

**WHY HAS SOUTH AFRICA BEEN RELATIVELY UNSUCCESSFUL
AT ATTRACTING INWARD FOREIGN DIRECT INVESTMENT
SINCE 1994?**

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ABSTRACT

Foreign Direct Investment (FDI) flows into South Africa have been very low for several decades, and this research examines the reason(s) why this has been the case since 1994. There is a common belief amongst economists that there is a positive relationship between the amount of FDI received and economic growth, thus the desire to attract greater FDI inflows. A literature review was conducted to establish the determinants of FDI globally and then data were collected and assessed to test which causes are most important. The performance of developing nations in attracting FDI was first compared with that of the developed nations. Thereafter, a regional breakdown of FDI flows was presented, with a particular focus on the Southern African region. FDI inflows to South Africa since 1994 were compared against the identified determinants of FDI, as well as with FDI inflows into two other major mining economies, Chile and Botswana. The friendliness of the government towards business was identified as a significant determinant of FDI inflows and the importance of this factor in explaining FDI inflows into environment in South Africa was looked at in more depth. It was found that many investors perceive the South African government as hostile towards business and as corrupt and/or inefficient. The empirical results show that this negative perception helps explain the FDI inflows attracted by South Africa since 1994. Therefore, increased friendliness to business by the government should increase future inward FDI flows into South Africa.

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List of Abbreviations

ANC.....	African National Congress
AU.....	African Union
BRICS.....	Brazil, Russia, India, China, South Africa
CIA.....	Central Intelligence Agency
COSATU	Congress of South African Trade Unions
CPI	Corruption Perceptions Index
DRC	Democratic Republic of the Congo
FDI	Foreign Direct Investment
FPI	Foreign Portfolio Investment
GCI.....	Global Competitiveness Index
GDFI	Gross Domestic Fixed Investment
GDP	Gross Domestic Product
GEAR.....	Growth, Employment and Redistribution plan
HDI	Human Development Index
IMF	International Monetary Fund
LDC	Least Developed Country
MNE	Multinational Enterprise
NDRC	National Development and Reform Commission
NEPAD	New Partnership for Africa's Development
NPC.....	National Planning Commission
OECD	Organisation for Economic Cooperation and Development
OFDI	Outward Foreign Direct Investment
QMA.....	Quadratic Match Average
SACU.....	Southern African Customs Union
SADC.....	Southern African Development Community
SOE	State Owned Enterprise
SSA	Sub-Saharan Africa
TNC	Transnational Corporation
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
VECM.....	Vector Error Correction Model
WTO	World Trade Organisation

CHAPTER 1:

INTRODUCTION

1.1. BACKGROUND OF THE STUDY

According to Rusike (2008), South Africa is seen by many foreign investors as a relatively risky, yet profitable investment destination. This is why portfolio/indirect investment (such as shares and stocks) is the preferred investment method as it offers a short term commitment that allows the foreign investors to reverse their investment decision when necessary. Busse & Hefeker (2007:397) argue that “short-term credits and portfolio investments are subject to sudden reversal if the economic environment or just the perception of investors changes”, giving rise to possible financial and economic crises. Authors such as Busse & Hefeker (2007) and Fedderke & Romm (2006) perceive that direct investment, and in particular, foreign direct investment is a much more resilient investment option.

Asiedu (2002) notes that there is a common belief that there is a positive relationship between the amount of Foreign Direct Investment (FDI) received and economic growth in developing nations. According to Asiedu (2002) and Rusike (2008), this is because many developing countries, including South Africa, have relatively low savings rates. FDI is likely to stimulate economic growth in such countries as it affords more access to necessary capital and technology than domestic savings would allow. Dunning (1988) notes that FDI also improves the balance of payments, improves human capital, increases skills and creates more jobs. With improved access to such economic growth factors, the potential for growth should increase. Fedderke & Romm (2006) argue that increased FDI not only allows a country to improve upon its physical capital but, perhaps more significantly, it improves the human capital of a nation as well. According to Noorbakhsh *et al.* (2001), economic growth is important because it will usually be accompanied by improved standards of living, higher salaries and incomes, increased employment, improvement of the health care system and increased human capital.

A number of theories have attempted to explain why FDI occurs and, by extension, why some countries are more successful than others in attracting FDI inflows. Calvet (1981) suggests that disequilibrium in the market for FDI is the cause of flows of FDI from certain nations to others and that these flows continue until equilibrium is restored. Factor distortions that cause such disequilibrium may include “labour costs, exchange rate fluctuations and

technological innovations” (Calvet, 1981:45-46). Jenkins & Thomas (2002) argue in a similar vein that without market imperfections there could simply be transfers of capital between nations and thus there would be no need for FDI. They note that the presence of risks in investing abroad implies that there must be distinct advantages to relocating investment to a particular host country. Noorbakhsh, Paloni & Youssef (2001), Barrell & Pain (1997) and Barry & Bradley (1997), state that as a result of diminishing returns from their investments, financiers in developed countries look to developing nations as investment opportunities where greater capital returns can be made. This is because the marginal productivity of capital is much higher in developing states where capital is in short supply in comparison with developed states where capital investment is plentiful.

Asiedu (2002) and Tuomi (2011) stress the importance of regional location in the decision making process of potential FDI investors. They suggest that certain regions or areas are perceived to be high-risk investments and are systemically viewed in a negative light by major investors. This is a result of both past economic and political failures of a majority of countries in these regions and ignorance of present day reforms and successes even when these have occurred. This negative perception of certain regions means the necessary FDI is diverted to other perceived safer investment regions (Asiedu, 2002). Evidence provided by Asiedu (2002) suggests that there are certain regions, and specifically Sub-Saharan Africa, that are generally viewed as higher risk investment hubs in comparison with say, East Asia, and thus do not gain the levels of FDI inflows that they should. Asiedu (2002:116) shows that “a country in the Sub-Saharan region will receive less FDI by virtue of its geographical location”. The implication of this conclusion is that governments of developing nations, such as South Africa, should adopt more liberal economic and political agendas and encourage trade liberalisation via reforms (Asiedu, 2002) in a bid to try and assure potential foreign investors that the policy mistakes of the past will not be repeated.

The Multi-factor theory (Wan, 2010) proposes that there are a multitude of determining factors of success in attracting FDI that are all linked in a web of economic, political and social connectedness. This makes targeting specific policy reforms very difficult, if not impossible, as isolating the individual determinants of success is impossible. The Capital theory (Lucas, 1990) likewise apportions many factors as determinants of FDI inflows. The main difference from the multi-factor theory however, is that it stresses the need to develop both the physical and human capital of a nation in order to attract more FDI.

It is possible that a number of the aforementioned factors may have contributed to South Africa's relative lack of success at attracting FDI inflows. If South Africa were to attract higher levels of FDI, then according to such theories as those proposed by Asiedu (2002), Rusike (2008) and Noorbakhsh *et al.* (2001), this will not only have beneficial economic effects but a host of socio-political benefits as well. Improved standards of living are usually associated with economic growth. This should see a reduction in poverty, inequality and unemployment. But if South Africa truly wishes to attract more FDI then it must ensure that it loses the tag of a possible high-risk long term investment hub (Asiedu, 2002). To do this, there must be a reduction in extremist rhetoric by politicians, such as those by the ANC Youth League. Even when such calls are not supported, they incite a sense of doubt in the minds of potential investors who then deem South Africa too risky an investment (Busse & Hefeker, 2007).

The post-1994 government has recognised the need to attract increased levels of FDI and from 1996, via the GEAR policy, adopted a more liberal approach to trade through decreased tariffs and taxes and attempts to lower inflation in a bid to make the South African economy more investment-friendly (Rusike, 2008). Thomas & Leape (2005) note, however, that although South Africa has taken measures to improve the economic environment since 1996, there has been very little increase in the levels of FDI and that the majority of foreign capital inflows are still portfolio/indirect investments. This is despite possessing an abundance of mineral wealth and large markets.

There must be some other attribute or factor, which is not immediately obvious to academic observers, which is putting off potential investors (Rusike, 2008 and Clark & Borgran, 2003). The problem may not be as simple as excessive protectionist laws or too many tariffs blocking the way for potential investors. There appears to be a more deep-rooted issue at hand. There seems to be a common (albeit not necessarily correct) view among foreign investors that South Africa should be grouped under the 'high-risk-African-state' banner (Clark & Borgran, 2003). Such an opinion has arisen as a result of historical failures by many African states and a general ignorance about modern reforms and policies put in place in a bid to make such nations more attractive and increase the potential for growth.

1.2. PROBLEM STATEMENT

The Economist (2013:1) notes that South Africa has a current-account deficit “of more than 6% of GDP” and it “relies on foreign capital to bridge the gap between what it spends and what it earns” which in turn makes it very “vulnerable to shifts in investors’ mood”. Over the past two decades, South Africa has received a fair amount of negative press regarding its credibility as a safe investment hub. Events such as the arms deal, the nationalisation debate, numerous reports of corruption, recent events in the mining sector and the downgrading of the country’s sovereign credit ratings have fuelled negative comments about SA as a reliable investment destination (Bruce, 2013). It appears that many potential investors have been put off investing in South Africa, and the level of FDI inflows has been negatively affected by such sentiment (Tuomi, 2011).

1.3. RESEARCH OBJECTIVES

This study will attempt to achieve the following goals:

- To identify the key determinants of global success in attracting FDI.
- To measure South Africa’s performance relative to these determinants.
- Identify the policy implications if South Africa proves to be an outlier in any of these measures.

1.4. RESEARCH QUESTIONS

The main questions regarding FDI inflows into a post-1994 South Africa seem to be:

- Which determinants are taken into account when investors consider a particular host country?
- What level of inflows of FDI has South Africa ascertained over the last two decades?
- Are foreign investors being put off by extremist rhetoric and/or an unfriendly business environment in South Africa?

Taking into account all three of these pertinent questions, and summarising them into one cohesive research problem leads to the main question that the half-thesis will attempt to answer:

Why has South Africa been relatively unsuccessful at attracting inward Foreign Direct Investment since 1994?

1.5. RESEARCH TECHNIQUE AND METHOD

The principal method of research utilised will be that of quantitative analysis. The paradigm employed will be positivist. Factors that have been identified in the literature as important determinants of FDI success such as trade openness, regional location, the exchange rate, and cost of capital will be compared for a number of developing countries in Africa, Latin America, Asia and Central Europe. These factors will be examined individually to determine their relevance in attracting FDI and South Africa's performance relative to these countries will be determined. The small sample size means that only very basic econometric analysis can be performed, and conclusions and policy recommendations drawn from this study are based on a specific time period, namely 1994 to 2010. Despite the limitations, the research still aims to make a significant contribution to the knowledge on the topic.

A particular focus of this study will be the inclusion of variables that measure the policy uncertainty implied by South Africa's much greater success in attracting portfolio capital inflows than FDI. These will include measures of political stability and "friendliness to business" such as the World Bank's ease of doing business index and components of the World Economic Forum's global competitiveness report. Thereafter, a multivariate linear regression and panel analysis will be conducted utilising the major determinants of FDI success. Data will be acquired from a number of sources such as the IMF International Financial Statistics database, the Reserve Bank of South Africa, UNCTAD World Investment Reports, OECD FDI Regulatory Restrictiveness Index and Thomson Data stream. As the study uses only published data, it is unlikely to encounter issues of an ethical nature.

1.6. OUTLINE OF STUDY

This study is presented in five chapters, which are structured as follows: Chapter 2 provides a summary of the theoretical perspectives on FDI, surveying the literature on FDI to both developed and developing countries. This chapter presents the background against which the analysis and possible impacts of increased inward FDI on the South African economy could be interpreted and brings to the fore the specific determinants that will be tested along with the political risk index in later chapters.

Chapter 3 provides an overview of global FDI flows between 1994 and 2012, focusing specifically on trends that have prevailed between developed and developing regions during this time. The aim of this chapter is to place South Africa's FDI performance into a global perspective, and set the background for analysing the effect of political risk/uncertainty as a major deterrent to potential investors.

Chapter 4 provides an overview of FDI flows to South Africa between 1994 and 2012, comparing the country's inflows with those of Chile and Botswana and against the specified determinants of FDI. In addition, the friendliness of the business environment in South Africa will be looked at in more depth.

Chapter 5 provides an empirical analysis of inward FDI in South Africa, presenting a multivariate linear regression model which analyses the specific determinants that are perceived to affect the FDI decision-making process, focusing specifically on the friendliness to business of the South African government. Thereafter, following the methodology of Claassen, Loots & Bezuidenhout (2011), a cross-section panel analysis will be conducted on the major determinants of FDI success.

Chapter 6 concludes with a summary of the study's key findings, as well as relevant policy recommendations.

CHAPTER 2:

LITERATURE REVIEW

2.1. INTRODUCTION

The theorised benefits of foreign direct investment, are well known, Rusike (2008) states that the reason behind the demand for Foreign Direct Investment (FDI) in developing nations is that FDI provides these developing countries with access to much needed capital inflows that stimulate economic growth. According to Asiedu (2002) and Rusike (2008), those developing states, such as South Africa, that have comparatively low savings rates are more likely to stimulate economic growth through increased FDI as it not only affords that nation more access to necessary capital and technology, but improves the balance of payments, enhances human capital and increases skills, and creates more jobs. With improved access to such economic growth factors the potential for growth should increase. According to Noorbakhsh *et al.* (2001), economic growth will usually be accompanied by improved standards of living, higher salaries and incomes, increased employment, improvement of the health care system and increased human capital.

Fedderke & Romm (2006) argue that increased FDI not only allows a country to improve upon its physical capital, but perhaps more significantly, it improves the human capital of a nation as well. This two-pronged advance is why many theorists, such as Fedderke & Romm (2006), argue that attracting increased levels of FDI is more beneficial to the economy than domestic investment. Tuomi (2011:133) asserts that developing nation demand for FDI will increase further in the years to come as other countries try to pull themselves out of the trap of “low investment, low growth and poverty” by opening their markets for investment and intensifying the competition between these states.

From the supply side, economic theory outlined by Noorbakhsh *et al.* (2001), Barrell & Pain (1997) and Barry & Bradley (1997), states that as a result of diminishing rates of return from their investments, financiers in developed countries look to developing nations as investment opportunities to make greater capital returns. This is because the marginal productivity of capital is much higher in developing states where capital is in short supply in comparison to developed states where capital investment is abundant. In addition, developing states tend to have low savings rates in comparison with the high savings rates of developed nations as

savings is believed to be a function of income levels as well as a country's demographic profile (Dirschmid & Glatzer, 2004). Rich countries, with older populations, save more than poorer countries with young populations as these rich states tend to have lower dependency ratios and thus, higher levels of private savings (Dirschmid & Glatzer, 2004). Therefore developed economies tend to invest some of these high savings in developing states where savings are in short supply and the return greater, thereby inducing a general flow of capital out of the wealthier, developed states to the poorer developing nations (Barry & Bradley, 1997 and Rusike, 2008). However, this generalised rule does not always apply in reality and there are a number of theoretical perspectives that try to explain why this may happen.

Traditionally, the major determinants for successfully attracting FDI were believed to be market size, labour cost, the exchange rate and openness to trade (Rusike, 2008). Although the basic theory (Tuomi, 2011 and Rusike, 2008) highlighted the importance of a large number of factors, the exchange rate and openness to trade were understood to be the most important long-term determinants of success in attracting FDI and market size and cost of labour the short-term determinants. In addition to these factors, a further premise of traditional theory (Moolman *et al.*, 2006 and Rusike, 2008) was that foreign investors were drawn to those states that had large amounts of natural resources or mineral wealth.

This traditional view has evolved over the years from the natural resource theory to the efficiency theory, whereby investors are now more concerned with the state of the economic and/or political environments in potential investment hubs than with resource endowment (Rusike, 2008). Fedderke & Romm (2006:758) found that “reducing political risk, ensuring property rights, bolstering growth in the market size, as well as wage moderation (ideally lowering real wages), lowering corporate tax rates, and above all of ensuring full integration of the South African economy into the world economy” would all significantly aid in increasing the inflows of FDI.

Buckley *et al.* (2007) indicate that there are two components to general FDI theory. Firstly, firms internalise missing or imperfect external markets until the costs of further internalisation outweigh the benefits. Secondly, firms choose locations for their constituent activities that minimise the overall costs of their operations. Imperfect external markets are then replaced by the expansion of internalised markets. Firms expand as a direct result of the internalisation of markets resulting from the influx of FDI and this allows these same firms to utilise FDI to replace markets in intermediate products and knowledge and acquire the returns

from so doing (Buckley *et al.*, 2007). Busse & Hefeker (2007) point out however, that there may be imperfections in the host country capital markets that may result in distinctive applications of the general FDI theorem. Such irregularities are more likely to occur in the case of emerging economy multinational enterprises.

2.2. DETERMINANTS OF FOREIGN DIRECT INVESTMENT

As more studies were carried out over the years it became clear that foreign investors were influenced by more than just the aforementioned traditional determinants and that case studies at times proved the contrary to the traditional beliefs and theories (Moolman *et al.*, 2006). A number of differing theories have been proposed as to what are now the major determinants of FDI.

2.2.1. Political and Social Stability

Asiedu (2002) focuses on the region as a key determinant of FDI inflows, and suggests this is especially important in the case of Africa. Asiedu (2002) shows that countries in sub-Saharan Africa tend to be viewed in a pessimistic light and are considered risky investments because of both historical factors and ignorance of more modern political and economic reforms. Jenkins & Thomas (2002:20) highlight the fact that Sub-Saharan Africa's share of total FDI to the developing countries has generally remained between just 3 to 5 per cent of the total during the 1990s. This indicates the marginalisation of the continent in terms of attracting much needed FDI. The statistics are more discouraging for the SADC economies between 1995 and 1999, where the approximate share of total FDI varied between 2 and 3 per cent (Jenkins & Thomas, 2002). Because of this Asiedu (2002) is of the school of thought that believes that developing states have very little influence over the actions of foreign investors and can only make the political and economic environment as investment-friendly as possible in the hope that this will be sufficient to attract FDI. Jenkins & Thomas (2002:1) consider that the "small and illiquid nature of capital markets in the Southern African region (with the important exception of South Africa) has added to the marginalisation of African economies in terms of the allocation of international private capital flows".

Tuomi (2011) believes that South Africa was negatively affected by the political crisis in Zimbabwe as foreign investors perceived the two states to be similar and believed that South African politics would inevitably end up heading in the same direction of economic chaos. In

a more recent study, Asiedu (2006) suggests that FDI in the sub-Saharan Africa region is largely determined by an *uncontrollable* factor, and that natural resource-poor countries or small countries will attract very little or no FDI, regardless of the policies the country pursues.

However, unlike Asiedu (2002) who views developing countries as being largely helpless in the face of negative investor sentiment, Tuomi (2011:141) believes that with rapid reassurance from the developing nation in question any hesitation on the part of investors can be overcome by “clear, constant and transparent communication channels between government and investors, both existing and potential”. Buckley *et al.* (2007) argue that the location aspect of general FDI theory is one of the major contributing factors of investment decisions, if not the most important. However, they (Buckley *et al.*, 2007) believe that there are three primary motivations: foreign market seeking FDI, efficiency seeking FDI and resource seeking FDI. The latter incentive may be at the expense of political stability and/or conservative investment strategic thinking and tends to have some form of ceiling in terms of the investment period that is comparatively shorter than other FDI ventures (Dunning, 2001).

There is a school of thought, as pointed out by Jenkins & Thomas (2002), which argues that there may be concern among a group of countries in a region, that the principal member country will attract FDI to the detriment of its smaller and perhaps less influential neighbours. Jenkins & Thomas (2002) state that this is particularly relevant in the case of Southern Africa, where the smaller economies are concerned by the possibility of increased dominance of South African trade and investment, and of losing FDI to South Africa. These concerns were heightened with the suggested formation of a free trade agreement among twelve SADC member states and other similar trade agreements such as SACU which encourages the movement of duty free goods between Botswana, Lesotho, Namibia, South Africa and Swaziland. Although such a fear may not be irrational, the evidence particularly for the Southern African region, has shown that the dominant regional force i.e. South Africa has not benefitted significantly from increased FDI inflows at the expense of the smaller regional states as of yet (Sandrey, 2013).

Jensen (2003) conducted a number of empirical tests on whether or not democratic governments attract higher levels of FDI than apparent autocratic regimes. The evidence suggested that because democratic nations were deemed less of a risk they were in fact favoured and thus attracted more FDI than high risk autocratic countries. Jensen (2003) does

not deny, however, that there are cases where authoritarian states attract a significant amount of FDI. He (Jensen, 2003:612) asserts, though, that these are the exceptions and not the rule, pointing out that “democratic regimes attract as much as 70 per cent more FDI as a percentage of GDP than do authoritarian regimes”. Busse & Hefeker (2007:400) contend however, that there are a number of political risk components, such as “government stability, socio-economic conditions, investment profile, internal and external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, and the quality of bureaucracy” and that these are connected to the quality of political institutions. Above all, the quality of the bureaucracy is closely associated with the institutional strength of a particular country. Similarly, by ensuring regulation and a decline in the levels of corruption, high-quality institutions may arise. These effects make up appropriate sub-constituents of a general valuation of good governance (Busse & Hefeker, 2007).

Mottaleb (2007) found the most significant deterrent to potential foreign investors is corruption. He stresses that this corruption is amongst and between businesses, firms, politicians and other bureaucrats. According to his research, states that have effective legal systems are more likely to be chosen as long term investment hubs. This is supported by Benassy-Quere *et al.* (2005), Asiedu (2002), Jensen (2003) and Bevan & Estrin (2000) who argue that low-risk nations are preferred by investors who view corruption in a pessimistic light as high-risk. Adding to the above points, Benassy-Quere *et al.* (2005:28) assert that in order to attract FDI there should also be in place “tax systems, lack of corruption, transparency, lack of corruption, contract law, security of property rights, efficiency of justice and prudential standards”.

Singh & Jun (1995) found that the effects of socio-political instability were dependent on which structural FDI group a particular country belonged to initially. Their study found that those states that belonged to the low-FDI group were more likely to be affected by a loss of work hours caused by political instability and as such should place higher premiums on labour relations so as to stabilise them and attract more FDI. Conversely, those nations that belonged to the high-FDI group were more likely to be affected by the overall perception of political stability/instability and, as such, require a more substantive and long-term commitment to ensure comparatively high levels of FDI are maintained (Singh & Jun, 1995).

2.2.2. Economically Efficient Environment

Janicki & Wunnava (2004:506-507) find from their empirical data that a “healthy investment climate characterised by macroeconomic and political stability benefits the FDI recipient country”. Tuman & Emmert (2009), like Asiedu (2002), also find that the environment of the economy has a major impact on FDI flows. They (Tuman & Emmert, 2009:109) argue that an “efficient economic environment and trade openness” are likely to be major attractions to foreign investors. When talking of this so called “efficient economic environment”, Tuman & Emmert (2009:109) point out that high taxes and wages both have a negative impact on FDI inflows and that infrastructure and market size are both positively related to FDI flows. This, however, is where Asiedu (2002) and Tuman & Emmert (2009) diverge, as although Tuman & Emmert (2009) claim that economic stability is a key determinant of FDI inflows, they argue that local governments are not constrained by any external forces in altering FDI flows. Fedderke & Romm (2006:758) concluded in their study that market size carries a “strong positive elasticity (a 1% increase in GDP generates an increase of foreign direct investment liabilities of approximately 13.56%)” and that increases in corporate taxation and wage costs negatively impact inflows of FDI.

Although Bevan & Estrin (2000) agree that the perceived image of the host state by potential foreign investors as low-risk is an essential determinant of FDI flows, they argue that political stability is not sufficient. Tuomi (2011:143) urges developing states to provide as much information to “potential investors in an effective and timely manner so as to ensure that “distortion costs related to incentive costs are minimised”. According to Bevan & Estrin (2000), states also need to develop their private sector, encourage industrial development, ensure a small government budget deficit and reduce crime and corruption, in order to attract significant increased flows of FDI. Adding to the above points, Benassy-Quere *et al.* (2005:28) assert that there should also be in place “tax systems, lack of corruption, transparency, contract law, security of property rights, efficiency of justice and prudential standards”.

A study aimed specifically at developing nations in Eastern Europe by Lankes & Venables (1997) showed that market access, production costs and an outward-orientated economic policy were all significant determining factors of the level of FDI attracted. Jenkins & Thomas (2002:10) list a host of economic inefficiencies that tend to be associated with developing nations in Africa, these include: high taxation, inadequate infrastructure, weak

private sector institutions, visa requirements and availability of work/residence permits, underdeveloped financial sectors, differing product standards, small domestic markets, shortages of skilled labour, low productivity and archaic legislation. Jenkins & Thomas (2002) state however, that the practice of transfer pricing (a practice that decreases the taxation revenue of a host country) and its effects are still open to debate and that action must be taken at both a national level and in the framework of transnational investment engagements.

Data provided by UNCTAD (2009:3-4) reveal that worldwide FDI levels decreased by some 15 per cent in the last quarter of 2008 as a result of the widespread economic meltdown and thus any potential investments had to be assessed very carefully and any potentially risky investments were recalled or withdrawn. Interestingly, however, the data shows that the most affected regions of the world were those predominantly populated by developed nations, North America and Europe being affected by as much as 40 per cent (Wan, 2010). This may be because the financial crisis originated in developed states and thus, these nations were deemed more high-risk than those regions populated predominantly by developing nations. Therefore, developing nations are not always confined to the label of high-risk investments and developed nations to the label of low-risk investments.

2.2.3. Security of Property Rights

A number of authors (Bevan & Estrin, 2000; Benassy-Quere *et al.*, 2005; Tuman & Emmert, 2004), agree that the security of property rights is a crucial factor that weighs very heavily on the minds of foreign investors. If there is any doubt about the security of their investment most, if not all, foreign investors will deem the investment opportunity too risky. Globerman & Shapiro (2003:20-21) believe that if a state has an “effective, impartial, and transparent legal system that protects property and individual rights” then this will attract FDI to such a nation as they protect “privately held assets from arbitrary direct and indirect appropriation”. Therefore, democratic nations with an efficient legal and justice system will be the preferred choice of foreign investors who wish to ensure the security of their capital investments.

Sonin (2002:4-5) states that if property rights are not secured or protected properly then it is highly likely that this will lead to “suboptimal paths of capital accumulation and production... and is ultimately associated with substantial wealth and income inequality”. Thus, traditional property rights theory, as stipulated by the likes of Sonin (2002) and Globerman & Shapiro (2003), suggests that the foreign investors want to be assured that there

is very little, if any, chance of a redistribution of their wealth to the poor host nation beneficiaries via a lack of security of property rights on their capital investments.

Kobrin (1979) delves slightly deeper and asserts that vulnerability is a function of enterprise-specific characteristics. Natural resource-based investment is generally more vulnerable, *ceteris paribus*, than are manufacturing firms producing essential products. Tuman & Emmert (2002) maintain that a significant proportion of the incentives that influence the investment decisions of MNEs also apply to domestic investors. “Addressing the problems identified by foreign investors already committed to the region should not only in the long run make Southern Africa more attractive to new FDI but should in the shorter term encourage increased domestic investment” (Tuman & Emmert, 2002:6).

There is, however, some debate as to which types of governments are able to secure a firm’s or individual’s property rights more rigorously. There are those scholars, such as Tuman & Emmert (2004:14-15), who argue that multi-national firms and corporations tend to prefer more authoritarian regimes to be in power in developing nations as they argue that these regimes protect such firms “against the threats posed by labour unions and the working class” and allow large profits and capital gains to be made. This goes against the conclusions of Jensen (2003) and Mottaleb (2007) who find that democratic regimes will be preferred to authoritarian governments. That is not to say that developing states are always more profitable as Tuman & Emmert (2004) assert that any state that poses the possibility of revolutionary forces, violence or riots will be avoided by potential investors as they are deemed too risky.

Sonin (2002:3-4) also believes that multi-national firms may prefer authoritarian regimes in developing nations but not from the perspective of avoiding the hassles of trades unions as Tuman & Emmert (2004) believe. Instead, Sonin (2004) argues that there is more chance for these multi-national firms to hire or employ their own private protection to ensure the security of property rights which may in fact be more effective than if it were left up to public protection by governmental agencies, no matter what the regime. This, in turn, will lead to what Sonin (2004:3) terms the “subversion of institutions” and if utilised by the rich results in further inequality and profit maximisation for these multi-national firms or even individual investors. Sonin (2004:19-20) asserts that although a lack of security of property rights may induce foreign investment, the security of such rights is a precondition for economic growth

and that such “improvements may occur only if they are in the interest of the majority who determine policy”.

Egger & Winner (2005) claim that one needs to differentiate between the two different influences of corruption on the flows of inward FDI. They argue that there are the short term costs that result from actions such as bribes, rent-seeking opportunities and some form of financial cover/insurance as corrupt contracts will not hold up in the courts. Egger & Winner (2005:934) term such short term costs as the “grabbing hand” effect of corruption. However, these costs may be outweighed by the long term benefits of the “helping hand” effects of corruption, such as a hastened bureaucratic process and easier access to government financed schemes (Egger & Winner, 2005:934). The long term benefits or “helping hand” effects of corruption are unpredictable and vary as with any other business decision and future outcome. Sonin (2004) points out however, that many firms, specifically multinational enterprises, tend to not put their reputations on the line by delving into such business ventures as bribery and corruption.

