IHS
Making cities work

IHS is the international institute of urban management
of Erasmus University Rotterdam

MSc Programme in Urban Management and Development

Rotterdam, the Netherlands

September, 2013

Thesis: FDI and City competitiveness within the Southern African Development Community (SADC): The Case of Lusaka City-Zambia

Name: Anthony Mwenya

Supervisor: Dr.Ronald Wall

UMD 9

Title: FDI and City competitiveness within the Southern African Development Community (SADC): The Case of Lusaka City-Zambia

Name: Anthony Mwenya

Country: Zambia

Supervisor: Dr.Ronald Wall

UMD 9 Report number:

Rotterdam, September 2013

Acknowledgements

This study could not have been possible without the contribution of certain institutions and individuals who really deserve my gratitude. First and foremost, I should like to thank the Dutch Government for funding my studies and IHS for according me an opportunity to study at the institute and access the databases which were crucial for the success of my research. Then I should like to extend my thanks to my Supervisor, Dr.Ronald Wall, for his passionate guidance throughout my thesis period. Other thanks go to Mr. George Kanja of Palan and Kanja Associates, Mr.Dyonitius Makunka of the Bank of Zambia and Mr.Modesto Simutowe of the Bank of Zambia for their financial and moral support during my fieldwork. I owe a lot of thanks to my employers-Samfya District Council, for granting me paid study leave. I should also like to express my gratitude to my colleagues in the UCR specialisation, especially Mattijs, for their ideas and advice they rendered me during my thesis period. Last but least, I should like to thank my wife Misozi and the rest of my family, for their patience and moral support during the period of my studies.

Thesis Summary

Lusaka is the capital city of Zambia which is urbanising at a fast rate. The population of Lusaka has increased from 1,391,329 in 2000 to 2,198,996 in 2010 at a growth rate of 4.7% (Central Statistical Office, 2011). Zambia's urban system is dominated by Lusaka, which hosts 32% of the total urban population in the country (UN-HABITAT, 2008). The poverty levels in the city have been steadily increasing over the last two decades mainly due to the high levels of population growth, which are not matched by economic growth and improved service delivery (Lusaka City Council. 2008). The economy of Lusaka city only provides formal employment to about 9% of the labour force (UN-HABITAT, 2008). Therefore, one of the biggest challenges for Zambia in general and Lusaka in particular is to attract more investments for economic growth and poverty reduction. It is generally evident from theory that to a greater extent, the world-wide urban networks provide crucial resources for the development of cities, while city systems form a set of resources or locational attributes for Multinational Corporations (MNCs). It is against this background that this study has been conducted with the overall objective of investigating the current Foreign Direct Investments (FDIs) and networks of cities in the Southern Africa Development Community (SADC) region and how Lusaka city can improve its competitive performance for attracting FDI.

The study is quantitative and has analysed the FDI markets.com database (2003-2012) through excel, UCINET software and SPSS. Overall, the study shows that, though modest, the number of FDI flows into SADC has been growing at 11.52% growth rate with the top 5 growing sectors being financial services, metals, software IT services, business services and communication. The closest 5 competitors to Lusaka in terms of attracting FDI to sectors are Windhoek (Namibia), Kinshasa (Congo DR), Lubango (Angola), Harare (Zimbabwe) and Lobito (Angola) in that descending order. Lusaka occupies the 12th position among the top 20 SADC cities in attracting FDI dominated by 7 South African cities. Furthermore, market size is the most important location factor for attracting FDI in the SADC region. In view of the above, Lusaka can learn a lot from its competitors, especially Windhoek, in terms of policies, programmes and projects attracting FDI, which Lusaka City Council can then include in its integrated strategic and marketing plans. In order to expand the market, Lusaka should pursue job creation policies to continue growing the middle class who are critical for the domestic market. In addition, SADC countries (Zambia inclusive) need to aggressively continue pursuing policies for greater regional integration to expand the market size and provide an important stepping stone to more diversified, inclusive and sustained growth to member states. Improving Lusaka's competitiveness will also require continued commitment to prudent macroeconomic policy at national level, investing in infrastructure development, human resource development, information communication technology (ICT) and information management systems. Other measures include promotion of gender equity and equality, the rule of law and professional management of both public and private business. Last but not least, targeted marketing and branding of Lusaka city as a prime investment destination, in particular sectors and activities, is crucial for FDI attraction.

Key words: Urban global networks, regional integration, location factors, competitiveness, Foreign Direct Investments (FDI), SADC.

Abbreviations

AIDS:	Acquired Immunodeficiency Syndrome
CSO:	Central Statistical Office
DBIS:	Department for Business, Innovation and Skills
DRC:	Democratic Republic of Congo
EIU:	Economist Intelligence Unit
EU:	European Union
FDI:	Foreign Direct Investment
GCI:	Global Competitiveness Index
GDP:	Gross Domestic Product
GRZ:	Government Republic of Zambia
HIV:	human immunodeficiency virus
ICT:	Information Communication Technology
IHS:	International Institute for Housing and Urban Development Studies
LCC:	Lusaka City Council
MNCs:	Multinational Corporations
ODA:	Overseas Development Assistance
OECD:	Organisation for Economic Co-operation and Development
SADC:	Southern Africa Development Community
SPSS:	Statistical Package for Social Studies
SSA:	Sub-Sahara Africa
TNCs:	Transnational Corporations
UCR:	Urban Competitiveness and Resilience
UK:	United Kingdom
UNCTAD:	United Nations Conference on Trade and development
UN-HABITAT:	United Nations Agency for Human Settlements
UNIDO:	United Nations Industrial Development Organization
US:	United States
V.I.F:	Variance Inflation Factor
ZDA:	Zambia Development Agency

Definition of key concepts

Urban economic networks: The process by which urban areas are spatially connected globally in economic networks through the MNCs' operations related to production and consumption of goods and services processes.

Regional integration: Collaboration between neighbouring countries in different parts of the continent and stronger cross-border flows of goods, services, labour, capital and information with the common objective of reducing barriers to trade between member countries and therefore, expanding markets for goods and services, helping to exploit scale economies in supply chains and labour markets.

Location factors: Location attributes (economic, institutional, social, environmental, cultural, political etc.) of a region or city which can be leveraged on to enhance urban or regional competitiveness.

Competitiveness: Set of institutions, policies, and factors that determine the level of productivity of a region or country which, in turn, sets the level of prosperity and higher levels of income for the citizens.

Foreign Direct Investment (FDI): This is investment across national boundaries to buy a controlling investment in a domestic firm or to set up an affiliate. It is also referred to as investment of a firm in one city into the development of another firm in a foreign city (cross-border). FDI is comprised of 'mergers and acquisition' data (M&A) and 'greenfield' data.

Greenfield Investments: Investment in new projects and expansions. Greenfield represents investments where parent companies start an entirely new venture in a foreign country by constructing new operational facilities from the ground up.

Industrial Sector: Goods or services producing segment of an economy e.g. agriculture, mining, alternative energy, manufacturing, financial services, communication, software IT services etc.

Industrial Activities: Various functions performed along the industrial sector value chain e.g. headquarters, manufacturing, sales marketing and support, research and development, business services, Logistics distribution and transport etc.

Multinational Corporations: Firms that have the power to coordinate, control and invest in operations in more than one country, even if they do not own them.

Table of Contents

List of Tables

List of Figures

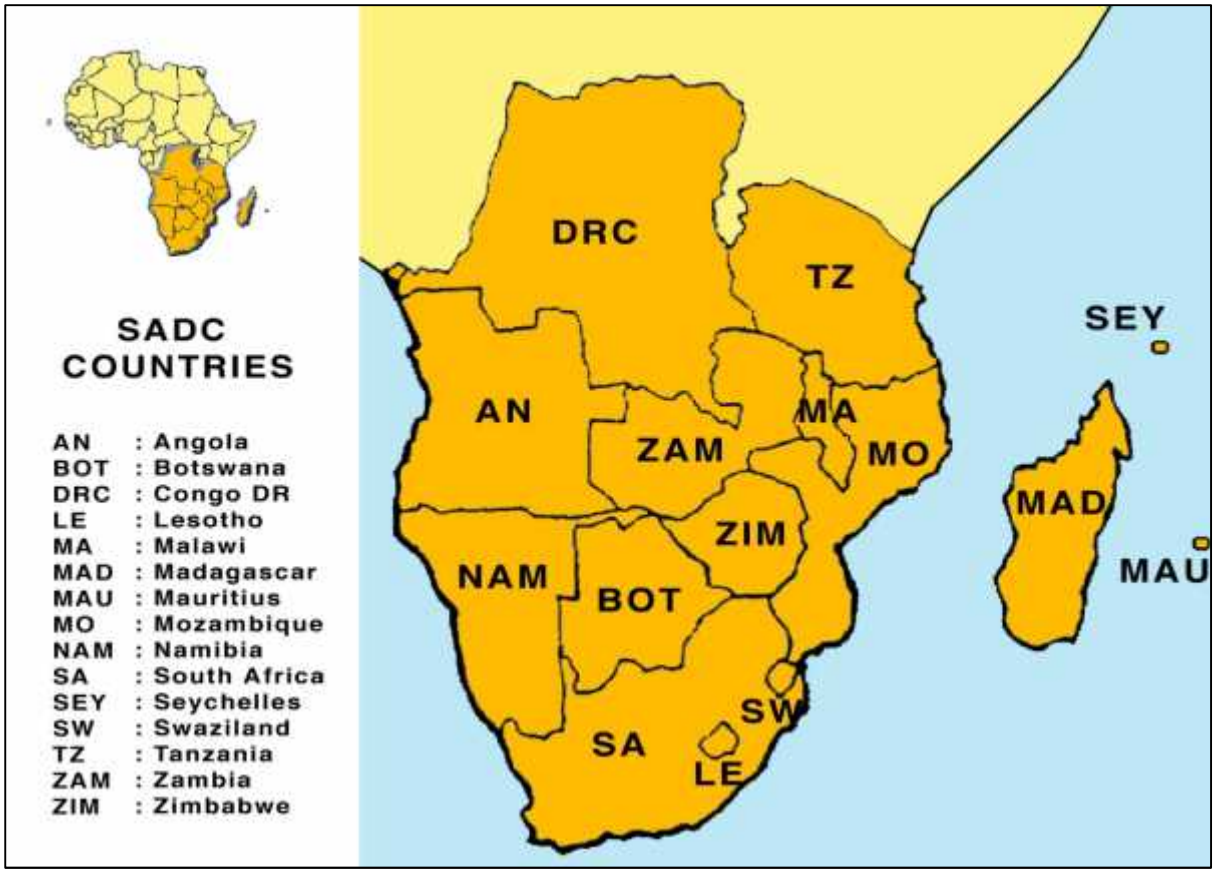
1.0. Introduction

1.1. Background

1.1.1. Southern African Development Community (SADC)

Zambia is a member of the Southern Africa Development Community (SADC), an inter-governmental organisation which is headquartered in Gaborone, Botswana. Its main aim is to further socio-economic cooperation and integration as well as political and security cooperation among 15 Southern African States. The Fifteen SADC member states include: - Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Malawi, Mauritius (currently under suspension), Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe, South Africa and Seychelles. The map of the SADC region is highlighted in figure 1. SADC (exclusively) is third placed as Zambia's export market after the Organisation for Economic Cooperation and Development (OECD-non EU) region and Asia. At the same time SADC (exclusively) is Zambia's top ranked major source of Imports (Bank of Zambia, 2011).

Figure1: Map of SADC



1.1.2. Zambia and Lusaka

Zambia has a population of 13, 046, 508 people (Central Statistical Office, 2011). The population has been increasing from 7,759,161 in 1990, 9,885,591 in 2000 and 13, 046, 508 persons in 2010. With regard to regional distribution of the population, 61 per cent reside in rural areas and 39 per cent reside in the urban areas (Central Statistical Office, 2011), which is an increase from 2000 when 35 per cent resided in urban areas and 69 per cent in rural areas. Lusaka city was the main destination for urban population increase as a result of rural-urban migration. Studies have shown that in the past decade, GDP growth for Zambia has been stable, averaging 6.1% per annum (GRZ, 2012). However, despite the sustained positive growth over the past decade, high poverty levels (60.5% in 2010); low productivity, compounded by very low formal employment levels have persisted, resulting in marginal improvement in the livelihoods of the majority of Zambians (GRZ, 2012). Since the 1990s, FDI has come to play an increasingly role in Zambia's economy, (UNCTAD, 2011). The overall improved investment climate and business environment has led to increased foreign direct investment (FDI) of US$ 1.73 Billion by 2010 (Zambia Development Agency, 2011; UNCTAD, 2011). However, the majority of this investment was directed to mining because Zambia's economic growth has been mainly resource-driven by the mining sector, with international copper prices developments being a major determinant of real GDP growth as far back as independence in 1964 (GRZ, 2012). The biggest challenge for Zambia is to attract more investments in sectors other than mining for economic growth, job creation and poverty reduction.

All in all, FDI has been a very important resource inflow into Zambia, second only to Overseas Development Assistance (ODA). There is considerable evidence that FDI can affect growth by complementing and facilitating domestic investment. It also creates new job opportunities (Ndulo et al, 2009). In July, 2011, the World Bank reclassified Zambia from low income status to a lower-middle income status (Times of Zambia, 2011), making the country less qualified for ODA, but putting it in a better position for accessing more non-concessional loans and more investment from firms and countries. Zambia therefore, needs to leverage her new status in attracting substantial FDI in order to facilitate and enhance the growth process and poverty reduction.

Lusaka is the capital city of the Republic of Zambia which is urbanising at a fast rate. The population of Lusaka has increased from 1,391,329 in 2000 to 2,198,996 in 2010 at a growth rate of 4.7 per cent (Central Statistical Office, 2011). This growth is partly due to rural-urban migration with drivers being higher economic prospects, opportunities for higher education and higher wage employment prospects (Lusaka City Council. 2008). Zambia's urban system is dominated by Lusaka, which hosts 32 per cent of the total urban population in the country (UN-HABITAT, 2008). The poverty levels in the city have been steadily increasing over the last two decades mainly due to the high levels of population growth, which are not matched by economic growth and improved service delivery (Lusaka City Council. 2008). The city is under the jurisdiction of Lusaka City Council (LCC). With respect to the economy, Lusaka is the second largest economic centre in Zambia after the Copperbelt, which is home to many mining industrial activities. Though the economy of the city is more diversified than that of the country, it is quite weak, as most of the sectors are underdeveloped (Lusaka City Council. 2008). The economy of Lusaka city only provides formal

employment to about 9 per cent of the labour force (UN-HABITAT, 2008). A major reason for this is that the local economy has been drifting towards the private sector and self-employment since the liberalisation of the economy in the early 1990s (UN-HABITAT, 2008). Unfortunately, the economy of Lusaka has not been measured as stand-alone. Major economic measurements of Gross Domestic Product (GDP), inflation and foreign direct investment (FDI) are available at national level. As such, it has proved difficult to measure the performance of the economy in Lusaka (Lusaka City Council. 2008).

1.1.3. Problem Statement

As mentioned earlier, FDI inflows in Zambia, as a nation, have averaged $651million inflows for the period 2002 to 2009, and reached US$ 1.73 Billion in 2010, but this is still underperformance when compared to the economic development demands of the country. Worse still the majority of this FDI has been directed to mining; especially that Zambia is an extractive-driven economy. The biggest challenge for Zambia is to attract more investments in sectors other than mining for economic growth and poverty reduction. And there are real opportunities in the tourism, agro-business and even manufacturing sectors. The picture for Lusaka city with respect to FDI may not be very different from the National picture. Unfortunately the economy of Lusaka has not been measured as stand-alone as cited above. As such, it has proved difficult to measure the performance of the economy of Lusaka (Lusaka City Council. 2008). However, though the economy of the city is more diversified than that of the country, it is quite weak, as most of the sectors are underdeveloped (Lusaka City Council. 2008). The poverty level in the city has been steadily increasing over the last two decades mainly due to the high levels of population growth, which are not matched by economic growth and job creation (Lusaka City Council. 2008).

2.0. Literature Review/Theory

2.1. Urban Economic Networks

2.1.1. Growth, Position, Structure and Geography

At the global level, FDI and international trade serve as the twin engines of world prosperity (Hufbauer and Draper, 2013). Nominal world GDP has trebled since 1980, mainly due to merchandise trade which has expanded by a factor of six and the stock of FDI which has expanded by a factor of 20, and this has made FDI and trade key driving forces of the world economy (Hufbauer and Draper, 2013). Multinational Corporations (MNCs), the parents of FDI account for some 80% of world exports; about half of it is embedded in global value chains (Hufbauer and Draper, 2013). Foreign Direct Investments have been found to be fundamental to global urban development, but are controlled by a relatively limited number of MNCs, such that by 2004 only the top 500 firms accounted for 90% of global FDI and 50% of world trade (Rugman, 2005).

Castells (1996), who is considered one of the proponents of world city network analysis, sees cities as a process through which centres of production and consumption of goods and advanced business services (ABS), and their surrounding local societies, are connected in a global network. To a greater extent, cities accumulate and retain wealth, control and power because of what flows through them, rather than what they statically contain (Beaverstock, 2000). The power of cities arises from urban accumulation processes that are improved by the location of Multinational Corporations (MNCs), such as activity support, employment growth, investment, as well as technological and social innovation spill overs (Rosenblat, 2010). It is therefore argued that the world-wide urban networks provide crucial resources for the urban development of cities, while city systems form a set of resources or locational attributes for MNCs (Rosenblat, 2010). The relationship between MNCs and their subsidiaries is seen to be important in linking cities into a world system of cities (Alderson and Beckfield, 2004). The world is seen to be shaped as a hierarchical and cooperative global industrial system on the basis of different cities (Pengfei and Kresl, 2010). It is further argued that global firms need cities, and indeed groups of cities because different cities have different strengths, which is a motivation for global firms to locate in many cities so that they can expand the global platform for their operations (Sassen, 2008). Literature has also revealed that in city networks, cities need each other and all contribute to the well-being of the networks (Taylor, 2010). Furthermore, for a firm to go global, it has to locate in multiple cities that function as entry points into national economies (Sassen, 2008). One of the implications of this claim is that, realising that MNCs need locational endowments of city systems, should enable the political, corporate and civic leadership in cities to negotiate for more benefits from MNCs for their cities' prosperity (Sassen, 2008), and this is likely to lead to overall positive outcomes if the ruling classes could realise that these global economic functions would grow better in a context of a strong and prosperous middle class rather than the big inequality and polarity that exists among households (Sassen, 2008).

In the context of contemporary globalisation, cities have become economically dissociated from their local geographies, as their positions in worldwide corporate networks have grown (Rosenblat,

2010; Wall, Burger & van der Knaap, 2011). Research has revealed that the gradual integration of nations within the global economy is strongly linked to the economic corporate networks created by MNCs headquarters with their subsidiaries located globally (Rosenblat, 2010; Wall, Burger, & van der Knaap, 2011). However, although the business radius for multinational corporations is global, the actual geographical scope of their activities remains limited, making command and control in the global economy extremely uneven (Rosenblat, 2010; Taylor et al, 2011; Wall, Burger & van der Knaap, 2011). The geography of command and control in the global economy is highly concentrated in North America, Western Europe and Asia Pacific (Taylor et al, 2011). It is further claimed that the corporate network is concentrated in the main world cities in a way that reinforces the northern transatlantic economic system (Carrol, 2007; Dickens, 2011). For instance, the geographies of Advanced Business Services (ABS) are enmeshed and embedded in cities of all kinds, especially, the biggest cities whose top tier consists of the so-called global or world cities such as London, New York, Paris, Tokyo, Hong Kong (Dickens, 2011). Therefore, the geographies of ABS are to a greater extent synonymous with the geographies of these big cities which are their 'natural habitat' (Dickens, 2011). In other words, the world economy remains strongly disproportionate, and not only are there vast differences in connectivity to the global corporate network between rich and poor countries, but also within the group of rich countries (Rosenblat, 2010; Wall, Burger & van der Knaap, 2011)

There is also a premise that corporate decision-making functions are concentrated in a limited number of cities. However, with respect to city network power, to be global players, firms concerned with flows ought to be widely spread globally (Taylor et al., 2011). As a result, cities in poorer countries are also relatively well represented in this form of power, even though; city network power continues to be concentrated in richer countries.

It is also evident from literature that a vast territory exists that is excluded from the vital economic processes of the global economy. Africa is primarily bound through Johannesburg, Abidjan, Lagos, and Cairo, but the relative share of connectivity to this continent is sparse, representing only 1 per cent of all global linkages (Wall and van der Knaap, 2011). Additionally, the combined connectivity of New York and London is believed to amount to the entire connectivity of Sub-Saharan Africa (Wall, 2011a), which is quite discomforting in the sense that about 10% of the global population resides in this part of the world (Wall, 2011a). Then by and large, cities with high outdegree (outgoing network linkages) are all located in developed countries, while in terms of subsidiaries or indegree (incoming network linkages), cities ranking highest in this category are in both developed and developing nations (Wall and van der Knaap, 2011). To a greater extent, this shows how shifts in regional competitiveness in the global economy powered by competitive markets, technological advancement and space-time compression, have increased the global radius of economic activity.

