctuations (Chart 4.4). A sharp decline is observed starting from 2008 throughout 2012, then started to revive and increased in 2013. This shows that the global financial crisis had restrained flowing MFDI towards Africa.

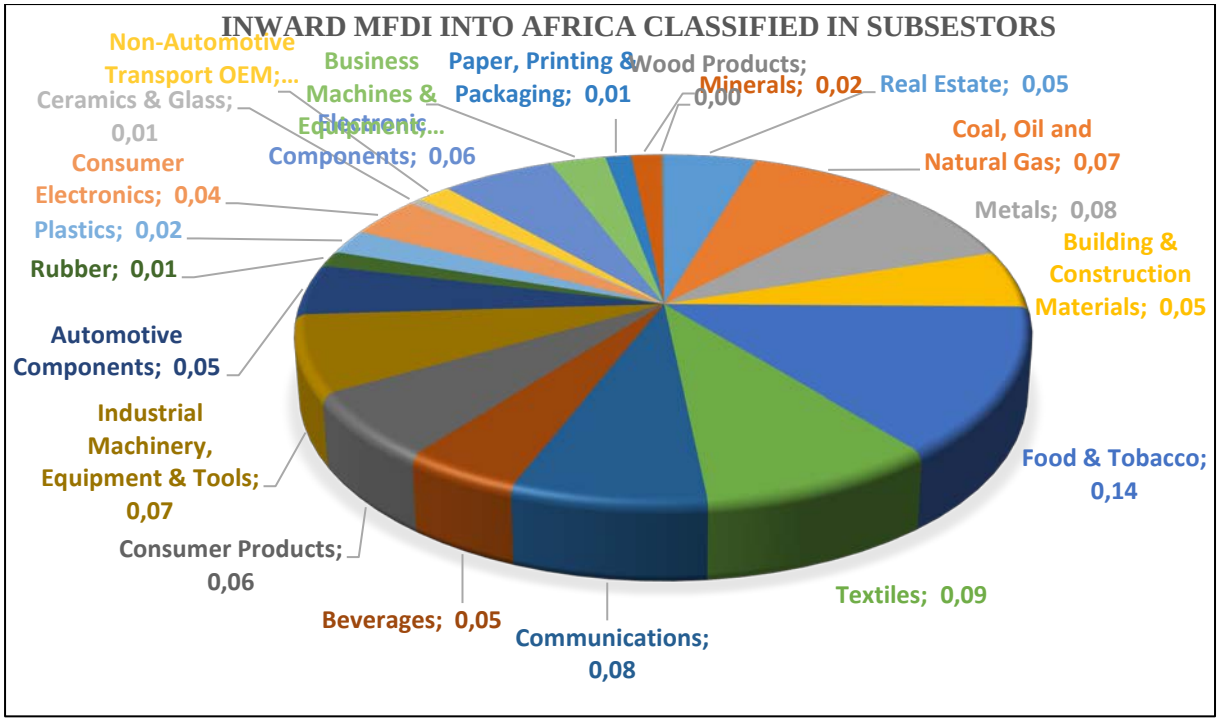
Chart 4.4 Growth trend of MFDI **(**Capital invested) and employment created in Africa over periods



Source: Author 2016: Based on fDi market database (2015)

As shown in the chart above, number of employment opportunities created improved throughout same periods, except for preceding periods of 2005, growth pattern is similar with the magnitude of capital invested on MFDI. The impact of the decline in MFDI during the global financial crisis also caused jobs created to shrink.

Figure 4.3 Cumulative African MFDI (2005-2014) distributed between subsectors



Source: Author 2016: Based on fDi market database (2015)

The increasing MFDI inflow into the Africa has not been evenly distributed between subsectors (Figure 4.3). MNCs engaged in Food and Tobacco projects took the leading position accounted for 14% out of 19 manufacturing subsectors. Textiles 9%, communications 8%, Coal, Oil and Natural Gas 7%, Industrial, Machinery, Equipment, and Tools 7% ... are manufacturing activities in their order of importance from total MFDI. On the opposite side, Rubber; Ceramics and Glass; Paper, Printing and Packaging have a small share of 1% each.