Thus, the evidence as to what level of security of property rights will induce increased FDI inflows is unclear as there are strong cases for both sides. However, on the whole, it would seem as though the evidence (Sonin, 2002; Tuman & Emmert, 2004; Jensen, 2003 and Mottaleb, 2007) points to foreign investors preferring to have their own property rights secured before trying to take advantage of other firms’ lack of security in a bid to increase profits.

2.2.4. Trade Liberalisation

Asiedu (2002) finds evidence that infrastructure development and higher returns on capital are attractive factors to investors in most regions of the world. However, she stresses they have little impact on the adjustment of FDI flows into the sub-Saharan Africa region. The more viable and effective methods of attracting higher levels of FDI include some form of trade liberalisation which, according to Asiedu (2002:10), will install a sense of trust in even pessimistic foreign investors. Boule (2010:51) agrees that the primary focus of developing states, and in particular African states, should be the encouragement of a “legal, political and economic climate for investment” via incentives for FDI. With more credibility and integrity associated with their names, these sub-Saharan states will become more attractive to FDI inflows. Jenkins & Thomas (2002) state that the indicator which has been found most

frequently to be correlated with increased FDI in Africa in cross-country macroeconometric analyses is economic openness, especially to international trade.

Asiedu (2002) points out that it is unsurprising that such an improved perception of African states may take some time, as most African countries have proven to be unreliable and unstable over the years. Thus, openness is a necessity according to Asiedu (2002) in the reform process, as African leaders must propagate dependable and consistent information about their countries, utilising such organisations as the World Bank. Janicki & Wunnava (2001) also believe that trade openness and constant policy reform (although not too rapidly) are crucial if a nation wishes to attract foreign investors. However, Janicki & Wunnava (2001) go further than Asiedu (2002) and assert that trade liberalisation and its benefits should not be confined to developing states but all nations.

Tuman & Emmert (2009) believe that if a developing country wants to increase the amount of FDI it receives, it should maintain a balance between its domestic and foreign economic policies and not ignore either of the two. Tuman & Emmert (2009) stress this importance as some developing country governments have tended in the past to put the need to attract foreign investment ahead of the needs of domestic firms and employees by ignoring wage rate demands. Bouille (2010:51) supports this finding, believing that developing nation governments must factor in the need for a coherent policy for “both inward and outward FDI” as he believes that both are crucial to the development of the economy for a sustained period of time. Singh & Jun’s (1995) study shows that the relative size of the export sector is one of the major determinants of FDI flows and they assert that their causality tests indicate that exports precede FDI inflows. Singh & Jun (1995:21) proceed to recommend that developing countries “should seek alternative ways to develop a vibrant export sector under a liberalized trade regime as a pragmatic way to encourage consistent FDI flows”.

Inflation is also mentioned as a determining factor of FDI flows by Tuman & Emmert (2009), who highlight inflation as a characteristic of an inefficient economy and that as such, should be of some concern for domestic governments. Asiedu (2002:10-12) also mentions inflation as having a “repellent” effect on foreign investors, but argues that this is dwarfed by the positive effects of trade liberalisation. Jenkins & Thomas (2002) state that private investment decreases as a result of the effects of inflation. This is because inflation increases risk, reduces average lending maturities, distorts the informational content of relative prices, and indicates macroeconomic instability (Jenkins & Thomas, 2002). However, Tuman & Emmert

(2009) note that there is debate regarding the effects of inflation and cite a number of opposing sources, such as Lim (2001) and De Mello (1997), who argue that inflation may in fact not have a negative impact on FDI inflows.

2.3. MULTI-FACTOR THEORIES

2.3.1. Market Disequilibrium

Calvet (1981) focuses on the theme of market equilibrium, or perhaps more appropriately disequilibrium. He proposes that there are a number of factors that cause the market for foreign investment to move into a position of disequilibrium and gives the example of an over-valued currency that causes an inflow of foreign investment in a bid to make capital gains until the exchange rate has reached equilibrium. He asserts that once market equilibrium is reached the flow of FDI will cease into that particular country. Distorting FDI flow factors mentioned by Calvet (1981:45-48) include “exchange rate fluctuations; labour costs; and technological innovations”. Calvet (1981:45) stresses that of these factors, the cost of labour is usually the more important determinant. Jenkins & Thomas (2002) also argue that without market imperfections there could be transfer of capital and thus no FDI. The presence of risks in investing abroad implies that there must be distinct advantages to relocating to a particular host country.

Although not necessarily an advocate of the Market Disequilibrium theory, Mottaleb (2007:3-4) asserts that FDI flows are influenced by some form of disequilibrium between nations with foreign investors more attracted to those states that have a higher per capita GDP and/or a higher per capita GDP growth rate. Such a claim suggests that developed nations will be preferred to developing states, further highlighting the disequilibrium situation that exists in world markets. Where Mottaleb (2007) differs from Calvet (1981) is that he believes that this disequilibrium is further widened by FDI flows as they tend to benefit the wealthier states, unlike the return to equilibrium between countries induced by FDI flows suggested by Calvet (1981). Voutilainen (2005:3-5) proposes that market prices are purposefully disturbed from the equilibrium by monopolistic and oligopolistic forces trying to create “impediments to new entrants and thus increase their own power” and this is why many firms invest in foreign nations.

2.3.2. Multi-factor theory

This theory, as suggested by Tuomi (2011), Wan (2010) and Bevan & Estrin (2000), asserts that a host of macroeconomic fundamentals alter the investment climate and that these are all connected in a web of economic, political and social connectedness which thus makes targeting specific policy reforms that will increase FDI inflows very difficult. Wan (2010:3-4) proposes that there are a vast array of factors that determine the amount of FDI that flows into a country and does not isolate any as more important or influential than the other determinants. She (Wan, 2010:4-5) asserts that “market size; agglomeration; labour quality; scientific research; openness; political risks; FDI substitutes and exchange rates” all have some influence on the investment decisions of potential foreign investors when deciding where to invest.

Although both Calvet (1981) and Wan (2010) believe that there are a number of influential factors affecting FDI flows, there are only a few agreed upon, namely; exchange rate volatility, labour markets and the role of governmental agencies. Whereas Asiedu (2002), Boulle (2010) and Tuman & Emmert (2009) base their argument on the pivotal role of governmental economic and socio-political policies, Calvet (1981) and Wan (2010) believe that governmental influence is only one component of a proverbial machine of FDI inflow factors that are inextricably linked to each other. This, therefore, makes it difficult to target specific sectors or isolate specific policies in a bid to induce FDI inflows without it having certain consequences on other sectors or policies.

Lim (2001:13) reiterates that “a large market size; cheap labour costs; the exchange rate; agglomeration effects; attractive fiscal incentives and a friendly business environment” are all major factors that weigh on the minds of foreign investors when deciding where to invest. Lim (2001:12-14) concurs with Calvet’s (1981) sentiments that because there is such a vast array of determinants, each with a number of their own contributing factors and determinants, that this makes developing a governmental policy to alter the flow of FDI to suit the host nation very problematic. He goes on to state that governments must realistically set targets for FDI that are well below the desired levels as they have little control over the actions of foreign investors but can merely make their nation as attractive to foreign investment as possible. Tuomi (2011:134-136) mentions the same factors as Wan (2010) and Lim (2001) but adds that qualitative factors, such as “institutional support”, are also crucial to the investment decisions of foreign investors.

Nunnenkamp & Spitz (2002) highlight that the traditional determinants of FDI flows are complementary to one another, such as trade liberalisation and the privatisation of public enterprises. Therefore, one must assess the impact of changes in one policy on another. Calvet (1981:45-46) mentions factors such as “trade barriers; taxes; price and profit regulation; and any other change in the institutional setting in which business operates” all of which are under the control of government agencies.

Calvet’s (1981) paper tends to adopt a more theoretical framework than other papers on FDI determinants and does not provide any specific examples or case studies to reiterate his point. However, his special focus on the role of government policy places him in the school of thought that believes that countries are capable of influencing FDI flows into their borders, unlike Asiedu (2002). Wan (2010) puts emphasis on the ability of the BRIC (Brazil, Russia, India and China) countries to maintain some form of FDI growth despite a global economic slump that resulted from the 2008 financial crisis. This is despite the fact that lesser developed countries, such as the BRIC nations, tend to have both economic and political instability and this, according to Wan (2010), tends to have a negative impact on inward FDI flows to these states. Wan (2010) stresses the important role of the governments in such countries in ensuring that the economies are as attractive as possible to potential investors, although she does not suggest what schemes or techniques would be deemed attractive by foreign investors.

According to Rusike (2008), the multi-factor theory is the most comprehensive theory put forward to date, but he adds that there are not only a multitude of FDI determinants, but that all these factors affect individual nations differently, depending on the individual nation characteristics, location and policies. Therefore, the task of targeting specific policies and reforms by host governments in the bid to attract larger flows of FDI becomes even more difficult as there is no consensus as to which factors affect groups of nations or individual nations (Rusike, 2008).

2.4. CAPITAL

2.4.1. Human Capital

Noorbakhsh *et al.* (2001:1594-1595) agree that a multitude of determining forces alter the flow of FDI. However, they believe that although factors such as labour costs and access to

markets were the main reasons why FDI fluctuated in the past, that over time human capital has managed to assert itself as the main determinant of FDI inflows. Pfefferman & Madarassy (1992) support this and claim that although the traditional determinants of FDI flows (such as those mentioned above in the multi-factor section) still comprise a substantial share of FDI inflows in the world, human capital has now surfaced as the leading FDI determinant regardless of whether the nation is developing or not. Lucas (1990), argued that although there was strong evidence of a direct correlation between the development of human capital and increased FDI flows into that country, such increases only occurred in developing states. However, the point made by these authors is quite clear, invest heavily in education and health so as to improve human capital and this should bring about an increased inflow of FDI from abroad.

Noorbakhsh *et al.* (2001:1595-1596) put forward the claim that as a “result of new technological advances and the concomitant shift of FDI toward more capital-, knowledge- and skill-intensive industries, the presence of a well-educated pool of labour has become increasingly attractive” to foreign investors and important to developing nations wishing to attract FDI. Where the Human Capital theory differs from the Regional or Location-specific theory as proposed by the likes of Asiedu (2002), is that authors such as Noorbakhsh *et al.* (2001) and Pfefferman & Madarassy (1992) claim that because of globalisation and the breaking down of economic, social, financial and cultural barriers, it is very difficult to pinpoint certain regions and determining factors. Thus, according to such authors, the development and enhancement of human capital, in any nation regardless of location, will attract FDI inflows. Nunnenkamp & Spatz (2002:23-24) confirm the claim that more effort should be made to improve human capital but argue that this should go “hand in hand with both higher per capita income” which may only come about as a result of increased FDI inflows in the first place. Thus, according to Nunnenkamp & Spatz (2002), the relationship between human capital development and increased FDI inflows represents a paradox situation whereby one needs increased FDI inflows to induce the development of human capital and *vice versa*.

Although supporters of the Human Capital theory admit that developing nations will still receive minor inflows of FDI if they overlook the significant impact that the development of their human capital will have, they argue that the quantity and quality of such inflows will be significantly less than those nations who formulate policies to advance skills and “build up human resource capabilities” (Noorbakhsh *et al.*, 2001:1603). Moolman *et al.* (2006:5) give

the examples of Chad, Angola and Sudan as those developing nations that have still managed to receive relatively high levels of FDI, in comparison to other developing states, despite having extremely low levels of human capital. They argue that this is because of the natural resource wealth and exceptionally low labour costs in these nations. Lucas (1990) stresses that those developing nations that have survived in the past on raw materials and/or low labour costs to ensure a relatively constant flow of FDI will need to adopt a more qualitative as well quantitative approach in the years to come.

2.4.2. Technology and Capital

Rusike (2008) notes that the development of physical capital is also an essential feature if countries want to attract larger FDI inflows. However, Blomstrom *et al.* (1999) declare that although the development of technology and physical capital is attractive to potential long-term investors, we again face a paradox situation whereby increased FDI inflows will aid the development of capital and technology but in order to gain the necessary increase in FDI inflows, the state must develop its physical capital and technology. Blomstrom *et al.* (1999) state that capital and technology could be grouped with other determinants in the Market Disequilibrium theory in the sense that the more developed nations tend to utilise their technological advantage over other states to further their capital gains. Thus, although not quite in the mould of the Market Disequilibrium theory, the situation proposed by Blomstrom *et al.* (1999) does have a form of disequilibrium (in this case in the technology market) that induces a flow of assets (even at times the transfer of technology itself) from one nation to another.

Lim (2001) agrees with Rusike (2008) that capital development encourages increased flows of FDI, but explains that this is partly to do with capital development being associated with higher levels of GDP growth (suggesting the state in question is not high-risk) and partly because the more developed state may be ‘dumping’ mediocre capital equipment and technology in the form of FDI on the less developed state. This is able to happen because the capital equipment or technology in question is inferior in the developed world but superior to or at least as good as the equipment and capital in the developing world. Tuomi (2011:135-136) claims that “incentive programs”, as those suggested by the likes of Asiedu (2002) and Janicki & Wunnava (2004), do not attract FDI but that “genuine long-term FDI is more likely to result from an improvement in human and physical infrastructure and streamlined government policies”.

2.4.3. Information and Communication Technology

Addison & Heshmati (2003) stress the importance of information and communication technology (ICT) in attracting foreign investment. According to their (Addison & Heshmati, 2003) empirical findings, those developing states that had more advanced ICT systems attracted higher levels of FDI than those with more out-dated ICT systems. Blomstrom *et al.* (1999) agree, stating that those states with greater accessibility to communication and information systems that are on a par (or close to) with the more developed nations seem to receive more FDI flows than those that are behind. Addison & Heshmati (2003) believe that nations, especially developing states, can no longer simply rely on their natural resources as their ‘draw-cards’ for FDI as the world becomes more reliant on computer technology and infrastructure.

The development of ICT infrastructure “diversifies from the dependence on natural-resource endowments and offsets some of the locational-disadvantages of landlocked and geographically remote countries” (Addison & Heshmati, 2003:2). The development of ICT systems allows specialisation and enhances efficiency in all markets thereby reducing costs and making that particular nation or sector or firm more attractive to potential investors (Blomstrom *et al.*, 1999). Addison & Heshmati (2003:23-24) stress that because most developing nations get caught in what they term the “low-level ICT trap” (whereby those states that are behind in terms of ICT fall even further behind over time) it has become even more essential that developing states invest heavily in the development of ICT infrastructure so as to capture the attention and capital of foreign investors.

2.5. THE EXCHANGE RATE

Exchange rate volatility has long been one of the major determinants of FDI according to Russ (2004) and Rusike (2008) as it affects the relative prices of goods and services for both the potential investor and the host nation. A change in the exchange rate will make one of the currencies cheaper or more expensive relative to the other. Thus, if a potential foreign investor speculates that the currency of the host nation (for example the South African Rand) will appreciate (strengthen) then this will mean that this currency will become more expensive relative to the currency of the investor’s country (for example the US Dollar). Traditional theory (Russ, 2004) argues that foreign investment will decrease when the

domestic currency appreciates or the foreign currency depreciates (weakens) relative to the other currency, as the chance of the foreign investor making a capital gain on their investment decreases, thus making the investment high-risk. Conversely, when the opportunity of the investor making a capital gain increases, as a result of a depreciation of the domestic currency or an appreciation of the foreign currency, the investment becomes less risky (Rusike, 2008). According to Jenkins & Thomas (2002), there is evidence that finds that exchange rate volatility is more of a disincentive than the actual level of the exchange rate. However, they also state that there is evidence to the contrary supporting the theory that the level of the real exchange rate is significantly correlated with private investment (Jenkins & Thomas, 2002).

2.5.1. Exogenous Factor Volatility

Goldberg & Klein (1997) and Campa & Goldberg (1995) believe that the exchange rate is an exogenous variable and thus any fluctuation or volatility therein will induce a prescribed response from the affected parties involved. Therefore, what authors such as Campa and Goldberg (1995) are saying, is that if the exchange rate between two specific currencies changes for any reason, the potential investor will adjust their investment decision in accordance with the traditional theory as explained in the previous paragraph. The response of the investors to the change in the exchange rate is, therefore, not influenced by the specific sector, risk-aversion rating or composition of the particular market/sector in terms of outputs to inputs (Campa & Goldberg, 1995). If the change in the exchange rate causes the investment to become more risky then the foreign investors will always either retract (if contractually possible) that investment or reduce portions of it and conversely augment the investment if it becomes less risky and potentially more profitable (Goldberg & Klein, 1997). Therefore, if a nation wishes to ensure a relatively constant flow of FDI across its borders, then according to authors such as Goldberg & Klein (1997) and Campa & Goldberg (1995) it should implement policies that aim to stabilise the exchange rate and reduce volatility.

2.5.2. Endogenous Factor Volatility

Russ (2004) argues that although exchange rate volatility does have some effects on FDI flows, the effect is dependent upon both macroeconomic variables and where the cause of exchange rate volatility occurred i.e. whether it occurred in the host nation or the foreign nation. In addition, Russ (2004) believes that the reason why the shock occurred is also a significant factor that affects the decision making process of the foreign investors. For example, the influx of foreign capital and its economic effects may have caused the

domestic/host nation currency to appreciate and thus become more expensive relative to the foreign currency.

Traditional theory (Rusike, 2008, Campa & Goldberg, 1995 and Goldberg & Klein, 1997) would suggest that such an appreciation will negatively affect FDI flows as it is now more expensive and high-risk for the foreign investors. However, Russ (2004) asserts that the foreign investors may not be too concerned by the change in the exchange rate if it was caused indirectly by investor confidence and flows of direct investment. Therefore, they might assess that the investment risk is still relatively low and proceed as planned (Russ, 2004). The fact that there may be what Russ (2004:1-3) terms 'sunk-costs', minimises the loss from an appreciation of the host country or depreciation of the foreign country. Sunk-costs are those pre-shock fixed overhead costs that were agreed to contractually such as "legal retainers, rental and maintenance contracts, or a property tax that is paid, negotiated or legislated in advance" (Russ, 2004:1). The costs that are most commonly susceptible to the exchange rate volatility are the revenues of host-nation employees which are earned and are thus affected by post-shock volatility. These are the costs that foreign investors tend to be most concerned about (Russ, 2004).

In addition, if a shock occurred in the foreign country causing the foreign currency to depreciate and become more expensive relative to the host/domestic nation currency the foreign investors might not view the host country in a bad light as the shock was exogenous to the economic mechanisms of that state (Russ, 2004). In the event of an appreciation of the foreign currency or a depreciation of the domestic currency, the foreign investor will in fact initially make a capital loss on their primary investment because the fixed sunk-costs are relatively higher than what the investor would pay post-exchange rate change. Therefore, Russ (2004) suggests that FDI flows may only be affected to a minor extent by exchange rate volatility if the shock that caused the volatility is not deemed serious or threatening to the investment of the foreign investors. However, it is important to note that Russ (2004) admits that any form of exchange rate volatility will affect FDI flows, she is merely trying to assert that the response of foreign investors is not always as clear-cut as traditional theory has us believe and thus policies to stabilise the exchange rate may not be as effective as hoped.

2.6. CONCLUSION

The literature on FDI is vast, and studies that focus on the relationship between FDI and economic growth are especially numerous. From the discussed literature discussed above it seems that there is still much debate on what constitute the major determinants of FDI inflows. Theorists, such as Asiedu (2002); Russ (2004) and Jensen (2003), believe that the flow of FDI is an external process that cannot be influenced (at least only to a minor extent) by the host country governmental policies and reforms. In their opinion states, and in particular developing nations, can simply try and make their economic and political environments as investment friendly as possible with the hope that foreign investors choose their firm, sector or nation. The majority of authors, however, do believe that host nation reforms (be it economic, socio-political or both) can attract significant increases in FDI. The disagreement emerges over which reforms or policies are the best suited to making the host nation more attractive to potential foreign investors. Authors, such as Goldberg & Klein (1997), assert that certain policies will have the same effects on all states regardless of region, time or size. Whereas other authors such as Russ (2004) stress that certain policies will affect states differently and that it is up to the individual states to discover which policies suit them best.

Multi-factor theorists such as Wan (2010), Tuomi (2011) and Bevan & Estrin (2000) argue that a whole host of policies need to be linked and assure that these reforms do not contradict each other as there is a vast array of FDI determinants which need to be manipulated in the host nation's favour. Addison & Heshmati (2003), Noorbakhsh *et al.* (2001) and Nunnenkamp & Spatz (2002), stress the need for developing states to invest in capital, technology and infrastructure so as to reassure foreign investors that the state in question is improving economically, thus inducing further capital and technological investments necessary for economic growth. There are proponents of improved human capital development, such as Lucas (1990), that stressed the necessity for such an improvement from the late 1980s, and one could argue this push in developing nations is either upon us or in the very near future, and either way, developing states should now have started to build up their human resource capabilities. Tuman & Emmert (2009), Janicki & Wunnava (2004) and Tuman & Emmert (2004) believe that developing states need to adopt more liberal reforms and project their state as democratic, non-extremist and economically efficient, in so thus doing presenting the state in question as investment friendly and low-risk.

The preceding chapter concentrated on macroeconomic studies that were conducted in both developing and developed countries. The methods used in these studies vary significantly and the use of panel models especially is controversial (Claassen, 2011). A general conclusion from the literature overview provided is that FDI can have a positive influence on economic growth in the host country. Educational attainment and financial development of a certain degree are particularly important factors in the host nation as a base for achieving further growth. These are often referred to as the host economy's absorptive capacity and determine its ability to capitalise on the benefits provided by FDI.

The following factors have been identified in the literature as important determinants of FDI success: trade openness, regional location, the exchange rate, the security of property rights, trade liberalisation and the development of physical and human capital.

This thesis focuses especially on political risk/uncertainty as a potentially major determinant of inward FDI into South Africa and possible solutions and policies that might attract higher levels of FDI inflows in the future are identified. The following chapter provides a more detailed depiction of global and regional FDI flows.

CHAPTER 3:

GLOBAL & REGIONAL FDI FLOWS

3.1. INTRODUCTION

2012 was a watershed for global investment flows as for the first time developing economies attracted a greater amount of FDI than the developed nations. Four developing economies (China, Hong Kong, Brazil and the British Virgin Islands) ranked amongst the top five FDI recipients globally (UNCTAD, 2013).

Global FDI flows increased at a stable rate during the 1990s up until the ‘Dot Com’ Crisis that hit the world economy circa 2000 (Busse & Hefeker, 2007). Global FDI inflows capitulated by some 51 per cent in the subsequent year (UNCTAD, 2002). The world economies slowly recovered and over the course of the next seven years there was rapid economic growth and rising wealth in a majority of the developed countries, but specifically in the United States (Silipo, 2010). Net global FDI flows peaked at a shade over US\$1 800 billion in 2007, after which inflows dropped drastically amidst the 2007/8 global financial crisis sparked by the bursting of the housing bubble in the United States (UNCTAD, 2013). Over the course of the next two years, global net FDI inflows plummeted to US\$1 216 billion (UNCTAD, 2013). The recovery process has been a slow and arduous affair, and although global FDI inflows improved in 2010 and 2011, reaching US\$1 651 billion in 2011, 2012 saw another decline in global FDI (UNCTAD, 2013).

The decline in global net FDI inflows in 2012 can mainly be attributed to continued macroeconomic fragility and policy uncertainty for investors. Against this backdrop FDI is forecast to rise only moderately over the next few years (UNCTAD, 2013). However, although the global FDI figures report a decrease in flows, there have been a number of major changes. In addition to the aforementioned increase in the share of FDI inflows to developing states, developing countries also generated almost one third of global FDI outflows, continuing an upward trend that has been apparent in recent years (UNCTAD, 2013).

In terms of regional performance, Africa attracted increasing amounts of inward FDI from 1994 in accordance with the global pattern of the time, but at a much smaller scale in comparison with the Asian market and in particular the East-Asian region (UNCTAD, 2002).

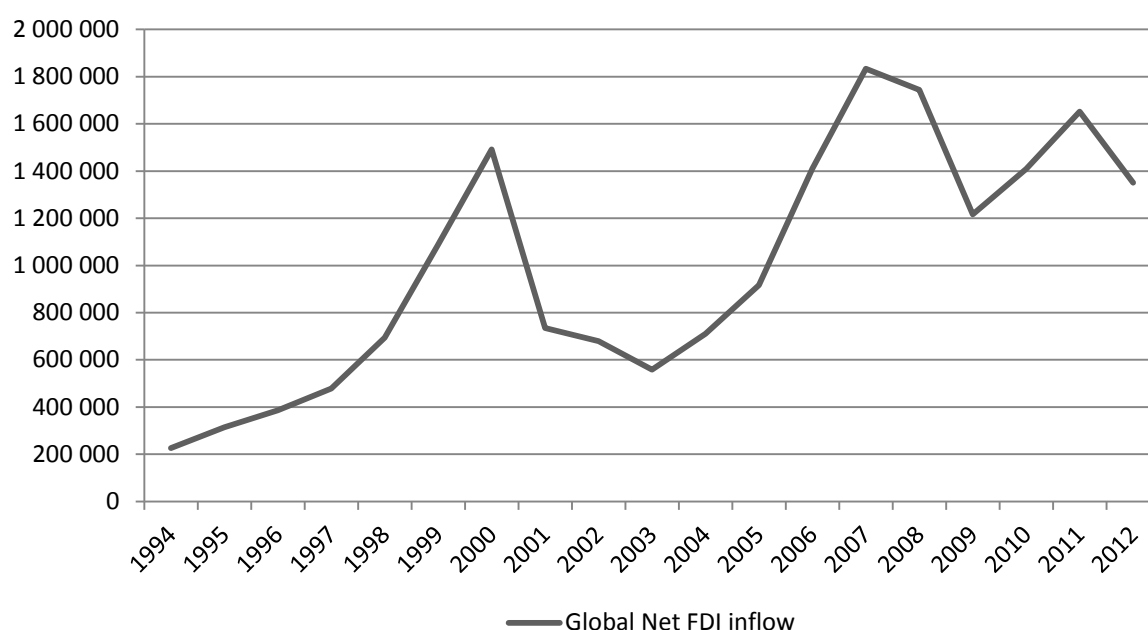
The Southern African region in particular has been unable to attract the levels of FDI desired when one considers the mineral wealth in the region (Rusike, 2008) and the high level of commodity prices over the past decade. This may be attributed to the relative failure of South Africa over a more prolonged period (1994-2012) and Angola over the course of the last three years (UNCTAD, 2013).

This chapter attempts to break down the FDI flows into firstly, a global perspective, comparing the performance of developing nations with that of the developed. Thereafter, a regional breakdown of FDI flows is presented, with a particular focus on the Southern African region.

3.2. GLOBAL FDI FLOWS

Between 1994 and 2000 net global FDI inflows increased by over 250 per cent as the world economies experienced a significant boom. This sharp incline in FDI flows is evident in Figure 3.1. The effects of the Dot Com crisis after 2000 meant global inward FDI flows dropped to approximately US\$560 billion in 2003, just a third of the net global inflows that had been experienced in 2000 (UNCTAD, 2006).

Figure 3.1: Net Global FDI inflows 1994-2012 (US\$ millions):



(UNCTAD statistical database 1994-2013)

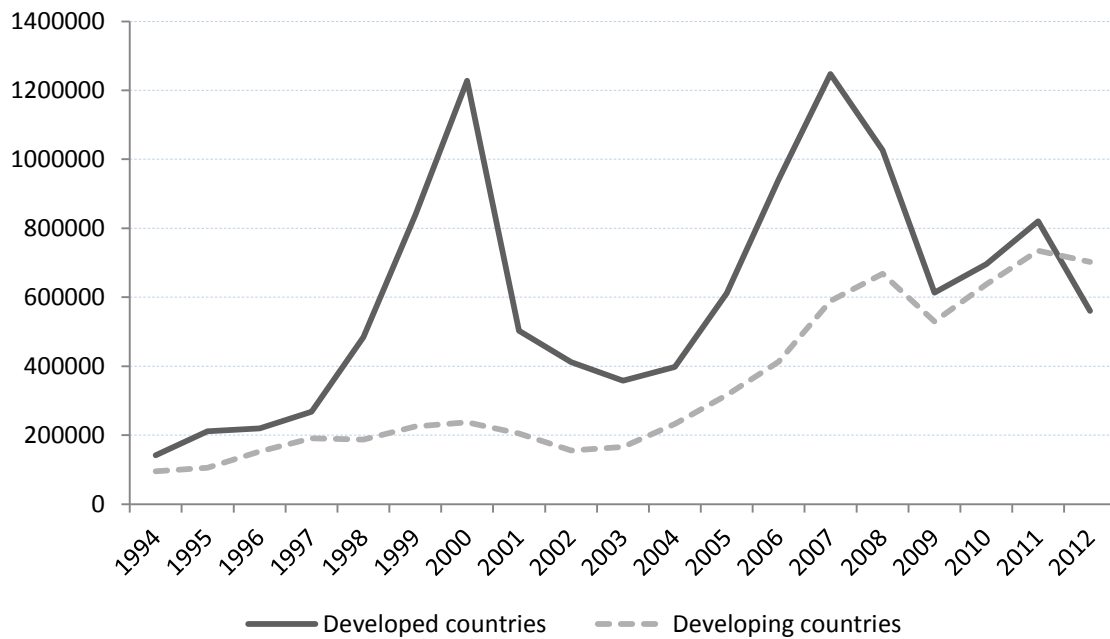
Between 2003 and 2007, however, FDI flows did recover to reach a new high of US\$1 833 billion in 2007 (UNCTAD, 2010). In 2008, world markets witnessed the biggest crash since the Great Depression and many at the time could not comprehend why or how such a devastating turn of events had occurred. Economists, worldwide, were quizzed as to how such a dramatic and widespread failure had not been anticipated, prevented or at the very least the effects reduced by quick and effective economic policy. Stop-gap fiscal policies were at first put in place to prevent any further damage to the world economies, followed by more prudent policies and financial regulations (Silipo, 2010). The negative effects on global FDI inflows however, continued to be felt until at least the latter half of 2009. Net global inflows dropped by 34 per cent from the peak in 2007 to US\$1 216 billion in 2009 (UNCTAD, 2010).

