

**CHINA'S AFRICAN FDI SAFARI: OPPORTUNISTIC
EXPLOITATION OR MUTUALLY BENEFICIAL TO
ALL PARTICIPANTS?**

Tina Dreier

g11d0041

Thesis to be submitted in partial fulfilment of the requirements for the degree of:

MASTER OF COMMERCE IN FINANCIAL MARKETS

DEPARTMENT OF ECONOMICS AND ECONOMIC HISTORY

RHODES UNIVERSITY, GRAHAMSTOWN

Supervisor:

Dr. Doreen Bekker

Co- Supervisor:

Nicolette Cattaneo

DECLARATION

Except for references specifically indicated in the text, and such help as has been acknowledged, this thesis is wholly my own work and has not been submitted to any other University, Technikon or College for degree purpose.

Tina Dreier

.....

ABSTRACT

When implemented within a favourable legislative framework, Foreign Direct Investment (FDI) can produce domestic growth-enhancing spillovers in host countries. Other potential positive effects include the provision of investment capital, the creation of local employment and the transfer of sophisticated technology or advanced knowledge. African nations in particular have been historically reliant on externally-provided funds. Prevailing low income levels, marginal savings rates and the absence of functioning financial markets necessary to provide local start-up capital continue to keep Africa reliant on foreign inflows. Considering China's increasing financial commitments to Sub-Saharan Africa (SSA) over the last decade, this study examines the state of current Sino-African investment relationships.

Specific attention is paid to the outcomes of this strategic bilateral alliance in order to determine whether or not a mutually beneficial investment relationship has evolved. The distinct nature and structure of, the motivation behind and the most significant determinants of Chinese FDI to SSA are all analysed in accordance with traditional FDI theories. A case study approach is used to establish whether China's contemporary interest in SSA differs from historical investments and to also investigate country-specific commonalities and differences.

Of particular relevance to SSA are resource-backed Chinese loans that finance major infrastructure projects in host nations. Interestingly, a lot of the Sino-African investment packages resemble similar deals struck between China and Japan in the 1970s. The results of this study indicate that China's investment motives seem more diverse than initially expected. Resource-seeking, profit-seeking and market access-seeking reasons appear to be the most important motives. After establishing the Top-Ten recipients of Chinese FDI in SSA, these nations are then classified into three major categories: resource-, oil- or agricultural-rich nations. Undiversified resource- or oil-rich economies are found to have secured the largest shares of Chinese FDI.

This study suggests that China's contemporary "African Safari" is an *unconventional* way of providing financial assistance. Rather than solely supplying FDI, China finances a diverse mix of instruments, the most important being concessional loans, export credits, zero-interest loans and the establishment of Special Economic Zones. A profound difference to traditional Western investment packages is China's non-interference approach. Accordingly, Beijing not only refrains from intervening in host countries' domestic affairs but also refuses to attach formal conditionalities to its loans. China's "financial safari" into Africa has produced many positive as well as negative effects in host countries. Nevertheless, it would seem that the positive effects outweigh the negative and China's FDI could contribute to sustainable development in SSA.

ACKNOWLEDGEMENTS

First and foremost, I would like to extend my deep gratitude to my supervisor Dr. Doreen Bekker. Thank you for your constant academic guidance, emotional support and overall encouragements. I owe you my sincere respect for your patience and enthusiasm dedicated to this study. I profoundly thank you for the excellent supervision this year - working with you has been a true pleasure!

Secondly, I would like to thank Nicolette Cattaneo for your co-supervision. Your support and insightful comments were much appreciated, especially during the last few weeks of the writing-up process. Furthermore, I would also like to acknowledge my co-workers and the librarians of Rhodes University who have been a great source of knowledge and support.

Lastly, I feel deeply indebted to my friends who were a constant source of strength. Special thanks to Lerato Sekhohola, Mutenta Nyambe, Spiwe Chidemo, Henusha Jhundoo, Melissa Jebril, Patricia Silva and Chifuno Stevens for all your emotional and spiritual support offered along this unique journey. To Alexine Sutherland and Musakanya Kapilikisha: thank you for making the time and effort to proof-read this study. I greatly value your help.

DEDICATION

To

Lance & Janet Johnston

And

Pete & Pauline Stein

Thank you for always believing in me and for encouraging me to chase my dreams, regardless of how big or impossible they seemed at the time being.



Also, thank you for the unconditional love and support. Words will never be able to express how deeply and sincerely grateful I am for everything you have done in my life.

TABLE OF CONTENT

Declaration	ii
Abstract	iii
Acknowledgements	iv
Table of Content	v
List of Tables	ix
List of Figures	x
List of Abbreviations	xi

CHAPTER ONE:

INTRODUCTION

1.1. Context of the Research	1
1.2. Goals of the Research	5
1.3. Methods, Procedures and Techniques	6
1.4. Organisation of the Research	7

CHAPTER TWO:

FDI THEORIES AND LITERATURE REVIEW

2.1. Introduction	8
2.2. FDI Definitions, Types and Classifications	8
2.3. FDI Motives	10
2.3.1. Horizontal (Market-Seeking) FDI.....	11
2.3.2. Vertical (Efficiency-Seeking) FDI.....	11
2.3.3. Extractive-Seeking FDI.....	12
2.3.4. Asset-Seeking FDI.....	12
2.3.5. Technology-Sourcing FDI.....	13
2.3.6. Conglomerate FDI.....	13
2.4. FDI Theories	14
2.4.1. Perfect Markets Theories of FDI.....	15
2.4.1.1. <i>Competitive and Comparative Advantage Theories</i>	15
2.4.1.2. <i>Differential Rates of Return Hypothesis</i>	15
2.4.1.3. <i>Portfolio Diversification Hypothesis</i>	16
2.4.1.4. <i>Shortcomings of Perfect Market Theories</i>	16

2.4.2. Imperfect Market Theories of FDI.....	16
2.4.2.1. <i>Industrial Organisation Hypothesis of Monopolistic Advantage</i>	17
2.4.2.2. <i>The Product Cycle Theory</i>	18
2.4.2.3. <i>The Internalisation Theory</i>	19
2.4.2.4. <i>The Eclectic Paradigm of Dunning</i>	20
2.4.2.5. <i>The Investment Development Path</i>	21
2.4.2.6. <i>Oligopolistic Reactions Hypothesis</i>	23
2.4.3. Other Theories of FD.....	24
2.4.3.1. Kojima'a Hypothesis.....	24
2.4.4. Theories Based on other Variables.....	25
2.5. FDI Determinants	25
2.5.1. Change in Destination trends towards Developing Countries.....	27
2.5.2. Economic Indicators.....	27
2.5.3. Trade Openness.....	28
2.5.4. Political Indicators.....	28
2.4.5. Importance of Robustness of Econometric Results.....	29
2.6. FDI Effects in Host Countries	30
2.6.1. Overall Effect of FDI on Economic Growth and Development.....	30
2.6.2. Positive Effects of FDI.....	30
2.6.2.1. <i>Technology</i>	31
2.6.2.2. <i>Knowledge</i>	31
2.6.2.3. <i>Increase in Efficiency and Productivity</i>	31
2.6.3. Negative Effects of FDI in Host Countries.....	32
2.6.3.1. <i>Short-Term Employment</i>	32
2.6.3.2. <i>Inadequate Knowledge Transfer</i>	32
2.6.3.3. <i>Crowding-In versus Crowding-Out-Effects</i>	33
2.6.3.4. <i>The Dutch Disease</i>	33
2.6.4. Effects of FDI-Producing Developing Home Countries.....	34
2.7. Conclusions	35

CHAPTER THREE:

GLOBAL FDI TRENDS AND CHINESE FDI TO SSA

3.1. Introduction	37
3.2. China's Economic Environment	37

3.3. Sub-Saharan Africa’s Economic Environment	40
3.4. Global FDI Flows	42
3.4.1. Sectoral and Locational Breakdown of Global FDI Flows.....	42
3.4.2. Sectoral and Locational Breakdown of Global FDI flows to Africa.....	45
3.4.3. South-South Flows.....	48
3.4.4. Determinants of FDI Flows to Africa.....	49
3.5. Chinese FDI Flows	53
3.5.1. Sectoral and Locational Breakdown of Global Chinese OFDI Flows.....	53
3.5.2. Sectoral and Locational Breakdown of Chinese OFDI Flows to Africa.....	55
3.5.3. Determinants and Motives of Chinese OFDI flows to Sub-Saharan Africa.....	59
3.5.3.1. <i>Determinants of Chinese OFDI</i>	59
3.5.4. Motives for Chinese OFDI Flows to Sub-Saharan Africa.....	60
3.5.4.1. <i>China’s Own Experience of IFDI as a Developing Country</i>	61
3.5.4.2. <i>Extractive-Seeking FDI</i>	61
3.5.4.3. <i>Strategic-Asset-Seeking FDI</i>	62
3.5.4.4. <i>Politically-Motivated FDI</i>	62
3.5.4.5. <i>Accumulated Wealth-Related FDI</i>	63
3.5.4.6. <i>Horizontal (Market-Seeking) FDI</i>	63
3.5.4.7. <i>Profit-Seeking FDI</i>	64
3.5.4.8. <i>Agriculturally-Seeking FDI</i>	64
3.5.5. Nature of Chinese OFDI flows to Sub-Saharan Africa.....	65
3.5.5.1. <i>Classification of FDI, ODA and OOF</i>	66
3.5.5.2. <i>China’s Policy Banks</i>	68
3.5.5.3. <i>Eximbank of China</i>	68
3.5.5.4. <i>External Financing targeting Construction Projects</i>	69
3.5.5.5. <i>Chinese FDI produced by State-Owned versus Privately-Owned Enterprises</i>	71
3.6. Conclusions	73

CHAPTER FOUR:

EMPIRICAL RESULTS AND CASE STUDY ANALYSIS

4.1. Introduction	75
4.2. Resource-Rich Sub-Saharan African Countries	76
4.2.1. South Africa.....	78

4.2.2. Zambia.....	80
4.2.3. The Democratic Republic of Congo.....	82
4.2.4. Niger.....	83
4.3. Oil-Rich Sub-Saharan African Countries.....	84
4.3.1. Angola.....	88
4.3.2. Sudan.....	90
4.3.3. Nigeria	92
4.4. Agriculturally-Rich Sub-Saharan African Countries.....	93
4.4.1. Ethiopia.....	96
4.4.2. Kenya.....	98
4.4.3. Madagascar.....	99
4.5. Negative Effects of Chinese FDI in Sub-Saharan Africa.....	101
4.5.1. Worker Related Issues.....	101
4.5.1.1. <i>Import of Chinese Workers.....</i>	101
4.5.1.2. <i>Anti-Chinese Sentiment.....</i>	102
4.5.1.3. <i>Neglect of Human Capital Developments.....</i>	103
4.5.1.4. <i>Cultural Differences.....</i>	103
4.5.1.5. <i>Inadequate Working Conditions.....</i>	104
4.5.2. Economic Issues.....	104
4.5.2.1. <i>Windfall Gains and Failure of Resource-Revenues to Benefit the entire Population.....</i>	104
4.5.2.2. <i>Crowding-out of Domestic African Businesses.....</i>	105
4.5.3. Ethical Issues, Violation of Moral Rights and Governance Obligations.....	105
4.5.3.1. <i>Lack of Governance, Democratic and Humanitarian Rights.....</i>	105
4.5.3.2. <i>Chinese Weaponries and Support for Conflict-Prone Regions.....</i>	107
4.5.4. Agricultural Issues.....	108
4.5.3.1. <i>Biopiracy.....</i>	108
4.5.3.2. <i>Pollution and other Environmental Issues.....</i>	109
4.5.3.3. <i>Effects of Chinese- Sponsored Dams.....</i>	109
4.6. Conclusions.....	109

CHAPTER FIVE:

CONCLUSIONS, POLICY RECOMMENDATIONS AND LIMITATIONS

5.1. Summary of Findings and Conclusions.....	112
---	-----

5.2. Implications of the Research and Policy Recommendations	117
5.3. Limitations of the Research	119
5.4. Concluding Remarks	120
Appendices	123
List of References	137

LIST OF TABLES

TEXT TABLES

Table 2.1: Main FDI types and their dominant features.....	13
Table 2.2: Summary of reviewed studies on FDI determinants.....	26
Table 3.1: Global FDI flows between 2009-2011 by regions, in current \$ billion and percent.....	43
Table 3.2: Sectoral distribution of FDI projects between 2005 to 2011, in current \$ billion and percent.....	44
Table 3.3: LDC's ten largest Greenfield Investment projects in 2011.....	47
Table 3.4: Top-Ten recipient nations of global FDI in SSA between 2005 to 2010, in percent.....	48
Table 3.5: Summary of reviewed studies on Africa-specific IFDI determinants.....	52
Table 3.6: China's global OFDI Flows and Stock in 2010, in \$ billion.....	54
Table 3.7: China's OFDI Flows and Stock as part of global FDI in 2010, in \$ billion.....	54
Table 3.8: Top-Ten recipient nations of Chinese FDI in SSA between 2004 to 2010, in percent.....	57
Table 3.9: Top-Ten recipient nations of global FDI in SSA between 2005 to 2010, in percent.....	59
Table 3.10: Number of completed Chinese projects in Africa by 2009.....	67
Table 3.11: Infrastructure spending needs in Africa in 2011, in \$ billion.....	70
Table 3.12: Current spending on Africa's infrastructure 2011, in \$ billion.....	71
Table 3.8 (Reproduced): Top-Ten recipient nations of Chinese FDI in SSA between 2005 to 2010, in percent.....	75
Table 4.1: Top-Ten recipient nations of Chinese FDI in SSA between 2005 to 2010, in percent of aggregate global FDI.....	76
Table 4.2: China's main national oil companies.....	86

Table 4.3: China’s main oil suppliers in SSA.....	87
Table 4.4: Chinese FDI in Sudan’s non oil-related industries.....	91
Table 4.5: Agriculturally-motivated FDI in Madagascar in 2009, in hectare of land.....	100

APPENDICES TABLES

Table A.1: Distribution shares and growth rates of FDI project values by sector/ industries in 2011, in percent.....	123
Table A.2: African M&A’s between 2010 to 2011 grouped by industries, in \$ million.....	124
Table A.3: African Greenfield FDI projects between 2010 to 2011 grouped by industries, in \$ millions.....	125
Table A.4: Global FDI flows to Africa between 2005 to 2010, in \$ million.....	126
Table A.5: Sectoral distribution of Chinese global OFDI between 2004 to 2010, in \$ million.....	128
Table A.6: Chinese FDI by geographical regions between 2004 to 2010, in \$ million.....	129
Table A.7: Chinese FDI flows to Africa between 2004 to 2010, in \$ million.....	129
Table A.8: Three main exports of African nations in 2010 with their share in total exports.....	131
Table A.9: Foreign stakes in African oil, Blocks 0-13.....	136
Table A.10: Foreign stakes in African oil, Blocks 14-30.....	136
Table A.11: Foreign stakes in African oil, Blocks 31-40.....	136

LIST OF FIGURES

TEXT FIGURES

Figure 3.1: Global FDI flows to Africa between 2000 to 2012 by location, in current \$ billion.....	45
Figure 3.2: Global FDI flows to oil-rich SSA nations between 2000 to 2012, in current \$ billion.....	46
Figure 3.3: China’s global OFDI flows between 2004 to 2010, in current \$ million.....	53
Figure 3.4: Major suppliers of global OFDI flows in 2010, in \$ billion.....	53
Figure 3.5: China's global OFDI flows by geographical regions between 2004 to 2010, in percent.....	56

APPENDICES FIGURES

- Figure A.1:** Global FDI inflows between 1995 to 2011 grouped by economies, in \$ billion.....123
- Figure A.2:** Total Share of Global FDI inflows to Africa between 2005 to 2011, in \$ billion...124
- Figure A.3:** Value of sectoral African Greenfield Projects between 2003 to 2011, in \$ billion.124
- Figure A.4:** Composition of global external financing flows to Africa in 2012, as percentage of GDP.....125

LIST OF ABBREVIATIONS

BRICS	Brazil, Russia, India, China and South Africa
CDB	China Development Bank
CNMC	China Nonferrous Metals Company
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
DRC	Democratic Republic of Congo
FDI	Foreign Direct Investment
FOCAC	Forum on China-Africa Cooperation
GDP	Gross Domestic Product
GNP	Gross National Product
IFDI	Inward Foreign Direct Investment
IMF	International Monetary Fund
LDC	Least Developed Country
M&A	Mergers and Acquisitions
MNE	Multinational Enterprise
MOFCOM	Ministry of Commerce of the People's Republic of China

NDRC	National Development and Reform Commission
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OFDI	Outward Foreign Direct Investment
O-L-I	Ownership, Location and Internalisation advantages
OOF	Other Official Flows
R&D	Research and Development
SADC	Southern African Development Community
SEZ	Special Economic Zone
SINOPEC	China Petroleum & Chemical Corporation
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organisation

CHAPTER ONE:

INTRODUCTION

1.1. CONTEXT OF THE RESEARCH

Although positive and negative spillover effects are widely recognised, the impact of Foreign Direct Investment (FDI) on developing countries remains particularly controversial. The most commonly accepted benchmark definition classifies FDI as strategic long-term investments into an indigenous company pursued by a foreign investor who resides in a different country than the receiving entity. In order to secure a lasting interest in the indigenous firm, at least ten percent of ownership control is transferred to the profit-seeking foreign investor (OECD, 2008a: 64). Portfolio investments, on the other hand, are not included in FDI flows considering investors' short-term interest in high turn-over securities (Moosa, 2002: 1).

While many mainstream economists do not consider FDI to be an unfair zero-sum game (UNCTAD, 1999), others argue that positive remunerations in recipient (host) countries are only marginal compared to those enjoyed by the investing (home) country. Most FDI literature tends to address two major issues. Firstly, researchers attempt to investigate the relationship between FDI and its growth-enhancing effects on the overall host economy. Secondly, accepting a positive relationship between FDI and economic growth, other researchers endeavour to identify the most important FDI determinants for potential host countries (Borensztein *et al.*, 1998; De Mello, 1997; Helleiner, 1998: 6; Herzer, 2009; Lim, 2001; Lipsey, 2004). Although a definite relationship between FDI and positive spillover effects in host countries cannot be established, most researchers concur on the positive correlation between FDI, economic growth and development. Especially in developing countries that encourage favourable investment policy frameworks, FDI has proven to spur the development of local businesses, boost international trade and to also benefit domestic economic growth through the transfer of superior technologies, advanced skills or sophisticated knowledge (OECD, 2008b: 64).

One developing region that has been historically reliant on FDI inflows is the African continent. Failure to provide the necessary tools for domestic capital formation has placed major restrictions on Africa's sustainable economic development (Collier and Pattillo, 2000: 365). As observed in most Sub-Saharan African countries, low domestic saving rates, marginal income levels and the lack of well-functioning financial markets have starved the continent of greatly needed domestic start-up capital (Asiedu, 2006: 107). In an attempt to overcome these regional

short-comings, FDI is utilised as a key medium to spur domestic development and to simultaneously enhance economic growth in Africa.

Despite efforts to lure large shares of global FDI inflows, African countries not only lag behind most other developing nations, but incoming flows are also distributed highly unevenly between recipient nations (Morris and Aziz, 2011: 401). Resource-abundant nations, such as Angola, Nigeria or Sudan, currently receive the largest share of global FDI coming into Africa (Alden, 2005; Asiedu 2002, 2006; Dunning, 2003; Musila and Sigue, 2006; NIC, 2005; Prichard, 2009). The World Investment Report 2011 (UNCTAD, 2011: 67) also states that joint business ventures struck between African firms and foreign investors are profoundly limited by financial and technical constraints. Hence, foreign capital inflows do not necessarily imply positive spillover effects in Sub-Sahara Africa (SSA).

An ongoing phenomenon in international capital movements is China's transformation from being a net receiver of inward FDI (IFDI) to becoming a major global FDI supplier. Empirical findings indicate that compared to other developing regions in Latin America or East Asia, Africa only receives a marginal amount of Chinese OFDI (China Development Bank, 2011). Recent scholarly work has observed that the most lucrative determinants of FDI into Africa are slightly dissimilar to those of other regions (Asiedu, 2002, 2006). Further research is necessary to verify whether regional factors are truly hindering Africa's attractiveness for FDI or if country specific parameters, such as trade restrictions, levels of corruption, market size etc. affect the inflow of foreign capital.

When analysed with traditional FDI theory, China's changing investment pattern has raised fundamental questions about the underlying nature of its FDI motives. The economic differences between Sub-Saharan Africa (SSA) and China are vast. While Africa is not expected to reach any of the eight Millennium Development Goals¹, China is currently regarded as the second strongest global economic powerhouse (Sparks, 2012). Moreover, whereas Africa is home to the most developing nations on a single continent, a booming Chinese economy has experienced significant annual economic growth rates of roughly 10.6 percent over the last five years (China Analyst, 2012: 14). This has transformed the country into a key participant in the global scramble for securing readily accessible raw materials, such as oil, gas, minerals, arable land, copper, cobalt and cotton (Alden, 2005: 148; Provost, 2011; Weston, Campbell and

¹ The Millennium Development Goals were adopted by all UN member nations in 2000 with the purpose of improving social and economic living conditions amongst the most impoverished regions in the world. Eight specific poverty-reducing goals were identified to be reached by 2015 (UN, 2000).

Koleski, 2011; Zweig and Jianhai, 2005: 25). In order to support its rapidly growing economy which is now facing the challenging demands of urbanisation and industrialisation, China's interest in establishing strategic long-term alliances with reliable suppliers of natural resources has steadily increased since the late 1990s (UNCTAD, 2011: 72).

China's long-term and short-term energy goals are openly stated in its foreign policies and Africa seems to play a very important part in this (Zhao, 2011a). In response to China's recent "African Safari", supporters of the classical dependency argument stress the one-sided exploitation of Africa's vast natural resources by commodity-hungry Chinese investors. Doriye (2010: 24-27), Zafar (2007: 105-108) and Zweig and Jianhai (2005: 33) consider Chinese investments as a mixed blessing for regional development. All four scholars agree that the support for vital infrastructure projects and developmental assistance targeting the construction of African dams, roads, ports, hospitals and schools are positive externalities caused by Chinese FDI. However, they also criticise the exploitative nature of Sino-African investment deals as Africa's own developmental needs seem to be neglected by Chinese investors. Accordingly, China is accused of solely focusing on their selfish motives by extracting African raw materials, mineral resources, hydrocarbons or securing arable land to satisfy its peaking domestic needs for oil, energy or food security. Assisting in the construction of local African infrastructure projects is thereby perceived as a means to keep African nations dependent on Chinese-induced capital inflows.

Various studies conducted by international organisations, such as the African Development Bank (ADB, 2011), Organisation for Economic Co-operation and Development (OECD, 2008b) or United Nations Conference on Trade and Development (UNCTAD, 2011, 2012) elaborate on China's global hunt for resource security. A valid observation is raised by Morck, Yeung and Zhao (2008: 338) who investigate the business structure of the most profitable Chinese companies engaged in overseas investment. According to this study, companies involved in the fields of resource extraction hold a monopolistic advantage in the key sector industries of their investments. This further supports the common *a priori* assumption that foreign investments targeting SSA's resource-rich nations are indeed non-diversified inflows with one goal only: natural resource extraction.

However, contrary to the popular belief that China's strategic interest in Africa lies purely in its resource abundance, recent research recognises food and energy security, new export markets, symbolic diplomacy and the relocation of labour-intensive production to overseas facilities as other relevant investment incentives (ADB, 2011; Alden, 2005; Brautigam, 2009; Brautigam and Xiaoyang, 2009; Claassen, Loots and Bezuidenhout, 2011; Gammeltoft, 2008; Provost, 2011;

The China Analyst, 2012; Wang, Hong, Kafouros and Boateng, 2012; Whitehead and Green, 2012; Zafar, 2007; Zweig and Jianhai, 2005). Indeed, Sino investment motives seem more multifaceted than expected. Entering new markets in response to competitive pressure in the domestic Chinese market and the opportunity to move excessive production supplies abroad were identified as major reasons for Chinese entities to engage in foreign investments (ADB, 2011: 40). An article published in The China Analyst (2012: 11) further supports the notion that Chinese FDI motives have changed from being primarily resource-extractive to those of securing strategic assets, acquiring new market shares and securing ownership positions in foreign brands or technologies. Chow (2010: 58) considers China's vast accumulation of foreign exchange reserves (in particular US Dollars) and its gradual liberalisation towards a profit-seeking market economy as other important motives for the current increase in overseas investments.

Although China's investment motives in SSA seem more diversified than might be expected from the aforementioned common *a priori* assumptions, resource-seeking activities remain at the centre of international media coverage. According to the ADB (2011: 19), the current state of Sino-African relations is depicted as "commodities-for-infrastructure" exchange. Critical questions about the mutual benefits arising from China's engagement in SSA are therefore raised. Appleyard, Field and Cobb (2008: 226) emphasise that FDI is not exclusively pursued for economic benefits, but is also motivated by political incentives. Alden (2005: 148) postulates that in addition to gaining resource security, Chinese FDI is also used as a vital instrument of exerting symbolic diplomacy. Accordingly, Sino-African collaboration should partially be treated as an effort to expand China's influence in international partnerships. China's political reasons for supplying foreign investments, such as assuring diplomatic support from FDI-dependent nations in SSA to gain voting rights in the UN or to deny Taiwan's independence, have been largely overlooked in contemporary research. As political reasons appear to offer a crucial link to the recent surge in Chinese FDI, they cannot be neglected in a critical analysis of investment reasons.

Regardless of the investment motives, Chinese unconditional² concessional loans have found great support amongst many undemocratic and corrupt African countries over the last decade (Weston, Campbell and Koleski, 2011). Compared to traditional Western loans that are attached to conditionalities, China prides itself by offering a new, *unconventional* path of development

² In theory, contemporary Chinese loans to Africa do not attach formal conditions. Nevertheless, it will become evident throughout this research study that China's concessional assistance is also tied to certain conditionalities in favour of China.

³ The limited scope of this thesis does not allow for a detailed explanation of all FDI types but rather focuses on

assistance. Beijing's pledge of non-interference with the recipient nation's domestic affairs and its preference to not impose conditionalities frame the major pillars of recent Sino-African investment packages.

In response to continuous pressure against the lack of transparency on adequate data, a White Paper was published by the Chinese government in 2011. Considered to be the first of its kind, this report was seen as a direct response to the accusation of China's natural resource safari in Africa. Beijing officially denied all such allegations and emphasised that it extends development assistance to over 161 countries in the form of debt-cancellations, bilateral trade agreements or infrastructure developments (Provost, 2011). China's engagement in Africa was hereby declared as a mutually beneficial investment relationship based on the principles of respect and friendship.

Nevertheless, the unconventional approach of Beijing's FDI policies has triggered growing tensions in Western countries which fear the loss of their dominant global position to the emerging "Eastern Dragon" (Doriye, 2010; NIC, 2005). Support for "undemocratic and corrupt governments", lack of environmental standards, failure to contract local workers and flooding the African market with excessive amounts of Chinese imports all represent popular reproaches to Sino-African collaboration. Most importantly, China's alleged selfish motive to deprive African nations of their natural resources is worsening the existing animosity between the Eastern and Western hemisphere.

In a repetition of modern history, Africa seems to be once more caught between resource-hungry nations. But compared to historic colonialism, this time Africa has an opportunity to carefully choose - whether to accept Western investments (such as structural adjustment programs imposed by the World Bank that have failed in the past) or to grant China's non-traditional investment agreements a fair chance. Because Africa has been and continues to be reliant on FDI, it now faces a challenging crossroad at its present developmental stage to ensure that only the right kind of foreign investment will be accepted. Critical analysis of long-term outcomes will determine whether the current era of overseas investment symbolises a repeat of imperialistic dependency theory or whether it provides new opportunities for autonomous and prosperous African development (Southall and Henning, 2009).

1.2. GOALS OF THE RESEARCH

Based on the contradictory state of current Sino-African relations, this research seeks to determine whether Chinese FDI flows into SSA is truly benefitting host countries or whether the bargaining power of receiving countries is diminishing even further by accepting much needed

Chinese concessional development assistance. More specifically, the following research question presents itself from the broader research context: “Are developing countries in SSA truly benefitting from their newly founded strategic alliance with the Chinese government through FDI induced spillover effects?”

1.3. METHODS, PROCEDURES AND TECHNIQUES

The intended final deliverable for this research study is to compile a critical, comprehensive analysis on the nature and structure of recent Chinese FDI flows destined for host nations in SSA. To further elucidate the main research question, the following three sub-goals were established:

- (1) Identify the Top-Ten recipient nations of Chinese FDI in SSA in order to establish a general investment pattern and to also explore the most attractive investment determinants.
- (2) Assess if China’s FDI to SSA suits traditional investment motives by employing a case study approach of the Top-Ten recipient nations.
- (3) Determine whether Chinese FDI is one-sided in favour of China’s selfish interests or whether investment deals are mutually beneficial to both China and its SSA host nations.

In order to address the goals of this research, an extended study of appropriate literature is conducted. Firstly, the conceptual framework of FDI with special attention given to relevant theories, motives, effects and determinants is created to lay a solid theoretical foundation for this study. Secondly, after drawing from those core characteristics of international capital movements, selected political documents, economic policies and quantitative economic data are reviewed to identify the specific patterns of Chinese FDI in SSA in more detail.

Findings of the reviewed literature are then complemented with empirical evidence. For this purpose, descriptive statistics and a country-specific case study investigating Sub-Saharan-African’s Top-Ten recipient countries of Chinese OFDI are implemented. While quantitative metadata provides the framework for Chapter Three, empirical results are analysed in the individual case studies of Chapter Four. Quantitative data is primarily obtained from the Chinese Ministry of Commerce in the *2010 Statistical Bulletin of China’s Outward Foreign Direct Investment* publication (MOFCOM, 2010). In conjunction with this publication, data extracted from various reports of economic indicators compiled by the United Nations (UN), UNCTAD, ADB and the International Monetary Fund (IMF) are further accessed. The relevant time period under

investigation is from 2004 to 2010, although a limited amount of data from 2011 was also evaluated.

1.4. ORGANISATION OF THE RESEARCH

This research study is organised as follows. After the introduction, Chapter Two commences with a comprehensive literature review of FDI classifications, theories, motives, determinants and host country effects. Chapter Three then combines initial empirical evidence with an extended literature study of the FDI framework applicable to the Sino-African context. Global and Chinese FDI flows to SSA are the main focus of this chapter. Chapter Four implements a case-study approach to gather and analyse country-specific empirical results. For this purpose, ten selected Sub-Saharan African countries are chosen based on data presented in Chapter Three. This research study concludes by discussing the most important results emerging from the analysis. Policy recommendations are made after critically assessing and synthesising those findings.

CHAPTER TWO:

FDI THEORIES AND LITERATURE REVIEW

2.1. INTRODUCTION

Chapter Two produces a literature study on major motives, theories, key players, determinants and effects of FDI. The second section of this chapter defines and classifies the most important conceptual characteristics of FDI in order to create a solid theoretical foundation for subsequent discussions. Section 2.3 sets out the different views on investment motives. Similarities and differences amongst selected research studies are pooled into a comprehensive debate of reasons for engaging in international capital investments.

After synthesising various FDI theories into appropriate categories based on market structures and other economic factors, Section 2.4 then identifies major key players for each category and elaborates on their main theoretical features. The gradual trend of describing international capital movements as an institutional phenomenon instead of explaining the actual process itself (as done in traditional FDI theory) will also be captured. Even though a clear separation of motives, determinants and theories is impossible due to the complex nature of capital investments, this section reviews the most important theoretical frameworks on FDI in a market structure-based taxonomy. The following Section 2.5 reviews a number of relevant studies that identify the most significant FDI determinants. An overview of desirable host country qualities that seem most successful in attracting FDI will be generated by discussing commonalities and disparities between selected studies.

Appraising positive and negative host country effects of international capital movements provides the last theoretical aspect of this chapter in Section 2.6. While most researchers confirm a growth-enhancing relationship between FDI and economic development, empirical studies fail to reach consensus on whether the immediate effects of foreign capital inflows have positive or negative repercussions. Lastly, in order to conclude the theoretical framework of FDI, disadvantages and advantages of FDI occurring in host countries are also presented. It is cautioned that FDI literature manifests various multi-disciplinary characteristics. Hence, certain features of FDI may appear in more than one section.

2.2. FDI DEFINITIONS, TYPES AND CLASSIFICATIONS

From the perspective of accounting transactions, Duce and Espana (2003) classify FDI flows either as Balance of Payments entries or as International Investment Positions, both of which are consistent with FDI classifications established by the IMF. Whereas the Balance of Payments

classification regards FDI as a “statistical statement that systemically summarises the economic transactions of an economy with the rest of the world for a specific time span”, the International Investment Position views FDI as “the value of stock of each financial asset and liability for a specific date as defined in the Balance of Payments” (Duce and Espana, 2003: 1).

The most commonly accepted international benchmark definition classifies FDI as strategic long-term capital investments into an entity undertaken by an investor who is located in a country different to that of the receiving firm. When securing a lasting interest in the indigenous firm, at least ten percent of ownership control is transferred to the profit-seeking foreign investor (OECD 2008a: 64). Moosa (2002: 265) defines FDI as a transitional process whereby residents of one country acquire ownership of assets for the purpose of controlling the activities of a foreign firm. In cases where positive spillover effects exist, financial capital and advanced technology as well as sophisticated management, marketing or accounting skills will be transferred to the recipient country.

Portfolio investments, on the other hand, are not included in FDI flows. Considering investors’ short-term interest in volatile, high turn-over securities, portfolio investments do not qualify as FDI transactions and are not investigated in this research study therefore.

On the subject of FDI terminology, different words are used interchangeably to describe both involved parties, namely suppliers and receivers. Throughout this thesis, producers are labelled as home countries, investing countries, FDI producers or suppliers. Likewise, FDI receivers are referred to as host countries, beneficiaries, indigenous entities or recipient nations. From the perspective of FDI-consuming countries in SSA, flows are considered as inwardly directed Foreign Direct Investment (IFDI) and China is perceived as the producer of outwardly directed Foreign Direct Investment (OFDI) flows. In addition, the terms FDI, international investments, direct investment, capital flows and foreign investments are also used interchangeably throughout this research study.

FDI can be generated through various means. Investments in pre-existing facilities, joint ventures, mergers and acquisitions (M&As), Greenfield Investments and Brownfield Investments are all examples of market-entry models³ promoted by FDI activities. Preference has been traditionally given to Greenfield Investments as market-entry method in developing economies (Agosin, 2004: 4-5). The modernisation and rationalisation of operations as well as

³ The limited scope of this thesis does not allow for a detailed explanation of all FDI types but rather focuses on Greenfield Investments since they have the most relevance for developing nations.

the transfer of technology are positive externalities derived from Greenfield Investments. More than two-thirds of the total value of all flows into developing countries are generated by Greenfield Investment projects (UNCTAD, 2011: 34). According to Bertrand (2004: 2-4), Greenfield Investments are defined as the formation of a new subsidiary in the host nation that is financed by a foreign investor. Disputes arise about the length of the investment period after which a transaction can be officially classified as a Greenfield Investment. As a threshold for Greenfield Investments, Bertrand (2004) suggests a minimum period of four to five years after the initial investment.

Another FDI taxonomy can be constructed from the viewpoint of ownership. As an increasing amount of FDI transactions are undertaken by multinational companies rather than individuals, a definition of MNEs (multinational enterprises) is necessary. Caves (1982: 1-4, 31) defines a MNE as “an enterprise that controls and manages production establishments and plants located in at least two countries”. Possessions of intangible assets in the form of technology, knowledge or marketing are the major drivers in expanding operations to foreign markets - although the underlying profit-seeking goal remains applicable. Hence, the vital link between FDI and MNEs is the equity capital transfer from the home firm to its foreign subsidiaries. But compared to FDI, the theorems behind MNEs draw on a more complex international business framework, in particular the theory of internalisation. Because MNEs’ prominent role in modern economics is a vast topic in itself, a detailed discussion of MNEs lies beyond the scope of this thesis.

2.3. FDI MOTIVES

Different types of FDI are naturally related to unique investment motives. Amongst the various FDI types, the only two constant characteristics comprise of the investor’s prospects for profits and the modification in ownership rights. Applying the assumptions of rationality and information asymmetry to FDI transactions, investors always aim to maximise profits (Appleyard *et al.*, 2008: 230) - a capitalistic-driven approach indeed! Consequently, foreign companies promising the highest rates of return to initial investments are preferred by investors.

Buckley and Casson (1976) categorise FDI into horizontal (see 2.3.1), vertical (see 2.3.2) and conglomerate FDI (see 2.3.6). In a study analysing the consequences of OFDI on economic growth, Herzer (2009) also identifies three different types of investment, namely horizontal, vertical and technology-sourcing FDI (see 2.3.4). A comparable taxonomy introduced by Musila and Sique (2006) confirms market-seeking (horizontal) and export-seeking motives as dominant FDI motives but also incorporated investors interests in extracting natural resources (see 2.3.3) into the argument. Complementing previous research, Dunning (2003) classifies investments as

market-seeking (see 2.3.1), efficiency-seeking (see 2.3.2), natural-resources seeking (see 2.3.3) or strategic asset-seeking (see 2.3.4) based on his Eclectic Paradigm theory (Dunning, 2003: 282).

Addressing all categories mentioned above, Dunning's (2003) taxonomy is used in chronological order for the following discussion. For the sake of convenience, the distinct characteristic of each investment motives category is then summarised in Table 2.1 (see page 13). Regardless of the minor conceptual difference in FDI motives, market-seeking FDI is equally labelled as horizontal FDI while efficiency-seeking FDI (export-oriented) is also referred to as vertical FDI.

2.3.1. Horizontal (Market-Seeking) FDI

When multiple production plants of a company produce identical goods at each branch in response to disruptive trade barriers (such as tariffs or high transportation costs), horizontal FDI was implemented in host countries (Buckley and Casson, 1976: 21). Because such disruptive trade barriers prevent the investing company from exporting their products to overseas markets (in host nations), they prefer to establish local production facilities in host nations. According to Herzer (2009), horizontally-driven FDI is mainly motivated by market-seeking reasons. In the short-run, exports are hereby substituted by the local production of identical goods in host nations which will simultaneously experience an increase in competitiveness within that specific market segment of. Lim (2001:11) agrees that in case of a sufficiently large market size, horizontally-driven investment motives represent a perfect export substitution. He emphasises cost-reductive benefits and an increase in competitiveness as major incentives for pursuing market-seeking FDI (Lim, 2001: 11).

2.3.2. Vertical (Efficiency-Seeking) FDI

As opposed to horizontal FDI which is assimilated with a company's effort to increase its inferior market share, vertical FDI exploits the existence of price-level differences between host and home nations in order to increase output through an export-intensive approach. Firms pursuing this type of foreign investment relocate part of their production facilities in such host countries that offer cheap labour or other cheap production costs (Lim, 2001: 11). According to Buckley and Casson (1976: 20), firms engage in vertical FDI by outsourcing various sequential stages of producing intermediate goods, in particular technological items, to multiple international locations.

Value-added activities are performed at a cost advantage in the foreign countries before intermediate products are eventually exported back to the home country. By moving value-added steps of the production chain into lower-cost countries, the company's final products can be sold at a lower price in the home market compared to homogeneous articles of home country

competitors which are locally produced. Herzer (2009) further argues that although domestic output in the home country decreases in the short-run, intermediate goods imported from host nations will increase at a cost advantage in the long-run. In line with market-seeking FDI, an overall increase in efficiency is also a positive spillover effect inherited in efficiency-seeking FDI.

2.3.3. Extractive-Seeking FDI

A special case of vertically-oriented FDI represent investments directed at countries blessed with abundant raw materials or primary commodities (Lim, 2001: 9). Throughout history, the main incentive to engage in extractive-seeking FDI was to secure scarce natural resources. This is particularly applicable to developing nations where resources are plentiful (Dunning, 2003: 285). If prestige resources are held in the hands of national governments, FDI appears less dependent on fluctuations of macroeconomic variables, such as market-size or labour cost. Governments are less dependent on efficiently-run business practises and might continue to invest in host countries despite accruing losses from such foreign operations. Resource-rich nations in particular tend to strictly regulate ownership rights and control pertaining to their extractive companies.