2.1.2. Multinational Corporations (MNCs) and Location Choice

Multinational Corporations (MNCs) also referred to as transnational corporations (TNCs) play a key role in coordinating global production networks and, therefore, in shaping the global economy (Dicken, 2011). The following is one of the definitions of TNCs;

''Transnational corporations (TNCs) are firms that have the power to coordinate and control operations in more than one country, even if they do not own them'' (Dicken, 2011. P. 60).

According to Dicken (2011), the significance of the MNCs lies in three basic characteristics namely; its ability to coordinate and control various processes and transactions within transnational production networks, both within and between different countries, its potential ability to take advantage of geographical location factors in the distribution of factors of production (e.g. natural resources, capital, labour, state policies) and its potential geographical flexibility (an ability to switch and to re-switch its resources and operations between locations at an international or a global scale). To this effect, much of the changing geography of the global economy is shaped by the TNC through its decisions to invest, or not to invest, in particular geographical locations and by the resulting flows between its geographically dispersed operations (Dicken, 2011). Presently, there are now very few parts of the world (if any) in which the influence of MNCs, whether direct or indirect, is not important (Dicken, 2011).

2.1.2.1. Why and how firms transnationalise?

Although a firm's motivation for engaging in transnational operations may be highly individual, they can be classified into two broad categories namely; market orientation and asset orientation (Dicken, 2011). With respect to market orientation, most foreign direct investment is designed to serve a specific geographical market by locating inside that market (Dicken, 2011). With regard to asset orientation, most of the various assets needed by a firm to produce and sell its specific products and services are unevenly distributed geographically and this mainly applies to the natural resource industries, where firms must, of necessity, locate their extractive activities at the sources of supply (Dicken, 2011), though this has been diluted by technological advancements in the production process and transportation. In addition, it has been argued that, at least at the global scale, the two most important location-specific factors are: access to knowledge and access to labour (Dicken, 2011).

Alternatively, motivations for foreign direct investments (FDI) can be put into two categories namely; host country determinants and home country determinants (Burger et al, 2012). The host country determinants include market-seeking motive, efficiency-seeking motive, natural resource-seeking motive and strategic-asset seeking motives, while home country determinants are related to ownership advantages such availability of internalised technology and skills as well as economic openness (Burger et al, 2012).

With respect to how MNCs transnationalise, the conventional view in the international business literature has been that there is a clear sequential trajectory to a firm's development from being domestically oriented to becoming a TNC (Dicken, 2011). In addition, based on Dunning's `OLI eclectic theory (Dunning, 1977), firms invest abroad if: they have market power given by the ownership (O) of products or production processes; they have a location advantage (L) in locating their plant in a foreign country rather than in their home country; and have an advantage by internalizing (I) their foreign activities in fully or partially owned subsidiaries, rather than carrying out business through market transactions (trade) or networked relationships with others (Burger et

al, 2012). In other words, a prerequisite for a firm to operate beyond its domestic borders (other than through trade) is the possession of some firm-specific assets which could then be transferred across borders geographically but inside the firm's organization, to foreign locations (Dickens, 2011). Therefore, the implicit assumption is that only a firm that has reached a substantial size will have the resources to begin to operate transnationally (Dicken, 2011).

2.1.3. Competition for FDI

In light of globalization, scholars and practitioners often argue that territorial competition will increase as the free movement of capital, goods and workers and the removal of economic, social and cultural barriers have made national boundaries disappear (Burger et al, 2012). Then, to a greater extent, the increase of MNCs networks takes place through FDIs, which are investments from one firm into another foreign firm, with the motivation of gaining a degree of control over that firm's operations (Wall, 2010, Dickens, 2011). Therefore, FDI is direct investment across national boundaries to buy a controlling investment in a domestic firm or to set up an affiliate (Dicken, 2011). It is also worth noting that MNCs enter foreign markets either through mergers and acquisitions (M&A) or greenfield investments (Wall, 2010). The greater the competition between potential host countries for a specific FDI the weaker will be any one country's bargaining position, because countries will tend to bid against one another to capture FDI (Dickens, 2011). In fact one of the most striking developments of the last few decades has been the development of so-called locational tournaments, to the effect that there has been an enormous intensification in competitive bidding between states/cities for the relatively limited amount of FDI (Dickens, 2011).

It is also evident from theory that the penetration of foreign capital through inter-city competition generates urban growth faster than previous forms of industrialization and this is believed to have led to today's 'entrepreneurial city', in which the city is not only 'structure' but also 'agent', generating urban growth by pursuing dynamic competitive advantages to capture mobile FDI and grounding it in specific locations (Wall, 2010). This notwithstanding, it has also been argued that increased FDI does not necessarily imply higher economic growth and that the empirical relationship between FDI and growth is unclear (Asiedu, 2006). However, in theory, greenfield investments (new projects and expansions) are expected to create new long-term jobs in the foreign country by hiring new employees (Wall, 2010). In addition, Jenkins and Thomas (2002) argue that possible developmental benefits of FDI include employment creation, the promotion of forward and backward linkages in the host economy, the development of human capital, the implementation of internationally acceptable codes of employment practice, improving the access of the host economy to world markets, and augmenting corporate tax revenues. However, it is also important to note that the developmental benefits of FDI are not automatic(Jenkins and Thomas, 2002; Asiedu, 2006), and therefore mechanisms may be required to ensure that the expected benefits of FDI are equitably distributed in order to make a positive impact on the living standards of the citizens(Jenkins and Thomas, 2002). FDI can further be characterised into two categories of horizontal and vertical (Humblin et al, 2011),where horizontal FDI, which constitutes the largest share of FDI (78%), relates to firms which duplicate a number of home country activities abroad, and are market-seeking, while vertical FDI concerns investments in which firms decide to unbundle their

activities geographically, and are efficiency-seeking (Humblin et al, 2011). Additionally, inward private investment by a multi-site company where the decisions are taken outside the economy of the host country is one of the key sources of investment (Wall, Burger & v.d.Knaap, 2011).

It is further argued that while motivated by the desire to maximize benefits; firms, citizens and other mobile elements migrate and accumulate in high-profit areas, hence the flows of economic entities (Pengfei and Kresl, 2010). Objectively speaking, this leads to competition among locations and competition among cities with regard to attracting citizens and firms (including production factors), production activities and markets (Pengfei and Kresl, 2010). Furthermore, urban areas or regions are considered to be in competition when they have overlapping investment portfolios in terms of: (i) industrial sectors in which it is invested, (ii) corporate activities in which it is invested and (iii) geographical origin of the investment (Burger et al, 2012). As a result, MNCs often perceive regions with similar characteristics situated in different countries as closer substitutes than dissimilar regions in the same country (Burger et al, 2012).

It is further claimed that when the location requirements for investments are minimal, the number of regions that are included in the consideration set of a MNC is relatively large and since a MNC can choose from a wide range of locations, it can play governments against each other by asking for tax cuts or subsidies (Burger et al, 2012). Then territories compete because subsidiaries of the same MNC compete (Burger et al, 2012). Literature has also shown that relationships between MNCs subsidiaries can be complementary to the extent that they perform different functions within the organisation, and therefore, making it possible for two cities or more to be used by the same MNC, but in different ways (Rosenblat, 2010; Burger et al, 2012). Therefore, territories are not always in competition, in the sense that they can have unique competitive advantages utilised by firms for different reasons, and, therefore, they can possibly cooperate (Burger et al, 2012). Additionally, there is no such entity as the 'global economy' with distinct hierarchies, but that realistically, the global economy consists of a vast number of circuits which contain different groups of nations and cities (Sassen, 2008). Furthermore, a global firm does not want one global city, even if it were the best in the world because different groups of cities will be desirable for global firms' functions in one way or the other, even if they have some serious negatives (Sassen, 2008). This goes to underscore the fact that cities do not simply compete, but can also be complementary (Sassen, 2008).

2.2. Regional/Urban Competitiveness

2.2.1. Definition of Regional/Urban Competitiveness

Generally, there is widespread agreement by scholars and practitioners that the world is witnessing a 'resurgence of regions and urban areas as key centres in the organisation of economic growth and wealth creation (Begg, 2002). In a globalised economy, cities are assumed to be in fierce competition over attracting foreign investments. However, the very notion of regional or urban competitiveness is itself contentious and complex (Kitson et al., 2004; Wall & van der Knaap, 2011). This means that

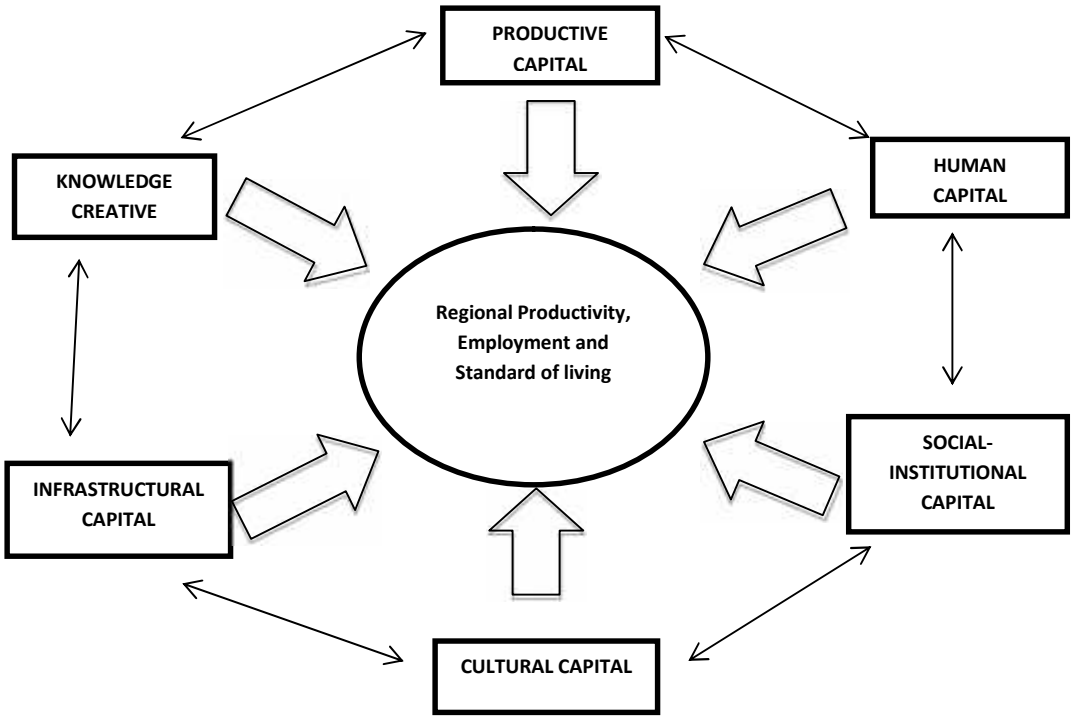
there is not yet consensus on what regional or urban competitiveness means and how it can be measured (Kitson et al., 2004). This study looks at a few definitions.

Regional competitiveness is defined as 'the ability of an urban economy to hold stable or increasing market shares in an activity while sustaining stable or increasing standards of living for those who participate in it' (Storper, 1997. P.264). In this case, for the urban economy to be competitive, it is expected to maintain or increase employment and do so in a qualitative, satisfactory way, which for those who are employed means satisfactory incomes (Storper, 1997). Regional or urban competiveness is also referred to as the success with which regions and cities compete with one another in some way over shares of export markets or it might just be over attracting capital or workers (Kitson et al, 2004). Global urban competitiveness is defined as 'the ability of a city to attract and utilize resources, provide goods and services, create wealth and provide its citizens with the society and economy to which they aspire, more effectively than other cities in the world' (World Economic Forum, 2010. P.81). At the national level, competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country which, in turn, sets the level of prosperity and higher levels of income for the citizens (World Economic Forum, 2012; Blanke and Ko, 2013).

2.2.2. Determinants of Regional/Urban competitiveness

Just as the definition of regional or urban competitiveness is highly contested, so are the determinants of regional or urban competitiveness. Begg (2002) argues that the determinants of the attractiveness and investability of a region or city fall under a number of headings, some beyond the immediate of the local policy (though often capable of being influenced) while others are amenable to policy action. According to Begg (2002), the location attributes of a region or city can be put into four categories namely; public capital, market factors, social factors and governance factors. According to Kitson et al (2004), the explanation of regional competitiveness need to consider several other and softer dimensions of the regional or urban socio-economy such as the quality and skills of labour (human capital), the range and quality of cultural facilities and assets (cultural capital), the extent, depth and orientation of social networks and institutional forms (social/institutional capital), the presence of an innovative and creative class (knowledge/creative skills), and the scale as well as quality of public infrastructure (infrastructure capital). This is shown in figure 2 below.

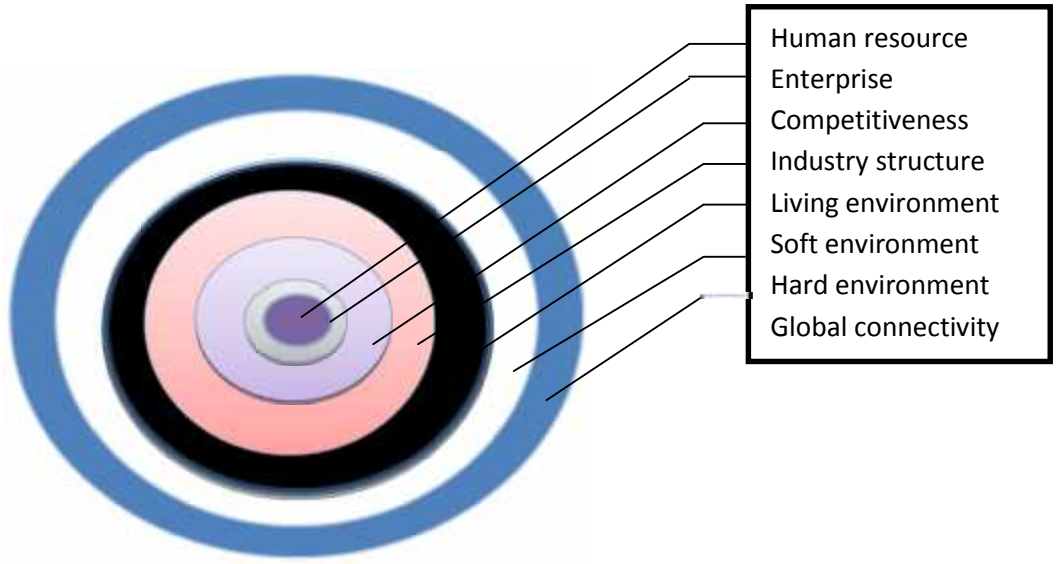
Figure 2: Bases for regional competitive advantage



Based on Kitson et al, 2004

According to the World Economic Forum (2010) urban competitiveness can be explained from two perspectives namely; input competiveness and output competitiveness. A city's input competitiveness is a function of; enterprise quality/competitiveness, industry structure, human resources, hard business environment, soft business environment, living environment and global connectivity (World Economic Forum, 2010. The input framework of global urban competitiveness is reflected in figure 3 bellow.

Figure 3: The input framework of global urban competitiveness



Based on World Economic Forum, 2010

With respect to output competitiveness, a city' competitiveness is a function of; cost of products, economic scale, economic growth (GDP growth rate), development level (GDP per capita), production efficiency (labour productivity), employment and economic aggregation, technological-innovation and decision-making ability (World Economic Forum, 2010). This is reflected in table 1 below.

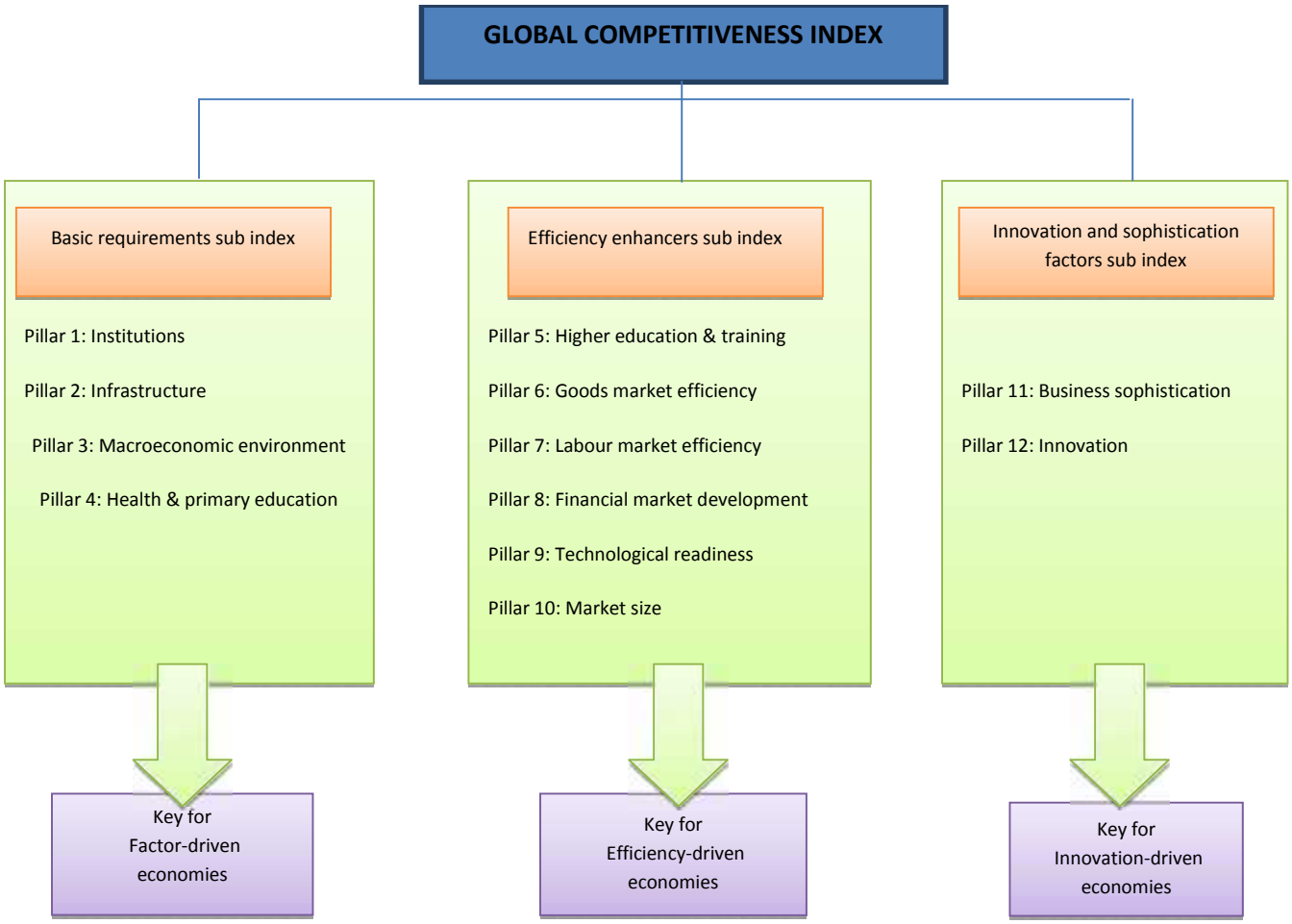
Table 1: Index system of urban comprehensive competitiveness

INDEX	IMPLICATIONS OF THE INDEX
GDP	A city's products and service market share
GDP per capita	A city's development level and residents' welfare level
GDP per square kilometer	Degree of economic aggregation
GDP growth rate	Economic vitality
Labour productivity	Economic Efficiency
Employment rate	Important macroeconomic performance and residents' welfare
Ratio of nominal exchange rate	Advantage in the price of commodities and services
Number of international patent applications	Ability of scientific and technological innovation
Multinational corporation score	Economic decision-making and controlling ability

Based on World Economic Forum, 2010

According to the World Economic Forum(2012), the 12 pillars of national competitiveness include:- Institutions, Infrastructure, Macroeconomic Environment, Health and Primary education, Higher Education and training, Goods Market Efficiency, Labour Market Efficiency, Financial Market Development, Technological Readiness, Market Size, Business Sophistication and Innovation. The above 12 pillars are reflected in the framework in figure 4. It is however, important to bear in mind that these 12 pillars are not independent, but that they tend to reinforce each other, and a weakness in one area often has a negative impact in others (World Economic Forum, 2012).

Figure 4: The Global Competitiveness Index Framework



Based on World Economic Forum, 2012-2012

Other studies have revealed that FDI connections targeted at poor countries are driven by low wage costs in these countries, whereas those targeted at rich countries are driven by low corporate taxes, and a country's market size is more important for connections targeted at rich countries than those targeted at poor countries (Wall, Burger and van der Knaap, 2011). To a greater extent, this explains differences in economic activities conducted between countries, where connections into poor countries are primarily related to labor-intensive activities, and FDI into rich countries is mainly targeted at services (Wall, Burger and van der Knaap, 2011).. Furthermore, FDI into poor countries is more natural resource seeking and efficiency seeking than is FDI into rich countries (Wall, Burger, & v.d.Knaap, 2011).