Although there was a recovery in FDI inflows in 2010 and 2011, when annual FDI reached US\$1 652 billion, global inward FDI fell again by 18 per cent in 2012 to US\$1 351 billion (UNCTAD, 2013). This decline was in “stark contrast to other key economic indicators such as GDP, international trade and employment, which all registered positive growth at the global level” (UNCTAD, 2013:xii). The restraint shown among investors in 2012 has been put down to a combination of economic instability, policy uncertainty in a number of major economies and the reshaping of many TNCs’ investments overseas (UNCTAD, 2013). This reshaping includes divestment, the restructuring of assets and, in many cases, relocation (UNCTAD, 2013).

3.3. DEVELOPED AND DEVELOPING NATIONS

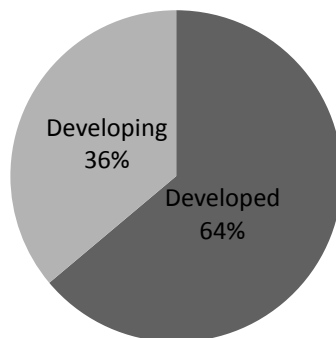
As noted in the previous section, 2012 marked a watershed for global investment as it was the first time that the developing nations attracted more FDI than the developed nations (UNCTAD, 2013). Figures 3.2 and 3.3 provide an indication of the relative inflows to developed and developing nations between 1994 and 2012. The trend shown by the global net FDI inflows graph is strikingly similar to that of the developed nations’ graph in Figure 3.1, demonstrating the overall dominance of inflows to developed countries over most of the period. This dominance is shown cumulatively for 1994-2012 in Figure 3.3.

Figure 3.2: Net inward FDI flows to Developed and Developing Nations 1994-2012 (US\$ millions)



(UNCTAD statistical database, 1994-2013)

Figure 3.3: Net inward FDI flows to Developed and Developing¹ Nations 1994-2012 (% share of total):



(UNCTAD statistical database, 1994-2013)

The gap in FDI inflows between the developed nations and developing nations widened significantly from 1997 until 2000. According to Park (2002), this divergence was brought about by the East-Asian Financial crisis of 1997/98 which came about as a result of a number of complex factors. The result of this crisis was that potential investors opted for safety in the

¹ Transitional countries were included as part of the developing nations

more recognised major developed economies. Developing economies were deemed too-risky with little reward in the few years after the East-Asian financial crisis (Park, 2002). The Dot Com crisis in 2000 put that theory to bed and inward FDI flows to developed countries more than halved, falling from US\$1 227 billion in 2000 to US\$503 billion in 2001 (UNCTAD, 2006). Comparatively, FDI inflows to developing countries were not as significantly affected by the Dot Com crisis as those to developed nations, decreasing from US\$238 billion in 2000 to US\$201 billion in 2001 (UNCTAD, 2006).

FDI inflows into both the developed and developing nations made a steady recovery in 2003 and a sharp increase in FDI inflows then ensued until 2007. Developed nations inward FDI flows peaked at US\$1 248 billion in 2007, but then dropped to US\$613 billion in 2009 as a result of the global financial crisis (UNCTAD, 2013). FDI inflows to the developing nations increased up until 2008, reaching US\$668 billion in that year but then reduced to US\$530 billion in 2009 (UNCTAD, 2013). This relatively inelastic response by foreign direct investors to developing nations during the financial crisis may be because the 2007/8 credit crisis was largely a developed economy crisis (Silipo, 2010 and Wray, 2011). FDI inflows to both developing and developed nations recovered in 2010 and 2011, but 2012 was a year of economic uncertainty and saw FDI inflows decrease for both the developing and developed nations. However, for the first time inflows into developing nations exceeded developed nations, being US\$703 billion and US\$561 billion respectively (UNCTAD, 2013).

3.4. REGIONAL COMPARISON

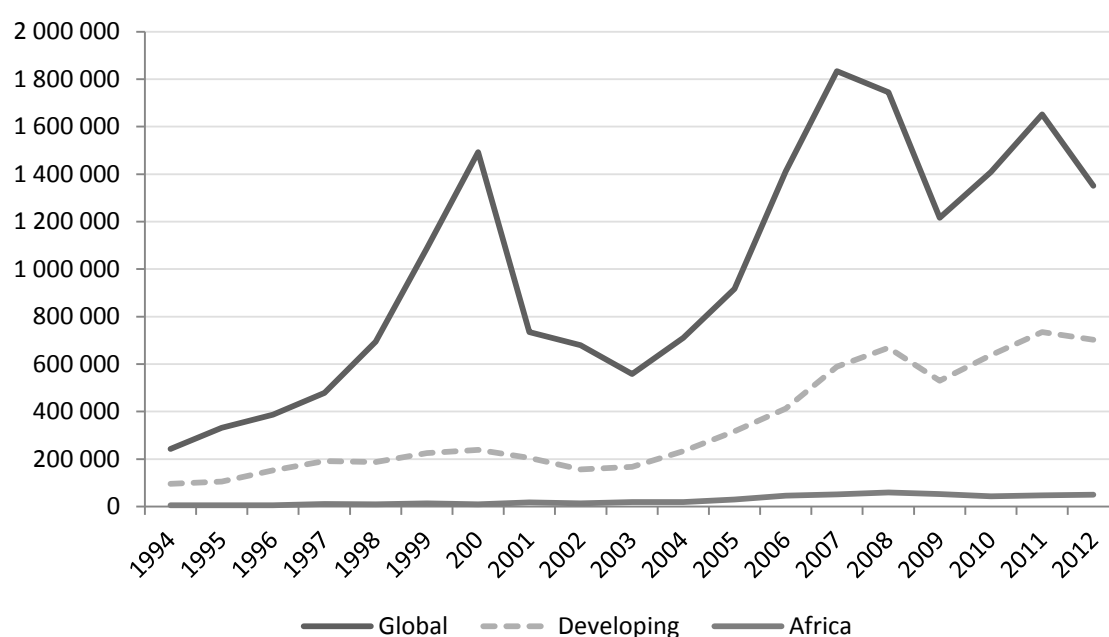
The developing countries can be divided into particular regions and comparisons can then be made to ascertain where the largest shares of FDI inflows into developing nations went during the 1994-2012 period. The African region, as a whole, is first looked at and its performance compared with the overall global, developing nations and other regions net FDI inflows. Thereafter, the Southern-African region is analysed in comparison to the African, South American and South-East Asian regions.

3.4.1. Africa

Although the developing nations attracted a significantly lesser amount of net FDI inflows between 1994 and 2012 than the developed nations, the gap between the two sets of countries decreased (UNCTAD, 2013). This movement towards a more equal split of world FDI

inflows between the developed and developing nations, highlights that in more recent years, potential investors have had the confidence to invest in the regions long regarded as full of potential, but that were perhaps deemed too risky for long term investment (Mottaleb, 2007). Worryingly for host African nations, whilst inward FDI flowing to Africa has increased nominally since 1994, from a mere US\$5.7 billion to a shade over US\$50 billion in 2012, its proportion of the world FDI inflows and, more importantly, the developing nations FDI inflows, has remained relatively stagnant (UNCTAD, 2013). The other developing regions such as South America and South-East Asia have seen their proportion of global and developing FDI inflows increase over the specified period (UNCTAD, 2013). The below figure shows the net FDI inflows between 1994 and 2012 to the African region and highlights how, relatively, the region has been ignored in comparison to other developing regions.

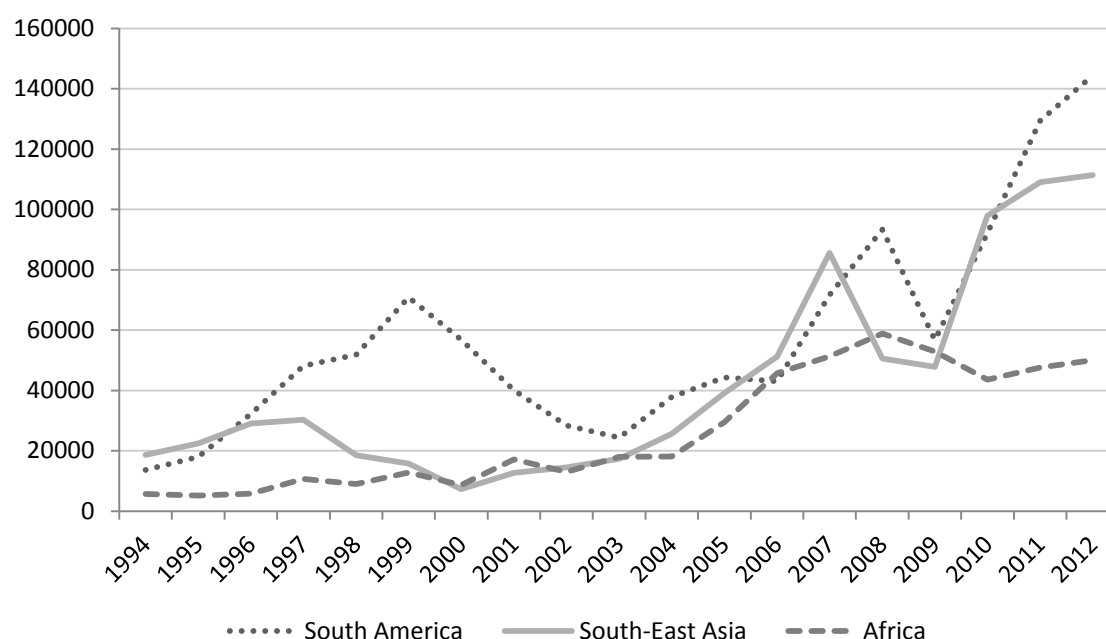
Figure 3.4: Net FDI inflows 1994-2012 (US\$ millions):



(UNCTAD statistical database, 1994-2013)

Figure 3.4 shows that although nominal FDI inflows to Africa increased by nearly 880 per cent over the specified period, the region's performance in relation to global FDI inflows and that of the developing nations as a whole was very poor.

Figure 3.5: Net FDI inflows per region 1994-2012 (US\$ millions):



(UNCTAD statistical database, 1994-2013)

Figure 3.5 shows that South-East Asia and South America were heavily preferred to Africa by investors for much of the early to mid-1990s. South American FDI inflows spiked after the 1997 East-Asian Crisis, reaching US\$71 billion in 1999 (UNCTAD, 2006). Africa's net FDI inflows grew steadily up until 2004 after which they increased significantly. Net FDI inflows to Africa peaked in 2008 at US\$59 billion and subsequently declined amidst the economic uncertainty after the global financial crisis (UNCTAD, 2013). The increase in FDI inflows to Africa since 2000 could be down to a combination of factors, including the implementation of increasingly liberal economic reforms and an increase in commodity prices as the demand for natural resources amplified and nations (especially China) turned to Africa to meet this demand (UNCTAD, 2001).

Inflows of FDI to South America and South-East Asia rose sharply after 2009, peaking at US\$144 billion and US\$111 billion respectively in 2012 (UNCTAD, 2013). The general trends in Figure 3.5 suggest that FDI flows into South-East Asia and South America tend to be more elastic/susceptible during financial crises/cycles in comparison to flows into Africa, but that over the past two decades investors have preferred to invest in these regions rather than Africa.

Table 3.1: Net FDI inflows per region 1994-2012:

	Share of global FDI inflows (%)			Share of developing nations' FDI inflows (%)		
	Africa	South America	South-East Asia	Africa	South America	South-East Asia
1994	2.34	5.62	7.69	5.95	14.30	19.56
1995	1.55	5.45	6.79	4.86	17.12	21.34
1996	1.51	8.34	7.52	3.82	21.11	19.03
1997	2.24	10.07	6.35	5.62	25.21	15.89
1998	1.29	7.47	2.66	4.80	27.65	9.875
1999	1.17	6.51	1.45	5.69	31.48	7.01
2000	0.58	3.80	0.48	3.65	23.89	3.05
2001	2.33	5.45	1.72	8.38	19.58	6.19
2002	1.91	4.19	2.13	8.35	18.30	9.32
2003	3.22	4.36	3.11	10.82	14.64	10.43
2004	2.54	5.32	3.61	7.75	16.23	11.00
2005	3.21	4.83	4.26	9.30	14.00	12.35
2006	3.24	3.05	3.63	11.07	10.43	12.40
2007	2.79	3.90	4.67	8.69	12.15	14.52
2008	3.37	5.35	2.89	8.81	13.97	7.56
2009	4.35	4.66	3.93	9.98	10.695	9.01
2010	3.09	6.54	6.95	6.84	14.46	15.36
2011	2.88	7.83	6.60	6.47	17.60	14.83
2012	3.70	10.68	8.24	7.11	20.54	15.84
Mean	2.49	5.98	4.46	7.27	18.08	12.35
Median	2.52	5.45	4.09	7.19	17.36	12.35

(UNCTAD statistical database, 1994-2013)

Between 1994 and 2012, on average, South America (5.98%) attained over double the proportion of global FDI inflows of Africa (2.49%). Its share of the total FDI inflows accrued by the developing states was even more than double that of Africa (18.08% versus 7.27%) (UNCTAD, 2013). South-East Asia also acquired a significantly higher average share of global and developing nations' FDI inflows than Africa over the specified period, accruing 4.46% and 12.35% respectively (UNCTAD, 2013). Over the last two decades, Africa has received a greater share than South America of global and developing nations FDI inflows in only one year, namely in 2006 (UNCTAD, 2013). Africa acquired a greater share of the global and developing nations' share of FDI inflows than South-East Asia in only five of the nineteen years shown in Table 3.1. Significantly, the years in question :- 2000, 2001, 2003, 2008 and 2009- were all after major financial crises.

Africa has, however, made some progress over the past two decades in attracting a greater share of FDI, as illustrated by Figures 3.4 and 3.5 and Table 3.1. Nominal annual FDI inflows have increased from a mere US\$5 billion in 1994 to over US\$50 billion in 2012 and Africa's share of global and developing nations' FDI inflows has risen from what was received in the

mid 1990s (UNCTAD, 2013). Between 1994 and 2000 Africa's average share of global and developing nation's inflows was 1.5% and 4.9% respectively. Since 2000, these averages have increased to 3.1% and 8.4% (UNCTAD, 2013).

This increase in Africa's share of FDI inflows is more impressive when compared to South America and South-East Asia whose share of global and developing nations FDI has fallen from 2001 onwards.

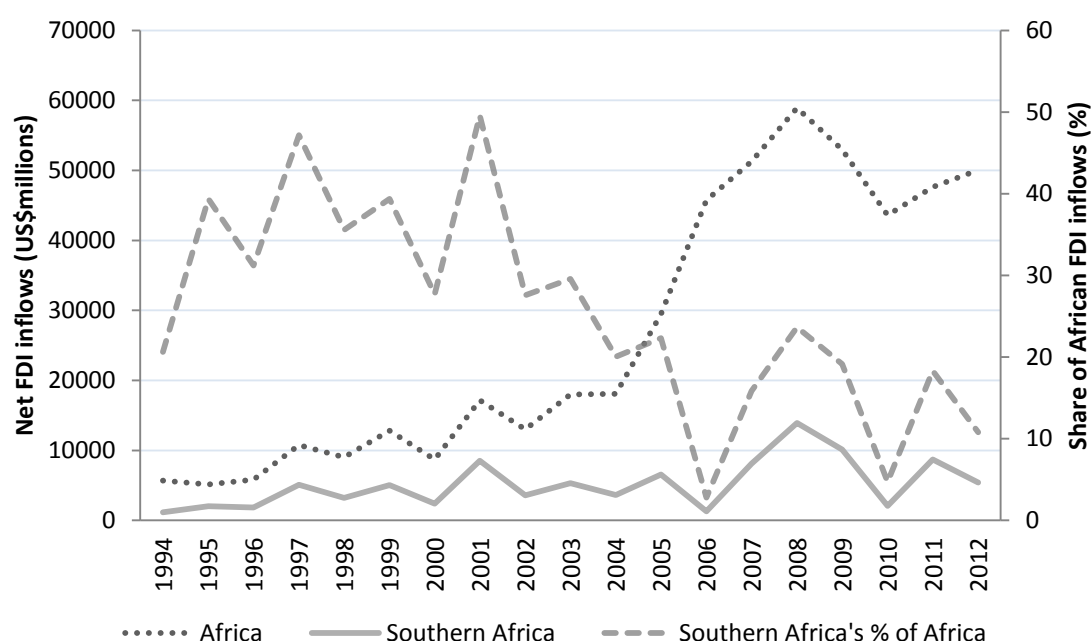
South America's share of global and developing nations' FDI inflows from 2001-2012 was 5.5% and 15.2% respectively, a decrease from its performance between 1994 and 2000 and less than its average annual share of 5.98% and 18.08% between 1994 and 2012 (UNCTAD, 2013). South-East Asia's share of global and developing nations' FDI inflows from 2001-2012 was 4.3% and 11.6% respectively, a decrease from its performance between 1994 and 2000 and less than its 4.48% and 12.35% annual average share between 1994 and 2012 (UNCTAD). These figures demonstrate that Africa has made both nominal and relative progress in attracting FDI inflows since the turn of the millennium, albeit from a low base.

Since 2008 and the global financial crisis sparked by the credit/housing bubble in the United States, Africa's performance in terms of global FDI inflows has further improved. Its share of global FDI averaged almost 3.5% between 2008 and 2012 (UNCTAD, 2013). Interestingly, Africa's share of the developing nations FDI inflows since 2008 (7.8%) decreased in comparison to its average since 2001, whilst those of South America (15.5%) and South-East Asia (12.5%) increased slightly (UNCTAD, 2013). This is possible because developing nations overtook the developed nations in terms of net FDI inflows over this period and FDI inflows into South America and East-Asia grew even faster than inflows into Africa (UNCTAD, 2013). Thus, although Africa's performance improved in relation to global FDI inflows, it declined slightly in comparison to these other developing regions.

3.4.2. Southern Africa

UNCTAD (2013:40) reports that the overall increase in African FDI inflows during the period 2012-2013 translated into increased flows to North Africa, Central Africa and East Africa, whereas West Africa and Southern Africa registered declines. FDI flows into Southern Africa slumped from US\$8.7 billion in 2011 to US\$5.4 billion in 2012 (UNCTAD, 2013:40). Falling FDI flows to Angola and South Africa, according to UNCTAD (2013), explained the main reason why the region's FDI inflows declined to such an extent.

Figure 3.6: Net FDI inflows & share of Africa's FDI inflows 1994-2012:



(UNCTAD statistical database, 1994-2013)

The net FDI inflows received by the African and Southern African regions show very similar trends in Figure 3.6. From 1994 up until 2003 the graphs show similar annual fluctuations, with a steady overall increase in FDI inflows. After 2003 FDI inflows to the rest of Africa rise much faster than those into Southern Africa and Southern Africa's share of Africa FDI declines dramatically. Net inflows into Southern African region reached US\$8.5 billion in 2001, after which inflows contracted to only US\$1.3 billion in 2006 (UNCTAD, 2013). In contrast, net FDI inflows into Africa as a whole rose strongly from 1994 up until 2008, when inflows peaked at US\$59 billion (UNCTAD, 2013). FDI inflows into Southern Africa and the rest of the world diminished sharply in the wake of the 2008 financial crisis, Africa attracting US\$45.5 billion in 2010 and Southern Africa only US\$2 billion (UNCTAD, 2013).

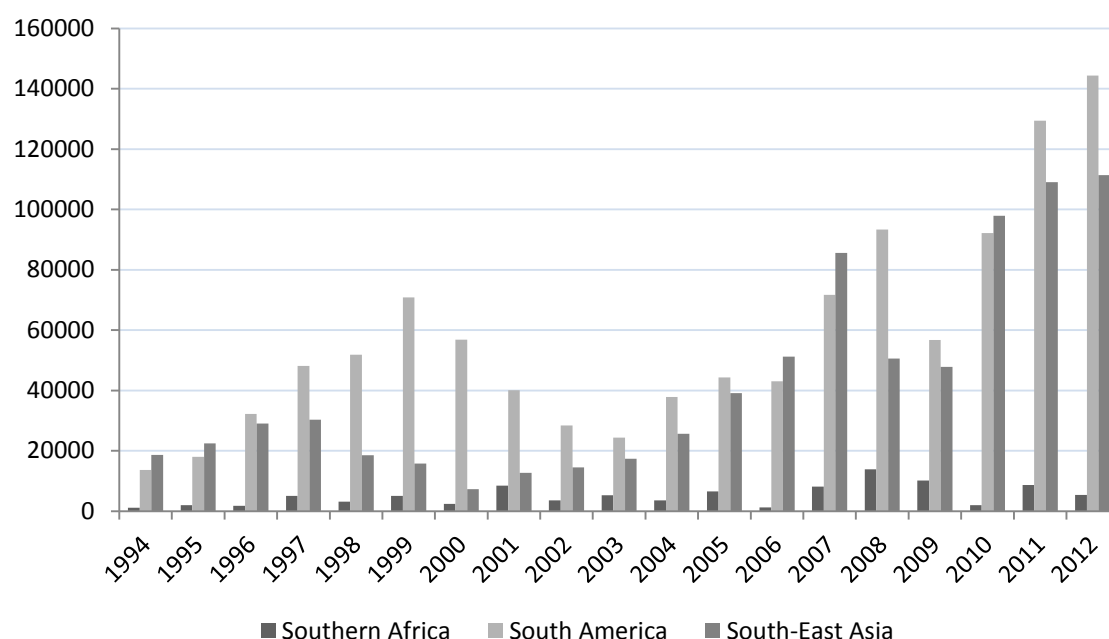
Southern Africa's share of total African FDI inflows has declined since 1994. However, the graph in Figure 3.6 highlights that, although volatile, overall Southern Africa's share has diminished over the past two decades (UNCTAD, 2013). Southern Africa's share of FDI inflows to Africa can be separated into three distinct periods which the trend shown in Figure 3.6 illustrates. These periods are: 1994-2001, 2002-2006 and 2007-2012. Between 1994 and 2001, Southern Africa's average share of FDI inflows to Africa was 36%. This period was

marked by an increasing share of total FDI inflows into Africa, peaking at 49.5% in 2001 (UNCTAD, 2013).

After 2001, Southern Africa's share decreased rapidly, reaching a base level of just 2.8% in 2006. Between 2002 and 2006, Southern Africa's average share of total FDI flows into Africa was just 20% (UNCTAD, 2013). This significant decline in FDI inflows to Southern Africa can be attributed to particularly low inflows to the two principal regional economies (Angola and South Africa) (UNCTAD, 2007). These two countries experienced net negative inflows amounting to US\$2 billion in 2006 (UNCTAD, 2007). This contrasted with the high growth experienced in 2005 when inflows into South Africa and Angola reached US\$6 billion. According to UNCTAD (2007:38), the negative FDI inflows experienced by South Africa in 2006 were caused by the sale of a foreign equity stake in a domestic gold-mining company to a local firm.

From 2006 onwards, annual FDI inflows into the Southern African region were very volatile. Southern Africa attracted as much as 24% of total African FDI inflows in 2008 – the year in which a Chinese Bank ICBC bought a 20% stake in South Africa's Standard Bank for US\$5.5bn - and as little as 4.7% in 2010 (UNCTAD, 2013). Southern Africa's average share of African FDI inflows for the period 2007-2012 was only 15.4%, less than half of the 1994-2002 average. FDI flows to Southern Africa slumped from US\$8.7 billion in 2011 to US\$5.4 billion in 2012 (UNCTAD, 2013). Once again, the reduction in FDI flows received by the Southern African region in 2012 was mainly due to falling FDI flows to Angola and South Africa (UNCTAD, 2013). 2012 marked a third successive year of net negative FDI for Angola, with -US\$6.9 billion recorded in 2012 (UNCTAD, 2013). FDI flows to South Africa fell by 24% from 2011 to US\$4.6 billion in 2012 (UNCTAD, 2013:40). This reduction was due to net sales of South African assets by foreign companies in the last quarter of 2012, primarily the sale by UK based Rio Tinto of its South African subsidiary, Palabora, to a South African buyer (UNCTAD, 2013:40).

Figure 3.7: Regional Net FDI inflows 1994-2012 (US\$ millions):



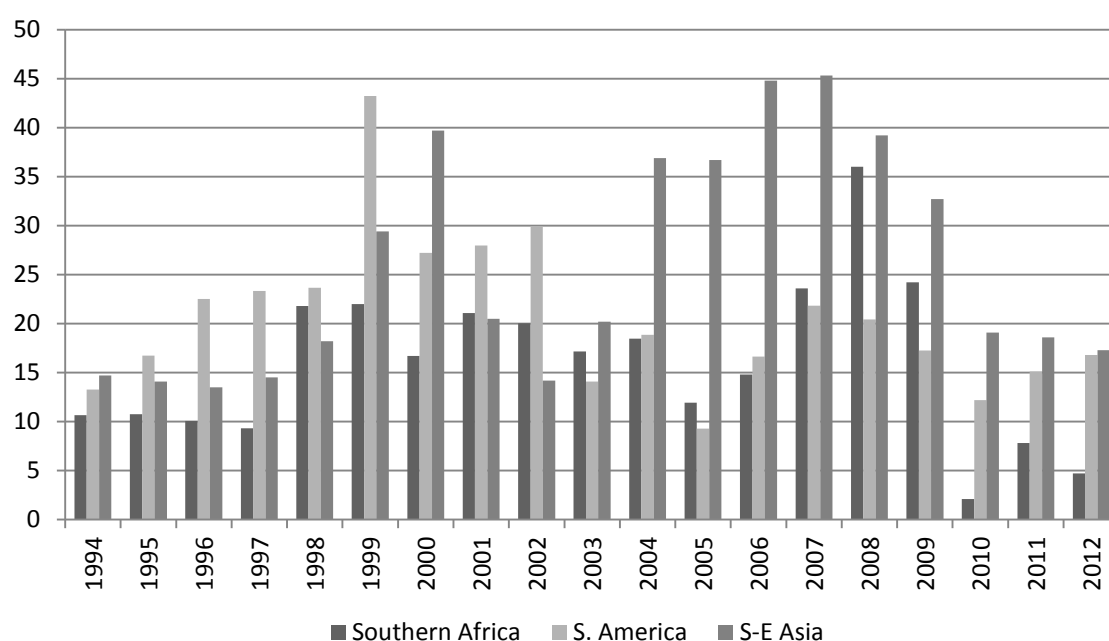
(UNCTAD statistical database, 1994-2013)

Figure 3.7 illustrates the widening gap that has opened up between the Southern African region and the South American and South-East Asian regions in terms of the net annual FDI inflows, since 1994. Southern Africa reaches a peak of US\$13.9 billion in FDI inflows in 2008 – the year of the ICBC/Standard Bank deal (UNCTAD, 2013). This is in comparison to peak FDI inflows of US\$144.4 billion and US\$111.3 billion reached in 2012 by the South American and South-East Asian regions respectively (UNCTAD, 2013). Furthermore, when one compares the lowest annual FDI inflows accrued by the three different regions over the specified period, Southern Africa performed woefully. The minimum annual FDI inflows attained by South America (US\$13.7 billion in 1994) are nearly 11 times larger than the minimum level of inflows attained by Southern Africa (US\$1.2 billion in 1994). The minimum FDI inflows attained by South-East Asia (US\$7.3 billion in 2000) are 5 times larger than the minimum level of inflows attained by Southern Africa (UNCTAD, 2013).

Due to this vast difference in the sizes of the 3 regions, comparing them in terms of nominal FDI inflows is unfair to the Southern African region. In Figure 3.8 net FDI inflows into each region is shown as a percentage of Gross Fixed Capital Formation (GFCF). This is done to demonstrate the importance of FDI in both boosting the fixed capital formation necessary for sustainable higher rates of GDP growth and also in providing the funding necessary to finance domestic capital formation. If FDI is greenfields investment it contributes to GFCF.

When FDI involves the purchase of existing assets it does not affect GFCF but it provides funding for domestic capital formation. This latter role is especially important in countries like South Africa where the low level of national savings means that investment is higher than savings, producing current account deficits which must be funded by foreign capital inflows. Thus, although nominal FDI inflows do give some perspective of how successful a country was/is at attracting FDI, it does not tell the whole story. Measuring FDI inflows as a percentage of GFCF allows comparisons to be made between the economies of countries and regions of different magnitudes or scope (Asiedu, 2002). It is also a more realistic gauge of a country's aptitude at attaining inflows of FDI depending on the resources available to it. FDI as a share of GFCF is also the preferred measure used in Chapters 4 and 5 below and is supported as a measure of the significance of FDI by Mikesell (2013) and Cheung *et al.* (2011).