Dunning (1979: 281-282) denotes extractive-seeking investment motives as twofold. Firstly, foreign companies extract natural resources from host nations because they are readily available in abundance. Following the principles of supply and demand, a high supply of resources in host countries will logically depress the price payable by the consuming (home) nations. Secondly, in response to a local shortage of natural resources needed for domestic production, investing entities might extract natural inputs from overseas (host) locations. Mills (2010: 352) demands special consideration for commodities-motivated FDI because natural resources are regarded as rent-producing assets which differ compared to regular assets.

2.3.4. Asset-Seeking FDI

Due to the gradual alteration in traditional investment destinations, Gammeltoft (2008: 4) introduces a new class of FDI motives, namely asset-seeking FDI. Foreign investments to developed countries targeting Research and Development (R&D), branding, operational know-how in the managerial and marketing areas or technology all fall into this category. Rather than focusing on country- or company-specific attributes, asset-seeking FDI emphasises the development stage of a country as the main investment criteria. Compared to efficiency- and market-seeking FDI which is mostly directed towards developing countries, asset-seeking FDI predominantly targets the more sophisticated assets of developed nations (Gammeltoft 2008: 4).

2.3.5. Technology-Sourcing FDI

A sub-component of asset-seeking FDI is technology-seeking FDI. This type of FDI occurs when a company acquires a foreign entity's superior technological knowledge. Technological advances can be transferred back to the source nation either by a direct purchase of technology from the parent company or by establishing specific R&D facilities in the foreign country. However, increases in productivity and growth of the local (host country) firm only arise if those newly obtained skills are exploited by the principle of scale economies (Herzer, 2009: 478-479). For example, an African firm interested in gaining superior technological advantages could join a venture with an advanced US company. Cost reduction and increased efficiency might occur.

2.3.6. Conglomerate FDI

Another category of FDI motives, that of agglomeration or conglomerate FDI, also emerges in the literature. Conglomerate FDI combines the theoretical characteristics of both horizontal (efficiency-seeking) and vertical (market-seeking) FDI when clustered together at the same location (Lim, 2001: 11; Moosa, 2002: 5). Buckley and Casson (1976: 21) posit that conglomerate clustering is more prevalent amongst companies that exhibit fewer multinational characteristics.

Table 2.1: Main FDI types and their dominant features

FDI types	Main motivation	Dominant features
<i>HORIZONTAL FDI</i>		
Market-seeking	Expand market share	<ul style="list-style-type: none"> • Attempt to overcome trade barriers in host countries using export-substitution • Production of identical goods as in home country
<i>VERTICAL FDI</i>		
Efficiency-seeking	Reduce production costs	<ul style="list-style-type: none"> • Vertical integration of production chain • Cheaper labour and production cost of intermediate goods • Export of goods back to source country
Extractive-seeking	Acquire natural resources	<ul style="list-style-type: none"> • Extract abundant resources in host country at cost advantage • Commodities are exported back to source country
Asset-seeking	Acquire strategic asset	<ul style="list-style-type: none"> • Derive knowledge benefits from asset
Technology-sourcing	Increase efficiency	<ul style="list-style-type: none"> • Acquire superior technology • Gain comparative advantage
<i>CONGLOMERATE FDI</i>		
Agglomerate	Increase efficiency and expand market size	<ul style="list-style-type: none"> • Locational clustering of vertical and horizontal features

Source: *Author's own table*

2.4. FDI THEORIES

A vast body of literature describing the theoretical framework of FDI concepts exists. However, not a single model but rather multiple different theories have jointly been accepted to best address the ever-changing set of political, social and economic variables that ultimately influence the core characteristics of FDI. Although his model received wide approval amongst researchers, Dunning (2001: 176) also stresses the idea that no single uniform FDI theory can be conceded. Due to the complex nature of motives, determinants, underlying core principles behind FDI and simply because different types of FDI involve heterogeneous determinants, a rich collection of FDI literature has evolved over the last century.

According to Loots (2001: 10), the key issue addressed in all theoretical FDI frameworks is the reason why foreign entities chose to relocate production processes abroad rather than using the available internal mechanisms of exporting, licensing or franchising. From a broader perspective, FDI theories can be grouped into macroeconomic or microeconomic models. Unlike microeconomic theories which incorporate firm specific-variables, macroeconomic models analyse country-specific factors that affect the flow of international funds.

Moosa (2002: 23), who based his ideas on Agarwal's (1980) survey, classifies FDI theories into the following four categories: (1) *Perfect Markets*, (2) *Imperfect Markets*, (3) *Other Theories* and (4) *Theories based on other categories*. Despite the fact that many other categorisations exist, Moosa's taxonomy appears to be the most logical as it simultaneously incorporates economic variables and market-structure characteristics. For the purpose of this research study, variations to Moosa's categories are made in some instances to analyse and discuss the most relevant theories only. At the same time, this thesis does not provide a complete assessment of all FDI theories.

Even though natural resource-seeking FDI continues to dominate other types of foreign capital inflows to developing countries, the theories presented in the following sections do not distinguish between the economic development stage of source (home) or recipient (host) countries. In other words, all such theories are to some extent applicable for developed, transitioning or developing countries. As developing countries (both China and nations in SSA) constitute the centre of this research study, Chapters Three and Four will address theoretical issues from a standpoint of developing countries.

2.4.1. Perfect Market Theories of FDI⁴

2.4.1.1. *Competitive and Comparative Advantage Theories*

Some of the earliest attempts in explaining the nature of international trade in a perfectly competitive market environment are found in classical comparative advantage literature. More specifically, Ricardo's comparative advantage theory (1817) and Heckscher-Ohlin's (1933) factor endowment theory were the first of their kind to explain international trade. However, Hosseini (2005: 530) points out that Ricardo's comparative advantage completely disregards the existence of international capital flows. Only labour is considered a relevant variable of production in the comparative advantage theorem. Neglecting the concept of international factor mobility, factor endowment theory also failed to explain international production comprehensively.

Both theories consequently possess no explanatory power to address the conceptual idea of FDI flows. Meanwhile, the first vague attempts to include previously ignored capital flows in international trade theory were made via the Differential Rates of Return Hypothesis and Portfolio Diversification Hypothesis. The main variable analysed in both theories is the interest rate, also referred to as the rate of return. As already addressed in Section 2.3., one of the core assumptions of FDI is its rent-seeking motives.

2.4.1.2. *Differential Rates of Return Hypothesis*

The Differential Rates of Return Hypothesis states that capital investments have historically flowed from countries portraying low rates of returns to countries with higher rates. Rates of return in both countries will eventually reach an equilibrium level after the transacted capital transfer. The major shortcoming of this theory is the lack of risk considerations inherent in capital transfers. Empirical studies have further shown that capital inflows do not necessarily occur at the same time as capital outflows as predicted by this theory. Hence, international capital cross-transfers which refer to the simultaneous movement of capital inflows and outflows are not captured by the Differential Rates of Return Hypothesis (Hosseini, 2005: 531; Moosa, 2002: 24).

⁴ Perfect competition assumes that prices are determined by the interaction of supply and demand from an infinite number of producers and consumers. Furthermore, no transaction cost is attached when accessing product information. Homogeneous products are freely traded amongst market participants as no entry, exit or trade barriers, such as tariffs or quotas, exist. On a national level, perfect market conditions encourage the free trade of goods and services. Perfect markets rarely exist due to the nature of restrictive global market conditions (Estrin, Laidler and Dietrich, 2008).

2.4.1.3. *Portfolio Diversification Hypothesis*

With respect to FDI flows, investors choose recipient nations based on two factors: the possible rate of return earned from the investment and the perceived risk involved in the investment. Portfolio Diversification Hypothesis represents an extension of the Differential Rates of Return Hypothesis. Capital flows are not risk neutral anymore, but are now appraised by the investor's rate of risk aversion. This assumption strongly relies on Markowitz' modern Portfolio Theory (1959) which assumes that risk-averse investors prefer to minimise their risk while selecting portfolios with the most promising returns. Hence, risk is now a quantifiable variable that can be reduced by diversifying investment options.

2.4.1.4. *Shortcomings of Perfect Market Theories*

Considered to be pioneers of describing international cross-border capital flows, Perfect Market Theories dismissed the following five issues. Firstly, because purely competitive markets only rarely exists in reality (if at all), their deficiencies enabled theories elaborating the need for imperfect market conditions to evolve. Trade barrier and protectionist as well as mercantilist trade practices have diminished the premise for an environment where goods and services can be openly transferred. Secondly, the failure to acknowledge risk and rate of return as relevant FDI determinants invited researchers to develop more advanced FDI concepts that deal with a variety of FDI determinants. For example, uncertainty in expected rates of return was not accounted for in Perfect Market Theories.

Thirdly, neither the Differential Rates of Return Hypothesis nor the Portfolio Diversification Hypothesis include the transfer of technological or managerial skills as part of FDI, but rather exclusively focus on the transfer of capital. Fourthly, global variations in economical, political or social conditions cannot be captured by Perfect Market Theories because they are static models. Lastly, and most importantly, such static models do not capture the central ideas behind ownership control changes occurring after the investment took place. Consequently, dynamic models could be an answer to the static unresponsiveness to change.

2.4.2. **Imperfect Market Theories of FDI⁵**

⁵ Imperfect markets refer to conditions contrasting a perfectly competitive environment. In such circumstances, monopolistic or oligopolistic structures arise. Other features of imperfect markets are trade barriers, entry and exit barriers, heterogeneous products, restrictive access to information and that market prices are dictated by the dominant company (Estrin *et al.*, 2008).

Drawing his support from the limitations of perfect markets, Hymer⁶ (1960) was the first scholar to develop a theoretical FDI framework based on market imperfections. Empirical findings of his Industrial Organisation Hypothesis (1960) formed the cornerstone for the Product Cycle Theory introduced by Vernon (1966), Dunning's (1979) Eclectic Paradigm Theory and Knickerbocker's (1973) Oligopolistic Reaction Theory, all of which are included under the category of Imperfect Market Theories.

2.4.2.1. Industrial Organisation Hypothesis of Monopolistic Advantage

Initially composed for his PhD dissertation, Hymer's Industrial Organisation Hypothesis (1960) was the first of its kind to simultaneously relate market structures and firm-specific advantages to FDI flows (Moosa, 2002: 29). According to Hosseini (2005: 232), there are two major motivations for FDI flows in Hymer's theory. Both the reduction of competition between firms and Multinational Entities' (MNE) profit-making incentive to maximise rent-seeking activities from firm specific-advantages produce FDI flows. Hymer's theory focuses on the microeconomic firm-specific characteristics of FDI in monopolistic market conditions. A special role in his theory is given to intra-industry flows moving cross-sectionally between homogeneous industries of two countries.

According to Hymer, international firms seeking investment in a foreign market will be naturally discriminated against by local customers, government and indigenous firms. All local institutions hold legal, political, economic and communication advantages over the foreign entity. Higher production costs faced by the foreign entity are also inevitable as a premium for acquiring information in host countries is charged. Therefore, an international firm will only invest abroad if it is in possession of certain firm-specific advantages (assets). Such assets are required to compensate for the higher cost incurred by unfavourable local treatment in host nations. Unless the benefits of investing abroad through a rent-earning asset are higher than the accrued net cost in the host country, FDI will not be implemented (Hymer, 1976: 34-43). Calvet (1981: 44) additionally notes that in this theory, FDI flows originate as a direct result of monopolistic or oligopolistic market structure imperfections which result in an internationally transferable advantage (asset) to the investing firm.

In a later study, Kindleberger (1969: 14) identifies superior brand naming, special marketing skills, sophisticated technology, access to prestige funding sources, economies of scale and access

⁶ Although Hymer's Industrialisation Organisation theory initially evolved as part of his PHD dissertation in 1960, the reference used in this study is his book "The International Operations of National Firms: A Study of Foreign Direct Investment" published in 1976. The years 1960 and 1976 are therefore used interchangeably.

to raw materials as firm-specific advantages. FDI thereby resembles a transitioning equilibrium force that encourages capital inflows as a medium to bypass market imperfections. Only when rates of returns in both countries are balanced do international capital flows come to a halt (Calvet, 1981: 44). Caves (1982) expanded on Hymer's monopolistic advantage theory in his scholarly work by analysing the rising influence of MNEs. Rather than focusing on firm-specific advantages created by monopolies, Caves investigated advantages that were mainly reflected in R&D activities of oligopolistic industry sectors.

Although Hymer and Kindleberger were the first scholars to investigate the relationship between firm-specific characteristics and FDI theories, country-specific variables as well as the concept of export substitutions as an alternative to FDI transactions were disregarded. Both scholars' theoretical frameworks were crucial for the development of other FDI theories following below.

2.4.2.2. The Product Cycle Theory

Taking a different approach to previous FDI theories, Vernon (1966) examined international investment strategies of US-based manufacturing companies in his work on the Product Cycle. As opposed to emphasising firm-specific or locational advantages, Vernon based his theory on the timing of international expansion. FDI is hereby identified as a natural stage of every firm's evolutionary process whereby monopolistic advantages are combined with locational and time-specific advantages. According to Vernon, companies only engage in FDI at a very specific stage during the three-phased product cycle. The three respective stages are labelled innovation, maturity and standardisation. Additionally, uncertainties and economies of scale are introduced into this cyclical model. Vernon's theory seeks to identify why companies that produce labour-intensive and high income goods expand their markets overseas.

The initial production phase describes the development of an innovative and price inelastic heterogeneous product in the domestic home market. Because of the product's inefficiencies, only local inputs of the home country are utilised in the production process. Adequate feedback from local customers and higher responsiveness to their demands will eventually resolve the product's shortcomings on a local level. When entering the second stage (maturity) of the cycle, the degree of standardisation, efficiency and international demand for the product in developed countries increases. The company now begins to export its products in order to expand market shares in other advanced countries. Supplementing export strategies as a means to satisfy the product's demand in the host country, FDI may also be utilised to invest in overseas production facilities in other developed countries (Vernon, 1966: 190-198).

Once the final phase is reached, the production process has now become fully standardised. Competition from other companies producing an identical product occurs. Based on the principles of scale economies, cheaper labour or production costs may favour developing countries as a more ideal production location. The innovating firm will therefore shift its production overseas. New production facilities in developing countries will be established with the help of FDI capital. Exports from the developed (home) country are eventually substituted with imports from developing (host) countries. As a result, firms will usually spend money on R&D activities to develop a new product capable of replacing the “outsourced” one. Ongoing R&D is necessary to ensure sufficient profits. Once considered a net exporter, the innovating firm gradually becomes a net importer of its own product. Hence, FDI plays an important role in financing the production facilities in host countries when the product has reached the state of complete standardisation.

One advantage of Vernon’s Product Cycle Theory is its dynamic structure capable of modelling the change in time-independent variables. Vernon also identified the specific timing when a firm decides to engage in FDI, an aspect previously ignored by most other FDI theories. According to Moosa (2002: 39), FDI in Vernon’s model is only introduced when transitioning from the maturity to the standardisation phase of the product cycle. While lower labour or manufacturing costs are the most prevailing advantages in such countries, increased competition and cost pressure are the main incentives for a firm to engage in FDI (Vernon, 1966: 202-206).

2.4.2.3. The Internalisation Theory

The Internalisation Theory was jointly developed by Buckley and Casson (1976) as part of their analysis on the growing global importance of MNEs. Within this theory, FDI is the preferred method of international expansion compared to the other internal production mechanisms licensing and exporting. According to Buckley and Casson (1976: 33-36), negative externalities prevalent in imperfect market (monopolistic) conditions induce the formation of internal markets for intermediate products. Instead of letting external market forces control those activities inefficiently, internal market structures are created by securing ownership control of several interdependent business activities.

Ultimately, MNEs are created when internalisation processes of local markets are extended across national borders. Transferring imperfect market conditions to internal markets not only provides a mechanism to avoid undesired imperfect markets externalities, but also leads to the creation of MNEs. Internalisation processes only come to an end when benefits and costs of

internalisation have reached an equilibrium state. FDI thereby represents the internalisation of market transactions by MNEs which are trying to bypass negative externalities induced by market failures. Consequently, FDI not only reduces the uncertainties of volatile price markets, but also decreases time-lags, communication costs (such as bargaining), knowledge inefficiencies and the costs of marketing public goods (Buckley and Casson, 1979: 36-40).

Markets for human capital, knowledge and marketing or management skills render the greatest incentives for internalisation (Buckley and Casson, 1979: 39; Moosa, 2002: 32, 56). The internalisation process of knowledge undertaken via FDI-induced patents, copyrights or trademarks is accompanied by two desirable long-term spillover effects, namely growth and enhanced productivity. Because knowledge is characterised as a public good in the internalisation theory, companies have greater incentives to internalise their knowledge advantages than those of any other assets.

In a study on the behavioural pattern of MNEs, Calvet (1981: 48) indicated that Internalisation Theory took an initial approach in describing FDI within an institutional context. For the first time, more emphasis was placed on the FDI producing entity rather than on the FDI transaction itself. Hence, Buckley and Casson (1976) were the first scholars who comprehensively addressed the motives for MNEs' overseas investments. Nevertheless, their theory was unable to explain country-specific reasons, such as why MNEs would invest in certain countries but avoid investments in others.

2.4.2.4. The Eclectic Paradigm of Dunning

Dunning's (1979, 2001) Eclectic Paradigm theory seeks to expand most classical theories in response to the changing investment motives of MNEs. FDI traditionally pursued for horizontal (market-seeking) or vertical (efficiency-seeking) motives are now replaced with incentives of product specialisation and scale economies (Dunning, 1979: 272). Besides drawing upon Hymer's (1960) Industrial Organisation Hypothesis and Buckley and Casson's (1976) Internalisation Theory, Dunning also incorporates location-specific advantages of international markets in order to justify why entities engage in FDI. Dunning criticises that previous FDI theories ignored the international movement of factors other than that of capital. Internalisation processes of markets were also not addressed (Dunning, 1979: 272). Dunning further postulates that for a firm to invest abroad, the following three prerequisites must be satisfied: ownership advantage, internalisation advantage and locational advantage. Thus, his theory is often referred to as the O-L-I theory of advantages.

Ownership advantages, such as firm size, managerial or organisational knowledge, superior technology, access to natural resources and the presence of capital all include the home firm's temporary possession of rent-producing assets unavailable to local producers. Transferred internally, ownership advantages cannot exist permanently due to the obstacles faced in securing such advantages. Internalisation advantages entail the internal transfer of a company's firm-specific (ownership) comparative advantages which resemble the counterpart to external market mechanisms, such as licensing or exports. Locational production advantages include non-transferrable host country-specific comparative advantages, such as open markets, liberal trade policies, large market sizes, labour costs, sophisticated capital markets and limited government intervention (Dunning, 1979: 275-28).

FDI will only occur if a company can exploit all three advantages simultaneously. If held in isolation, not one of the O-L-I advantages is powerful enough to compensate for the lack of the other two. Moreover, ownership, internalisation and location advantages vary significantly across industry segments, countries or firms. Correspondingly, the amount of FDI received in host nations depends on the strength of the combined advantages. Countries and firms with labour-cost benefits or abundant supplies of natural resources generally attract larger amounts of FDI than countries lacking such qualities. In general, for FDI to be produced, the net competitive advantages of foreign entities must exceed the level of indigenous companies' advantages (Dunning, 1979: 288-89).

In later work on his O-L-I theorem, Dunning (2001) acknowledges that his model might be more appropriate to describe the determinants of FDI as opposed to developing a predictive theory of cross-border investment. He also defended previous criticism of the interdependence of O-L-I variables by suggesting a combinational approach. The optimal FDI level is attracted by combining the benefits of possessing rent-generating assets (ownership advantage) with geographically inherited benefits (locational advantage). Dunning (2001) also observes that an ascending amount of FDI can be ascribed towards the impact of MNEs' activities in the global economy. So long as O-L-I advantages are privately owned and standardisation of technology, products and production processes have not been reached universally, most FDI activities will continue to be carried out by MNEs as key investors (Dunning, 2001: 176).

2.4.2.5. The Investment Development Path

Criticism of Dunning's O-L-I model denotes its static nature. Because ownership, internalisation and location advantages are constantly adjusting to prevailing economic market conditions, they

should be dynamic in lieu of static variables. An effort to adjust the O-L-I paradigm to recent international production patterns was undertaken by Dunning (2001) and Narula and Dunning (2000, 2010) in their proposal for a modified Investment Development Path model. According to Dunning (2001: 180), country-specific O-L-I factors alternate depending on the country's current developmental stage. Similarly, O-L-I factors are applicable to both foreign entities interested in investing in host countries as well as local host country firms in search for overseas market niches. The multi-level interaction between foreign firms, domestic entities and the country's investment decisions is also investigated (Dunning, 2001: 180). Dunning simultaneously illustrates the reasons and the effects of such a dynamic cycle in this modified model. When analysed with FDI motives (Section 2.3), this falls under the asset-seeking category.

In the pre-industrialisation stage of a country's development, no investment occurs because location and ownership advantages are lacking. When the country advances to a more sophisticated business climate characterised by favourable government trade policies and efficient infrastructure systems, FDI will increase. Investment incentives offered by the host country will alter when a more advanced development phase is reached. At this point of the development path, Dunning (2001) recognises the positive spillover effects of intensifying competition between indigenous and foreign firms. This will ultimately increase the competitive advantage (ownership advantages) of the indigenous entity. Variations in outward- and inward-directed FDI mark the final stage of the Investment Development Path. Alternatively to exploiting ownership advantages, FDI is now primarily conducted to expand markets or invest in pre-existing assets (Dunning, 2001: 181).

The transition of countries through distinct development phases removes the static limitations of Dunning's previous O-L-I paradigm. Combining multiple classical FDI theories into one comprehensive model makes it superior to plenty of other research. Dunning explicitly assessed the importance of firm-specific advantages within the international production process, a variable that has commonly been ignored. Rather than evaluating ownership, internalisation or locational advantages in isolation, Dunning's mutual inclusion of all three endogenous variables into a single model has established him as one of the most important scholars in the field of FDI. Modifications of the Investment Development Path were made by Narula and Dunning (2010). New trends in globalisation which have inflicted upon the operations of MNEs were captured in the modified model. Because of the limited scope of this thesis, a more thorough analysis of the modified Investment Development Path cannot be included.

2.4.2.6. Oligopolistic Reaction Hypothesis

A more behaviouristic approach to companies' overseas investment motives was taken by Knickerbocker (1973) in his Oligopolistic Reaction Hypothesis. Oligopolistic reaction refers to the mutual interdependence of companies that are operating within an oligopolistic market structure in which individual firms react and counter-react in accordance with their competitor's actions. The higher the degree of oligopolisation in a particular industry, the higher the level of firm's interdependence will be. One firm's loss represents another firm's gain. A visual representation could be symbolised by a game of chess - the anticipation of the opponent's moves creates an individual strategy on how to best respond to such moves (Knickerbocker, 1973: 5).

When defensive strategies are balanced out with aggressive actions, an oligopolistic equilibrium is said to have been reached. Knickerbocker stresses the importance of achieving such an equilibrium state. In this case, all members of the oligopolistic community can benefit from mutually agreed upon decisions instead of having to worry about how an individual firm's behaviour might affect each member on an individual basis. The connecting link between the theoretical concept of oligopolistic reaction and FDI constitutes the matching of a firm's FDI flows by its competitors. Not only is the majority of FDI clustered into oligopolistic industries, but companies in such industries also align their investments (Knickerbocker, 1973: 9). In order to retain competitive market positions, a firm's outflowing investments substantially influence other firms to engage in FDI transactions. Preferably, equilibrium is reached at the end of this process. A high level of industry concentration, as measured by a small amount of competing firms, will produce a higher level of counter-active behaviour and more FDI flows as a result (Knickerbocker, 1973: 30).

As individual companies are simultaneously affected by aggregated market activities, the optimal level of FDI investments is produced only when all market participants coordinate their FDI flows. Matching a rival firm's FDI's serves the purpose of minimising risk as both companies would eventually reach an equilibrium state with the equal amount of costs and risks. Although Knickerbocker's (1973: 6) theory could not explain why specific industries are preferred by foreign investors, it does offer an important argument in the ongoing debate about FDI theories. The bandwagon effect of his theory, which stresses the importance of groupthink and group behaviour, accurately explains why competitor's behaviour instead of country-specific factors ultimately influences investors' decisions.

2.4.3. Other Theories of FDI

Moosa (2001) lists four other theories in this category but only one, Kojima's Hypothesis, is found to have relevance for this research study. The other three theories, namely the Internal Financing Hypothesis, the Currency Areas Hypothesis and the Effect of the Exchange Rate Hypothesis as well as the Hypothesis of Diversification with Barriers to International Capital Flows are not explored in any detail because they approach foreign investments from a more advanced financially-influenced background that exceeds the boundaries and requirements of this research study.

2.4.3.1. Kojima's Hypothesis

Based on the combination of international trade features and FDI theories, Kojima (1982) suggests a macroeconomic approach to explain Japanese FDI inflows. In this dynamic neo-classical model, FDI flows proceed from countries with marginal comparative advantages to host countries with superior comparative advantages. Comparative advantages entail cost efficiencies, while FDI-seeking advantages incorporate the areas of technology, managerial skills and capital (Kojima, 1982: 3).

Kojima distinguishes two forms of FDI: trade-oriented and anti-trade-oriented investments. According to Moosa (2002: 49), trade-oriented FDI is beneficial to both countries because it creates a rising demand for goods in home countries and simultaneously increases the supply of exports in host countries. Kojima (1982: 3) further appraises FDI's role in complementing trade instead of providing a perfect substitute for international trade. Anti-trade-oriented FDI, on the other hand, does not attain a balancing level of production cost in both countries. No positive spillover effects are observed with anti-trade-oriented FDI flows. Consequently, countries are advised to either pursue trade-oriented FDIs or to utilise exporting strategies (Kojima, 1982: 3).

The major shortcomings of Kojima's Hypothesis are as follows. Firstly, Kojima's theory focuses explicitly on macroeconomic conditions which are more applicable to Japan or other similar economies. Secondly, firm-specific FDI determinants are completely ignored in this model. Kojima further suggests that FDIs are one-directional flows. Only FDI-induced flows from developed countries which seek to exploit cheap labour costs or the availability of natural resources in LDCs are acknowledged. Intra-developing countries' FDI flows are not accounted for. Nevertheless, Kojima's macroeconomic approach to integrate international trade with FDI theory has added a valuable source of information to the existing body of FDI literature.

2.4.4. Theories Based on other Variables

In addition to explicitly emphasising micro- and macroeconomic variables in FDI theory, other approaches have evolved. Moosa (2002: 50) classifies political risk, country risk, tax policies, trade barriers and government regulations as other relevant FDI variables, although for the sake of this research study, these determinants do not seem significant enough to establish an entirely new class of FDI variables. Instead, they are explored in more depth in a comprehensive discussion of FDI determinants presented in Section 2.5.

As addressed by Hosseini (2005: 533), other relevant variables in FDI-related research are the concepts of information asymmetry and public goods. Both concepts focus on the public ownership rights of knowledge which may create moral hazard and adverse selection⁷ as part of the information asymmetry dilemma.

Another recent trend in economics is the notion of behavioural influences. In order to describe FDI flows more accurately, behavioural economists advise to incorporate a more complex and multi-faceted mix of political, cultural and economic variables into a single dynamic model (Hosseini, 2005: 534). However, such untraditional determinants lie outside the scope of this thesis and will not be elaborated on.

2.5. FDI DETERMINANTS

Narula and Dunning (2000: 142) postulate that host countries' competition to attract prestigious foreign capital has intensified. Since different types of FDIs are naturally attracted by heterogeneous determinants, time-specific, country-specific, firm-specific and sector-specific characteristics must all be examined on an individual basis for a thorough analysis (Lim, 2001: 12). Furthermore, while some FDI determinants are established in line with sound economic theory, others are suggested instinctively (Kok and Ersoy, 2009: 108). It is crucial to emphasize again that an overlap in FDI determinants, motives, effects and the general theoretical framework exists. None can exist without the others. A clear-cut line between the taxonomies outlined above cannot be drawn. Accordingly, findings of the most important FDI determinants for developing countries are elaborated upon after selected studies have been reviewed and synthesised accordingly in the next section. Table 2.2 represents a visual tool to briefly summarise the reviewed studies of this section. Market size seems to be the most important determinant, followed by an open economy, interest rates and GDP growth rate. Preliminary

⁷ The concepts of moral hazard and adverse selection are attributed to the problem of information asymmetry. Adverse selection occurs when information is only partially supplied in a market environment. Moral hazard refers to a situation in which specific actions are not revealed to the trading partners (Estrin *et al.*, 2008: 502).

assumptions presume that economic variables appear to have the most influence on an investor's decision as to which foreign (host) country to invest in.

Table 2.2: Summary of reviewed studies on FDI determinants

Researcher(s)	Purpose of the Study	General Findings	Major Determinants
Sethi <i>et al.</i> (2002)	Explain changing trends in determinants and FDI motives	FDI now flows into developing countries for market or efficiency-seeking motives	Large population, low GNP, cultural distance
Lim (2001)	Find determinants of FDI and positive spillovers effects	Economic indicators most important	Market size, free trade zones, infrastructure quality, political and economic stability
Chakrabarti (2001)	Find meaningful FDI determinants based on the robustness of economic theory	Previous econometric studies lack robustness, independent variables are not chosen based on sound economic theory	Market size, openness, wages, growth rate, trade barriers, exchange rate
Kahai (2006)	Establish traditional and non-traditional determinants of FDI in developing countries	Objectively measured non-traditional variables as important as traditional economic variables	Market size, GDP growth, infrastructure quality, labour costs (traditional); economic freedom, corruption, trade regulations (non-traditional)
Moosa & Cardak (2006)	Using extreme bound analysis to identify the most robust FDI determinants	Limited set of independent variables produces more reliable results based on sound theory	Openness of economy, infrastructure quality, country risk
Büthe & Milner (2005)	Examine whether trade agreements influence the amount of FDI flows	Membership in trade agreements increases FDI inflows	Preferential trade agreements
Kok & Ersoy (2009)	Identify FDI determinants in developing countries	Economic indicators are most influential	Tax incentives, gross capital formation, communication, GDP growth, market size
Bevan & Estrin (2004)	Identify FDI determinants in European transition economies	Economic indicators are most influential	Labour cost, gravity factors, market size proximity
Wint & Williams (2002)	Identify FDI determinants in developing countries	Economic indicators most important	Per Capita income, literacy rates, interest rates
De Mello (1997)	Determine relationship between growth and FDI in developing countries	Economic indicators most important	Market size, labour cost, interest rates and exchange rates

Source: *Author's own table*

2.5.1. Changes in Destination towards Developing Countries

As Sethi *et al.* (2002: 693) note in a paper analysing the changing nature of FDI flows, investment motives and geographical attractiveness of flows can change over time. Host countries' institutional and strategic indicators in particular are vulnerable macroeconomic factors that can alter FDI flows. Considering that the USA was the biggest contributor of FDI flows at the time, this study focuses on American FDI flows to Western Europe and Asia (Sethi *et al.*, 2002: 689). Findings confirm a change in the destination of traditional flows from developed recipient countries to developing recipient countries. Both market and efficiency seeking motives account for the locational alterations of host countries. Mainly the quest for cheaper production costs can be attributed for this locational change. According to Sethi *et al.* (2002: 698), the most important FDI determinants in host countries are strategic institutional factors, more specifically a high population size, large market size, low GNP, and differences in culture.

A study compiled by Kahai (2006) also reports a changing pattern in FDI motives. Previously undertaken for market-seeking or efficiency-seeking purposes, institutional and cultural factors now also seem to attract FDI flows. According to Kahai (2006: 470), most FDI research neglected non-traditional FDI determinants. He therefore suggests two independent categories of determinants for his model, namely traditional variables and non-traditional variables. Traditional quantifiable economic variables include market size, purchasing power, GDP, labour cost, inflation and the availability of natural resources. Non-traditional variables, on the other hand, consist of objectively measured political, cultural and social factors of the host country. Variables affecting the transaction cost of a business also constitute part of the non-traditional category. Using a linear least squares regression, Kahai (2006) concludes that the traditional economic variables market size, GDP growth, infrastructure quality and labour costs are consistent with economic theory. Non-traditional variables, such as economic freedom, corruption and trade regulations surprisingly also appear to be significant FDI determinants. As a result, host countries imposing strict policies to reduce the transaction costs of doing business are more attractive destinations to foreign investors compared to those countries neglecting non-traditional variables (Kahai, 2006: 43-50).

2.5.2. Economic Indicators

Amongst all selected studies under review, economic indicators proved to be the most effective variables in attracting international investment capital. An IMF paper by Lim (2001: 17-18) on the determinants and positive effects of FDI identified market size as the most important economic determinant of FDI. Agglomeration effects, availability of infrastructure, positive

investment climates with little trade barriers and cheap labour costs are also of importance. Countries with unstable governments or less developed economies in general tend to attract less FDI. While Sachs (2010: 33) distinguishes a country's economic growth rate as the dominant FDI attractor, De Mello (1997: 6) denotes market size, costs of production, labour costs, exchange rates and interest rates as the most relevant FDI determinants.

A panel-regression study examining the most lucrative FDI determinants in developing countries was performed by Kok and Ersoy (2009). Results reveal that especially economic indicators are highly influential in attracting FDI. In this study, favourable tax incentives, communication (as measured by the amount of telephones in a country), market size, GDP per capita growth and gross capital formation appear to be most lucrative in securing foreign capital (Kok and Ersoy, 2009: 105-112).

Bevan and Estrin (2004: 778-785) also acknowledge that economic indicators dominate other kinds of FDI attractors. Their empirical work on FDI inflows into European transitioning economies identified labour costs, market size and proximity as the most vital determinants. Particularly in developing countries, institutional factors, political risk and the stability of macroeconomic variables (such as growth rates, inflation or exchange rates) seem to secure large shares of FDI. Wint and Williams (2002: 36) developed another set of FDI determinants applicable to developing nations. According to this survey, predominantly the economic variables per capita income and the interest rate emerged as most successful IFDI determinants.

2.5.3. Trade Openness

The relationship between trade openness and FDI flows into developing countries was analysed in a study conducted by Büthe and Milner (2008). Overall, trade liberalisation in the form of international trade agreements (GATT/ WTO) and membership of preferential trade agreements show a positive effect on the amount of received FDI. Membership of trade agreements grants a mechanism to monitor and ensure the compliance of regulative trade laws. In addition to that, trade agreements impose high informational costs on members breaching their commitments. For all those reasons, a positive relationship between the degree of trade openness and the amount of FDI received was observed by Büthe and Milner (2008: 1-8, 23).

2.5.4. Political Indicators

Political indicators and the nature of countries' legal environment represent another meaningful set of FDI determinants. In a study examining the role of host countries' political frameworks, Globerman and Shapiro (2002) expressed that a stable political environment not only increases the amount of FDI, but also ensures that local businesses can develop and thrive appropriately.

Positive governance is hereby recognised by transparent public institutions, a functioning law system protecting individual and property rights, unrestrictive trade policies and a low corruption index. Out of those, free trade policies and transparent non-corruptive laws are most favourable in attracting FDI flows. According to the empirical results of this study, host nations that are ranked highly in human capital investments are also considered as better choices for investors. It is cautioned though that investments in human capital are not directly related to good political governance (Globerman and Shapiro, 2002).

2.4.5. Importance of Robustness of Econometric Results

Many researchers, for example Chakrabarti (2001) or Moosa and Cardak (2006), have dismissed the poor quality of many econometric studies which are flawed by the lack of sound economic theory. Based on mis-specified independent variables, such studies produce unreliable results which remain highly sensitive to minor model modifications. Because the theoretical frameworks on FDI determinants, motives or effects overlap, many researchers fail to determine the most robust independent FDI variables (determinants). Quite often, purely intuitive variables as opposed to those based on sound economic theory are falsely included in econometric models (Moosa and Cardak, 2006: 200).

Moosa and Cardak (2006) choose a unique technique in developing an appropriate model for FDI determinants. In order to achieve the most robust results, they use extreme bound analysis to run a cross-sectional regression of 138 countries. A very limited set of independent variables is used to explain the levels of foreign capital investments into host countries. The most important FDI determinants that evolved from this study are the openness of the economy measured by exports, the quality of infrastructure represented through telephone lines per 1000 inhabitants and the overall country risk. Contrary to other studies, Moosa and Cardak (2006) disregard the variables GDP growth rate, energy usage and domestic investments as significant FDI determinants.

An advanced econometric approach in search of influential FDI determinants was performed by Chakrabarti (2001) in a cross-country regression analysis. He based his model on a sample pool of 135 countries from the year 1994 and a selected list of economic variables. Consistent with the other studies, a positive relationship between market size and FDI evolved. A striking difference to other studies is found in the influence of controversial macroeconomic variables, such as taxes, wages, openness of the economy, exchange rates, trade barriers and GDP growth, all of which are highly responsive to the slightest variation in initial data. This study classifies wages, net exports, the economic growth rate, taxes, trade barriers and the exchange rate as most

important FDI determinants. However, Chakrabarti (2001) also cautions that all results need to be carefully interpreted since not all variables are based on sound economic theory.

2.6. FDI EFFECTS IN HOST COUNTRIES

No consensus on the adverse cyclical effects of FDI has been reached amongst researchers. Many empirical studies acknowledge both positive and negative externalities as results of foreign capital inflows. The magnitude of spillover effects greatly varies depending on the type of FDI pursued by investors. Extractive-seeking FDI undertaken for the purpose of securing scarce natural resources imposes different externalities than market-seeking, efficiency-seeking or technology-sourced FDI. In general, FDI-induced benefits are a direct observable result of spillover effects. Therefore, unless positive spillover effects exist, no benefits can be attributed to FDI flows (Driffield and Love, 2005: 59). This section explicitly focuses on FDI's host country effects only. Home country effects are therefore ignored.

2.6.1. Overall Effect of FDI on Economic Growth and Development

Many scholars agree that FDI yields positive long-term benefits and growth-stimulating economic effects in recipient nations (Borensztein *et al.*, 1998; De Mello, 1997; Helleiner, 1998: 6; Herzer, 2009; Lim, 2001; Lipsey, 2004). The OECD (2006) takes the following stance on the positive effects of international capital movements:

“Foreign direct investment (FDI) is a key element in international economic integration. FDI creates direct, stable and long-lasting links between economies. It encourages the transfer of technology and know-how between countries, and allows the host economy to promote its products more widely in international markets. Finally, FDI is an additional source of funding for investment and, under the right policy environment; it can be an important vehicle for enterprise development.”

Most crucially, the importance of FDI flows to developing countries can be attributed to the positive externalities as well as economic growth enhancements (UNCTAD, 1999). Due to the lack of domestic start-up capital in developing countries, FDI provides one of the cheapest and most efficient form of acquiring advanced technological, managerial and organisational knowledge (Narula and Dunning, 2000: 149-150).

2.6.2. Positive Effects of FDI

In a study on outward-driven FDI, Herzer (2009: 479) reports that positive externalities in both host and home countries are directly caused by foreign capital inflows. FDI projects generally provide investment capital to enable local business start-ups or to support pre-existing businesses. The threat of increased competition imposed by foreign firms amplifies local

competitiveness and efficiency. A decrease in the cost of production naturally follows. Finally, FDI enables advancements in the fields of technology, managerial or marketing skills in the long-run (Helleiner, 1998: 17-18).

2.6.2.1. Technology

Technological spillovers are one of FDI's most consistent positive externalities. Caves pointed out (1982: 224) that the rapid global expansion of MNEs has been responsible for a higher technology transfer rate in recipient countries than licensing had achieved in the past. Previously, during the economically restricted pre-globalisation period, the traditional mechanism of licensing was cheaper, less risky and more feasible compared to expanding businesses abroad through FDI projects. Kojima's (1982) study on the Japanese economy (see section 2.4.3.1) also established a positive relationship between FDI and technology transfers to host countries. Initially, simple labour-intensive technology should be demanded by host countries before more advanced capital-intensive technology can be transferred once the host country has absorbed technological linkages from the initial investment (Kojima, 1982).

Lim (2001) supports the argument of technological-induced advantages. Both Lim (2001: 3) and Kojima (1982: 5-8) agree that technological spillovers in host countries occur by the acquisition of superior knowledge in the form of workers' training, increases in local competitiveness and the enhancement of industry-wide production efficiency in response to increased competition. The magnitude of spillover effects hereby depends on the recipient countries' capability to absorb technological advancements. (Lim, 2001: 4).