Table 4.8 Cumulative MFDI (2005-2014) flowing into Top African Countries

	Destination Countries	African Region	FDI Value	FDI number
1	Egypt	Northern	88,629.74	209
2	Nigeria	Western	34,687.37	163
3	Libya	Northern	22,787.38	30
4	Tunisia	Northern	20,353.31	132
5	Mozambique	Southern	17,294.05	70
6	Morocco	Northern	15,862.05	228
7	South Africa	Southern	15,638.90	320
8	Algeria	Northern	15,335.05	71
9	Ghana	Western	7,737.39	87
10	Cameroon	Central	5,337.80	9
	MFDI Total		**243,663.04**	**1,319**

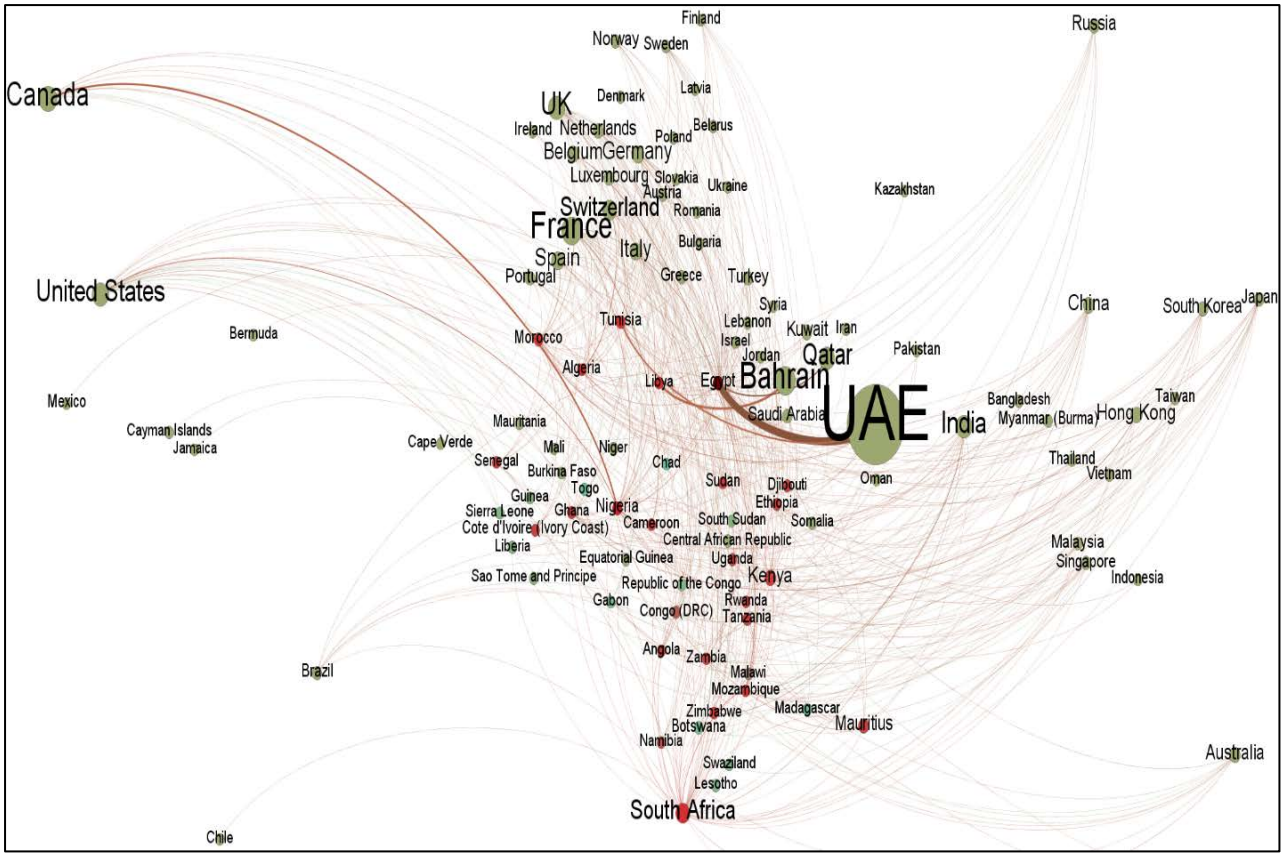
Source: Author 2016: Based on fDi market database

In listing top recipients of MFDI in Africa, there are two categories of countries valued in terms of capital invested and number of projects (Table 4.8). Egypt is found to attract highest MFDI followed by Nigeria, Libya, and Tunisia … measured in value (capital). However, South Africa achieved most in hosting the highest number of MNCs followed by Morocco, Egypt and so on measured in number of MFDI. In general, countries from the northern region took the lion share of MFDI flowing into Africa.

4.3.3. MFDI Linkages between African and Global Countries

The extent to which Africa has attracted foreign multinationals from different global countries can also be explained by intensity of the network created between them. The prevailing network between Africa and, Middle East and Europe is intense and complex (Figure 4.4). It shows that these two regions are investing more followed by Asian and Pacific, and North America. The thickness the edge UAE and Africa is exceptionally thicker than others due to its huge capital in the continent. Then UAE is followed by Bahrain, Canada, United States and so on as described by countries connecting edges. Worthwhile that countries nodes are located based on their geographic coordinates and the network analysis is unidirectional (inward).