Figure 3.8: Regional FDI inflows 1994-2012 (% of GFCF):



(UNCTAD statistical database, 1994-2013)

Figure 3.8 illustrates, that when FDI inflows are measured as a percentage of GFCF, the Southern African region has fared much better when compared to South America and East Asia (in relation to being measured as Net FDI flows). The mean average FDI as a percentage of GFCF for the entire period since 1994 was 15.9% for Southern Africa in comparison with the 20.5% achieved by South America (UNCTAD, 2013). South-East Asia has a mean average FDI of 25.8% for the entire period and has been the most successful and consistent

region at attracting FDI inflows as a percentage of GFCF. From 2003 to 2009, the Southern African figures are very similar, and in some cases higher, than those of South America, having been substantially lower prior to this (UNCTAD, 2013). 2008 was Southern Africa's peak year for nominal FDI inflows and in terms of inflows as a percentage of GFCF, with FDI in that year accounting for 36% of GFCF (UNCTAD, 2013). From 2010-12, however, Southern Africa's net FDI inflows are very small relative to South America and East Asia, even when measured as a share of GFCF.

3.4.3. The Nature of FDI inflows

Historically, the majority of FDI flows into Southern Africa were driven by foreign investment in extractive industries, but in more recent years, investment in consumer-oriented manufacturing and service industries has also expanded (UNCTAD, 2013). There is a rising number of success stories of manufacturing FDI in Southern Africa that are not directly related to extractive industries, including in the automotive sector in South Africa and the garment business in Lesotho (UNCTAD, 2013). The mining, quarrying and petroleum sector has accounted for well over half of all cross-border mergers and acquisitions in Southern Africa in the past four years (UNCTAD, 2013:41).

TNCs from Southern Africa are also increasingly active within their own region, building on a trend in recent years of a higher share of FDI flows to the region coming from emerging markets. Southern African, regional value chains are relatively less developed and are an area that possible future policies could target. One type of FDI source that has garnered increasing attention in recent years is private equity in Southern Africa (UNCTAD, 2013). Private equity investment in "the whole African region is concentrated in a few countries and South Africa is, by far, the largest recipient of private equity on the continent accounting for more than half (53%) of total investments" (UNCTAD, 2013:41). Additionally, non-financial services such as infrastructure and communications are sectors that have seen increasing regional investment by Southern African TNCs.

South America fared relatively well in comparison with South-East Asia, as the median FDI attained by each region for the period shown in Figure 3.8 was 18.9% and 20.2% of GFCF respectively (UNCTAD, 2013). The main factors making South America attractive to FDI over the past two decades are "its wealth in oil, gas and metal minerals and its rapidly expanding middle class" (UNCTAD, 2013:xvii). Flows of FDI into natural resources are

significant in many South American countries. UNCTAD (2013:3) states that FDI inflows into South America were also driven by the region's "economic buoyancy, attracting a significant number of market-seeking investments and by the persistent strength of commodity prices". This continued to encourage investments in the extractive industries, particularly in Chile, Peru and Colombia (UNCTAD, 2013).

South-East Asia has been very successful at attracting high levels of FDI. Since the East-Asian crisis in 1997, the South-East Asian region has averaged FDI inflows of 28.9% of GFCF and nearly 30% since the turn of the millennium (UNCTAD, 2013). Although these figures are much higher than those of South America and Southern Africa, this may not necessarily be because of the attractiveness of the region as a whole (as suggested by the regional theory of Asiedu (2002)), but more because South-East Asian countries have individually put in place incentives and policies attractive to foreign direct investors.

UNCTAD (2013) reports that there has been a considerable wave of relocation in manufacturing within the South-East Asian region during the past few years, particularly for labour-intensive industries and value-chain activities. Meanwhile, both the extractive and the infrastructure industries in the region have also received significant foreign investment, driven partly by intraregional investment (UNCTAD, 2013). China's investment in the South-East Asian region has surged over the last decade. Traditionally, important target countries in South-East Asia for production relocation from China were Indonesia and Vietnam (UNCTAD, 2013). Foreign companies have started to relocate their production and assembly facilities to low-income countries in South-East Asia as production costs in China have risen (UNCTAD, 2013). During the past few years, infrastructure investment from China in South-East Asia has also risen. UNCTAD (2008:45) notes: "In infrastructure industries, such as transport and telecommunications, intraregional investment has been particularly significant in South-East Asia over the past decade, with Malaysia, Singapore and Thailand the major players from emerging economies in those industries".

3.5. CONCLUSION

Southern African inward FDI regional average is heavily influenced by the FDI flows to South Africa and Angola. The low level of FDI attracted by both these countries in recent years has caused Southern Africa's share of global and African FDI inflows, as well as FDI's

share of regional GFCF, to fall to very low levels. According to the National Planning Commission of South Africa (2013), South Africa holds the world's largest reported reserves of gold, platinum group metals, chrome ore and manganese ore, and the second-largest reserves of zirconium, vanadium and titanium. In a report commissioned by the US-based Citigroup bank, South Africa was ranked as the world's richest country in terms of its mineral reserves, worth an estimated US\$2.5 trillion (MiningMX, 2010:1). Although not South Africa's only source of attraction for FDI, such an abundance of resources should have translated into much higher levels of inward FDI than has been the case. The next chapter looks at the historical flows of inward FDI to South Africa and examines these against the determinants of FDI flows identified in the literature review.

CHAPTER 4:

SOUTH AFRICAN FDI INFLOWS

4.1. INTRODUCTION

South Africa attracted US\$4.6 billion in net FDI inflows in 2012, which equated to 6.1% of GFCF (UNCTAD, 2013). This was, however, 24% lower than in 2011; an all too common occurrence of dramatic annual fluctuations in FDI inflow for a country regarded as one the richest nations in terms of natural resources (UNCTAD, 2013). The National Planning Commission (NPC) of South Africa (2013:1) admits that “over the past two decades, South Africa’s mining industry has performed poorly in comparison with its global peers”. Thus, despite being “the world’s richest country in terms of its mineral reserves” (MiningMX, 2011:1), South Africa ranks outside the top five mineral producers globally (NPC, 2013). FDI inflows to the country have failed to reach the potential levels that were/are anticipated nearly every year since 1994.

South Africa has consistently ranked among the top African nations in terms of net FDI inflows attracted annually (UNCTAD, 2013), but many critics, such as Bruce (2013), argue that South Africa should have attracted even more inflows. Thus, although nominal FDI inflows do give some perspective of how successful a country was/is at attracting FDI, it does not tell the whole story. Measuring FDI inflows as a percentage of GFCF allows comparisons to be made between the economies of countries and regions of different magnitudes or scope (Asiedu, 2002). It is also a more realistic gauge of a country’s aptitude at attaining inflows of FDI depending on the resources available to it. A developing nation, such as South Africa, with a huge supply of mineral resources, should attract FDI inflows that are a higher proportion of its GFCF than those nations which rely less heavily on foreign investment in order to spur domestic economic growth (Jenkins & Thomas, 2002). Utilising the two measures of FDI inflows gives a clearer understanding of exactly how successful a country has been at attracting FDI inflows nominally, in comparison to other countries and in relation to its past performance (Ezeoha & Cattaneo, 2012).

An editorial in *Business Day* (2013:1) suggests that investors should think twice before deciding on whether to invest in South Africa and that said investors would not be irrational to ask government officials- “Is my investment safe from arbitrary political decisions when I

buy in SA?” The same article (Business Day, 2013) reports on an Australian-based, mining company, Aquila, and its struggles in South Africa with the Department of Mineral Resources. Specifically, the case involved the South African department granting a prospecting right over existing mineral rights, an apparently relatively common occurrence in South Africa (Business Day, 2013). South African government and ANC members of parliament (MPs) have called for and stoutly defended amendments to mining legislation for a number of years now, which would specifically allow the Minister of Mineral Resources to make arbitrary decisions over mining rights (Business Day, 2013). Such proposed changes, which are passionately opposed by the mining industry, are not the first of its kind. In 2007, South Africa was revising its mining legislation with a view to increasing its revenues and development benefits from mining. The draft legislation proposed a royalty rate between 1% and 6%, depending on the type of mineral (UNCTAD, 2008). Although the amendments were not passed, it provides a stark example as to why foreign investors are hesitant to choose South Africa as their investment destination.

Bruce (2013) provides an example of anti-business sentiment given by the head of research at the ruling ANC party and adviser to the Minister of Public Service, Thami ka Plaattjie, about the current attitude of the ruling party towards business in South Africa. Plaattjie is quoted as saying, “We are still wresting control from the white capitalist economy. We still reel under the oppressive yoke of all-pervading oligopolistic and monopolistic forms of the white economy” (Bruce, 2013:1). Such heated rhetoric towards the sector that, according to Bruce (2013:1), “pay the taxes that government spends on providing services to the poor” is perhaps another pertinent example of the perceived lack of business aptitude and openness to investment in the current South African government.

The mining sector, particularly, has been affected over the past few years by the reticent and perceivably negative approach by the South African towards business and the series of strikes that have plagued the industry in recent years. Simon Brown from JustOneLap, a financial and investment consultancy, said in a Mail & Guardian article (Steyn, 2012:1) that “mining giants had been slowly disinvesting from South Africa for many years. And when you look at BHP Billiton's project pipeline, South Africa doesn't feature at all.” Peter Major from Cadiz Corporate Solutions was also quoted as saying in the same article (Steyn, 2012:1) that “the experienced mining chief executives know how to manage high cost and risky assets. But they need input from the government, unions and employees to keep these operations going.”

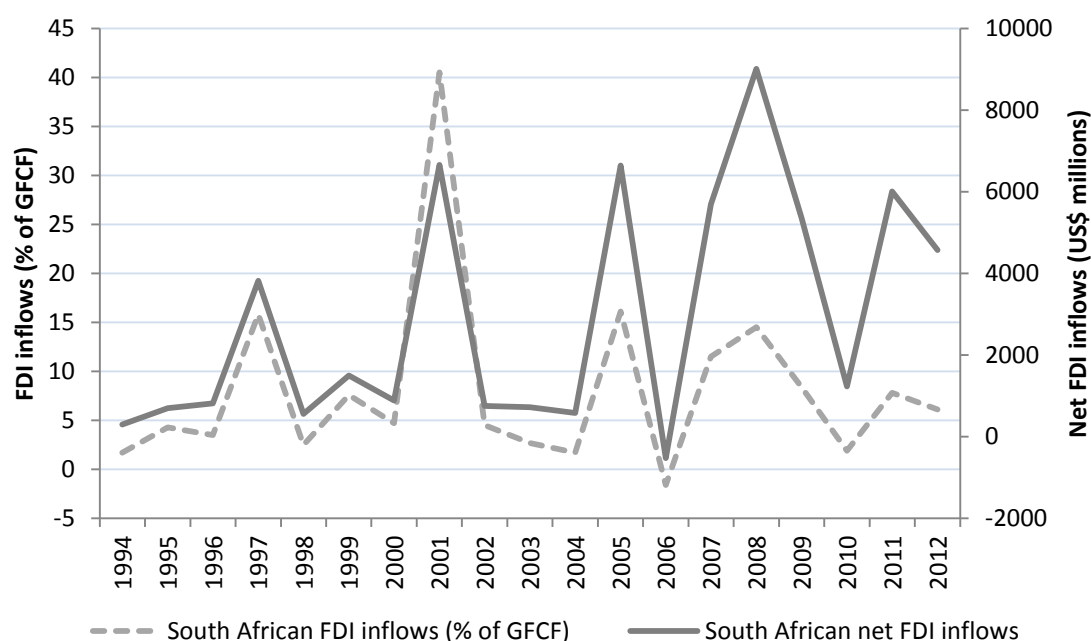
Major continued to say that “most of our deep mines can be kept going for decades longer if they are managed correctly in tandem with the four stakeholders' co-operation: unions, government, employees and management” but stressed “complete, absolute buy-in from government and the workers is mandatory” (Steyn, 2012:1).

Over the course of this chapter, an overview of FDI flows to South Africa between 1994 and 2012 will be provided, comparing the country's inflows with those of Chile and Botswana and against the specified determinants of FDI that were identified in the previous chapter. In addition, the friendliness of the business environment in South Africa will be looked at in more depth.

4.2. SOUTH AFRICAN FDI INFLOWS

Since 1994, South Africa's annual inflows have been very volatile, reflecting the “lumpy” nature of direct investments by foreigners (see Figure 4.1). From time-to-time there have been very large investments, especially into banking, telecommunications and mining that have dramatically impacted annual FDI inflows. These include the 1997 sales of a stake in the newly privatised Telkom (US\$1.3 bn), the 2000 purchase of De Beers (approximately US\$5 bn), the 2005 purchase of a 50% stake in ABSA by Barclays Plc (US\$5.3 bn), ICBC's purchase of 20% of Standard Bank in 2008 (US\$5.5 bn) and the purchase of 2 tranches in Vodacom by Vodaphone in 2008 and 2011 (Ezeoha & Cattaneo, 2012). FDI reached a peak of US\$9 billion in 2008 (the IBC/Standard Bank deal and the purchase by Vodaphone of Venfin's stake in Vodacom) and experienced a low net negative FDI of US\$527 million in 2006 (UNCTAD, 2013). Although 2008 was South Africa's most successful year in nominal terms, it was not the peak year in terms of FDI inflows measured as a percentage of GFCF. As a share of GFCF, FDI was 14.5% in 2008 which was lower than the 2001 peak (the year of the De Beers deal) when inward FDI of US\$6.6 billion was 40.5% of GFCF (UNCTAD, 2013).

Figure 4.1: South African FDI inflows 1994-2012:



(UNCTAD statistical database, 1994-2013)

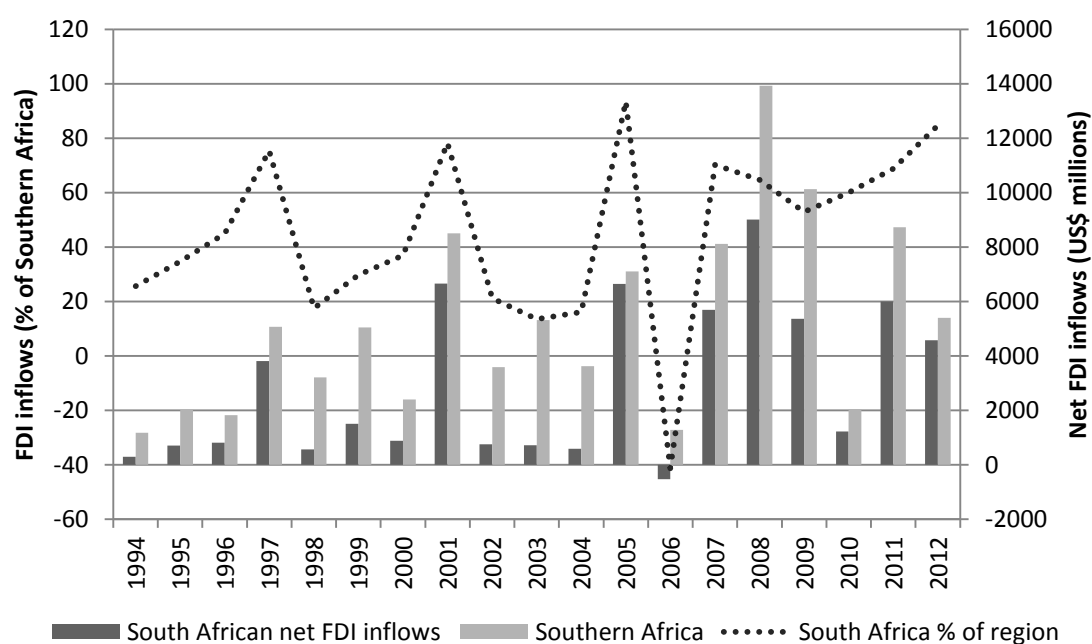
2006 saw negative FDI inflows and UNCTAD (2007:38) states that South Africa witnessed this major decline in inflows due to “the sale of a foreign equity stake in a domestic gold-mining company to a local firm”. In terms of FDI inflows, (both nominally and as a percentage of GFCF) South Africa’s most successful years were 1997, 2001, 2005, 2007, 2008 and 2011 (UNCTAD, 2013). The large foreign investment deals that occurred in each of these years were discussed above. The average nominal FDI inflows over the past two decades were US\$2.9 billion and average FDI inflows as percentage of GFCF were 8.1% (UNCTAD, 2013).

If one divides Figure 4.1 into two distinct periods, 1994-2004 and 2005-2012, annual nominal FDI inflows average US\$1.6 billion and US\$4.7 billion respectively. This shows that South Africa has attracted much higher FDI inflows since 2004, which may suggest relative success. However, inward FDI as a percentage of GFCF averaged 8.1% between 1994 and 2004 and 8.4% between 2005 and 2012 respectively (UNCTAD, 2013).

UNCTAD (2013:81) claims that “foreign firms may seek market access through investment and production in one member country with the intent to export to other members of the agreement”. In terms of net FDI inflows, the Southern African region has been dominated by

South Africa and Angola over the past two decades. Amongst the SADC countries, South Africa has more often than not received the highest share of regional FDI flows (UNCTAD, 2013). The US\$4.6 billion South Africa received in net FDI inflows in 2012 was 85% of the total net FDI inflows accrued by the Southern African region in that year (UNCTAD, 2013).

Figure 4.2: South & Southern African net FDI inflows 1994-2012:



(UNCTAD statistical database, 1994-2013)

Figure 4.2 shows the relationship between South African net FDI inflows and those of the Southern African region. Between 1994 and 2005, South Africa's share of total FDI inflows into Southern Africa followed a four year cyclical period, peaking in 1997, 2001 and 2005 with troughs in 1994, 1998 and 2003. After this period, South Africa had a disastrous year in 2006 in terms of attaining FDI, experiencing net divestment of US\$527 million and attaining -41% of total nominal FDI flows into the Southern African region (UNCTAD, 2013). 2007 to 2012 was a relatively successful period for South Africa in terms of attaining a high percentage of total FDI flows to Southern Africa. During this period, South Africa averaged 67% of total Southern African nominal FDI inflows (UNCTAD, 2013). With South Africa attaining two thirds of total nominal FDI inflows to the region since 2007, one can label it the "principal host nation" of the region (UNCTAD, 2007:38). However, attaining a high share of nominal regional FDI inflows does not necessarily make South Africa successful at attaining FDI. Such an occurrence may suggest that the region has also been relatively

unsuccessful at accruing the desired and/or potential level of FDI inflows. One needs to consider whether the low regional FDI inflows affected South African inflows, as Asiedu (2002) suggests might be the case, or *vice versa*.

The FDI flows into South Africa over the past two decades have been volatile, but overall disappointing, considering the wealth of mineral resources at South Africa's disposal. Further investigation is needed to ascertain whether South Africa's low inflows had an effect on the regional nominal flows or the region negatively affected inflows to South Africa. There may have been another/other determinant/s altogether that deterred potential investors from choosing South Africa. The following sections will utilise the major determinants obtained during the literature review and comparisons will be made between South Africa, Chile and Botswana. The latter countries were selected on the basis that they are upper-middle income, developing countries that rely heavily on their extractive industries, much like South Africa.

In this chapter, South Africa's relatively poor performance in attracting FDI since 1994 is examined in two ways. Firstly a comparison of thirty countries is made relative to each of the variables identified in the previous chapter as being important determinants of FDI inflows. South Africa's performance in terms of the variable and FDI inflows is then compared with what is expected on the basis of the thirty country sample. Secondly, short term annual changes in the determinant variable are compared with changes in South African FDI inflows, to see whether such changes impacted on FDI in the manner that was expected.

Data were collected for the thirty countries for all of the determinants of FDI identified in the previous chapter. The data were obtained for each country from 1994-2012 from UNCTAD World Investment Reports (1998, 2002, 2006, 2010 and 2012) and the IMF's (2013) online statistical database. Scatter graphs were plotted with a trend line inserted to show the type of relationship between the individual determinants and FDI inflows as a percentage of GFCF. For convenience, extreme outlier data points were ignored when plotting the trend line, so as to ensure the trend was a fair reflection of the relationship between FDI and the relevant indicator for most of the thirty countries considered. The outlier points were still shown in the scatter graphs for comparative purposes. The positions of South Africa, Chile and Botswana were then identified and analysed in comparison with the trend line to determine whether they attracted the amount of FDI that would be expected given their performance in the particular determinant variable. The exception was the regional measure, where the data are

presented in a table. Comparisons are made between South Africa and the region, and then between Southern Africa and other regions.

4.3. SOUTH AFRICA'S PERFORMNACE RELATIVE TO IDENTIFIED FDI DETERMINANTS

FDI inflow statistics were obtained for each country from 1994 up until 2012 from UNCTAD World Investment Reports (1994-2013). These figures were plotted against annual time series figures obtained from IMF (2012) research statistics, the individual country reserve banks (Reserve Bank of South Africa, 2013; Banco Central de Chile, 2013; Bank of Botswana, 2013) and OECD surveys (1998, 2002, 2006, 2010 and 2012) on each individual determinant for each country. The results were then represented graphically to assess the types of relationship experienced for each country.

4.3.1. Regional Patterns of FDI Flows

According to Asiedu (2002) and Tuomi (2011), certain regions of the world have negative impacts on the investment decisions of potential investors. Asiedu (2002) claims that Sub-Saharan Africa is one of these negatively impacting regions. To test this claim, FDI inflows were divided in Table 4.1 into 3 regions, Southern Africa (excluding South Africa), South America and East Asia. The countries used per region were as follows: Southern Africa- Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland and Zambia. South America- Argentina, Bolivia, Brazil, Chile, Colombia, Peru and Venezuela. South-East Asia- Hong Kong, Indonesia, Malaysia, Singapore, South Korea and Thailand. Angola was not included in the Southern Africa regional average calculations as, being an oil producer, the data would be distorted upwards significantly. However, Angola was included in the scatter graph calculations. The other countries used in the scatter graph calculations were: Australia, Bangladesh, Canada, China, Germany, Japan, Nigeria, United Kingdom and the United States of America.

Table 4.1: Country and Regional Average FDI inflows (% of GFCF), 1994-2012:

Year	South Africa	Botswana	Southern Africa Regional Average	Chile	South America Regional Average	South-East Asia Regional Average
1994	1.7	8.7	10.6	15.1	13.3	14.7
1995	4.3	6.4	10.7	19.1	16.7	14.1
1996	3.5	6.6	10.1	27.1	22.5	13.5
1997	15.8	8.6	9.3	27.2	23.3	14.5
1998	2.5	7.8	21.8	23.2	23.7	18.2
1999	7.6	2.7	22.1	59.9	43.2	29.4
2000	4.7	4.4	16.7	23.1	27.2	39.7
2001	4.9	2.6	21.1	28.4	27.9	20.5
2002	4.5	33.1	20.1	17.8	29.9	14.2
2003	2.7	23.7	17.2	28.2	14.1	20.2
2004	1.7	2.3	18.5	39.2	18.8	36.9
2005	16.1	14.7	11.9	27.9	9.3	36.7
2006	-1.2	26.9	14.9	25.8	16.6	44.8
2007	11.5	24.4	23.6	42.9	21.8	45.3
2008	14.5	16.9	36	36.3	20.4	39.2
2009	8.4	17.7	24.2	36.8	17.3	32.7
2010	1.9	13.8	2.1	33.1	12.2	19.1
2011	7.8	8.4	7.8	39.8	15.8	18.6
2012	6.1	6.4	4.7	46	16.1	17.3
Mean	6.3	12.4	15.9	31.4	20.5	20.2
Median	4.7	8.6	16.7	28.2	18.8	25.8

(UNCTAD statistical database, 1994-2013)

Table 4.1 compares the FDI inflows of South Africa, Botswana and Chile with the regional averages of Southern Africa, South America and South-East Asia. Based on Asiedu (2012) and Tuomi (2011) our *a priori* expectation is that a negative relationship exists between the amount of FDI inflows and South Africa's regional location. Botswana's location in Sub-Saharan Africa is also *a priori* expected to have a negative impact on the amount of FDI inflows. Asiedu (2002) suggests that although South America may not necessarily be viewed in a positive light in terms of potential investment compared to Europe and South-East Asia, the region is perceived as a safer option than Sub-Saharan Africa. Therefore, we can *a priori* expect Chile's location to have a more positive impact on FDI inflows than those of South Africa and Botswana.

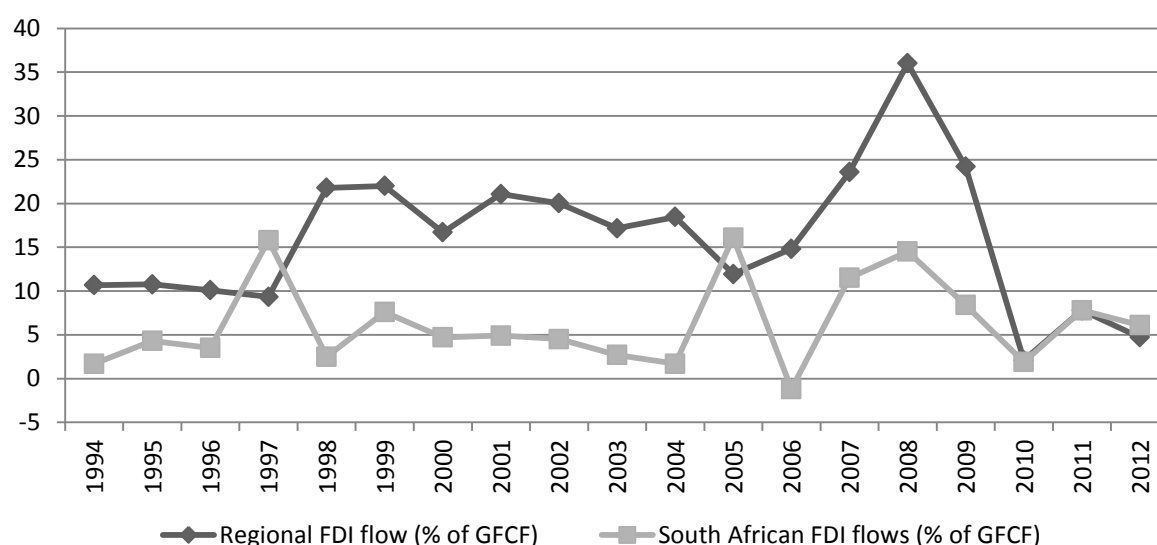
South Africa's FDI inflows are below the Southern African regional average for the majority of the years shown. South Africa's average and median level of FDI for the period, 6.3% and

4.7% of GFCF respectively, are much lower than the regional average and median of 15.9% and 16.7% respectively. The data for Botswana in contrast, show that it fluctuates around the regional average. However, its average and median level of FDI is lower than that of the region (excluding SA). South Africa therefore cannot be said to have been held back by its region as its inflows were much lower than its neighbours as a whole.

What is more significant, however, is that from 2002, the Southern African regional average figures are very similar to those of South America, having been substantially lower prior to this. This suggests that not only does South Africa fare poorly in comparison to most of the Southern African region, but these low inflows cannot be attributed to regional location as Southern Africa receives similar inflows to South America. Although one must take note that the mean average FDI for the entire period since 1994 for Southern Africa was 15.9% in comparison with the 20.5% achieved by South America. Chile FDI figures (average 31.4%) show that it constantly achieves higher than average regional inflows in contrast to South Africa.

The mean FDI inflows also show how poorly South Africa did in comparison with Botswana and the Southern African region. Whereas Chile attracted much higher mean FDI inflows in comparison with the South American region and actually fared well in comparison with South-East Asia. The South-East Asian figures show, that for the last ten years, the region has been very successful at attracting high levels of FDI. Although these figures are much higher than those of Southern Africa, this may not necessarily be because of the regional theory as suggested by Asiedu (2002), but more to do with attractive incentives, policies and other determinants put in place by the South-East Asian countries.