2.6.2.2. Knowledge

Globalisation and trade liberalisation over the last few decades have transformed the global economy from a predominantly industrialised society to a knowledge-seeking society. Knowledge transfer across national borders is a positive side-product of FDI transactions. Currently, a large amount of MNEs' FDI is held responsible for the unrestricted internal transfer of sophisticated knowledge from headquarters to the foreign (host country) subsidiaries (Aharoni, 2010: 41-45). International knowledge transfer emerges in the fields of technology, marketing and accounting.

2.6.2.3. Increase in Efficiency and Productivity

Contrary to popular arguments, the goal of foreign capital investments should be to spur domestic entrepreneurial activities in host nations and not to merely transfer financial capital (Lipsey, 2004: 335). Apart from acquiring financial interests in a foreign company, the interest in and transfer of strategic assets to foreign subsidiaries is also of great importance. Lipsey (2004:

353) further emphasises that the higher the degree of a company's foreign ownership in host countries, the more likely the demand for higher skilled labourers. Employing more skilled and educated workers might reduce production cost and time. Likewise, increases in the host country's efficiency and productivity emerge as indirect results of knowledge transfer. Once the level of human capital has been raised through FDI linkages in host countries, competition in the domestic market will now benefit local producers and consumers as long as the improved efficiency processes are implemented (Blomström and Kokko, 2003: 10).

2.6.3. Negative Effects of FDI in Host Countries

Musila and Sigue (2006: 579) report that extractive-driven FDI "bears a high social cost in the form of exploitation of economic rent, negative externalities in the form of pollution, and the exacerbation of inequality through dualistic economic structures". This argument is strengthened by Chitrakar (1994: 70-76) who identifies the additional costs imposed on host economies as the major setback of FDI. In respect thereof, additional costs are comprised of subsidies and tax incentives offered to the foreign firm, reduction of domestic profits in response to the foreign firm's competition and the possible deterioration of the host country's terms of trade. The danger of capital flight might also arise. Blomström and Kokko (2003: 19) stress that the magnitude of positive spillover effects, if any, ultimately depends on the host country's ability to absorb sophisticated knowledge or technological know-how. The larger the gap between home and host countries, the more likely it is for host countries to not fully absorb spillover effects.

2.6.3.1. Short-Term Employment

Caves (1982: 131) postulates that FDI might lead to temporary decreases in short-term employment levels while simultaneously lowering the level of real wages. In general, FDI supplied via M&As is more prone to intensify local unemployment compared to Greenfield Investments since the latter have proven to create more domestic employment opportunities. Driffield and Love (2005: 56) further caution that as a result of increased globalisation, the majority of FDI capital will be provided by a few elite and powerful MNEs which might then establish monopolistic advantages in their respective investment sectors. Considering that only a selective group of the population benefits from such advantages in host nations, the trickle-down mechanism responsible to evenly distribute this newly gained wealth will eventually break down.

2.6.3.2. Inadequate Knowledge Transfer

Negative FDI externalities are also inherent in the quality of knowledge transfer. Even though knowledge transfer from home to host countries can produce positive spillovers, Amsden (2007)

exhorts that such advantages are diminished by the transfer of unsophisticated or outdated knowledge⁸. Accordingly, investing firms are very selective and only transfer their least valuable knowledge abroad (Amsden, 2007: 293-303). Educational spillovers in host countries are not only constrained to “beginner-levels R&D”, but also benefit just a small elite group. As a result, host countries usually continue to remain dependent on foreign investors without ever catching up to their level of sophistication. This is even more apparent in resource-driven economies where the only kind of inflowing FDI benefits extractive industries. Complementing her reasoning, Amsden (2007: 305) warns that multinational firms often exert market and political power that oppress host countries’ own development in the long-run.

2.6.3.3. Crowding-In versus Crowding-Out Effects

According to Agosin (2008), FDI can produce the following three outcomes in recipient countries: crowding-in, crowding-out or a neutral effect. If FDIs enable an increase in domestic investment capital which would have been absent otherwise, positive host country effects on economic growth, such as the introduction of new capital goods, are possible. On the other hand, no benefits in host nations will be realised if foreign capital is an identical replacement for an industry sector already serviced by domestic producers. In this case, host countries’ local production will become “crowded out” by the more advantaged foreign investor. Neutral effects present themselves as an equilibrium state. Incurred costs and received benefits of FDI-induced activities in host nations appear balanced.

Agosin (2008: 1-4) denotes bankruptcy or the replacement of local firms by foreign competitors as negative FDI crowding-out effects. Outward FDI investments undertaken between 1971 and 2000 generally created such negative or neutral crowding-out effects. In fact, the negative implications of crowding-out only occur under imperfect market conditions - which are applicable in most developing countries (Amsden, 2007: 291).

2.6.3.4. The Dutch Disease

An interesting point relating to unhealthy export structures of non-renewable natural resources is raised by Fletcher (2010). If extractive-seeking FDI is undertaken in resource-abundant host countries, such host countries may jeopardise sustainable long-term growth when focusing on only improving the immediate living standards (Fletcher, 2010: 54). Resource-rich nations

⁸ Strong protection of Intellectual Property Rights (IPRs) and Trade-Related Aspects of Intellectual Property Rights (TRIPS) could be another reason for inadequate knowledge transfer, especially in the light of recent World Trade Organisation agreements. See Chang (2001) for a discussion on both concepts.

thereby become dependent on the revenue of commodity exports or expected dividends from joint ventures in mining companies.

Although commodity revenues secure local profits, they could also lead to deindustrialisation because most resource-rich host nations will eventually neglect all other segments of their economy except for the primary sector (UN Conference, 2011b: 1). In addition to that, surges in commodity revenues often inflate the host country's exchange rate. Hence, non-resource sectors become even less competitive because the appreciated currency increases the prices of exports. As a result, economic disturbances in host countries are caused since cheap imports come with a trade-off for expensive exports (Zafar, 2007: 108). Finally, as most resource-extraction facilities are owned by a small elite, rents derived from commodities do not benefit the whole host country but rather only a few beneficiaries. These common problems prevalent in resource-rich countries are also known as the Dutch Disease in the literature.

2.6.4. Effects of FDI-Producing Developing Home Countries

FDIs originating in developing countries offer a fairly new phenomenon. Due to limited research, the full implications of host countries' OFDI have not been fully investigated yet. Benefits of this FDI type might not take the same form or intensity as FDI sourced in developed countries. Critics argue that developing countries which supply FDI fail to provide sophisticated technology, knowledge or sufficient financial capital. Hufbauer and Adler (2010: 415) find that even though developing countries are more willing to share their technological know-how, the magnitude of positive spillovers is only marginal compared to more sophisticated technologies transferred by developed countries. Disadvantages are also found in the potential for job creation. As almost 75 percent of OFDI from developing countries is supplied by M&As, job losses in the host country might occur after the foreign takeover in line with downsizing activities (Hufbauer and Adler, 2010: 417).

On the other hand, supporters claim that home developing countries (FDI producers) have more common attributes to other host developing nations (FDI receivers). Consequently, FDI-producing developing nations hold a distinct advantage over developed nations since they are faced with similar problems as the receiving nations (Gammeltoft, 2008: 3). Development state-specific similarities between home and host developing countries could become an important determinant of FDI in the future.

2.7. CONCLUSIONS

FDI theories have historically evolved for a number of different reasons but can generally be categorised based on market structure. Perfect market theories, imperfect market theories and theories based on other variables were the preferred categories used for this research paper. Over time, researchers became aware that not only investment motives, but also the specific timing of when to engage in FDI transactions matters. While country-specific, firm-specific and asset-specific attributes were found to be significant on an individual basis, more recent work on FDI combines multiple factors into one dynamic comprehensive theory.

Contemporary theories capture the recent transition from describing the actual FDI transaction towards taking an institutional approach of the firm itself. Hymer's (1960) Industrial Organisation Hypothesis, Vernon's Product Cycle (1966) and Buckley and Cassons' Internalisation Theory (1976) represent important classical attempts to explain FDI engagement in host countries.

In response to a more close-knitted global economy, MNEs' significance as supplier of foreign investment capital has been incorporated in more recent research. International Business theory is hereby blended with traditional FDI theory. Until today, Dunning's (1979) Eclectic Paradigm is regarded as the most significant contribution to FDI theories. His O-L-I theory successfully combines both classical theories based on market imperfections and contemporary market characteristics which are influenced by the spread of MNEs. In general, FDI is only undertaken if a firm's ownership, internalisation and locational advantages are simultaneously fulfilled. Although Dunning's O-L-I theory relies on a solid theoretical base, the implications of scholarly work in the field of behavioural economics or information asymmetry could create a more multifaceted model of foreign investments in the future.

While the theoretical framework of FDI theories constantly changes in response to the most current economic, political and institutional factors, FDI motives have traditionally remained constant. Supplementing profit-seeking motives, market- and natural resource-seeking motives appear to be the most consistent investment motives over time. Extractive-seeking FDI, in particular via Greenfield Investment projects, is the most significant form of overseas expansion dealt with in this thesis.

Regardless of the reasons for which FDI is pursued, scholars disagree on a homogeneous set of FDI determinants applicable to all regions of the world. Country- and company-specific determinants as well as economic and political stability are normally required to generate an attractive investment climate in host countries. Discrepancies prevail in respect to the distinct

effects of FDI observed in host countries. Only FDI's overall growth-enhancing long-term benefits can be verified by scholars. Positive FDI externalities might take on the form of technological advancements, knowledge transfers or a boost in workers' wages. On the other hand, the crowding-out of local firms, capital flight, increased pollution, poor working conditions, or the uneven distribution of benefits are all well documented negative FDI spillovers.

After reviewing and analysing FDI terminology, motives, theories, determinants and host country effects in this chapter, the solid theoretical framework for this thesis has been established. In the next chapter, general FDI theories will be narrowed down to specific countries. From now on, China is considered as home country or FDI investor, while SSA nations are labelled as recipient nations or host countries. Applying the general FDI concept to a specific geographical region allows preliminary conclusions to be drawn about whether traditional FDI theories hold in the case of China's overseas investment in SSA nations.

CHAPTER THREE:**GLOBAL FDI TRENDS AND CHINESE FDI TO SSA****3.1. INTRODUCTION**

FDI destined to African recipient nations provides some of the necessary start-up capital with the prospect of spurring economic development. As discussed in the previous chapter, foreign capital inflows should (in theory) encourage economic diversification away from resource-extractive sectors, create local employment and transfer advanced knowledge or technology. Particularly applicable to developing host countries, Kojima (1982: 6) points out that FDI “should play the role of a tutor” through the transfer of advanced technology, marketing skills, management skills and more efficient production processes. Indeed, prevalently weak saving rates, low income levels and inadequate financial markets have enslaved Africa to become dependent on foreign external financing (Collier and Pattillo, 2000; Dahl, 2002: 5). A report published by the World Bank (2012a) states that 80 percent of all Sub-Sahara African nations applied regulatory incentives to attract more foreign capital - another indicator of how crucial FDI has become to Africa as a whole.

Chapter Three aims to identify global FDI trends. In order to analyse the nature, motives and types of foreign investment Africa has attracted over the last decade, the most recent publications on FDI are reviewed. Sections 3.2 and 3.3 briefly address the current economic environment of China and SSA respectively. Analysing the present conditions in both regions is seen as an initial attempt to identify attributes that might either encourage or hinder FDI flows. The fourth section of this chapter considers general FDI trends in Africa and also raises the question of whether FDI attractors in Africa are different to those of other region. Breaking down investment flows into its sectoral and locational components helps to generate an overall picture of global foreign investment trends. The World Investment Report (UNCTAD, 2012) constitutes the major source of this data. After establishing overall global investment trends, Section 3.5 discusses the nature, motives and sectoral breakdown of Chinese flows relevant for the case of SSA. Comparisons to FDI theories presented in Chapter Two are made in order reach preliminary conclusions about whether Chinese flows to SSA are pursued for the same traditional investment motives.

3.2. CHINA’S ECONOMIC ENVIRONMENT

Currently, Beijing still runs a largely closed state-planned economy. As a developing country itself, China has traversed through a phase of impressive economic growth to become the

manufacturing factory of the world. Since the turn of the millennium, it has become the largest global manufacturer. This is mainly attributed to China's need for supplying jobs for its large domestic population (Mills, 2010: 44). 2009 saw China claiming the number one position in global exports. On average, Chinese income per capita grew by eight and nine percent during the 1980s and 1990s respectively (Kaplinsky, 2006: 986). Industries not affected by import quotas, such as footwear, games or toys account for China's major export markets. Over two-thirds of such exports were destined for the US and Japan.

Not only did its domestic economy begin to prosper, but Beijing also played a crucial role in bailing out struggling Westerns companies and governments that were affected by the global financial crisis (Nolan and Zhang, 2010: 97). According to The World Factbook (CIA, 2012), China's population in 2012 is approximately 1,343,000,000 - the most populated country in the world. A booming Chinese economy has experienced economic growth rates of roughly 10.6 percent per annum over the last five years (China Analyst, 2012: 14). But despite the prosperous economic growth in recent years, China remains the largest *developing* country in the world.

Moreover, the combination of China's booming economy, surging export revenues and large accumulations of US foreign exchange are pressuring global market prices. Global inflation rates rose while interest rates declined in the mid-2000s (Goldstein, Pinaud, Reisen and Chen, 2006: 111). Global commodity and food prices also steadily increased in the mid-2000s as a result of China's aggressive natural resource-seeking strategy, while shortages in shipping freight are attributed towards its export-driven economy (NIC, 2005: 2; Kaplinsky, 2006: 986-993). Beijing's pressing need for commodities, environmental pressure as well as rising labour and production costs represent the biggest threats to the Chinese economy at the time of writing.

Concerns from the West about Beijing's state-controlled economic success are soaring. Critics affirm that China's economic performance is skewed by its undervalued currency which maintains a competitive advantage for its exports and has also helped gain control of global commodity supplies (Pereira and De Castro Neves, 2011: 6). In 2010, the Chinese Renminbi was estimated to be between 20 to 40 percent below its normal market value (Mills, 2010: 347). Nevertheless, a closer look at China's economic affairs might paint a more realistic picture. Gradually opening up its state-controlled economy for the sake of attracting foreign investment has successfully lifted millions of Chinese people out of poverty. Trade liberalisation, the availability of low-cost labourers, a large market size, a disciplined work ethic and a strong savings culture all contributed towards China's economic miracle.

China's membership of the newly developing group of BRICS (Brazil, Russia, India, China and South Africa) economies benefited its ascending position in the global economy. BRICS was founded with the intention to challenge the global dominance of the G-7 economies by committing to political, commercial and cultural cooperation between member nations. The growing importance of BRICS was highlighted during the financial crisis in 2009. Not only were the BRICS nations less severely affected by the crisis, but also allocated plenty of capital to rescue many struggling developed nations (Pereira and De Castro Neves, 2011: 1).

In preparation for China's membership to the WTO, Beijing slowly opened its economy. Initially, outward FDI in the light of industrial processing trade sectors, namely textiles, machinery or electrical equipment was promoted. Chinese raw materials or intermediate goods were used to complete the production process in foreign host countries' facilities (Oyeranti, Babatunde, Ogunkola and Bankole, 2010: 24). In 2002, Beijing announced its new "Going Global" foreign policy. Instead of relying on export mechanisms to enter the global economy, foreign investments were now strongly encouraged. Reasons for this global expansion strategy are twofold. Firstly, Beijing aims to establish strong and reputable Chinese brands capable of competing in international markets. Secondly, supplying OFDI to more sophisticated recipient nations, especially in Europe or the US, was seen as a convenient way to improve the technological and service skills of Chinese companies (Oyeranti *et al.*, 2010: 24).

However, the influence of the ruling Communist Party is profoundly visible in every aspect of the Chinese society. Most companies remain partially if not wholly owned by the state. State-imposed five year plans setting out the country's economic goals are still in place. Economic and political affairs continue to be strategically regulated by state-owned institutions. Nevertheless, gradual liberalisation reforms not only witnessed China to remain a preferred investment location for foreign investors but to now also becoming a major global investor.

One investment region that has become of particular interest to China over the last two decades is Africa. Established in 2000, the Forum on China-Africa Cooperation (FOCAC) was founded in Beijing with the aim to better channel and promote friendship, corporation, economic development and mutually beneficial long-term stability between China and 44 African nations (FOCAC 2012). In order to evaluate the effectiveness of reforms and programs, conferences have been held every three years. Since the Forum's founding, China has granted debt cancelation, concessional loans and low-interest loans promoting small-size African entrepreneurs. Additionally, China offered training courses, medical care, preferential tariffs for certain African exports entering China and also established special economic zones in selected

African countries. It would therefore seem as if most African nations have so far benefitted from the variety of programs provided by FOCAC. For example, at the last Forum held in Egypt in 2009, China pledged \$10 billion in concessional loans to African countries and \$1 billion in special loans for small-scale African entrepreneurs (FOCAC, 2012; China Briefing, 2009).

3.3. SUB-SAHARAN AFRICA'S ECONOMIC ENVIRONMENT

Even long after colonialism, SSA continues to remain dependent on resource-driven exports. Between 1995 and 2008, 73 percent of all exports from this region were motivated by mining activities (World Economic Forum, 2011: 4). Zafar (2007: 110) strengthens this argument, claiming that over 75 percent of African exports were generated by commodities, natural resources or oil. Numerous SSA nations thereby indirectly benefitted from the Chinese- created commodity boom which has enriched many resource-abundant nations over the last few years (Zafar, 2007: 110). The boom was only short-lived as commodity prices and the demand for African commodities from a global perspective declined significantly after the financial crisis of 2008 (Melber, 2009: 56). However, the demand has slowly recovered in post-crisis years.

This continuous dependency of Africa's economic growth on natural resources does not promote sustainable long-term development but rather encourages cyclical fluctuations based on China's commodity demand. Some researchers even go so far as to blame Africa's resource abundance as its greatest curse, especially because resource-dependent economies are more vulnerable to authoritarian government that will not only control the country politically, but also economically (Mills, 2010: 170, 241). All the negative implications of the Dutch Disease, including an appreciating currency causing expensive exports, crowding-out of local industries, failure to diversify local economies or the enrichment of local elites apply in the case of Africa (see Section 2.6.3.4.)

Most manufacturing sectors in SSA, contributing less than 10 percent towards respective countries' GDPs on average, remain underdeveloped and incapable of competing in the global business environment (Sparks, 2012). In other words, most countries in SSA failed to establish diversified economies and low-value added activities continue to be the dominant economic drivers. In general, Africa's comparative advantages either lie in the extraction of unprocessed commodities or in the agricultural sectors as land is abundant. Competitive advantages are therefore found in low-cost or low-skilled manufacturing (Goldstein *et al.*, 2006: 113). Skilled labour is still scarce - most jobs remain blue-collar in nature. Widespread corruption, lack of legislative transparency and authoritarian leadership practises nurture unstable political

environments that further exacerbate the underdeveloped economic state of many African nations. Rupiya and Southall (2009: 171) acknowledge that the African continent hosts the largest amount of UN peace-keeping operation- another indicator of the fragile state of many African nations.

Other research affirms that Africa's lack of production diversification is largely caused by marginal investments in human capital, inadequate infrastructure, conflict- or war-prone countries, unfavourable institutional environments and regulatory challenges (World Economic Forum, 2011: 13). Compared to the rest of the world, Africa has the most developing nations on a single continent. While economic growth worldwide is still suffering from the aftermath of the global financial crisis of 2008, Africa has recovered marginally better than other regions.

The improving trade relations with BRICS countries increased overall growth in SSA to moderate levels. In general, Africa's participation in international trade is still relatively low compared to global levels (Sparks, 2012). Although African GDP growth between 2001 to 2010 occurred at an annual rate of 5.2 percent, Africa only accounted for a meagre 2 percent of global trade in 2009 (Mills, 2010: 137; World Economic Forum, 2011: xi). South Africa alone contributed more than half of this figure with the other SSA economies lagging behind.

Through its going-global policy implemented in the last decade, China has become Africa's biggest trading and investment partner since 2001. In 2009, it surpassed the United States as Africa's most important trading ally (Wonacott, 2009). According to the FOCAC (2011), during the period of 2000-2009, Sino-African bilateral trade and Chinese investment into Africa grew from \$10.6 billion to \$91.07 billion and from \$220 million to \$1.4 billion in nominal terms respectively. African commodity exports of minerals or fuels portray one direction of Sino-African trade relations; while cheap Chinese consumer goods, textile products and machinery but also a growing amount of weapons to Africa depict the other side of the relationship. During the same period, Chinese-sponsored infrastructure projects in Africa increased more than twenty-fold from \$1.1 billion to \$28.1 billion.

Although China's growing demand for natural resources brought vital commodity revenues to resource-rich African nations, global exports from Africa dropped by 31 percent due to the global financial crisis of 2008. Minerals, energy and oil exports formed the largest shares of export products to China in 2010, with oil accounting for 13 percent of all African exports to China (FOCAC, 2011). Non-commodity exports to China also increased as a result of preferential tax and tariff agreements. Fertiliser, electronics, textiles, garments, woodwork, base

metals, wine, cocoa beans, coffee, olive oil and machine parts comprise Africa's major non-commodity export products (FOCAC, 2011).

Low income levels, marginal saving rates and the immediate effects of the HIV epidemic all constitute the geographical challenges Africa is still facing in present days. UN Conference (2011d: 2) notes in a report that domestic resource mobilisation in most African nations is weakened by transfer pricing and inappropriate tax laws that prevent the efficient collection of revenues. As a result, resource-rich nations in particular adopted preferential tax incentives in order to attract more foreign investment (Sparks, 2012). In such regions, FDI still substitutes domestic capital as the most important source of gross fixed capital formation. For example, according to the African Economic Outlook (2012), global FDI inflows to Angola accounted for 316, 201 and 222 percent of gross fixed capital formation in 2008, 2009 and 2010 respectively. This implies that at least half (2009-2010) and even more than 3 times (2010) the amount of capital invested in Angola's physical assets (factories, stores, offices, buildings etc.) was supplied by foreign investors. The absence of domestic investment capital could indicate a disturbed economic system in relevant host nations as they continue to heavily rely on foreign capital.

A World Bank publication (2006) emphasises "a persistently negative saving rate implies that a country is on an unsustainable path and consumption must fall in the future. SSA is actually the only region that has constantly exhibited negative genuine savings rate since the mid-1970s." In order to escape this unsustainable trap, numerous African countries implemented various economic reforms which addressed the issues of inflationary pressures, budget deficits, fiscal policies a crowding-out effects within the last decade (World Economic Forum, 2011: xiii). Quite often, the public sector also became partially privatised. So far, results are showing promising effects as African economic growth rates in the near future are projected to be some of the highest worldwide. At the time of writing, seven of the ten fastest growing global economies are situated in Africa (UNCTAD, 2012). Interestingly, the largest income streams are generated by the sectors of banking, manufacturing, retail, telecommunication and wholesale (French, 2012) - and not by extractive-intensive segments. Thus, if utilised appropriately, a boost in externally supplied foreign capital could lift millions of Africans out of poverty.

3.4. GLOBAL FDI FLOWS

3.4.1. Sectoral and Locational Breakdown of Global FDI Flows

Capital inflows to Africa are not a newly emerging trend but have been recorded for over 500 years. For example, the slave trade, colonialism or neo-colonialism all brought foreign capital to

the African continent; some more directly than others (Satgar, 2009: 35). Over the last decade, global FDI generally increased although flows were partially reduced by the onset of the global financial crisis (2007-2009). Despite the ongoing European debt-crisis and the aftermath of the earlier financial crisis in 2008, 2011 saw global FDI rise by 16 percent (UNCTAD, 2012). The location of traditional FDI recipient countries also diverged from developed nations to developing and transitioning countries which by the early 2000s accumulated more than half of total inflows (Dunning, 2003). According to Table 3.1, the latter reached a historic high of \$777 billion inflows, with developing economies securing approximately 45 percent of inflows and transitioning economies accounting for roughly 6 percent of total global inflows in 2011. Developed countries which traditionally received the largest amount of FDI by far accounted for 49 percent of global flows in 2011 (see Table 3.1).

Table 3.1: Global FDI flows between 2009-2011 by regions, in current \$ billion and percent

Region	FDI inflows			FDI outflows		
	2009	2010	2011	2009	2010	2011
World	1 197.8	1 309.0	1 524.4	1 175.1	1 451.4	1 694.4
Developed economies	606.2	618.6	747.9	857.8	989.6	1 237.5
Developing economies	519.2	616.7	684.4	268.5	400.1	383.8
Africa	52.6	43.1	42.7	3.2	7.0	3.5
East and South-East Asia	206.6	294.1	335.5	176.6	243.0	239.9
South Asia	42.4	31.7	38.9	16.4	13.6	15.2
West Asia	66.3	58.2	48.7	17.9	16.4	25.4
Latin America and the Caribbean	149.4	187.4	217.0	54.3	119.9	99.7
Transition economies	72.4	73.8	92.2	48.8	61.6	73.1
Structurally weak, vulnerable and small economies^a	45.2	42.2	46.7	5.0	11.5	9.2
LDCs	18.3	16.9	15.0	1.1	3.1	3.3
LLDCs	28.0	28.2	34.8	4.0	9.3	6.5
SIDS	4.4	4.2	4.1	0.3	0.3	0.6
Memorandum: percentage share in world FDI flows						
Developed economies	50.6	47.3	49.1	73.0	68.2	73.0
Developing economies	43.3	47.1	44.9	22.8	27.6	22.6
Africa	4.4	3.3	2.8	0.3	0.5	0.2
East and South-East Asia	17.2	22.5	22.0	15.0	16.7	14.2
South Asia	3.5	2.4	2.6	1.4	0.9	0.9
West Asia	5.5	4.4	3.2	1.5	1.1	1.5
Latin America and the Caribbean	12.5	14.3	14.2	4.6	8.3	5.9
Transition economies	6.0	5.6	6.0	4.2	4.2	4.3
Structurally weak, vulnerable and small economies^a	3.8	3.2	3.1	0.4	0.8	0.5
LDCs	1.5	1.3	1.0	0.1	0.2	0.2
LLDCs	2.3	2.2	2.3	0.3	0.6	0.4
SIDS	0.4	0.3	0.3	0.0	0.0	0.0

Source: UNCTAD (2012: 38)

On a regional scale, developing nations in Asia and nations in Latin American and the Caribbean which secured approximately 28 and 14 percent on inflows, exhibited the most promising FDI growth rate in 2011 (UNCTAD, 2012). Capital invested in Africa and Least Developing Countries (LCDs), on the contrary, fell by 11 percent compared to 2009. Table 3.1 reveals that only roughly 3 percent of all global inflows were destined to African recipient countries. FDI inflows in 2012 were projected to reach moderate levels. As a result of declining growth prospects in Asia, transitioning economies and resource-rich African nations were expected to experience the fastest increase in FDI inflows (UNCTAD, 2012).

With respect to market-entry forms of FDI, the level of global Greenfield Investments in 2011 remained on a slightly negative downward trend. Global M&As, on the other hand, increased significantly by 53 percent (UNCTAD, 2012). Greenfield Investments still constitute the preferred method of FDI in developing and transitioning nations worldwide, with two-thirds of all Greenfield projects being conducted in those regions. Extractive, chemicals, utilities, transportation and communication industries in developing nations secured the highest share of foreign investment via Greenfield Investments.

Reflecting the slow recovery from economic turmoil, all sectors of the global economy except manufacturing experienced growing FDI inflows in 2011. Table 3.2 shows that while the primary and service sectors slightly increased their share of global FDI, the share of investment in the manufacturing sector declined in 2011 but rose in monetary terms (UNCTAD, 2012).

Table 3.2: Sectoral distribution of FDI projects between 2005 to 2011, in current \$ billion and percent

Year	Value			Share		
	Primary	Manufacturing	Services	Primary	Manufacturing	Services
Average 2005–2007	130	670	820	8	41	50
2008	230	980	1 130	10	42	48
2009	170	510	630	13	39	48
2010	140	620	490	11	50	39
2011	200	660	570	14	46	40

Source: UNCTAD (2012: 9)

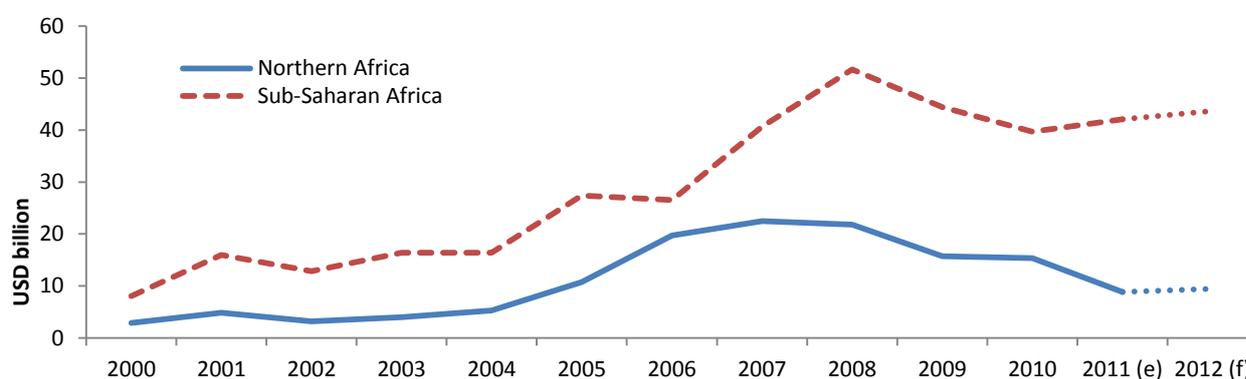
Aggregate figures for all market-entry methods of FDI show that in 2011, the manufacturing sector received the largest shares of FDI investment with 46 percent followed by services and the primary sector accounting for 40 and 14 percent respectively (UNCTAD, 2012). Only one

sub- sector within the primary sectors, namely commodity-seeking activities, received FDI flows. This confirms the continuous investment potential of natural resource-rich countries which have traditionally received the largest amount of inward flows.

3.4.2. Sectoral and Locational Breakdown of Global FDI flows to Africa

Despite the positive growth in global FDI, Africa continued to experience declining FDI inflows for the third consecutive year in 2011. Political turmoil in Northern Africa and reduction of flows from developing countries reduced overall flows in 2011. Nevertheless, SSA countries succeeded in attracting a historic \$37 billion (UNCTAD, 2012). An alternative dataset extracted from the African Economic Outlook (2012) confirms Sub-Saharan Africa’s success in attracting more FDI than in previous years. Compared to UNCTAD (2012) data, flows to SSA peaked in 2008 at roughly \$45 billion (see Figures 3.1 and 3.2). Extractive industries in resource-rich SSA are the largest recipients of Greenfield-implemented FDI projects, followed by growing flows into the banking, retail and telecommunication sectors.

Figure 3.1: Global FDI flows to Africa between 2000 to 2012 by location, in current \$ billion



Source: *African Economic Outlook (2012)*

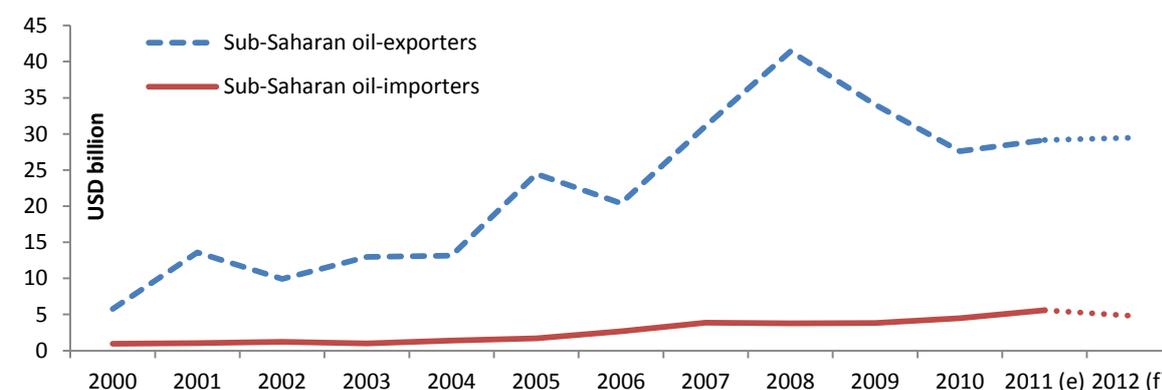
Note: The notations 2011(e) and 2012(f) indicate investment projections for the respective years.

According to the World Investment Report (UNCTAD, 2012), the largest African recipients of FDI in 2011 (with each nation receiving more than \$3 billion) were Angola, Nigeria, South Africa and Ghana; followed by Congo, Algeria, Morocco, Mozambique and Zambia each accounting for \$2 to \$2.9 billion. Between \$1 and \$1.9 billion of FDI was flowing to Sudan, Chad, Congo, Guinea, Tunisia, Tanzania and Niger. Madagascar, Namibia, Uganda, Equatorial Guinea, Gabon, Botswana and Liberia each received between \$0.5 to \$0.9 billion of funds; while \$0.1 to \$0.4 billion flowed to each of Zimbabwe, Cameroon, Côte d'Ivoire, Kenya, Senegal, Mauritius, Ethiopia, Mali, Seychelles, Benin, Central African Republic, Rwanda and Somalia. Only marginal flows (less than \$0.1 billion) were obtained by Swaziland, Cape Verde, Djibouti,

Malawi, Togo, Lesotho, Sierra Leone, Mauritania, Gambia, Guinea-Bissau, Eritrea, São Tomé and Príncipe, Burkina Faso, Comoros and Burundi (UNCTAD, 2012).

The top receiving African host nations only have one commonality: all are producers of oil, commodities or precious natural resources. Goldstein *et al.* (2006: 76) substantiate this view by attributing 50 to 80 per cent (country-dependent) of all FDI to Africa towards commodity or resource-intensive industries. According to the African Economic Outlook (2012), oil exporting countries attracted more FDI inflows than non-oil exporting countries (see Figure 3.2 below). In line with global trends discussed in the previous section, pre-crisis FDI inflows to resource-rich (oil in this instance) countries in SSA peaked at 2008 to a historic level of over \$40 billion (refer back to Figure 3.1). However, at that stage, only \$5 billion (eight percent) of all FDI inflows to SSA were directed at non-oil producing nations.

Figure 3.2: Global FDI flows to oil-rich SSA nations between 2000 to 2012, in current \$ billion



Source : *African Economic Outlook (2012)*

Note: The notations 2011(e) and 2012(f) indicate investment projections for the respective years.

According to this data, preliminary *a priori* assumptions that resource-rich countries attract the largest share of FDI can be formed. However, Sparks (2012) argues that recent FDI trends are gradually transitioning from that notion as the economic sectors of agriculture, manufacturing and service industries have received recent attention from foreign investors. This could suggest the beginning of economic diversification away from resource-extractive industries.

With respect to entry-methods of African inward FDI flows, investments in M&As slowed down over the last two years (see Table A.2 in Appendix), marking the effects of the ongoing global recession that impeded overall foreign investments. While African Greenfield Investments in the manufacturing and service sector also decreased, Greenfield Investments in the primary sector increased during 2010-2011 (refer to Table A.3 in Appendix). Table 3.3 below illustrates that the ten largest global Greenfield Investment projects in LDCs are all driven by commodity-seeking motives. Nine out of those ten projects are located in Africa, and seven are in Southern Africa.

Complementing the data presented in the previous section of this chapter, this further supports the claim that the main interest in Africa lies in its vast potential to provide precious natural resources. Naturally resource-rich countries in SSA are expected to become the fastest growing FDI recipients (UNCTAD, 2012).

Table 3.3: LDCs' ten largest Greenfield Investment projects in 2011

Host economy	Industry	Investing company	Home economy	Estimated investment (\$ million)	Estimated jobs created
Mozambique	Fossil fuel electric power	Jindal Steel & Power	India	3 000	368
Uganda	Oil and gas extraction	Tullow Oil	United Kingdom	2 000	783
Mozambique	Natural, liquefied and compressed gas	Eni SpA	Italy	1 819	161
Mozambique	Natural, liquefied and compressed gas	Sasol Petroleum International	South Africa	1 819	161
Equatorial Guinea	Oil and gas extraction	Noble Energy	United States	1 600	626
Democratic Republic of the Congo	Copper, nickel, lead and zinc mining	Freeport McMoRan	United States	850	1 459
United Republic of Tanzania	Fossil fuel electric power	Castletown Enterprises	United Kingdom	799	118
Zambia	Copper, nickel, lead and zinc mining	Non-Ferrous China Africa (NFCA)	China	700	1 201
Democratic Republic of the Congo	Iron ore mining	Sundance Resources	Australia	620	1 063
Lao People's Democratic Republic	Biomass power	Thai Biogas Energy	Thailand	558	700

Source: UNCTAD (2012: 69)

Another way of measuring the thriving importance of FDI flows is by analysing data on external financing. FDI constitutes a key medium of gross fixed capital formation, especially in resource-abundant SSA countries. According to Mills, (2010: 139), Official Development Assistance (ODA) was still the largest source of external financing in Africa less than a decade ago. Yet, recent surges in FDI directed to SSA nations have changed that composition. For the first time since 2005, FDI to Africa has now officially overtaken ODA as the major form of external financing (Sparks, 2012). This suggests that in addition to supplying natural resources to global investors, African nations have also implemented favourable investment environments to attract more foreign capital.

Figure A.4 and Table A.4 (see Appendix) provide a visual depiction of Africa's External Global Financing Flows (as percentage of GDP) and a table listing global FDI inflows to Africa between 2005-2010. Both sources were extracted from the African Economic Outlook (2012). Corresponding to that data, Table 3.4 following below groups the Top-Ten receiving host countries in SSA according to their degree of economic diversity and their main exports extracted from Table A.8 (see Appendix). When analysing these data sets altogether, it can be

validated from Table 3.4 that more than half of all global FDI to Africa indeed targets ten resource-rich⁹ Sub-Saharan African nations. Hence, this data also confirms the findings of the World Investment Report (UNCTAD, 2012) that resource-abundant countries in Southern Africa, in particular the oil-producing nations of Angola, the Democratic Republic of Congo (DRC), Nigeria and Sudan managed to secure the largest shares of global FDI.

Table 3.4: Top-Ten recipient nations of global FDI in SSA between 2005 to 2010, in percent

Rank	Country	% 2005-2010	Exports	Oil	Resources	Main 3 Exports Products	Main FDI Motives
1	Angola	19%	1	x	-	Oil	Resources
2	Nigeria	11.60%	1	x	-	Oil, Natural Gas	Resources
3	South Africa	8.25%	92	-	x	Platinum, Gold, Iron	Resources
4	Sudan	4.51%	1	x	-	Oil	Resources
5	Congo	3.88%	1	x	-	Oil	Resources
6	DRC	2.20%	6	-	x	Copper, Cobalt, Cathodes	Resources
7	Ghana	2.10%	9	-	x	Cocoa, Magnesium	Resources + Agricultural
8	Zambia	1.48%	3	-	x	Copper, Unrefined Copper	Resources
9	Madagascar	1.26%	32	-	-	Cotton products, Vanilla, Seafood	Agricultural
10	Uganda	1.25%	13	-	x	Coffee, Tobacco, Fish	Agricultural

Source: *Author's own table created with data extracted from MOFCOM (2010) and African Economic Outlook (2012)*

Note: "Exports" is a measure of export diversification and simply indicates the number of products that account for over 75 percent of exports (African Economic Outlook, 2012). The higher the number of products, the more diversified is the country's economy. Based on the "The Three Major Export Products" identified in each nation, the "Main FDI Motives" were categorised by the author as either natural resources, oil, agricultural products or a combination thereof.

As evident from the combined data in Table 3.4, foreign investment to Africa can be grouped into the following three host-country characteristics: natural resources, oil or agriculturally-motivated FDI. In addition to those three determinants, the main target countries in SSA almost exclusively comprise of highly undiversified economies. Oil-producing countries in particular resemble the least diversified economies, utilising only one product (oil) to generate export revenues. Yet, Table 3.4 also reveals a newly emerging trend. Host countries portraying potential for agricultural-related investments, such as Ghana, Madagascar or Uganda; tend to have more diversified economies than their resource-rich SSA counterparts which only rely on oil or natural resources to obtain export income. South Africa resembles a data outlier as 92 products generate export revenues in addition to its comparative advantage found in the financial services sector.