Figure 4.4 MFDI Linkages between African and Global Countries



Source: Author 2016: Based on fDi market database

4.3.4. Explaining determinants at African countries level

In regressing the panel data for African countries, the Hausman test resulted in P-value (0.00) which accepts the null hypothesis and hence fixed effects model is performed. Based on this, sub-pillars such as inflation, foreign market size index and business impact of rules on FDI are identified as determinants of MFDI inflow into African countries (Table 4.10).

Table 4.10 Regression result on determinants of MFDI inflow into African countries

Significant X-variables	Equation 4.3
Constant	-6.881*
	(3.414)
X_1 =Inflation	-0.0204***
	(0.00226)
X_2 =Foreign market size index	1.552***
	(0.464)
X_3=Business impact of rules on FDI	0.780**
	(0.353)
R^2	0.113
Observations	196
Number of countryid	33

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author (2016) Based on GCI data from World Economic Forum (2015)

The volume of MFDI inflow towards African countries is partly attributed to these significant and other exogenous factors. The value of R-squared 0.113 mean 11.3% of the MFDI inflow is predicted the significant dependent variables but the remaining 88.7% (100% – 11.3%) attributed to the constant error term. The equation (4.3) of fitted line formulated using fixed effects model is:

$$\hat{Y} = -6.881 - 0.0204X_1 + 1.552X_2 + 0.780X_3$$

Where $\hat{Y}$ is the predicted MFDI, X's are determinants of MFDI and is error term

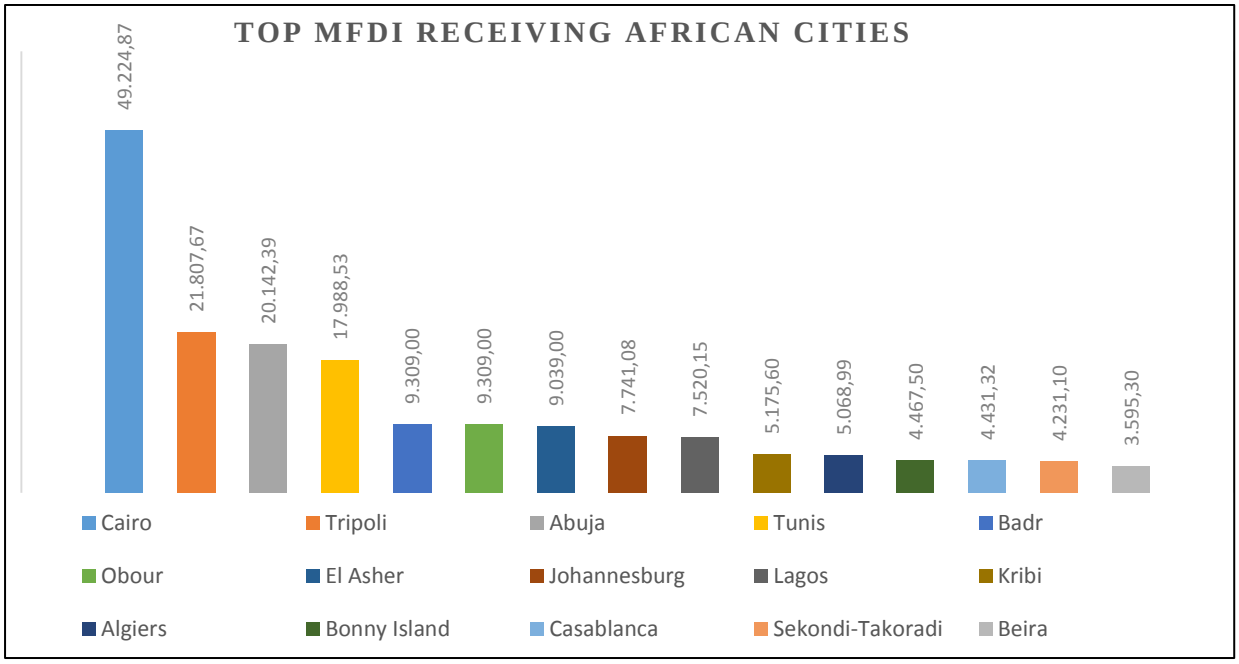
As discussed in theoretical section, stable economic environment and trade openness are suitable climate for foreign investment in countries. Coinciding with these theoretical arguments inflation and market size of countries are significant factors to determine level of MFDI inflow towards African countries. When countries record of high inflation rate increasing rate of MFDI inflow decline in the same rate and vice versa as these countries are suspected as economically unstable. On the hand, market size and inward flow MFDI are positively related which implies the more countries size market the more foreign investors attracted same countries and vice versa.