Figure 4.3: Average Regional FDI Inflows against South African FDI Inflows 1994-2012 (% of GFCF):



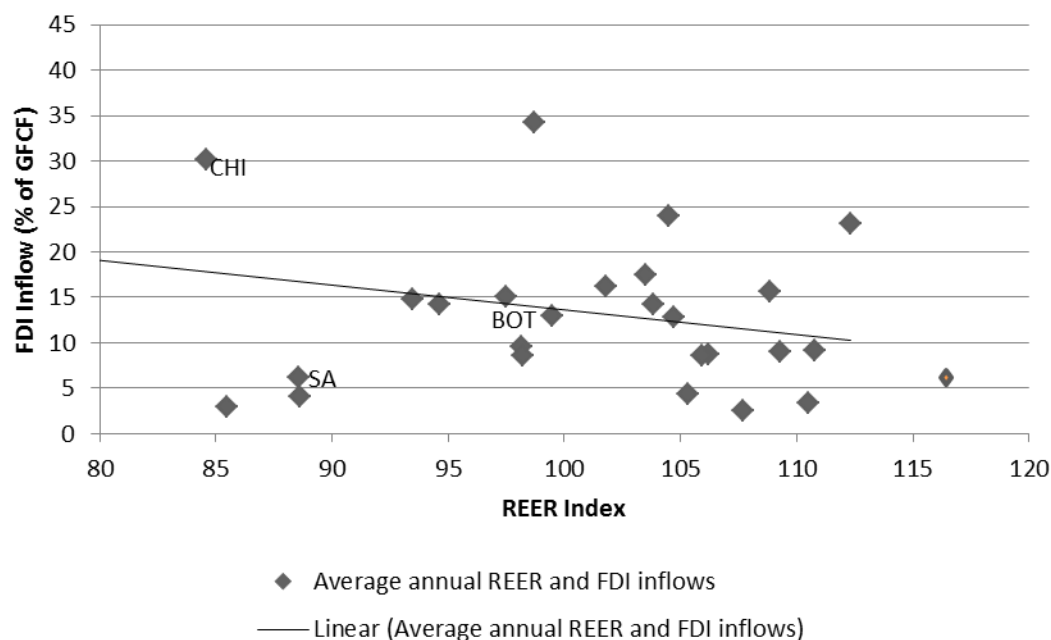
(UNCTAD statistical database, 1994-2013)

In Figure 4.3 South Africa's FDI inflows as a percentage of GFCF are shown against those of the region on an annual basis since 1994. In only 3 years (1997, 2005, 2012) did South Africa's FDI as a percentage of GFCF exceed that of the region. In the other years South Africa's FDI was always substantially lower than the region as a percentage of GFCF. If regional theory, as proposed by Asiedu (2002), were to hold, and South Africa's low level of FDI is the result of being in an unfavourable region, the regional average FDI inflows would also be very low. Thus, although annual changes in the two lines are fairly similar, the very low inflows into South Africa must be caused by some other determinant than regional location.

The data series for Botswana, shown in Annexure B, contradicts the negative regional theory as proposed by Asiedu (2002). The graph lines overlap on numerous occasions, suggesting no correlation between the two trends. FDI inflows into Chile (Annexure A) proved to be higher than the regional average for almost every year. Thus, although the two lines showed similar annual movements, the results suggest alternative FDI determinants are positively significant for Chile that outweigh any impact of the region in which it is located.

4.3.2. Real Effective Exchange Rate

Figure 4.4: Average REER (Index) against average FDI inflows (% of GFCF) for 28 countries, 1994-2012:



(UNCTAD statistical database, 1994-2013)

Figure 4.4 shows the relationship between the REER (index) and FDI inflows (percentage of GFCF) for twenty-eight countries. Japan and Singapore are not included as their REER index values, 117.2 and 121.4 respectively, distort the overall trend. The average REER is a proxy for real exchange rate depreciation or appreciation over the period. A REER above 100 shows that the REER has appreciated over the period and REER below 100 shows it has weakened. The base year of 100 is 1994. The trend line shows that a negative relationship exists between the two determinants, which suggests that if the REER appreciates or strengthens, FDI inflows will decrease. The findings in Figure 4.4 are therefore in accordance with our *a priori* expectation.

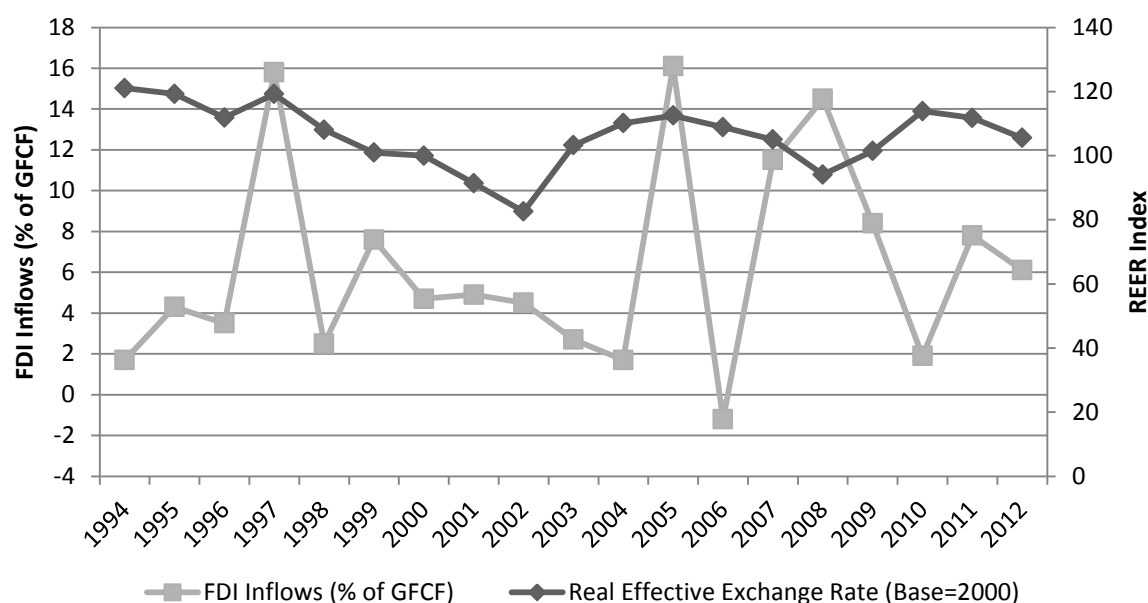
Russ (2004) and Goldberg & Klein (1997) state that a depreciation or weakening of the domestic currency (currency of country to be invested in) relative to the foreign currency (currency of country of potential investor) should induce increased inflows of FDI as the opportunity of making capital gains on investments rises should the domestic currency later strengthen. In this case, our *a priori* expectation is that a negative relationship exists between FDI inflows and the exchange rate when the domestic currency weakens or depreciates (i.e. a

weaker exchange rate will result in increased FDI inflows). Conversely, we *a priori* expect that when the domestic currency appreciates or strengthens relative to the foreign currency, a positive relationship will ensue between FDI inflows and the exchange rate as the potential for capital gains is reduced.

South Africa has an average REER index of 88.6 which suggests that the Rand has weakened in real terms over the course of the nineteen years since 1994. This should be attractive for FDI inflows but it can be seen that South Africa's FDI inflows (average of 6.3% of GFCF) are substantially lower than they should be in terms of the trend identified. Although the Botswanan Pula has also weakened very slightly since 1994 (average REER index of 99.5), it still managed to achieve nearly double the average amount of FDI inflows (12.4% of GFCF) than South Africa. The Chilean Peso weakened considerably over the course of the last two decades (average REER index of 84.6) and Chile managed to attract massive FDI inflows (average of 31.4% of GFCF) in comparison with Botswana and South Africa. This attractiveness is possibly also explained by Chile's position as a major commodity exporter (copper). Commodity exporters favour a weaker real exchange rate as it reduces their production costs in foreign currency when their export price is set in US dollars, widening profit margins. This should also have made South Africa's commodity exports more attractive to foreign investors, but this evidently was not the case.

These results suggest that while the weakening of the Rand should have had some influence on FDI inflows since 1994, the favourable exchange rate was still not enough of an incentive for foreign investors to invest directly in South Africa since 1994.

Figure 4.5: Real Effective Exchange Rate indicator (Index) against FDI inflows (% of GFCF) for South Africa, 1994-2012:



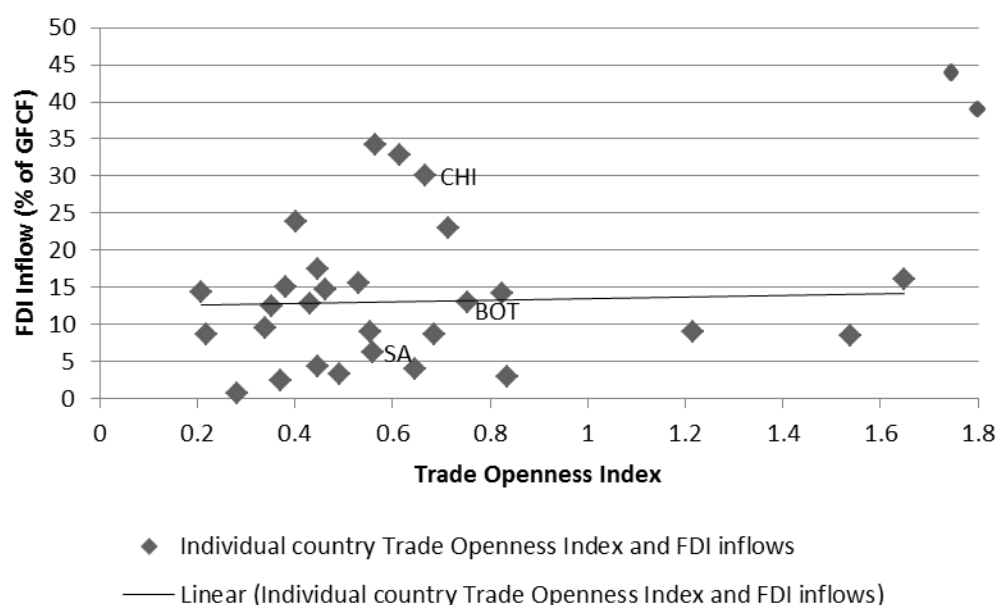
(UNCTAD statistical database, 1994-2013)

Figure 4.5 shows the relationship between annual changes in the Real Effective Exchange Rate (REER) and annual inflows of FDI as a percentage of GFCF into South Africa since 1994. The “lumpy” nature of South African FDI discussed above make it hard to discern any trend. The REER initially weakens steadily but then experiences periods of growing strength and renewed weakness. In accordance with theory (Russ, 2004) when the REER increases, signifying an appreciation or strengthening of the Rand, inflows of FDI should weaken as investors fear future exchange rate induced losses. No such relationship can be seen in Figure 4.5 where some periods of REER strength are accompanied by increased FDI inflows (e.g. 2005) and some periods of REER weakness are times of large inflows (e.g. 2007 and 2008). It seems therefore that changes in the REER, at least in the short term, have little influence in determining South Africa’s annual FDI inflows.

The data series for both Chile and Botswana (Annexures A and B respectively) produced very similar annual changes that do not support the theory (Russ, 2004). FDI inflows increased as a result of a strengthening of the domestic REER (Peso and Pula) and decreased when the domestic REER weakened.

4.3.3. Trade Openness

Figure 4.6: Average Trade Openness Index (X+M/GDP) against average FDI inflows (% of GFCF) for 28 countries, 1994-2012:



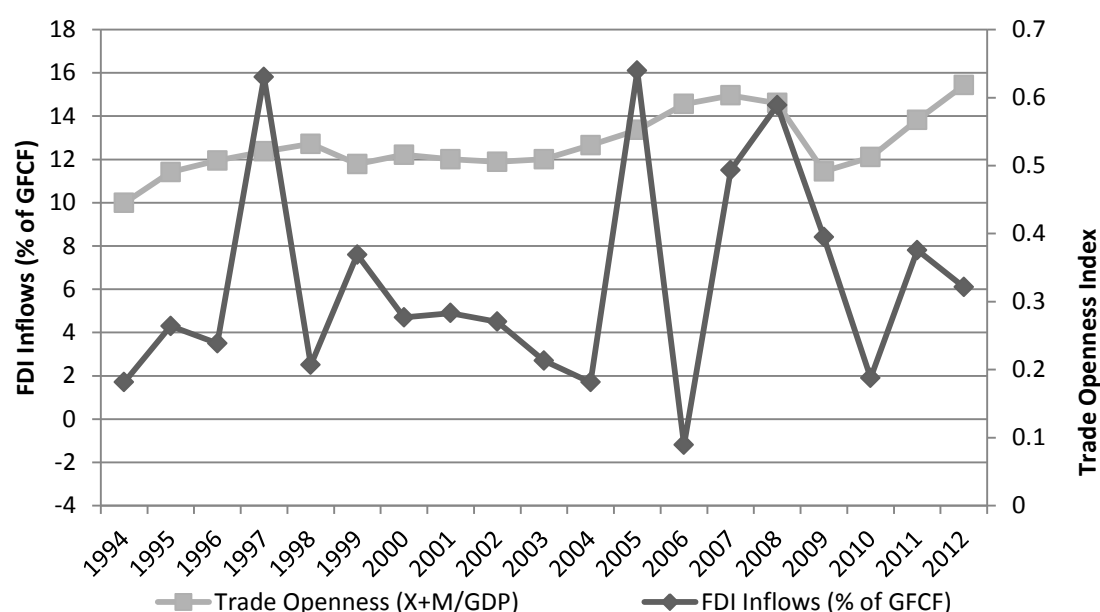
(UNCTAD statistical database, 1994-2013)

Figure 4.6 shows the relationship between the trade openness index (X+M/GDP) and FDI inflows (percentage of GFCF) for twenty-eight countries. Hong Kong and Singapore are not included in the calculation of the trend line as their trade openness index values, 1.9 and 2.1 respectively, distort the overall trend. The trend line shows that a moderately positive relationship exists between trade openness and FDI inflows. Tuman & Emmert (2009) and Boulle (2010), believe that the less barriers to entry in a state, the higher the inflows of FDI will be. Our *a priori* expectation that a positive relationship exists between the level of trade openness and the level of FDI inflows is therefore supported.

South Africa achieves lower than expected levels of FDI (average of 6.3% of GFCF) in relation to its relatively high trade openness index (0.56). Botswana (average of 12.4% of GFCF) fares better than South Africa but should still achieve higher levels of FDI considering its very high trade openness index (0.75). Chile attracts very high levels of FDI inflows (31.4% of GFCF) whilst having a trade openness index (0.67) that is lower than that of Botswana and marginally higher than that of South Africa. Such a finding suggests that a

lack of trade openness is not the cause of South Africa's relative failure to attract higher levels of FDI.

Figure 4.7: Trade Openness Indicator (X+M/GDP) against FDI inflows (% of GFCF) for South Africa, 1994-2012:



(UNCTAD statistical database, 1994-2013)

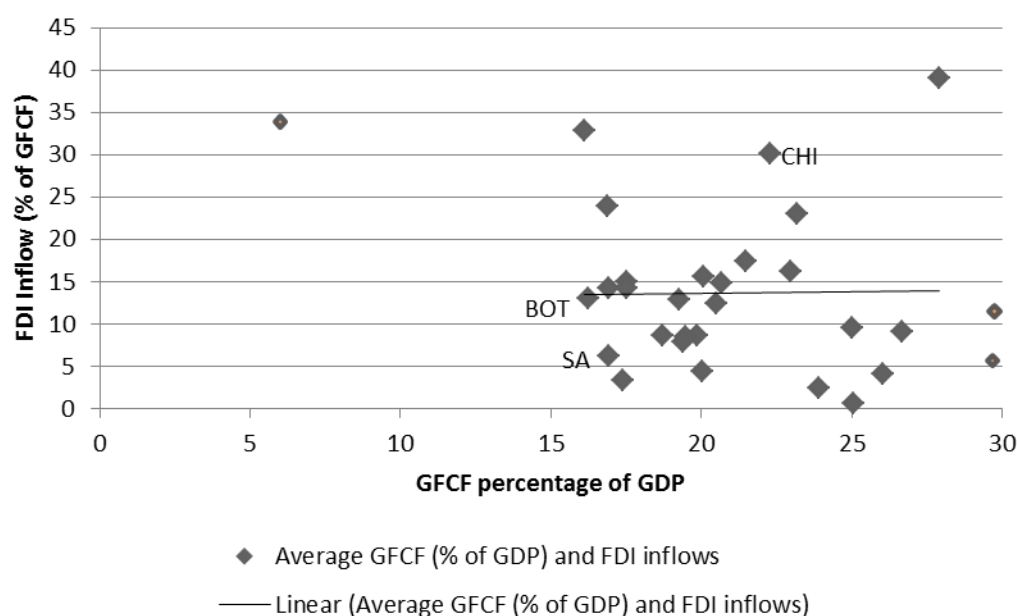
Figure 4.7 shows the relationship between changes in the trade openness index and the annual inflows of FDI as a percentage of GFCF for South Africa. As noted, the volatility of SA annual FDI inflows make it difficult to discern any trend in FDI. The trade openness index shows that SA has become more open to trade over the period, although there was a setback associated with the 2007 global financial crisis when exports fell. The annual changes are largely in accordance what is expected by theory, as posited by Tuman & Emmert (2009) and Boulle (2010), that there exists a positive relationship between trade openness and FDI inflows. The only years that revert from the trend are 1998, 2006, 2010 and 2012, which see an inverse relationship between the two data series. Once again, the recent global financial crisis and subsequent economic uncertainty could explain the 2010 and 2012 results, whilst the East-Asian Financial crisis of 1997-1998 could possibly explain the 1998 result.

Botswana (Annexure B) also experiences similar positive changes, although there appears to be an inverse relationship between 2002 and 2004 that is not in accordance with traditional theory (Tuman & Emmert, 2009; Boulle, 2010). 2011 was an anomaly in that Botswana

received less FDI inflows despite being more open to trade. Chile (Annexure A) experienced a spike in FDI flows in 1999 despite no change in its trade openness index. This may perhaps be a result of foreign investors looking away from East Asia and towards other developing markets post the 1997/98 Asian financial crisis. As with South Africa, 2010 also shows a fall in FDI flows despite increased trade openness, however, Chile continued to receive increased FDI inflows until 2012 despite trade openness decreasing significantly. Chile was perhaps identified by investors as a safe and worthwhile investment destination in the midst of the economic uncertainty since 2010. Otherwise, Chile also experiences a general positive relationship between trade openness and FDI inflows in accordance with traditional theory (Tuman & Emmert, 2009 and Boule, 2010).

4.3.4. Physical Capital

Figure 4.8: Average GFCF (% of GDP) against average FDI inflows (% of GFCF) for 28 countries, 1994-2012:



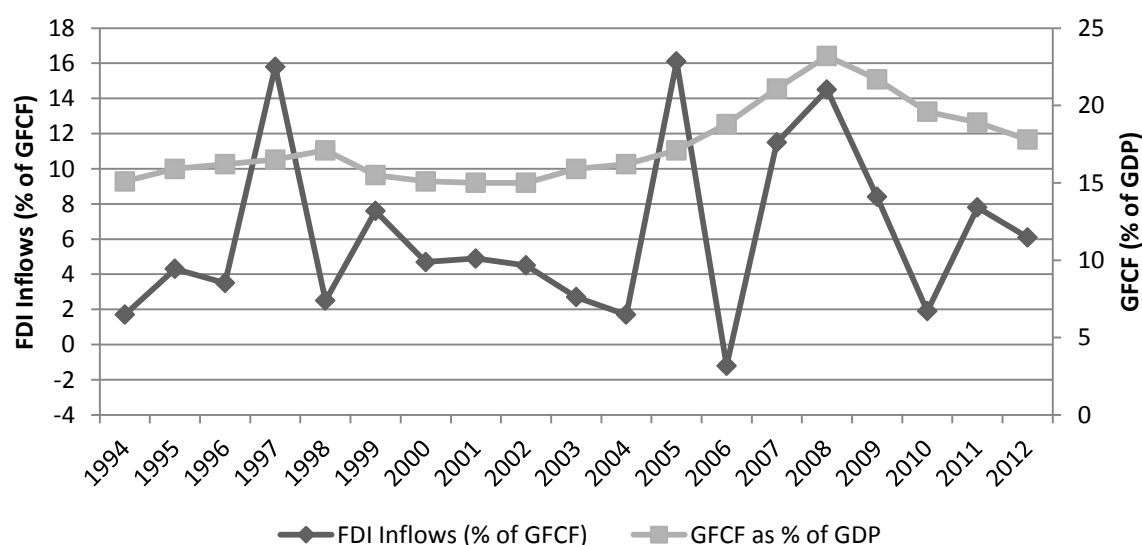
(UNCTAD statistical database, 1994-2013)

Figure 4.8 shows the relationship between GFCF (as a percentage of GDP) and FDI inflows (percentage of GFCF) for twenty-eight countries. China and Nigeria are not included in the trend line calculation as their GFCF values, 30.4% and 7.1% respectively, distort the overall trend. The trend line suggests that a moderately positive relationship exists between physical capital and FDI inflows. Noorbakhsh *et al.* (2001) and Nunnenkamp & Spatz (2002) assert

that those countries that develop their physical capital are often associated with having higher levels of GDP and are thus perceived as growing economies and good investment opportunities. Therefore, our *a priori* expectation that a positive relationship exists between the levels of physical capital and FDI inflows in a country receives tentative support in Figure 4.8.

South Africa achieves a relatively low level of GFCF (average of 16.7% of GDP) in comparison with most of the countries observed and sits below the trend line. Chile achieves both a high level of GFCF (average of 22.3% of GDP) and FDI inflows (average of 31.4% of GFCF), which suggests that high levels of physical capital may induce high levels of FDI. However, Botswana achieved a lower level of GFCF (average of 16.24% of GDP) than South Africa and still managed to attract higher FDI inflows (average of 12.4% of GFCF) than South Africa. These results are thus inconclusive and suggest that physical capital may not be a significant determinant of FDI inflows as the results for Botswana prove.

Figure 4.9: GFCF as a % of GDP against FDI inflows (% of GFCF) for South Africa, 1994-2012:



(UNCTAD statistical database, 1994-2013)

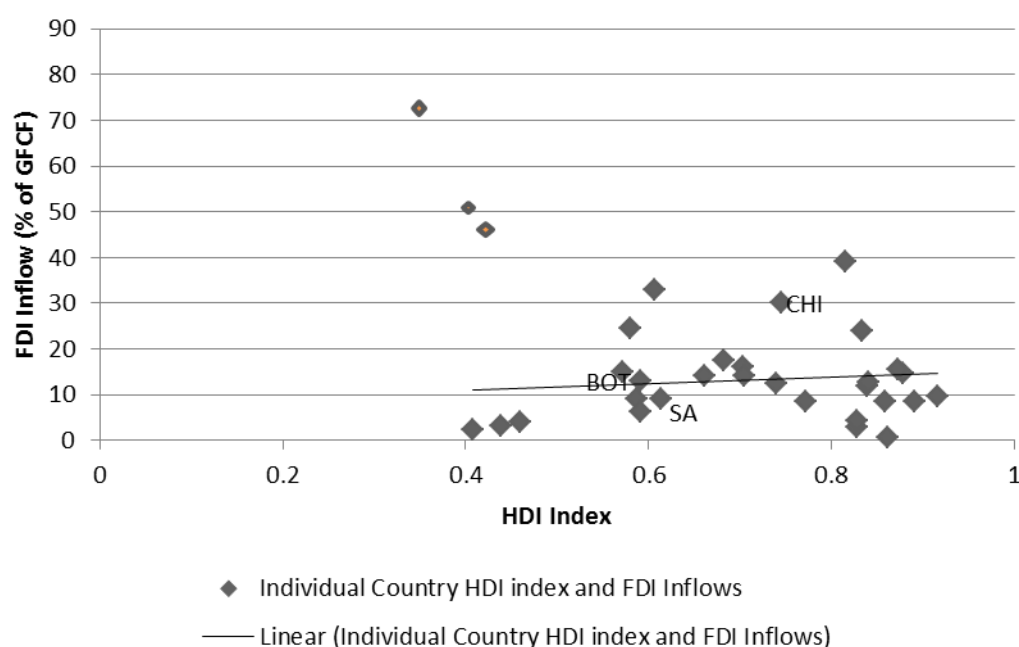
Figure 4.9 shows the relationship between the level of physical capital as measured by the Gross Fixed Capital Formation as a percentage of GDP and inflows of FDI as a percentage of GFCF for South Africa. The annual changes in the graph are in accordance with traditional theory, as stated by (Noorbakhsh *et al.*, 2001 and Nunnenkamp & Spatz, 2002), that increased physical capital attracts higher levels of FDI inflows and *vice versa* for a decrease

in physical capital. There are however certain years, such as 1998 and 2006, when such a positive relationship does not hold.

The graph in Annexure A shows that annual changes for Chile are generally in accordance with theory (Noorbakhsh *et al.*, 2001 and Nunnenkamp & Spatz, 2002) as high levels of physical capital are accompanied by increased FDI inflows. Botswana (Annexure B) exhibits a positive trend, with the exception of 1998 and 2009, where FDI inflows suffer a massive dent, perhaps a result of the 1997/98 Asian Financial crisis and the 2007/8 global financial crisis respectively.

4.3.5. Human Capital

Figure 4.10: Average HDI (Index) against average FDI inflows (% of GFCF) for 28 countries, 1994-2012:



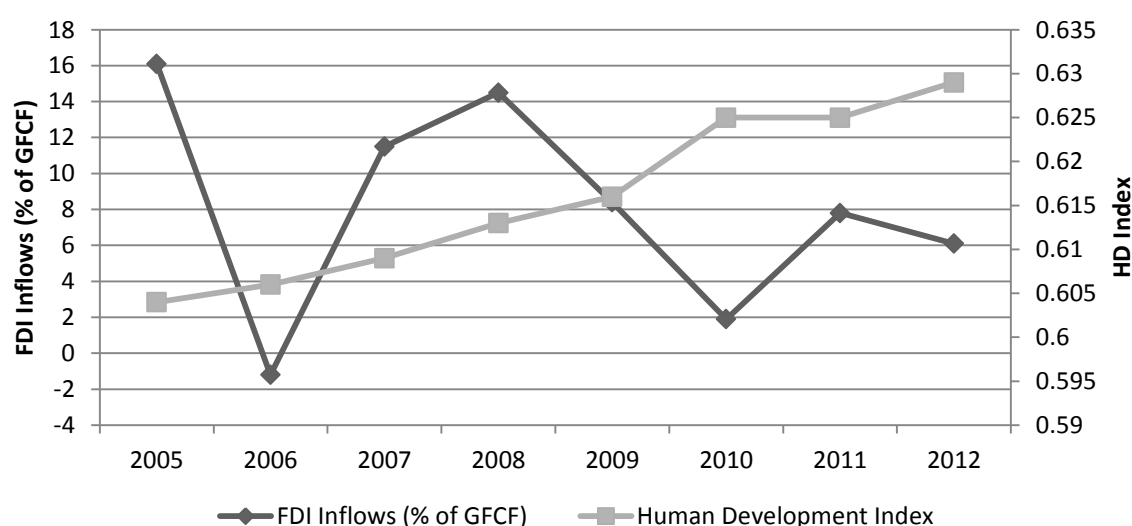
(UNCTAD statistical database, 1994-2013)

Figure 4.10 shows the relationship between human capital (HDI index) and the average FDI inflows (percentage of GFCF) for twenty-eight countries. Angola and Nigeria are not included in the trend calculation as their FDI values, 79.4% and 34.2% respectively, distort the overall trend. The trend line shows that there is a moderately positive relationship between the perceived level of human capital and FDI inflows. Addison & Heshmati (2003) argue that as technology develops further, the need for countries to develop their ICT capital increases significantly. Those countries that fail to keep up and develop their human and ICT

capital will most likely have lower levels of FDI inflows (Noorbakhsh *et al.*, 2001). The positive relationship in Figure 4.10 is therefore in accordance with our *a priori* expectation.

Of significance also, is South Africa's position relative to both Botswana and Chile. South Africa is positioned slightly below the trend line signifying that it receives a comparatively low level of FDI (average of 6.3% of GFCF) relative to the level of human capital (0.59). Although Botswana also sits below the trend line, it fairs better than South Africa in terms of FDI inflows (average of 12.4% of GFCF) whilst having the same perceived level of human capital (0.59). Chile is positioned above the trend line and receives a comparatively high amount of FDI (average of 31.4% of GFCF) whilst achieving a high human development index (0.74). These results suggest that a failure to develop its human capital is not a significant cause for South Africa's failure to attract higher levels of FDI.

Figure 4.11: Human Development Index against FDI inflows (% of GFCF) for South Africa, 2005-2012:



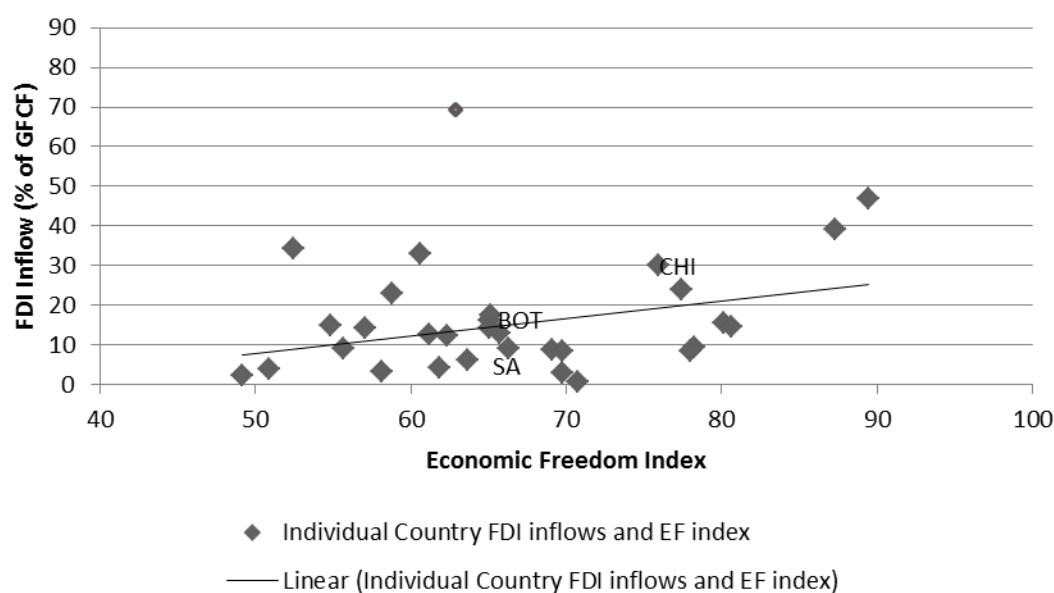
(UNCTAD statistical database, 1994-2013)

Figure 4.11 shows the relationship between the perceived level of human capital as measured by the Human Development Index (HDI) against the inflows of FDI as a percentage of GFCF for South Africa only from 2005-12 due to lack of data availability. The annual changes in the graph are not supportive of the theory posited by Addison & Heshmati (2003), and the relationship seems random. However, the data series for South Africa encompasses a relatively short time frame and may not have a sufficient amount of data and/or time to show a meaningful trend in the relationship between the two variables. With time, a more definite relationship may appear.