3.4.3. South-South Flows

⁹ Resource-rich here refers to any type of natural resource commodities in the form of minerals, precious metals, oil products, fresh food products or agricultural products, such as cotton or fabrics. However, a distinction will be made between resources, oil and agricultural products as this thesis progresses.

Compared to traditional North-North flows that have dominated global FDI, over the last decade significant increases in South-South investments are observed. North-North flows are defined as FDI flowing from developed home to developed host nations, whereas South-South flows are produced and received by developing nations. This changing pattern is mainly attributed to the economic slow-down of northern economies, liberalising economic reforms in developing countries, the rise in international trade agreements and an overall boost in investment capital available to developing countries (Aykut and Ratha, 2003).

In 2003, developing countries accounted for more than one third of foreign investment flows to other developing nations (UNCTAD, 2004: 3). In accordance with North-North investments, South-South flows follow the same cyclical patterns and are also attracted by similar factors as discussed in Chapter 2 (see Section 2.3 and 2.5). Compared to traditional flows, most South-South flows focus on infrastructure or resource-related projects realised through M&As (Gammeltoft, 2008: 11).

South-South cooperation, particularly amongst BRICS nations, is slowly challenging the dominant position of G-8 economies (Pereira and De Castro Neves, 2011: 1). African countries are benefitting from the growing South-South collaboration because it increases their combined political power, provides the required capital to stimulate domestic development and further strengthens African unity. Similar to Chinese outflows or global FDI, funds supplied by Southern investors predominantly target the infrastructure, manufacturing or extractive sector of resource-rich SSA host nations. Even though the share of South-South FDI is not as large as that of developed source nations, emerging Southern countries have already displaced many developed countries as supplier of alternative external financing- mainly via export credits (Sparks, 2012).

3.4.4. Determinants of FDI Flows to Africa

Plenty of scholarly work on African-specific FDI determinants has been conducted whereby various macroeconomic or microeconomic variables as well as country- and industry-specific characteristics are tested. Although Section 2.5 has already reviewed a number of theoretical FDI frameworks related to FDI determinants, researchers argue that some determinants in Africa differ to those of other regions. Therefore, this section expands the findings of Section 2.5 by investigating Africa-specific FDI attractors.

A study conducted for the Namibian Economic Policy Research Unit by Dahl (2002) established significant economic and political determinants applicable to FDI inflows to the Southern

African Development Community (SADC). Dahl tests whether good performance in the eight economic variables economic growth, literacy rate, foreign trade, regional grouping, cost of labour, GDP, competitiveness and external debt, are positively correlated to the amount of FDI received. Political variables are also tested for their causal effects on FDI flows. Political and economic indicators include budget deficits, corporate tax levels, country risk ratings, inflation rates, levels of privatisation, special FDI laws, multilateral agreements, bilateral agreements, double taxation treaties and development assistance. An existing positive relationship between the amount of FDI received and the established political or economic indicators could not be confirmed by empirical evidence (Dahl, 2002: 9-20). Instead, the availability of resources was identified as an important attractor for FDI.

In another study that seeks to explain why Africa fails to attract the same amount of FDI compared to other developing regions, Ahmed, Arezki and Funke (2005) investigate various determinants and various components of FDI directed at developing countries. This study groups determinants into six broad categories, namely macroeconomic performance, quality of institutions, investment environment, infrastructure and resources, financial development and global factors. The agglomeration effect of FDI's locational clustering, as characterised by a country's historical track record of attracting FDI, is also taken into consideration. Estimating a dynamic panel model, Ahmed *et al.* (2005: 23) confirm previous findings that most domestic (pull) factors, such as high growth, trade openness, good infrastructure and a high institutional quality, are crucial determinants for FDI in developing countries. Complementing other research, capital controls and a stable domestic currency were also regarded as significant determinants.

Morris and Aziz (2011) also investigate why host nations in SSA lag behind other competing countries. Conclusions drawn from this study further concur with the general notion that Africa's FDI determinants vary (Asiedu, 2002, 2006; Musila and Sique, 2006). Compared to most other studies which address macroeconomic variables, this study examines firm-specific determinants. Firm-specific variables are expressed as the average of "the ease of doing business index". Morris and Aziz (2011: 407) conclude that Sub-Saharan Africa host nations scoring high on variables such as starting a business, enforcing contracts, employing workers, registering property, paying taxes or trading across borders only received more FDI for limited time periods. Credit availability and the protection of investors seems particularly important to investors targeting countries in SSA (Morris and Aziz, 2011: 411). However, findings of this study are inconclusive as some of the largest FDI recipient nations in SSA, such as Angola, Nigeria or Sudan, scored very low on the "ease of doing business" index. Hence, it can be firstly

concluded that MNEs might be attracted to factors other than the ‘ease of doing business’ indicators. Secondly, the notion that sound economic investment environments attract more FDI can also be refuted.

Another research paper by Asiedu (2006: 65-74) highlights the crucial role that natural resources and large consumer markets play as FDI determinants since these two variables appear to attract the largest share of FDI reaching SSA. Nevertheless, host nations lacking either one still have the potential to attract FDI by establishing favourable institutional and legal frameworks, well-functioning infrastructure system or by keeping inflation rates at a low level. Corrupt or unstable governments, on the contrary, reduce the amount of FDI flows to SSA. Asiedu (2006: 70) emphasises that uncontrollable exogenous factors, such as the availability of natural resources or being a land-locked country, do not explicitly affect the amount of FDI received. Instead, implementing sound legal and economic policies are perceived as controllable tools able to enhance an attractive investment environment. Therefore, in contrast to Morris and Aziz’ (2011) study, both economic and political factors are found to be significant FDI determinants.

Drawing on the findings of Asiedu’s (2006) study, Musila and Sigure’s (2006: 577-593) work complemented the argument that the amount of FDI supplied to African countries greatly varies in response to specific political and regional-responsive factors. Accordingly, the distribution of inflows is unevenly skewed in favour of countries in possession of natural resources or with large market sizes. Musila and Sigure (2006: 591) advise recipient countries to align domestic regulations and development goals with the investor’s specific motives.

Asiedu (2002: 112) confirms in yet another independent investigation on African FDI determinants that only a few selected determinants actually influence the amount of FDI inflows. Trade openness, infrastructure and the rate of return on the initial FDI investment seem significant determinants in her research study. Asiedu (2002: 15) also attributes uncontrollable geographical variables to the fact that SSA is lagging behind other developing investment locations. Similar to her later work (Asiedu, 2006), this research also recognises favourable economic conditions as crucial determinants for FDI.

Since none of the discussed studies provide a satisfactory explanation for why African nations receive less FDI than other regions, further research which goes beyond the scope of this thesis is required. The reviewed literature suggests that due to its geographical, political and socio-economic challenges, Africa portrays slightly more diverse FDI determinants. Liberalised

economic environments, stable political conditions and FDI-encouraging investment laws appear to provide a good climate for FDI. A summary of the reviewed studies follows below.

Table 3.5: Summary of reviewed studies on Africa-specific IFDI determinants

Study	Purpose of Study	Findings	Determinants
Dahl (2002)	Identify important economic/ political determinants of FDI in SADC countries	No positive correlation between FDI & economic/ political indicators, FDI is driven by natural resources	Economic indicator based on eight variables, political indicator based on ten variables
Ahmed, Arezk & Funke (2005)	Identify determinants of level and compositions of capital flows into developing countries	Domestic pull factors are most significant factors	High growth, trade openness, good infrastructure, a high institutional quality
Morris & Aziz (2011)	Investigate whether 'ease of doing business index' affects FDI	Inconclusive relation between ease of doing business index and amount of FDI received	Starting business, credit availability, paying taxes, trading across borders, registering properties, employing workers. enforcing contracts
Asiedu (2006)	Investigate the role of natural resources, market size, government and economic policies as FDI determinants in SSA	Availability of natural resources and large market sizes are the most important determinants though they are not explicit	Natural resources, large market size, adequate infrastructure, minimal inflation, efficient legal system, good investment framework
Musila & Sigure (2006)	Investigate the role of legal framework and successful strategies as FDI determinants	Uneven distribution of FDI mainly depending on natural resources and market size, synchronize countries' individual goals with investors motives or preferences	Natural resources, large market size, sound economic policies, favourable investment regulations, political stability
Asiedu (2002)	Investigate whether FDI determinants are different in Africa than to the rest of the world	Determinants in Africa are different, region is less favourable to investors than others	Trade openness, good infrastructure, rate of return on investment

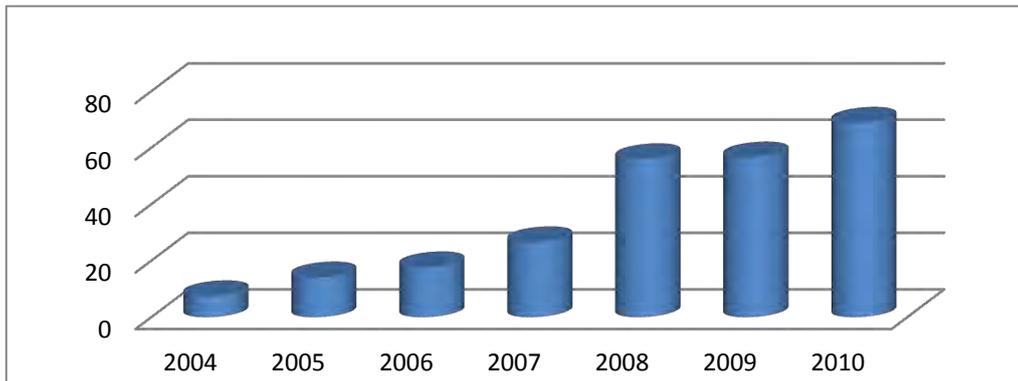
Source: *Author's own table*

3.5. CHINESE FDI FLOWS

3.5.1. Sectoral and Locational Breakdown of Global Chinese OFDI Flows

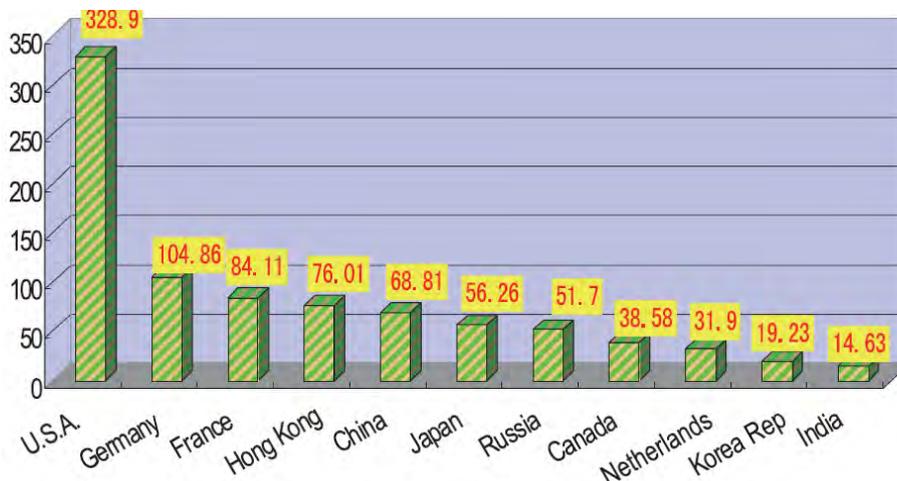
On a global level, China has evolved from a dominant recipient of FDI to an important supplier of funds. Figure 3.3 displays that when compared to the year 2004, China’s global outward FDI (OFDI) has more than tripled in 2008 and maintained an historic all-time peak ever since.

Figure 3.3: China’s global OFDI grows between 2004 to 2010, in current \$ million



Source: MOFCOM (2010) and author’s own calculations

Figure 3.4: Major suppliers of global OFDI flows in 2010, in \$ billion



Source: MOFCOM (2010: 80)

Note: Data compiled by the Ministry of Commerce of the People’s Republic of China (MOFCOM, 2010) reports that OFDI flows in 2010 amounted to \$68.81 billion. 2010 was the most current data set at the time of writing. A massive \$60.18 billion or 88 percent of all Chinese OFDI flows target non-financial industries (see Table 3.6 on the following page).

In 2010, China was ranked as the world’s fifth largest supplier of foreign investment capital; surpassed only by the USA, Germany, France and Hong Kong (MOFCOM, 2010). Figure 3.4 represents a visual overview of Chinese OFDI in 2010 compared to the world’s leading OFDI

suppliers. In that year, China and India were the only developing countries amongst the largest global OFDI producers, a phenomenon previously discussed in Sections 3.4.

Table 3.6: China's global OFDI Flows and Stock in 2010, in \$ billion

	OFDI Net Flows		OFDI Net Stock	
	OFDI net flows	OFDI net flows %	OFDI net stock	OFDI net stock %
Equity	20.64	30%	59.73	19%
Reinvested Earnings	24.01	35%	120.7	38%
Other Investments	24.16	35%	136.78	43%
TOTAL	68.81	100%	317.21	100%
Financial OFDI	8.63	12%	55.25	17%
Non-Financial OFDI	60.18	88%	261.96	83%

Source: MOFCOM (2010) and author's own calculations

Note: FDI flows are defined as “capital provided by a foreign direct investor to a FDI enterprise, or capital received by a foreign investor from a FDI enterprise. The flows comprise equity capital, reinvested earning and intra-company loans”. FDI stocks, on the other hand, are defined as “the value of the share of their capital and reserves (including retained profits) attributable to the parent enterprise plus the net indebtedness of affiliates to the parent enterprise. (UNCTAD, 2009 cited in Cattaneo, 2011: 43).

In spite of an overall increase in Chinese flows, Table 3.7 below reveals that China’s global FDI flows in 2010 only accounted for 5 percent of total global flows. Chinese OFDI stock is even smaller, contributing only 2 percent towards global investment stocks in 2010.

Table 3.7: China's OFDI Flows and Stock as part of global FDI in 2010, in \$ billion

FDI FLOWS PER REGION	OFDI Net Flows		OFDI Net Stock	
	OFDI net flows	OFDI net flows %	OFDI net stock	OFDI net stock %
Non-Chinese Global OFDI	1251.19	95%	20082.79	98%
China's FDI	68.81	5%	317.21	2%
TOTAL WORLD	1320	100%	20400	100%

Source: MOFCOM (2010) and author's own calculations

The sectoral distribution of Chinese global OFDI flows from 2004 to 2010 (see Table A.5 in Appendix) reveals unexpected findings. According to this data (MOFCOM, 2010), Chinese global OFDI investment between 2004 and 2010 targeted a total of 19 different sectors, although significant investments were only recorded in 12 of those sectors. Contrary to preliminary assumptions, the Leasing and Business Sector is the largest recipient of Chinese OFDI with a massive 36 percent of flows invested during 2004 to 2010. The mining sector which has traditionally received the largest share of FDI comes in second with 17 percent, followed by Wholesale and Retail Trade with 12 percent and the Banking sector securing 15 percent. The construction sector received marginal attention by Chinese investors, suggesting

that most construction projects are not exclusively funded through FDI. Moreover, Chinese FDI outflows in oil-related industries do not appear in this table. The composition of each sector cannot be derived from the data sources and no explanation was found as to why the Leasing and Business Service Sector is a data outlier. This could be an indicator that China might “hide” its oil investments in other sectors, possibly even in the Leasing and Business Service Sector. A more thorough discussion on the composition and nature of Chinese FDI flows to SSA follows in Section 3.5.3.

3.5.2. Sectoral and Locational Breakdown of Chinese OFDI Flows to Africa

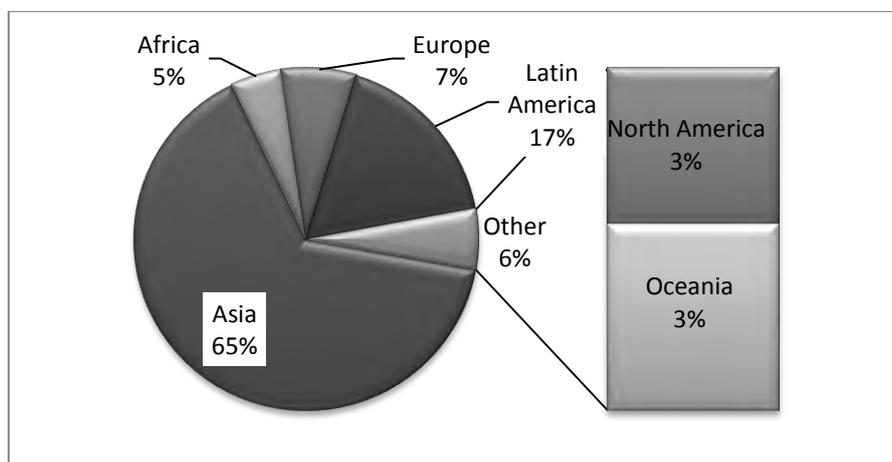
In 2010, a comprehensive report on aggregate Chinese FDI data was released by the Ministry of Commerce of the People’s Republic of China (MOFCOM). At the time of writing, the *2010 Statistical Bulletin of China’s Outward Foreign Direct Investment* lists the most detailed information on China’s FDI and was therefore utilised as one of the major data sources throughout Chapter Three and Chapter Four. However, data on foreign external assistance must be analysed with caution. Standards in reporting methods greatly vary across different regions of the world. Gelb (2010) warns that most empirical studies on Chinese FDI to SSA are majorly constrained by inaccurate data, which inevitably, reduces their overall value.

As noted previously, most African nations have promoted aggressive investment incentives to attract a more diverse pool of foreign capital. While remaining a top destination for foreign capital itself, China now also supplies moderate amounts of FDI to Africa. Despite the current media buzz, the amount of Chinese FDI to Africa is relatively small compared to its OFDI to the rest of the world (see Tables A.6 and A.7 in the Appendix). Only five percent of China’s total overall expenditure of global FDI was directed at Africa (Devonshire-Ellis, 2010). According to the author’s own calculation within the investment period of 2005 to 2010, only 3.43 percent of Global FDI to Africa was produced by China. Section 4.1, and more specifically Table 4.1 which shows Chinese FDI to the Top-Ten SSA recipient countries as percentage of global FDI outflows between 2005 to 2010 (see page 76), will elaborate on this in more detail.

Investments in Africa were almost non-existent between 2004 and 2006. In 2006, Chinese FDI to Africa tripled before reaching an all-time record high in 2008. The aftermath of the financial crisis in 2008 slowed down global trends and did not spare Africa. Whereas Chinese OFDI flows to Africa fell after 2008, global flows to Africa increased again in 2010 and reached a new post-crisis high in 2011 (UNCTAD, 2012).

Figure 3.5 below reveals that over the investment period 2004 to 2010, only five percent of Chinese aggregate FDI was flowing to Africa. The largest recipient of Chinese OFDI was Asia itself with 65 percent, followed by Latin America and Europe with 17 and 7 percent respectively. Africa was only the fourth largest receiver of Chinese FDI (at five percent) followed by North America and Oceania which received the smallest investment flows of 3 percent each (MOFCOM, 2010). Despite Africa’s continuous increase in FDI inflows experienced between 2006 to 2010, this growth was off a very small base. Furthermore, the year 2008 must be treated as a data outlier due to China’s \$5 billion heavy investment deal in South Africa’s Standard Bank.

Figure 3.5: China's global OFDI flows by geographical regions between 2004 to 2010, in percent



Source: *Author's own calculations with data obtained from MOFCOM (2010)*

During the period 2004 to 2010, 50 African nations benefitted from Chinese OFDI (MOFCOM, 2010: 83-84). Sub-Saharan African nations in particular have attracted the largest shares of Chinese OFDI flows, although 49 percent of flows reaching SSA were secured by South Africa alone. This seems to indicate that China does not shy away from untraditional investment regions characterised by lower economic growth rates, smaller market sizes, less political stability, lower human capital index and inadequate infrastructure quality. Based on those characteristics, SSA should be regarded as an untraditional investment region.

Despite the heavy media coverage about China’s substantial engagement in Angola, merely 1.39 percent of aggregate Chinese flows to SSA are actually directed at Angola (MOFCOM, 2010). Surprisingly, Angola accounts as the bottom receiver amongst the Top-Ten SSA recipient nations of Chinese flows (see Table 3.8 below). Although an increase in FDI inflows to Angola cannot be disputed, this does not explicitly classifies China’s engagement in Angola as FDI transactions. As stated previously, Chinese FDI investments might be “hidden” in other flows.

Table 3.8: Top-Ten recipient nations of Chinese FDI in SSA between 2004 to 2010, in percent

Rank	Country	% 2004-2010	Exports	Oil	Resources	Main Three Export Products	Main FDI Motives
1	South Africa	49%	92	-	x	Platinum, gold, iron	Resources + Finance Sector
2	Nigeria	9.09%	1	x	-	Oil, natural gas	Oil
3	Zambia	5.23%	3	-	x	Copper, unrefined copper	Resources
4	DRC	5.05%	6	-	x	Copper, cobalt, cathodes	Resources
5	Niger	2.97%	1	-	x	Uranium, light oils	Resources
6	Sudan	2.88%	1	x	-	Oil	Oil
7	Ethiopia	1.56%	3	-	-	Coffee, Sesamum seeds, flowers	Agricultural
8	Kenya	1.40%	48	-	-	Tea, flowers, coffee	Agricultural
9	Madagascar	1.40%	32	-	-	Cotton products, vanilla, seafood	Agricultural
10	Angola	1.39%	1	x	-	Oil	Oil

Source: *Author's own table created with data extracted from MOFCOM (2010) and African Economic Outlook (2012)*

Note: "Exports" is a measure of export diversification and simply indicates the number of products that account for over 75 percent of exports (African Economic Outlook, 2012). The higher the number of products, the more diversified is the country's economy. Based on the "The Three Major Export Products" identified in each nation, the "Main FDI Motives" were categorised by the author as either natural resources, oil, agricultural products or a combination thereof.

According to Table 3.8 (which was created by merging Table A.7 and Table A.8 both listed in the Appendix), by far the largest recipient of Chinese OFDI in SSA is South Africa, capturing almost 50 percent of aggregate African inflows. As mentioned previously, South Africa has to be treated as a data outlier amongst all beneficiaries in SSA. Resource or oil-rich nations, such as the DRC, Nigeria, Niger, Sudan or Zambia follow respectively. The bottom half of China's top ten OFDI recipients in SSA all portray agricultural potential. In accordance with the global trends outlined in the World Investment Report (UNCTAD, 2012), the availability of natural resources, oil, other precious commodities or agricultural products appear to be the biggest attractors for Chinese investment flows into SSA with the exception of South Africa.

Analysing Table 3.8 further suggests supportive evidence for the *a priori* assumption that resource-rich nations in SSA are indeed preferred locations for Chinese investors. Angola, Nigeria and Sudan which are all amongst the top ten recipients of Chinese OFDI in SSA have poorly diversified economies but rather rely on only one export product, namely oil, to secure at least 75 percent of all export revenues. In regards to the resource-rich country Niger, the commodity uranium secures over 75 percent of export revenues. Amongst the other top receivers, Zambia and the DRC exhibit three and six products that account for 75 percent of exports respectively. Both countries present with only slightly diversified economies as well.

Amongst these minimally diversified economies, only natural resources or commodities seem to be able to attract FDI inflows.

In other words, although China does target medium-diversified economies in SSA, most of these nations are also resource-abundant. Interestingly, the largest recipient of Chinese OFDI, South Africa, has a highly diversified economy of 92 export products accounting for at least 75 percent of exports (see Table 3.8). Precious metals, especially platinum and gold, are found in vast amounts. But South Africa also represents an exception with its sophisticated financial services sector capable of attracting foreign investments. In line with FDI theory, this supports the strategic asset-seeking investment motives and proposes that South Africa's investment attractiveness is enhanced by three determinants. Its highly diversified economy but also the availability of natural resources and a well-functioning financial industry all contribute towards its lucrative investment environment. Table 3.8 further suggests an growing interest in Africa's agriculturally-motivated FDI inflows. Three countries, namely Ethiopia, Kenya and Madagascar are amongst the ten largest recipient of Chinese FDI in SSA, primarily for their agricultural attractiveness. Interestingly, these "agricultural-nations" have more diversified economies compared to all other resource-rich nations, excluding South Africa.

Preliminary conclusions drawn from this data confirm that Chinese FDI flows to SSA outside of South Africa are predominantly motivated by two reasons, namely short-term goals to secure access to natural resources or other precious commodities and long-term (agricultural) goals for the purpose of food or land security. In accordance with global investment trends discussed in Section 3.4, this implies that the major share of Chinese FDI to SSA, excluding South Africa, indeed targets the primary sector and extractive industries (UNCTAD, 2012). A more thorough discussion of relevant investment motives will follow in Chapter Four where specific Sino-African investments deals are analysed through an individual case study approach.

Compared to global FDI flows to Africa between 2005-2010 (see Table A.4 in the Appendix), Chinese MOFCOM (2010) data as synthesised in Table 3.8 identifies different countries as Top-Ten SSA recipient nations. Table 3.9 below identifies the Top-Ten recipient nations of global FDI flows reaching Africa between 2005-2010. According to this dataset, Angola, which was the bottom recipient of Chinese inflows, secured the largest share of global FDI flows to SSA with 19 percent. Nigeria and South Africa followed respectively. Recall that based on the Chinese FDI dataset, South Africa was the dominant recipient nations securing almost 50 percent of all Chinese inflows. Ethiopia and Niger ranked amongst the Top-Ten nations amongst Chinese FDI beneficiaries in Africa but do not appear in the highest ranked global inflows. Uganda and

Ghana, on the other hand, received significant inflows from global FDI producers but not from Chinese investors. Similar to the analysis with Chinese data, the Top-Ten SSA recipient nations of global FDIs were also grouped based on to their potential resources. Accordingly, natural resources, oil, agricultural potential and an attractive financial sector in the case of South Africa were also identified as the main FDI determinants in Sub-Saharan African host nations. Whereas Chinese OFDI targets three oil-abundant nations in SSA, global OFDI benefits one additional oil-producing country as well as one other nation, namely Ghana, with both agricultural and resource-related investment potential.

Table 3.9: Top-Ten recipient nations of global FDI in SSA between 2005 to 2010, in percent

Rank	Country	% 2005-2010	Exports	Oil	Resources	Main Three Export Products	Main FDI Motives
1	Angola	19%	1	x	-	Oil	Oil
2	Nigeria	11.60%	1	x	-	Oil, natural gas	Oil
3	South Africa	8.25%	92	-	x	Platinum, gold, iron	Resources + Finance Sector
4	Sudan	4.51%	1	x	-	Oil	Oil
5	Congo	3.88%	1	x	-	Oil	Oil
6	DRC	2.20%	6	-	X	Copper, cobalt, cathodes	Resources
7	Ghana	2.10%	9	-	X	Coca, magnesium	Resources + Agricultural
8	Zambia	1.48%	3	-	X	Copper, unrefined copper	Resources
9	Madagascar	1.26%	32	-	-	Cotton products, vanilla, seafood	Agricultural
10	Uganda	1.25%	13	-	x	Coffee, tobacco, fish	Agricultural

Source: *Author's own table created with data extracted African Economic Outlook (2012)*

Note: "Exports" is a measure of export diversification and simply indicates the number of products that account for over 75 percent of exports (African Economic Outlook, 2012). The higher the number of products, the more diversified is the country's economy. Based on the "The Three Major Export Products" identified in each nation, the "Main FDI Motives" were categorised by the author as either natural resources, oil, agricultural products or a combination thereof.

3.5.3. Determinants and Motives of Chinese OFDI flows to Sub-Saharan Africa

3.5.3.1. Determinants of Chinese OFDI

In comparison to Dunning's (1979) traditional Eclectic Theory (see Section 2.4.2.4) which focuses on utilising existing strategic assets, most modern theories explaining the nature of MNEs have focused on gaining access to specific resources or assets by using internalisation strategies. Rui and Yip (2008: 183) appraise Chinese FDI to Africa as a combination of traditional and modern MNE theories. In accordance with traditional FDI theory, the authors argue that Chinese MNEs exploit competitive advantages through niche markets, cheap production costs or institutional advantages. Nevertheless, conformity with internalisation theory

(see section 2.4.2.3) also exists as Chinese investments only occur upon securing a unique firm-specific advantage which will eventually be internalised in the process.

As a result of China's growing global presence, a number of studies investigating the determinants of Chinese OFDI have evolved. Buckley, Clegg, Cross, Liu, Voss and Zheng (2007) test whether mainstream FDI theories of market imperfections, ownership advantages and institutional factors are relevant determinants of Chinese OFDI or if a special set of determinants is necessary in the case of Chinese investments. According to Buckley *et al.* (2007: 501), the constraints of China's capital market imperfections allow for loans to be secured at below market rates. Low-cost capital is used to finance overseas projects, especially those pursuing asset-seeking or resource-extractive motives. China's institutional environment as characterised by the government's dominant position on any legislative level significantly contributes towards the internalisation of Chinese overseas investment. China's restrictive domestic business environment therefore encourages investors to seek opportunities abroad (Buckley *et al.*, 2007: 503; Rui and Yip, 2008: 222). Buckley *et al.* (2007) identify market size, trade liberalising reforms and the availability of natural resources as the major determinants of Chinese OFDI.

Contrary to the findings of The China Analyst (2012), strategic asset-seeking motives are insignificant in other studies (Buckley *et al.*, 2007: 510). Moreover, the combination of firm, industry and institution-specific factors are other relevant determinants in explaining China's OFDI flows (Wang *et al.*, 2012). This contradicts the narrow-minded traditional view which emphasises asset-exploitative motives. Nevertheless, conformities between the established determinants and the theory presented in Chapter Two exist as some of the Perfect Market Theories of FDI as well as Dunning's (1979) O-L-I Eclectic Theory seem applicable to Chinese FDI (Buckley *et al.*, 2007).

3.5.4. Motives for Chinese OFDI Flows to Sub-Saharan Africa

Except for reasons of efficiency, all FDI motives included in section 2.3, namely horizontal, extractive, technology and conglomerate-seeking FDI, apply in the case of China. Contrary to popular debates, China's substantial investments in African are not purely undertaken for extractive-seeking motives. Indeed, a more careful review of current literature presents a very different picture that identifies a variety of multi-faceted motives for China's expansion into Africa. It should also be noted that China's Sino-African policies have changed over time "from

the ideologically-driven solidarity of anti-colonialism and the Cold War to pragmatic, market-oriented economic engagement” (IRIN, 2006).

3.5.4.1. China’s Own Experience of IFDI as a Developing Country

China used to be a large recipient of aid and foreign investment itself. Striking commonalities between China’s developmental state in the 1970s and Africa’s current structures exist - both were or still are agriculturally-driven economies with a vast amount of mineral resources (Brautigam, 2009: 46). Many of China’s current foreign aid and FDI practices, such as the use of export credits or resource-backed loans, are actually similar repetitions of struck deals between China and Japan in the late 1970s (Brautigam, 2009: 24).

In order to secure extraction rights in China’s coal and oil reserves, Japan utilised various FDI tools from until 1973 onwards. The first legislative contract governing the long-term relationship between the two countries was signed in 1978 whereby Japan arranged to export technology, plants and material worth \$10 billion. China, on the other hand, agreed to repay the Japanese investment by deferred coal or crude oil exports (Brautigam, 2009: 46). By the end of 1978, more than 74 contracts between Japanese investors and the Chinese government had been signed. These governed China’s repayments of coal and oil exports in return for receiving sophisticated knowledge and complementary FDI funds for infrastructure projects from Japan. Contracts were considered a win-win situation for both countries and created a successful prototype for China’s own contemporary FDI practises, including the extensive usage of export-credits and resource-backed loans. Furthermore, China’s similarities to developing African nations provide a distinctive advantage most traditional donors never had (Brautigam, 2009: 46-51).

3.5.4.2. Extractive-Seeking FDI

Even so, China’s motives are contradictory in nature. Many scholars agree that China’s main interest in African is centred on its hunger to secure the spiralling demand for precious natural resources and commodities (Alden, 2005: 148; Buckley *et al.*, 2007; Gammeltoft, 2008: 10; Provost, 2011; Zafar, 2007: 108; Zweig and Jianhai, 2005: 25). Opponents of China’s aggressive resource strategy go as far as predicting a resource war over African commodities in the near future (Michel and Beuret, 2009: 77). Supporters of the classical dependency theory stress the one-sided exploitation of Africa’s resources by commodity-hungry Chinese investors who use financial incentives as a way of keeping African nations dependent on monetary inflows. Opposing views acknowledge the beneficial impacts of China’s OFDI in SSA. An interesting point was raised by Obi (2009: 203) who postulates that “what has changed is the increased

bargaining power of petro-states to demand more in exchange for access to their oil reserves”. Only time will tell whether China’s involvement in Africa presents a new form of imperialism, (also referred to as neo-colonialism) that expands the traditional scramble for African commodity by foreigners (Melber and Southall, 2009: xx; Zhao, 2011c).

Indeed, when applying Dunning’s (1979) O-L-I Eclectic Theorem and more specifically the locational advantages (see Section 2.4.2.4), the commodity-hungry hypothesis can be supported. Since Africa’s main locational advantages still prevail in its resource abundance, it appears only natural that the majority of FDI flows to Africa benefit the primary (extractive) sector. A variety of different investment motives complement mining-induced inflows (Narula and Dunning, 2000: 151).

3.5.4.3. Strategic-Asset-Seeking FDI

In addition to resource-extractive motivated FDI, China is interested in gaining asset-specific advantages from their overseas investments (Rui and Yip, 2008: 221). Strategic asset advantages entail absorbing superior technologies, gaining advanced knowledge in international operations or acquiring skills in local distribution networks or brand management. An article published in *The China Analyst* (2012: 11) complements the notion that Chinese investors are interested in securing strategic assets by acquiring market shares or securing ownership positions in foreign brands and technologies. Considering the underdeveloped state of most SSA nations (excluding South Africa), asset-seeking motives do not seem to be of relevance here. However, part of China’s FDI to South Africa can be attributed to asset-seeking motives. For example, South Africa’s sophisticated financial sector offers plenty of opportunities for Chinese investors to absorb superior knowledge (Cattaneo, 2011). Section 4.2.1 will address South Africa’s case study in more depth.

3.5.4.4. Politically- Motivated FDI

Manipulating foreign policies could be regarded as one of the political reasons behind China’s engagement in Africa. Researchers agree that Chinese OFDI is gradually starting to challenge the still prevailing Western dominance in most developing countries since the provision of financial, political and humanitarian support has found great support amongst SSA host nations (Alden, 2005; Brautigam, 2009; Zweig and Jianhai, 2005). This kind of assistance could be perceived as a form of symbolic diplomacy. China thereby agrees to finance African infrastructure projects that are simultaneously linked to Chinese political interests. Gaining political support to isolate Taiwan or Tibet, securing votes in UN related affairs or exerting growing influence in

multilateral organisations, such as the WTO, are currently the top priorities on China's political agenda - all of which are currently supported by almost all Sub-Saharan Africa host nations.

Although China's interests in Africa for the sake of gaining political support represents a valid reality, "much of the criticism directed toward China in Africa is more an indicator of Western fear of being challenged in territory historically considered as its own backyard than motivated by genuine concerns for the African development prospects" (Melber, 2009: 62). Irrespective of China's political agenda, other research affirms that "strengthening cooperation with developing countries through economic and technical support has become a key part of China's foreign and economic policy" (IRIN, 2006) - and Western criticism might therefore not be entirely justifiable.

3.5.4.5. Accumulated Wealth-Related FDI

China's relatively high household and corporate savings rate is considered as another investment incentive. Morck, Yeung and Zhao (2008: 343) observe that a significant portion of Chinese FDI-engaging State-Owned-Enterprises (SOEs) do not pay out dividends to investors. Instead, firms' accumulated retained earnings are used to invest in more lucrative and profitable opportunities abroad. Chinese OFDI could therefore be regarded as a profitable method to reinvest excessive corporate savings. Not only do the high corporate and household savings rates contribute towards an increase in Chinese OFDI activities, but so does the government's accumulation of foreign reserves. Gammeltoft (2008: 10) indicates that a large amount of Chinese investments directed at high-priced securities in American and European nations went unnoticed without receiving a lot of media attention. Excessive foreign reserves are thereby recycled into profitable US securities, supporting the notion that China's newly acquired wealth is another important foreign investment motive (Goldstein, Pinaud, Reisen and Chen, 2006: 16)

3.5.4.6. Horizontal (Market-Seeking) FDI

Horizontal-driven (market-seeking) FDI motives also apply in the case of China. Multiple sources report the flooding of African markets with cheap low value consumer products that would otherwise not have found a customer base in the over-crowded Chinese market (Alden, 2005: 150; Claassen, Loots and Bezuidenhout, 2011: 4; Zafar, 2007: 111). Most of the Chinese consumer goods flooding the African markets are selling for a fourth of the equivalent African domestic prices (Michel and Beuret, 2009: 115). Hence, the African continent has been described as a sanctuary for "low-cost Chinese motorcycles, electronic goods, and T-shirts, benefiting the consumers in the continent" (Zafar, 2007: 105). Although African consumers definitely benefit

from those low-priced products, Chinese imports pose a significant threat to domestic production in Africa.

3.5.4.7. Profit-Seeking FDI

The quest for competitive and profitable business opportunities adds to the motivating factors behind China's "African Safari" (Brautigam, 2009: 15; Whitehead and Green, 2012). Due to the restrictive domestic business environment and overcapacity of Chinese firms, inventive entrepreneurs have recognised overseas business operations as promising alternatives. Market access, competitive pressure in the domestic Chinese market and the opportunity to move excessive production abroad are identified as major investment incentives for Chinese entities to invest abroad (ADB, 2011: 40). Whereas Western entrepreneurs shy away from Africa's risky investment environment, Chinese investors see opportunity for long-term profits considering their willingness to implement experimental approaches instead of focusing on certainties (Brautigam, 2009: 16; Michel and Beuret, 2009: 5). Compared to traditional FDI suppliers, Chinese investors also appear to be less risk-averse and more flexible with regards to business standards (Goldstein *et al.*, 2006: 84).

3.5.4.8. Agriculturally-Seeking FDI

Because textile, apparel and food products constitute the majority of Sub-Saharan Africa's non-commodity exports to China, agricultural-seeking incentives are also identified as China's possible investment motives (Zafar, 2007: 115). Enhancing food security, securing ownership rights to arable land in SSA, setting up agricultural plantations and improving technology are all part of China's long-term goals as spelled out in its mutually-beneficial African policies of 2006. (Brautigam, 2009; Brautigam and Xiaoyang, 2009). Chapter Four will further elaborate on Chinese agriculturally-motivated FDI in SSA.

Some researchers argue that China's agricultural involvement in Africa is a way of relocating displaced Chinese farmers who have lost their land as part of China's urbanisation processes. Furthermore, with its rapidly growing population, China will eventually reach the critical point where it cannot stay agriculturally self-sufficient. 2003 already saw China becoming a net-food importer. As Western donors and aid agencies mostly neglected to invest in Africa's agricultural sector, China's investment could now become a viable opportunity for local African farmers to absorb superior production technology. Increasing efficiency as well as reaching food security could be possible positive spillovers from agriculturally-motivated FDI activities (AATF, 2010; Edinger and Sandrey, 2010).

3.5.5. Nature of Chinese OFDI flows to Sub-Saharan Africa

Extending assistance to African nations is not a recent phenomenon but has been an on-going trend in China's diplomatic foreign policies since 1949. Brautigam (2009: 34) claims that China offered foreign aid to more than 37 African nations during the 1970s - more than most of Africa's former communistic ally, the Union of Soviet Socialist Republics, ever had.

Current funding for African host countries is generated from export-credits, concessional loans, foreign debts cancellations, grants, zero- interest loans and improving trade relations by establishing Special Economic Zones (SEZ). Even though none of those instruments qualify as FDI mediums per se, most are included as FDI transactions in official reports. According to the IMF (2003), Chinese interest-free loans and all aid grants are supplied by the state-operated Ministry of Commerce (MOFCOM). While zero-interest loans are only granted to finance infrastructure projects in stable and less risky developing African nations, grants are intended to benefit social projects regardless of the countries' riskiness (Grimm, Rank, Schickerling and McDonalds, 2011: 10).