The other sub-pillar affecting level MFDI inflow into African countries is business impact of rules on FDI which is under sixth pillar market efficiency. It is noted that efficient market work by force of demand and supply without government intervention except few areas. This is a favorable condition for investors enabling them to predict the feature and set strategies to penetrate the market. Therefore, rules framed in paving ways for market efficiency have positive impact for MFDI attraction, on the other hand, and bureaucratic and interventionist rules downgrade MFDI inflow towards African countries.

4.3.5. MFDI inflow towards African cities

The amount of cumulated MFDI in terms of capital invested between periods 2005 and 2014 attracted by African top cities is high when compared with top global cities. As indicated before in Figure 4.1 Shanghai and London are the leading cities in attracting USD 47,529 and USD 47,245 respectively whereas Cairo (a premier city in Africa) attracted MFDI valued USD 49,225 (Figure 4.5). However, African cities achieved lower aggregated MFDI than global cities in value terms. Following Cairo city Tripoli, Abuja and Tunis performed well, on the contrary, Beira is the top least city in Africa top cities list.

Figure 4.5 Cumulative MFDI (2005-2014) of Top African Cities

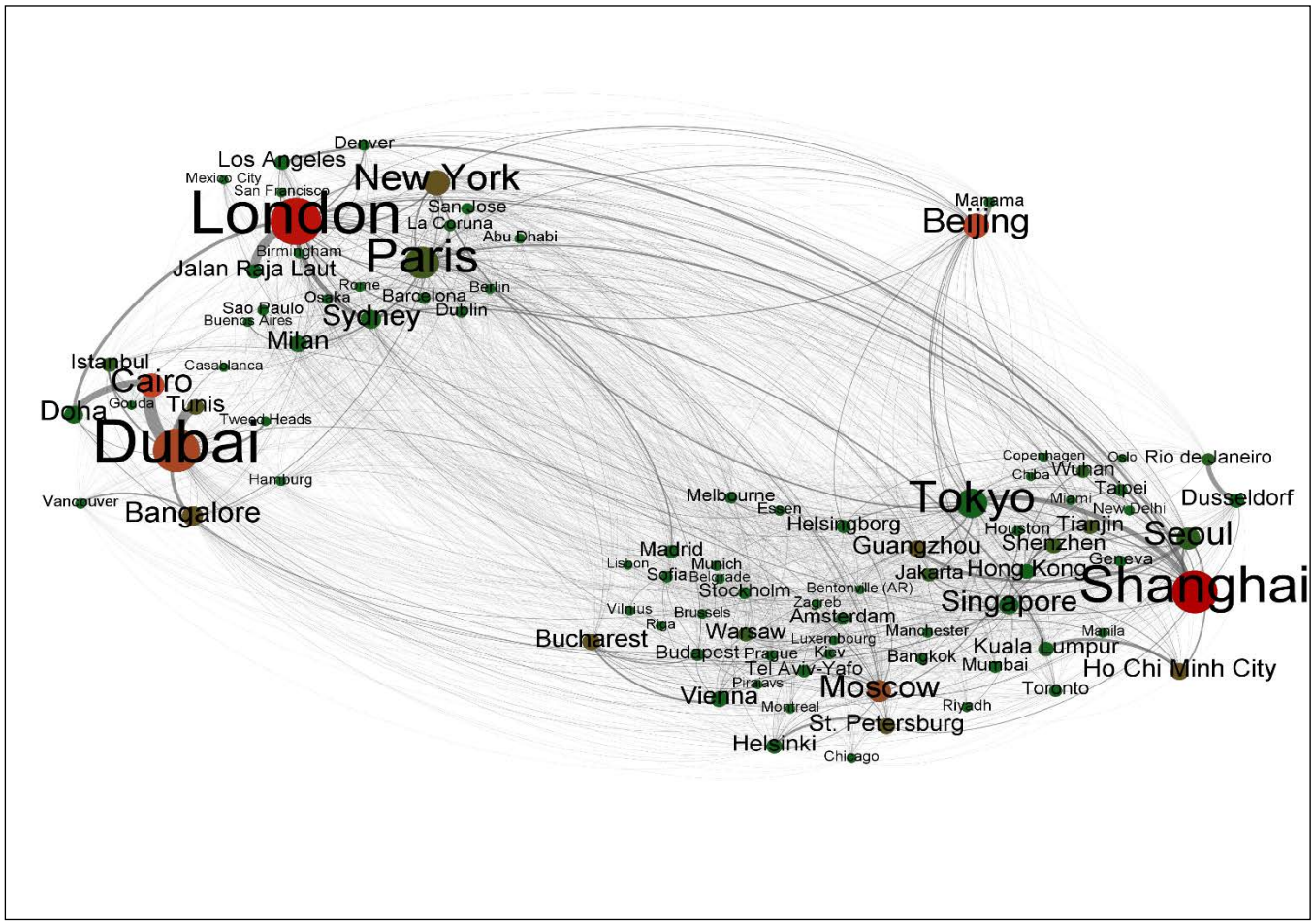


Source: Author 2016: Based on fDi market database (2015)