2.2.3. Global Urban/ National Competitiveness

The 2010 Global Urban Competitive Report reveals that USA and European cities still dominate the list (World Economic Forum, 2010). Similarly, according to the Global National Competitiveness report (2012-2013), the competiveness hotspots remain concentrated in Europe, North America, and a handful of advanced economies in Asia and the Pacific (World Economic Forum, 2012). Then despite decades of brisk economic growth in some developing regions (such as Latin America and Africa), the profound competitiveness gap of these regions with more advanced economies persists (World Economic Forum, 2012). In particular, many African economies continue to appear among the least competitive in the Global Competitiveness Index (GCI), which shows that 14 out of the 20 lowest-ranked economies are African (World Economic Forum, 2013).

2.3. Regional /Urban Networks and Competitiveness in Sub-Saharan Africa (SSA)

The issue of FDI as a driver for trade and development holds great resonance in Africa (Ismall, 2013). FDI flows to Sub-Saharan Africa remain modest, yet have increased steadily over the past decade as inbound direct investments have exceeded total aid flows since 2005, and in 2011 they stood at US$ 36.9 billion – equivalent to 2.4% of global flows (Ismall, 2013). To a greater extent this has contributed towards Sub-Saharan Africa's impressive growth over the last 15 years: registering GDP growth rates of over 5 per cent in the past two years, and the region continues to exceed the global average and to exhibit a favourable economic outlook (World Economic Forum, 2012). However, more generally, sub-Saharan Africa as a whole lags behind the rest of the world in competitiveness, requiring efforts across many areas to place the region on a firmly sustainable growth and development path (World Economic Forum, 2012).

Another noticeable feature is the increase of Chinese FDI into Sub-Sahara Africa (SSA). Chinese FDI into SSA has grown rapidly in recent years and, despite the paucity of evidenced research on its magnitude and character, a stream of general papers has noted China's FDI rapid growth and significance in SSA (Kaplinsky and Morris, 2009). Recent research reveals that the Chinese government has supported 1, 700 projects on the African continent since 2000 and that about 1,000 projects totalling US$48.6billion are under way or completed (Provost and Harris, 2013). Sub-Saharan Africa is a beneficiary of this aid. Wall (2011b) also observes that there is increasing connectivity of Sub-Saharan Africa to emerging globalising cities of China, to be specific Hong Kong, Beijing and Shanghai, and that China has prioritized Africa as a strategic partner, with Southern

Africa viewing China as a 'new economic messiah'. However, there are two schools of thought about Chinese assistance to Africa. While some insist the bottom line is China's thirst for natural resources, others argue that Beijing's development projects on the African continent are also part of a public diplomacy strategy to build up goodwill and international support for the future (Provost and Harris, 2013). Nevertheless, China's geopolitical influence in Africa is likely to have long-term consequences for the economic evolution of Sub-Saharan African cities, which in turn will enhance the connectivity of cities in this region (Wall, 2011b).

The above notwithstanding, it is on record that SSA is one of the regions with lowest number of cities qualifying for inclusion within the global network analysis and the relative share of connectivity that these cities hold is also comparatively small compared to what other global regions have (Wall, 2011a). Furthermore, only Johannesburg could be regarded as a moderate contender within the world economy (Wall, 2011a). It is claimed that the combined connectivity of New York and London amounts to the entire connectivity of Sub-Saharan Africa, despite the fact that this region holds 10 per cent of the world population (Wall, 2011a). Research has also revealed that Sub-Saharan African cities are poorly represented in the network of advanced producer services. (Wall, 2011a).The reasons for this under representation are varied (Wall, 2011b).

With regard to determinants of Foreign Direct Investment (FDI) into Sub-Saharan Africa, Ajayi (2006) argues that FDI flows are influenced by both pull and push factors. The push factors are mainly growth and interest rates in the industrialized countries, while the pull factors consist mainly of host country characteristics and policies which include: - indicators of current and capital account openness, tax levels and existence of incentives to encourage capital inflows, measures of the quality of legal and other institutions (including corruption), conflict measures, political regime, size of domestic markets and natural resource base. Additionally, macroeconomic policy and performance-growth, the external balance, real exchange rate over-valuation and exchange rate regime, financial market development are other determinants (Ayayi, 2006, Ezeoha and Cattaneo, 2011). Furthermore, it is generally accepted that market size and access to natural resources are crucial determinants of FDI in Africa (Morisset, 2001). Asiedu, (2006) argues that large local markets, natural resource endowments, good infrastructure, low inflation, an efficient legal system and a good investment framework promote FDI in Africa, but in contrast, corruption and political instability have the opposite effect. The recent resurgence of many African economies has been attributed to the extraction and exporting of primary commodities (especially oil, gas, metals and minerals such as diamonds and coal) and agricultural products (Turok and McGranahan, 2013).

Sub-Saharan Africa is also considered the most risky investment environment (Bartels, Kratzsch, Eicher, 2009). This is due to the fact that at the macro-level, great uncertainty emanates from unstable political systems, in which capital and investment are threatened by war, expropriation and civil unrest and industrial hold up, while at the micro-level, institutions suffer from bureaucracy, administrative burdens, juridical inefficiencies and corruption that amplify transaction costs in FDI operations (Bartels, Kratzsch & Eicher, 2009). Moreira (2009) argues that for Africa(SSA inclusive), the specific determinants of FDI flows include market size and growth, availability of natural

resources, human capital costs and skills and availability of good infrastructure. Others are openness of the economy, political and economic stability, institutional quality, investment regulation and international treaties and guarantees (Moreira, 2009). Further, Investment promotion, return on investment and other factors such as cost-related factors, concentration of other investors, investment incentives, privatization and inflows of bilateral ODA are also FDI drivers taken into account (Moreira, 2009). Other studies have concluded that the primary reason for locating in Southern Africa is to take advantage of the local market (Jenkins and Thomas, 2002).

2.4. Regional/Urban networks and competitiveness in the Southern Africa Development Community (SADC)

The growth of regional trade blocs has been one of the major developments in international relations in recent years and virtually all countries are members of a bloc (Moreira, 2009). The idea of regional integration involves collaboration between neighbouring countries in different parts of the continent and stronger cross-border flows of goods, services, labour, capital and information (Turok, 2010). Almost all regional integration agreements (RIAs) have the common objective of reducing barriers to trade between member countries and therefore, expanding markets for goods and services, help to exploit scale economies in supply chains and labour markets (Turok, 2010; Schiff and Winters, 2002). The most positive intent is the claim that RIAs add credibility to government policies in general and thus help increase investment and attraction of FDI (Schiff & Winters, 2002). In addition, history has revealed that enhanced trade and regional integration expand economic possibilities and boost performance (Blanke and Ko, 2013). In fact this is what is now driving the Europeans and Americans (who are impatient to restore their sagging economies) to seriously explore a transatlantic free-trade area (Blanke and Ko, 2013). It further has been argued that the market size advantage of regionalism is particularly important for Africa because countries in the region are small, both in terms of population and income (Asiedu, 2006).

In Southern Africa, regional integration has taken the institutional form of the Southern African Development Community (SADC), which was formed in 1992 (Chingono & Nakana, 2009). The main objective of SADC is to promote 'economic and social development through co-operation and integration (Chingono & Nakana, 2009). With respect to attracting FDI, both the SADC and Zambia have made substantial improvements in creating a more attractive business environment and in attracting FDI over the past twenty years (Hamblin et al, 2011). For example, SADC as a Community attracted on average only US$ 691 million in the early 1990s, but FDI to the region quadrupled in the second half of the 1990s standing on average at US$ 3061 million during 1995-98 (SADC, 2004). This figure accounted for more than half (55%) of all FDI flows directed to the SSA region (SADC, 2004). Then, since the 1990s, FDI has come to play an increasingly role in Zambia's economy (UNCTAD, 2011). The overall improved investment climate and business environment has led to increased FDI of US$ 1.73 Billion by 2010 (Zambia Development Agency, 2011; UNCTAD, 2011). Another key feature to note with regard to foreign investments in SADC is the increasing Chinese FDI flows into the region. Chinese FDI flows to SADC have been on the increase during the past decade (UNCTAD, 2010). Literature has revealed that Chinese FDI to SADC increased from about US$27Million in 2003

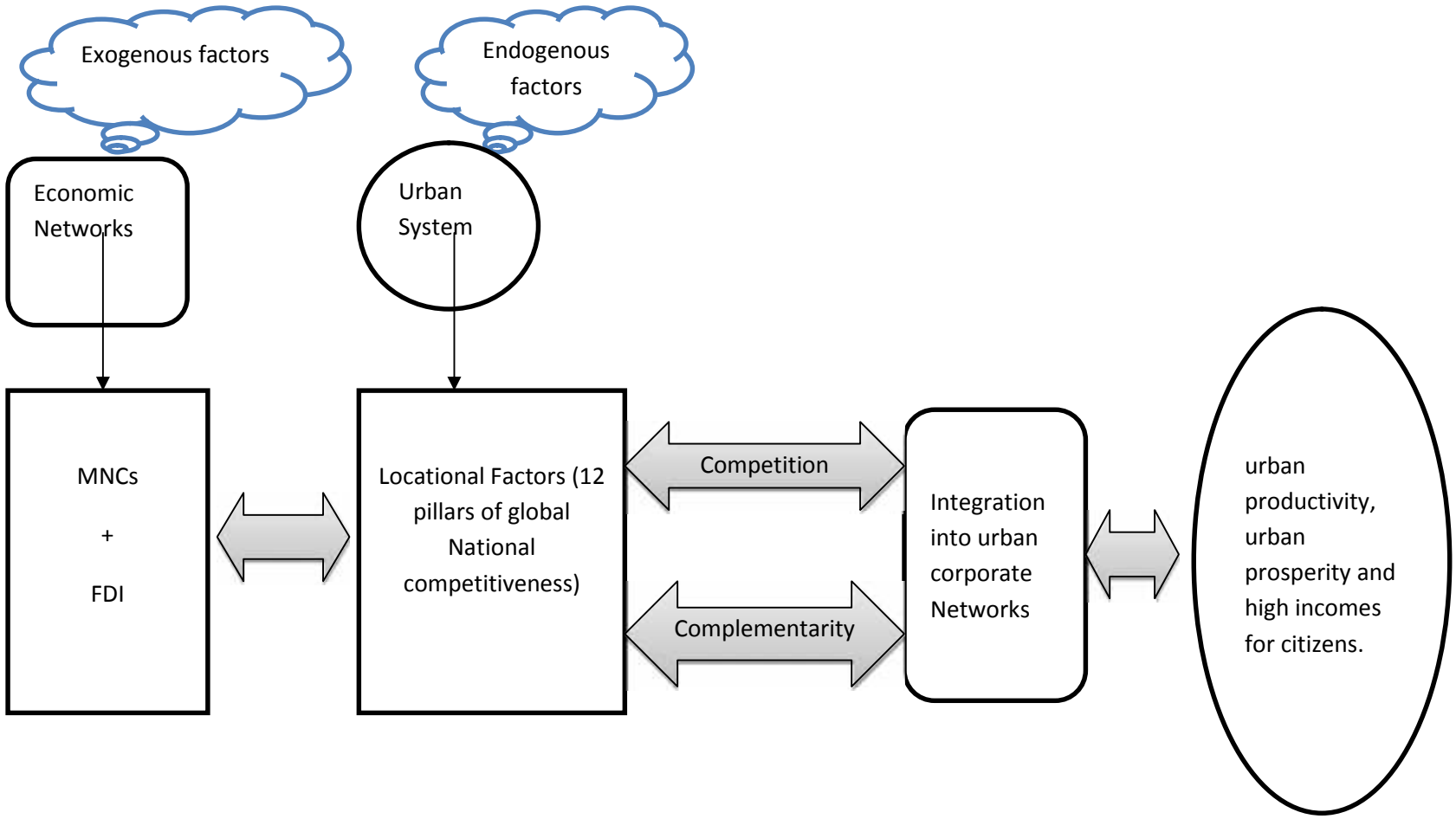
to about US$506Million in 2009, while the Chinese FDI flows to Zambia increased from about US$5.5Million to about US$111.8Million over the same period (UNCTAD, 2010). This trend is foreseen to continue (Hamblin et al, 2011).

However, despite these changes, foreign investors feel that there is still much room for improvement, especially on the need to reduce the costs of doing business (Hamblin et al, 2011). Additionally, lack of good infrastructure (roads and other forms of transport) in both Zambia and the SADC has been raised as an area that need to be improved in order to bring down the comparatively high investment costs for investors (Hamblin et al, 2011).One argument worth noting is that attracting FDI is not enough for economic growth, the host country needs to have policies in place in order to reap the benefits of this FDI (Hamblin et al, 2011). Civil society groups in Zambia agree with the Zambian government that FDI inflows are necessary for Zambia's development in the sense that attracting foreign capital helps to improve the productive base of the country by generating revenue, taxes and creating employment opportunities for locals (Hamblin et al, 2011). One of the recommendations given by Hamblin et al (2011) is that in order to make an informed decision on how best to attract and regulate FDI, the Zambian government should consider conducting a study on the reasons why foreign investors choose to invest in the country. To a greater extent, this is the direction being taken by this study. The future prospects for FDI flows to SADC cities and Lusaka in particular, are quite positive. The main challenge for Zambia, Lusaka city in particular, is to position herself for this FDI through competition and complementarity in order to attract new FDI for economic growth, job creation and poverty reduction. The results of this study are most likely to be helpful in this regard.

2.5. Conceptual Framework

As seen earlier, the world-wide urban networks provide crucial resources for the urban development of cities, while city systems form a set of resources or locational attributes for MNCs (Rosenblat, 2010). To a greater extent, this implies that for a city to prosper, it needs to aspire for more connectivity to the global urban networks. And this can be done by attracting MNCs and FDI through the city systems' resources or locational endowments (Rosenblat, 2010). Literature has also shown that relationships between MNC subsidiaries can be complementary to the extent that they perform different functions within the organisation, and therefore, making it possible for two cities or more to be used by the same MNC, but in different ways (Rosenblat, 2010; Burger et al, 2012). In light of the above, a conceptual framework for this research is summarised in figure 5.

Figure 5: Conceptual Framework



2.6. Research Hypothesis

H_0: There is no significant relationship between the Global Competitiveness Index (GCI) and FDI.

H_1: There is a significant relationship between the Global Competitiveness Index (GCI) and FDI.

2.7. Research Objectives

This research is exploratory in nature, with the objective to investigate the current FDIs networks of cities in the SADC region, and how Lusaka can improve its competitive performance.

2.8. Revised Research Questions

2.8.1. Overall Research Questions

- What are the current FDIs networks of cities in the SADC region, and how can Lusaka improve its competitive performance and complementarity?

2.8.2. Specific Research Questions

1. What is the growth of all FDI to cities in the SADC region?
2. What is the growth of FDI within the 5 most important sectors in the SADC region?
3. What is the position of cities in the attraction of all FDI in the SADC region?
4. What is the position of industrial sectors in attracting FDI in the SADC region?
5. Which cities are the most important competitors of Lusaka in the SADC region?
6. What is the geographical distribution of all FDI in the SADC region?
7. Which location factors are most important for attracting FDI in the SADC region?

2.9. Timeframe

The study involves analysis of FDI from 2003 -2012.

2.10. Scope and Limitations

Geographically, the study purposively focuses on 15 countries of the SADC region on the basis of their geographical location and their common goals for regional integration. These countries are : - Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Malawi, Mauritius (currently under suspension), Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe, South Africa and Seychelles. The map of the SADC region is highlighted in figure 1. Furthermore, the study only focuses on the analysis of FDI, greenfield investments to be specific. This does not imply that domestic investments are not important. Unfortunately, comparative databases of internal investments that take place within countries do not exist. One problem with the purchased data is that roughly 60% of the investment values are not known and have therefore been estimated by fDi Markets (Wall and Burger, 2012). By using a high degree of estimated data in the analyses, would mean that the results could be distorted and misleading. For this reason it was decided at an early stage of this study to not use the valued data. Instead, the number of investments that a region receives or sends serves as a more reliable unit of analysis, bearing in mind that correlation analysis

between the number of investments and the value of the same investments reveals that very high correlations exist between the two forms of data, implying that using the numbers of investments, serves as a good proxy of the investment values (Wall and Burger, 2012). City- specific locational indicator's database for African cities in general, and the SADC region in particular are not readily available for analysis. As a result, the study analyses a database of national-specific indicators from the GCI as proxy to city level locational factor indicators. Non availability of up to date investment values in the FDI market database for certain countries (e.g. Malawi, Swaziland, Seychelles and Lesotho) and cities (e.g. Lilongwe, Mbabane, Victoria and Maseru) in the SADC region is another limitation. Updating this information is not within the powers of this research, as this is based on already existing databases.

2.11. Significance of the study

A lot of academic work has been done on global corporate economic network and competitiveness analyses. However, much of this work has been biased towards the developed world of America and Europe as well as the emerging markets of Asia. Network analysis literature on Sub-Saharan Africa in general and SADC region in particular, remains thin. Furthermore, a comprehensive study on the reasons why investors choose to invest in SADC and Zambia in particular has been lacking (Hamblin et al, 2011). It is hoped that by analysing latest data from FDI markets.com and location factors from the GCI report, this study would fill this gap and enhance understanding of the position of the SADC region in the economic network discourse. With respect to benefits to society, the policy significance of this study cannot be underestimated. This study reveals growth, position, competition and geography of SADC as a whole and Lusaka in particular, in attracting FDI. This is likely to facilitate more goal-oriented and effective strategic planning and policy making with respect to territorial competitiveness and complementation of sustainable economic development (Burger et al, 2012). This would also increase the possibility of attracting further FDI due to heightened recognition of the possibilities of investing in Zambia, and Lusaka to be specific, which in turn is likely to enhance economic growth, job creation and poverty reduction.

3.2. Research Objective, Approach and Technique(s)

3.2.1. Research Objective

With regard to the research objective, this study is mainly exploratory in the sense that urban network analysis is being done in the SADC region for the first time and very little is previously known about this phenomenon in the region.

3.2.2. Research Approach

With respect to the approach, the research is quantitative in the sense that it involves the analysis of quantitative data from existing data bases namely; FDI markets.com and indicators of location factors from the GCI.

3.2.3. Research Technique (s)

The research technique used under this study is the analysis of existing data bases. The main methods and tools used include: - Excel, Ucinet, Netdraw, Manhattan Distance and SPSS. These are elaborated further under data analysis methods section which comes later in this document.

3.3. Explaining the variables.

In this study the dependent variable Y represents FDI inflows. As indicated in the conceptual framework, 12 pillars of the global national competitiveness report (and their sub-categories) are the independent (X) variables. The following is a brief description of each of the 12 pillars of the GCI. It is acknowledged here that the source of these brief descriptions is the Global National Competitiveness report (2012-2013).

3.3.1. FDI

FDI data for SADC is based on Financial Times 'fDi Markets' database and covers greenfield data over the period 2003 to 2012. The data necessary for this study concerns 1,942 investments in SADC. Greenfield data represents investments where parent companies start an entirely new venture in a foreign country by constructing new operational facilities from the ground up. Therefore greenfield investments clearly indicate traceable developments between firms and are therefore useful in studying their impact on regional development. More detailed information on FDI is given under section 3.5.1.

3.3.2. Institutions

The institutional environment is determined by the legal and administrative framework within which individuals, firms, and governments interact to generate wealth. The quality of institutions has a strong bearing on competitiveness and growth in the sense that it influences investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies. The role of institutions goes

beyond the legal framework. Government attitudes toward markets and freedoms and the efficiency of its operations are also very important

3.3.3. Infrastructure

Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy, as it is an important factor in determining the location of economic activity and the kinds of activities or sectors that can develop in a particular instance. The quality and extensiveness of infrastructure networks significantly impact economic growth and reduce income inequalities and poverty in a variety of ways. Additionally, effective modes of transport (quality roads, railroads, ports, and air transport) enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitate the movement of workers to the most suitable jobs. Furthermore, economies also depend on electricity supplies that are free of interruptions and shortages so that businesses and factories can work unimpeded. Last but not least, an intact and extensive telecommunications network allows for a rapid and free flow of information, which increases overall economic efficiency by enhancing effective decision-making.

3.3.4. Macroeconomic environment

The stability of the macroeconomic environment is important for business and, therefore, is important for the overall competitiveness of a country. For instance, firms cannot operate efficiently when inflation rates are out of hand. All in all, the economy cannot grow in a sustainable manner unless the macro environment is stable.

3.3.5. Health and Primary education

A healthy workforce is vital to a country's competitiveness and productivity. Workers who are ill cannot function to their potential and will be less productive. Poor health leads to significant costs to business, as sick workers are often absent or operate at lower levels of efficiency. Basic education increases the efficiency of each individual worker. Lack of basic education can become a constraint on business development, with firms finding it difficult to move up the value chain by producing more sophisticated or value-intensive products with existing human resources.

3.3.6. Higher education and training

Quality of higher education and training is particularly crucial for economies that want to move up the value chain beyond simple production processes and products. The current globalizing economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the economy.

3.3.7. Goods market efficiency

It is believed in the capitalist world that countries with efficient goods markets are well positioned to produce the right mix of products and services given their particular supply and demand conditions, as well as to ensure that these goods can be most effectively traded in the economy. Healthy market competition, both domestic and foreign, is important in driving market efficiency and thus business

productivity by ensuring that the most efficient firms, producing goods demanded by the market, are those that thrive.