The graphs for Chile and Botswana (Annexures A and B respectively), show a positive relationship between the perceived level of human capital and inflows of FDI, which is in accordance with theory (Addison & Heshmati, 2003).

4.3.6. Security of Property Rights

Figure 4.12: Average Economic Freedom Indicator (Index) against average FDI inflows (% of GFCF) for 29 countries, 1994-2012:

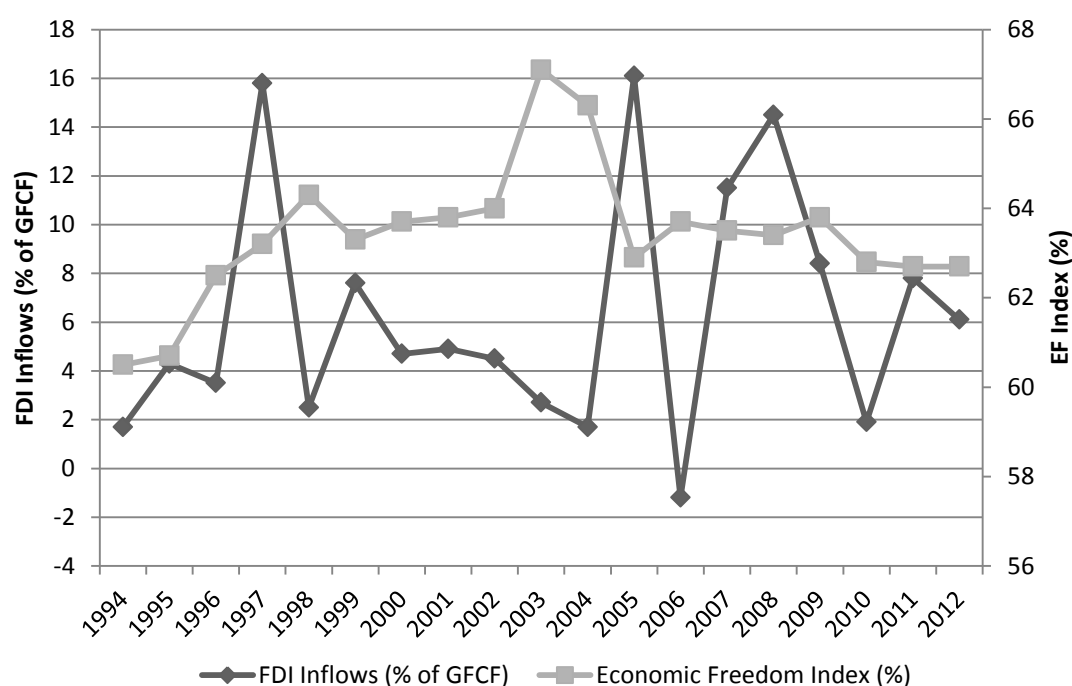


(UNCTAD statistical database, 1994-2013)

Figure 4.12 shows the relationship between the perceived security of property rights (index) and FDI inflows (percentage of GFCF) for twenty-nine countries. Angola is not included as its FDI value of 79.4% distorts the overall trend. The trend line again shows that a positive relationship exists between the two determinants. Foreign firms have very little incentive to invest in countries where they believe the security of their investment is questionable (Sonin, 2002). A majority of foreign investors would rather opt for safety and choose to invest in a state that has secure property right laws in place and are effectively enforced (Mottaleb, 2007). FDI constitutes a long-term investment commitment and the foreign firms prefer there be as little risk of losing their investment as possible. Therefore, our *a priori* expectation that a positive relationship exists between the level of property right security and FDI inflows is supported in Figure 4.12.

South Africa receives a relatively low amount of FDI (average of 6.3% of GFCF) in relation to its high Economic Freedom index level (63.67). Botswana also receives less FDI (average of 12.4% of GFCF) than it should but fares better than South Africa with a similar Economic Freedom index level (65.7). Chile once again receives much higher levels of FDI (average of 31.4% of GFCF) in addition to its high Economic Freedom index (75.9) and is situated in a much better position on the graph than South Africa. South Africa once again does not receive the level of FDI inflows it should be with a relatively high average Economic Freedom index. These results suggest that although increased economic freedom may contribute towards slightly higher levels of FDI, they still do not explain why South Africa has achieved such low levels up to date.

Figure 4.13: Economic Freedom Indicator (Index) against FDI inflows (% of GFCF) for South Africa, 1994-2012:



(UNCTAD statistical database, 1994-2013)

Figure 4.13 shows the relationship between annual changes in the security of property rights index and FDI inflows in South Africa. Theory suggests that a positive relationship exists between economic freedom (security of property rights) and FDI inflows. The graph in Figure 4.13 shows annual changes that are mainly supportive of this theory (Sonin, 2002 and

Mottaleb, 2007), from 1994 to 1999, but thereafter the relationship becomes negative which does not conform to this theory.

The changes shown by the Botswana graph (Annexure B) are also not in accordance with theory (Sonin, 2002 and Mottaleb, 2007) as they show a negative relationship for the majority of the years with large spikes in FDI flows in 2002 and 2006, despite small reductions in the security of property rights. Chile (Annexure A), however, does show annual changes that conform to theory (Sonin, 2002 and Mottaleb, 2007) of a positive relationship between the security of property rights and FDI inflows.

4.4. THE INVESTMENT CLIMATE

4.4.1. OECD Restrictiveness Index

The Organisation for Economic Cooperation and Development (OECD) publishes a FDI regulatory restrictiveness index which is utilised as a “tool for benchmarking countries, measuring reform and assessing its impact” (OECD, 2010:1). The index utilises the following restrictions: sectoral equity limits, screening, restrictions on key personnel and other restrictions such as land, reciprocity, capital repatriation, branches, *etc.* (OECD, 2010). Each of the aforementioned restrictions is given a score based on an assessment of its importance and the aggregate score is the weighted average of sectoral scores (OECD, 2010). The sectors range from fishing to real estate and encompass a vast range of business related sectors. The index measures a country’s FDI regulatory restrictiveness on a scale of 0 to 1, with 0 being open and 1 being closed (OECD, 2010).

South Africa ranked 38th out of 44 countries studied in 2006, with a total FDI index of 0.26 (Kalinova *et al.*, 2010). In the 2010 survey, South Africa improved both its index and its ranking, climbing to 28th out of 48 countries with a total FDI index of 0.089 (Kalinova *et al.*, 2010). In comparison, Chile² was ranked 32nd out of the 44 countries surveyed in 2006 and had a total FDI index of 0.165, significantly less restrictive than South Africa (Kalinova *et al.*, 2010). By 2010, Chile had a total FDI index of 0.081 and ranked 26th out of the 48 countries studied. These indices suggest that since 2006, South Africa has become more open and friendlier towards foreign investment but the results are not reflected in higher levels of

² Botswana was not included in the OECD study

FDI. However, one must take note of the sectoral breakdown of this index to realise that the South African political and economic environments may still not be as amicable to foreign and local businesses as the overall index suggests.

Kalinova *et al.* (2010:6) state that the FDI index focuses on four measures, one being “other operational restrictions (such as limits on purchase of land or on repatriation of profits and capital)”. The restrictions in this sectoral measure include: “the establishment of branches not allowed/local incorporation required, reciprocity requirements, restrictions on profit/capital repatriation, access to local finance, acquisition of land for business purposes, land ownership not permitted but leases possible” (Kalinova *et al.*, 2010:11). South Africa’s operational restrictions accounted for 0.067 of the 0.089 total FDI index, whereas Chile’s accounted for just 0.003 of the 0.081 total FDI index (Kalinova *et al.*, 2010).

If one looks at the specific sector scores, South Africa had very high index scores for mining, transport, financial services and business services attaining scores of 0.060, 0.227, 0.127 and 0.385 respectively (Kalinova *et al.*, 2010). These are crucial sectors in terms attracting the type of foreign investment that South Africa requires to fully capitalise on the wealth of mineral resources at its disposal. Chile, although attaining a relatively similar total FDI index to South Africa, had a different sectoral breakdown in terms of index scores. The sectors that were most restricted in Chile were fishing, transport and media with index scores of 1.000, 0.413 and 0.225 respectively (Kalinova *et al.*, 2010). Although improvements to these sectors would increase the likelihood of future FDI inflows, they are not as significant as the restricted/closed key sectors in South Africa.

4.4.2. World Economic Forum’s Global Competitiveness Index

The World Economic Forum’s Global Competitiveness Index (GCI) is calculated using a weighted average of many different components, each measuring a different aspect of competitiveness (Schwab, 2013). These components are grouped into 12 pillars of competitiveness: 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, innovation and business sophistication (Schwab, 2013). The index ranks a country’s global competitiveness from 0 to 7, with 7 being extremely competitive. South Africa ranked 53rd out of 144 countries in 2013

with a GCI index of 4.37 (Schwab, 2013). Chile ranked 34th and Botswana 74th out of the 144 countries studied, with GCI scores of 4.61 and 4.13 respectively (Schwab, 2013).

Schwab (2013:43) states that South Africa does well on “measures of the quality of its institutions (41st), including intellectual property protection (18th), property rights (20th), and in the efficiency of the legal framework in challenging and settling disputes (13th and 12th, respectively)”. Furthermore, South Africa has impressive financial market development (3rd place) and an efficient market for goods and services (28th), and it does reasonably well in more complex areas such as business sophistication (35th) and innovation (Schwab, 2013). However, South Africa’s performance in the macroeconomic environment has dropped sharply (from 69th to 95th) and scores low for the “diversion of public funds (99th), the perceived wastefulness of government spending (79th) and a more general lack of public trust in politicians (98th)” (Schwab, 2013:43). The latter two rankings are particularly alarming for future FDI decision making and security continues to be a major area of concern for doing business coming in at a lowly 109th (Schwab, 2013). Specifically, South Africa ranks 120th for “favouritism in decisions of government officials” (GCI score of 2.5), 119th for “government procurement of advanced technological products” (2.9), 116th for “burden of government regulation” (2.9), 99th for the “diversion of public funds” (2.8), 98th for “public trust in politicians” (2.4) and a lowly 79th for “wastefulness of government spending” with a GCI score of 3.1 (Schwab, 2013:347).

Chile has been the most competitive economy in Latin America for a number of years. According to Schwab (2013:37), Chile owes this “privileged position to its traditional strengths: a strong institutional setup (28th) with low levels of corruption (26th) and an efficient government (18th); solid macroeconomic stability (17th) with a balanced public budget and low levels of public debt; and well-functioning markets with high levels of domestic competition (32nd) and openness to foreign trade (29th), which allows for an efficient allocation of available resources.” Schwab (2013) identifies a lack of diversity, an education system in much need of improvement and low innovation as Chile’s main obstacles in its bid to become more competitive and attractive to increased investment. Although Botswana has an overall GCI ranking of 74th, its strengths are its relatively sound macroeconomic environment, “efficient government spending, strong public trust in politicians and low levels of corruption” (Schwab, 2013:43).

Table 4.2: Individual country best & worst performing factors (2013 GCI scores and rankings):

Year	South Africa	Botswana	Southern Africa Regional Average	Chile	South America Regional Average	South-East Asia Regional Average
1994	1.7	8.7	10.6	15.1	13.3	14.7
1995	4.3	6.4	10.7	19.1	16.7	14.1
1996	3.5	6.6	10.1	27.1	22.5	13.5
1997	15.8	8.6	9.3	27.2	23.3	14.5
1998	2.5	7.8	21.8	23.2	23.7	18.2
1999	7.6	2.7	22.1	59.9	43.2	29.4
2000	4.7	4.4	16.7	23.1	27.2	39.7
2001	4.9	2.6	21.1	28.4	27.9	20.5
2002	4.5	33.1	20.1	17.8	29.9	14.2
2003	2.7	23.7	17.2	28.2	14.1	20.2
2004	1.7	2.3	18.5	39.2	18.8	36.9
2005	16.1	14.7	11.9	27.9	9.3	36.7
2006	-1.2	26.9	14.9	25.8	16.6	44.8
2007	11.5	24.4	23.6	42.9	21.8	45.3
2008	14.5	16.9	36	36.3	20.4	39.2
2009	8.4	17.7	24.2	36.8	17.3	32.7
2010	1.9	13.8	2.1	33.1	12.2	19.1
2011	7.8	8.4	7.8	39.8	15.8	18.6
2012	6.1	6.4	4.7	46	16.1	17.3
Mean	6.3	12.4	15.9	31.4	20.5	20.2
Median	4.7	8.6	16.7	28.2	18.8	25.8

(Schwab, 2013)

The table above highlights some of the problematic as well as successful factors for South Africa, Chile and Botswana. It may be of some significance that Chile and Botswana, who both attract higher levels of FDI inflows (as a percentage of GFCF) than South Africa, have much higher ratings in terms of trust in and the perceived efficiency of their governments, whereas the South African government is perceived as a comparatively inefficient and corrupt administration.

A GCI average index average of specific scores was obtained from the Global Competitive Index of the World Economic Forum which were used by the author to quantify the perceived friendliness to business of the South African government. These data were obtained from the World Economic Forum and are measured as an index. Theory (Busse & Hefeker, 2007) expects there to be a positive relationship between inward FDI flows to South Africa and the perceived trust by foreign investors in the government and its friendliness to business, both

domestic and foreign. The specific GCI scores that were taken into account were: the diversion of public funds, public trust in politicians, irregular payments and bribes, favouritism in decisions of government officials, wastefulness of government spending, the burden of government regulation and transparency of government spending.

Figure 4.14: GCI average score (Index) against FDI inflows (% of GFCF) for 26 countries, 2004-2012:

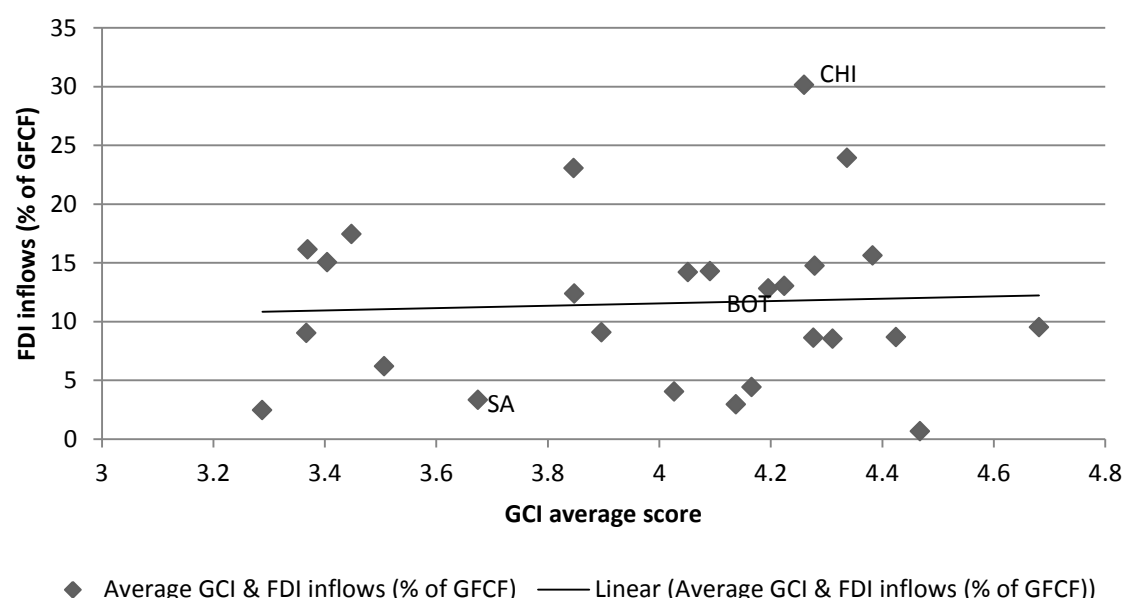


Figure 4.14 above, shows the relationship between the derived GCI average score index and FDI inflows as a percentage of GFCF, for 26 countries between 2004 and 2012. Nigeria, Hong Kong, Singapore and Bolivia were excluded as they were extreme outliers that distorted the overall trend. The trend shows that a positive relationship exists between the two determinants, which is in accordance with our *a priori* expectation (Schwab, 2013).

South Africa again achieves much lower FDI as a percentage of GFCF than its GCI average score suggests should be the case. Botswana received about what is expected and Chile achieves much more than would be expected from this measure of FDI attractiveness alone.

4.5. CONCLUSION

All the measures of FDI attractiveness considered in this chapter displayed the relationship to FDI that was expected for the 30 countries considered. In all the measures South Africa's

level of FDI was below what would be expected from its score in relationship to the particular measure.

The next chapter will empirically analyse the determinants identified in the literature review. A particular focus of this study will be the inclusion of variables that measure the policy uncertainty implied by South Africa's much greater success in attracting portfolio capital inflows than FDI, including the World Bank's ease of doing business index and components of the World Economic Forum's global competitiveness report.

CHAPTER 5:

EMPIRICAL ANALYSIS OF FDI INFLOWS TO SOUTH AFRICA

5.1. INTRODUCTION

In Chapter 2 the following factors were identified in the literature as important determinants of FDI success: trade openness, regional location, the exchange rate, security of property rights and the cost of capital. Chapter 3 provided a detailed account of the global and regional FDI flows and the flows to South Africa specifically, were focussed on in Chapter 4. The data showed that in terms of each of the identified determinants South Africa had received less inward FDI than it should have and that Chile and Botswana were more successful at attracting higher levels of inward FDI than expected. The analysis in Chapter 4 suggested that there must be some other factor affecting negatively the investment decisions of potential foreign investors to explain the lower than expected levels of FDI received by South Africa. It was suggested that the South African government is perceived by many investors as inefficient and unfriendly, perhaps even aggressive, towards businesses, both local and foreign.

There are few empirical analyses on the subject of whether the perceived inefficiency, corruption and hostility towards business of the South African government is an important deterrent of long term investment commitments in South Africa. Thus, although there are some limitations to the methodology used in this chapter, the results should help provide a clearer picture as to the effects of external perceptions of the South African government and other determinants of FDI inflows into South Africa. The following section provides the background on the data and method of estimation used in the empirical analysis.

5.2. DATA AND METHOD

Firstly, all of the identified determinants of FDI in South Africa are investigated via a multivariate linear regression analysis to determine which (if any) of them have had a significant impact on inward FDI flows to South Africa since 1994. The second model runs a multivariate linear regression utilising a subset of variables from the first model. Thirdly,

following the methodology of Claassen, Loots & Bezuidenhout (2011), a cross-section panel analysis is conducted on the major determinants of FDI success.

Quarterly data were acquired from a number of sources such as the IMF International Financial Statistics database, the Reserve Bank of South Africa, UNCTAD World Investment Reports, OECD FDI Regulatory Restrictiveness Index, the World Economic Forum and Thomson Datastream. The first two models use quarterly data from 1994:1 to 2012:4 for South Africa. Quarterly data were not available for all of the variables. The EFI, HDI and GCI_average variables were obtained as annual indices and following the methodology of Aziakpono (2005) were then interpolated using quadratic match average (QMA) via Eviews to obtain quarterly data.

Annual data were utilised in the panel analysis. The panel analysis contained data for 28 countries from selected regions. The data for these countries were used to estimate a cross-sectional balance panel model with 28 cross sections and a total of 252 observations. The countries used in the panel analysis were as follows: Sub-Saharan Africa - Botswana, Kenya, Nigeria, South Africa and Zambia. South America - Argentina, Bolivia, Brazil, Chile, Peru and Venezuela. South-East Asia - Malaysia, Singapore, South Korea, Thailand. Rest of the world- Australia, Bangladesh, Canada, China, Egypt, France, Germany, Japan, New Zealand, Saudi Arabia, United Arab Emirates, United Kingdom and the United States of America.

5.3. MODEL SPECIFICATIONS AND RESULTS

5.3.1. Unit Root Tests

An Augmented Dickey-Fuller unit root test was conducted to determine the order of integration and subsequent stationarity of the time series variables. Each series was tested with an intercept only.³ The results are presented in the table below.

³ Tests were performed also for intercept and trend, but the results were not materially affected from those with intercept only

Table 5.1: Unit Root Test Results:

		Level Data		First Difference		Conclusion
		t-statistic	Significant	t-statistic	Significant	
Variables	Fdi_inflows	-5.953	At 1%			I(0)
	EFI	-2.631	At 10%			I(0)
	REER	-3.019	At 5%			I(0)
	Trade_open	-2.069	insignificant	-3.312	At 5%	I(1)
	Region	-2.567	insignificant	-3.790	At 1%	I(1)
	GFCF	-1.747	insignificant	-4.616	At 1%	I(1)
	Gci_average	-0.701	insignificant	-3.734	At 1%	I(1)
HDI		0.290	insignificant	-5.632	At 1%	I(1)
Critical Values (at 10%)		-2.588		-2.588		

(Author's own estimation using Eviews 7)

The results in the table above show that the FDI, EFI and REER series are stationary at level terms, whilst the HDI, trade openness, region, GFCF and GCI average score series are stationary at first difference terms.

5.3.2. Model 1 Specification

The first or base model was run utilising the determinants of FDI identified in the literature review.

$$FDI_inflows = f(Region, Trade_Open, REER, EFI, HDI, GFCF, GCI_average).....(5.1)$$

Where:

FDI_inflows represents inward FDI flows to South Africa. These data were obtained from the IMF International Financial Statistical database and are measured as a percentage of GFCF. Since some flows were negative, representing net outflows, it was not possible to take the log of FDI_inflows.

Region represents the average inward FDI flows to Southern Africa. These data were obtained from the IMF International Financial Statistical database and are measured as a percentage of GFCF. The assumption is that because South Africa is in a region that generally attracts low levels of FDI, this will be negative for its ability to attract FDI (Asiedu, 2002). This means that the relationship between South African and Southern African FDI inflows (excluding South Africa) is expected to be positive: a rise in Southern African FDI inflows should reflect in a rise in South African FDI inflows and vice versa.

Trade_Open represents the trade openness of South Africa. These data were obtained from Thomson Datastream and utilise the generally accepted formula for trade openness i.e. $(\text{Exports} + \text{Imports})/\text{GDP}$. Data are measured as an index. While theory (Bouille, 2010) expects increased trade openness to have a positive impact on FDI inflows to South Africa it is hard to be dogmatic because foreign investors may also see high tariff protection as a reason for investing directly in an economy.

REER represents the Real Effective Exchange Rate in South Africa. These data were obtained from the South African Reserve Bank with 2000 being the base year. A rise in the index is a strengthening of the REER. Theory (Russ, 2004) expects there to be a negative relationship between the REER and FDI inflows to South Africa as foreign investors fear exchange rate losses when the REER is very strong and hope to make exchange rate gains when the REER is weak. Again, it is hard to be dogmatic about the expected sign as a stronger REER where capital markets are relatively underdeveloped may be the result of large capital inflows associated with high levels of FDI.

EFI represents the perceived security of property rights in South Africa. These data were obtained from the IMF and are measured as an index. Theory (Bevan & Estrin, 2000) tells us that because foreign direct investors will want ownership of their fixed investment to be secure there should be a positive relationship between the perceived security of property rights and FDI inflows in South Africa.

HDI represents the perceived level of human capital in South Africa. These data were obtained from Thomson Datastream and is measured as an index. Theory (Lucas, 1990) expects there to be a positive relationship between the perceived level of human capital and FDI inflows into South Africa.

GFCF represents the Gross Fixed Capital Formation in South Africa. These data were obtained from SARB statistical database and are measured as a percentage of GDP. Theory (Noorbakhsh *et al.*, 2001) expects an increase in physical capital to have a positive effect on FDI inflows. If FDI is in Greenfields investment then there may be a problem of causality as an increase in FDI will automatically result in an increase in GFCF. However, this is not likely to be too much of a problem in the case of South Africa, firstly because FDI is a very low ratio of GFCF and also because many of the most significant foreign direct investments

in SA (e.g. ICBC's purchase of 20% of Standard Bank and Barclay's purchase of 50% of ABSA) were purchases of existing assets and therefore did not impact on GFCF.

GCI_average represents the average of specific scores from the Global Competitive Index of the World Economic Forum which were used by the author to quantify the perceived friendliness to business of the South African government. These data were obtained from the World Economic Forum and are measured as an index. Theory (Busse & Hefeker, 2007) expects there to be a positive relationship between inward FDI flows to South Africa and the perceived trust by foreign investors in the government and its friendliness to business, both domestic and foreign. The specific GCI scores that were taken into account were: the diversion of public funds, public trust in politicians, irregular payments and bribes, favouritism in decisions of government officials, wastefulness of government spending, the burden of government regulation and transparency of government spending.

The restrictions of the estimated model must be kept in mind – because the data set is only a small sample, inevitably the estimated model will have some limitations. However, the results from such a multivariate linear regression analysis can serve as a broad platform on which to base further research regarding FDI inflows to South Africa.

5.3.3. Model 1 Empirical Results

Table 5.2: Model 1 Empirical Results:

Independent Variable	t-statistic	p-value
(Constant)	-2.536719	0.0135
Region	0.761842	0.4488
Trade Open	1.133154	0.2611
EFI	-0.587461	0.5588
REER	-0.276590	0.7829
HDI	2.331825	0.0227
GFCF	-0.539881	0.5910
GCI Average Score	3.446730	0.0010
R-squared	(0.408)	
Adjusted R-squared	(0.347)	
Durbin-Watson	(0.397)	
F-stat	(6.694)	0.000

(Author's own estimation using Eviews 7)

The table above shows the results for the first model analysed. The results show that the coefficient of human capital (HDI) variable is statistically significant at the 5% level, and the friendliness to business (GCI Average Score) variable is statistically significant at the 1% level. The signs of both are positive, conforming to our *a priori* expectations that both the level of human capital and the friendliness of government towards business are important in attracting FDI. The rest of the other explanatory variables are statistically insignificant. This is surprising given the importance attached to these variables in the literature. The signs of region and trade openness conform to our *a priori* expectations that there will be positive relationships between these variables and South African FDI. But the signs of EFI and GFCF are negative, contrary to what was expected. It is possible that REER is insignificant because the impact of changes in the real exchange rate are already captured in the trade openness variable.

The F-statistic implies that the overall model is statistically significant at the 1% level. The Durbin-Watson statistic, when compared to critical values, suggests that there is positive

serial correlation or a weakness in the model specification. The unexpected signs of some variables and low t-values may indicate multicollinearity. Accordingly some of the variables are left out in Model 2.

Two potential problems are that FDI could already be included in Region and GFCF and hence is being measured two or even three times in Model 1. In the case of Region, South Africa was excluded from the measure of FDI as a per cent of GFCF to avoid this problem. It was felt that because most FDI in SA to-date was the purchase of existing assets rather than brownfields investment the measure of GFCF in Model 1 would contain little FDI. Hence GFCF could be included in the model. Nonetheless, because of the weakness of the results in Model 1, both Region and GFCF are amongst the variables left out in Model 2 and so these potential problems fall away.

5.3.4. Model 2 Specification

The second model was run utilising the two significant independent variables from the first model as well as the REER and trade openness variables. REER and trade openness are included both because of their theoretical importance and because various permutations of the model showed that their inclusion improves the model's overall fit. Moreover, the t statistic of trade openness in Model 1 is greater than 1, indicating that it contributes positively to the adjusted R-squared.

$$FDI_inflows = f(HDI, Trade_open, REER, GCI_average).....(5.2)$$

where the variables are defined as before.

5.3.5. Model 2 Empirical Results

Table 5.3: Model 2 Empirical Results:

<u>Independent Variable</u>	<u>t-statistic</u>	<u>p-value</u>
(Constant)	-5.431	0.000
HDI	4.482	0.000
Trade_open	1.675	0.098
REER	-1.311	0.194
GCI Average Score	5.560	0.000
R-squared	(0.402)	
Adjusted R-squared	(0.368)	
Durbin-Watson	(0.405)	
F-stat	(11.927)	0.000

(Author's own estimation using Eviews 7)

The results in the table above show that the coefficients of GCI Average Score and HDI variables are statistically significant at the 1% level, whilst the trade openness variable is now statistically significant at the 10% level. The signs are all positive, as expected, suggesting that the friendliness to business, trade openness and HDI variables all have a positive relationship with FDI inflows to South Africa. The REER variable is statistically insignificant and the sign is negative. It was argued above that the expected sign should be positive, but it was acknowledged that the direction of this relationship is not clear cut. There may be multicollinearity between the REER and trade openness variables but it was deemed inappropriate from a theoretical perspective to drop REER from the model. Furthermore, the absolute t-statistic of the REER coefficient exceeds 1 suggesting that the variable contributes to the model's explanatory power.