4.3.6. MFDI Linkages between African and other Global Cities

Most global cities serve as headquarters for MNCs who seeks to open their subsidiary office African cities. Figure 4.6 shows that London, Shanghai, Dubai and Beijing cities are most connected with African cities by weighted (in degree and out degree) investment and have thickest edges and biggest nodes in the network. Cities such as Paris, New York, Tokyo … have relatively lowest weighted MFDI. Though African cities are connected with global MFDI network, they play limited interactive role (except Cairo and Tunis) since most are only recipients. Note worthwhile that cities nodes arrangement is based on network analysis.

Figure 4.6 MFDI Linkages between African and Global Cities



Source: Author 2016: Based on fDi market database (2015)

4.3.7. Explaining determinants at African cities level

Based on regressed value of P (0.4304), Hausman test estimator rejected the null hypothesis (H_0) and hence random effects model should applied. Using the fixed effects model total population and productivity are significant factors of MFDI inflow into sampled African cities (Table 4.10).

Table 4.11 Regression result on determinants of MFDI inflow into African cities

Significant X-variables	Equation 4.4
Constant	2.358
	(1.818)
X_1 =Total population	0.000134***
	(4.38e-05)
X_2 =Productivity	6.35e-05***
	(2.31e-05)
R^2	0.663
Observations	51
Number of City_id	8

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author (2016) Based on Cities Passport data from Euro Monitor International (2015)

When the dependent variable (MFDI) is affected by these tested determinants other undefined factors affects it as well. As mention by value of R-squared, 66.3% of the variations in MFDI inflow is explained by variations the factors population and productivity. The error term (constant) accountable for 33.7% (100% - 66.3%) of the variations in MFDI. Fitted line equation (4.4.) formulated using random effects model is:

$$\hat{Y} = 2.358 + 0.134X_1 + 6.35X_2$$

Where $\hat{Y}$ is the predicted MFDI, X's are determinants of MFDI and is error term

Furthermore, growing population of sampled African cities are accompanied by growing inflow of foreign investors interested to operate in manufacturing sector. Similar to results of other global cities, investors give more attention to more populated cities due better market opportunities for their manufactured products. In the opposite, a decline in population growth rate affects the volume of flowing investment by same rate.

In addition, MNCs considers their cost-benefit analysis before their investment decisions towards these African cities. Cities with better productivity opportunities are promising for increased profit margin of manufacturers. Hence, as productivity of African sampled cities

increase they could attract increased MFDI proportionally. When production costs of foreign manufacturers getting higher and higher investors would be discouraged to operate in green field MFDI as it affects their profitability.

4.4. Findings of Descriptive Analysis

It is noted that during the data analysis periods Middle East has played a major role by spending extensive amount of capital into Africa in manufacturing FDI but have a low number of projects compared to other regions. The position UAE and Bahrain attained in the top list rank confirmed this reality. However, countries performed best in MFDI value revealed weak tie with Africa expressed in number of operating projects. West Europe is the most connected region with Africa in number of MFDI but second in value. France, UK, and Switzerland which are countries of West Europe which have a strong link with Africa in number of MFDI succeeding United State. Between 2008 and 2013 the amount of capital attracted by Africa showed remarkable fluctuation caused by the 'Global Financial Crisis' happened in 2008. The period 2013 was also a turning point that the Middle East and West Europe once again increased to their invested tremendous capital towards the continent. Based on the analysis flowing MFDI growth trend into Africa is a mirror image of these two dominant regions. The increasing growth trend has been hindered by the global financial global crises and finally revived in 2103.