3.3.8. Labour market efficiency

The efficiency and flexibility of the labour market are critical for ensuring that workers are allocated to their most effective use in the economy and provided with incentives to give their best effort in their jobs. Labour markets must therefore have the flexibility to shift workers from one economic activity to another rapidly and at low cost, and to allow for wage fluctuations without much social disruption.

3.3.9. Financial market development

An efficient financial sector is critical to competitiveness in the sense that it allocates the resources saved by a nation's citizens, as well as those entering the economy from abroad, to their most productive uses. Furthermore, it channels resources to those entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected. In addition, economies require sophisticated financial markets that can make capital available for private-sector investment from such sources as loans from a sound banking sector, well-regulated securities exchanges, venture capital, and other financial products.

3.3.10. Technological readiness

Technology is increasingly essential for firms to compete and prosper in today's globalized and liberalised world. This pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICT) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness.

3.3.11. Market size

The size of the market affects productivity since large markets allow firms to exploit economies of scale. Historically, the markets available to firms have been constrained by national borders. However, in the era of globalization, international markets can to a certain extent substitute for domestic markets, especially for small countries. In addition, vast empirical evidence shows that trade openness is positively associated with growth.

3.3.12. Business sophistication

It is generally claimed that sophisticated business practices are conducive to higher efficiency in the production of goods and services. Business sophistication concerns two elements that are intricately linked: the quality of a country's overall business networks and the quality of individual firms' operations and strategies. These factors are particularly important for countries at an advanced stage of development when, to a large extent, the more basic sources of productivity improvements have been exhausted. For example, when companies and suppliers from a particular sector are interconnected in geographically proximate groups, such as clusters, efficiency is heightened,

greater opportunities for innovation in processes and products are created, and barriers to entry for new firms are reduced.

3.3.13. Innovation

Technological breakthroughs have been at the basis of many of the productivity gains that the global economies have historically experienced ranging from the industrial revolution in the 18th century and the invention of the steam engine and the generation of electricity to the more recent digital revolution. Innovation is particularly important for economies as they approach the frontiers of knowledge and the possibility of generating more value by only integrating and adapting exogenous technologies tends to disappear.

3.4. Operationalisation

Operationalisation is in two parts. The first part presents the research methodology framework while the second part presents the variables and indicators.

3.4.1. Research Methodology Framework

The following concepts are considered under research methodology framework:-

- Research questions
- Data sources
- Data analysis type
- Analysis methods
- Analysis tools
- Outputs
- Dimension

The research methodology and design framework is presented in table 2 bellow.

Table 2: Research methodology and design framework

RESEARCH METHODOLOGY & DESIGN FRAMEWORK (Research Questions, Data source, Analysis type, Methods, Tools & criteria)									
Overall Research Question: What are the current FDI networks of cities in the SADC region and how can Lusaka improve its competitive performance?									
SPECIFIC RESEARCH QUESTIONS	DATA SOURCE	Analysis Type	METHODS	TOOLS	CRITERIA FOR CITY & SECTOR ANALYSIS IN THE SADC CORPORATE NETWORK				DIMENSION
Question 1 & 2	FDI markets	DESCRIPTIVE	Trend Analysis	Excel	Growth Volume	Growth Volume	Growth Volume	Growth Volume	TIME
Question 3 & 4	FDI markets		Indegree & Bwtweeness	UCINET Excel	Nodes & Position	Nodes & Position	Nodes & Position	Nodes & Position	FUNCTIONAL
Question 5	FDI markets		Relative Manhattan Distance	UCINET	Competition, similarity of FDI	Competition, similarity of FDI	Competition, similarity of FDI	Competition, similarity of FDI	
Question 6	FDI markets		GIS MAPPING	UCINET	Geography, Distance	Geography, Distance	Geography, Distance	Geography, Distance	SPACE
Question 7	Location Factors, FDI markets.com	EXPLANATORY	SPSS multiple statistical regression model	SPSS	Causality investment (y) Location Factors (X)	Causality investment (y) Location Factors (X	Causality investment (y) Location Factors (X	Causality investment (y) Location Factors (X	CAUSE

Specific questions

1. What is the growth of all FDI to cities in the SADC region?
2. What is the growth of FDI within the 5 most important sectors in the SADC region?
3. What is the position of cities in the attraction of all FDI in the SADC region?
4. What is the position of industrial sectors in attracting FDI in the SADC region?
5. Which cities are the most important competitors of Lusaka in the SADC region?
6. What is the geographical distribution of all FDI in the SADC region?
7. Which location factors are most important for attracting FDI in the SADC region?

3.4.2. Variables and indicators

The main variables and indicators for this study are reflected in table 3 below.

Table 3.Variables and indicators

Research Questions	Variables	Indicators
What is the growth of all FDI to cities in the SADC region?	Indegree (FDI)	Number of inward FDIs
What is the growth of FDI within the 5 most important sectors in the SADC region?	Indegree (FDI) Source cities Destination cities	Number of inward FDIs Source cities investing in SADC Destination SADC cities receiving FDI.
What is the position of cities in the attraction of all FDI in the SADC region?	Indegree Source cities Destination cities	Number of inward FDIs received by SADC cities Source cities investing in SADC Destination SADC cities receiving FDI.
What is the position of industrial sectors in attracting FDI in the SADC region?	Indegree Source countries of FDI Industry sectors	Number of inward FDIs received by each of the top 5 sectors in SADC Source cities investing in SADC Top 5 industry sectors in receiving FDI in SADC
Which cities are the most important competitors of Lusaka in the SADC region?	FDI destination cities	Number of inward FDIs
What is the geographical distribution of all FDI in the SADC region?	FDI destination countries FDI source countries	Number of inward FDIs Number of outward FDIs
Which location factors are most important for attracting FDI in the SADC region?	Dependent variable (Y): Number of FDIs	Logged number of FDI inflows (2003-2012) for 38 African countries and 28 Asian countries
	X1: Global Competitiveness	Global Competitiveness Index (GCI)
	X2: Institutions	• Property rights • Intellectual property protection • Diversion of public funds Public trust in politicians Irregular payments and bribes • Judicial independence Favouritism in decisions of government officials • Wastefulness of government spending • Burden of government regulation Efficiency of legal framework in settling disputes • Efficiency of legal framework in challenging regulations • Transparency of government policymaking • Provision of government services for improved business performance • Business costs of terrorism Business costs of crime and violence • Organized crime • Reliability of police services • Ethical behaviour of firms • Strength of auditing and reporting standards • Efficacy of corporate boards • Protection of minority shareholders' interests • Strength of investor protection
	X3: Infrastructure	• Quality of overall transport infrastructure • Quality of roads • Quality of railroad infrastructure

		• Quality of port infrastructure Quality of air transport infrastructure • Available airline seat kilometers • Quality of electricity supply Mobile telephone subscriptions Fixed telephone lines
	X4:Macroeconomic environment	• Government budget balance Gross national savings • Inflation • Government debt • Country credit rating
	X5: Health and Primary education	• Business impact of malaria g Malaria incidence • Business impact of tuberculosis • Tuberculosis incidence • Business impact of HIV/AIDS/ HIV prevalence • Infant mortality • Life expectancy • Quality of primary education Primary education enrolment rate
	X6: Higher education and training	• Secondary education enrolment rate • Tertiary education enrolment rate • Quality of the educational system Quality of math and science education • Quality of management schools Internet access in schools • Local availability of specialized research and training services Extent of staff training
	X7: Goods market efficiency	• Intensity of local competition Extent of market dominance Effectiveness of anti-monopoly policy • Extent and effect of taxation • Total tax rate • Number of procedures required to start a business Time required to start a business • Agricultural policy costs • Prevalence of trade barriers • Trade tariffs • Prevalence of foreign ownership Business impact of rules on FDI Burden of customs procedures Imports as a percentage of GDP • Degree of customer orientation Buyer sophistication
	X8: Labour market efficiency	• Cooperation in labour-employer relations • Flexibility of wage determination • Hiring and firing practices Redundancy costs • Extent and effect of taxation • Pay and productivity • Reliance on professional management • Brain drain • Female participation in labour force
	X9: Financial market development	• Availability of financial services • Affordability of financial services • Financing through local equity market • Ease of access to loans • Venture capital availability • Soundness of banks • Regulation of securities exchanges • Legal rights index

	X10: Technological readiness	• Availability of latest technologies • Firm-level technology absorption • FDI and technology transfer • Internet users • Broadband Internet subscriptions • Internet bandwidth • Mobile broadband subscriptions Mobile telephone subscriptions Fixed telephone lines
	X11:Market size	• Domestic market size index • Foreign market size index
	X12: Business sophistication	• Local supplier quantity • Local supplier quality • State of cluster development • Nature of competitive advantage • Value chain breadth • Control of international distribution • Production process sophistication • Extent of marketing Willingness to delegate authority • Reliance on professional management
	X13: Innovation	• Capacity for innovation Quality of scientific research institutions • Company spending on R&D University-industry collaboration in R&D • Government procurement of advanced technology products Availability of scientists and engineers • PCT patent applications • Intellectual property protection

3.5. Data Collection Methods

Data for this study is generated from the two existing databases elaborated bellow:-

3.5.1. fDi Markets.com database

This is the Financial Times fDI Markets database, a detailed register of cross-border investments that are made worldwide. Currently, the fDI Markets database is one of the leading sources of FDI project data for the large FDI statistics organizations, such as the United Nations Conference on Trade and Development (UNCTAD), Economist Intelligence Unit (EIU) and World Bank.

It is important to mention here that FDI is comprised of 'mergers and acquisition' data (M&A) and 'greenfield' data. Since M&A data concerns the process of particular firms either deciding to go forward as a single new firm (merger), or taking monetary possession of other firms (acquisition), the impact of this on regional development remains particularly indefinable. On the other hand Greenfield data represents investments where parent companies start an entirely new venture in a foreign country by constructing new operational facilities from the ground up. Therefore greenfield investments clearly indicate traceable developments between firms and are therefore useful in

studying their impact on regional development. For this reason the research is based on greenfield data.

Another thing to note is that the theoretical framework clearly explains that within the context of a globalizing world, FDI is an important entity for the development of regions (Wall and Burger, 2012). However, this does not imply that domestic investments are not important. Unfortunately, comparative databases of internal investments that take place within countries do not exist. Although this is a limitation of this study, it should be realized that many studies argue that FDI brings unique advantages to a region because these investments, when compared to domestic ones are generally higher in quality and importance, and have the potential to deliver higher levels of capital, employment, technological innovation and specialized knowledge(Wall and Burger, 2012)..

The data is based on Financial Times 'fDi Markets' database and covers greenfield data over the period 2003 to 2012. The data necessary for this study concerns 1,942 investments in SADC. Each individual investment is coded by year of investment, parent company name, target company name, industrial sector, corporate function, investment value, and country codes of both parent and subsidiary companies. Since roughly 30% of the regional locations of firms in the fDi Markets are incomplete, these missing values needed to be completed using other databases and search engines. Furthermore, each urban region needed to be geocoded by its geographic coordinates, for GIS analysis purposes.

One problem with the purchased data is that roughly 60% of the investment values are not known and have therefore been estimated by fDi Markets (Wall and Burger, 2012). By using a high degree of estimated data in the analyses, would mean that the results could be distorted and misleading. For this reason it was decided at an early stage of the study to not use the valued data. Instead, the number of investments that a region receives or sends serves as a more reliable unit of analysis. Furthermore, a correlation analysis between the number of investments and the value of the same investments reveals that very high correlations exist between the two forms of data, implying that using the numbers of investments, serves as a good proxy of the investment values (Wall and Burger, 2012).

3.5.2. Location Factors database

Due to non-availability of a comprehensive database for location factors in cities of the SADC region, the study uses national based location factor indicators of 38 African countries and 28 Asian countries for attracting FDI from the global national competitiveness report of the World Economic Forum. It is also worth mentioning here that the location factor data for only 15 SADC countries is not used because the sample is too small to give significant results. Therefore, the study opts to broaden the analysis and increase the sample to 38 African countries, with the assumption that the results from the 38 African countries would also apply to SADC countries. Subsequently location factors of 28 Asian countries are analysed separately in order for SADC learn from Asia which is a development stage ahead of Africa.

3.6. Data Analysis Methods

The analysis conducted in this study is both descriptive and explanatory. Descriptive analysis is answering the 'what' research questions while explanatory analysis is addressing the 'why' research question as reflected in the methodology and design framework cited in the foregoing paragraphs.

3.6.1. Descriptive Analysis

The following descriptive analysis tools and methods have been used:-

- **Excel** to analyse trends in the growth of FDI in the SADC region
- **UCINET** to analyse indegree (inward investment) and outdegree(outward investment) in order to establish nodes and positions with respect to FDI in the SADC region
- **UCINET** to use the relative Manhattan Distance technique, in order to reveal competition and similarity with regard to FDI in the SADC region
- **NETDRAW** to analyse the structure of FDI networks in the SADC region
- **UCINET** to spatially map the geographical distribution of FDI in the SADC region

3.6.2. Explanatory Analysis

3.6.2.1. Statistical Package for Social Sciences (SPSS)

SPSS has been used to run multiple regression models in order to determine causality between FDI (Y-Dependant variable) and Location factors (X-Independent variables).

3.6.2.1. Setting up the regression model

- As mentioned earlier, due to non-availability of a comprehensive database for location factors in cities of the SADC region, the study uses national based location factor indicators of 38 African countries and 28 Asian countries for attracting FDI from the global national competitiveness report of the World Economic Forum.
- It is also worth mentioning here that the location factor data for only 15 SADC countries is not used because the sample is too small to give significant results. Therefore, the study opts to broaden the analysis and increase the sample to 38 African countries, with the assumption that the results from the 38 African countries would also apply to SADC countries. Subsequently location factors of 28 Asian countries are analysed separately in order for SADC learn from Asia which is a development stage ahead of Africa (Blanke and Ko, 2013). Appendices 1 and 2 show in detail the African and Asian (Oceania) indicators respectively only at pillars' level. Sub-categories details are not reflected in the appendices because it is too much information that would just make this document too big.
- A multi-collinearity test was then conducted using SPSS in order to remove location factors that were too highly correlated. Conducting a multi- collinearity test on each of the location factors (excluding the dependent variable: FDI inflows) ensures that the measure of variance

of estimated regression coefficient is not inflated due to collinearity. In other words, multi-collinearity (high correlations between predictor variables) causes problems when trying to draw inferences about the relative contribution of each predictor variable to the success of the linear regression model.

- It is emphasized here that multi-collinearity tests were conducted on the 12 pillars of global national competitiveness and on the location factors in the 12 sub-categories of the 12 pillars cited above. With regard to the variance inflation factor (VIF) size, which measures the magnitude of multi-collinearity, it was assumed under this study that if the VIF is over 10 for a particular location factor, that location factor is not considered in the regression model because it entails a high correlation with other location factors.
- In order to address skewness (heteroskedasticity) of data, the FDI values (for 38 African countries and 28 Asian countries) and all the indicators of 12 categories of the 12 pillars, as well as values for the global competitive Index (for 38 African countries and 28 Asian countries) were log transformed in order to enhance even distribution of the data.
- No outlier was removed from the 38 African countries data because after log transformation, the data displayed an even distribution trend. Moreover, when a regression model was run without data for South Africa, Egypt and Morocco (possible outliers), there was no difference with the results obtained with the above cited 3 countries included. The same applied to the Asian data. In fact it was pointless to remove possible outliers such as China and India from the Asian data in the sense that these are the major targets for Africa to learn from.
- Fourteen(14) multiple regression analyses (using the Stepwise Method) were run as follows:-
  i. Global Competitive Index (Independent X variable) against FDI (Dependent Y variable) to assess the significance of the relationship between the two variables.
  ii. Twelve (12) pillars of the global national competitiveness Index (Independent X variables) with VIF values of less than 10 against FDI (Dependent Y variable) to assess the significance of the relationship between the 12 pillars of global national competitiveness and FDI.
  iii. Twelve (12) categories(Indicator level) of the 12 pillars of the global national competitiveness Index(Independent X variables) with VIF values of less than 10 against FDI (Dependent Y variable) to assess the significance of the relationship between location factors in the 12 categories and FDI.

3.7. Sample Size and Selection

The FDI markets.com data base contains firms, cities and counties from all over the world. So, this data base includes a vast collection of world countries, cities and firms. This makes it highly representative. Geographically, the sample purposively focuses on the 15 countries of the SADC region, on the basis of their geographical location and their common goals for regional integration.

3.8. Validity and Reliability

First and foremost, all the data used in this study is obtained from two credible sources namely; FDI markets.com database of the Financial Times and the Global National Competitiveness Indicators

database (location factors) of the World Economic Forum (2012). To a greater extent, this warrants the validity and reliability of the data. The study further makes the following three assumptions on the adopted research methodology with respect to validity and reliability:-

i. Possibility of skeweness or hetroskedacity in the data

Skewness characterizes the degree of asymmetry of a distribution around its mean. Skewness is a statistical distribution, in which the curve appears distorted or skewed either to the left or to the right. To address skewness or hetroskedacity were it exists; the data is log transformed to make it more evenly distributed.

ii. Possibility of multicollinearity (similar correlation of X-variables on FDI)

Multicollinearity occurs when variables are so highly correlated with each other that it is difficult to come up with reliable estimates of their individual regression coefficients. This is because when two variables are highly correlated, they are basically measuring the same. That is to say the two variables convey essentially the same information. Since multicollinearity could adversely affect the results of one's multiple regression analysis, it is important that the analyses are properly evaluated to determine the presence of multicollinearity. To this effect, multicollinearity is addressed by conducting a Variance Inflation Factor (V.I.F) test to exclude x-variables causing an overlap. The Variance Inflation Factor (VIF) measures the impact of collinearity among the variables in a regression model. Only location factors with VIF values less than 10 were used in the regression model

iii. Possibility of outliers in the data

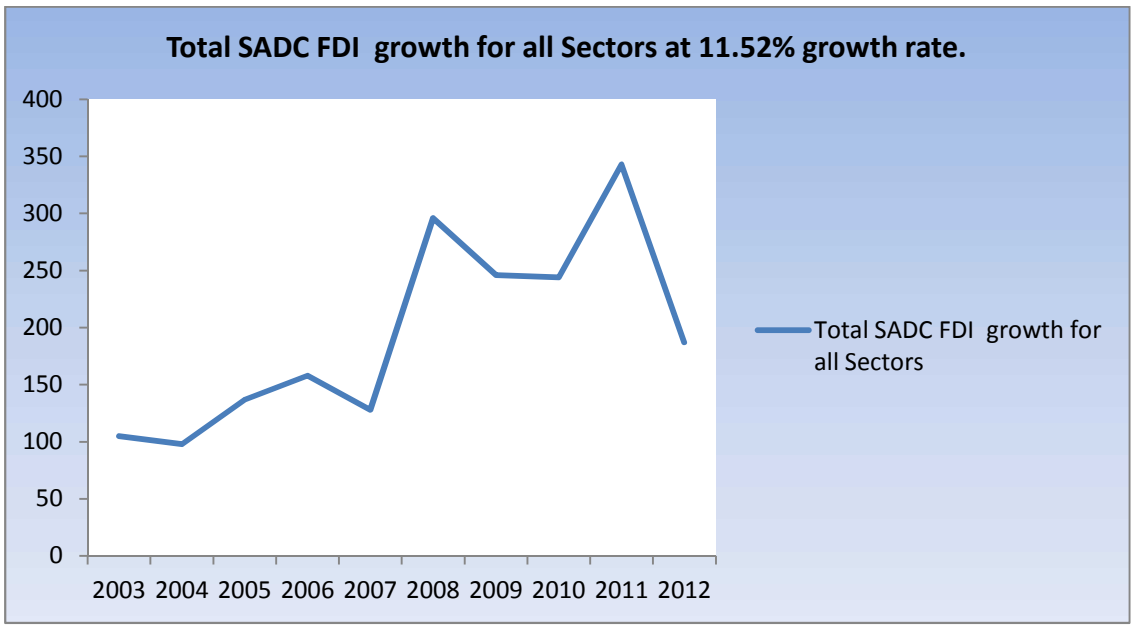
An **outlier** is an observation that is numerically distant from the rest of the data. Outliers can have a strong influence on the outcome. For example, when one looks at the distribution of the flow of FDI into Asian countries, China and India have FDI values which are far higher than the rest of the Asian countries, and therefore could be as outliers in that distribution. This poses the possibility that the values of these two countries could influence the results of a model. Should the outliers exist they are removed from the model.

4.0. Presentation of data and analysis

4.1. Growth of all FDI to cities in the SADC region

The growth of all FDI in the SADC region was generated through analysis of FDI markets.com database (SADC based with 1,942 number of investments) using the trend analysis function of Excel. The output of this analysis is reflected in figure 6 bellow. The first impression that comes out is that, though modest, there has been a general upward growth in the number of investments flowing into SADC between 2003 and 2012, reaching a peak in 2011 with FDI average growth rate of 11.52 per cent. Of course this increase is punctuated by declines, specifically in 2008 and 2012, mainly due to the economic crisis experienced in most parts of the developed world in those years. This also goes to demonstrate that the SADC region is connected to the global economy, though not very integrated.