The overall model is statistically significant at the 1% level, as indicated by the F statistic. The adjusted R-squared value of 0.368 suggests the model is an adequate fit and an improvement over Model 1. However, the Durbin-Watson statistic, when compared to critical values, suggests that there is positive serial correlation.

Model 2 proves the better fit. In order to test for cointegration, an Engle-Granger test for cointegration was conducted. The results presented in the table below.

Table 5.4: Engle-Granger Cointegration Test Results:

		t-statistic	Prob.
Augmented Dickey-Fuller test statistic		-7.237	0.000
Test critical values:	1% level	-2.597	
	5% level	-1.945	
	10% level	-1.614	

(Author's own estimation using Eviews 7)

The Engle-Granger test conducts a unit root test on the residuals of the cointegrating regression. The null hypothesis of a unit root is rejected. This essentially shows that the cointegrating regression results are not spurious and that there is a long run equilibrium relationship between the variables.

The existence of a cointegrating relationship implies that an Error Correction Model (ECM) is appropriate in order to investigate the short run relationship between the variables.

An ECM was run using Eviews 7. The ECM specification is as follows and the results are shown below:

$$\Delta FDI_t = 0.301 + 132.013\Delta HDI_t + 10.126\Delta Trade_open_t + 0.131\Delta REER_t + 28.369\Delta GCI_average_t - 0.208Resid01_{t-1} \dots \dots \dots (5.3)$$

Table 5.5: Error Correction Model Results:

Variable	Coefficient	t-statistic	Prob.
Constant	0.301	1.114	0.269
D(HDI)	132.013	0.740	0.462
D(Trade_open)	10.126	0.484	0.630
D(REER)	0.131	1.380	0.172
D(GCI_average)	28.369	5.446	0.000
Resid01(-1)	-0.208	-3.084	0.0029
Adjusted R-squared	0.340		
F-statistic	8.641	Prob(F-stat.)	0.000
Durbin-Watson stat	0.799		

(Author's own estimation using Eviews 7)

The error correction model reflects the short run relationship around the long run equilibrium. The coefficient of the lagged residual series is negative and statistically significant at the 1% level. The coefficient value of -0.208488 therefore suggests that about 20 percent of the

discrepancy between short-term and long-term FDI is eliminated each quarter. Put differently, it takes just under five quarters for long-run equilibrium to be restored.

5.3.6. Model 3 Specification

A third model was run utilising a fixed effects cross-sectional balance panel analysis of 28 countries. This was done to test the relationships established for South Africa against the determinants of FDI in a number of developed and developing economies (Claassen, 2011). It was not feasible to construct a measure of regional impact for some of the countries in the sample. A regional dummy would have been constant over time for each country and resulted in estimation difficulties in the fixed effects approach. The regional aspect was therefore omitted from the panel study.

$$FDI_inflows = f(Trade_Open, REER, EFI, HDI, GFCF, GCI_average).....(5.4)$$

where the variables are defined as before.

5.3.7. Model 3a Empirical Results

Table 5.6: Model 3a Empirical Results:

<u>Independent Variable</u>	<u>t-statistic</u>	<u>p-value</u>
(Constant)	1.759	0.080
EFI	-1.250	0.213
GFCF	-0.261	0.794
HDI	-1.390	0.166
REER	0.081	0.935
Trade_open	1.597	0.112
GCI Average Score	1.97	0.049
R-squared	(0.678)	
Adjusted R-squared	(0.629)	
F-stat	13.938	.000

(Author's own estimation using Eviews 7: cross-sectional fixed effects shown in Table 5.9 below.)

The results in the table above show that the friendliness to business variable is statistically significant at the 5% level. The REER, EFI, HDI, Trade openness and GFCF variables are all statistically insignificant. Overall, the model is statistically significant at the 1% level. The

results indicate that a positive relationship exists between the friendliness to business variable and FDI so that an increase in the friendliness to business of government will attract increased FDI inflows. This is in accordance with our *a priori* expectations.

A random effects panel analysis was then run and the results compared to those of the fixed effects model.⁴

5.3.8. Model 3b Specifications

A fourth model was run utilising a random effects panel analysis of 28 countries as follows:

$$FDI_inflows = f(Trade_Open, REER, EFI, HDI, GFCF, GCI_average).....(5.5)$$

where the variables are defined as before.

5.3.9. Model 3b Empirical Results

Table 5.7: Model 3b Empirical Results:

<u>Independent Variable</u>	<u>t-statistic</u>	<u>p-value</u>
C	1.584	0.115
EFI	1.333	0.184
GFCF	-2.243	0.026
HDI	-1.591	0.113
REER	-1.528	0.128
Trade_open	3.871	0.000
GCI_average	2.086	0.038
R-squared	(0.138)	
Adjusted R-squared	(0.117)	
F-stat.	6.548	0.000
Cross-section random	S.D. (7.983)	Rho (0.403)
Idiosyncratic random	S.D. (9.721)	Rho (0.597)

(Author's own estimation using Eviews 7: cross-sectional random effects shown in Table 5.9 below.)

The results in the table above show that both the friendliness to business and GFCF variables are statistically significant at the 5% level. The trade openness variable is statistically significant at the 1% level. The REER, EFI and HDI variables are all statistically insignificant. Overall, the model is statistically significant at the 1% level. The results indicate that a positive relationship exists between the friendliness to business and trade openness variables, and FDI. This is in accordance with our *a priori* expectations that an increase in the friendliness to business of the government will attract increased FDI inflows..

⁴ The fixed effects model would be improved by dropping GFCF. However it is important first to run the random effects model so that the results can be compared using the same variables.

The results also suggest that the GFCF variable has a negative relationship with FDI inflows. This is not in accordance with our *a priori* expectations.

It must be noted that the REER variable is theoretically important, but in both the fixed and random models it is insignificant. It is possible the impact of the exchange rate is already being reflected in the trade openness variable, hence REER is insignificant.

The Hausman test ascertains which of the two models analysed is the more appropriate.

Table 5.8: Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	12.132942	6	0.059	
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var.(Diff.)	Prob.
EFI	-0.375394	0.259615	0.052207	0.0054
HDI	-72.997360	-21.057491	2581.728178	0.3067
REER	0.009559	-0.139412	0.005538	0.0453
GFCF	-0.184029	-0.612838	0.421960	0.5092
Trade_open	20.257601	11.869585	151.576713	0.4957
GCI_average	3.071839	2.617181	0.839221	0.6197

(Author's own estimation using Eviews 7)

The null hypothesis for the Hausman test is that the random effects model is more appropriate. It is not clear from the Hausman test results above whether the random or fixed effects model is the better. However, there appears to be insufficient evidence to reject the null hypothesis. Only the REER (5% level) and the EFI (1% level) coefficients have significant differences to their fixed effects counterparts. It is only at the 10% level that the fixed effects model may be preferred, and thus the result is uncertain. The results of the random effects model seem to be better because at 1% and 5% levels the random effects coefficients are more statistically significant. In addition, the random effects model may be the preferred option as the number of cross-sectional units exceeds the number of time series observations and the countries can be seen as a random drawing from a larger sample (Gujarati and Porter, 2009: 606).

Table 5.9: Country Specific Coefficient Difference from Model Average:

Country	Cross-section fixed effects (Var.)	Cross-section random effects (Var.)
Argentina	2.722335	1.997554
Australia	32.22261	10.03075
Bangladesh	-32.28517	-7.610885
Bolivia	-8.386015	-2.782846
Botswana	-6.683214	-4.339866
Brazil	-2.315766	-0.058374
Canada	17.24229	2.304547
Chile	29.80194	14.76458
China	-15.05790	3.658881
Egypt	4.321265	10.35170
France	6.930988	0.386123
Germany	5.353547	-5.505797
Italy	-0.274651	-4.596344
Japan	9.090697	-2.041273
Kenya	-32.43928	-13.91268
Malaysia	-22.70681	-9.672977
New Zealand	-6.086744	10.22203
Nigeria	21.74107	-1.106786
Peru	9.160737	5.377668
Saudi Arabia	3.166837	3.926536
Singapore	6.246848	8.493477
South Africa	-13.98930	-6.283682
South Korea	-1.577754	-8.144082
Thailand	-20.33613	-6.412542
UAE	-13.56429	-9.209995
UK	26.87499	7.286735
USA	18.42504	-4.002679
Zambia	-17.59817	6.880229

(Author's own estimation using Eviews 7)

Table 5.9 shows the the amount by which the coefficients for each of the countries differ from the model average. The results show that South Africa is substantially below the average for both the fixed and random effects models (-13.989 and -6.284 respectively). Chile on the other hand has coefficients that are well above the average for both the fixed and random effects models (29.802 and 14.765 respectively). Botswana, although also below the average, produces better results than South Africa. There are a few countries that are even worse performers than South Africa however, namely China, Thailand, Kenya, Malaysia and Zambia in the fixed effects model and Malaysia, South Korea, Thailand and the UAE in the random effects model.

5.3.10. Model 4 Specification

In the fixed effects model the developed countries have coefficients much larger than the average. They therefore seem to be distorting the model. Accordingly, another cross-sectional balanced panel analysis was run without the developed nations i.e. excluding Australia, Canada, France, Germany, Japan, New Zealand, UK and the USA. The remaining 20 developing countries were all included. There were thus 20 cross sections and 180 observations. A fixed effects model was run firstly.

$$FDI_inflows = f(Trade_Open, REER, EFI, HDI, GFCF, GCI_average).....(5.6)$$

where the variables are defined as before.

5.3.11. Model 4a Fixed Effects Results

Table 5.10: Model 4a Results:

Independent Variable	t-statistic	p-value
(Constant)	2.133	0.035
EFI	-1.468	0.144
GFCF	-0.388	0.699
HDI	-1.119	0.265
REER	-1.607	0.110
Trade_open	1.453	0.148
GCI Average Score	1.920	0.057
R-squared	(0.697)	
Adjusted R-squared	(0.648)	
F-stat	14.189	.000

(Author's own estimation using Eviews 7: cross-sectional fixed effects shown in Table 5.12 below.)

The results in the table above show that the overall model is statistically significant at the 1% level. The GCI average variable is statistically significant at the 10% level and the sign is positive as expected. All the other variables are statistically insignificant.

5.3.12. Model 4b Specifications

A random effects model utilising the 20 developing countries was then run so as to compare it to the fixed effects model.

$$FDI_inflows = f(Trade_Open, REER, EFI, HDI, GFCF, GCI_average).....(5.7)$$

where the variables are defined as before.

5.3.13. Model 4b Random Effects Results

Table 5.11: Model 4b Results:

Independent Variable	t-statistic	p-value
(Constant)	2.822	0.005
EFI	0.181	0.857
GFCF	-2.339	0.021
HDI	-1.600	0.111
REER	-2.791	0.006
Trade_open	3.573	0.005
GCI Average Score	2.170	0.031
R-squared	(0.166)	
Adjusted R-squared	(0.137)	
F-stat	5.750	.000

(Author's own estimation using Eviews 7: cross-sectional random effects shown in Table 5.12 below.)

The results in the table above show that both the friendliness to business and GFCF variables are statistically significant at the 5% level. The trade openness and REER variables are statistically significant at the 1% level. The EFI and HDI variables are both statistically insignificant. Overall, the model is statistically significant. The results indicate that a positive relationship exists between the friendliness to business and trade openness variables and FDI. This is in accordance with our *a priori* expectations. The results also suggest that the GFCF and REER variables have a negative relationship with FDI inflows. This is not in accordance with our *a priori* expectations.

The Hausman test ascertains which of the two models analysed is the more appropriate.

Table 5.12: Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	8.270476	6	0.2189	
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var.(Diff.)	Prob.
EFI	-0.523096	0.047148	0.059094	0.0190
HDI	-64.689930	-27.794908	3037.095858	0.5032
REER	-0.287657	-0.383191	0.013216	0.4060
GFCF	-0.327655	-0.761029	0.607890	0.5783
Trade_open	20.553124	14.439978	183.754167	0.6520
GCI average	3.743801	3.519517	1.172184	0.8359

(Author's own estimation using Eviews 7)

In the case of Models 4a and 4b, the random effects approach may once again be preferred for the reasons outlined in Section 5.3.8 above. In this instance the Hausman test clearly indicates that there is no significant difference between the two sets of coefficients.

Table 5.13: Country Specific Coefficient Difference from Model Average:

Country	Cross-section fixed effects (Var.)	Cross-section random effects (Var.)
Argentina	4.189470	0.260026
Bangladesh	-22.54940	-7.911003
Bolivia	-10.11668	-10.04332
Botswana	3.000244	-0.603901
Brazil	4.755524	1.284521
Chile	33.79758	16.17031
China	-8.913765	3.543752
Egypt	9.606654	9.263945
Italy	7.531585	-0.895272
Kenya	-22.19006	-13.52268
Malaysia	-14.87619	-9.657464
Nigeria	1.445937	7.580013
Peru	15.99229	7.622404
Saudi Arabia	11.40056	6.140353
Singapore	11.63567	6.761644
South Africa	-3.559800	-3.345431
South Korea	1.352438	-7.400943
Thailand	-11.47275	-5.207965
UAE	-5.701308	-7.878689
Zambia	-5.327984	7.839699

(Author's own estimation using Eviews 7)

Table 5.13 shows the the amount by which the coefficients for each of the countries differs from the model average. The results show how South Africa is below the average for both the fixed and random effects models (-3.559 and -3.345 respectively). Although, it must be noted that the severity of the below average coefficient has decreased in comparison to the previous

model. Chile on the other hand has coefficients that are well above the average for both the fixed and random effects models (33.798 and 16.170 respectively). Botswana now has a better than average coefficient for the fixed effects model, and slightly less than average coefficient for the random effects model. Botswana again produces better results than South Africa. There are a few developing countries that are even worse performers than South Africa however, namely Bangladesh, Bolivia, Kenya, Malaysia, Thailand, UAE and Zambia. All of these countries perform worse than South Africa in both fixed effects and random effects model.

5.4. CONCLUSION

Despite the multivariate linear regression analysis having limitations, such as the data set being a relatively small sample, the results do provide a clearer picture as to the effects of especially external perceptions of the South African government. The models analysed produced results that suggest there are numerous factors that influence FDI inflows in South Africa, but that in all of the models the friendliness to business of the South African government certainly has a significant effect on these inflows. The often insignificance of the identified determinants of FDI and, in some cases, their unexpected signs, suggests that the factors affecting FDI are complicated and are not easily measured in empirical models.

Nonetheless, the results of the models suggest that an improved external perception of the South African government's attitude and approach towards business should have a positive effect on inward FDI flows. Although the models have their limitations, the results produced can be used as a platform for further research into the subject of South African FDI and specifically, the affability of the South African government to both foreign and domestic business. The development of human capital and trade openness both have facilitated FDI inflows. These determinants must also be taken into account when determining policy.

The results show that over the course of the last two decades, the South African government has been perceived as somewhat hostile, corrupt and inefficient by many investors and this may have had a direct influence on the relatively low FDI inflows attained. Improvements should be made to the conduct and approach of the government toward business, and the need for a more friendly business and investment environment cannot be understated.

CHAPTER 6:

CONCLUSIONS AND POLICY RECOMMENDATIONS

6.1. INTRODUCTION

The goal of this study was to ascertain which determinants of FDI explained South Africa's low level of FDI inflows over the past two decades. South Africa has emerged from the socio-political, and in later years, economic storm that was *apartheid*, as the economic powerhouse of Africa. With an abundance of natural resources, Africa's largest market and a large unemployed labour force, South Africa should much attract high levels of inward FDI than has been the case since 1994. If South Africa were to attract these higher levels of FDI, then according to such theories as those proposed by Asiedu (2002), Rusike (2008) and Noorbakhsh *et al.* (2001), this will not only have beneficial economic effects but a host of socio-political benefits as well. Improved standards of living are usually associated with economic growth. Higher FDI inflows should therefore see a reduction in poverty, inequality and unemployment.

Although South Africa has made major economic strides over the course of the last two decades, policy makers need to improve upon past performances and policies. South Africa's admission to the BRICS (formerly BRIC) association in 2010 was a major coup in terms of international recognition of its economic emergence. The admission caused much debate about whether or not South Africa was deserving of membership. Nonetheless, being associated with such economically powerful, emerging nations, such as the BRICS, will no doubt be beneficial for the long-term investment image of South Africa. However, it is not sufficient to rely on just an association with major emerging economies. Policy-making, perceptions, rhetoric and general attitudes should be adjusted accordingly to become more accommodating towards international business so that South Africa is viewed as a more attractive investment destination.

Both Chile and Botswana have been more successful at attracting higher levels of inward FDI over the past two decades than has South Africa. All three countries are upper-middle income developing countries that rely heavily on their extractive industries and thus, should attract similar levels of FDI as a percentage of GFCF. South Africa's failure to do so should be of

major concern for policy makers and perhaps the approaches toward local and foreign business, adopted by both Chile and Botswana, should be adapted in South Africa. This chapter summarises the main findings of the study and makes policy recommendations based on these findings.

6.2. CHAPTER SUMMARIES AND CONCLUSIONS

6.2.1. Chapter 2

In order to establish the determinant(s) of FDI that may have caused South Africa to receive disappointing levels of inward FDI over the course of the last two decades, a literature review was conducted in Chapter 2. The literature on FDI is vast, and studies that focus on the relationship between FDI and economic growth are especially common. From the discussed literature it seems that there is still much debate on what constitute the major determinants of FDI inflows. The literature review concentrated on macroeconomic studies that were conducted in both developing and developed countries. The methods used in the studies varied significantly. The majority of the literature was published during the twenty year period under investigation, but literature preceding this period, such as Calvet (1981), was also taken into account.

A general conclusion from the literature overview is that FDI can have a positive influence on economic growth in the host country. Educational attainment and financial development of a certain degree are particularly important factors in the host nation as a base for achieving further growth. These are often referred to as the host economy's absorptive capacity and determine its ability to capitalise on the benefits provided by FDI. Most of the studies acknowledged that a host of factors had some influence on the amount of FDI a country received, but believed that one or a few were far more influential than others. Grouped under the government transparency umbrella, Asiedu (2002) argues that political and social stability are necessary to attract higher levels of FDI, whilst Janicki & Wunnava (2004) believe that an economically efficient environment will be more attractive to foreign investors. Bevan & Estrin (2000) stress the importance of the security of property rights to ensure long term investment and Boulle (2010) argues that trade liberalisation is essential to increased FDI inflows.

Multi-factor theorists such as Wan (2010), Tuomi (2011) and Bevan & Estrin (2000) argue that a whole host of policies need to be linked and not contradict each other as there is a vast array of FDI determinants which need to be manipulated simultaneously in the host nation's favour. Addison & Heshmati (2003), Noorbakhsh *et al.* (2001) and Nunnenkamp & Spatz (2002), stress the need for developing states to invest in capital, technology and infrastructure so as to reassure foreign investors that the country in question is improving economically, thus inducing further capital and technological investments necessary for economic growth. Proponents of the importance of improved human capital development, such as Lucas (1990), stress the growing importance of such improvements since the late 1980s. Tuman & Emmert (2009), Janicki & Wunnava (2004) and Tuman & Emmert (2004) believe that developing states need to adopt more liberal reforms and project their state as democratic, non-extremist and economically efficient, in so doing presenting the state in question as investment friendly and low-risk.

Though the literature regarding FDI in developing countries is vast, the following factors were identified in the literature as important determinants of FDI success: trade openness, regional location, the exchange rate, security of property rights, trade liberalisation and the development of human and physical capital.

6.2.2. Chapter 3

The third chapter broke down global FDI flows into firstly, a global perspective, comparing the performance of developed nations with that of the developing. Thereafter, a regional breakdown of FDI flows was presented, with a particular focus on the Southern African region. Global nominal FDI flows experienced three distinct cyclical periods between 1994 and 2012. FDI inflows grew between 1994 and 2000, but dipped significantly in 2001 and 2002 as a direct result of the Dot Com crisis. Between 2003 and 2007, there was economic prosperity of an unprecedented note in a majority of the developed countries, but specifically in the United States. Net global FDI flows peaked in 2007, after which inflows dropped drastically amidst the 2007/8 global financial crisis sparked by the housing asset bubble in the United States. Over the course of the next two years, global net FDI inflows plummeted. The recovery process has been an arduous affair, and although global FDI inflows improved in 2010 and 2011, 2012 saw another decline due to macroeconomic fragility and policy uncertainty for investors.

Developed states attracted the majority of global FDI inflows during the twenty year period, accruing 64% of total global FDI flows, in comparison to the 36% attained by the developing states. What was striking, however, was the closing of the initial nominal FDI gap between the developed and developing states over the period studied. The gap in FDI inflows between the developed nations and developing nations widened significantly from 1997 up until 2000. After which the developing nations attracted increased inflows as investor confidence in developed states took a knock after the Dot Com crisis in 2000. The developed and developing states both made a steady recovery in 2003 and a sharp increase in FDI inflows ensued until 2007. Developed nations inward FDI flows peaked in 2007 and then dropped off in 2009. Paradoxically, FDI inflows to the developing nations increased up until 2008, and then reduced in 2009. This relatively inelastic response by investors to developing nations may be due to the very nature and origin of the 2007/8 credit crisis, i.e. credit/indirect investment risk in the developed United States. FDI into both sets of countries recovered in 2010 and 2011, but 2012 was a year of economic uncertainty and saw both the developing and developed nations' FDI inflows decrease. However, for the first time developing nations attained more inflows of FDI than developed nations in 2012.

Worryingly for Africa, whilst inward FDI flowing to Africa has increased nominally since 1994, from a mere US\$5.7 billion to just over US\$50 billion in 2012, Africa's proportion of the world FDI inflows and, more importantly, the developing nations FDI inflows, has improved only slightly (UNCTAD, 2013). The other developing regions such as South America and South-East Asia have seen their proportion of global and developing FDI inflows increase over the specified period. Nominal FDI inflows to Africa increased by nearly 880 per cent over the specified period, however, the region's performance in relation to global FDI inflows and that of the developing nations was poor. Annual changes in FDI flows into South-East Asia and South America could allow one to argue that inflows to those regions tended to be more elastic/susceptible to financial crises/cycles in comparison to flows into Africa. However, over the past two decades investors have preferred to invest in the former regions rather than Africa. Thus, although Africa's performance improved slightly in relation to global FDI inflows, it declined slightly in comparison to other developing regions. Since 2008 and the global financial crisis sparked by the credit/housing bubble in the United States, Africa's performance in terms of global FDI inflows has improved.

Southern Africa's share of total African FDI inflows showed volatile annual changes between 1994 and 2012. Southern Africa's share of global FDI has diminished over the past two decades. Southern Africa's share of FDI inflows into Africa can be separated into three distinct periods: 1994-2001, 2002-2006 and 2007-2012. The period between 1994 and 2001 was marked by an increasing share of total FDI inflows into Africa. After 2001, Southern Africa's share decreased at an alarming rate, reaching a base level of just 2.8% in 2006. Between 2002 and 2006, Southern Africa's average share of total FDI flows into Africa was down 80% on the 1994-2001 average. This significant decline in FDI inflows to Southern Africa can be attributed to particularly low inflows to the two principal host countries (Angola and South Africa) in the sub-region. This led to negative inflows in 2006. From 2006 onwards, the Southern African region continued to receive volatile FDI inflows. In terms of FDI inflows attained as a percentage of GFCF, the Southern African region has fared much better in comparison with its performance utilising nominal FDI inflows. Significantly, from 2003 to 2009, the Southern African regional average figures are very similar, and in most cases higher than those of South America, having been substantially lower prior to this. Though, it was noted that the mean average FDI for the entire period since 1994 for Southern Africa was significantly lower than that achieved by South America. Significantly, however, South-East Asia was the most successful and consistent region at attracting FDI inflows as a percentage of GFCF over the entire period.

6.2.3. Chapter 4

Since 1994, South Africa has attracted very volatile inflows of FDI, reaching a nominal peak of US\$9 billion in 2008 and experiencing divestment of US\$527 million in 2006 (UNCTAD, 2013). Although 2008 was South Africa's most successful year nominally, it was not the peak year in terms of FDI inflows as a percentage of GFCF. If one divides South African FDI inflows since 1994 into two distinct periods, 1994-2004 and 2005-2012, nominal FDI inflows average US\$1.6 billion and US\$4.7 billion respectively. This shows that nominally, South Africa has attracted much higher FDI inflows since 2004, which may suggest relative success. However, when one takes into account GFCF, South Africa's inward FDI increased only slightly. Such a slight increase in proportion to GFCF shows that the large increase in nominal FDI inflows was not a realistic measure of increased success at attracting FDI, but highlights the increase in the size of the economy and GFCF in South Africa since 1994.

That a principal host country, as regionally influential as South Africa, experienced net divestment in 2006 is disturbing. Between 1994 and 2005, South Africa's share of total FDI inflows into Southern Africa followed a four year cyclical period, peaking in 1997, 2001 and 2005 with troughs in 1994, 1998 and 2003. After this period, South Africa had a disastrous year in 2006 in terms of attaining FDI, experiencing net divestment. 2007 to 2012 was a relatively successful period for South Africa in terms of attaining a high percentage of total FDI flows to Southern Africa. During this period, South Africa attained two thirds of total nominal FDI inflows to the region and thus one can label it the "principal host nation" of the region. South Africa's annual FDI inflows are "lumpy" because of the dominance of a number of very large deals in mining, telecommunication and banking.

The six determinants identified in the literature review were then individually analysed graphically against the FDI inflows obtained by each country (South Africa, Chile and Botswana) from 1994 up until 2012. Although all the individual country graphs showed similar annual changes to the regional graphs, the South African FDI inflows were less than the regional inflows, Chilean FDI inflows were greater and Botswana's consistently overlapped, suggesting that the negative regional influence as suggested by Asiedu (2002) may not have been significant. The annual changes for most of the REER data series are not in accordance with theory (Russ, 2004) as when the REER increased, signifying an appreciation or strengthening of the domestic REER (Rand, Peso and Pula), the inflows of FDI usually increased and conversely, decreased when the domestic REER weakened. Annual changes in trade openness graphs are in accordance with theory, as posited by Tuman & Emmert (2009) and Boulle (2010), that there exists a positive relationship between trade openness and FDI inflows. The only years that do not perform as expected are 1998, 2006, 2010 and 2012, which see an inverse relationship between the two data series. The recent global financial crisis and subsequent economic uncertainty could explain the 2010 and 2012 results, whilst the East-Asian Financial crisis of 1997-1998 could possibly explain the 1998 result.

Changes in physical capital investment are in accordance with theory, as stated by (Noorbakhsh *et al.*, 2001 and Nunnenkamp & Spatz, 2002), that increased physical capital attracts higher levels of FDI inflows and *vice versa* for a decrease in physical capital. There are however certain years, such as 1998 and 2006, when such a positive relationship does not hold. Changes in the South African human capital data series and FDI are not in accordance

with theory, as posited by Addison & Heshmati (2003), and the relationship seems random. However, the data series for South Africa encompasses a relatively short time frame and may be insufficient to show establish a meaningful relationship between the two variables. The relationship between human capital and FDI for Chile and Botswana are positive. In terms of the security of property rights, South Africa and Botswana showed relationships to FDI that are in accordance with this traditional theory (Sonin, 2002 and Mottaleb, 2007), from 1994 to 1999. But thereafter the relationship becomes negative which does not conform to this theory. Changes in Chile's security of property rights are positively related to changes in FDI inflows.

The analysis of annual changes of the identified FDI determinants and FDI across 30 countries were all in accordance with our *a priori* expectations and suggest that South Africa should have acquired higher FDI inflows than it did. The OECD restrictive indices were then assessed for South Africa and Chile. South Africa ranked 38th out of 44 countries studied in 2006, and 28th out of 48 countries in 2010. In comparison, Chile was ranked 32nd out of the 44 countries surveyed in 2006, and was significantly less restrictive than South Africa. By 2010, Chile was ranked 26th out of the 48 countries studied. These indices suggest that since 2006, South Africa has become more open and friendlier towards foreign investment. South Africa had very high index scores (more restrictive) for mining, transport, financial services and business. These are crucial sectors in terms attracting the type of foreign investment that South Africa requires to fully capitalise on the wealth of mineral resources at its disposal. Chile, although attaining a relatively similar total FDI index to South Africa, had a different sectoral breakdown in terms of index scores. The sectors that were most restricted in Chile were fishing, transport and media.

The World Economic Forum's GCI identified financial market development, market size and the effectiveness of anti-monopoly policy in South Africa as some of the more attractive components to investors. The lowest scoring and thus, least attractive components to investors in South Africa were: favouritism in decisions of government officials, the burden of government regulation and public trust in politicians. Chile scored high for solid macroeconomic stability, an efficient government and low levels of corruption. The areas for improvement in Chile include the quality of the educational system, poor innovation capacity and the extent of market dominance. Botswana achieved high scores for efficient government

spending, public trust in the government and low levels of corruption and scored poorly for goods market inefficiency, the rate of diseases and the quality of the educational system.

An index of “friendliness towards business” was constructed for all 30 countries using the sub-indices of the WEF’s GCI. The specific GCI scores that were taken into account were: the diversion of public funds, public trust in politicians, irregular payments and bribes, favouritism in decisions of government officials, wastefulness of government spending, the burden of government regulation and transparency of government spending. It was shown that there is a positive relationship between this new index of government performance and FDI inflows across the 30 countries. Chile and Botswana both attract higher levels of FDI inflows (as a percentage of GFCF) than South Africa and have trust in their perceivably efficient governments, whereas the South African government is perceived as a comparatively inefficient and corrupt administration by many. This helps explain the relatively low level of FDI which South Africa has attracted since 1994.