During the same periods, Shanghai and London served as major hubs for MNCs but Cairo was extraordinarily the best performer compared to both global and African scale. Dubai and New York which are cities of Middle East and North America respectively received minimum MFDI. Tripoli, Abuja, and Tunis are found at the second ladder of top fifteen cities. In this regard, Cairo highly dominated African cities in manufacturing sector. Again countries of African leading cities such as Egypt, Nigeria, Libya, and Tunisia are able to achieve better over others in terms of capital. On the other hand, South Africa, Morocco, Egypt and Tunisia relatively created a strong link through MFDI in Africa in order of importance. As a result, Northern Africa hosted majority (48%) of flowing MNCs the remaining attracted to rest of African (sub-Saharan) regions. The other interesting findings of descriptive analysis was a diversified network created between source and destination countries and cities through MFDI edges. As explained previously investing countries of West Europe, North America, and Asian and Pacific have multiple ties than the Middle East which characterized by big size nodes indicating the volume of capital invested. African countries also have been tied one another

and recorded remarkable weighted MFDI investment. The growing MFDI network between Africa and rest of the world is better described by existing ties between cities. Regardless of the intensified ties global cities dominated the network by controlling lion share of weighted investment except few African cities.

As a result of the average annual rise in MFDI generated contributed to the generation of employment at a significant level. At the end of the periods analyzed cumulatively 594,579 job opportunities are created by foreign investors engaged in manufacturing projects.

4.5. Findings of Inferential Analysis: Determinants of FDI in manufacturing sector

Comparative values of means for independent variables, selected explanatory variables, are tested as unequal confirming that Africa has lower competitive capacity than global countries and cities. The means difference of some location factors such as infrastructure, inflation, tertiary education and training and business sophistication are found to be high. However, P value of national highways and total population is not significant implying the mean difference of sampled African and global cities is equal.

It was found that foreign investors interested in global countries engaged in the manufacturing sector are curious about price instability, the payable wage for workers and rules related to FDI. It is because these factors affect their profit margin in one way the other. These global countries should control fluctuations of inflation and wage rate which are not favorable conditions to secure more capital and related benefits from MFDI. Rules practiced on business areas need to be enacted carefully with respect to FDI in order to increase attracted MNCs in manufacturing sector.

According to the analysis, fluctuations of goods and price in Africa and business impact of rules on FDI are also factors MNCs put into consideration before their decision to operate in manufacturing activities. In addition, the scale of market that countries control in the international arena determines the flowing MFD into Africa. Identified significant GCI pillars imply the importance of the general macroeconomic setting and technological readiness for a better MFDI inflow. From the analysis, it is noteworthy that inflation and business impact rules on FDI are explained as common determinant factors of MFDI inflow both for global (non-African) and African countries.

At global cities level unemployment rate and consumer expenditure has constraining effect on MFDI. Prevalence of unemployment rate in cities can imply labour market inefficiency, low productivity of workers and profit margin which degrade motives of new MNCs entering towards these cities. Consumer expenditure of residents in global cities is also significant that determines affect MFDI inflow. Foreign investors planning in to invest in African manufacturing sector takes productivity in cities as one parameter during their manufacturing project pre feasibility study. The common location factor at determinants for MFDI inflow at both global (non-African) and African cities is Total population. It is regarded as a vital issue by foreign investors because cities with relative population possibly have high a number of customers and the big domestic market for products of manufactured goods.

5. Chapter 5: Conclusions and Recommendations

5.1. Introduction

Nowadays, the capacity of countries to attract more FDI serves as one aspect of measuring of competitiveness. In literature unanimity has not been reached on the potential effects of FDI on economy, however, many studies argued in favor of it especially for developing regions like Africa. It was indicated that African countries could be benefited from FDI including as source of finance and foreign currency, positive spillover effects and hasten economic growth. Beyond these common benefits, Africa could enjoy even more if foreign investors are promoted to operate in the manufacturing sectors. This is because manufacturing FDI inflow could better lead continent's agriculture dominated economy into process of industrialization than any other sectors. This in turn would, create ample employment opportunities and horizontal spillovers to domestic manufacturers on top of aforementioned benefits. However, the impact of MFDI on economy was not the focus of this research, and assumptions about the presumably positive effects were made based on findings from the literature on FDI.

To realize these advantages, identifying significant factors which determine the flowing MFDI into Africa is vital input to increase foreign investors' attraction. In the effort to undertake this study, the significant determinants of MFDI inflow into African countries and cities are explained in reference to global (non-African) countries and cities. There are two reasons behind this systematic comparative approach: the current supremacy of these countries and cities over Africa by attracting and managing MFDI. Moreover, the lion's share of MFDI in Africa are coming from global countries outside the continent. In the subsequent part, conclusions of this study is put as follows in order of addressing sub-research questions followed by recommendations.

5.2. Conclusion

5.2.1. Describing MFDI inflow into African and Global Countries and Cities

Africa is less competitive when compared to other parts of the globe in competitiveness pillars and other location factors which related to economic performance. In other than population and national highways of cities, global countries and cities performed higher in creating favorable economic conditions which assumed critical for MNCs in their investment decisions. Africa's status is worse compared to its global counters in high record of inflation and low in tertiary education provision. It will be simple to anticipate meager inflow of MFDI to Africa compared to the sample of global countries.