Figure 6: Growth of all FDI in the SADC region

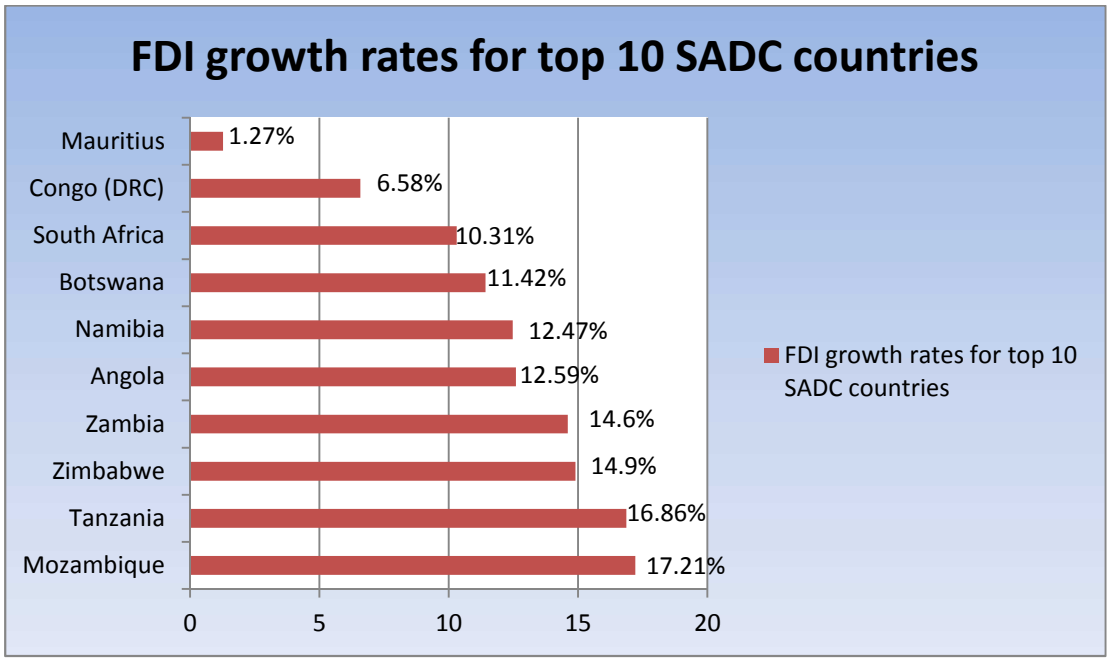


Based on FDI markets

With regard to the FDI growth rates for top 10 SADC countries between 2003 and 2012 as reflected in figure 7, Mozambique (17.21%) tops the chart, followed by Tanzania (16.86%), Zimbabwe (14.9%), Zambia (14.6%), Angola (12.59%), Namibia (12.47%) and Botswana (11.42). South Africa (10.31%) is in the 8th position followed by DR Congo (6.5%) and Mauritius (1.27%). The low FDI attraction growth rates for South Africa and Mauritius can be explained by the fact that South Africa and Mauritius are the African continent's top performers with respect to competitiveness, ranked 52nd and 54th, respectively, just below the Southeast Asian average and above emerging market economies of India and Russia (World Economic Forum, 2013). Therefore, their competitiveness is already high. Congo (DRC) also recorded a lower FDI growth rate despite being rich in mineral

reserves which are a motivation for resource-seeking FDI. This can partly be explained by the fact that Congo (DRC) has been shaken by a spate of civil wars for many years now, especially since 1998 and not many investors would risk investing in a conflict stricken environment. The FDI growth rates for countries like Mozambique, Tanzania, Zimbabwe and Zambia are quite high in the sense that these economies really want to catch up in attracting FDI.

Figure 7: FDI growth rates for top 10 SADC countries (2003-2012)

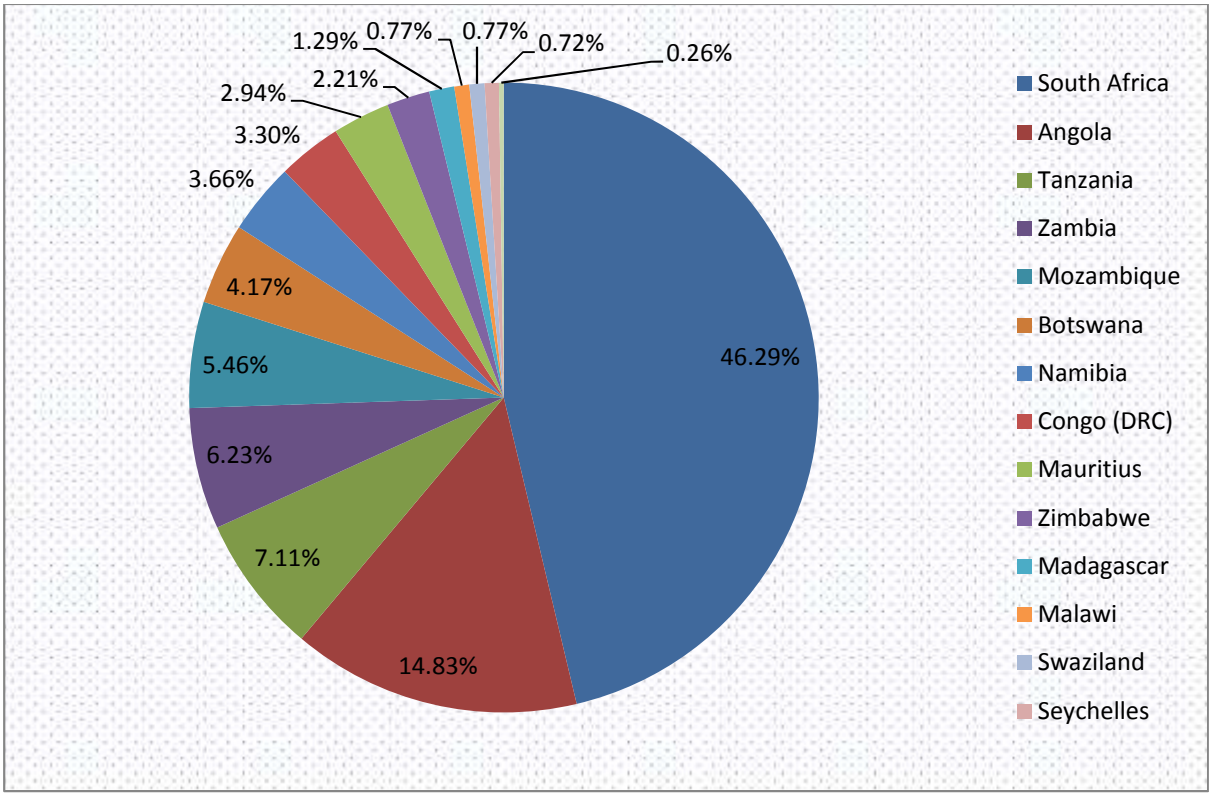


Based on FDI markets

Another interesting feature is the country composition of SADC's number of FDIs between 2003 and 2012 which is reflected in figure 8 below. It is clear from the chart that South Africa dominated with 46.29%, followed by Angola (14.83%), Tanzania (7.11%) and Zambia (6.23%). South Africa's dominance is not surprising in the sense that it is the most developed economy in the region with a sophisticated economy, particularly in the financial sector. The major attractions of FDI for South Africa are mainly the natural resources sector of the economy, especially mining (gold, platinum, diamond reserves etc.), manufacturing and service industries. South Africa also has a GDP of about US$ 408 billion and GDP per capita of about US$ 8, 078(World Economic Forum, 2013). These factors, among others, contribute towards making South Africa the most competitive country in the SADC region. Angola is second in the attraction of FDI mainly due to the fact that Angola has large oil reserves. As a result investments in oil industries have been a major source of FDI for Angola. Tanzania is third in attracting FDI in SADC mainly because of investments in gas reserves in that country. With regard to Zambia, which takes the 4th position, its major FDI attraction has been investments in copper reserves. It is clear again from Angola, Zambia, Tanzania and even South

Africa that most of the FDI that has been going into these countries is resource seeking, natural resources to be specific.

Figure 8: Country composition of SADC's volume of FDIs (2003-2012)

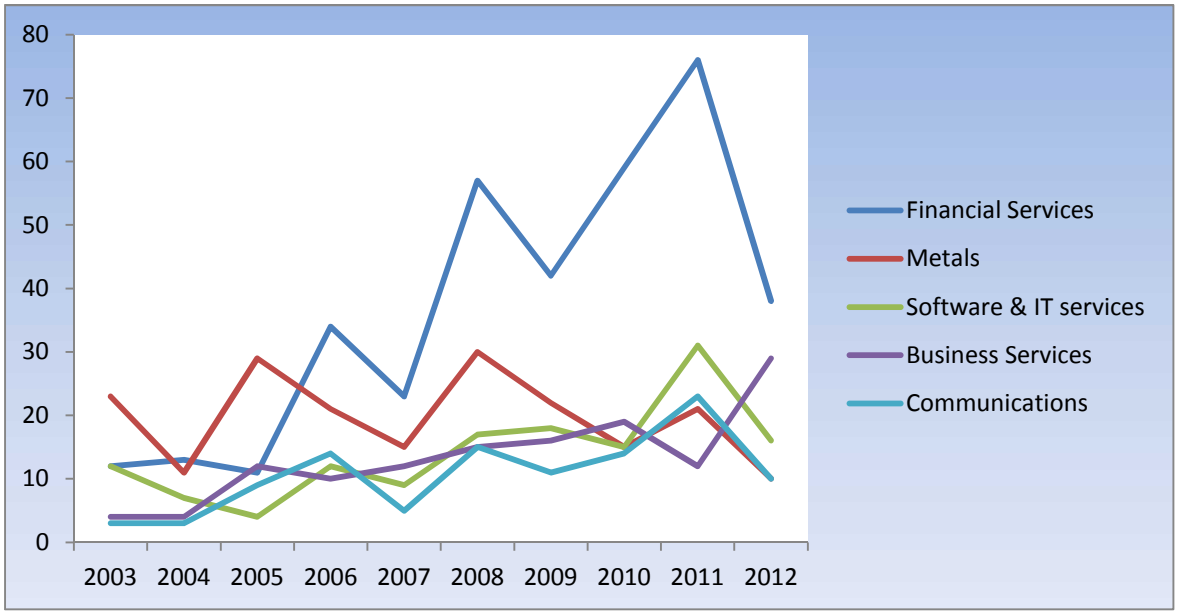


Based on FDI markets

4.2. Growth of FDI to the top 5 sectors in the SADC region

In a similar manner, the growth of FDI to the 5 top sectors in the SADC region was analysed (SADC based with 1,942 investments). The output of this analysis is reflected in figure 9. It is clear from the chart that financial services sector is highest, followed by metals, software IT services, business services and communication sectors. Absence of manufacturing among the top 5 growing sectors in the SADC region, to a greater extent shows that that the manufacturing sector is yet to breakthrough. Another notable feature is that although developing countries are generally known to be receivers of resource seeking FDI (Burger et al, 2012), the results show that out of the top 5 sectors which are growing in the SADC region, only metals qualify to be a receiver of resource (natural resources) seeking FDI. The other 4 can be said to fall under Advanced Business Services (ABS) mainly due to South Africa, Botswana and Mauritius. Therefore, there is an increasing FDI inflow in the service sectors in the SADC region. Of course it can also be argued that most of these service sectors are servicing investments in the exploitation of natural resources (resource seeking FDI) in the region.

Figure 9: FDI trends in the top 5 sectors in SADC region (2003-2012).

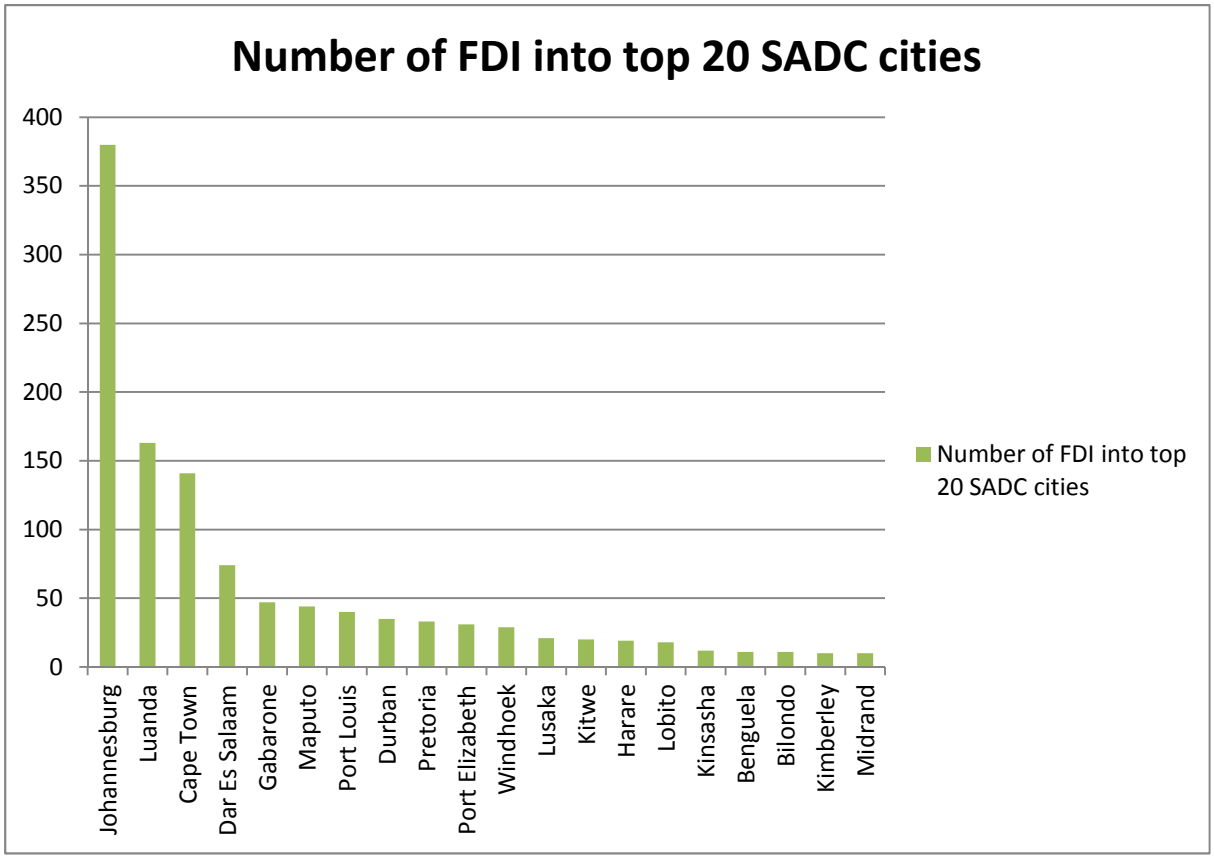


Based on FDI markets

4.3. Position of top 20 SADC cities in attracting FDI in SADC region

Here, the aim was to determine the position of the top 20 SADC cities in the attraction of FDI concerning combined sectors in the SADC region. The results of this analysis are reflected in figure 10 below. It is not surprising that the chart reveals that 7 cities from these top 20 cities are from South Africa, which is the most developed nation in this region, with a sophisticated economy, particularly in its financial sector which benefits other SADC neighbouring countries. Johannesburg in particular, which ranks first, plays a key role in connecting the SADC region to the global economy. Luanda and Cape Town are in the second and third positions respectively. Apparently, Lusaka is on the 12th position, demonstrating a moderate position in the attraction of FDI in the region.

Figure 10: Position of top 20 SADC cities in attracting FDI (2003-2012).

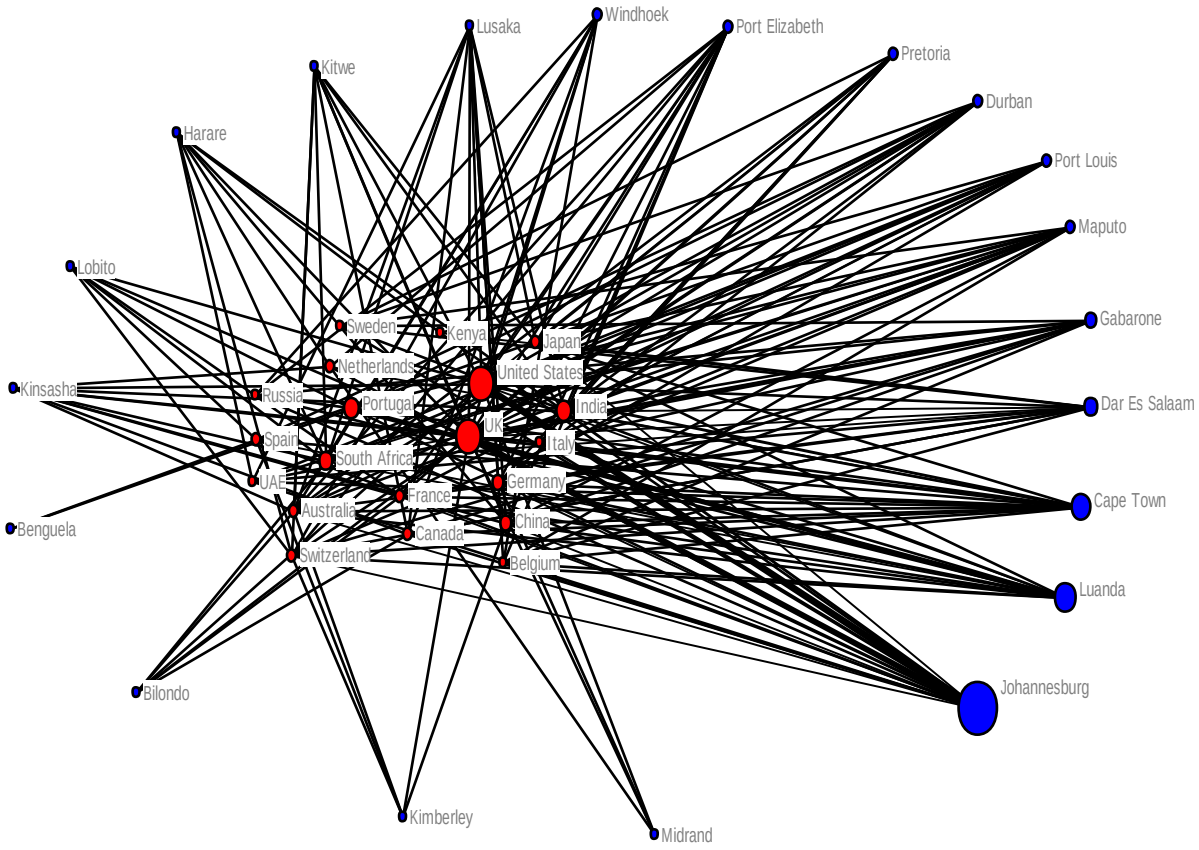


Based on FDI markets

Furthermore, the same position of top 20 cities in the attraction of FDI in the SADC region is presented in figure 11 in form of a network map, but including top 20 source countries of FDI in combined sectors. The red nodes are source countries while the blue nodes are destination cities. The bigger the red node the more the FDI that country sends. In the same way, the bigger the blue node the more the FDI that city receives. Again Johannesburg stands out clearly as the dominant city, followed by Luanda, Cape Town and so on. The city of Lusaka takes a moderate position (12^{th}) among the top 20 cities in the attraction of FDI in the region. The network map also reveals that UK, US, India and South Africa are the major sources of FDI for cities in the SADC region. Worth noting is the fact that South Africa is among the source countries of FDI for most SADC cities including Lusaka, which further demonstrates the economic strength of South Africa in the region. This is not surprising in the sense that South Africa holds some of the largest mineral reserves (gold, platinum, diamond etc.) reserves in the world and has historically had a relatively well-developed industrial and service sectors as well as stock exchange in the region (Wall 2011a). In addition, the close integration of South Africa into the SADC regional economy facilitates the FDI resource transfers from South Africa to other SADC countries. This analysis also reveals that Portugal is investing heavily

in Luanda (capital city of Angola). This can be explained by the fact that Angola is a former colony of Portugal. It is also clear from figure 11 that overall, the top 20 source countries of FDI in the SADC region are dominated by cities from Western Europe, North America and South East Asia, which reinforces the argument that the geography of command and control in the global economic system is highly concentrated in North America, Western Europe and the Asian Pacific (Taylor et al., 2011).