Government loans are offered at slightly below competitive commercial rates with an extended loan period of 12 to 15 years followed by an extended grace period compared to traditional loans (Brautigam, 2009: 335). Grace periods are usually not offered by Western funding. However, only a limited amount of loans extended to African countries are actually subsidised by the Chinese government. With respect to FDI instruments, MOFCOM and China's Eximbank (a more detailed discussion of both follows below) are the most important institutions to channel funds to Africa. In addition to these bilateral connections, multilateral institutions, such as the China Africa Council which collaborates with the UN Development Program, provide additional mediums to enhance investments of privately owned Chinese companies in Cameroon, Ghana, Mozambique, Nigeria, South Africa and Tanzania (IRIN, 2006).

Considered to be the first of its kind, a White Paper on foreign aid released by the Chinese government in 2011 is the first official record that provides a comprehensive account of China's foreign aid policies. This white paper was composed to refute allegations of China's resource exploitation. Accordingly, 40 percent of all Chinese foreign aid is classified as grants with the remaining 60 percent consisting of zero-interest or concessional loans (Provost, 2011). Nevertheless, whereas some reports include components of FDI either as financial aid flows,

Official Development Assistance (ODA) or Other Official Flows (OOF)¹⁰, others list them as part of aggregate FDI figures. For example, Chinese institutions might categorise different ODA instruments as FDI while Western institution might account ODA as official foreign aid instead or vice versa. The following section will address the issue on data inaccuracy in more depth.

3.5.5.1. Classification of FDI, ODA and OOF

As acknowledged in Section 3.5.5, caution must be taken when analysing quantitative data on Chinese FDI. Inconsistencies in FDI data published from different (country) sources provide the major constraint for this research study. Most of China's development projects cannot exclusively be classified as ODA, OOF or FDI according to their definition but are a combination of multiple mediums. The limiting nature of available metadata and inconsistencies in data computation negatively impacts a compatible comparison of Chinese ODA, FDI or OOF (OECD, 2006: 62; Gelb, 2010). Eastern publications not only apply different sets of FDI definitions, but also utilise different accounting standards compared to reports compiled in the Western hemisphere (Gelb, 2010). Furthermore, Sandrey cited in Hartzenberg, Erasmus and Du Pisani (2012: 2004) denote that statistics on FDI outflows and inflows do not match up, as required by the Balance of Payments accounting standard. The removal of capital controls which required FDI transactions to be recorded more frequently also contributes towards data inaccuracy (Kaplinsky and Morris, 2009: 5). Despite the heavy critique, Gelb (2010:6) credits MOFOMC (2010) data, which was heavily drawn upon in Chapters Three and Four, to be more reliable from 2003 onwards.

Chinese foreign assistance might take the form of technical assistance, medical assistance, food relief, project support, debt cancellation, humanitarian assistance, overseas scholarships, military support, poverty alleviation projects or loans supporting joint ventures (Brautigam, 2011a: 760; Grimm, *et al.*, 2011: 8). Additionally, zero-import tariffs and import duties exemptions for more than 180 products from African nations have been approved by the Chinese government since 2005 (Zafar, 2007: 117). With regards to FDI investments, most Chinese funds are targeting large-scale infrastructure projects. Although Beijing perceives the Sino-African cooperation as a mutually beneficial investment relationship, construction projects aimed at visible landsite (sport stadiums or government buildings for example) do not entail poverty-reducing aspects. Table

¹⁰ For a definition of FDI, refer back to Chapter One. According to the IMF (2003), Official Development Assistance (ODA) is defined as external funding provided by governmental agencies with the intension of promoting economic development and welfare. ODA instruments have a concessional grant attribute of at least 25 percent but exclude export credits. All other financial flows produced by the foreign sector that do not qualify as FDI or ODA are categorised as Other Official Flows (OOF). Such flows either finance projects that do not have clear developmental goals or grant attributes of less than 25 percent (IMF, 2003).

3.10 lists the number of completed Chinese funded projects in Africa in 2009. In numerical terms, Chinese aid to Africa between 2000 to 2009 rose tenfold (FOCAC, 2011). Furthermore, China promised to increase its assistance to more than double previous levels and to pledge an additional \$5 billion towards the China-Africa Development Fund (UN Conference, 2011a: 3).

Table 3.10: Number of completed Chinese projects in Africa by 2009

Schools	Agricultural Projects	Industrial Projects	Hospitals	Sports Venues	Conference Centres	Others	Total
71	142	145	54	53	62	357	884

Source: FOCAC (2011)

In terms of cash aid, Beijing does not supply funds that directly supplement government budgets and unlike more sophisticated donor nations, Chinese funds are not channelled through a specific funding agency. Overseas consulates and embassies distribute the capital in host nations. (Brautigam, 2009). Most importantly, in contrast to Western lending approaches, China refrains from imposing rigorous economic, humanitarian or political conditions on its foreign finance packages. Historical foreign assistance policies from the West (carried out by the World Bank, IMF etc.) imposed structural adjustment programs which aimed to enhance growth and productivity by liberalising and opening African economies to global trade (Reed, 2001: 12). A new approach followed shortly after when international lending institutions tied financial assistance to the good governance. The good governance agenda imposed even more interfering stipulations on African recipient nations. By contrast, China's non-interference foreign aid policy is argued by some to leave Africa even more vulnerable to future corruption, less transparency in commodity-revenues and the neglect of democratic and humanitarian reforms (Zafar, 2007: 106).

The establishment of Special Economic Zones (SEZs) is another distinctive trade mark of China's own successful development journey towards industrialisation. In an effort to increase its attractiveness to foreign investors, China created four SEZs offering preferential tax treatment and infrastructure systems in 1979 (Brautigam and Xiaoyang, 2011: 70-72). According to Brautigam (2011c), such zones help raise the quality of infrastructure, improve manufacturing sectors and overcome institutional challenges within a narrow geographical segment. Offering favourable conditions for Chinese investors, similar economic enclaves in Africa are now expected to boost export revenues and to create local jobs (Whitehead and Green, 2012).

Zones are created, run for profit and serviced by Chinese enterprises with the help of governmental subsidies. An open tender system awards the lowest bidding Chinese company the right to establish a SEZ at their suggested location. No uniform SEZ model is followed but instead, a multi-purpose system focusing on scientific entities, technology parks or manufacturing and processing facilities is implemented (Brautigam and Xiaoyang, 2011: 81-72). Currently, seven SEZs exist in Algeria, Egypt, Ethiopia, Mauritius, Nigeria (two zones) and Zambia. Five additional zones have been already planned for in the future.

3.5.5.2. China's Policy Banks

90 percent of ODA, OOF and FDI funds are channelled through the MOFCOM (Grimm *et al.*, 2011: 8), making it the most important institution to handle overseas investments. The three state-owned policy-banks, namely Agricultural Bank, China Development Bank (CDB) and Eximbank (also referred to as Export-Import-Bank), plan and implement the majority of ODA and FDI activities (Brautigam 2009: 80). Offering buyer and seller credits in addition to concessional loans, Eximbank is regarded as the most influential institution in respect to Sino-African relations. CDB operates on a domestic level but most recently also began to provide non-concessional loans to African nations as manager of the market-based China-Africa Development Fund. According to Grimm *et al.* (2011: 18), this fund supports Chinese entrepreneurs who wish to engage in African infrastructure or joint venture projects with managerial and financial advice. In 2007, an equivalent of \$5 billion was pledged towards this equity fund by the Chinese government.

3.5.5.3. Eximbank of China

All concessional loans are supplied by the state-owned Eximbank of China. Accordingly, they do not qualify as foreign aid but rather as OOF and only partially as FDI transactions. Concessional loans are awarded to pursue large-scale infrastructure projects with motives ranging from symbolic diplomacy, profits or developmental objectives (Brautigam, 2011a: 755-756). Only creditworthy nations or projects that appear profitable in less credit-reputable countries will receive funding from Eximbank, regardless of whether or not natural resources are present in host countries. Despite being issued by the Eximbank, all concessional loans are subsidised by the Chinese Ministry of Commerce for the sole purpose of keeping interest rates competitively low. This implies that Eximbank-supplied export credits are much larger and more competitive than funds granted by traditional donors. Overall, 97 percent of all Eximbank loans to Africa are directed towards government infrastructure projects (Brautigam, 2009: 188).

Brautigam (2011a: 758) further notes that with Eximbank's funding programs, "the finance stays in China". Revenues attained from African resource exports are initially placed into a special account which is then used to reimburse the local sub-contracted African construction firms. This is indeed an untraditional approach which helps to reduce the embezzlement of funds by corrupt African host nations because cash does not exchange hands. Unfortunately, data on the transparency of Sino-Africa financing packages could not be located. More research is needed to validated the claim that China's financial engagements in Africa actually do reduce corruption.

According to China Eximbank's mission statement, its

"main mandate is to facilitate the export and import of Chinese mechanical and electronic products, complete sets of equipment and new-and high-tech products, assist Chinese companies with comparative advantages in their offshore contract projects and outbound investment, and promote Sino-foreign relationship and international economic and trade cooperation" (China Eximbank, 2012).

A second instrument supplied by the Eximbank is export-buyer credits. These market interest rate loans are only granted to resource-rich African countries, using commodity exports (instead of resource concessions) as loan collateral (Brautigam, 2011b: 4). Loans are initially offered to Chinese companies which then sub-contract local African companies to complete infrastructure projects. In addition to financing infrastructure projects, Eximbank's sponsored capital could also be used to finance the import of Chinese products by African import business. Brautigam (2009: 173) suggests classifying export credits as multilateral trade agreements rather than as foreign aid funds. Yet another financial tool provided by EximBank is export-seller credits. After carefully screening for profitability and riskiness, this selected line of export-seller credits is offered to African importers of Chinese goods and services.

3.5.5.4. External Financing targeting Construction Projects

Chinese construction firms are on the verge of outbidding lucrative African infrastructure project contracts from Western competitors (Chapter 4 discusses the crowding-out effects of Chinese OFDI in more detail). In return for building up infrastructure, African host nations are expected to provide unconditional political support to China. Construction contracts vary from establishing health care facilities, such as hospitals or clinics, to building dams, roads, stadiums, embassies or industrial buildings (Brautigam, 2011a: 753 and 2011b: 6). Chinese SOEs in the infrastructure sector are less risk-adverse and invest in lower-profit margin projects compared

with Western or Indian infrastructure contracts (Rui, 2010). This reduces the costs of infrastructure in favour of African host nations.

Even though Chinese FDI is still very low in contrast to aggregate global Chinese FDI outflows (refer back to Section 3.4), Chinese-sponsored construction projects in Africa continue to receive a lot of media attention. Highly visible official buildings, such as stadiums or embassies, are interpreted as warning signs of how powerful and possibly dangerous China has become to the shaking Western world order. Beijing's annual financial assistance to African infrastructure projects doubled from \$1 billion in 2001 to 2003, to \$2 billion during the years 2004 to 2005 before spiking at almost \$7 billion in 2007 (Oyeranti, Babatunde, Ogunkola and Bankole, 2010: 50-51). A decrease of almost 50 percent to \$4.5 billion was recorded in 2007. More than \$3.5 billion alone was allocated for the construction of hydro-power dams by 2006, while more than \$4 billion benefitted Africa's railway system. Oyeranti *et al.* (2010: 50-51) further note that close to \$3 billion worth of telecommunication equipment was delivered to Ethiopia, Ghana and Sudan between 2001 to 2007.

Generally, non-OECD members have funded the largest infrastructure projects in Africa. Infrastructure development in Africa is crucial to economic growth and the development of human capital, both of which have been neglected by traditional OECD aid or FDI funds. A UN Conference paper (2011d: 1) estimates that Africa's deficient state of infrastructure decreases industrial production levels by over 40 percent. Ultimately, this results in much higher business costs. Mills (2010: 144) independently acknowledged that 20 percent (up to 50 percent in landlocked countries) of all foreign earnings in SSA dissipate as a result of transportation costs. Devonshire-Ellis (2010) indicates that amongst all countries in the world, the most landlocked nations are situated in Africa, yet the infrastructure networks here are in particularly poor condition.

Table 3.11: Infrastructure spending needs in Africa in 2011, in \$ billion

Infrastructure Sector	Capital Expenditure	Operation and Maintenance	Total Spending Needs
ICT	7.0	2.0	9.0
Irrigation	2.9	0.6	3.4
Power	26.7	14.1	40.8
Transport	8.8	9.4	18.2
Water Supply & Sanitation	14.9	7.0	21.9
Total	60.4	33.0	93.3

Source: UN Conference (2011c: 3)

Table 3.12: Current spending on Africa’s infrastructure 2011, in \$ billion

Infrastructure Sector	Operation & Maintenance	Capital Expenditure					Total Spending
		Public Sector	ODA	Non-OECD Financiers	Private Sector	Total	
ICT	2.0	1.3	0.0	0.0	5.7	7.0	9.0
Power	7.0	2.4	0.7	1.1	0.5	4.6	11.6
Transport	7.8	4.5	1.8	1.1	1.1	8.4	16.2
Water Supply & Sanitation	3.1	1.1	1.2	0.2	2.1	4.6	7.6
Irrigation	0.6	0.3	-	-	-	0.3	0.9
Total	20.4	9.4	3.6	2.5	9.4	24.9	45.3

Source: *UN Conference (2011c: 3)*

Contrary to what is often reported in popular media, Tables 3.11 and 3.12 present some evidence about the current spending profile on Africa’s infrastructure. 45 percent of all infrastructure expenditures are funded by African taxpayers and the public sector, 20 percent by private investors and only 13 percent by Official Development Assistance (ODA) or external funders (UN Conference, 2011c). In comparison with ODA funds allocated towards all infrastructure sectors (transport, electricity and water), funds provided by non-OECD states are mainly targeted at the energy and rail sector of resource-rich African nations (UN Conference 2011d: 1, 2011c: 8). This could be an additional indicator that global as well as Chinese FDI to SSA is indeed motivated by the availability of natural resources. Traditional FDI investors generally neglected Africa’s infrastructure needs except for those in the industrial mining sector which received funding for the construction of roads, railways, stable power and labour supplies to operate efficiently (Hönke, 2009: 284). As evident in both tables, Africa’s current spending on infrastructure projects merely covers half of what is actually needed. External funding is still necessary to compensate for the shortage in infrastructure spending – maybe Chinese funding could provide an additional source of support in the future.

3.5.5.5. Chinese FDI Produced by State-Owned versus Privately-Owned Enterprises

In an attempt to secure extraction rights to oil, gas, precious metals and other commodities, the Chinese government encourages predominately state-owned companies to invest in the energy sectors of foreign countries (Alden, 2005; Brautigam, 2009; Zhao, 2011a; Zweig and Jianhai, 2005). Instead of purchasing extraction rights in relevant countries, Chinese’s companies are buying equity shares (stakes) to secure ownership rights in heavily subsidised state-owned African entities (Alden, 2005: 149; Zafar, 2007: 124). China now holds partial ownership in

extractive-companies granting authority in the decision making process. As a result, commodities can be exported back to China at below international market rates.

According to Morck, Yeung and Zhao (2008: 340), most Chinese OFDI flows are strategically distributed by government-influenced SOEs which hold a monopoly in their respective investment sector. Monopolies exist in the key industries of communications and electricity as well as natural resources and commodities. Rupia and Southall (2009: 176) note that by 2005, approximately 674 Chinese entities operated in Africa, mainly in the oil, natural resources, fish, timber, fabric and clothing products, construction, telecommunication and farming sectors. In 2001, 12 of the 50 largest transnational companies from developing countries belonged to Chinese owners (Gammeltoft, 2008: 12). Chapter Four provides a more thorough analysis of China's SOE entities and their specific FDI involvement in SSA.

Estimates (MOFCOM, 2010) record that by the end of 2008, more than 1600 Chinese companies operated in Africa. Prior to 2003, privately owned Chinese companies were not allowed to participate in international investments. According to Chinese standards, private ownership refers to entities in which the state holds less than 50 percent ownership (Kaplinsky and Morris, 2009: 4). Currently, most investing Chinese companies remain state-owned enterprises. The small numbers of private Chinese companies allowed to invest abroad are heavily regulated by the Ministry of Commerce of the People's Republic of China (MOFCOM) and the National Development and Reform Commission (NDRC). Both entities only subsidise overseas investments directed towards specific countries or companies. Special preference is thereby given to overseas resource acquisition (Zhao, 2011a; Zweig and Jianhai, 2005: 26).

Preferential tax treatment is granted by the Chinese government for approved investment regions or industries (Oyeranti *et al.*, 2010: 22). However, unless private Chinese investors comply with certain strict regulations, they are not allowed to pursue overseas investments. With respect to Sino-African relations, MOFCOM resembles the most important Chinese institution as it approves all foreign investment packages, aid and loan agreements to Africa in agreement with China's Eximbank (Zhao, 2011a).

Rui and Yip (2008) acknowledge that Chinese SOEs pursue strategic long-term goals when investing in M&As. Institutional incentives are utilised to conduct OFDI with the overall aim of acquiring strategic assets, subsidising competitive disadvantages and strengthening firm-specific advantages (Rui and Yip, 2008: 214). Even though the Chinese government imposes strict sector-specific FDI requirements on all outward-investing firms, state ownership can also imply

firm-specific advantages. Easier access to strategic resources, cheaper loans below market rates and political or economic advantages are some of the benefits derived from state-ownership (Wang, Hong, Kafourous and Boateng, 2012: 428). A further advantage of investing in Africa through Chinese SOEs is that such entities do not necessarily have to be profitable. As long as the firm's objectives are in line with China's overall long-term development strategy, namely to invest in reliable and cheap producers of raw materials, profits become of secondary importance (Zafar, 2007: 124).

Despite continuous criticism, Brautigam (2011a, 2011b) urges the intellectual community to view China's involvement in Africa as a conduit for economic development instead of considering it as a threat to the current world order. Even though she also acknowledges the lack of transparency in official Chinese figures, "a more realistic appraisal of China's engagement in Africa - an appraisal that cuts through the many myths that circulate like viruses through cyberspace" should be made (Brautigam, 2011b: 1). China has been actively involved in providing development assistance to African nations since they reached independence in the 1960s. Beijing's engagement in Africa peaked in the 1970s when it surpassed the amount of US aid programmes targeting Africa (Brautigam, 2011b). This might have been forgotten in recent years and suggests that the current hype about Chinese development assistance is exaggerated.

3.6. CONCLUSIONS

Global FDI flows have still not recovered from the financial crisis in 2008. Despite a slow-down in aggregate flows, SSA succeeded in attracting growing inflows. After reviewing the most current FDI data, supporting evidence suggests that most Chinese OFDI to Africa is motivated by the hunt for natural resources or commodities. Sectoral MOFCOM (2010) data indicate that the Leasing and Business Service Sector in SSA attracted the largest amount of Chinese OFDI. Nevertheless, this data does not allow for any valid explanation.

Throughout this chapter, multiple resources indicate that oil-producing and resource-rich SSA nations attract more FDI from both global and Chinese investors. The largest recipients in SSA have only marginally-diversified economies, with South Africa being the only exception. Comparative advantages are mainly found in commodities or natural resources, underscoring the fact that the availability of natural resources as well as agricultural products seems to be the dominant attractor for FDI flows to Africa. In the case of South Africa, strategic-asset seeking motives in its sophisticated financial services sector seem also relevant.

After reviewing the relevant literature, a number of multifaceted reasons other than just extractive motives appear to contribute towards China's growing interest in Africa. Firstly, China is incorporating its very own experiences of receiving FDI and OFDI in its long-term African investment strategy. Complementing the traditional investment motives of horizontal, extractive and strategic-asset seeking, China also engages in FDI in search of profits, to dispose of accumulated household and corporate savings, as symbolic diplomacy and obviously to benefit from host countries' commodities. Evidently, some of the most prevailing features of Chinese FDI can be derived from its highly restrictive domestic business environment. Institutional challenges are thereby encouraging Chinese companies to internalise those challenges. The resultant overseas relocation of Chinese firms yields some of the IFDIs to Africa. China's FDI should therefore be regarded as a political tool combined with profit-seeking motives and most importantly, China's quest for Africa's resources.

Due to flawed data and inconclusive definitions of what FDI, ODA or OOF entail, China's current investment in Africa ought to be classified as a combination of those mediums of external assistance. China's engagement in Africa could be viewed as a new, untraditional form of providing development assistance as its loan or aid packages do not require the implementation of free trade policies or attach any obvious conditionalities. Host countries' compliance with democratic or humanitarian rights, especially in conflict-prone host countries, is also not a pre-requisite to qualify for Chinese development financing. Most of China's FDI, ODA or OOF is targeting African infrastructure projects that are financed through concessional loans or resource-backed export credits.

Chinese flows are of great importance to African countries, although China's contribution to African FDI inflows are relatively small compared to global FDI flows to Africa. Source-dependent, China only produces between 3.5 and 5 percent of Africa's FDI capital. Because most Western aid neglected the local infrastructure sector, the cost of doing business in Africa remains high. Despite the positive effects that Chinese OFDI flows bring along, numerous aspects of China's going-global policy are accused of not meeting "Western standards". Most importantly, criticism about the negligent screening process of host countries' in comparison with rigorous stipulations of conditional loans offered by the IMF is on the rise (Zweig and Jianhai, 2005). A case-study approach in the next chapter seeks to investigate whether the benefits of Chinese-induced investment flows are indeed mutually benefits or whether African nations are entering into dependency-creating partnerships.

**CHAPTER FOUR:
EMPIRICAL RESULTS AND CASE STUDY ANALYSIS**

4.1. INTRODUCTION

This chapter reviews the Top-Ten Sub-Saharan African recipient countries of Chinese OFDI on an individual basis. As established in Chapter Three, Chinese OFDI to SSA between 2004 to 2010 was distributed highly unevenly by both country and sector. While information for Angola, the DRC or Zambia is readily accessible, other countries, namely Kenya, Niger or Madagascar only provide sparse data. Hence, the amount of information compiled in each section of this chapter varies dependent on data availability. Section 4.1 provides a general introduction to the chapter, followed by an individual analysis of resource-rich, oil-rich and agricultural-rich nations in Sections 4.2, 4.3 and 4.4 respectively. Table 3.7 presented in the previous chapter provides the principal source for the applied country classification based on resource, oil or agricultural potential.

Table 3.8 (Reproduced): Top-Ten recipient nations of Chinese FDI in SSA between 2005 to 2010, in percent

Rank	Country	% 2004-2010	Exports	Oil	Resources	Main Three Export Products	Main FDI Motives
1	South Africa	49%	92	-	x	Platinum, gold, iron	Resources + Finance Sector
2	Nigeria	9.09%	1	x	-	Oil, natural gas	Oil
3	Zambia	5.23%	3	-	x	Copper, unrefined copper	Resources
4	DRC	5.05%	6	-	x	Copper, cobalt, cathodes	Resources
5	Niger	2.97%	1	-	x	Uranium, light oils	Resources
6	Sudan	2.88%	1	x	-	Oil	Oil
7	Ethiopia	1.56%	3	-	-	Coffee, Sesamum seeds, flowers	Agricultural
8	Kenya	1.40%	48	-	-	Tea, flowers, coffee	Agricultural
9	Madagascar	1.40%	32	-	-	Cotton products, vanilla, seafood	Agricultural
10	Angola	1.39%	1	x	-	Oil	Oil

Source: *Author's own table created with data extracted from MOFCOM (2010) and African Economic Outlook (2012)*

Note: "Exports" is a measure of export diversification and simply indicates the number of products that account for over 75 percent of exports (African Economic Outlook, 2012). The higher the number of products, the more diversified is the country's economy. Based on the "The Three Major Export Products" identified in each nation, the "Main FDI Motives" were categorised by the author as either natural resources, oil, agricultural products or a combination thereof.

Although Sino-African trade has increased significantly over the last decade (see Section 3.3), it appears to be highly concentrated since only a few selected countries benefit. Angola, Nigeria, South Africa and Sudan accounted for over three-quarter of all Sino-African trade in 2004

(Zafar, 2007: 115). Only commodity-rich export nations seem to be significant trading partners. On the other hand, textiles and processed food are less significant exports in the non-commodity area (Zafar, 2007: 115). This empirical data could support both the agricultural and resource motives behind China's OFDI goals. As stated in Section 3.5.2, only 3.43 percent of aggregate FDI to Africa was produced by China. Table 4.1 below represents China's FDI to Africa as share of recipient countries' total FDI over the investment period 2005 to 2010, expressing Chinese FDI not from the viewpoint of China but from the relevant source country. In order to derive this data, Table A.7 was shown as percentage of Table A.4 (both listed in the Appendix). As evident by this table, albeit quite small from China's perspective, Chinese investments to most recipient nations in SSA provide an important source of external capital.

Table 4.1: Top-Ten SSA recipient nations of Chinese FDI in SSA between 2005 to 2010, in percent of aggregate global FDI

Top-Ten SSA Recipients	2005	2006	2007	2008	2009	2010	% 2005-2010
Angola	0.01%	0.01%	0.42%	-0.06%	0.07%	1.02%	0.26%
DRC	0.00%	14.34%	3.17%	1.39%	34.22%	8.04%	7.93%
Ethiopia	1.86%	4.39%	5.98%	8.95%	33.55%	0.47%	11.95%
Kenya	9.66%	0.36%	1.22%	24.30%	20.01%	76.08%	13.99%
Madagascar	0.16%	0.40%	1.71%	5.23%	3.99%	3.90%	3.57%
Niger	19.01%	15.71%	78.14%	0.00%	5.40%	0.40%	14.24%
Nigeria	1.07%	1.39%	6.41%	1.97%	1.99%	3.03%	2.65%
South Africa	0.71%	0.00%	7.98%	53.38%	0.78%	26.48%	20.92%
Sudan	3.95%	1.44%	2.70%	0.00%	0.72%	1.94%	1.28%
Zambia	2.83%	14.20%	9.01%	22.80%	16.09%	7.21%	12.43%
TOTAL AFRICA							3.43%

Source: *Author's own table created with data extracted from MOFCOM (2010) and African Economic Outlook (2012), refer to Table A.4 and A.7 (Appendix) for original data*

4.2. RESOURCE-RICH SUB-SAHARAN AFRICAN COUNTRIES

Zhao (2011a) groups China's official energy strategy into two categories, namely short to medium-term and medium to long-term objectives. Short to medium-term goals comprise the extraction of China's own indigenous non-renewable resources¹¹ as well as the extraction and production of foreign-owned non-renewable resources. Additionally, this includes the construction of new pipelines or other infrastructure mediums to transport resources back to China. Medium to long-term goals include the establishment of renewable energy sources¹², the establishment of R&D facilities to create efficient and sustainable energy resources (both

¹¹ In this context, non-renewable resources refer to coal, oil, natural gas (Zhao 2011a).

¹² In this context, renewable sources refer to hydropower, solar, wind or nuclear energy (Zhao 2011a).

renewable and non-renewable) and the reduction of negative environment-degrading effects of resource-extraction (Zhao, 2011a). Not only do oil and resources play a crucial role in China's current energy goals, but the need to secure both are also openly stated in China's foreign aid policies. As postulated throughout this research study, China's increasing demand for aluminium, copper, nickel, iron ore and oil for its manufacturing sector has guided its foreign policy goals towards securing global access to raw materials (Alessi and Hanson, 2012).

According to Zhao's (2011a) two categories stated above, Africa fits into China's medium to long-term energy goal. Hence, China's intentions to extract and produce foreign-owned resources is partially realised by financing African infrastructure projects or issuing commodity-linked loans via the Eximbank. Mills (2010: 227) states that other observers consider China's scramble for African resources to be a 50 to 100 years long-term investment strategy. Regardless whether Chinese goals are timed for 10, 50 or 100 years, Chinese investors certainly have secured large shares of Africa's most precious commodity reserves. While this chapter explores the case of Africa's Top-Ten Chinese OFDI recipients in more depth, the analysis conducted does not capture the entire picture due to the limited scope of this thesis.

A conference paper released by the American National Intelligence Council (NIC, 2005: 1) predicts that amongst a few other resource-rich SSA nations which actively implemented regulative policies, South Africa will continue to attract large amounts of FDI. In general, SSA holds approximately 30 percent of all global minerals - the majority of which are still underexplored (Prichard 2009: 240). Most of SSA's mining activities are in fact sponsored by FDI funds, implying that Greenfield Investments dominate all other entry-level modes of FDI in SSA. According to Zafar (2007: 109), China was the world's biggest consumer of copper, coal, steel, cement and platinum in 2005 and became the largest global commodity user in 2010 (Mills 2010: 347). In respective order, petroleum, iron ores as well as concentrates and other commodities constitute China's first, third and tenth import commodities in 2009 (UN Comtrade, 2012).

It comes as no surprise that from 2002 onwards, most of China's commodity supplies have been exported from SSA. Mainly as a result of China's increased demand for all kinds of commodities and especially base metals, resource-rich SSA nations have benefited from a global rise in commodity prices since 2002 until the height of the mining boom in 2008 (Prichard, 2009: 271). China hereby remains a primary commodity buyer rather than a producer. Until the onset of the global financial crisis in 2008, FDI in the SSA mining sector increased fourfold. An interesting feature of Chinese-induced mining FDI to SSA pertains to ownership. Excluding Zambia, most

of Sino-African mining deals are mainly entered through long-term buying rights instead of purchasing majority stakes in African mining companies (Prichard 2009: 250-255). This conflicts previous observations made by Alden (2005) and Zafar (2007) who postulate that Chinese companies purchase equity stakes in mining companies. Nevertheless, all three sources agree in the case of Zambia where China has been actively controlling all major mines through the acquisition of ownership stakes (Alden, 2005; Prichard, 2009; Zafar, 2007). See Section 4.2.2 for more details.

Mineral extraction in SSA is not just a contemporary activity though. During Colonial times, Europeans actively exploited Sub-Saharan Africa's vast mineral resources. Vernon (1971) notes that foreign investment capital represents a crucial ingredient in global mining operations. This claim is strengthened by observations of the World Investment Report 2007 (UNCTAD, 2007) which reports that developing countries' extractive industries captured half of total global OFDI flows. A positive by-product of traditional FDI flows targeting Africa is the establishment of infrastructure. Construction of railways and roads assured that minerals could be transported back to the European mainland more efficiently and cost effectively. Zambia, the DRC and Ghana are prime examples of European exploitation. The post-colonial period witnessed the nationalisation of many mining and oil companies as well as the implementation of stricter labour, tax and profit repatriation laws by local African governments (Prichard, 2009: 241). Because most state-owned operations failed and pressure applied from the World Bank or the IMF, many SSA governments introduced liberalisation reforms between 1985 to 2000 in an attempt to decrease the role of the state's involvement in the mining business. Ascending FDI inflows followed as a result of liberalisations efforts.

Recent years witnessed the rise of Chinese and other investors from emerging countries. The bargaining power of resource-rich SSA nations was significantly boosted as the competition from bidding Western and Eastern companies now amplified the available choices in host countries. Nevertheless, neglect of labour laws, environmental standards, worker's safety and the spread of corruption are valid disadvantages derived from some developing source country investors- these aspects will be further explored in Section 4.6 of this chapter.

4.2.1. South Africa

South Africa's investment pattern offers a unique case study compared to all other SSA nations. On one hand, South Africa is by far the largest recipient of Chinese OFDI, securing almost half (49 percent) of all incoming flows (MOFCOM, 2010). Considering the second ranked country

Nigeria only captured 9 percent of Chinese OFDI, South Africa should be treated as an outlier which portrays different determinants and characteristics than other SSA nations. Interestingly, South Africa also produces a large amount of OFDI destined to African nation. Although South Africa's intra-regional African OFDI does seem to predominantly target natural resource-related industries, more diverse investments in basic utilities, telecommunications and retail sectors also appear substantial (Daniel and Bhengu, 2009: 141; Southall and Comminos, 2009: 366). Over the investment period 2005 to 2010, Chinese flows to South Africa resemble roughly one fifth of aggregate global flows (refer to Table 4.1).

Prichard (2008) identifies the transfer of historical linkages, technical and managerial knowledge as well as the political and financial support South Africa extends to other SSA nations as key areas of regional collaboration. South Africa is classified as both an investor as well as a recipient of mining FDI. Prichard (2009: 259) states that "South Africa acts as a regional platform for mining activities. All of the major mining firms have established offices in Johannesburg, viewing South Africa as a hub from which to conduct business in the rest of Africa". Two of South Africa's largest mining companies, namely AngloGold Ashanti and Randgold and Exploration, actively participate in FDI-induced mining contracts in and Burkina Faso, Ghana, Guinea, Ivory Coast, Mali, Namibia, Senegal and Tanzania, (Southall and Comminos, 2009: 370).

South Africa exhibits the largest and most diversified economy of all nations in SSA with 92 different products earning at least 75 percent of export revenues (see Table A.8 in Appendix). Platinum, iron ores, coal, ferroalloys, gold, diamonds and petroleum oils constitute the most significant export minerals (UN Comtrade, 2012). South Africa is also a supplier of agribusiness, wine, automotive industry, harbour wharfs docking facilities, coal to liquids technology and chemicals. Gelb (2010: 1) notes that by 2009, China overtook Germany to become South Africa's largest trading partner. His paper is considered the most detailed and accurate empirical account of China's FDI to South Africa. As addressed in Section 3.5.5.1, Gelb (2010) strongly criticises the accuracy of Sino-South African investment data. Accordingly, Chinese FDI stock in South Africa in 2007 is estimated to be inflated tenfold compared to official South African figures (Gelb, 2010: 6).

By the end of 2007, only 47 Chinese entities operated in South Africa. This number appears quite small considering that in total, more than 2000 foreign companies were said to operate in South Africa. As reported in other SSA nations, Greenfield Investments comprise of the preferred market-entry method (Gelb, 2010: 20). So far, China's largest surge of FDI to South Africa targeted the financial institution Standard Bank in late 2007 with China's state-owned

Industrial and Commercial Bank of China acquiring 20 percent ownership rights for \$5.6 billion (Brautigam, 2009: 279). This underscores the fact that China does not exclusively focus on investments in the mining sector, but also targets strategic asset-seeking motives (see Sections 2.3.4 and 3.5.4.3) in South Africa's sophisticated banking sector which offers strong institutional advantages to Chinese investors (Cattaneo, 2011: 6-7; Gelb, 2010: 14). In response to the extensive amount of inflowing capital following the acquisition deal, Chinese FDI flows to South Africa appear heavily inflated in 2008. According to the authors own calculation performed with MOFCOM (2010) data, in 2008, China's acquisition of shares in Standard Bank accounted for 83 percent of its aggregate OFDI flows to South Africa between 2004-2010. Hence, as mentioned previously, the year 2008 should be considered as a data outlier.

Sandrey cited in Hartzenberg, Erasmus and Du Pisanie (2012) acknowledges that in respective order, the mining, manufacturing and financial sectors have attracted significant Chinese inflows since 2008 (2012: 190-193). Gelb (2010: 14) affirms China's multifaceted investment motives in South Africa. Accordingly, Chinese investments in the infrastructure, construction, mining, automobile, electrical machinery and financial service sectors evidently played a crucial role from the mid 2000s. Nevertheless, mining inflows are relatively small, suggesting that Chinese investment motives in South Africa are well diversified. In addition to stable mining inflows motivated by resource-extractive reasons, Chinese growing investments to South Africa's automotive sector seem to be driven by market-seeking motives, while inflows in the financial sector are driven by strategic-asset seeking motives. In conclusion, the empirical evidence above indicates that South Africa portrays a well diversified economy capable of attracting a wide range of differently motivated FDI.

4.2.2. Zambia

Zambia has been the showcase for China's ideologically-driven foreign policies since the 1970s when construction on the great railway project Tam-Zam connecting Tanzania and Zambia officially began. Over 25,000 imported Chinese labourers helped with the project (Michel and Beuret, 2009: 234). However, until the last decade, China's engagement in Zambia remained fairly insignificant after the completion of the railway in 1976. According to the MOFCOM (2010) publication, Zambia received the third largest share (5.23 percent) of Chinese FDI during the period 2004-2010. With respect to global flows, China produced about 12.5 percent of Zambia's aggregate FDI inflows (refer to Table 4.1). This implies that China is of average significance to the Zambian economy with respect to foreign direct investments.

Zambia's Copperbelt which used to be a British dominated enclave for copper extraction has now been taken over by China, mainly during the mining boom between 2004 to 2008. Chambezi copper mine was bought in 1999 and is now fully managed under China's authority. Copper production in 2009 reached three times the levels of 1994 (Mills, 2010: 369). Hönke (2009: 281) states that China's recent engagement in Zambia is the product of two historic trends, namely the nationalisation of the mining business after Zambia gained independence in 1960 and the later deterioration of mining activities due to the copper crisis in the mid 1970s. In order to satisfy its copper demand, which by 2005 was the largest global demand for copper, China allocated close to \$170 million towards Zambia's mining sector (IRIN, 2006). Copper products alone account for Zambia's top five export products (UN Comtrade, 2012).

As revealed in Table 3.8, Zambia failed to diversify its economy and relies almost exclusively on copper exports to earn foreign exchange. Zambia flourished in the early 1970s but its economy crashed during the global copper crisis and the resultant price collapse in the 1980s. Liberalisation programs imposed by the World Bank in the late 1990s which aimed at privatising Zambia's mining sector also failed (Reed, 2001: 140). As a result, Zambia's economy collapsed and caused immense losses - making it one of the poorest and most heavily indebted country in the world by that time (Brautigam, 2009: 27). So far, Zambia remains the only SSA country where China actively sought ownership control in mining activities. Prichard (2009: 255) argues that China's heavy investment in Zambia's Copperbelt was triggered by the volatile price increase in copper after 2005. Spikes in Zambia's IFDI flows were observed from 2004 onwards (Hönke, 2009: 282). Even though many global foreign investors pulled out of Zambia's copper mines after a windfall tax¹³ was imposed by the Zambian government, the Chinese did not (Mills, 2010: 224). In addition to running three other copper mines in Zambia, China now entirely controls the Chambishi copper mine which had been closed down for over ten years. Beijing further pledged to pump more than \$900 million into Zambia's copper industry (BBC 2011; Prichard 2009: 255). It is estimated that by the end of 2005, over 160 Chinese firms had invested in Zambia (Brautigam, 2009: 4).

In an additional attempt to secure Chinese mining rights in Zambia, the establishment of a Special Economic Zone (SEZ) and large debt cancellations were agreed upon. The Zambian SEZ was established around the Chambishi mine and received major capital inflows from

¹³ A windfall tax refers to a special tax imposed by the Zambian government on mining revenues. If copper prices rose above the threshold of \$3 per pound, an additional 25 percent would be charged to extracting companies. Although the Zambian government hoped to reap a direct benefit from rising copper prices, many mines became economically unviable and eventually closed down as investors pulled out of the country (Mills 2010: 369). The windfall tax was abolished in 2009 out of fear of losing more foreign investors.

China's Nonferrous Metals Company (CNMC) (Hönke, 2009: 282). In theory, it was envisaged that this project would attract 150 Chinese companies, create 6,000 Zambian jobs and secure roughly \$800 million of FDI (Michel and Beuret, 2009: 234). CNMC intended to sponsor a number of firms to engage in the mining, processing, recycling, machinery and service segments of the copper and cobalt industry (Brautigam, 2009: 101). Present developments show a different reality, since only 11 companies had invested in the zone by the end of 2009. The Chinese SOE CNMC is particularly involved in this zone to extract copper from the mine and critics claim that the zone was created to protect CNMC profits which qualify for preferred tax rates.

Opposing inadequate working and safety conditions, Anti-Chinese sentiment in Zambia has grown remarkably (see section 4.5.1.4). The opposition candidate, Michael Sata, used xenophobic tactics as a tool to secure votes in the presidential elections of 2006 by claiming that Chinese FDI is exploitative rather than beneficial to the Zambian population (Brautigam, 2009: 6). Despite the population's growing distrust of its Chinese counterparts, Zambia's government continues to strongly support and encourage Chinese investment as it recognises the country's dependence on FDI. While beneficial in times of high global copper demand, it has long been argued that Zambia's economy has to diversify away from its reliance on copper revenues. In order to achieve long-term prosperity, focusing on agricultural products might be an alternative to the copper trap (Reed, 2001: 79). Although the country is not a leading agricultural producer, Chinese FDI to Zambia has recently been labelled as agriculturally-motivated investment. Section 4.4 evaluates Zambia's agricultural attractiveness to Chinese investors in more detail to determine the validity of these claims.