Over the past decade, the inflow of foreign investors towards Africa has increased in the manufacturing sector. The Middle East and West Europe were highly connected global regions with Africa through manufacturing MFDI which is complemented by increasing rate of Inter-Africa investment. The lion's share of African MFDI inflow was directed towards North African countries, such as Egypt, Morocco, Algeria and Tunisia the remaining goes to sub-Saharan countries.

Africa's poor performance in several factors measure limited its power to attract MFDI from the globe as well as is being less connected through it. In addition, the role of Africa within MFDI network remained only as recipients, while global countries and cities play both investing and receiving role. It is evident that there is a wide difference in the inward-outward MFDI success between African countries, North African countries highly dominated in hosting high MNCs and better connected with global countries. The role of African cities in MFDI network at urban level is very limited except few like Cairo. On the opposite, cities of West European, and Asian and Pacific regions, namely Shanghai and London have dominated the network.

5.2.2. Difference in location factors between African and global countries and cities

It was found out that developed regions are better in their economic competitiveness position when compared to Africa. The analysis of location factors in countries hosting MFDI showed that global countries are much attractive than African countries by providing competitive pillars. Analyzing these independent variables of MFDI using t-test revealed that African countries performed low in measures of institution, infrastructure, macroeconomic environment, higher education and training, labour and financial market, technological readiness, market size, business sophistication and innovation. This was further confirmed through testing respective sub-pillars of competitiveness indices, which reinforced the prior finding. Low indices measures of these location factors indicate Africa's low performance in productivity and economic efficiency compared to global countries.

Similarly, it is tested that high difference prevail between sampled African and global cities in the location factors inflation, GDP, population density, unemployment rate, productivity, economically active population, Gini index, annual disposable income, consumer expenditure, airline passengers, national highways and total population. The independent variable, inflation, is a common threat for African countries and cities discouraging foreign investors. Next to

explaining the difference in location factors, significant variables need to be identified which determine the level of MFDI inflow into these sampled countries.

5.2.3. Determinants of MFDI inflow into Global Countries and Cities

Determinants of MFDI inflow for global countries and cities are identified as inflation, unemployment rate, Consumer expenditure, flexibility of wage determination and total population. Findings of Hussain and Kabibi (2012) confirmed also that factors such as market size, wage rate, technically skill labourers, and compensations of incomes are critical in determining Japanese multinational decisions. The business regulatory framework enacted in relation to FDI and total population also matters inflows of MFDI. For plenty of manufacturers who are looking for suitable destinations for their labour-intensive plants, the legalization, and pre-implementation process is frequently important in decision making (Dupasquier and Osakwe 2005).

5.2.4. Determinants of MFDI inflow into African Countries and Cities

Identified determinants of MFDI inflow towards Africa are found to be significant factors inflation, foreign market size index and business impact of rules on FDI. Hence, foreign investors operating on manufacturing takes these determinants into consideration before their decision to invest in African countries. For instance, determinants of FDI inflows into Africa includes inflation rate, government spending, political stability and accountability, regulatory burden and the rule of law, and basic education (Naude and Krugell 2007). Even though, some determinants of MFDI are common with general FDI there special areas of difference. In addition, country-specific location factors namely inflation, foreign market size and business impact of rules on FDI, total population, and productivity were tested as determinants at African cities level. While there is difference in determinants of MFDI at countries and cities scale factors such as inflation and market size are found to be common.

Looking into African and global countries and cities determinants, inflation, business impact of rules on FDI and total population. Productivity of cities being one of the location factors attests that Africa should work more to improve its competitiveness in making the economy productive and efficient. In conclusion, determinants explained above are critical in affecting the inflow of MFDI into Africa.

5.3. Recommendations

Global regions which have better GCI measure could be able to attract more MFDI and connected to the world dominating Africa overwhelmingly. Some countries of Africa also influenced foreign investor's decision by providing better economic productivity and efficient facilities over other African countries. In this regard, countries and cities of North Africa benefited much by securing increased capital and connectivity advantage. In order to get increased volume of MFDI inflow into Africa, at the first instance, macroeconomic environment need to be favorable for foreign investors. Full-fledged policy which is framed to create stable economy with special emphasis to inflation, foreign market size and business rule promoting foreign investors. Promotional incentives are also important to improve productivity of MNCs operating in manufacturing, consequently, increase number foreign investors could be attracted. In addition, domestic manufacturers should be integrated with foreign investors to ensure best experiences of are shared and integration was created between them.