Figure 11: Network map-Position of cities in attracting FDI in the SADC region

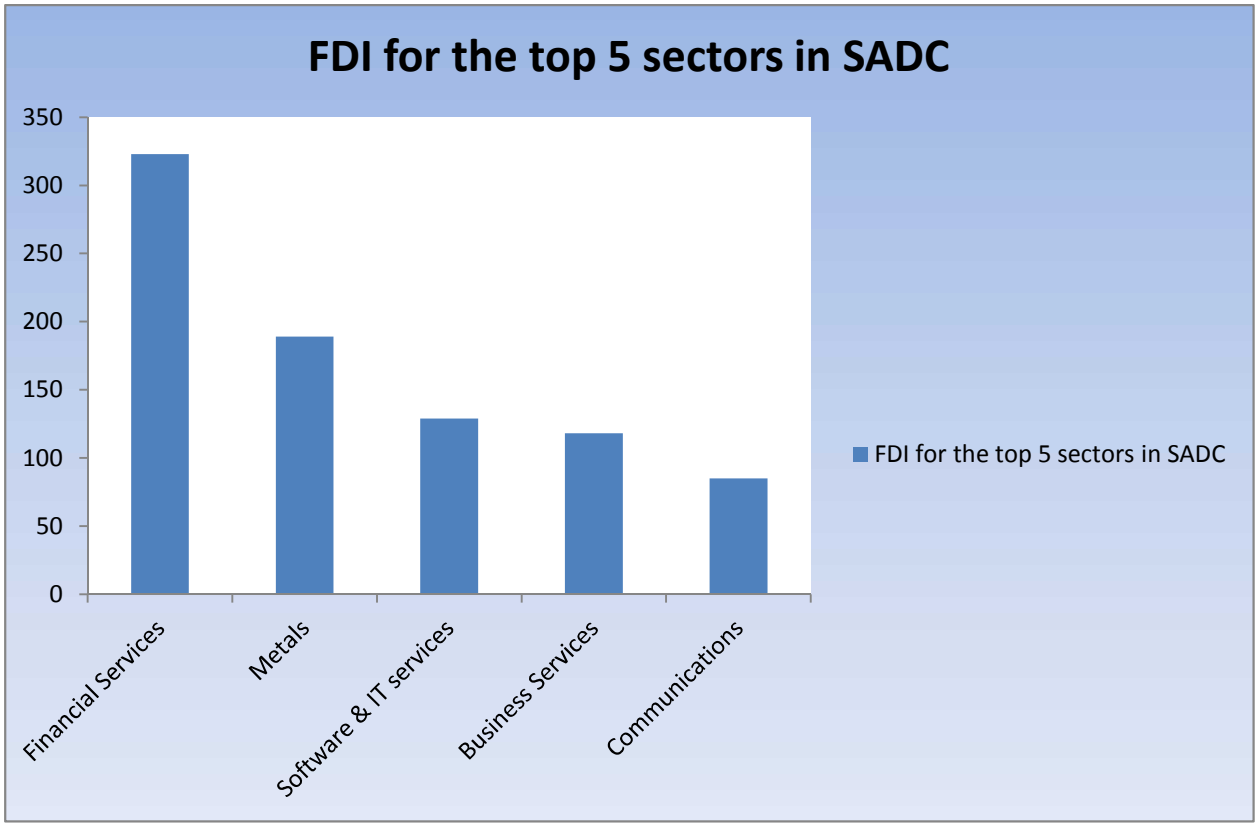


Based on FDI markets

4.4. Position of top 5 sectors in attracting FDI in SADC

The results of this analysis are reflected in figure 12 below. Financial services ranks first, followed by metals. Then software and IT services, Business services and communication are in third, fourth and fifth place respectively.

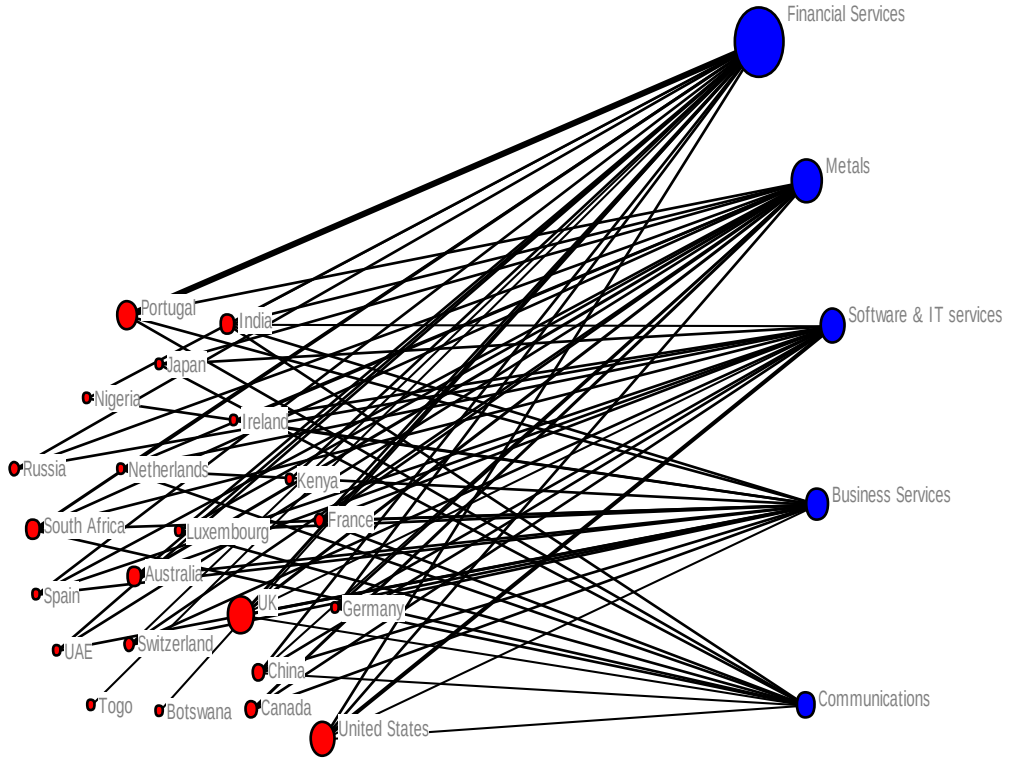
Figure 12: Position of top 5 sectors in attracting FDI in the SADC region (2003-2012).



Based on FDI markets

The position of the top 5 sectors in attracting FDI in SADC is also reflected by the network map in figure 13. The bigger the node of a sector, the more the investments it receives and vice versa. Again it is clear that financial services rank first followed by metals, software and IT services, business service and the communication sector takes the last position. The network map also reveals that UK, United States, Portugal, India, South Africa and Australia are the major sources of FDI for the top 5 sectors in SADC. Worth noting again is the fact that South Africa, is among the major source countries of FDI that flows into top 5 sectors in SADC. This further depicts South Africa as the economic power house of Sub-Saharan Africa in general and SADC in particular.

Figure 13: Network map for FDI for the top 5 sectors in SADC



Based on FDI markets

4.5. City competition for FDI in the SADC region by industry sector

City competition was analysed by origin city, industrial activity and industrial sector. This is in line with the argument that urban areas or regions are considered to be in competition when they have overlapping investment portfolios in terms of: (i) sectors in which it is invested, (ii) functions in which it is invested and (iii) geographical origin of the investment (Burger et al, 2012). The analysis by sector produced more accurate results. Top 20 SADC cities in terms of attracting FDI were analysed. Table 4 below presents the results of some 10 key cities in the SADC region with their corresponding top 5 competitors. The competitor top 5 cities are ranked 1 to 5, with 1 representing the closest competitor and 5 representing the furthest competitor accordingly.

Table 4: City competition for FDI within the SADC region (2003-2012)

No	NAME OF CITY	COMPETITOR CITIES BY RANK				
		1	2	3	4	5
1	Lusaka	Windhoek	Kinshasa	Lubango	Harare	Lobito
2	Johannesburg	Cape Town	Luanda	Dar es Salaam	Maputo	Gaborone
3	Gaborone	Durban	Lusaka	Windhoek	Kinshasa	Lubango
4	Harare	Kinshasa	Lusaka	Lobito	Windhoek	Maputo
5	Luanda	Dar es Salaam	Maputo	Port Louis	Gaborone	Cape Town
6	Dar es Salaam	Maputo	Harare	Windhoek	Gaborone	Lusaka
7	Cape Town	Port Louis	Maputo	Harare	Dar es Salaam	Windhoek
8	Durban	Kinshasa	Lusaka	Lubango	Lobito	Cabinda
9	Maputo	Harare	Lusaka	Lobito	Windhoek	Kinshasa
10	Windhoek	Lusaka	Kinshasa	Harare	Mbabane	Lubango

Based on FDI markets

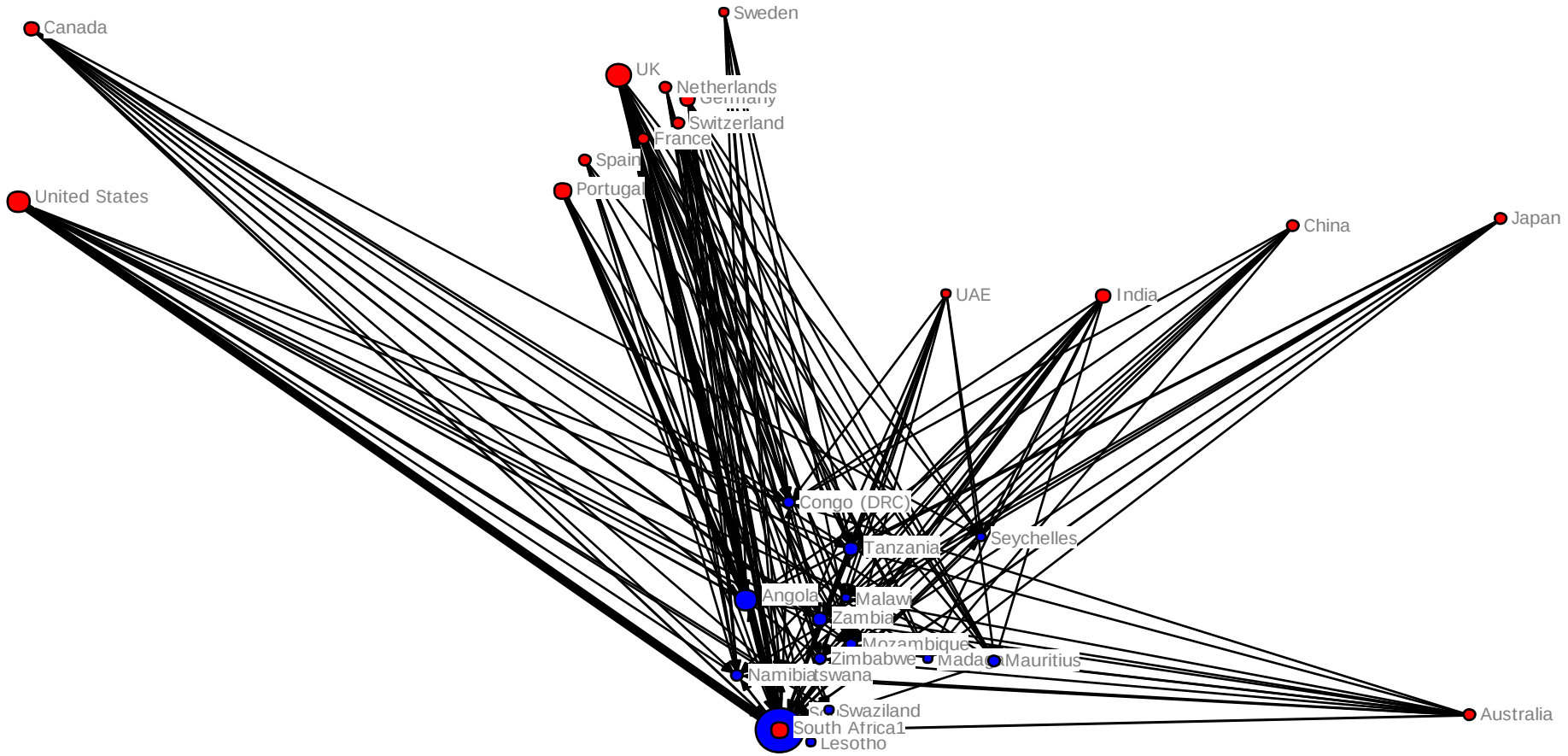
It is clear from the table that the competitors of Lusaka city are Windhoek (Angola), Kinshasa (Congo DR), Lubango (Angola), Harare (Zimbabwe) and Lobito (Angola). Therefore, these are the cities which Lusaka is supposed to direct her competition efforts towards in the sense that they possess environments which are similar to what Lusaka possesses. For example, from the earlier analysis of the position of the top 20 cities in attracting FDI, Windhoek is in 11th position, while Lusaka is in 12th position and yet they are competitors. To a certain extent, this could mean that there are certain location factors where Windhoek is doing better than Lusaka. So, Lusaka can explore factors in Windhoek in order to improve her position in attracting FDI. High level cities like Johannesburg and Cape Town do not appear among Lusaka's competitors mainly because these compete at a higher level, bearing in mind that city competition happens at different scales and that different cities have different strengths (Sassen, 2008). Therefore, Lusaka can only apply a complementary approach to these cities in order to attract FDI.

4.6. Geographical distribution of all FDI in the SADC region

The research picked the top 15 source countries globally and the 15 SADC destination countries to plot the geographical distribution of all FDI in the SADC region using UCINET. Figure 14 is the output of this analysis. With regard to source countries of FDI for the SADC region, it is clear from figure 14 that most of the FDI comes from Western Europe (7 countries), North America (United States and Canada) and South East Asia (India, China and Japan).The other source countries of FDI are Australia and United Arab Emirates. Within SADC, only South Africa invests in other SADC countries (Also see figure 15). This result is less surprising in the sense that North America, Western and South East Asia are the command and control centres of the global economy. To a greater extent, this result is in line with theory that the geography of command and control in the global economy is highly concentrated in North America, Western Europe and the Asian Pacific (Taylor et al., 2011) and that the investor hotspots remain concentrated in Europe, North America, and a handful of advanced economies in Asia and the Pacific (World Economic Forum, 2012). It is also clear from the map that

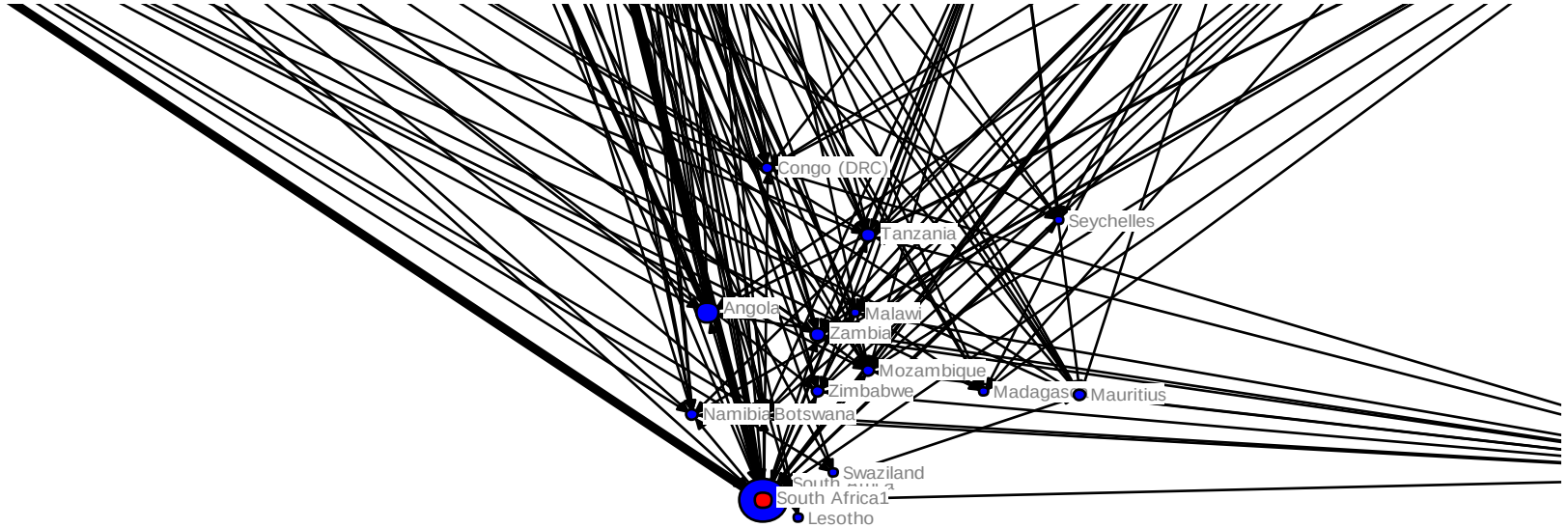
among the source countries, the UK and United States are the biggest origins of FDI for the SADC region and this is mainly due to the fact that they are home to London and New York which are among the top most control and command centres (global cities) of the global economy (Dickens, 2011). The map also reflects the influence of the emerging economies of Asia Pacific (especially China) in the FDI of the SADC region, therefore, agreeing with recent literature which has noted China's FDI rapid growth and significance in SSA which includes SADC (Kaplinsky and Morris, 2009). In regard to the FDI destination SADC countries, it is reflected from figure 14 that a bigger part of FDI in the SADC region is going to South Africa followed by Angola and Tanzania. This is also consistent with the revelations of literature that South Africa is the economic powerhouse of Sub-Saharan Africa and that only Johannesburg from Sub-Saharan Africa could be regarded as a moderate contender within the world economy (Wall, 2011a).

Figure 14: Spatial map-Geographical distribution of all FDI in the SADC region



Based on FDI markets

Figure 15: Spatial map-Geographical distribution of all FDI in the SADC region



Based on FDI markets

4.7. Important factors attracting FDI to Africa and the SADC region

This part of the analysis is about explanatory statistics. The aim of this section is to find out the important factors responsible for attracting FDI in Africa in general and SADC in particular.

4.7.2. Regression Analysis results

As mentioned earlier, 14 regression analyses were run for both African and Asian data. The first regression analysis was between the global competitiveness index (GCI) and FDI. The second regression model was run between the 12 pillars and FDI. Then 12 regression analyses were conducted on all the sub-categories of the 12 pillars. The report of the results (Africa) in this analysis show the significance of the model by citing the *F* and the associated *p* values, along with the adjusted R square, which indicates the strength of the model. The Adjusted R Square value tells what the model accounts for (%) of variance in predicting FDI. The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable (Location factors in this case) has a large effect on the dependent variable (FDI in this case). Then the *F* and *p* values from the ANOVA test assess the overall significance of this model. Therefore, as $p < 0.05$ standard, the model is significant in the sense that all the ANOVA tests of the 14 analyses that were run gave *p* values<0.05. Detailed results of this analysis (Africa) for only location factors that show a significant relationship with FDI are discussed in the paragraphs that follow below.

4.7.2.1. Africa

4.7.2.1.1. Global Competitiveness Index (GCI) and FDI

Adjusted R square =.241: F=12.766, *p<.001*(stepwise method).

Predictor or Independent Variable	**Beta**	***p***
Global Competitiveness Index	.512	.001

The above results show a positive significant relationship between the global competitiveness index (GCI) and FDI, and therefore rejecting the null hypothesis of this research. Since there is only one predictor (GCI) for FDI in this model, this also implies that there is a significant positive correlation between GCI and FDI, which goes to show that, to a greater extent, measurement design and process of national competitiveness by the World Economic Forum is credible.

4.7.2.1.2. Twelve (12) pillars and FDI

Adjusted R square = .700: F= 55.929, *p<.000* (stepwise method).

Predictor or Independent Variable	Beta	*p*
Market Size	.688	.000
Business Sophistication	.341	.001

The adjusted R square value above reflects that 70% variance in FDI is accounted for by availability of airline seats and quality of electricity factors. It is clear from the above results that two location factors (market size and business sophistication) emerged to have a significant relationship with FDI. However, since market had a higher standardised Beta coefficient than business sophistication, it has been acknowledged in this study as the most important pillar in attracting FDI for Africa. The significant relationship between market size and FDI in Africa can be explained by the fact that there is increasing African consumer affluence because of the growing population and a trend towards urbanisation which show potential for a large emerging middle class (market-seeking incentives) and most global firms are now looking to tap into this African market (Ismall, 2013). However, it is worth noting that most African nations remain at a disadvantage compared to other fast-growing regions with respect to market-seeking incentives, owing to narrow markets and weak regional integration (Ismall, 2013). It is also worth mentioning here that this finding does not erase the literature pointing to the fact that most of the FDI by volume in Africa, has been and continues to be resource seeking-that is extraction and exporting of primary commodities (especially oil, gas, metals and minerals) and agricultural products (Asiedu, 2006; Turok and McGranahan, 2013). The results also imply that business sophistication is also taking root in some African countries, especially those with sophisticated economies (e.g. South Africa and Egypt).

4.7.2.1.3. Institutional Environment indicators and FDI (Category 1)

Adjusted R square =.219: F= 10.810, *p<.000*(stepwise method).

Predictor or Independent Variable	Beta	*p*
Strength of investor protection	.491	.002

The adjusted R square value above reflects that 21.9 % variance in FDI is accounted for by strength of investor protection. With respect to category 1, the results reveal that there is a significant relationship between the strength of investor protection and FDI. Investor protection is defined by the extent to which the commercial law and its enforcement protect investors from expropriation by company insiders (both managers and controlling shareholders). In most cases when outside investors finance firms, they face a risk that the returns on their investments will never materialize because the controlling shareholders or managers will simply keep them. To a greater extent, potential shareholders and creditors finance firms because their rights are protected by the law. These outside investors are more vulnerable to expropriation, and therefore more dependent on the law. The fact that this research has revealed a significant relationship between strength of investor protection and FDI means that investor protection laws do exist in most African countries, and they therefore just need further strengthening to attract more FDI.

4.7.2.1.4. Infrastructure indicators and FDI (Category 2)

Adjusted R square = .665: F= 48.065, *p<.000*(stepwise method).