4.2.3. The Democratic Republic of Congo (DRC)

The DRC also heavily relies on revenues generated through the export of minerals, mostly found in the Katanga Province. During Colonial times, the country was a safe haven for Belgian investors to expropriate the country's vast supplies of cobalt, copper and more recently also uranium. According to Table 3.7, three of the major products that generate more than 75 percent of the DRC's export revenues are minerals. Despite being classified as a "failed state" with regards to corruption, poverty, absence of humanitarian rights, lack of good governance and the ongoing violent conflict in the east, the DRC has become one of the most lucrative FDI destinations in SSA since 2006 (Reyntjens, 2007). A limited set of legal rights were then granted to multinational mining entities which improved investors' confidence in the country (Hönke, 2009: 281-84). A report conducted in 2010 estimates that the world's largest untapped mineral reserves of cobalt as well as rich diamond and copper supplies worth \$24 trillion are found in the

DRC (Kuepper, 2010). Between 2004 to 2010, China allocated approximately 5 percent, or \$598.32 million, of its aggregate African OFDI to the DRC. From a global perspective, China contributed almost 8 percent of the DRC's global share of FDI inflows.

Chinese FDI in the DRC's vast copper and cobalt mines included a record infrastructure deal worth \$5 billion (IRIN, 2006; Prichard, 2009: 256). Other sources estimate the value of infrastructure and mining contracts to be as high as \$9 billion (Daniel and Bhengu, 2009: 161). This implies a *six fold* increase from the DRC's previous domestic infrastructure budget. According to Daniel and Bhengu (2009: 161), repayment was negotiated in exchange for mineral exports. As thoroughly discussed in Chapter Three, this entails the funding of Chinese-approved infrastructure projects in the DRC and not the actual lending of money. In quantitative terms, this implies that the huge \$9 billion loan was supposed to be repaid with 13 million tons of copper (Mills, 2010: 227).

Similar to other Sino-African construction projects, China's Eximbank also agreed to fund public streets, two airports and numerous hospitals and clinics. The SOE China Railway Engineering Company agreed to renovate the DRC's railways while Sinohydro, another Chinese government-owned company, offered to build two electricity distribution channels. In return, the DRC is obliged to repay these infrastructure investments with copper and cobalt commodities extracted by the national Congolese mining firms Gecamines and the privately-owned Socomin entity (Hönke, 2009: 289-292; Prichard, 2009: 256). Such infrastructure-for-resources contracts fit perfectly into the FDI model discussed in Chapter Three.

4.2.4. Niger

Niger falls into the resource-rich category of non-diversified SSA economies that generally rely on their major commodities to generate export income. Uranium and light oil products obtain the most export revenues in Niger. Out of both, uranium is of greater significance (see Table 3.8 and WTO, 2012). Securing almost 3 percent, or \$ 352.17 million, of China's OFDI flowing to SSA, it is ranked as one of the top five nations amongst investigated countries over the investment period 2004 to 2010. In terms of Chinese FDI as share of Niger's total FDI inflows, calculations derived that Beijing produced a fairly significant share of 14.24 percent (refer to Table 4.1). Although livestock and cotton products are exported in small volumes, only oil and uranium count as significant export commodities (UN, Comtrade 2012). According to WTO (2012), fuel and mining products accounted for 54.5 percent of Niger's exports. Agricultural products only contributed 11.6 percent towards the country's aggregate exports. This suggests an

unsustainable economic development path, especially because Niger's economy remains dominated by small scale agricultural activities (World Bank 2012b).

China was Niger's second largest trading partner in 2011 (WTO, 2012). No sector-specific investment data could be located. The WTO (2009) notes that Niger established a set of special tax framework aiming to increase foreign inflows in the agriculture, energy, housing, services, transportation and education sectors. FDI to the mining sector is strictly governed by the Mining Code and diversifications in the mining industry are envisioned. It was projected for oil extraction to commence from 2010 onwards (WTO, 2009).

Although this section briefly reviewed the country's trading profile, the lack of empirical data prevents a discussion on its FDI potential. Based on Niger's trading profile, the country is classified as a resource-rich country. *A priori* assumptions suggest that the country's inflowing FDI targets the mining- and oil-extractive industry. However, no empirical data could be found to substantiate this claim.

4.3. OIL-RICH SUB-SAHARAN AFRICAN COUNTRIES

Inter-nation struggles to secure access to precious oil reserves seem ironically artificial when official data from oil producers is accessed. A report compiled by one of the largest global energy and gas multinationals BP (BP, 2012: 1) states that

“our world is not structurally short of hydrocarbon resources – as our data on reserves confirms year after year – but long lead times and various forms of access constraints in some regions continue to create challenges for the ability of supply to meet demand growth at reasonable prices”.

The fact that China has entered the global scramble for Africa's precious “black gold” is now widely accepted. As this chapter unfolds, both quantitative and empirical evidence is able to substantiate China's oil-hungry interests in SSA nations. However, extracting resources from developing countries does not necessarily imply an exploitative relationship between host and home countries. Zhao (2011a) stresses that China's strategic energy policies can benefit developing countries by improving market shares, enhancing industrialisation processes and supplying financial capital (for example via FDI). In theory, the possibility to create mutually beneficial Sino-African investments agreements therefore arises.

With a global consumption of 33 percent, oil remains the world's most important source to generate energy (BP, 2012: 2). Throughout its own successful industrialisation process, Beijing's

energy needs were mostly fulfilled by coal products. Constrained by environmental, financial and sustainability factors, China eventually began to modify its energy sources (Zafar, 2007: 118). Although coal remains a vital method of energy generation, China recently became the world's second largest oil consumer after the USA (Mills, 2010: 347). In 1993, China transitioned from a net oil-exporter to a net oil-importer and is now predicted to emerge as the world's largest oil consumer by 2020 (IEA, 2011). According to the Statistical Review of World Energy June 2012 (BP, 2012: 2), China's current energy consumption alone contributed 71 percent towards total aggregate global consumption growth. Further estimates project Chinese oil imports in 2020 to equal the size of Africa's production capacity and double the amount of Saudi Arabia's production capacity (Michel and Beuret, 2009: 175).

Nonetheless, as argued in Chapter Three, the quest for tapping into precious African oil resources which were traditionally accessed by the Western powers is also partially undertaken for strategic foreign policy objectives. Just like Sino-African infrastructure-for-resources deals, oil exports are exchanged for project funding. In return for cheap and reliable oil supplies not subject to market price or exchange rate fluctuations, China provides competitive loans to fund public infrastructure projects. In this way, neither rising inflation nor soaring oil prices will affect any Sino-African oil arrangements- a very clever and well-implemented strategy indeed!

China's most influential state-owned oil entities, China National Offshore Oil Corporation (CNOOC), China National Petroleum Corporation (CNPC) and China Petroleum & Chemical Corporation (SINOPEC), have expanded their presence all over SSA (Doriye, 2010: 26; Zhao, 2011a). Table 4.2 below illustrates the respective African territorial investments of China's three dominant oil companies. Accordingly, some of the top Sub-Saharan African receivers of Chinese OFDI (as indentified in Chapter Three), namely Angola and Nigeria, profit from China's most powerful government-owned oil entities.

Table 4.2: China's main national oil companies

China's Main National Oil Companies			
	China National Petroleum Corporation (CNPC)	China Petrochemical Corporation (Sinopec Group)	China National Offshore Oil Corporation Ltd. (CNOOC)
Created	1988	1983	1982
Ownership	State-owned	State-owned	State-owned
Level	Ministry-level	Ministry-level	Bureau-level
Headquarters	Beijing	Beijing	Beijing
Main tasks	Production of oil and gas (largest oil producer in China); exploration of oil and gas overseas	Exploration of oil, gas, and other chemicals overseas; transportation and processing of oil and gas (largest refining capacity in China)	Offshore exploration and production of oil and gas; forming of JVs with foreign companies; conducting operations in territorial waters
Internationally listed subsidiaries	PetroChina	Sinopec Corporation	CNOOC Limited China Oilfield Services
Selected major stakes in Africa	Chad Gabon Nigeria Sudan	Algeria Angola Gabon Sudan	Gabon Nigeria Uganda

Source: Zhao (2011a)

Due to robust petrol demand, estimates foresee that Sub-Saharan Africa's oil producers will reap the benefits of steady export revenues for at least another decade. The National Intelligence Council (NIC, 2005) recognised that by 2005, China had already secured over 25 percent of its aggregate oil demand from African suppliers. Although African oil reserves only generate about 10 percent of aggregate global output, they satisfy more than one third of China's current oil demand while exporting 15 percent of its supply to America (Michel and Beuret, 2009: 178; Zhao, 2011c). Other estimates approximate that China only imports 13 percent of its total oil requirements from Africa (IPG, 2011). Whatever the case, Africa's "black gold" appears especially precious because of its underutilisation and the ample amount of untapped reserves. Table 4.3 below summarises the most important Sino-African petrol contracts of 2009. Three out of the five countries in the table are amongst the Top-Ten recipient nations of Chinese FDI to SSA. While Angola and Sudan have been vital suppliers of Chinese oil for years, Beijing's interest in Nigeria recently increased.

Table 4.3: China's main oil suppliers in SSA

Main African Sources of Oil for China				
	OPEC member?	Oil resources	Oil exported to China	Major deals and partnerships
Angola	Yes	Largest source of oil in Africa (about 50 percent) – largest crude oil exporter in Africa in 2009 <u>Largest investors:</u> ChevronTexaco (U.S.), Exxon Mobil (U.S.), BP (UK), Total (France)	Largest African oil provider to China	2004: US\$2 billion loans and aid 2005: Nine agreements signed, including long-term oil supply
Sudan	No	Oil exports account for 90 percent of country's total revenue <u>Largest investor:</u> China National Petroleum Company (entered 1996). U.S. companies not allowed to invest.	Second-largest oil provider to China (60 percent of its oil goes to China) China is largest importer of Dar Blend (high-acid crude oil)	1997: 2007: Interest-free loans for building construction 2008: US\$2.8 million humanitarian aid package
Republic of Congo (Congo-Brazzaville)	No	<u>Largest investors:</u> Total (France) and Eni (Italy). Around 20 U.S. companies, including Chevron and Murphy Oil.	Third-largest oil provider to China (around 50 percent of its oil goes to China)	2006: Cooperation to build airport and infrastructure 2010: Chinese Development Bank to help create SEZs
Equatorial Guinea	No	Oil accounts for over 80 percent of total revenue <u>Largest investors:</u> ExxonMobil (U.S.), Hess (U.S.), Marathon (U.S.)	Around 12 percent of its oil exports go to China	2009: China gained exploration and drilling rights in areas
Nigeria	Yes	Second-largest oil reserves in Africa – oil accounts for over 90 percent of country's exports, 80 percent of total revenue <u>Largest investors:</u> Royal Dutch Shell (British/Dutch), ChevronTexaco (U.S.), Exxon Mobil (U.S.), Agip (Italy), Total (France)	Small amount of oil to China (in 2009, 28,000 barrels/day)	2006: US\$4 billion in oil and infrastructure projects in exchange for drilling licenses 2010: US\$23 billion to build oil refineries and infrastructure

Source: Zhao (2011b)

Interestingly, China's state-owned oil companies act more like independent privately-owned firms according to their profit-seeking behaviour and high degree of autonomy in spite of governmental stipulations (Gill and Reilly, 2007; Zhao, 2011a). China's SOEs in the oil sector seem to indeed pursue conflicting goals (Zhao, 2011b). Firstly, as an official arm of the government, they ought to fulfil interests that are consistent with China's official energy strategy. In respect of the African content, this implies the extraction and production of resources (refer back to Section 4.1). Yet, in addition to complying with state-imposed requirements, Chinese oil firms also compete amongst each other in search of expanding market sizes and higher profits. This competitive rivalry should theoretically clash with the communistic ideologies inherent in

the Chinese government. Popular media reports generally neglect to mention the commercial aspects of Chinese SOEs but rather perceive them as puppets of the state.

Nigeria, Sudan and Angola are all amongst the top receivers of Chinese OFDI to SSA. Ranked in descending order, they secured 9, 2.9 and 1.4 percent of Chinese investment (MOFCOM, 2010). When synthesising this data with Sub-Saharan Africa's largest receivers of Chinese financial assistance consisting of Official Development Assistance (ODA) and Other Official Flows (OOF), the same countries appear in a slightly different order. Accordingly, Sudan received \$15 billion, Nigeria \$11 billion and Angola \$8 billion of Chinese financial assistance (Michel and Beuret, 2009: 176). As noted in Chapter Three, ODA differs from FDI with regards to ownership rights. Compared to FDI, ODA funding must be extended with a minimal grant element of at least 25 percent that pertains to an overall poverty reducing goal (IMF, 2003). Case studies of Angola, Niger, Nigeria and Sudan, all of which seem to attract Chinese OFDI for their oil availability based on *a priori* assumptions, follow in the next section.

4.3.1. Angola

Angola was China's top oil supplier in 2005 and the second largest producer in Africa overall (Zafar, 2007: 119; Zhao, 2011b). By 2010, Angola successfully surpassed Saudi Arabia as the largest oil-supplying nation to China (Doriye, 2010: 26). Similar to China's engagement in Sudan, investments in Angola's oil industries commenced when Western firms discontinued their assistance to Angola because it refused to accept Western aid conditionalities (Obi, 2009: 201). According to Zhao (2011b), Angolan oil revenues in 2009 contributed 85 percent towards the country's GDP, generated 95 percent of aggregate export revenues and accumulated 85 percent of total government revenues.

These numbers endorse the findings of Table A.8 (see Appendix) which identify Angola as an undiversified economy with only one product, namely petroleum oil, securing over 75 percent of all export revenues. Although ranked last out of Sub-Saharan-Africa's top ten recipients of Chinese OFDI (see Table 3.8), Angola presents a compelling showcase for China's unconventional practises. As previously mentioned, tying FDI not only to financial assistance but also to profit-seeking and diplomatic strategies is an unusual method of extending foreign assistance. The successful implementation of China's finance packages in Angola is also referred to as the "Angolan Model" and provides a reliable model for numerous other Sino-African investment deals.

Africa's aggregate oil reserves are grouped into 76 "blocks", yet currently, only 35 are utilised for oil extractive-activities. The majority of Angola's oil reserves are located in Blocks¹⁴ 1 to 35 (Zhao, 2011b). Although Sinopec bought two Angolan oil blocks via a \$2 billion-backed infrastructure soft loan, Westerns multinational oil entities actually still dominate Angola's oil industry (Obi, 2009: 192; Zhao, 2011a and 2011b). Despite this dominance, China's investment flows to Angola appear to have increased.

In line with other Sino-African FDI projects, Chinese companies and the SOE Sinopec entered into deals with Angola's government-owned oil company Sonangol Group. In 2004, a joint venture called Sonangol Sinopec International Ltd was founded as a Sino-Angolan entity. According to Zhao (2011b), Sonangol acquired a 50 percent ownership stake in oil Block 18 for \$2.46 billion in 2010 and further purchased a 20 percent ownership stake in oil Block 32 from an American oil company for \$1.3 billion. Zhao (2011b) acknowledges that between 2004 and 2007, China issued three major financial packages through its Eximbank. Angola received a \$2, \$1 and \$2.5 billion credit lines in 2004, 2005 and 2007 respectively, while granting Sinopec the rights to drill for oil. Additionally, another multibillion-dollar agreement in 2005 regulated the export of Angolan oil to China. In return, China extended a \$2 billion loan to Angola (Zhao, 2011b).

Similar to other Sino-African projects, investments in Angola's infrastructure system, particular its railways, are necessary to create a reliable and cheap transportation mechanism for the transport of mineral resources back to China (Kaplinsky and Morris, 2009: 14). Aggregate foreign Chinese assistance to Angola is estimated to be worth \$8 billion. Funds targeting the reconstruction of Angola's war-torn infrastructure system are valued at approximately \$6 billion (Michel and Beuret, 2009: 161, 213).

However, considering Chinese OFDI to Angola from 2004 to 2010 was only valued at \$164.08 million, and respectively ranked as the lowest recipient of SSA's Top-Ten receivers, these figures seem suspicious (refer back to Table A.7). Further calculations reveal that based on global FDI inflows, China only produced *0.26 percent* of Angola's aggregate FDI shares during the period 2005 to 2010 (refer to Table 4.1). These numbers significantly contradict the valuations of Chinese investments in Angola's infrastructure sector! One possible explanation for the large data divergence could be the fact Sino-Angolan infrastructure packages are not accounted for as official FDI transactions but are rather "hidden" in other transactions, such as ODA or OOF.

¹⁴ The major foreign stake holders in Angola's oil sector are listed in Tables A.9, A.10 and A.11 (see Appendix).

4.3.2. Sudan

Sudan¹⁵ is ranked as sixth largest recipient of Chinese OFDI in SSA, securing roughly 3 percent, or \$341.14 million of Chinese funding to SSA from 2004 to 2010 (see Table 3.8). According to the author's own calculations, this implies a marginally low allocation rate of Chinese OFDI in comparison with aggregate global flows to Sudan. China only contributed 1.28 percent of aggregate FDI inflows over the investment period of 2005 to 2010 (see Table 4.1) – questions about the potential benefits arising from Chinese-induced funds must be asked therefore. As Africa's third largest oil producer, it is estimated that Sudan generates roughly 7 percent of China's aggregate oil imports (Michel and Beuret, 2009: 192). Sudan resembles a perfect example of China's diplomatic going-global policies which allow foreign investments to any host countries regardless of (ongoing) civil wars or the lack of good governance, humanitarian and democratic rights.

According to China Daily (2010), Sudan's greatest investment potential is found in its mining, petroleum, energy and agricultural sector. Additionally, sugar, groundnuts, sesame and cotton are identified as strong key export products, highlighting Sudan's possible agricultural potential secondary to its vast oil resources. Maglad (2008: 11) points out that in 2007, 72 percent of Chinese OFDI was targeting Sudan's mining sector, followed by the manufacturing sector (electrical appliances, electronics and computer assembly) at 24 percent. Only 2 percent of Chinese OFDI was oriented towards the agricultural sector (Maglad, 2008: 11). Surprisingly, all foreign investment funds other than the export-oriented mining sector generate local revenues. This suggests that China refrains from investing into the export-oriented segments of the Sudanese economies, with the exception of oil.

The ongoing civil war between the central government and rebels, partly about disputes for ownership rights of precious raw materials, resulted in the withdrawal of the major Western oil companies Chevron, Concorp, Arakis, Taslismand and Lundin from Sudan after 1992 (Patey, 2006). This enabled Chinese entities to eventually establish their presence in the Sudanese oil business. A 40 percent ownership stake in the largest Sudanese oil company, Greater Nile Petroleum Corporation, was acquired by Chinese investors and oil exports to China commenced in 2009. Obi (2009: 192) reports that Sudan exports between 50 to 60 percent of its aggregate petrol production to China. Currently, Sudan ranks as China's third largest African trading partner (China Daily, 2010).

¹⁵ In 2011, the former Sudan was split in two separate nations, North Sudan and South Sudan. As all empirical data reviewed in this section precedes the country's division, it includes Sudan's aggregate figures.

IRIN (2006) indicates that China pumped more than \$8 billion into a Sino-Sudanese joint venture contract which, apart from other oil related projects, entailed the construction of a pipeline to the Red Sea as well as building a tanker facility at Port Sudan. The \$2 billion heavy Merowe Dam is another key Chinese-sponsored infrastructure project. Different sources estimate the value of China’s FDI investments in Sudan as reaching almost \$15 billion. In addition to oil investments, the Sudanese textile and fishing industries were also targeted by Chinese investors (Michel and Beuret, 2009: 149). Similar to Sino-Angolan oil-for-infrastructure-deals, roads, bridges, hydro-electric dams, power facilities, hospitals, educational institutions as well as agricultural projects, such as irrigation and farming facilities, all attracted foreign Chinese funding (China Daily, 2010). In line with Angola’s case, Chinese financial assistance helped to rebuild Sudanese war-torn infrastructure.

In summary, it can be concluded that China’s interest in Sudan is mainly motivated by the availability of oil. However, according to Table 4.4 following below, investments in other segments of the economy were also of relevance. Rui (2010) notes that during the years of China’s financial assistance, Sudan managed to implement favourable labour laws, sometimes requiring Chinese contractors to hire and train up to 95 percent of labour from Sudan’s local work force. Additional positive spillovers of Chinese engagement in Sudan include adequate worker’s compensation, the expansion or improvement of Sudan’s infrastructure systems and the Sudanese government’s effort to diversify investments away from resources.

For the first time, China has also refrained from its non-interference policy in Africa by taking an active role in assisting Sudan with peace talks and actively participating in peace missions (Maglad, 2008: 3). This symbolises China’s willingness to accept and positively react to Western criticism. In a way, this could also indicate a new direction in China’s foreign policy.

Table 4.4: Chinese FDI in Sudan’s non oil-related industries

Year	Projects (employees)	Amount (US\$)	Industries
2000	5	38,440,451	Petrochemical service station, <i>Roads and Bridges (2)</i> , Computer Assembly, Bricks
2001	1	200,000	Leather products
2002	2	1,531,800	Furniture, plastic products
2003	3	12,071,850	Leather products, furniture, lighting bulb
2004	8 (414)	10,889,933	Plastic products (2), leather products, garment, food (2), oxygen supply, building material manufacture (2)
2005	12 (828)	46,376,952	Steel Manufacture, building material manufacture (2), plastic products (2), poultry and vegetables, earth moving, restaurant, roads and bridges (3), construction equipment

2006	17 (1141)	97,178,745	Transportation (3), advertisement, soil analysis, construction (2), irrigation, plastic products (3), construction equipment, medical equipment, mining, computer equipment, furniture, car component manufacturing and engineering
2007	22 (1615)	33,574,420	Car service (4), constructions(2), transportation, hotel, media and advertisement, farms (2), poultry products, engineering workshop (2), steel, plastic products (3), mining (2), cement, garment
Mar-08	4 (386)	8,530,039	irrigation, agricultural products, miscellaneous (flooring and blankets), Plastic Products
2000-Mar2008	74	248,794,190	

Source: *Rui (2010: 58)*

4.3.3. Nigeria

It was estimated that by 2005, Africa surpassed the Middle East as largest crude-oil supplier in the world. Nigeria in particular transformed into the biggest oil-producer in Africa and the fifth-biggest globally (Rupia and Southall, 2009: 171). In respect to Chinese OFDI to SSA, Nigeria is the second largest recipient; although only 2.65 percent of aggregate global inflows to Nigeria were created by Chinese investors (refer back to Table 4.1 and A.7). Evidently, its vast oil reserves seem responsible for an estimated inflow of \$11 billion from China (Michel and Beuret, 2009: 161). Nigeria’s explicit resource-dependency also unfolds in the lack of economic diversification which defines its economy as overwhelmingly reliant on oil exports (see Table 3.8). Accordingly, petrol revenues currently generate 95 percent of the country’s income and the petrol industry attracts the majority of foreign investments inflows (Portnoy, 2012).

A Sino-Nigerian contract worth \$800 million in 2005 enabled the Chinese SOE Petrochina to extract 30, 000 barrels of crude oil daily over a one-year period (Daniel and Bhengu, 2009: 161). Another significant deal followed shortly after in 2006 through which CNOOC purchased 45 percent ownership shares in an offshore petrol and natural gas field for \$2.3 billion (IRIN, 2006). At the time of writing, this was considered to be CNOOC’s largest global oil acquisition deal (Obi 2009: 192). By 2015, projected annual FDI inflows to Nigeria are expected to be as high as \$12 billion (Portnoy, 2012).

But Nigerian petrol companies are not the only attractors for foreign funds. Major surges in Chinese-induced FDI were also recorded in Nigeria’s infrastructure sector. In 2006, almost \$5 billion worth of infrastructure financing, which by then accounted for 70 percent of China’s overall commitment to SSA in 2006, were recorded in Nigeria (Oyeranti *et al.*, 2010: 54). The same authors report the dispersed spread of China’s infrastructure investment in Nigeria. Accordingly, transport projects received 65 percent of overall infrastructure funding followed by

the power sector with 24 percent. China also pledged to improve Nigeria's railway system and to construct six power dams by 2006 (Oyeranti *et al.*, 2010: 54).

The establishment of two Special Economic Zones, namely the Lekki Free Trade Zone and the Ogun-Guangdong Free Trade Zone, highlights China's strategic interest in Nigeria. Lekki SEZ is a joint-venture agreement between four Chinese companies and local government entities located in the greater Lagos region by a deepwater port (Brautigam and Xiaoyang, 2011: 10). Investments are planned in the transportation, equipment, textile, light industry, home appliances, communication, warehousing and export processing sectors. However, construction and investments in the zone have been delayed until further notice. The second SEZ in Nigeria, Ogun-Guangdong, has also run in administrative and financial problems. By 2010, only six out of the registered 36 companies had actually begun construction. This Zone provides financial incentives to both Chinese and Nigerian businesses to produce construction materials, ceramics, ironware, furniture, wood, processing, medicine, small home appliances, computers, lighting and paper (Brautigam and Xiaoyang, 2011: 10-12). The full implications of both SEZs will only be known in the future as corruption and financial difficulties delayed construction in both cases. So far, infrastructure investments in roads, power plants as well as water and sewage plants close to the zones are the only derived positive externalities.

At the same time, China also pursues investments in Nigeria's pharmaceutical ventures and other business sectors. For example, the Sino-Nigerian joint venture Sichuan Guangda Pharma is expected to produce local anti-malaria drugs (Brautigam 2009: 223). A communication satellite was also established by the Chinese in 2007 (IRIN, 2006). Other segments of the Nigerian economy of interest to private Chinese investors are agro-allied industries, manufacturing or the telecommunication sector (Oyeranti *et al.*, 2010: 36). A research report estimates that in 2006, approximately 30 Chinese-owned companies or joint ventures operated in the construction, oil, technology, services and education segments of the Nigerian economy (Ongunkola *et al.*, 2008). In summary, it can be concluded that China's strategic interests in Nigeria are mainly driven by oil-extractive motives, although other segments of the Nigerian economy also received significant financial support. Therefore, this suggests that Chinese FDI to Nigeria flows to a range of diverse sectors apart from the primary sector.

4.4. AGRICULTURALLY-RICH SUB-SAHARAN AFRICAN COUNTRIES

Despite employing almost half of its population in the agricultural sector, a conference report (NIC, 2005: 15) argues that Africa has "the lowest level of inputs and the lowest yields compared

to genetic potential of any region on earth". Considering the fact that 35 out of all 48 SSA nations are actual food importers, Africa remains a net-recipient of foreign food donations (Mills, 2010: 136). On the other hand, producing as much as 40 percent of export revenues while employing almost 70 percent of its population, many SSA countries continue to rely on the agricultural sector as the largest export driver (Oyejide, 2005: 109). Aggregate economic growth in most SSA nations is therefore still pivotally reliant on the performance of the agricultural sector.

Although less significant than investments in the mining or manufacturing sectors, Africa's textile, clothing and food sectors have become seemingly attractive to Chinese investors. Leather resources in Africa are vast and the textile sector could become a sustainable economic alternative to economically diversifying away from resource dependency (Goldstein *et al.*, 2006: 123). While 15 percent of the world's cattle and 25 percent of sheep and goats live in Africa, the continent currently only accounts for 2 percent of global leather trade (Brautigam, 2009: 211). Despite the fact that some of the world's best cotton products evolve from Africa, SSA does not yet play a significant role in global cotton trade. Unfavourable global multilateral cotton and textile agreements disfavour Africa's role in the global cotton trade.

Thompson (2009: 299) argues that the scramble for Africa not only entails the plundering of mineral resources but also the extraction of bioresources¹⁶. Brautigam (2009: 234) notes that despite owning only 8 percent of the world's arable land, China has succeeded in locally growing roughly 95 percent of its foods to feed its population, currently making up 20 percent of the world's entire population. In comparison to Africa, yields on China's arable land are at least three times higher.

As Section 3.5.4.8 briefly explained, China supposedly aspires to secure ownership rights to fertile arable African land. Reasons for this are attributed to rising food prices and China's explosive population growth over the last few decades (Doriye, 2010: 28). Coinciding with Beijing's other strategic African objectives, Brautigam (2009: 236) claims that Chinese agricultural engagement is not a new trend, but has rather been part of China's foreign aid policies since the 1950s when state-owned dairy farms and poultries were set up in Tanzania. Plenty of Taiwanese-sponsored agricultural projects in Africa were taken over by China after being abandoned by Taiwan. Agricultural interest in Africa could therefore also symbolise a political tool which aims to gain the diplomatic support of African nations in return for investments in agricultural projects. This reinforces the earlier observation of non-

¹⁶ Bioresources refer to plants, animals and their natural biotopes.

conditionalities attached to Chinese financing packages only holding true on paper as there may be “hidden” conditionalities.

Only a limited scope of scholarly research investigating China’s agriculturally-motivated FDI in Africa exists¹⁷. At the Beijing Summit of the Forum on China-Africa Cooperation 2006, China pledged to establish ten agricultural demonstration centres in Africa in addition to annually educating 5000 Africans farmers. In 2007, the establishment of five additional centres was announced (Brautigam, 2009: 240-252). Chinese companies were supposed to manage those centres with a three-year long loan offered by MOFCOM. After this initial period, African enterprises are encouraged to take over those centres. Considered as yet another *unconventional* way of extending foreign assistance, these centres symbolise the lucrative merging of foreign aid or investment with global profit-seeking motives (Brautigam, 2009: 241). Additionally, the China Development Bank and the EximBank both pledged to fund water and land resource projects in SSA.

Agricultural centres were established in some of the Top-Ten recipient nations of Chinese OFDI in SSA, namely Ethiopia, Nigeria, South Africa, Sudan and Zambia, while Chinese agricultural experts were sent to Nigeria and Zambia. In regard to establishing overseas farming facilities, China is also no newcomer. For example, Beijing’s agricultural funding in Zambia has been a longstanding tradition (Brautigam, 2009: 254). By 2009, estimates suggested the number of Chinese-owned farms in Zambia to be between 15 to 23. Nevertheless, Brautigam (2009: 257) argues that the Chinese farms in Africa are mostly aimed at ensuring small scale food production for local African markets. Domestically produced goods include rice, wheat, livestock and poultry. Mwanawina (2004) makes note of China’s attempt to educate Zambian farmers and Beijing’s financial support of local Zambian cotton and textile factories.

A conference report compiled in Lusaka (National Consultation Workshop, 2009) confirms those findings by claiming that Zambia does not export agricultural products back to China. A joint-venture deal struck in 2007 between one of China’s largest telecommunication SOEs, Zhong Xing Telecommunication Equipment Company, and a local bio-fuel entity in the DRC was heavily criticised. Mass media reports worldwide exaggerated the size of the acquisition almost threefold (Brautigam and Xiaoyang, 2009: 694). This reemphasises the fundamental issue with Chinese FDI data. Inaccurate and flawed data hence result in contradictory numbers.

¹⁷ Recent studies on China’s investment in Africa’s agricultural sector include Edinger and Sandrey (2010) and AATF (2010).

When quantitative data is consolidated, agriculturally-motivated Chinese FDI in Sub-Saharan African recipient nations is only of minor importance. Countries like Guinea, Mali, Somalia or Tanzania have received small amounts of Chinese FDI to establish farms, irrigation systems and provide workers' training with the goal of developing self-sufficient food-producing nations. Since these countries do not fall under the scope of this thesis, a more detailed analysis will not be performed. Brautigam and Xiaoyang (2009: 694) further acknowledge that most Chinese companies remain hesitant to invest in the agricultural sector of African nations. Poor infrastructure systems and substantial market uncertainties are the main reasons. If hypothetically speaking, China was to cultivate African food products for export purpose; this would not be economically viable or profitable.

Nevertheless, a few Chinese pioneers are presently trying to expand their operations to African markets. At the core of improving Africa's agricultural technologies is the development of hybrid grains for rice or maize production. Because Beijing prides itself in having successfully developed hybrid grains, agricultural pursuits in Africa could be perceived as a mixture of chasing profits, extending symbolic diplomacy and improving Africa's food security (Brautigam and Xiaoyang, 2009: 694-701). In addition, Chinese farmers may also be encouraged by their own government to resettle in Africa, but to date, data recording Chinese farming immigrants in Africa is still unavailable. Therefore, common claims that China is land grabbing or that the dislocation of local African farmers threatens African food security cannot be validated. Further research is required to evaluate the full implications of China's agriculturally-motivated FDI to Africa, in particular since the vast amount of arable land in Africa seems to be slowly running out.

4.4.1. Ethiopia

Ethiopia has gained recent attention from foreign investors and according to MOFCOM (2010) data, it is ranked as the 7th top receiver of Chinese OFDI in SSA with approximately \$185.12 million FDI flows having reached the country between 2004 to 2010. In 2005, Chinese aid (ODA and OOF) to Ethiopia was negligible, only amounting to \$800 million. By 2007, that number had already doubled to \$1.7 billion, which could serve as an indicator of the country's projected oil potential (Michel and Beuret, 2009: 191). Foreign aid figures in 2007 were almost the same as the total amount of Chinese FDI inflows between 2004 to 2010 which implies that ODA and OOF are vital tools in channelling foreign capital to developing nations. Despite being one of the poorest countries in the world, Ethiopia was classified as a nation attractive for its agricultural potential (see Table 3.8). Unfortunately, only a limited amount of data is available on China's presumed agricultural engagement in Ethiopia. Initially classified as an agriculturally-

attractive nation, Daniel and Bhengu (2009: 180, 191) acknowledge the country's vast untapped oil reservoir under the desert. Investment potential is also found in Ethiopia's growing light manufacturing industry. In fact, Chinese FDI to Ethiopia appears more diversified than presumed as both oil and agricultural motives seem relevant.

The Chinese SOE Sino African Overseas Leather Products signed a joint-venture agreement worth \$34 million in order to build a tannery and numerous factories for the manufacturing of various textile products. Mainly shoes, gloves and leather jackets are produced for export purposes. Another notable Chinese investment in Ethiopia's leather segment includes an FDI-induced project between Huajian Group and a local shoe producer (Whitehead and Green, 2012). The establishment of a second Special Economic Zone (SEZ) is also planned as part of this investment deal. Greenfield Investments, on the other hand, predominantly occur in oil-extractive industries. Chinese companies also began investing in Ethiopia's construction sector. For example, the China-Africa Development Fund acquired 40 percent ownership shares in an Ethiopian plate glass project and invested \$60 million in a local cement plant (Brautigam, 2009: 224). Joint-venture investments were also recorded in Ethiopian building material plants.

Plans to realise the implementation of Ethiopia's Eastern Industrialisation Park, one of China's six SEZs in Africa, has been slow. On paper, the creation of 10,000 to 20,000 jobs was envisioned by approximately 80 sponsoring companies. Yet by 2011, only one cement factory has been established in the Zone after financial constraints forced the initial investors to abandon the project. Since then, 11 additional investors signed letters of intent while China's EximBank is still negotiating the financing terms (Brautigam and Xiaoyang, 2011: 76). Nevertheless, revenues obtained from the established cement factory have already benefited nearby infrastructure developments. Further industries are expected to commit to the Zone's development in the near future (Brautigam, 2011c; Brautigam and Xiaoyang, 2011: 76-77).

China's effort to pump financial support into Ethiopia's roads, its dazzling embassy, the country's largest Tekeze Dam and the local communication network could be perceived as a long-term strategy to secure oil access. In order to advance telecommunication services in one of the world's least telephone - dense region, a notable multi-billion Sino-Ethiopian telecommunication contract worth \$1.5 billion was signed in 2007 via supplier credits. (Brautigam, 2009: 187). Although Ethiopia is still considerably underdeveloped, both America and China seem eager to secure access to the country's untapped oil reserves before other foreign nations get a chance to become involved in the hunt. Hence, Ethiopia embodies the classical ideological conflict between China's semi-communist interests and America's capitalist

ideologies. In response to America opening its biggest West African embassy in Ethiopia in 2005, China not only constructed an even more impressive one shortly after but also pledged \$150 million towards the African Union's new headquarters (Michel and Beuret, 2009: 191).

This case study of Sino-Ethiopian engagement shows supporting evidence for China's unconventional foreign assistance practices. In consistency with other Sino-African deals, diplomatic, capitalist and energy-related motives seem to be simultaneously tied to Ethiopia's funding packages.

4.4.2. Kenya

Although Kenya only secured less than 2 percent of inflows, it is ranked as the 8th largest recipient of Chinese OFDI to SSA. According to the author's own calculations summarised in Table 4.1, roughly 14 percent of aggregate global FDI to Kenya between 2005 to 2010 was sourced by Chinese investors. Based on Table 3.8, Kenya is classified as a diversified economy with 48 products generating more than 75 percent of its export revenues. Black tea, cut flowers and coffee hereby absorb the largest share of foreign revenues (see Table A.8 in Appendix). Although UN Comtrade (2012) classifies 45 percent of aggregate Kenyans exports as agricultural products, surprisingly, Kenya generally does not export its agricultural products to China. This could refute the assumption that China's FDI interests in Kenya rest on agrarian motives, at least not in the short-run. However, China became the largest FDI supplier to Kenya by 2010 (Juma, 2011). So if not for agricultural reasons, why then does China display a genuine interest in Kenya?

According to Onjala (2008: 8), "China views Kenya as a gateway to the region and it has become a key focus of China's trade and economic strategy in Africa". Compared to more aggressive FDI strategies in resource-rich SSA nations, China's concern for Kenya could be considered as a fairly recent and more diversified development approach in pursuit of various multifaceted investment motives. In the early 2000s, 90 percent of Chinese OFDI to Kenya targeted manufacturing services, with the remaining 10 percent invested in service industries. By 2003, 11 fully-owned Chinese service companies were established and 50 more followed the year after (Onjala, 2008: 16). Aiming to strengthen technical and economic cooperation, 2006 witnessed the signing of six bilateral Sino-Kenyan trade agreements. A Greenfield Investment deal was struck in 2006 to reserve offshore oil drilling rights. Additionally, Sino-Kenyan pharmaceutical joint ventures were formed and another joint venture worth \$130 million was initiated in a Nairobi solar panel factory (Brautigam, 2009: 224; Onjala, 2008: 9-17).

Despite a lack of data, it was estimated that by 2007 approximately 8,000 Chinese resided in Kenya, the majority of whom were involved with the importing of manufactured goods (Kamau, 2007). Recent foreign investments also targeted auto-assembly plants and distribution centres for car parts (Juma, 2011). While Chinese investment motives in the early 2000s focused on the manufacturing sector, recent investments now predominantly reach resource-extractive industries, even though manufacturing segments continue to be targeted. Other sectors supported by Chinese funds are construction, telecommunication, tourism and transport and retail ventures. For example one of China's largest SOEs, Huawei, won a large telecommunication deal to expand Kenya's local cell phone network. Most Sino-Kenyan investment agreements are not implemented by joint-ventures, but rather through fully-owned Chinese entities (Onjala, 2008: 20-30).

While only modest compared to other African trading nations, Kenya's exports to China constitute agricultural products, such as hides and skins, sisal, fibre, coffee, tea and fishery products. China's dominant exports to Kenya, on the other hand, comprise of machinery, equipment, medicine, footwear textiles and clothing, batteries, office supplies, appliances, industrial and agricultural tools, textile goods, commodities for daily use, and building materials. Furthermore, in an attempt to secure new export markets for Chinese products, Kenya has become an important investment location (Onjala, 2008: 32). Although Kenya was initially classified as an agriculturally-motivated FDI host nation, empirical results suggest that China might also be pursuing resource-extractive and market-seeking motives.

4.4.3. Madagascar

During the investment period 2004 to 2010, Madagascar captured 1.4 percent of China's OFDI to SSA and was ranked as 9th largest receiver amongst the countries investigated. According to Table A.8 (see Appendix), Madagascar records 32 main products responsible for securing 75 percent of all export revenues. China's OFDI as a share of Madagascar's total FDI is fairly small at about 3.57 percent (refer to Table 4.1). Cotton merchandise, vanilla and seafood are the most significant exports. Close to 80 percent of Madagascar's population is employed in the agricultural sector which generates 30 percent of the country's GDP (Üllenberg, 2009). Despite its reasonably well-diversified economy, textile exports are the major economic drivers. Nevertheless, Madagascar has plenty of fertile land and due to its low agricultural productivity, plenty of investment potential to boost the country's agricultural sector exists.