Taking the primary purpose of the research as yardsticks, significant determinants of MNCs operating in manufacturing sector were identified for African countries and cities. However, due to lack of data, time and other constraints the research could not be complete. Manufacturing FDI studies are very limited to Africa, therefore, many studies are expected to come. In the future detailed academic researchers focusing on MFDI inflow differences between sub-Saharan and rest of Africa; natural resource rich countries and other African countries will be highly important. In addition, studies that address the actual impact of MFDI on Africa's economy that takes continent's diversified demography and culture as well as volatile politics into consideration also will be substantially recommended.

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Annex 1. List of sampled African countries and cities

List of sampled African countries		List of sampled African cities
1	Algeria	Cairo
2	Angola	Casablanca
3	Benin	Douala
4	Botswana	Johannesburg
5	Burkina Faso	Lagos
6	Burundi	Nairobi
7	Cameroon	Tunis
8	Cape Verde	Cape Town
9	Chad	Obour
10	Côte d'Ivoire	Algiers
11	Egypt	Tripoli
12	Ethiopia	El Asher
13	Gabon	Bony Island
14	Gambia, The	Abuja
15	Ghana	Lagos
16	Guinea	Sekondi-Takoradi
17	Kenya	Badr
18	Liberia	Kribi
19	Libya	Beira
20	Madagascar	
21	Malawi	
22	Mali	
23	Mauritania	
24	Mauritius	
25	Morocco	
26	Mozambique	
27	Namibia	
28	Nigeria	
29	Rwanda	
30	Senegal	
31	Seychelles	
32	Sierra Leone	
33	South Africa	
34	Tanzania	
35	Tunisia	
36	Uganda	
37	Zambia	
38	Zimbabwe	

Annex 2. List of sampled Global countries and cities

Sampled global countries		Sampled global cities					
1	Brazil	1	Abu Dhabi	40	Istanbul	79	Riga
2	Canada	2	Almaty	41	Jakarta	80	Rio de Janeiro
3	China	3	Amman	42	Karachi	81	Riyadh
4	Egypt	4	Amsterdam	43	Kiev	82	Rome
5	France	5	Ankara	44	Kolkata	83	Rotterdam
6	Germany	6	Antwerpen	45	Kuala Lumpur	84	Salvador
7	Hungary	7	Athens	46	Leeds	85	San Francisco
8	India	8	Auckland	47	Lima	86	San Jose
9	Indonesia	9	Baku	48	Lisbon	87	Santa Cruz
10	Korea, Rep.	10	Bangalore	49	Ljubljana	88	Santiago
11	Malaysia	11	Bangkok	50	London	89	Santo Domingo
12	Mexico	12	Barcelona	51	Los Angeles	90	Sao Paulo
13	Nigeria	13	Beijing	52	Lyon	91	Sarajevo
14	Philippines	14	Belgrade	53	Madrid	92	Seoul
15	Poland	15	Berlin	54	Manama	93	Shanghai
16	Qatar	16	Birmingham	55	Manchester	94	Shenzhen
17	Romania	17	Bogota	56	Manila	95	Skopje
18	Russian Federation	18	Boston	57	Marseille	96	Sofia
19	Saudi Arabia	19	Bratislava	58	Melbourne	97	St. Petersburg
20	Singapore	20	Brussels	59	Mexico City	98	Stockholm
21	Slovak Republic	21	Bucharest	60	Miami	99	Sydney
22	Spain	22	Budapest	61	Milan	100	Taipei
23	Thailand	23	Buenos Aires	62	Minsk	101	Tallinn
24	Turkey	24	Chicago	63	Montevideo	102	Tbilisi
25	United Arab Emirates	25	Copenhagen	64	Montreal	103	Tehran
26	United Kingdom	26	Doha	65	Moscow	104	Tel Aviv
27	United States	27	Dubai	66	Mumbai	105	Tianjin
28	Vietnam	28	Dublin	67	Munich	106	Tokyo
		29	Frankfurt	68	Nagoya	107	Toronto
		30	Geneva	69	New Delhi	108	Vancouver
		31	Glasgow	70	New York	109	Vienna
		32	Gotenborg	71	Novosibirsk	110	Vilnius
		33	Guangzhou	72	Osaka	111	Warsaw
		34	Guatemala	73	Oslo	112	Washington
		35	Guayaquil	74	Paris	113	Wuhan
		36	Hamburg	75	Philadelphia	114	Zagreb
		37	Helsinki	76	Phoenix	115	Zurich
		38	Ho Chi Minh City	77	Prague		
		39	Houston	78	Quito		