Predictor or Independent Variable	Beta	*p*
Available airline seat/kms/week/millions	.772	.000
Quality of electricity supply	.238	.036

The adjusted R square value above reflects that 66.5 % variance in FDI is accounted for by availability of airline seats and quality of electricity factors. The above results show that two location factors (available airline seats and quality of electricity supply) have a significant relationship with FDI in Africa. However, since available airline seats has a higher standardised Beta coefficient than quality of electricity supply, this study views available airline seats as the most important location factor in in attracting FDI for Africa under this category. By definition, available airline seat kilometres refer to how many seat kilometres are actually available for purchase on an airline. This result is not surprising in the sense that Executives and Managers of MNCs are regular fliers. Therefore, they would love to invest in countries where they can fly in and out as regular as possible to enhance their business transactions. The results further demonstrate that most African countries (especially their capital cities) have access to air transport, but there is still room to further improve air transport infrastructure in order to attain high-quality air connectivity in Africa and enhance competitiveness. With respect to quality of electricity supply, the result is again not surprising in the sense that economies largely depend on electricity supplies that are free of interruptions and shortages so that businesses and factories can work unimpeded. More often than not, power cuts and shortages increase business costs, reduce productivity and deter private investment. Therefore, power generation and supply needs to be strengthened in Africa in order to create a more enabling environment for foreign investments.

4.7.2.1.5. Macroeconomic indicators and FDI (Category 3)

Adjusted R square = .504: F= 15.264, *p*<.000(stepwise method).

Predictor or Independent Variable	Beta	*p*
Country credit rating	.861	.000
Inflation (annual)	.590	.000

It is clear from the above results that two location factors (country credit rating and annual inflation) have a significant relationship with FDI in Africa. Country credit rating and inflation are among the measures of macroeconomic stability of a country. Favourable country credit rating and better inflation rates are a motivation to FDI. It should be noted here that according to the World Economic Forum, the lower the inflation rate of a country, the more competitive that country is. For example, for inflation rates between 0.5 and 2.9%, a country received the highest possible score of 7, and outside this range, scores decreased linearly as they moved away from these values (World Economic Forum, 2012). Therefore, a positive beta value of inflation above refers to lower inflation

rates. Similarly, country credit rating refers to expert assessment of the probability of sovereign debt default on a 0–100 (lowest probability) scale (World Economic Forum, 2012). Subsequently, firms cannot operate efficiently when inflation rates are out of hand (high), while unsustainable country debts are not good for business because most of the country's resources would be channelled to debt serving instead of investment. This research result makes sense because it has generally been observed that the political process of regulatory reform has gained momentum in many African nations, with policy efforts targeted at strengthening domestic business environments and investment frameworks (Ismall, 2013: Blanke and Ko, 2013) and that many countries in Africa remained relatively unscathed by the global economic crisis due to prudent macroeconomic management (World Economic Forum, 2013). In addition, most African countries that were highly indebted have received debt relief in the last two decades. These efforts just need further strengthening and consolidation by African countries for them to yield further results in terms of attracting FDI.

4.7.2.1.6. Health and Primary education indicators and FDI (Category 4)

Adjusted R square =.191: F= 9.011, *p*<.005(stepwise method).

Predictor or Independent Variable	Beta	*p*
Malaria cases	-.463	.005

Malaria cases reveal a significant negative relationship with FDI. Generally speaking, malaria is one of the health issues in Africa, especially Sub-Sahara Africa. This when viewed within the general context of health is very critical in the sense that a healthy workforce is vital to a country's competitiveness and productivity. Workers who are ill cannot function to their potential and will be less productive. Moreover, poor health leads to significant costs to business, as sick workers are often absent or operate at lower levels of efficiency, and this can deter foreign investments in the sense that investors are hardly willing to entertain such costs. Therefore, investment in the provision of health services in Africa is thus critical for clear economic, as well as moral, considerations.

4.7.2.1.7. Higher education and training indicators and FDI (Category 5)

Adjusted R square =.233: F=6.607, *p*<.004(stepwise method).

Predictor or Independent Variable	Beta	*p*
Availability of research and training services	.519	.002
Quality of math and science education	-.323	.039

Arising from results in the above model, only about 23.3% variance in FDI is accounted for by availability of research and training services and quality of math and science education as shown by the adjusted R square value. It is also clear from the model that the relationship between availability of research and training services and FDI in Africa is significant. This result could mean that to some extent, research and training services are available in Africa, but their quantity and quality may leave much to be desired and therefore needs serious improvements to be abreast with global standards.

The results also show a significant but negative relationship between the quality of math and science education and FDI in Africa. This could possibly imply that the quality of math and science education in Africa is just too low to have any meaningful impact on FDI as compared to the developed western economies and the emerging economies of Asia. This is more so in the sense that according to latest statistics, only half of the population in Africa attends secondary school, and a mere 10% go on to higher education, compared with close to 40% in Latin America and Asia (Blanke and Ko, 2013), while in the western world higher education is almost a basic need which every citizen should attain. Therefore, there is need for Africa to generally improve on the quantity and quality of higher education and training services (especially in math and science) in order to enhance nurturing pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the global economy.

4.7.2.1.8. Goods market efficiency indicators and FDI (Category 6)

Adjusted R square =.388: F=11.775, *p*<.000(stepwise method).

Predictor or Independent Variable	**Beta**	***p***
Buyer sophistication	.607	.000
Imports as a percentage of GDP	-.441	.003

Arising from the adjusted R square value, we can conclude that only 38.8% of variance in FDI is explained by buyer sophistication and imports as a percentage of GDP in this model. The results also show a significant relationship between buyer sophistication and FDI in Africa. As seen earlier, this can partly be explained by the fact that due to Africa's rapidly growing new consumer base as a result of the growing middle class, customers and buyers are slowly becoming more sophisticated and oriented to fashion and product taste, and therefore increasing the market size and demand for such products. These conditions are a motivation for market-seeking FDI. It is also clear from the results above that there is a significant negative relationship between imports as a percentage of GDP and FDI. Since the sum of imports and exports as a percentage of GDP indicator measures a country's 'openness' or 'integration' in the world economy (DBIS, 2013), imports as a percentage of GDP is also a measure of country' 'openness or integration in the world economy'. An increase in the share indicates a higher degree of a country's or region's integration into international trade flows (DBIS, 2013. This result can be attributed to the fact that Africa's integration in the global economy is currently limited mainly due to the fact that most African countries are small in terms GDP and population, among other factors. There is very little trade going on between Africa and the rest of the world. For example, Sub-Saharan Africa's share of world trade between 1995 and 2010 was just a paltry 2% and in 2011, sub-Saharan African economies exported a mere 12% of their goods within their region, compared with 25% in Southeast Asia, 49% in North America and 65% in the European Union (Blanke and Ko, 2013). Therefore, due to this limited integration of African economies in international trade, the impact on FDI is negligible in the sense that to a greater extent FDI and international trade tend to favour each other. There is really need for Africa to promote its integration into international trade flows.

4.7.2.1.9. Labour market efficiency indicators and FDI (Category 7)

Adjusted R square = .411: F=9.369, *p*<.000(stepwise method).

Predictor or Independent Variable	Beta	*p*
Women in labour force ratio to men	-.440	.002
Reliance on professional management	.519	.001
Cooperation in labour employer relations	-.366	.011

Arising from the adjusted R square value, the results above reveal that only 41.1% of the variance in FDI is accounted for by the 3 independent variables above. It is also clear that out of the three independent variables; only reliance on professional management has a significant positive relationship with FDI. This means that there are efforts by African countries to emphasize professionalism in the running of business, which of course need strengthening. The results show that the other two factors namely; women in labour force ratio to men and cooperation in labour employer relations impact FDI negatively in Africa. The results are not very surprising in the sense that generally speaking, even though the population of women is more than that of men in most African countries, few women compared to men in Africa participate in FDI related productive processes. For example, it is generally agreeable in literature that to a greater extent most FDI by volume in developing countries (Africa inclusive) has historically been, and continue to be resource-seeking by (Asiedu, 2006; Burger et al, 2012; Turok and McGranahan, 2013), in particular extractive industries for natural resources such as oil, natural gas, minerals and metals. Most of these industries are labour-intensive, but are dominated by men due to the manual labour involved which has been shunned by women in most cases mainly due to historical cultural values of most African countries. In this regard, the contribution of women in this type of resource-seeking FDI is very minimal (if any). Moreover, most women in Africa are just engaged in informal employment such as subsistence farming, small businesses and reproductive chores. To this effect, African countries should strive to provide equity in the business environment between women and men to enhance FDI attraction and improve productivity. With respect to cooperation in labour employer relations, labour disputes and strikes over improved wages and conditions of service are common happenings in most African countries, even in advanced nations such as South Africa, where just recently (August, 2012) about 34 striking miners in a platinum mine in Marikana were shot dead by police during a wage related strike. Definitely, such social disruptions are not a motivation to FDI. It is true that most African countries have labour laws which provide for conflict resolution in labour employer relations, but there is still room for further reform and implementation to keep pace with the dynamics in the global economy.

4.7.2.1.10. Financial market development indicators and FDI (Category 8)

Adjusted R square = .349: F=20.339, *p*<.000(stepwise method).

Predictor or Independent Variable	Beta	*p*
Financing through local equity market	.606	.000

Equity market (stock market) is the market in which shares are issued and traded, either through exchanges or over-the-counter markets. This is one of the most vital areas of a market economy because it gives companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance. The results from this model show that even though the adjusted R value reflect that only 34.9% of variance in FDI is accounted for by financing through local equity market, the relationship between the two variables is significant in Africa. To some extent, this could mean that most African countries have functioning national stock exchange systems, but there are opportunities for improvement to enhance their competitiveness and attract more FDI.

4.7.2.1.11. Technological readiness indicators and FDI (Category 1)

Adjusted R square = .316: F=13.453, *p*<.001(stepwise method).

Predictor or Independent Variable	Beta	*p*
FDI and technology transfer	.584	.001

The results above reveal a significant relationship between technological transfer and FDI, though the adjusted R square value reflects that only 31.6% of FDI variance is explained by technological transfer in this model. This could imply that even though information and communications technology (ICT) uptake remains considerably lower in Africa than in other regions (which have been moving even faster to adopt them), efforts are being made by African countries to enhance Information Communications Technology (ICT).

4.7.2.1.12. Market size indicators and FDI (Category 9)

Adjusted R square =.574: F=50.908, *p*<.000(stepwise method).

Predictor or Independent Variable	Beta	*p*
Domestic market size index	.765	.000

The above results show a significant relationship between domestic market size index and FDI. To a greater extent, this just further emphases the significant relationship between market size and FDI discussed earlier. The argument is more or less the same. There is increasing African consumer affluence because of growing population and a trend towards urbanisation which show potential for a large emerging middle class (market-seeking incentive), and most global firms are now looking to tap into this African market. All that Africa needs is to expand the market size for goods and services through policies that aim at job creation and regional integration, among other things.

4.7.2.1.13. Business sophistication indicators and FDI (Category 10)

Adjusted R square =.292: F=16.280, *p*<.000(stepwise method).

Predictor or Independent Variable	Beta	*p*
Extent of marketing	.558	.000

It is clear from the above that there is a significant relationship between extent of marketing and FDI, though the adjusted R square value reflects that only 29.2% of FDI variance is explained by extent of marketing in this model. This result may imply that even though business sophistication factors are particularly important for countries at an advanced stage of development, branding and marketing strategies are taking root and improving in some African countries. They just need further strengthening and consolidation through dynamic policy making and implementation.

4.7.2.1.14. Innovation Indicators and FDI (Category 12)

Adjusted R square =.256: F=8.906, *p*<.007(stepwise method).

Predictor or Independent Variable	**Beta**	***p***
Quality of scientific research institutions	.537	.007

In the above model, only about 25.6% variance in FDI is accounted for by quality of scientific research institutions as shown by the adjusted R square value. It is also clear from the model that the relationship between quality of scientific research institutions and FDI in Africa is significant. This result again could mean that even though innovation indicators mainly apply to the innovation driven economies (advanced developed economies), some African countries (e.g. South Africa and Egypt) have good quality scientific and research institutions. However, the situation in most African countries leaves much to be desired in this regard, and therefore need to improve for them to enhance their competitiveness.

4.7.2.2 Asia

A detailed report of the regression results is not presented on Asia in the sense that this analysis was done to enable Africa to draw conclusions from Asia, which is a notch higher in development. To this effect, only important location factors and their significant coefficients are presented. The location factors for Asia which show a significant relationship with FDI, but do not currently apply to Africa include:- labour market efficiency (.003), quality of primary education (.036), quality of management schools (.000), intensity of local competition (.000), affordability of financial services(.000), local supplier quantity(.000) and availability of scientists and engineers (.000). These location factors will be very critical for Africa in the near future if it aspires to reach the economic development and prosperity levels of most Asian countries today. For example, today Asia (especially China) is the main factory of the global economy, hence the importance of scientists and engineers in the region. Therefore, if Africa aspires to be a global factory at some point in future, developing a pool of high class scientists and engineers through training and attraction of talent is not optional. The same applies to most of the above cited location factors where Asia is doing well.

5.1. Conclusions

5.1.1. Growth, Position, Competition and Geography of FDI in SADC

Arising from the foregoing analyses, the following are the major conclusions of the study with respect to growth, position, competition and geography of FDI in SADC.

With respect to growth, this study concludes that though modest, there has been a general upward growth in the number of investments flowing into SADC between 2003 and 2012, reaching a peak in 2011 with FDI average growth rate of 11.52 per cent. Of course this increase is punctuated by declines, specifically in 2008 and 2012, mainly because of the economic crisis experienced in most parts of the developed world in those years which are the major sources of FDI for SADC. Another interesting feature is the country composition of SADC's number of FDIs. South Africa dominates and this is not surprising in the sense that South Africa is the most developed economy in the region. In addition, the top 5 growing sectors in SADC, according to this study are: - financial services, metals, software IT services, business services and communication in that descending order.

With regard to position of top 20 SADC cities in attracting FDI, the study concludes that Johannesburg tops the list, while Luanda and Cape Town are in the 2nd and 3rd positions. Lusaka, which is the case of reference in this research, is in 12th position, demonstrating just a moderate to weak position in the attraction of FDI in the region. Furthermore, the top 20 source countries of FDI in the SADC region are dominated by cities from Western Europe, North America and South East Asia, which reinforces the argument that the geography of command and control in the global economic system is highly concentrated in North America, Western Europe and the Asian Pacific (Taylor et al., 2011). Then the top 5 sectors in attracting FDI, according to this research are:-financial services, metals, software and IT services, business services and communication in that descending order. In addition, UK, United States, Portugal, India, South Africa and Australia are the major sources of FDI for the top 5 sectors in SADC. Worth noting again is the fact that South Africa, which is a SADC country, is among the major source countries of FDI that flows into top 5 sectors in SADC. This further depicts South Africa as the economic power house of Sub-Saharan Africa in general and SADC in particular.

With respect to city competition for FDI, this research concludes that the top 5 competitors to Lusaka city are Windhoek, Kinshasa, Lubango, Harare and Lobito in that descending order. High level cities such as Johannesburg and Cape Town do not appear among Lusaka's competitors mainly because these compete at a higher level bearing in mind that city competition happens at different scales and that different cities have different strengths (Sassen, 2008). Therefore, Lusaka can only apply a complementary approach to these cities in order to attract FDI.

With regard to the SADC world network of FDIs, it is concluded in this study that most of the FDI for SADC comes from Western Europe, North America (United States and Canada) and South East Asia (India, China and Japan).The other source countries of FDI are Australia and United Arab Emirates. To a greater extent, this is in line with the theory that the geography of command and control in the

global economic system is highly concentrated in North America, Western Europe and the Asian Pacific (Taylor et al., 2011, World Economic Forum, 2012). The UK and United States are the biggest origins of FDI for the SADC region and this is mainly due to the fact that they are home to London and New York which are among the top most control and command centres (global cities) of the global economy (Dickens, 2011). Within SADC, only South Africa is investing in other SADC countries. In addition, a bigger chunk of FDI in the SADC region is going to South Africa. This is also consistent with the revelations of literature that South Africa is the economic power house of Sub-Saharan Africa (Jenkins and Thomas, 2002; Wall, 2011a).

5.1.2. Most important location factors for attracting FDI in the SADC region

The following are the major conclusions with regard to the most important factors for attracting FDI in the SADC region.

First and foremost, the writer concludes that market size is the most important location factor in attracting the number of FDIs in Africa in general and SADC in particular between 2003 and 2012 which is partly explained by the fact that there is increasing African consumer affluence because of the growing middle class in most African countries and most MNCs are scrambling to tap into this market. To a greater extent, this agrees with other empirical findings which have stressed the importance of market size in attracting MNCs and FDI (Morisset, 2001; Jenkins and Thomas, 2002; Schiff and Winters, 2002; Muradzikwa, 2002; Ayayi, 2006; Moreira, 2009; Turok, 2010; Dickens, 2011; Burger et al, 2012; Ismall, 2013). Of course this does not erase the literature pointing to the fact that most of the FDI for Africa in terms of volume has been and continue to be resource seeking, especially natural resources (Morisset, 2001; Jenkins and Thomas, 2002; Asiedu, 2006; Turok and McGranahan, 2013).

Strength of investor protection is also another important location factor in attracting FDI in Africa according to this study mainly because to a larger extent, outside investors are more vulnerable to expropriation by managers and controlling shareholders, and hence, more dependent on the law. The significance of credible legal systems and other institutions for attracting FDI have been highlighted by other studies (Begg, 2002, Kitson et al, 2004; Ayayi, 2006; Wall, Burger & van der Knaap, 2011; World Economic Forum, 2010; World Economic Forum, 2012). Availability of airline transport is yet another important location factor going by this study and this is mainly because Executives and Managers of MNCs are regular fliers as they conduct business transactions across the globe.

On the macroeconomic front, country credit rating and inflation (macroeconomic indicators) are other important location factors in attracting FDI in Africa between 2003 and 2012 arising from this study. In fact, it is on record that many countries in Africa remained relatively unscathed by the global economic crisis of 2008 and 2012 due to prudent macroeconomic management (World Economic Forum, 2013). With respect to health indicators, malaria cases reveal a significant negative relationship with FDI in this study. Generally speaking, malaria is one of the health issues in Africa,

especially Sub-Sahara Africa. This, when viewed within the general context of health is very critical in the sense that a healthy workforce is vital to a country's competitiveness and productivity. With regard to higher education and training, availability of research and training services is an important location factor for attracting FDI in Africa under this study.

Another location factor which has come out important for attracting FDI in Africa is buyer sophistication partly because of Africa's rapidly growing new consumer base as a result of the growing middle class which is slowly becoming more sophisticated and oriented to taste and fashion. The importance of a strong and prosperous middle class to the growth of the economy and its functions at city, national and global levels has been stressed by theory (Sassen, 2008).

With regard to labour market efficiency issues, reliance on professional management is an important location factor for attracting FDI in Africa arising from this study. The writer also concludes that to a greater extent gender inequality and labour employer relations are quite problematic in most African countries, and therefore, are not motivating to FDI. Financing through local equity market (stock market) is another important location factor for attracting FDI according to this study mainly because stock exchange markets give companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance. Other important factors for attracting FDI in Africa revealed by this study are technological transfer, extent of marketing and quality of scientific research institutions.

On a comparison basis, it is concluded from this research that the important location factors for Asia for attracting FDI, but are not currently present in Africa include:- labour market efficiency, quality of primary education, quality of management schools, intensity of local competition, affordability of financial services, local supplier quantity and availability of scientists and engineers. These location factors will be very critical for Africa in the near future if Africa is aspiring to reach the economic development and prosperity levels of most Asian countries today.

5.2. Recommendations

Needless to say that Africa in general and SADC in particular is today at a crossroads, and therefore, decisions and policies made presently will determine the future development path. It is also note worth that to bolster economic potential, reforms and investments are needed to increase productivity and competitiveness. Arising from this study, the following recommendations have been put forward categorised under those for SADC and those for the Zambian government and Lusaka City Council.

5.2.1. Southern African Development Community (SADC)

1. There is need for SADC to aggressively continue pursuing policies for greater regional integration (including free trade area initiatives) because this will provide an important stepping stone to more diversified, inclusive and sustained growth in member states. This is most likely going to promote political stability, policy coordination by SADC countries and expansion of the market

size, among other things, and therefore make the region more attractive to FDI. However, it should be born in mind that these regional initiatives need to be designed in such a way that the benefits of new FDI are broadly spread across the region and avoid a situation where much of the FDI flowing into SADC will locate in South Africa which is a core economy in the region as shown in this study.

2. Continued prudent macroeconomic policy for SADC is very critical as this remains the solid foundation for economies to withstand repercussions of economic shocks and crises.
3. There is need for SADC countries to massively invest in physical infrastructure (roads, air transport, ports, ICT & energy) in order to attain high-quality connectivity and power supply for smooth running of business and industries.
4. There is need for all SADC countries to enhance consistent, transparent and effective policies and regulation systems for Information, Communication and Technology (ICT) to significantly improve the quality, access and uptake levels of ICT services by businesses and the citizens in the region.
5. There is need for SADC to enhance information management systems of key development indicators.