Table 4.5: Agriculturally-motivated FDI in Madagascar in 2009, in hectare of land

	Area, in ha
FDI in land (in total)	3,020,300
FDI in land for food production	1,446,500
FDI in land for agro-fuel production	1,531,700
FDI in land for cash crop production	9,100
FDI for other purposes	33,000
Others	530

Source: *Üllenberg (2009: 9)*

Table 4.5 provides an overview of aggregate FDI in Madagascar's land resources. Accordingly, FDI flowing into Madagascar's agricultural sector seems to be motivated twofold; either for local food production or for agro-fuel production (Üllenberg, 2009). Chinese FDI to Madagascar reveals a similar trend. In line with foreign investments into Zambia, the portion of China's OFDI targeting Madagascar's agricultural sector is only aimed at enhancing local food security. Examples of China's engagement in Madagascar are sparse. One of those is China's investment in the previously state-owned local sugar cane company SUCOCOMA. After the indigenous Madagascan' company failed, the 10,000 hectare of land are now used to recultivate and regrow sugar cane. Only one FDI project so far recorded agricultural export serving international markets. Popular agriculturally-motivated FDI businesses in Madagascar are agro-fuel projects or investments in the sugar, palm oil and cattle. However, the majority of OFDI in land-projects are utilised for crop cultivation. As bidding for land ownership rights is hindered by a lack of transparency and inaccurate ownership records, the targeting of Madagascar's fertile land via FDI does not seem as viable as portrayed by the media (Üllenberg, 2009: 6-20).

Contrary to China's FDI to Madagascar which seem to address agricultural goals, other researchers claim that most of aggregate global OFDI to the country is motivated by mining incentives, particularly in cobalt, nickel or iron ore resources (Razafindravonona, Rakotomanana and Rajaobelina *et al.*, 2009: 6). This seems generally applicable for FDI flowing from international source countries, excluding China. Indeed, the major portion of Chinese OFDI appears to target the manufacturing sector followed by the construction and telecommunication sectors. In terms of size, a Chinese joint-venture in the telecommunication sector is the largest known deal so far. Textile investments were targeted on a much smaller case by Asian investors (World Bank, 2007: 12).

Madagascan farmers welcome FDI in hope of improving their own living conditions. Investments in infrastructure, rural electrification, water facilities, schools, hospital and the creation of local employment are all recorded benefits of FDI. It is estimated that 11 percent of local employment in the telecommunication and manufacturing sectors was created by Chinese OFDI (Razafindravonona *et al.*, 2009: 29). The government also benefits from increased tax revenues, increased agricultural production and greater food security (Üllenberg, 2009: 25).

On the other hand, flooding the Madagascan market with cheap Chinese imports, a low inclusion rate of local investors in projects and the resistance to employ local Madagascan workers for Chinese projects are some of the negative externalities from Chinese investments (Razafindravonona *et al.*, 2009: 6, 30). As with Kenya and Ethiopia which were also grouped as agricultural nations, Chinese engagement in Madagascar appears more diversified and dispersed than initially expected. In addition to its agricultural sector, the manufacturing, telecommunication and construction segments also reflected spikes in recent investment. This highlights China's diverse investment motives.

4.5. NEGATIVE EFFECTS OF CHINESE FDI IN SUB-SAHARAN AFRICA

4.5.1. Worker Related Issues

4.5.1.1. Import of Chinese Workers

Before supplemental labour laws aiming to raise the number of local workers to 70 percent were passed by the Angolan government in 2009, previously only 30 percent of all Chinese-financed infrastructure projects in Angola employed local workers. In total, 70 percent of all infrastructure contracts in host nations are awarded to Chinese firms, leaving little room to benefit the local economy. Labour statistics in Madagascar show a worrisome rate of local employment. Only as low as 23 percent of all labourers in the manufacturing sector are Madagascan citizens (Razafindravonona *et al.*, 2009: 25). Chinese oil companies in Sudan, on the contrary, draw 93 percent of their labourers from the domestic labour pool. In the DRC, 80 percent of mining and infrastructure workers are required to be locals (Brautigam, 2009: 157; Lee and Shalmon, 2008: 135; Zafar, 2007: 120). Other sources dispute these numbers and postulate that China fails to create sufficient local employment. IRIN (2006), for example, estimate that by 2005 close to 10,000 Chinese workers were employed in Chinese-sponsored projects in Sudan; more than 5000 alone were imported to help build the Merowe Dam (Michel and Beuret, 2009: 161).

Criticisms about unfair labour laws and the export of Chinese labourers are widely spread. Some reports estimate the number of Chinese labourers immigrating to Africa since the 1990s to fluctuate between 300,000 and 750,000 (Brautigam, 2009: 154). Others fear that close to 85 million Chinese workers could possibly be exported to overseas projects in the future (Whitehead and Green, 2012). Labour laws governing the minimum inclusion rate of local workers in Chinese-induced infrastructure differ from country to country. The availability of skilled local workers, how long a Chinese company has been present in Africa, the given time frame for the completion of infrastructure projects and work visa requirements all vary according to country-specific factors (Brautigam, 2009: 156).

Even though Zafar (2007: 123) compliments the quality and low-cost advantages of Chinese construction projects in SSA, he also documents that by 2005, more than 700 Chinese construction companies employed close to 80,000 imported Chinese workers in over 50 countries. Considering the vast discrepancies between different data sources, consistent estimates on the number of imported Chinese workers in Africa is not available. Yet, regardless which country is investigated, researchers concur that tens of thousands of imported Chinese workers arrive in SSA for the sake of completing domestic construction projects. Since Beijing's construction companies are also accused of unfairly outbidding Western companies on profitable infrastructure contracts, tensions are on the rise (Alessi and Hanson, 2012).

4.5.1.2. Anti-Chinese Sentiment

Anti-Chinese sentiment amongst all SSA host nations is currently worst in Zambia where as many as 80,000 Chinese are estimated to reside (Michel and Beuret, 2009: 232-234). An explosion at the Chinese controlled Chambishi copper mine, which was declared economically unviable by other foreign investors, resulted in the death of 51 local Zambian workers in April 2005 (Hönke, 2009: 284; Prichard, 2009: 255). Insufficient training of Zambian workers, the lack of safety equipment and the poor state of the mine itself were blamed for the tragedy (refer to Section 4.5.1.5 for a discussion on inadequate working conditions). Anti-Chinese sentiment intensified as Zambian workers openly rebelled against harsh working conditions, poor safety standards, lack of unions, non-existence of worker benefits and inadequate wages after the tragic mining incident (Michel and Beuret, 2009: 233-247). A year later in 2006, Zambian workers destroyed mine property and clashes escalated when Chinese authorities lost control over the mine and shot 10 workers. A similar incident occurred in 2008 when Chinese mining supervisors were taken hostage after Zambian workers destroyed some of the company's properties and went on strike (Michel and Beuret 2009: 236). Growing Anti-Chinese resentment is a clear

indicator that China's presence in SSA is not as warmly welcomed as portrayed by government officials on both sides.

4.5.1.3. Neglect of Human Capital Development

Zafar (2007: 124) cautions that Chinese SOEs supplying FDI to Africa neglect workers' training and human capital investment, both of which are vital for developing nations. Research indicates that most of the higher-level positions in Sino-African agreements are awarded to more qualified Chinese workers and that in most instances, only blue-collar African construction workers are employed by Chinese companies. Goldstein *et al.* (2006: 1240) estimate that 90 per cent of all managers and 75 percent of technical workers in infrastructure projects are Chinese workers. Mills (2010: 31) accurately summarises the trap in African development as follows: "Development depends on improving productivity. A lack of investment in people as well as equipment and technology can lead to an underutilisation of the labour potential in the world". According to the evidence stated in this section, Chinese investors do not perceive investment in human capital or worker training as a crucial aspect of Sino-African collaboration. Most employed African workers are low-skilled labourers receiving little or only marginal investment in human capital. According with the theory on FDI-induced positive externalities, (see Section 2.6), this could imply that the transfer of sophisticated knowledge from home (China) to host nations (SSA) is not applicable. Evidently, no positive knowledge spillovers might occur.

4.5.1.4. Cultural Differences

Language barriers as well as cultural differences intensify friction between Chinese and African workers, especially in Arabic-speaking Islamic countries. In countries like Sudan where English is not the official language, communication between both working groups (Chinese and Sudanese workers in this instance) mostly only occurs via gestures or sign language (Michel and Beuret, 2009: 148). Sino-African cultural differences are plentiful. Whereas Islamic workers pray five times daily out of religious obligation, Chinese workers might perceive them as inefficient and lazy. On the other hand, Chinese workers refuse to eat the local African food and attempt to grow their own food. Intimate relationships between local Africans Chinese workers are also strictly condemned by both countries (Michel and Beuret, 2009). The lack of cultural proximity and understanding not only negatively effects the working environment, but also fuels the growing resistance to China's presence in SSA.

4.5.1.5. Inadequate Working Conditions

In response to inadequate working conditions and low wages, anti-Chinese sentiment in Africa recently turned violent (see Section 4.5.1.2 for incidents Zambia). Chinese mining companies in the DRC are accused of hiring children under hazardous and exploitative working conditions (Brautigam, 2009: 300). Inhuman working conditions including long shifts, inadequate salaries, lack of respect for workers as well as numerous working casualties have been reported in Nigeria (Obi, 2009). A growing wealthy oil-elite in Nigeria which grew powerful after the government liberalised the oil sector is now the predominant beneficiary of Chinese FDI. This resulted in the violent Niger-Delta crisis between local workers and the Nigerian government which also affected foreign investors. It is estimated that internal violent conflicts to protect Nigeria's oil supplies from foreign investors have already cost the country almost one-fourth of oil-exports (Obi, 2009: 205-206). Violent conflicts also occurred in Ethiopia where on April 24th 2007, clashes between rebels and a Sinopec facility resulted in 65 Ethiopian and 9 Chinese deaths as well as Chinese hostages being taken. Evidently, it seems like African workers are not satisfied with the Chinese working conditions and as discussed in the preceding section, cultural differences hinder the mutual understanding and respect of workers.

4.5.2. Economic Issues

4.5.2.1. Windfall Gains and Failure of Resource-Revenues to Benefit the entire Population

Since extractive sectors continue to remain state-owned or controlled by a few powerful individuals, only a small political elite profits from FDI-supported Greenfield Investments in the oil and mining sector (NIC, 2005: 7). At the same time, the majority of African mines are now owned by foreigners. As incoming petro dollars only benefit foreign owners or the local ruling elite, the amount of profits directly benefiting SSA countries is severely restricted (Hönke, 2009: 284; Satgar, 2009: 47; Southall and Comminos, 2009: 368; UN Conference, 2011b: 1). Additionally, Prichard (2009: 262) notes that mining revenues gained through FDI have not generated sufficient tax revenues. In other words, the trickle-down effect of mineral revenues which are supposed to benefit the population as whole, does not occur.

Many Sub-Saharan African mining and petrol companies (or governments) accept Chinese resource-for-infrastructure contracts, but they have no say in what kind of projects will receive Chinese sponsoring or in what area funds should be invested. Although the road systems and public infrastructure networks in many SSA recipient nations are improving because of Chinese funding, other areas of the economy are neglected. Another common problem with petrol-

revenues is their cyclical behaviour. Mining and oil revenues are fragile in times of price volatility but booming in times of high global prices. Considering the recent surge in commodity-extractive FDI, researchers are indecisive about whether this is just another cyclical high or whether a new era of large mining engagements in SSA is about to begin.

4.5.2.2. Crowding-out of Domestic African Businesses

On the consumption side, African markets have been flooded with cheap Chinese imports which certainly benefit African consumers with a choice of products that were unavailable before (see Section 3.5.4.6). Nevertheless, Chinese goods hurt the domestic African businesses. Sub-Saharan Africa's textile and clothing industry has been severely affected by cheap Chinese imports after the WTO terminated import quotas on Chinese goods¹⁸ (IRIN, 2006). Between 2003 and 2006, South Africa claims the loss of almost 67,000 jobs for textile workers following the imports of cheap Chinese clothing (Brautigam, 2009: 189). Madagascar similarly suffers from the market entry of Chinese goods which depress the local textile industry (Razafindravonona *et al.*, 2009: 6). Zambia, on the other hand, asserts that Chinese farms disadvantage local food production. Nevertheless, such charges could not be supported (see Section 4.4).

While critics blame the crowding-out effects of cheap Chinese textile imports for job losses, others point to South Africa's negligence in not investing enough capital and the low productivity of its worker (Edwards, Naughtin and Rankin, 2011). South Africa has not sufficiently improved its competitiveness in the global textile market. Surprisingly, when analysing China's trading profile for 2009 to 2010, textile products were not amongst its dominant export products (UN Comtrade, 2012). In conclusion, Chinese exports to SSA could therefore be seen as mixed blessings, beneficial to African consumers but to some extent also hurtful to local African producers.

4.5.3. Ethical Issues, Violation of Moral Rights and Governance Obligations

4.5.3.1. Lack of Governance, Democratic and Humanitarian Rights

Contemporary Chinese loans to Africa encourage an alternative method of foreign assistance-one that previously had not been implemented. Beijing's apparent non-interference policy has attracted heavy criticism from Western countries as it neglects to recognise the need for basic humanitarian rights, democratic principles or politically stable host governments. It is feared that

¹⁸ The termination of the Multi Fibre Agreement in 2005 meant that (SSA) countries were no longer allowed to impose import quotas on Chinese clothing and textiles. See Edwards *et al.* (2011) for a discussion on Southern Africa's textile industries.

unconditional Sino-African deals aggravate the state of corruption, lack of political freedom and violent conflicts in authoritarian African nations (NIC, 2005: 7). Currently, Angola, the DRC, Ethiopia and Sudan represent specific examples where China's no-interference policy clashes with international stipulations. Whereas most Western oil companies withdrew their operations or governments broke off ties with the Sudanese government for continuously violating human rights, China continues to financially and diplomatically support the country in exchange for securing access to oil (IRIN, 2006). Multi-billion heavy Sino-Congolese infrastructure-for-minerals deals are also condemned as humanitarian conditions in the DRC are unacceptable according to Western standards.

Particularly in Angola, corruption poses a serious issue. China's financial aid engagements with Angola are criticised based on the lack of transparency and corrupt malpractices (Obi, 2009: 196). Estimates predict that at least \$1 billion of domestic funds vanish annually in the government's accounting books (Michel and Beuret, 2009: 213, 231). Corrupt domestic business practices inevitably affect foreign funds. In the case of Angola, \$3 billion of Chinese funds were reported to have evaporated untraceably. According to the Corruption Perception Index¹⁹, most of the Sub-Saharan-African nations investigated in this research study scored some of the lowest rankings (Transparency International, 2012). Out of 182 countries in total, Sudan, DRC, Angola are ranked 177th and 168th respectively. Kenya, Nigeria, Niger, Ethiopia and Zambia also scored in the bottom half of the index and were ranked 154th, 143th, 134th, 120th and 91st respectively. Those findings confirm the argument that China does not seek to encourage good governance or ethical business practise when screening potential investment locations. Confidentially signed foreign aid and non-transparent Sino-African FDI agreements aggravate the problem of accountability (Mwanawina, 2004).

Corruption not only applies to SSA regimes but also to fraudulent Chinese investors. Some of China's largest investors in SSA, for example China State Construction Engineering Corporation and Geo-Engineering, were both blacklisted by the World Bank because of charges of corrupt and fraudulent business activities (Brautigam, 2009: 295). Based on the Corruption Perception Index (Transparency International, 2012), China ranked 75th out of 182 countries, suggesting that corruption in the public service occurs frequently.

¹⁹ The Corruption Perception Index ranks countries based on their public sectors' perceived corruption levels. Rankings are allocated on a scale from zero to ten. Countries with low scores are classified as highly corrupt countries, whereas countries with little observed corruption in their public services obtained high scores (Transparency International, 2012).

4.5.3.2. Chinese Weaponries and Support for Conflict-Prone Regions

Some of the newer mining and oil recipient nations of Chinese OFDI in SSA are regions of unstable governments and conflict-prone areas with high risk of war. The DRC, for example, has been war-ridden for almost twenty years and foreign investments from China are greatly encouraged by the DRC's government as traditional investors pulled out of the country when loan stipulations to guarantee humanitarian rights were violated.

A worrisome aspect of various Sino-African oil-for-loan agreements concerns weaponry deals struck between war-torn nations in SSA that received Chinese arms in return for oil exports (Dowden, 2009; Rupiya and Southall, 2009: 180). Angola, the DRC, Sudan and Zimbabwe are all beneficiaries of such secret arms-for-petrol deals. Arms-for-commodity swops do not appear in international arm sales statistics and they could therefore be classified as black-market trading. Michel and Beuret (2009: 136) affirms that Norinco 9mm pistols - a Chinese model- are widely used in most violent muggings and crimes in South Africa. Interestingly enough, South Africa is China's largest recipient of OFDI. Sudan, on the other hand, experiences its own issues with Chinese arm deliveries. Before the country split into North and South Sudan in 2011, China delivered weapons to the Sudanese government to fight off the rebels. As most of the oil is located in the now rebel-governed South Sudan, it is claimed that China started to support the former enemy in order to protect their oil drilling rights (Alessi and Hanson, 2012).

If this correlation between Chinese OFDI and the increase in the quantity of arms in host countries holds true for the future, a frightening scenario may evolve. Nevertheless, Beuret and Michel (2009: 136) reveal that 42 of the top 100 arms manufacturers are American companies. In line with all FDI-related data, caution must be exerted when analysing the sources of such statistics as they could be misused for propaganda purposes. Furthermore, the increase of Chinese weaponry sales in African host nations could possibly be more trade-related than FDI-related. Although it is too early to predict the full implications of Chinese non-interference policies, China might be slowly beginning to enforce partial stipulations on loans. Presumably Western pressure is the main reason for this. For example, financial aid packages extended to Zimbabwe or Sudan recently began to see conditions attached to them.

4.5.4 Agricultural Issues

4.5.4.1. Biopiracy

Thompson (2009: 300) acknowledges biopiracy²⁰ as a negative externality of agriculturally-motivated FDI. Industrialised nations hereby approach Africa in a global competition to extract desirable genes (traits) of local animals. Those genes will then be reproduced and eventually sold at higher profits in home countries. Unfortunately, neither the local governments nor indigenous tribal communities which claim the rightful ownership over breeding animals are reimbursed by investing countries.

Cases of plants or animals from which genetically material has been removed without prior consent were revealed in South Africa (tube worm, sea pen extract) and Mozambique (bacteria extracts). Uvaria, an African fruit used as traditional medicine in Ethiopia or Tanzania, is further protected by patents or copyrights despite its usage in Europe and America. Thompson (2009: 314) further disputes the company Monsanto's illegal business practises. Monsanto owns 90 percent of all global patents for genetically modified organisms though refuses to compensate local farmers for contaminating their indigenous crops. Even worse, the company recently began suing local farmers whose crops contain minor traces of Monsanto's patented gene for negligence of paying royalties. It was not taken into consideration whether genetic pollution was caused by wind pollination or other uncontrollable causes.

Biopiracy produces the same negative consequences as other forms of piracy - both refuse to compensate the rightful owner of the resources. As Thomson (2009: 317) concludes:

“The North is gene poor, while Africa is gene rich. The new scramble for Africa is pirating genetic wealth, privatising it and then demanding that African farmers pay to use it or African geneticists pay to explore it. This process is not at all different from the commodity chain for oil: taken from African reserves it ends up as petrol in dilapidated African buses. The commodity chain beginning with columbite-tantalum dug from African soil is processed for laptop computers too expensive for Africans to buy”.

²⁰ Biopiracy is not a contemporary concept but dates back to 1977 when the term was phrased by Shiva. According to Thompson (2009: 300), biopiracy is defined as the unlawful removal of plants, seeds or animals with the purpose of claiming ownership thereof as well as the physical destruction of natural habitats through genetic or chemical contamination.

4.5.4.2. Pollution and other Environmental Issues

Considering China is still a developing country itself, lax environmental practises of Chinese companies operating in Africa are transferred to SSA host countries. Brautigam (2009: 299) postulates that the lack of Chinese social and environmental standards, particularly applicable for hydropower dams, roads and large-scale mining projects, severely damages Africa's environment. Incidents of environmental violations are plentiful as oil-related exploration, production and manufacturing activities are associated with a series of environmental problems. While the costs of negative externalities that result from such practises are borne by host communities, a detailed investigation of environmental issues is beyond the scope of this study. Nevertheless, the need to ensure that Chinese firms comply with social responsibility laws is valid.

4.5.4.3. Effects of Chinese-Sponsored Dams

The construction of the Chinese-sponsored Sudanese Merowe Dam in Sudan also caused severe environmental damage. Plenty of controversy surrounds this project which was envisioned since 1943. Construction began in 2000 with Sinohydro winning the prestige infrastructure deal. Projected to generate half of Sudan's water supply, the dam was officially opened in 2009 (Michel and Beuret, 2009: 161). However, in addition to date palms being permanently destroyed, houses torn down and compensation packages promised by the Chinese government never being paid, more than 50,000 indigenous Sudanese people were dislocated from their traditional territory. Other hydropower dams in Ethiopia and Nigeria also forced many indigenous people from their fertile land and resulted in violent clashes (Brautigam, 2009).

Depending on whether Chinese or Western data is accessed, most sources reveal conflicting findings. Media reports from the West claim that China is land-grabbing, while most of the food produced by Chinese farms in SSA is claimed to be exported to China. Vulnerable food-importing countries, such as Sudan and Ethiopia are reported to export over 70 percent of their aggregate food production to China (Doriye, 2010: 29). Chinese authorities, on the other hand, ensure that Chinese farms and food distributors in Africa are solely used to enhance local food productivity (Brautigam, 2009). More research in the area of agriculturally-motivated FDI is therefore needed in order to endorse both claims.

4.6. CONCLUSIONS

In order to evaluate the impact and magnitude of Chinese investments, this chapter analysed Sino-African FDI deals in more depth. The Top-Ten recipients of Chinese OFDI in SSA were

reviewed in country-specific case studies. From these studies, FDI flows appear to be more concentrated towards nations that are strategically important to China based on three determinants: oil, natural resources or agricultural potential. This is underscored by the fact that those Top-Ten recipients secured over 75 percent of China's aggregate investment funds to Africa, whereas South Africa must be treated as a data outlier. Other sectors in SSA that received substantial shares of Chinese OFDI are the telecommunication, manufacturing and construction sectors. China's OFDI as a share of recipient countries' total FDI between 2005 to 2010 varies from being statistically insignificant in Angola at 0.23% to almost 21 percent in South Africa. Benefits arising from Chinese-produced flows greatly vary therefore.

Preliminary *a priori* assumptions suggested that investments in resource-rich or oil-producing nations are non-diversified unilateral flows in line with China's strategic energy goals. The DRC, Niger, South Africa and Zambia were classified as resource-rich nations. Excluding South Africa, findings confirm the non-diversified export strategies of those nations. Virtually all of China's OFDI flows to the extractive sectors of the relevant economies. An exception to this is South Africa, where strategic asset-seeking motives in its financial services sector play a crucial role in attracting foreign inflows. In quantitative terms, South Africa received the largest but also most diversified Chinese inflows amongst all resource-rich nations, followed by Zambia which also indicated agricultural potential. Chinese FDI to the DRC appears to predominantly target extractive-intensive industries, while investments to Niger appear to be attracted by uranium products. Due to a lack of empirical data, only vague assumptions on Niger's investment behaviour could be drawn.

Case studies of the oil-rich nations Angola, Sudan and Nigeria confirm the assumption that China's interest in these nations is enhanced by the availability natural resource- in this case oil. Surprisingly, all of these "oil countries" also secured a significant amount of funding relevant to non-resource segments of their economies. This suggests that resource and oil-motivated Chinese OFDI to SSA seems more diversified in reality than initially assumed.

The last category of Sub-Saharan African host nations reporting Chinese FDI inflows, namely agricultural-nations, include Ethiopia, Kenya and Madagascar. All three countries presented more diversified economies than any other group. Consequently, in addition to agriculturally-related inflows, these nations succeeded in attracting the most wide-ranging types of Chinese inflows. The empirical evidence presented in this chapter indicates that agricultural FDI into SSA is not motivated by land-grabbing or the export of food, but rather focuses on ensuring small-scale food security for local African markets.

In conclusion, it is postulated that as an investment location, Africa serves both China's short-term goals as well as its strategic long-term energy goals. The implications of China's engagement in Sub-Saharan African host nations differ on a country-specific level. Negative externalities range across a variety of economic, social, humanitarian or environmental issues. The case-study approach confirms that inadequate working conditions, marginal investments in human capital, the failure to create substantial local employment, crowding-out of local businesses or low environmental standards do create serious challenges for sustainable, long-term development in African host nations. Neglect of humanitarian rights, support for war-prone conflict zones or authoritarian leadership and the engagement in corrupt business practices symbolise additional short-comings of Chinese induced FDI in SSA.

CHAPTER FIVE:

CONCLUSIONS, POLICY RECOMMENDATIONS AND LIMITATIONS

The motivation behind this research study is found in China's contemporary engagement on the African continent. In response to its growing financial commitment to 44 African nations (FOCAC, 2012), it is important to assess the nature, forms, motivations and determinants of Chinese OFDI by reviewing relevant literature and analysing empirical results. Due to a lack of domestic investment capital, low savings rates and marginal income earnings, FDI provides a key medium through which to supply capital in most SSA nations (Asiedu, 2006: 107). As stressed throughout this study, the withdrawal of FDI by foreign investors may severely hinder economic growth and domestic developments in African host nations. Hence, it felt necessary to investigate Chinese investment patterns in order to critically evaluate their implications for African host nations.

5.1. SUMMARY OF FINDINGS AND CONCLUSIONS

This study commenced by addressing the theoretical framework of FDI. Various different explanations as to why countries or companies supply foreign investment and what determinants appear most successful in attracting foreign inflows were discussed. Chapter Two presented relevant theories based on a market-structure taxonomy but also incorporated the contemporary trend of considering MNEs as influential institutions in the process of supplying FDI funds. Although a number of FDI theories exist, Dunning's (1979, 2001) Eclectic Paradigm seems to best capture both classical trends as well as contemporary developments in international capital movements. His theory mainly draws on Hymer's (1960) Industrial Organisation Hypothesis, Vernon's Product Cycle (1966) and Buckley and Casson's (1976) Internalisation Theory to answer the questions of where, how and why entities engage in overseas investment. Referred to as the O-L-I theory, Dunning (1979) postulates that a firm's ownership, internalisation and locational advantages must all be satisfied if FDI is to be utilised as a strategy to expand operations overseas. At the present moment, his theory is considered as the most relevant FDI model amongst researchers.

According to the literature review, FDI determinants are highly responsive to country, industry or sector-specific variables. No consensus has been reached yet with regards to which host country determinants appear more attractive to foreign investors. Nevertheless, it can be concluded from the studies under review that economic variables, such as market size or the

openness of the economy, and political stability in host countries seem to be the most attractive determinants. In general, investment motives vary depending on the investor's intentions (Lim, 2001: 12).

Discrepancies also emerged when investigating the effects of FDI in host countries. Many empirical studies concluded the presence of both positive and negative FDI-induced externalities. Most researchers confirm a positive relationship between FDI inflows and economic growth in host countries (Akinlo, 2004; Borensztein *et al.*, 1998; De Mello, 1997; Lim, 2001). Moreover, positive externalities in host countries vary from absorbing sophisticated technology or knowledge to creating local employment or increasing efficiency and productivity. On the other hand, high social costs, crowding-out of local businesses, short-term employment and the negative implication of the Dutch Disease all emerged as negative FDI effects on host countries. In summary, the magnitude and extent of FDI-induced spillover effects generally varies according to country-specific factors, the specific type of FDI received and the mode of entry (see Section 2.6.).

After establishing a solid conceptual framework on FDI theories in Chapter Two, Chapter Three looked at global and Chinese FDI flows to SSA. General findings derived from the conceptual FDI framework were now applied to the specific Sino-African content of this investigation. The Chinese economy has witnessed an impressive developmental process that transformed its previously closed economy into an influential global economic powerhouse. China's annual growth rates, sometimes as high as 10.6 percent, mainly rely on its manufacturing sector (China Analyst, 2012: 14). China's ascending transformation to become the dominant global nation is currently challenging Western economies.

African nations, on the other hand, continue to rely on FDI or foreign aid funds. Failure to establish diversified economies, unfavourable institutional environments and the reliance on resource exports resemble the biggest challenges. Inadequate infrastructure, low investments in human capital, persistently negative savings rates and the immediate effects of the HIV epidemic have paralysed Africa into a developmental trap. Since Africa currently contains the largest number of developing nations on a continent, China's financial commitments could significantly boost its economic development if necessary reforms and stipulations are implemented in relevant host nations. Considering that Africa was and continues to be forecasted as the fastest growing continent, a possible cause for this could be the positive effects of Chinese FDI-induced

spillovers in SSA. Nevertheless, further research exceeding the scope of this thesis is required to validate such assumptions.

This study investigated Chinese OFDI from 2004 to 2010 based on information primarily extracted from the Chinese Ministry of Commerce (MOFCOM, 2010). Within that time frame, 50 African nations were reported to have benefited from Chinese funds. A fairly new trend in FDI is the emergence of South-South flows. Traditionally, FDI originated in Western developed countries and targeted developing host nations in the Southern hemisphere. With the growing importance developing countries play in the global economy, many of them now also supply FDI (Sparks, 2012). The BRICS countries in particular have become a vital source of OFDI - and China resembles a perfect example of this new trend.

As mentioned in the introductory chapter of this thesis and in Section 3.5.5.1, discrepancies between different data sets exist. To an extent, inconsistencies in data computations and the limited amount of available metadata restricted this research study (OECD, 2006: 62). Furthermore, untangling official data on Chinese FDI proves difficult as the majority of Chinese financing packages to SSA host nations are a combination of export credits, concessional loans, foreign debt cancellations, grants, zero-interest loans or the establishment of Special Economic Zones. Hence, most of Sino-African deals cannot be exclusively classified as ODA, OOF or FDI according to their definitions but rather as a mixture of each.

When analysing China's data, it was found that despite media reports about China's alleged heavy investments in SSA, only five percent of its aggregate OFDI is actually allocated to African host countries (Devonshire-Ellis, 2010). A similar pattern was observed for global FDI. Despite a general increase in FDI targeted at developing countries, only a marginal share of three percent was recorded to have reached Africa (UNCTAD, 2012). Hence, China's financial assistance to Africa is only marginally more than aggregate global funding in proportional terms. These empirical results confirm comments in the literature which recommend special regional considerations for SSA host countries (Asiedu, 2002, 2006). It is postulated that FDI determinants in SSA marginally differ from other regions.

As Chapter Two stated, different types of FDI are motivated by heterogeneous determinants. In accordance with this theoretical framework, motives are found to range from horizontal, vertical, extractive, asset-seeking, technology and conglomerate-seeking FDI. Supplementing such traditional motives, the empirical evidence assessed in Chapter Three suggested additional investment motives applicable to China's engagement in Africa. These vary from political

motives of extending symbolic diplomacy, disposing of accumulated foreign reserves to purely profit-seeking motives pursued by ambitious less risk-adverse Chinese entrepreneurs (Michel and Beuret, 2009). As Chinese businesses generally have not reached the standards of more sophisticated European American firms, African markets are also used as a test market for Chinese entrepreneurs willing to enter overseas markets in (see Section 3.5.4).

China's investments through SOEs also require special attention. Contrary to common *a priori* assumptions, these entities pursue conflicting motives. Firstly, as an extension of the state, they pursue China's strategic energy goals in acquiring access to foreign natural resources. Secondly, expanding operations overseas is also driven by realising profit-hungry business opportunities. Hence, China's interest in SSA should not exclusively be labelled as a quest for securing natural resources but rather as a blending of economic and political motives with Beijing's strategic natural resources interests.

Both data sets used, Chinese (MOFCOM, 2010) and UNCTAD (2012), confirmed that the majority of FDI reaching Africa is motivated by extractive activities in the primary segments of the oil or resource sectors. Particularly in developing or transitioning economies, Greenfield Investments remain the dominant method of market entry. This also holds true for SSA nations, as the majority of FDI flowing to resource-rich nations is allocated to Greenfield Projects. Other relevant sectors of SSA nations that received IFDI were the banking, retail, construction and telecommunication sectors respectively (UNCTAD, 2012). Interesting results were obtained from Chinese data (MOFCOM, 2010). According to the data, Sub-Saharan Africa's Leasing and Business Service Sector attracted the largest amount of inflows. Nevertheless, no theoretical or other empirical evidence was able to confirm these findings.

China's funds are mainly channelled through two institutions, Eximbank and MOFCOM, whereas 90 percent of all funds are supplied by MOFCOM (Grimm *et al.*, 2011: 8). Concessional loans are offered at more favourable and generous terms than traditional loans, while resource-backed financing options do not force conditionalities on recipient nations. Loans extended to resource-rich SSA nations finance local key infrastructure projects in return for exporting resources back to China. Investments in Africa's infrastructural sector are a vital ingredient for its successful economic development as traditional OECD funds neglected to undertake such investments. Brautigam (2011a: 758) further argues that with Chinese funding, the actual money lingers in China. In a way, resources-for-infrastructure deals could also be regarded as an elementary form of barter-trading. Furthermore, as China's support to African nations does not

solely rely on providing financial funds but also includes cultural, economic and political support, it should indeed be conceived as a new, *unconventional* form of extending development assistance.

Chapter Three also pointed out that despite common assumptions, China's engagement in Africa is not a new phenomenon but has gradually evolved since African nations gained independence in the 1960s. In fact, Brautigam (2009) noted that the Chinese have never left the continent, but that their investments and engagements in Africa have simply gone unnoticed. For example, China has supported Zambia ever since the 1960s, mostly for reasons of extending political support or symbolic diplomacy. China's engagement in Africa is commonly exaggerated by Western politics or media reports that fear the loss of influence by an ever growing Chinese nation, both economically and politically. As part of an ideological power struggle, such sources state facts which conflict with Eastern data. Caution is hereby required when analysing China's engagement in Africa as sources from both China and the West have a tendency to manipulate data according to their own needs.

As 75 percent of Chinese OFDI to SSA was dispersed to only 10 countries, the last section of this thesis conducted a case study approach of the Top-Ten SSA recipient nations in order to establish common investment denominators and patterns. Based on China's strategic investment strategies and country-specific data identifying the major products that account for more than 75 percent of exports, relevant recipient countries were grouped into three distinctive categories, namely resource-rich, oil-rich or agricultural nations. Similarities were found between the group of resource-rich and petroleum-rich SSA host nations, most of which (except for South Africa) presented with little or insignificant economic diversification. Export revenues in these countries almost exclusively rely on natural resources and empirical evidence confirmed that most of Chinese inflows to those countries were indeed targeting extractive industries.

The DRC, South Africa and Zambia were grouped as resource-rich nations. Out of the Top-Ten Sub-Saharan African recipient nations of Chinese FDI between 2004 to 2010, South Africa portrays the most diversified economy and also received the largest share of inflows. Securing almost 49 percent, it should be considered as an outlier, although Chinese inflows were fairly diversified. Zambia and the DRC, on the other hand, confirmed *a priori* assumptions as Chinese investments here primarily target the extractive industries. A similar pattern emerged for oil-rich countries. Angola, Nigeria, Niger and Sudan were classified accordingly. Due to a lack of accurate data, only a very limited amount of empirical results could be obtained for Niger. The other three oil-countries are heavily reliant on undiversified oil exports and empirical data

strengthened the argument that most of their inflowing FDI from both Chinese and more traditional investors is motivated by the availability of oil.

Interesting results were achieved for the agriculturally-classified nations Ethiopia, Kenya and Madagascar. Compared to resource-rich or oil-rich host nations, these countries have more diversified economies and Chinese OFDI targeted a wider-range of sectors. All three countries managed to secure inflows in their agrarian, telecommunication and manufacturing sectors. Claims accusing China of “land-grabbing” or exporting food products from mainly food-importing SSA nations could not be confirmed. In fact, empirical results revealed the opposite. Food production in such agrarian nations is low-scale and local in nature (Brautigam, 2009: 257; Üllenberg, 2009: 25). Instead of depriving African nations of their own food, China seems to be actually enhancing local food security. Zambia, for example, hosts a number of Chinese farms, all of which were supporting local food production. Furthermore, land-ownership rights in Africa are complicated. Ownership disputes amongst local tribes and governments exist, which makes it even harder for foreigners to acquire land. In fact, China does not seem to have the knowledge nor the power to steal away the local land.

5.2. IMPLICATIONS OF THE RESEARCH AND POLICY RECOMMENDATIONS

China’s engagement in Africa is indeed unconventional in many ways. Firstly, China’s own experiences of being a major recipient of OFDI is an advantage traditional donors never had. Most Sino-African agreements draw heavily upon Sino-Japanese FDI contracts from the 1970s. Secondly, China and Africa have more commonalities than Africa and its traditional donors ever did. Both are still developing countries, faced with similar problems and issues. Poverty, corruption, low humanitarian standards, limited personal freedom, unequal wealth distribution, disregard for environmental issues and neglect of appropriate working conditions are challenges both regions still have to overcome. Thirdly, compared to structural adjustment programs and string-attached loans supplied by traditional nations, China’s non-interference foreign policies do not impose any *obvious* conditionalities on African host nations. Nevertheless, certain obvious conditions, such as host nations’ support for Beijing’s foreign policy agenda, are indirectly inflicted upon recipient nations.

At least on paper, Chinese authorities consider Sino-African relations as mutually beneficial agreements based on respect, friendship and collaboration. But in line with all FDI, negative externalities are evident. Empirical evidence indicates that claims of the crowding-out of local African business, poor working conditions, inadequate workers’ safety and compensation,

violation of environmental rights, the failure to employ local workers or Beijing's unconditional support for corrupt and authoritarian African nations do appear valid, at least to some extent (refer to Section 4.5). Sino-African arms deals benefitting war-torn African conflict nations have further drawn collective international criticism, questioning China's morals and ethics. Based on FDI theory, the magnitude of FDI-imposed externalities in host nations varies on a country- and industry-specific base. At the time of writing, a growing amount of anti-Chinese resentment is experienced in all host nations.

However, as with any official contract, one cannot receive without being willing to give. This relies on one of the simplest economic principles: the law of supply and demand. If China supplies foreign funds, they will obviously demand something in return. In the case of Africa, this happens to be natural resources or oil, considering natural resources continue to remain the continent's dominant comparative advantage. Remembering their painful experience with traditional Western FDI suppliers, African nations should not realistically expect to receive unconditional funding without accepting certain trade-offs. As a result of globalisation, Africa is now actively embedded in global trade. Therefore, African nations should accept Chinese FDI as two-sided contractual agreements beneficial to both parties. Rather than considering China's engagement in SSA as an exploitative dependency-creating alliance, it should be perceived as opportunistic trade and development assistance. In the past, China also gave away precious oil and coal commodities in return for receiving Japanese investments and more sophisticated technology. But China actually never complained about such agreements. On the contrary, China realised FDI's positive spillovers and gladly offered its own resources with the intension of creating long-term sustainable development.

On the other hand, benefits arising in host countries greatly vary. Evaluating China's FDI as a share of the recipient countries' aggregate FDI from 2005 to 2010 revealed that its share was smaller than other sources claimed. Only 3.43 percent of host countries' aggregate FDI inflows were produced by China – a small number compared to other global source countries. Numbers also fluctuate depending on the relevant host country. South Africa is both the biggest recipient of Chinese OFDI from 2004 to 2010 and the largest beneficiary of China's FDI as a share of the country's total FDI inflows at 21 percent. Angola, on the other hand, is the 10th largest recipient of China's FDI in SSA. Yet, this comprises only 0.25 percent of all FDI received by Angola. The benefits, if existing, might only be minuscule compared to what Angola gains from non-Chinese FDI.

As the empirical results have shown, the bargaining power of African nations in Sino-African deals has actually improved, although due to limited data, it is impossible to precisely estimate to what extent. Unfortunately, it is up to African leaders to negotiate favourable investment agreements which not only benefit the local ruling elite, but the host country as a whole. Therefore, if host nations are truly trying to maximise the benefits from Sino-African projects, African leaders themselves must ensure the favourable outcome of investment agreements. Only they have the power and authority to influence agreements. In order to increase positive externalities derived from Chinese investments, SSA leaders should increase the tax rates imposed on extractive industries, change the labour laws to increase the number of local workers employed, increase minimum wages for local workers on par with international standards, ensure working conditions are safe and further establish environmental regulations that impose penalties for non-compliance. Lastly, it is recommended that SSA nations implement uniform foreign investment codes and laws. If investment regulations were unified, regional cooperation and integration amongst recipient countries in SSA could be enhanced.