6.2.4. Chapter 5

Firstly, all of the identified determinants of FDI in South Africa were investigated via a multivariate linear regression analysis to determine which (if any) determinants had a significant impact on inward FDI flows to South Africa since 1994. The second model ran a multivariate linear regression utilising only some of the variables in Model 1. A fixed effects panel analysis was then run in the third model and a random effects panel analysis in the fourth model. Data was acquired from a number of sources such as the IMF International Financial Statistics database, the Reserve Bank of South Africa, UNCTAD World Investment Reports, OECD FDI Regulatory Restrictiveness Index, the World Economic Forum and Thomson Datastream.

The models produced results that suggest there are numerous factors that influence FDI inflows in South Africa, but that the friendliness to business of the South African government certainly has a significant effect on these inflows in all the models. The development of human capital and trade openness both have some influence on the amount of inward FDI that South Africa, specifically, attracts. These determinants must also be taken into account when determining policy. The results of the models suggest that an improved external perception of the South African government’s attitude and approach towards business should have a positive effect on inward FDI flows.

Although the models have limitations, the results produced can be used as a platform for further research into the subject of South African FDI and specifically, the attitude of the South African government to both foreign and domestic business. The index constructed shows that over the course of the last two decades, the South African government has been perceived as somewhat hostile, corrupt and inefficient by many investors and the models' results indicate that this may help explain the relatively low FDI inflows attained.

6.3. POLICY RECOMMENDATIONS AND FURTHER RESEARCH

Both investment policy and approach need to be adjusted in South Africa so as to reassure potential investors. A holistic change to the investment environment in South Africa would show both foreign individuals and firms, that the government is serious about trying to attract the much needed FDI. Although the South African government has adjusted economic policies in the past to try and attract long-term investment, one could argue that the attitude of government has been somewhat hostile at times towards both local and foreign business. This may explain why portfolio/short-term investment has been the preferred investment choice of foreign firms and individuals. Extremist and nationalistic rhetoric may have planted seeds of doubt into the minds of potential investors and a generally unfriendly governmental approach may have put off existing investors. The major problem of being perceived by many as a hostile, corrupt and/or inefficient government is that such a reputation will take a long time to repair. Therefore, whilst there may be short-term measures that could aid in creating a more investment friendly environment in South Africa, the process to attract the potential levels of FDI will be a longer-term procedure and requires a willingness for change on the part of the South African government policy makers.

6.3.1. Investment Policy and Rhetoric

In terms of investment policy, the South African government should reject the proposed draft bill that removes the right to international arbitration and more generous provisions for compensation in the event of expropriation with those contained in the constitution. Such a bill highlights the doubts of foreign investors about the future execution of nationalisation policies and reforms. In order to attract foreign investors in the light of such rhetoric, a minimum, significant compensation should be offered. Ideally all mention of expropriation should be reduced if not eliminated, from the fiscal jargon. Wage negotiations, in particular

in the mining sector, need to be conducted swiftly and include unions, government, employees and management. Any murmurings, even from minor government officials, about nationalisation should stop. The ANC government as a whole may not support nationalisation, but any public calls/suggestions from within the ruling party's ranks for the implementation of such an extremist policy may cause any potential investors to be wary. Prospecting rights for a specific plot or area of land should be granted to one firm only, and these rights then respected. The case of Aquila discussed above proves that all is not well in the mining sector. The proposed amendments to mining legislation, allowing the Department of Mineral Resources, and in particular the Minister, more power to make arbitrary decisions, including about the marketing of production, should be rejected.

If and when a government representative or spokesperson does use aggressive or hostile rhetoric towards business, necessary damage-limitation steps should swiftly be taken. This should reassure foreign firms and individuals that such an occurrence was an aberration. Such measures may include a follow up statement retracting the initial hostile statement, and reassure investors that the views expressed were not those of the government. Some form of fine or suspension for the individual or group in question would also show potential investors that the government in fact, does not adhere to such extremist/aggressive calls. Perhaps a longer-term solution to changing the perceived hostile attitude of the government towards business would be to ensure that the officials in question have attained some form of tutelage concerning the benefits of foreign direct investment and business in general. One could argue that some policy makers may be naive about the importance of the role played by business in any country and specifically, direct investment in the mineral rich South Africa. Recent cooperation amongst members of the economic cluster (finance, economic development and trade and industry) about greater policy alignment is certainly a step in the right direction. Coordination and clarity are key to ensuring investment-friendly policies are successfully implemented.

6.3.2. Areas for further research and concluding remarks

The main questions regarding FDI inflows into a post-1994 South Africa posited at the beginning of the study were:

- Which determinants are taken into account when investors consider a particular host country?

- What level of inflows of FDI has South Africa ascertained over the last two decades?
- Are foreign investors being put off by extremist rhetoric and/or an unfriendly business environment in South Africa?

The questions were gradually answered over the course of the study and one could summarise the answers as follows:

The following determinants were considered the most influential to investors: security of property rights, trade openness, human and physical capital, exchange rate, regional location and friendliness to business of the government.

Since 1994, South Africa has attracted very volatile inflows of FDI, reaching a nominal peak of US\$9 billion in 2008 and experiencing divestment of US\$527 million in 2006. Although 2008 was South Africa's most successful year nominally, it was not the peak year in terms of FDI inflows as a percentage of GFCF, reaching 14.5%. 2001 saw inward FDI peak at 40.5% of GFCF, with nominal FDI inflows reaching US\$6.6 billion. The Southern African region has been dominated by South Africa and Angola over the past two decades in terms of net FDI inflows. Amongst the SADC countries, South Africa has more often than not received the highest share of regional net FDI flows. However, Botswana (and Chile) attained higher levels of FDI as a percentage of GFCF between 1994 and 2012 than South Africa. FDI inflows attained by South Africa, have been below their potential level, especially considering the wealth of mineral resources in South Africa.

Many investors perceive the South African government as hostile towards business, corrupt and/or inefficient. The empirical results show that this negative perception has had a negative influence on the amount of FDI inflows attained over the course of the past two decades.

Further research on this topic could include expanded empirical models when more data become available. The friendliness of the South African government to foreign business is difficult to quantify and measure. Future research into more successful quantifying of this determinant would be advisable. Cross-sectional and/or longitudinal surveys concerning the friendliness to foreign business could be distributed to a range of foreign firms. Such primary data could be used in conjunction with published data in order to increase the validity of the findings.

ANNEXURES

ANNEXURE A: CHILE DATA GRAPHS

Figure A.1: Average Regional FDI Inflows (% of GFCF) against Chilean FDI Inflows (% of GFCF) 1994-2012:

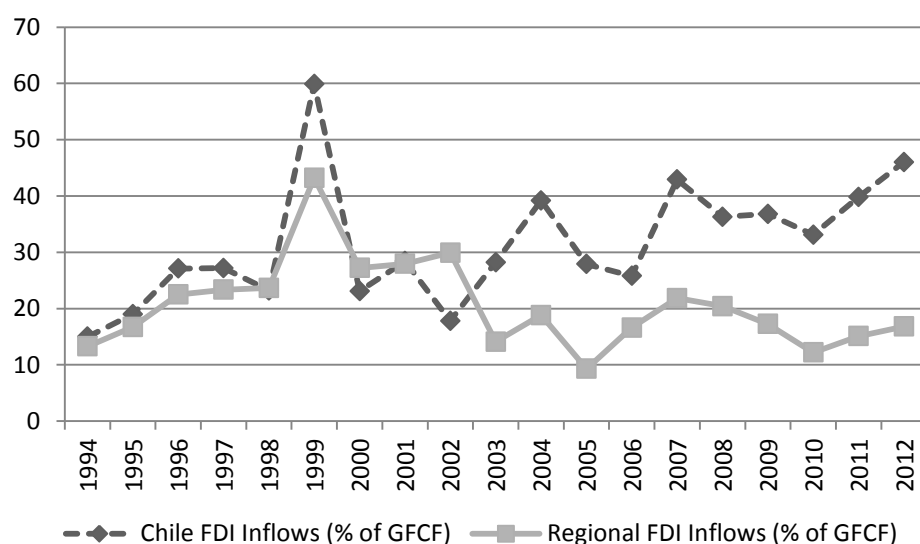


Figure A.2: Real Effective Exchange Rate indicator (Index) against FDI inflows (% of GFCF) for Chile 1994-2012:

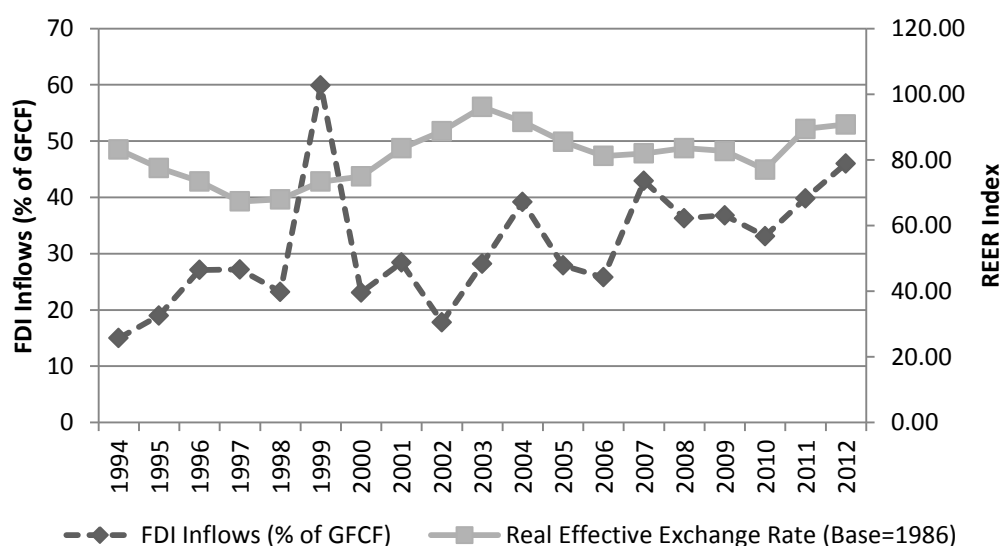


Figure A.3: Trade Openness Indicator ($X+M/GDP$) against FDI inflows (% of GFCF) for Chile 1994-2012:

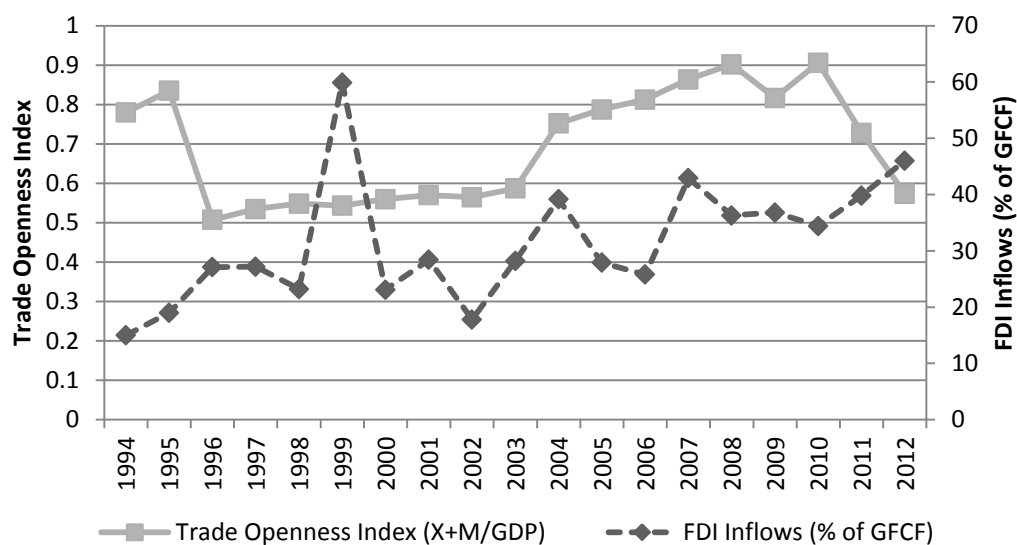


Figure A.4: GFCF as a % of GDP against FDI inflows (% of GFCF) for Chile 1994-2012:

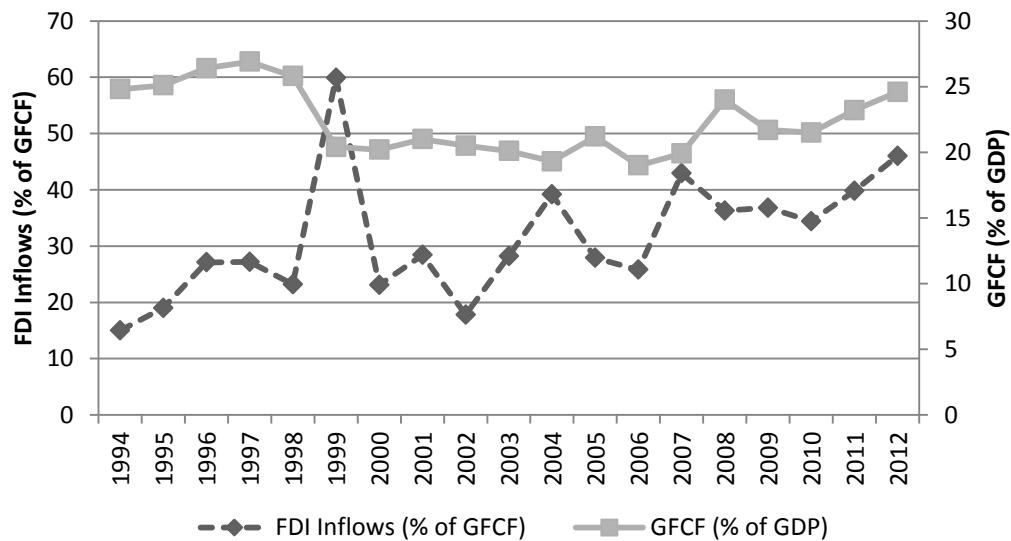


Figure A.5: Human Development Index against FDI inflows (% of GFCF) for Chile 1994-2012:

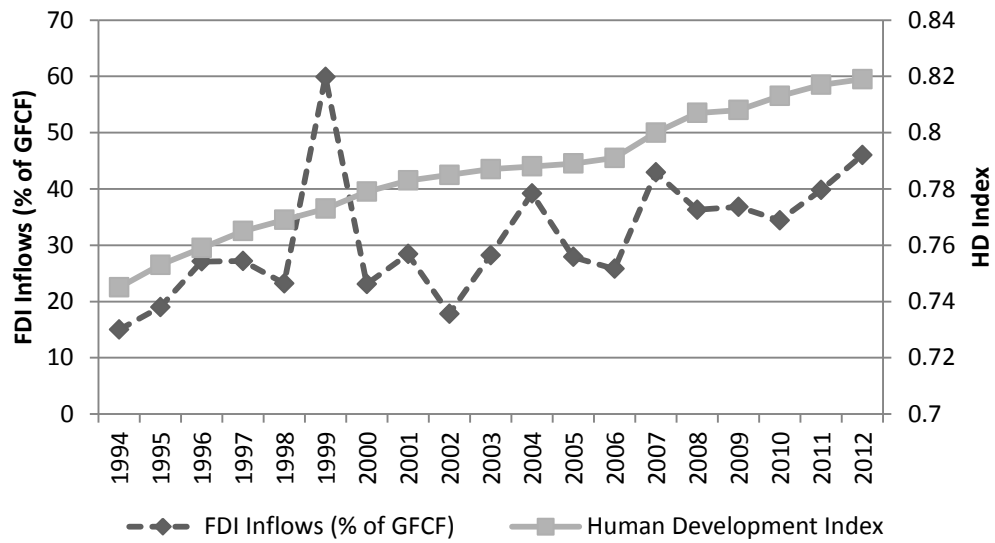
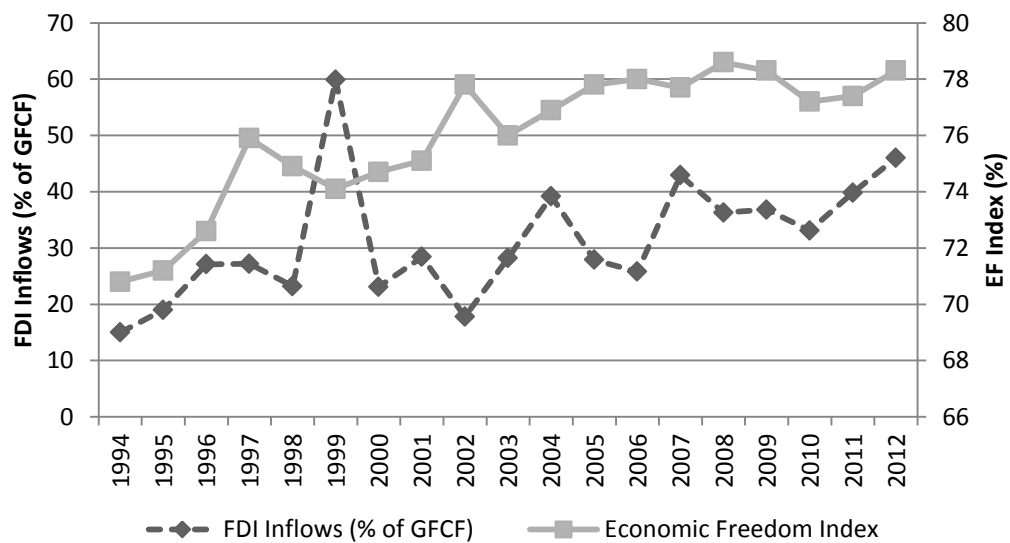


Figure A.6: Economic Freedom Indicator (Index) against FDI inflows (% of GFCF) for Chile 1994-2012:



ANNEXURE B: BOTWSANA DATA GRAPHS

Figure B.1: Average Regional FDI Inflows (% of GFCF) against Botswanan FDI Inflows (% of GFCF) 1994-2012:

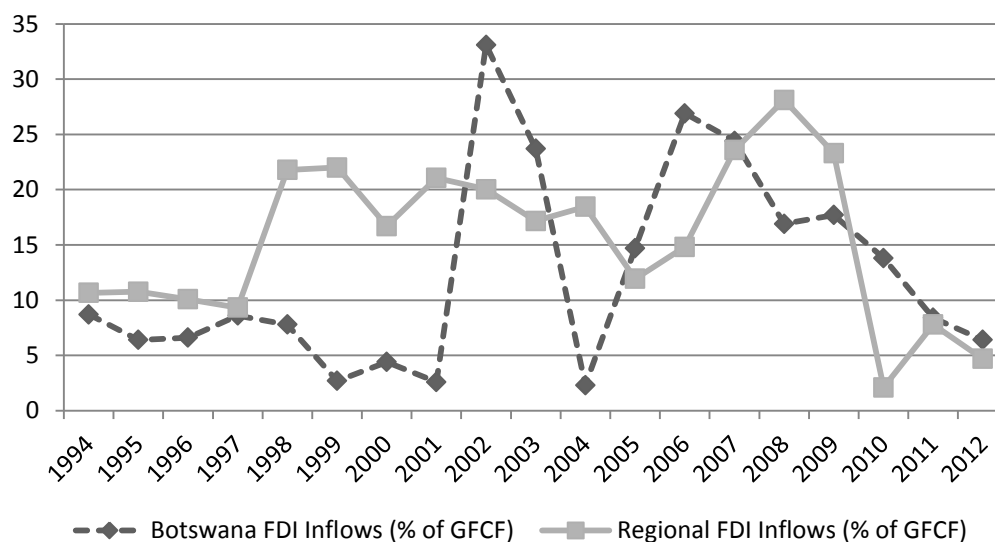


Figure B.2: Real Effective Exchange Rate indicator (Index) against FDI inflows (% of GFCF) for Botswana 1994-2012:

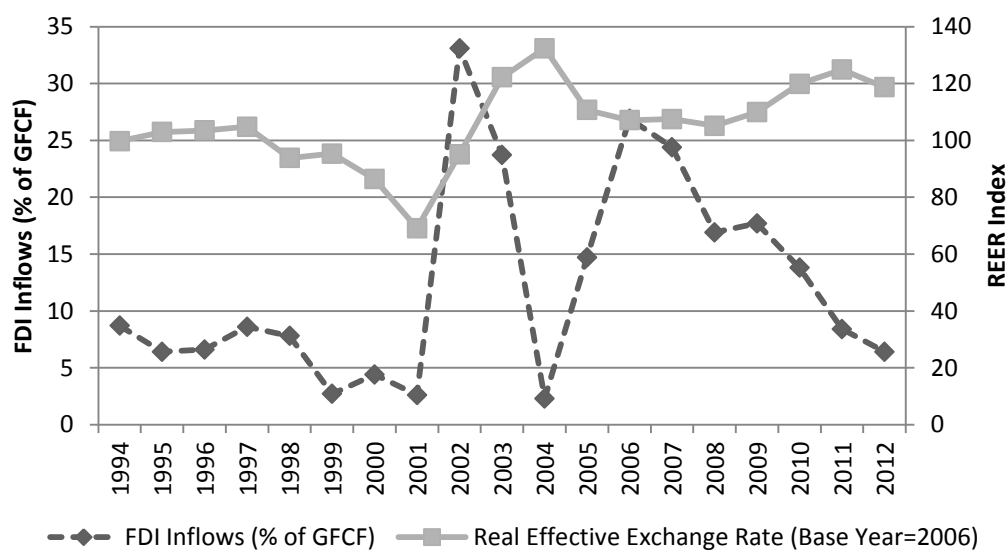


Figure B.3: Trade Openness Indicator ($X+M/GDP$) against FDI inflows (% of GFCF) for Botswana 1994-2012:

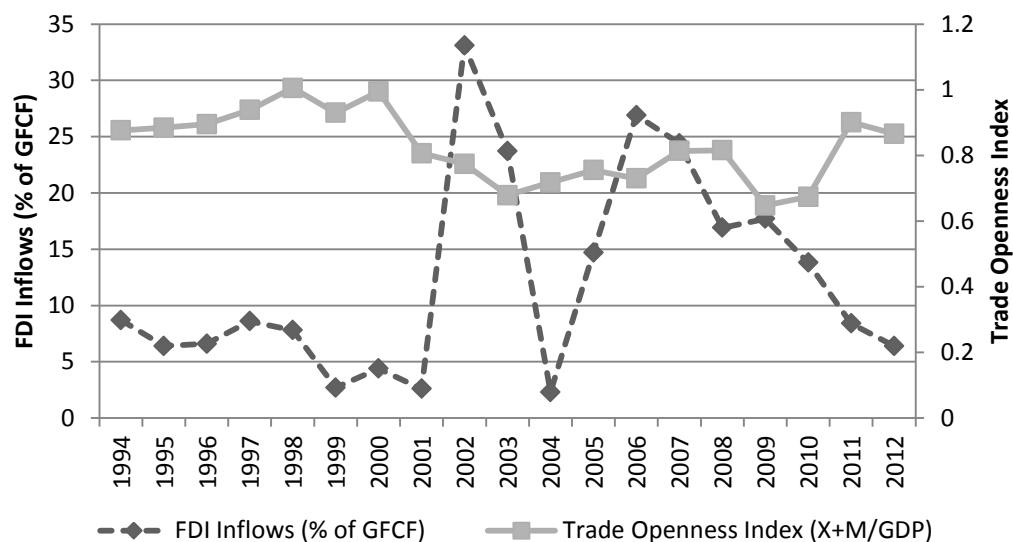


Figure B.4: GFCF as a % of GDP against FDI inflows (% of GFCF) for Botswana 1994-2012:

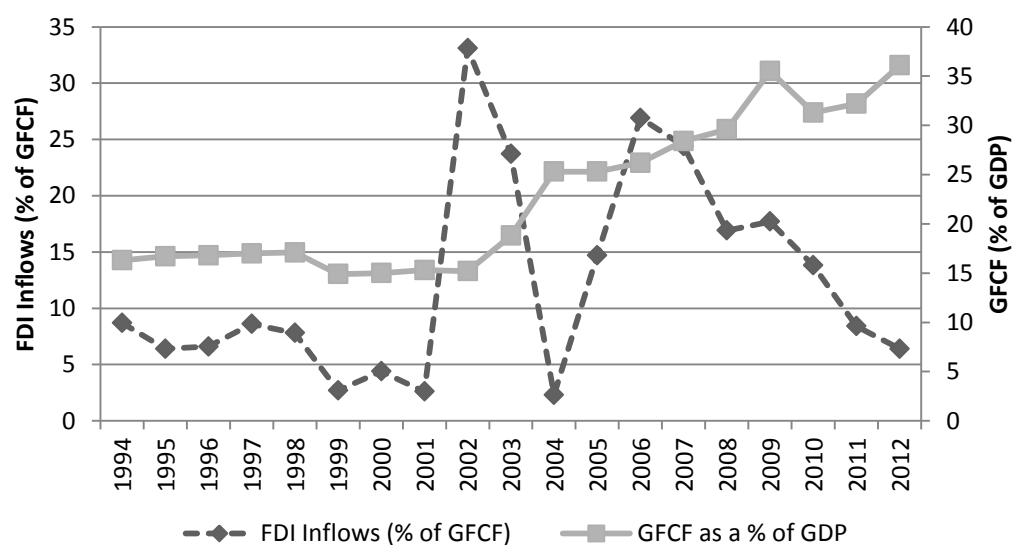


Figure B.5: Human Development Index against FDI inflows (% of GFCF) for Botswana 1994-2012:

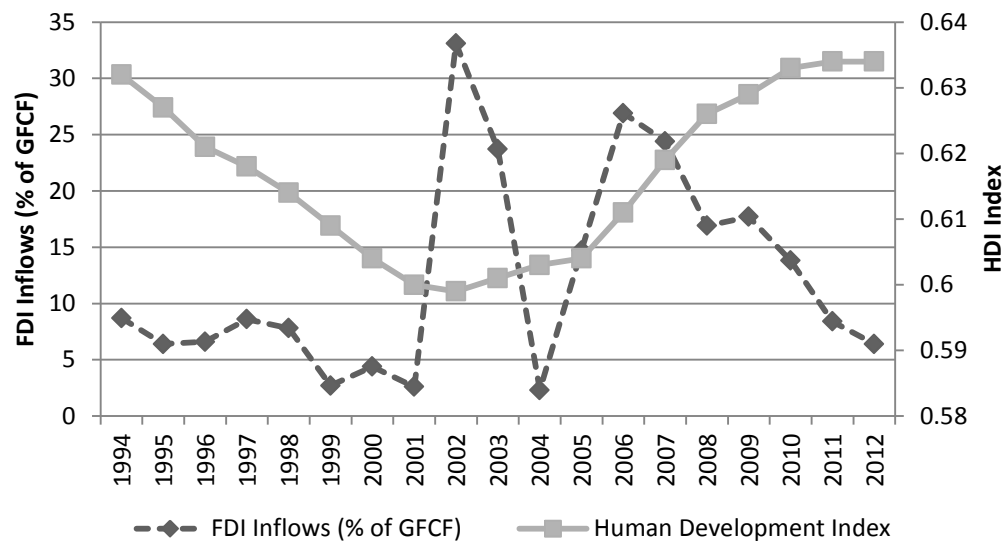
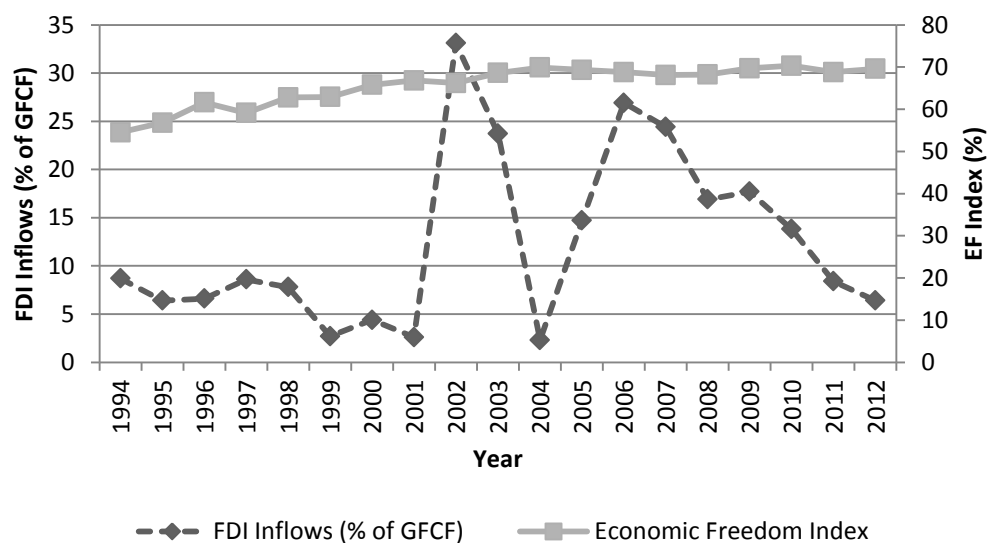


Figure B.6: Economic Freedom Indicator (Index) against FDI inflows (% of GFCF) for Botswana 1994-2012:



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