5.2.2. Zambian government and Lusaka City Council

6. There is need for continued prudent macroeconomic policy and management at national level.
7. There is need to promote policies aimed at economic diversification, including export markets and local value addition, particularly in the manufacturing and service industries, to create jobs and resilience against economic shocks and crises.
8. There is need to strengthen the operations of the Zambia Development Agency and undertake wide and deep reforms to improve the investment climate and support ease of doing business as a means to increase investment and generate new employment opportunities.
9. There is need for the country to strengthen the rule of law, protection of property rights and formulation of liberal FDI regulatory and legal regimes through sound investment policies and legal reforms in order to guarantee investor protection and raise investor confidence.
10. There is need to continue walking the path of investing in physical infrastructure (roads, air transport, ports, ICT & energy) in order to attain high-quality connectivity and power supply for smooth running of business and industries.
11. There is need to invest in the provision of health services on both economic and moral grounds to enhance the quality of human resources.
12. There is need to improve the quantity and quality of higher education and training services in universities and colleges, especially in math and science, in order to enhance nurturing pools of well-educated workers.
13. There is need to invest in scientific and research institutions in order to improve their quantity and quality to enhance competitiveness.
14. There is need to promote and strengthen professional management in the conduct of both private and public business.
15. There is need to provide for gender equity in the business environment in order to promote women's participation in the productive sectors of the economy.

16. There is need to promote policies aimed at reforming and enforcing labour laws which provide for strong consultations and dialogue among government, the private sector and trade unions in labour related conflict resolution strategies.
17. There is need to enhance consistent, transparent and effective policies and regulation systems for Information, Communication and Technology (ICT) to significantly improve the quality, access and uptake levels of ICT services by businesses and the citizens.
18. Lusaka City Council (LCC) should consider setting up a department (with subsequent capacity building and training activities) that deals specifically with city competitiveness and attraction of investments. Once in place, this department should be working hand in hand with other related existing institutions such as the Zambia Development Agency (ZDA).
19. Lusaka City Council should consider setting up a department within its current organogram that exclusively deals with the marketing and branding of Lusaka city as a prime investment destination city in the SADC region.
20. Zambia Development Agency and Lusaka City Council should make use of digital marketing and social media tools as a strategy to communicate Lusaka City brand and promote the city as an important investment destination in the SADC region
21. Lusaka City Council should consider conducting a qualitative study of location factors in her competitors such as Windhoek in order to identify policies, programmes and projects to include in the strategic plans for Lusaka city to enhance the city's competitiveness.
22. Establishing and strengthening information management systems on key development indicators is very critical.

References

Alderson, A. S., and Beckfield, J. 2004. Power and position in the world city system. American Journal of Sociology 109:811–51.

Asiedu, E. 2006. Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. United Nations University, 2006.

Ayayi, S. 2006. Foreign Direct Investment in Sub-Sahara Africa: Origins, Targets, Impact and Potential.

Bank of Zambia.2011. Annual Report. Lusaka, Zambia

Bartels, L. F.,Kratzsch, S, and Eicher, M. 2009. Foreign Direct Investment in Sub-Saharan Africa: Determinants and location decisions. Research and statistics branch working paper 08/2008. UNIDO, Vienna.

Beaverstock, J.V., Smith, R.G and Taylor, P.J. 2000. World City Network: A new Metageography. Annals of the Association of American Geographers, Vol.90.No.1 (March, 2000). pp. 123-134. Taylor and Francis Ltd.

Begg, I. 2002. Investability: The key to competitive Regions and Cities? *Regional Studies,* 36 (2), pp. 187-193.

Blank, L and Ko, C. 2013. Can Africa's Lions Match Asian Tigers? African perspectives, May 15, 2013.

Boschma, R. 2004. Competitiveness of Regions from an Evolutionary Perspective. *Regional Studies, Vol.* 38 (9), pp. 1001-1014. Available at: http://dx.doi.org/10.1080/0034340042000292601 .

Burger, M.J., van der Knaap and Wall, R.S. 2012. Revealed competition for greenfield investments between European regions. *Economic Geography,* pp. 1-30. Available at: http://joeg.oxfordjournals.org .

Carroll W K. 2007.``Global cities in the global corporate network'' Environment and Planning A 39 2297-2323

Castells, M. 1996. The rise of the network society. Oxford, U.K.: Blackwell.

Central Statistical Office, 2011. 2010 Census of Population and Housing preliminary report, Government Printers, Lusaka, Zambia

Chingono, M and Nakana, S. 2009. The challenges of regional integration in Southern Africa. *African Journal of Political Science and International Relations,* 3 (10), pp. 396-408.

DBIS, 2013. BIS performance indicators. Openness to trade: exports plus imports as a share of GDP, ranked against major competitors. Department for Business, Innovation and Skills, London

Dicken, P. 2011. A global shift. Mapping the changing contours of the world economy. Sixth edition. The Guilford press, New York and London.

Dunning, J.H. 1977. ''Trade location of economic activity and the MNE: a search from an eclectic approach'', in the International Allocation of Economic Activity, Eds B Ohlin, P.O.Hesselborn, P.M.Wijkman (Macmillan, London) pp. 395-418.

Ezeoha, E.A and Cattaneo, N. 2011. FDI flows to Sub-Sahara Africa: The impact of finance, Institution and Natural Resource endowment. Paper submission for the GSAE Conference.

GRZ, 2012. National Report-Zambia. Report presented at the United Nations Conference on Sustainable Development, June, 2012, Rio de Janeiro, Brazil.

Hufbauer, G.C and Draper, P. 2013. Facts and Figures. In: World Economic Forum, 2013. Foreign Direct Investment as key driver for Trade, Growth and Prosperity, Geneva, Switzerland.

Humblin, V.,van der Lugt, S., Burgess, M and Schickerling, E. 2011. Assessing China's Role in Foreign Direct Investment in Southern Africa. Centre for Chinese Studies, Stellenbosch University, South Africa.

Ismall, S. 2013. A view from Sub-Saharan Africa: Fresh Opportunities for integration. In: World Economic Forum, 2013. Foreign Direct Investment as key driver for Trade, Growth and Prosperity, Geneva, Switzerland.

Jenkins, C and Thomas, L. 2002. Foreign Direct Investment in Southern Africa: Determinants, Characteristics and Implications for economic growth and poverty alleviation. CSAE, University of Oxford.

Kaplinskya, R and Morris, M.2009. Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons. European Journal of Development Research (2009) 21, 551–569. doi:10.1057/ejdr.2009.24

Kitson, M., Martin, R and Tyler, P. 2004. Regional Competitiveness: An Elusive yet Key Concept? *Regional Studies,* 38 pp. 991-999.

Moreira, B. S. 2009. THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT. What is the evidence for Africa? *UNISUL, Tubarão,* 2 (1), pp. 83-104.

Morisset, J. 2001. Foreign direct investment in Africa: policies also matter. OECD global forum on international investment, Mexico City, 26-27 November 2001.

Ndulo, M., Mudenda, D., Ingombe, L and Muchimba, L. 2009. Global Financial Crisis. Discussion Series Paper 10: Zambia. Overseas Development Institute, London.

Neffke, F., Henning, M and Boschma, R. 2011. How Do Regions Diversify over Time? Industry Relatedness and the Development of New Growth Paths in Regions. *Economic Geography,* 87 (3), pp. 237-265.

Provost, C and Harris, R. 2013. China commits billions in aid to Africa as part of charm offensive-interactive. *The Guardian*, Monday 29 April, 2013.

Rosenblat, C. 2010. Opening the Black Box of Agglomeration Economies for measuring cities' competitiveness through international firm networks. *Urban Studies,* 47 (18), pp. 2841-2865.

Rugman, A., 2005. *The Regional Multinationals*, Cambridge University Press, Cambridge.

SADC, 2004. Regional Indicative Strategic Development Plan (RISDP), Gaborone, Botswana

SADC., 2012. Investment climate in the SADC Region. Report presented at the first Japan-SADC Infrastructure Investment Seminar, 14th March, 2012, Tokyo, Japan.

Sassen, S. 2008. The Specialised Differences of Global Cities. Newspaper Essay, South Africa, December, 2008.

Schiff, M and Winters, A.L. 2003. Regional Integration and Development. World Bank and Oxford University Press.

Storper, M. 1997. *The Regional World: Territorial Development in a Global Economy*. New York: Guilford Press.

Taylor, J.P., et al. 2011. Global Urban Analysis. A survey of cities in globalisation. Earthscan, London.

Taylor, P.J. 2010. Competition and Cooperation between Cities in Globalization. *GaWC publications*

Times of Zambia, 14th December, 2011: The year when the country reached lower income country status.

Turok, I and McGranahan, G. 2013. Urbanisation and Growth: the arguments and evidence for Africa and Asia. SAGE. http://eau.sagepub.com

Turok, I. 2004. *Cities, Regions and Competitiveness, Regional Studies, Vol. 38.9, pp. 1069–1083*.

UNCTAD, 2011. An Investment Guide to Zambia. Opportunities and Conditions. United Nations, New York & Geneva, 2011.

UN-HABITAT, 2008. Zambia: Lusaka Urban Profile, UN-HABITAT, Nairobi, Kenya

Wall, R. S. 2011a. Sub-Saharan Cities in Globalisation: In *Taylor, et al, 2011. Global Urban Analysis. A Survey of Cities in Globalization.,* pp. 318-323. Earthscan, London.

Wall, R. S. 2011b. Southern African Cities: In *Taylor, et al, 2011. Global Urban Analysis. A Survey of Cities in Globalization,* pp. 318-323. Earthscan, London.

Wall, R. S., 2010. **The Need for Archinomics**. *GaWC Publications.*

Wall, R. S., Burger, J.M., & van der Knaap, G.A., 2011. The geography of global corporate networks: the poor, the rich, and the happy few countries. *Environment and Planning A 2011, Volume 43, Pages 904 ^ 927,* 43 pp. 904-927.

Wall, R.S and Burger, M. 2012. De Strijd om Kapitaal. De Haag: Province of South-Holland.

Wall, R.S and van der Knaap, G.A. 2011. Sectoral Differentiation and Network Structure within Contemporary Worldwide Corporate Networks. *Economic Geography,* 87 (3), pp. 267-308.

World Economic Forum, 2013. The Africa Competitiveness Report 2013. Geneva, Switzerland

World Economic Forum., 2010. The Global Urban Competitiveness report-2010. Edward Elgar Publishing Limited. UK and USA

World Economic Forum., 2012. The Global Competiveness report (2012-2013). Geneva, Switzerland

Appendix 1: FDI and location factors for 38 African countries

Country	FDI	1st pillar: Institutions(1-7)	2nd pillar: Infrastructure(1-7)	3rd pillar: Macroeconomic environment(1-7)	4th pillar: Health and primary education(1-7)	5th pillar: Higher education and training(1-7)	6th pillar: Goods market efficiency(1-7)	7th pillar: Labour market efficiency(1-7)	8th pillar: Financial market development(1-7)	9th pillar: Technological readiness(1-7)	10th pillar: Market size(1-7)	11th pillar: Business sophistication(1-7)	12th pillar: Innovation(1-7)	GCI Global Competitiveness Index (1-7)
South Africa	899	4.47	4.19	4.93	4.03	4.07	4.68	4.09	5.36	3.63	4.87	4.49	3.61	4.39
Egypt	575	4.00	3.75	3.51	5.40	3.57	3.92	3.26	3.70	3.15	4.73	3.93	3.00	3.94
Morocco	534	3.98	3.67	4.94	5.45	3.54	4.15	3.54	3.93	3.34	4.05	3.82	3.02	4.09
Nigeria	315	3.32	2.24	5.00	3.31	3.08	4.18	4.34	4.23	2.87	4.42	3.97	3.09	3.61
Algeria	312	3.35	3.12	5.95	5.52	3.40	3.48	3.40	2.82	2.62	4.29	3.05	2.63	3.87
Kenya	236	3.32	2.88	3.85	4.44	3.62	4.05	4.54	4.70	2.98	3.46	4.05	3.41	3.72
Ghana	191	3.92	2.94	3.43	4.25	3.27	4.07	4.11	4.25	2.83	3.32	3.53	2.79	3.61
Tanzania	138	3.79	2.44	4.15	4.26	2.57	3.84	4.34	3.95	2.62	3.28	3.50	3.03	3.56
Libya	132	3.72	2.89	5.74	4.70	3.73	3.45	3.17	2.91	2.79	3.31	3.31	2.61	3.80
Uganda	130	3.34	2.39	4.23	3.81	2.81	3.74	4.78	3.90	2.75	3.15	3.43	2.99	3.46
Zambia	121	3.90	2.53	4.05	3.73	2.86	4.01	4.01	4.45	2.74	2.57	3.47	2.89	3.49
Mozambique	106	3.31	2.39	4.01	3.34	2.45	3.55	3.91	3.26	2.64	2.89	3.15	2.70	3.19
Botswana	81	4.73	3.71	4.96	4.26	3.61	4.02	4.47	4.59	3.08	2.85	3.48	3.01	4.08
Namibia	71	4.43	4.36	5.17	4.36	3.15	4.07	4.45	4.54	3.08	2.57	3.57	2.81	3.97
Rwanda	70	5.23	3.14	4.51	4.95	3.07	4.35	5.21	4.28	3.06	2.20	3.73	3.25	4.14
Ethiopia	58	3.79	2.61	4.02	4.00	2.62	3.74	4.28	3.22	2.34	3.52	3.16	2.67	3.46
Mauritius	57	4.52	4.20	4.35	5.78	4.02	4.63	4.29	4.81	3.65	2.71	4.25	3.00	4.26
Senegal	52	3.65	2.77	4.50	4.33	3.28	4.14	3.95	3.63	3.22	2.77	3.89	3.27	3.69
Zimbabwe	43	3.24	2.66	2.37	4.13	3.15	3.35	3.51	3.76	2.46	2.08	3.26	2.62	3.07
Cote d'Ivoire (Ivory Coast)	38	2.94	3.20	4.31	3.29	3.04	3.69	4.10	3.49	3.03	3.05	3.44	2.72	3.40
Cameroon	29	3.27	2.31	5.02	4.10	2.96	3.76	4.04	3.28	2.63	3.17	3.37	2.86	3.52
Madagascar	25	3.20	2.32	3.72	4.85	2.70	3.79	4.37	3.06	2.54	2.73	3.30	2.90	3.39
Gabon	22	3.94	2.71	6.25	4.11	3.05	3.73	4.43	3.62	3.53	2.74	2.93	2.35	3.82
Sierra Leone	20	3.56	2.09	2.47	2.95	2.30	3.84	3.92	3.34	2.46	1.76	3.10	2.27	2.82
Guinea	18	3.18	1.86	2.63	3.52	2.60	3.71	4.49	3.07	2.45	2.27	3.03	2.62	2.90
Liberia	17	4.31	2.77	4.51	4.10	3.30	4.54	4.45	4.03	2.62	1.24	3.99	3.34	3.71
Burkina Faso	17	3.72	2.29	4.22	3.31	2.54	3.79	4.27	3.47	2.51	2.55	3.16	2.95	3.30

Mauritania	16	3.43	2.35	3.84	4.11	2.27	3.46	3.89	2.99	2.66	2.13	3.22	2.50	3.22
Gambia	15	4.56	3.52	3.99	4.14	3.30	4.05	4.66	3.92	2.93	1.47	3.84	2.99	3.79
Malawi	15	4.16	2.32	3.42	4.03	2.87	3.98	4.56	4.20	2.55	2.38	3.50	3.00	3.45
Swaziland	15	3.73	3.23	3.93	3.64	2.85	3.87	4.00	3.89	2.57	1.97	3.20	2.29	3.33
Burundi	15	2.84	2.06	3.11	3.85	2.20	3.14	4.14	2.52	2.18	1.52	2.89	2.35	2.82
Seychelles	14	4.25	4.71	4.55	5.95	4.98	4.27	4.54	3.79	3.88	1.38	3.74	2.98	4.10
Mali	12	3.55	2.63	4.47	3.30	2.66	3.74	3.93	3.24	2.60	2.55	3.21	2.98	3.34
Cape Verde	8	4.08	2.84	4.13	5.49	3.46	3.86	3.75	3.52	3.45	1.17	3.17	2.64	3.55
Chad	6	2.68	1.77	4.23	2.99	2.18	2.90	3.96	2.86	2.18	2.48	2.95	2.49	2.85
Lesotho	5	3.35	2.34	4.86	3.69	2.86	3.81	4.10	3.44	2.48	1.93	3.12	2.54	3.36
Benin	4	3.56	2.51	4.66	4.55	3.00	3.77	4.10	3.69	2.58	2.37	3.39	2.99	3.59

Appendix 2: FDI and location factors for 28 Asian (Oceania) countries

Country	FDI	1st pillar: Institutions (1-7)	2nd pillar: Infrastructure(1-7)	3rd pillar: Macroeconomic environment(1-7)	4th pillar: Health and primary education(1-7)	5th pillar: Higher education and training(1-7)	6th pillar: Goods market efficiency,(1-7)	7th pillar: Labour market efficiency, (1-7)	8th pillar: Financial market development,(1-7)	9th pillar: Technological readiness, (1-7)	10th pillar: Market size, (1-7)	11th pillar: Business sophistication (1-7)	12th pillar: Innovation(1-7)	GCI Global Competitiveness Index(1-7)
China	12819	4.11	4.25	6.13	5.86	4.06	4.36	4.56	3.87	3.28	6.73	4.31	3.80	4.73
India	6147	4.15	3.48	4.34	5.13	4.01	4.39	4.14	4.94	3.27	6.13	4.61	3.74	4.34
Singapore	2615	6.09	6.36	5.71	6.41	5.65	5.71	5.79	5.91	5.69	4.40	5.17	5.14	5.54
Australia	1905	5.53	5.46	5.59	6.37	5.50	5.13	4.99	5.60	5.24	5.06	4.74	4.42	5.15
Hong Kong	1840	5.63	6.50	6.01	6.09	4.97	5.61	5.65	6.02	5.79	4.72	5.16	4.15	5.34
Japan	1419	5.05	5.87	4.25	6.32	5.22	5.09	5.07	4.72	5.17	6.13	5.84	5.59	5.41
Thailand	1319	4.06	4.70	5.39	5.58	4.32	4.55	4.83	4.49	3.55	5.02	4.33	3.38	4.59
Malaysia	1261	4.90	5.17	5.27	6.13	4.70	5.04	4.84	5.45	4.31	4.68	4.98	4.29	5.03
Vietnam	1227	3.75	3.11	4.65	5.53	3.49	4.13	4.57	3.94	3.21	4.58	3.80	3.26	4.13
Indonesia	934	3.89	3.25	5.08	5.48	4.01	4.54	4.30	4.29	3.16	5.23	4.42	3.56	4.31
South Korea	897	4.34	5.63	6.08	6.23	5.45	4.79	4.42	4.40	5.42	5.51	5.04	4.97	5.12
Philippines	655	3.33	2.90	4.86	5.30	4.05	4.07	3.96	4.01	3.28	4.65	4.15	2.91	4.03
Taiwan	627	4.78	5.53	5.58	6.43	5.62	5.19	4.81	4.60	5.28	5.17	5.27	5.24	5.25
Kazakhstan	259	3.67	3.50	5.47	5.37	4.19	4.12	4.93	3.67	3.38	4.10	3.64	3.00	4.18

New Zealand	236	5.92	4.75	5.31	6.57	5.51	5.29	5.14	5.65	5.05	3.84	4.69	4.11	4.99
Pakistan	193	3.42	2.95	3.83	4.23	2.86	4.00	3.63	4.18	2.82	4.66	3.82	3.08	3.63
Georgia	156	3.79	3.48	3.98	5.51	3.71	4.07	4.70	3.81	2.96	2.81	3.28	2.63	3.88
Azerbaijan	146	3.87	3.76	5.59	5.08	3.79	4.01	4.76	3.94	3.35	3.47	3.86	3.36	4.23
Sri Lanka	135	3.93	3.66	3.57	5.87	3.95	4.38	3.77	4.32	3.15	3.77	4.38	3.46	4.09
Cambodia	119	3.50	2.80	4.06	4.68	2.84	4.10	4.68	3.48	2.69	3.17	3.48	2.80	3.64
Armenia	93	3.54	3.22	4.61	5.30	3.66	3.81	4.62	3.68	2.89	2.60	3.39	2.81	3.82
Bangladesh	84	3.08	2.24	4.54	4.89	2.65	3.91	4.02	4.08	2.49	4.36	3.46	2.56	3.62
Mongolia	28	3.15	2.30	4.95	5.26	3.79	3.88	4.57	3.41	2.92	2.32	3.10	2.85	3.70
Tajikistan	17	3.73	2.63	3.51	5.17	3.34	3.65	4.33	3.18	2.58	2.49	3.28	2.93	3.55
Kyrgyzstan	16	2.93	2.48	3.41	5.18	3.67	3.61	4.36	3.47	2.43	2.53	3.19	2.29	3.41
Nepal	12	3.12	1.89	4.67	4.62	2.69	3.70	3.63	3.69	2.43	3.04	3.21	2.41	3.41
Brunei	10	4.77	4.35	6.66	6.02	4.17	4.04	5.13	4.23	3.84	2.47	3.81	3.10	4.72
Timor-Leste	1	3.15	1.95	5.27	3.95	2.65	3.41	4.12	2.90	2.36	1.25	2.90	2.29	3.23