At the same time, China needs to step up its game to ensure that African host nations are treated fairly and in accordance with international standards. Lax humanitarian, ethical, working, political or economic standards are causing justifiable tensions and frustration in African host countries. As shown by the case studies, the effects of Chinese OFDI in SSA nations vary from country to country. Sudan provides a good example of how successful negotiations resulted in 90 percent of all oil workers hired in Chinese projects being locals. After recent violent clashes, Zambian authorities have also tightened labour laws and investment stipulations. This supports the argument that it is indeed up to African nations themselves to negotiate favourable and mutually beneficial investment agreements.

5.3. LIMITATIONS OF THE RESEARCH

The limiting amount of available Chinese metadata presents the biggest challenge for this research study. Inconsistencies in data computation further restrict the quality of data analysis (OECD 2006: 62). Reasons for this are twofold. Firstly, detangling official data on Chinese FDI provides difficult. Hence, most of Sino-African deals cannot be exclusively classified as FDI, Official Development Assistance (ODA), or Other Official Flows (OOF) according to its definition, but should rather be considered as a mixture of all three. Secondly, different accounting standards applicable in China compared to those in the rest of the world make it impossible to precisely compare data accurately as vast discrepancies between Chinese and Western data exist (Gelb, 2010).

It is therefore acknowledged that it proved impossible to analyse Chinese OFDI in isolation without also reviewing data on ODA, OOF or FDI. Instead of exclusively focusing on FDI, China's aggregate financing packages were critically investigated for the sake of compiling this research study. In conclusion, it is stressed that the combination of inaccurate Chinese metadata, inconsistent accounting standards causing discrepancies between Western and Eastern data and weak FDI recording methods in relevant SSA host countries exacerbate the uncertainty of the quantitative segment of this study. An example for this is the inconclusive case-study of Niger as no empirical results could be obtained. Aiming to enhance the quality of this research study, a mix of primary and secondary data sets from both Western and Eastern reports was therefore incorporated. Nevertheless, neither one ensures 100 percent accuracy. Lastly, it is also emphasised that information on a large share of Sino-African FDI agreements are not accessible for the public. Consequently, the exact state and nature of SSA's host nations bargaining power in Sino-Africa investment deals can only be evaluated to a certain extent, simply because information might not be available. However, the empirical evidence reviewed in this research study does suggest that Africa's bargaining power has increased.

5.4. CONCLUDING REMARKS

This research study has found that Chinese OFDI to SSA nations (excluding South Africa) from 2004 to 2010 only targets a limited number of strategic nations which appear significant based on their natural resources, oil or agricultural potential. Supplementing those three characteristics, South Africa was found to be an attractive investment location based on its sophisticated finance sector. China is pursuing both short-term and strategic long-term goals to ensure energy-security. Its engagements in Africa should be perceived as an untraditional and unconventional way of providing FDI or development assistance. Sino-Angolan investment packages were recently coined as the "Angolan model", a framework that has now become the example for many other investments deals. Such resource-backed loans fund vitally needed infrastructure projects at 20 to 30 percent lower costs than contracts offered from Western lenders. Repayment terms of Chinese financing packages are also more generous and loans have no official (yet some indirect) strings attached.

Tensions between America and China are on the rise as both nations actively participate in the global scramble for African resources and oil. Elaborating on the shortcomings of Chinese OFDI is a popular American propaganda method used to in an attempt of restoring the interest of African nations in American capital. African nations, on the other hand, are gradually

beginning to distance themselves from the prolonged dominance of American and European influence on their continent. China's "African Safari" could resemble a fresh start for sustainable development in SSA, away from the painful experiences of European dominance in the past and away from conditionalities imposed by World Bank or IMF financing programs. Nevertheless, this research also recognises that many of the critics of China were also critics of the FDI supplied by the West. While propaganda motives most certainly apply to the context of this notion, a well-established academic argument against FDI per se exist – regardless of host nation's geographical location. Criticism of Chinese engagements in Africa might be a reaction to the damaging effects of past FDI malpractices. Therefore, the demand for conditionalities attached to FDI packages is justifiable when past mistakes are taken into consideration.

Undeniably, China is most definitely investing in SSA to extract natural resources or oil needed for its own selfish demands. In fact, Sub-Saharan Africa's oil reserves offer a cheap and reliable source of oil exports not subjective to inflationary price fluctuations or foreign exchange volatility. But at the same time, Western and other countries have done the same thing for years without paying sufficient attention to Africa's own needs and they still continue to invest in SSA resource-rich nations. The only difference lies in publicity. America and Europe extract African oil and resources more quietly compared to Chinese investors, which could give the impression that Western countries are actually secretly trying to steal Africa's resources.

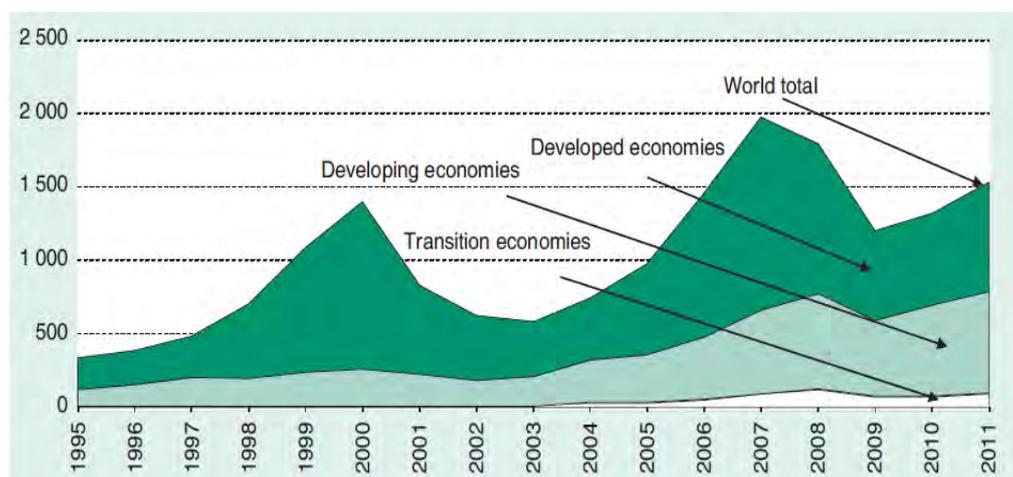
China, on the other hand, has openly announced its strategic-energy goals and Sub-Saharan African resource-rich nations play a crucial role in them. Beijing not only offers cost-effective infrastructure funding to support public projects that have been neglected by traditional Western investors for years but also loan conditions that are less harsh than traditional funding requirements. Additionally, China has been willing to invest in a region regarded as more risky and less profitable than other investment locations. Contrary to common assumptions, only a small number of Chinese investors are driven by market-seeking motives. Linking aid to investment is a smart Chinese strategy that has seen successful results. Even though African markets also provide test markets for Chinese products, local African consumers now benefit from the variety of cheap Chinese consumer goods and the establishment of public institutions, such as hospitals or schools.

In conclusion, Chinese investments should perhaps be considered as a well-structured program of unconditional loans with favourable repayment terms rather than as a new form of colonialism. The power of positively-enhancing investment agreements ensuring that everyone is

benefitting lies mainly in the hands of African leaders, and not the Chinese investors. In absence of domestic capital, Chinese capital seems like a better option than having no capital at all. Hence, this is Africa's opportunity to decide its own destiny and whether or not the outcome will be truly beneficial or a repetition of the dependency-creating deals during colonial times- and maybe the West could learn a great deal from China's investment approach after all.

APPENDICES

Figure A.1: Global FDI inflows between 1995 to 2011 grouped by economies, in \$ billion



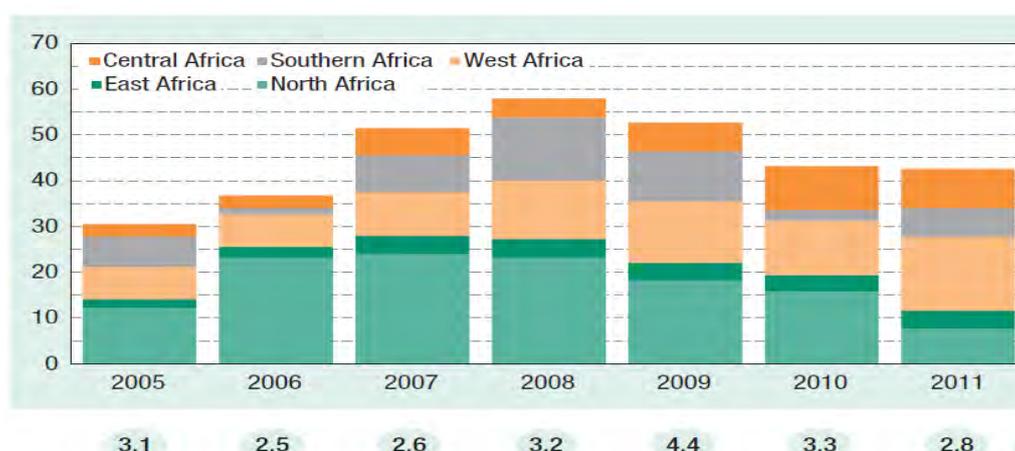
Source: UNCTAD (2012: 3)

Table A.1: Distribution shares and growth rates of FDI project values by sector/ industries in 2011, in percent

Sector/industry	Distribution shares	Growth rates	
		2011 compared with 2010	2011 compared with pre-crisis average (2005–2007)
Total	100	15	-12
Primary	14	46	50
Mining, quarrying and petroleum	14	51	53
Manufacturing	46	7	-1
Food, beverages and tobacco	6	18	40
Coke, petroleum and nuclear fuel	4	-37	-30
Chemicals and chemical products	10	65	25
Electrical and electronic equipment	5	-8	-26
Motor vehicles and other transport equipment	6	-15	10
Services	40	15	-31
Electricity, gas and water	8	43	6
Transport, storage and communications	8	38	-31
Finance	6	13	-52
Business services	8	8	-33

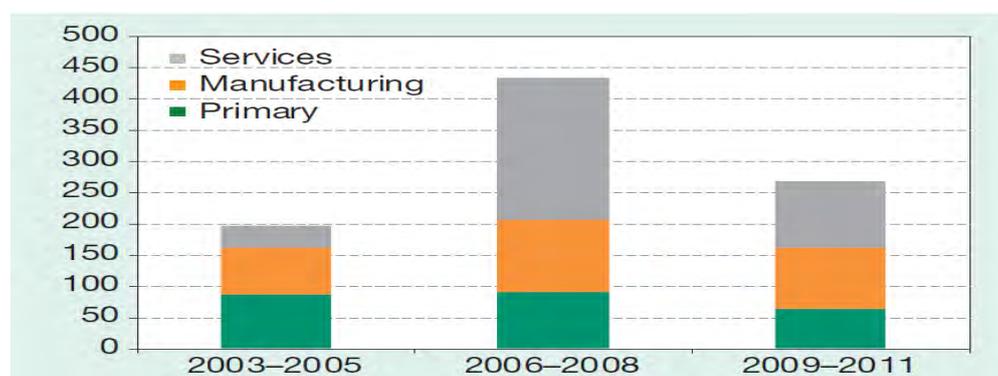
Source: UNCTAD (2012: 10)

Figure A.2: Total share of global FDI inflows to Africa between 2005 to 2011, in \$ billion



Source: UNCTAD (2012: 38)

Figure A.3: Value of sectoral African Greenfield projects between 2003 to 2011, in \$ billion



Source: UNCTAD (2012: 41)

Table A.2: African M&A's between 2010 to 2011 grouped by industries, in \$ million

Sector/industry	Sales		Purchases	
	2010	2011	2010	2011
Total	8 072	7 205	3 309	4 812
Primary	2 516	1 664	- 28	- 22
Mining, quarrying and petroleum	2 516	1 595	- 28	- 22
Manufacturing	303	1 922	404	4 393
Food, beverages and tobacco	263	1 026	2	15
Chemicals and chemical products	5	155	- 15	810
Metals and metal products	32	286	-	-
Electrical and electronic equipment	- 9	470	-	-
Services	5 253	3 619	2 933	441
Trade	84	2 161	- 49	- 181
Transport, storage and communications	1 912	489	-	- 10
Finance	134	910	2 547	674
Business services	2 994	149	436	37

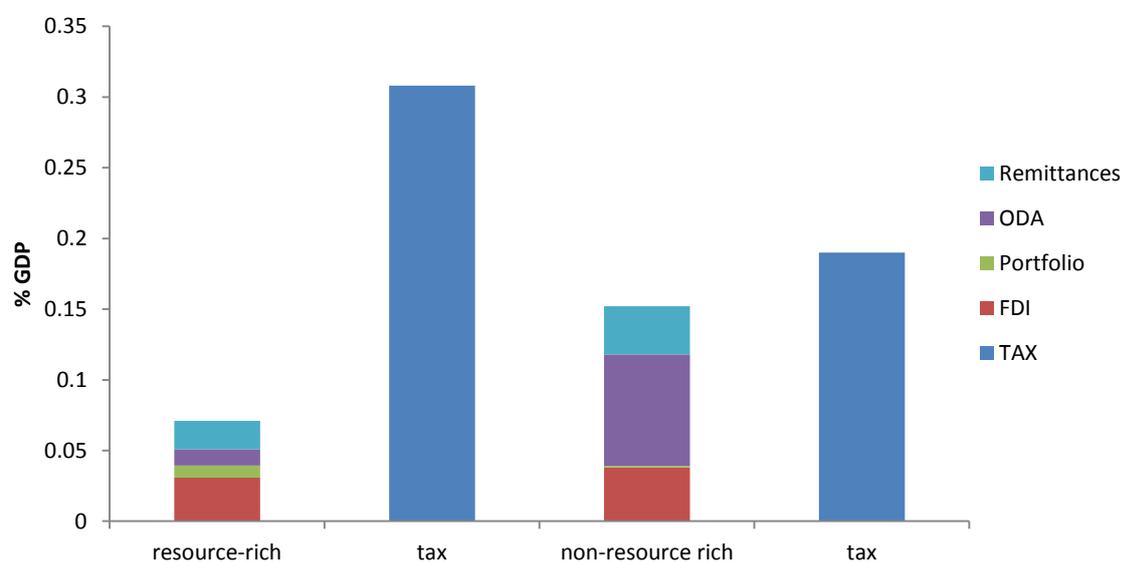
Source: UNCTAD (2012: 39)

Table A.3: African Greenfield FDI projects between 2010 to 2011 grouped by industries, in \$ millions

Sector/industry	Africa as destination		Africa as investors	
	2010	2011	2010	2011
Total	88 918	82 315	16 662	16 551
Primary	20 237	22 824	1 246	4 640
Mining, quarrying and petroleum	20 237	22 824	1 246	4 640
Manufacturing	39 506	31 205	7 506	4 798
Food, beverages and tobacco	1 888	5 185	175	628
Coke, petroleum and nuclear fuel	23 235	9 793	5 684	2 212
Metals and metal products	2 093	5 185	429	9
Motor vehicles and other transport equipment	2 568	3 118	99	-
Services	29 175	28 286	7 910	7 113
Electricity, gas and water	5 432	10 477	899	1 441
Construction	7 630	3 303	-	1 223
Transport, storage and communications	6 381	5 345	2 627	68
Business services	5 429	5 619	1 274	2 282

Source: UNCTAD (2012: 39)

Figure A.4: Composition of global external financing flows to Africa in 2012, as percentage of GDP



Source: African Economic Outlook (2012)

Table A.4: Global FDI flows to Africa between 2005 to 2010, in \$ million

Global FDI Inflows 2005-2010 (USD million)								
	2005	2006	2007	2008	2009	2010	2005-2010	% 2005-2010
Algeria	1081	1795	1662	2594	2761	2291	12184	3.63%
Angola	6794	9064	9796	16581	11672	9942	63848	19.02%
Benin	53	53	255	171	135	111	778	0.23%
Botswana	279	486	495	528	579	529	2896	0.86%
Burkina Faso	34	34	344	137	171	37	757	0.23%
Burundi	1	0	1	14	10	14	39	0.01%
Cameroon	225	309	284	270	337	425	1850	0.55%
Cape Verde	82	131	190	209	119	111	842	0.25%
Central Afr. Rep.	32	35	57	117	42	72	355	0.11%
Chad	-99	-279	-69	234	462	781	1029	0.31%
Comoros	1	1	8	8	9	9	35	0.01%
Congo	1475	1925	2275	2483	2083	2816	13058	3.89%
DRC	-	256	1808	1727	664	2939	7394	2.20%
Cote d'Ivoire	312	319	427	1	381	418	1857	0.55%
Djibouti	22	108	195	229	100	27	681	0.20%
Egypt	5376	10043	11578	9495	6712	6386	49588	14.77%
Equatorial Guinea	769	470	1243	-794	1636	695	4019	1.20%
Eritrea	-1	0	0	0	0	56	55	0.02%
Ethiopia	265	545	222	109	221	184	1546	0.46%
Gabon	242	268	269	209	33	170	1192	0.35%
Gambia	45	71	76	70	47	37	347	0.10%
Ghana	145	636	855	1220	1685	2527	7069	2.11%
Guinea	105	125	386	382	141	303	1442	0.43%
Guinea-Bissau	8	17	19	6	14	9	73	0.02%
Kenya	21	51	729	96	141	133	1170	0.35%
Lesotho	57	89	97	56	48	55	401	0.12%
Liberia	83	108	132	395	218	248	1183	0.35%
Libya	1038	2013	4689	4111	2674	3833	18358	5.47%
Madagascar	86	295	773	1169	1066	860	4250	1.27%
Malawi	52	72	92	9	60	140	426	0.13%
Mali	225	82	65	180	109	148	809	0.24%
Mauritania	814	106	138	338	-38	14	1372	0.41%
Mauritius	42	105	339	383	257	430	1556	0.46%
Morocco	1654	2449	2805	2487	1952	1304	12650	3.77%
Mozambique	108	154	427	592	893	789	2962	0.88%
Namibia	348	387	733	720	516	858	3562	1.06%
Niger	30	51	129	566	739	947	2462	0.73%
Nigeria	4978	4898	6087	8249	8650	6099	38960	11.60%
Rwanda	14	31	82	103	119	42	392	0.12%
São Tomé & Príncipe	16	38	35	33	14	3	138	0.04%

Senegal	52	210	273	272	208	237	1253	0.37%
Seychelles	86	146	239	179	275	369	1293	0.39%
Sierra Leone	83	59	97	53	33	36	361	0.11%
Somalia	24	96	141	87	108	112	568	0.17%
South Africa	6647	-527	5695	9006	5365	1553	27739	8.26%
South Sudan	-	-	-	-	-	-	0	0.00%
Sudan	2305	3534	2426	2601	2682	1600	15147	4.51%
Swaziland	-46	121	37	106	66	93	377	0.11%
Tanzania	494	597	647	679	645	700	3762	1.12%
Togo	77	77	49	24	50	41	319	0.09%
Tunisia	783	3308	1616	2758	1688	1513	11665	3.47%
Uganda	380	644	792	729	816	848	4209	1.25%
Zambia	357	616	1324	939	695	1041	4971	1.48%
Zimbabwe	103	40	69	52	105	105	474	0.14%
TOTAL Africa	38155	46259	63131	73413	60167	55040	335719	100.00%

Source: *African Economic Outlook (2012)* and author's own calculations. Highlighted countries represent the Top Ten receiving countries in SSA of global FDI.

Table A.5: Sectoral distribution of Chinese global OFDI between 2004 to 2010, in \$ million

INDUSTRY	2004	2005	2006	2007	2008	2009	2010	Total 2004-2010	Total % 2004-2010
Agriculture, Forestry, Husbandry, Fishing	288.66	105.36	185.04	271.71	171.83	342.79	533.98	1899.37	1%
Mining	1800.21	1675.22	8539.51	4062.77	5823.51	13343.09	5714.86	40959.17	17%
Manufacturing	755.55	2280.4	906.61	2126.5	1766.03	2240.97	4664.17	14740.23	6%
Production and Supply of Electricity, Gas and Water	78.49	7.66	118.74	151.38	1313.49	468.07	1006.43	3144.26	1%
Construction	47.95	81.86	33.23	329.43	732.99	360.22	1628.26	3213.94	1%
Transport, Storage and Post	828.66	576.79	1376.39	4065.48	2655.74	2067.52	5655.45	17226.03	7%
Wholesale and Retail Trade	799.69	2260.12	1113.91	6604.18	6514.13	6135.75	6728.78	30156.56	12%
Banking	0	0	3529.99	1667.8	14048	8733.74	8627.39	36606.92	15%
Real Estate	8.51	115.63	383.76	908.52	339.01	938.14	1613.08	4306.65	2%
Leasing and Business Service	749.31	4941.59	4521.66	5607.34	21717.23	20473.78	30280.7	88291.61	36%
Scientific Research, Technical Service and Geological Prospecting	18.06	129.42	281.61	303.9	166.81	775.73	1018.86	2694.39	1%
Information Transmission, Computer Services and Software	30.5	14.79	48.02	303.84	298.75	278.13	506.12	1480.15	1%
Lodging and Catering Services	2.03	7.58	2.51	9.55	29.5	74.87	218.2	344.24	0%
Water Conservancy, Environment and Public Facilities Management	1.2	0.13	8.25	2.71	141.45	4.34	71.98	230.06	0%
Services to Households and Other Services	88.14	62.79	111.51	76.21	165.36	267.73	321.05	1092.79	0%
Education	0	0	2.28	8.92	1.54	2.45	2	17.19	0%
Health, Social Security and Social Welfare	0.01	0	0.18	0.75	0	1.91	33.52	36.37	0%
Culture, Sports and Entertainment	0.98	0.12	0.76	5.1	21.8	19.76	186.48	235	0%
Public Management and Social Organisation	0.04	1.71	0	0	0	0	0	1.75	0%
Total accumulated flows per year	5497.99	12261.17	21163.96	26506.09	55907.17	56528.99	68811.31	246676.68	100%

Source: MOFCOM (2010: 95) and author's own calculations

Table A.6: Chinese FDI by geographical regions between 2004 to 2010, in \$ million

REGION	2004	2005	2006	2007	2008	2009	2010	Total 2004-2010	Total % 2004-2010
Asia	3013.99	4484.17	7663.25	16593.15	43547.5	40407.59	44890.46	160600.11	65%
Africa	317.43	391.68	519.86	1574.31	5490.55	1438.87	2111.99	11844.69	5%
Europe	2046.77	2166.65	597.71	1540.43	875.79	3352.72	6760.19	17340.26	7%
Latin America	1762.72	6466.16	8468.74	4902.41	3677.25	7327.9	10538.27	43143.45	17%
North America	126.49	320.84	258.05	1125.71	364.21	1521.93	2621.44	6338.67	3%
Oceania	120.15	202.83	126.36	770.08	1951.87	2479.98	1888.96	7540.23	3%
TOTAL	7387.55	14032.33	17633.97	26506.09	55907.17	56528.99	68811.31	246807.41	100.00%

Source: MOFCOM (2010) and author's own calculations

Table A.7: Chinese FDI flows to Africa between 2004 to 2010, in \$ million

Country	2004	2005	2006	2007	2008	2009	2010	2004-2010	%2004-2010
Algeria	11.21	84.87	98.93	145.92	42.25	228.76	186.00	797.94	6.74%
Angola	0.18	0.47	22.39	41.19	-9.57	8.31	101.11	164.08	1.39%
Benin	13.77	1.31	-	6.32	14.56	0.09	1.76	37.81	0.32%
Botswana	0.27	3.69	2.76	1.87	14.06	18.44	43.85	84.94	0.72%
Burundi	-	-	-	-	--	0.69	--	0.69	0.01%
Cameroon	0.37	0.19	0.73	2.05	1.69	0.82	14.88	20.73	0.18%
Cape Verde	--	0.32	0.23	0.09	0.48	--	-0.46	0.66	0.01%
CAR	-	-	-	-	--	--	25.81	25.81	0.22%
Chad	--	2.71	1.61	0.75	9.47	51.21	2.13	67.88	0.57%
Comoros	--	-	-	-	--	--	-0.01	0.01	0.00%
Congo DR	11.91	5.07	36.73	57.27	23.99	227.16	236.19	598.32	5.05%
Congo	0.51	8.11	13.24	2.50	9.79	28.07	34.38	96.60	0.82%
Cote D'Ivoire	6.75	8.74	-2.91	1.74	-7.02	1.51	-5.02	3.79	0.03%
Djibouti	--	-	-	1.00	--	3.40	4.23	8.63	0.07%
Egypt	5.72	13.31	8.85	24.98	14.57	133.86	51.65	252.94	2.14%
Eq.Guinea	1.69	6.35	10.19	12.82	-4.86	20.88	22.08	69.15	0.58%
Eritrea	--	-	0.01	0.45	-0.49	0.23	2.94	3.14	0.03%
Ethiopia	0.43	4.93	23.95	13.28	9.71	74.29	58.53	185.12	1.56%
Gabon	5.60	2.08	5.53	3.31	32.05	11.88	23.44	83.89	0.71%
Gambia	--	--	--	--	-	-	-	0.00	0.00%
Ghana	0.34	2.57	0.50	1.85	10.99	49.35	55.98	121.58	1.03%
Guinea	14.44	16.34	0.75	13.20	8.32	26.98	9.74	89.77	0.76%
Kenya	2.68	2.05	0.18	8.90	23.23	28.12	101.22	166.38	1.40%
Lesotho	0.03	0.60	--	--	0.62	0.10	0.56	1.91	0.02%
Liberia	0.58	8.65	-7.03	--	2.56	1.12	29.89	35.77	0.30%
Libya	0.06	0.25	-8.51	42.26	10.54	-38.55	-10.50	4.45	-0.04%

Madagascar	13.64	0.14	1.17	13.24	61.16	42.56	33.58	165.49	1.40%
Malawi	--	--	--	0.20	5.44	-	9.86	15.50	0.13%
Mali	-	-	2.60	6.72	-1.28	7.99	3.05	19.08	0.16%
Mauritania	0.09	0.36	4.78	-4.98	-0.65	6.53	5.77	11.90	0.10%
Mauritius	0.44	2.04	16.59	15.58	34.44	14.12	22.01	105.22	0.89%
Morocco	1.80	0.85	1.78	2.64	6.88	16.42	1.75	32.12	0.27%
Mozambique	0.66	2.88	--	10.03	5.85	15.85	0.28	35.55	0.30%
Namibia	--	0.18	0.85	0.91	7.59	11.62	5.51	26.66	0.23%
Niger	1.53	5.76	7.94	100.83	-0.01	39.87	196.25	352.17	2.97%
Nigeria	45.52	53.30	67.79	390.35	162.56	171.86	184.89	1076.27	9.09%
Rwanda	--	1.42	2.99	-0.41	12.88	8.62	12.72	38.22	0.32%
Sao Tome	--	--	--	--	-	-	0.02	0.02	0.00%
Senegal	--	--	--	0.24	3.60	11.04	18.96	33.84	0.29%
Seychelles	--	0.05	0.06	0.09	0.05	0.36	12.28	12.89	0.11%
Sierra Leone	5.92	0.49	3.71	2.85	11.42	0.90	-	25.29	0.21%
South Africa	17.81	47.47	40.74	454.41	4807.86	41.59	411.17	5821.05	49.14%
Sudan	146.70	91.13	50.79	65.40	-63.14	19.30	30.96	341.14	2.88%
Tanzania	1.62	0.96	12.54	-3.82	18.22	21.58	25.72	76.82	0.65%
Togo	1.85	0.31	4.58	2.70	4.20	8.91	11.77	34.32	0.29%
Tunisia	0.22	--	1.73	-0.34	-	-1.30	-0.29	0.02	0.00%
Uganda	0.15	0.17	0.23	4.01	-6.70	1.29	26.50	25.65	0.22%
Zambia	2.23	10.09	87.44	119.34	213.97	111.80	75.05	619.92	5.23%
Zimbabwe	0.71	1.47	3.42	12.57	-0.72	11.24	33.80	62.49	0.53%
Total Africa	317.43	391.68	519.86	1574.31	5490.56	1438.87	2111.99	11844.70	100.00%
Total Top 9	224.82	172.94	298.38	809.80	421.90	723.27	1017.78	3668.89	30.97%
Total Top 10	242.63	220.41	339.12	1264.21	5229.76	764.86	1428.95	9489.94	80.12%

Source: *Author's own calculations and MOFCOM (2010: 83-84)*

Highlighted countries represent the 10 top receiving SSA countries of Chinese FDI.

CAR= Central African Republic,

Congo, DR= Democratic Republic of Congo

EG= Equatorial Guinea

Total Top 9= Sum of the 10 top receiving SSA countries of Chinese FDI excluding South Africa

Total Top 10= Sum of the 10 top receiving SSA countries of Chinese FDI

Table A.8: Three main exports of African nations in 2010 with their share in total exports

Table 7 - Exports, 2010				No of products accounting for more than 75 per cent of exports
Three main exports, with their share in total exports				
	Product I	Product II	Product III	
Algeria	Petroleum oils and oils obtained from bituminous minerals, crude (45,0%)	Natural gas, in gaseous state (20,0%)	Natural gas, liquefied (8,7%)	4
Angola	Petroleum oils and oils obtained from bituminous minerals, crude (97,3%)			1
Benin	Petroleum oils & oils obtained from bituminous minerals (other than crude) & preparations (35,3%)	Gold (incl. gold plated with platinum), in unwrought forms (excl. powder) (15,5%)	Light oils and preparations (9,3%)	6
Botswana	Diamonds non-industrial unworked or simply sawn, cleaved or bruted (43,7%)	Nickel mattes (21,9%)	Diamonds non-industrial nes excluding mounted or set diamonds (8,9%)	4
Burkina Faso	Cotton, not carded or combed. (37,4%)	Gold (incl. gold plated with platinum), non-monetary, in semi-manufactured forms (15,8%)	Gold (incl. gold plated with platinum), in unwrought forms (excl. powder) (10,8%)	5
Burundi	Coffee, not roasted, not decaffeinated (70,2%)	Black tea (fermented) and other partly fermented tea (13,1%)		2
Cameroon	Petroleum oils and oils obtained from bituminous minerals, crude (42,1%)	Cocoa beans, whole or broken, raw or roasted (15,8%)	Tropical wood specified in Subheading (7,2%)	6
Cape Verde	Yellowfin tunas (Thunnus albacares) (20,2%)	Fish, whole or in pieces, but not minced :-- Other (19,6%)	Mackerel (12,0%)	6
Central African Republic	Wood in the rough, other (31,0%)	Diamonds unsorted whether or not worked (22,3%)	Tropical wood specified in Subheading (15,7%)	4

Chad		Petroleum oils and oils obtained from bituminous minerals, crude (80,6%)	Petroleum oils & oils obtained from bituminous minerals (other than crude) & preparations (8,6%)		1
Comoros		Cloves (whole fruit, cloves and stems) (38,8%)	Vessels for the transport of goods & for the transport of both persons & goods (20,3%)	Essential oils, nes (15,6%)	4
Congo		Petroleum oils and oils obtained from bituminous minerals, crude (85,1%)			1
Congo Republic	Democratic	Cathodes and sections of cathodes (24,7%)	Cobalt ores and concentrates (17,8%)	Copper ores and concentrates (11,9%)	6
Cote d'Ivoire		Cocoa beans, whole or broken, raw or roasted (32,3%)	Petroleum oils and oils obtained from bituminous minerals, crude (12,5%)	Cocoa paste, not defatted (8,8%)	10
Djibouti		Live animals, n.e.s. (49,7%)	Coffee, not roasted, not decaffeinated (12,3%)	Sheep (8,5%)	4
Egypt		Petroleum oils and oils obtained from bituminous minerals, crude (18,3%)	Natural gas, liquefied (9,5%)	Light oils and preparations (5,5%)	76
Equatorial Guinea		Petroleum oils and oils obtained from bituminous minerals, crude (78,0%)	Natural gas, liquefied (14,7%)		1
Eritrea		Sheep (11,2%)	Cardamoms (9,2%)	Mens/boys's shirts, of cotton (8,6%)	19
Ethiopia		Coffee, not roasted, not decaffeinated (42,1%)	Sesamum seeds (22,5%)	Cut flowers fresh (10,7%)	3
Gabon		Petroleum oils and oils obtained from bituminous minerals, crude (75,8%)	Manganese ores and concentrates (12,3%)		1
Gambia		Cashew nuts, in shell (20,3%)	Crude oil (14,9%)	Titanium ores and concentrates. (11,2%)	9

Ghana	Cocoa beans, whole or broken, raw or roasted (46,4%)	Cocoa paste, not defatted (7,2%)	Manganese ores and concentrates (5,7%)	9
Guinea	Aluminium ores and concentrates. (31,7%)	Petroleum oils and oils obtained from bituminous minerals, crude (21,0%)	Natural gas, liquefied (20,7%)	4
Guinea Bissau	Cashew nuts, in shell, fresh or dried (92,9%)	Ferrous waste and scrap, iron or steel, nes (0,0%)	Logs, non-coniferous nes (0,0%)	2
Kenya	Black tea (fermented) and other partly fermented tea (18,6%)	Cut flowers fresh (13,1%)	Coffee, not roasted, not decaffeinated (6,1%)	48
Lesotho	Diamonds non-industrial unworked or simply sawn, cleaved or bruted (37,0%)	Mens/boys trousers and shorts, of cotton, not knitted (15,0%)	Women's/girls', trousers & shorts, of cotton, not knitted (7,5%)	6
Liberia	Technically specified natural rubber (19,4%)	Petroleum oils and oils obtained from bituminous minerals, crude (15,4%)	Vessels for the transportof goods & for the transportof both persons & goods (15,0%)	6
Libya	Petroleum oils and oils obtained from bituminous minerals, crude (82,1%)	Natural gas, in gaseous state (6,9%)	Petroleum oils & oils obtained from bituminous minerals (other than crude) & preparations (4,5%)	1
Madagascar	Shrimps and prawns (9,5%)	Vanilla (6,6%)	Jerseys, pullovers, cardigans, waist-coats & similar articles, knitted/crocheted, of wool (4,6%)	32
Malawi	Tobacco, partly or wholly stemmed/stripped (53,0%)	Black tea (fermented) and other partly fermented tea (6,9%)	Natural uranium and its compounds; (6,8%)	5
Mali	Cotton, not carded or combed. (35,7%)	Petroleum oils & oils obtained from bituminous minerals (other than crude) & preparations (29,1%)	Sesamum seeds (7,8%)	4
Mauritania	Iron ores & concentrates, non-agglomerated (49,3%)	Copper ores and concentrates. (13,6%)	Octopus, other than live/fresh/chilled (7,0%)	4
Mauritius	Tunas, skipjack and bonito (11,3%)	T-shirts, singlets and other vests, of cotton, knitted (11,0%)	Cane/beet sugar & chemically pure sucrose, in solid form, not containing added flavouring/colouring matter (6,4%)	43

Morocco	Phosphoric acid and polyphosphoric acids (7,6%)	Ignition wiring sets and other wiring sets of a kind used in vehicles, aircraft or ships (6,5%)		69
Mozambique	Aluminium unwrought, not alloyed (48,0%)	Electrical energy (7,5%)	Natural gas, liquefied (5,0%)	8
Namibia	Natural uranium and its compounds; (26,8%)	Diamonds non-industrial unworked or simply sawn, cleaved or bruted (16,1%)	Unwrought Zinc, containing by weight 99.99 % or more of zinc (13,4%)	6
Niger	Natural uranium and its compounds; (80,6%)	Light oils and preparations (7,6%)		1
Nigeria	Petroleum oils and oils obtained from bituminous minerals, crude (85,9%)	Natural gas, liquefied (6,9%)		1
Rwanda	Coffee, not roasted, not decaffeinated (30,4%)	Niobium, tantalum and vanadium ores and concentrates (24,8%)	Black tea (fermented) and other partly fermented tea (13,8%)	4
Sao Tome and Principe	Cocoa beans, whole or broken, raw or roasted (36,3%)	Wrist-watches other than automatic winding (17,4%)	Articles of jewellery & parts thereof , of silver, whether/not plated/clad with other precious metal (9,7%)	8
Senegal	Petroleum oils & oils obtained from bituminous minerals (other than crude) & preparations (26,4%)	Portland cement (excl. white cement, whether/not artificially coloured), whether/not coloured (10,5%)	Phosphoric acid and polyphosphoric acids (9,8%)	18
Seychelles	Tunas, skipjack and bonito (49,6%)	Bigeye tunas (Thunnus obesus) (8,3%)	Yellowfin tunas (Thunnus albacares) (6,9%)	5
Sierra Leone	Diamonds non-industrial unworked or simply sawn, cleaved or bruted (26,9%)	Aluminium ores and concentrates. (14,8%)	Cocoa beans, whole or broken, raw or roasted (11,8%)	11
Somalia	Goats (31,3%)	Sheep (29,5%)	Live bovine animals other than pure-bred breeding animals (13,1%)	4
South Africa	Platinum unwrought or in powder form (7,6%)	Gold (incl. gold plated with platinum), in unwrought forms (excl. powder) (6,9%)	Iron ores & concentrates, non-agglomerated (6,6%)	92

South Sudan
Sudan	Petroleum oils and oils obtained from bituminous minerals, crude (90,3%)			1
Swaziland	Raw sugar, cane (16,5%)	Mixtures of odoriferous substances, of a kind used in the food or drink of industries (15,2%)	Food preparations nes (10,7%)	20
Tanzania	Other Precious metal ores and concentrates, other than silver (14,5%)	Tobacco, partly or wholly stemmed/stripped (8,7%)	Coffee, not roasted, not decaffeinated (6,4%)	24
Togo	Cocoa beans, whole or broken, raw or roasted (26,7%)	Gold (incl. gold plated with platinum), in unwrought forms (excl. powder) (12,8%)	Cement clinkers (10,1%)	8
Tunisia	Petroleum oils and oils obtained from bituminous minerals, crude (11,7%)	Ignition wiring sets and other wiring sets of a kind used in vehicles, aircraft or ships (6,8%)	Mens/boys trousers and shorts, of cotton, not knitted (4,7%)	94
Uganda	Coffee, not roasted, not decaffeinated (32,9%)	Tobacco, partly or wholly stemmed/stripped (9,9%)	Fish fillets and other fish meat (whether or not minced), fresh or chilled (9,3%)	13
Zambia	Copper cathodes and sections of cathodes unwrought (48,0%)	Unrefined copper; copper anodes for electrolytic refining (26,7%)		3
Zimbabwe	Tobacco, partly or wholly stemmed/stripped (20,5%)	Ferro-chromium containing by weight more than 4% of carbon (15,3%)	Nickel, not alloyed, unwrought (7,1%)	17
Africa	Petroleum oils and oils obtained from bituminous minerals, crude (46,6%) [46,6%]	Natural gas, in gaseous state (3,2%) [10,2%]	Natural gas, liquefied (3,1%) [16,3%]	34

Source: *African Economic Outlook (2012)*

Table A.9: Foreign stakes in African oil, Blocks 0-13

Shallow Water Blocks (0-13)			
	Location	Oil Fields	Foreign Stakes
Block 0	Offshore Cabinda	Banzala, Kokongo, Lomba, N'Dola, North Nemba, Numbi, Sanha, Takula, Vanza	ChevronTexaco's subsidiary Cabinda Gulf Oil Company (CABGOC) (39.2%), Sonangol (41.0%), TotalFinaElf (10.0%), Agip/Eni (9.8%)
Block 1/Safueiro	Offshore	Safueiro	ENI (50.0%), Total (25.0%), Petrogal (10.0%), Naftaplin (7.5%), Naftgas (7.5%)
Block 1/06	Offshore	Bananeira, Pitangueira, Sapesapeiro	Tullow Oil (50%), Sonangol (20%), ProdOil (20%), Force Petroleum (10%)
Block 2/80-85	Offshore	Bagre, Calafate, Cavala, Chopa, Estrela	Petrobras (27.5%), Total (27.5%), Sonangol (25%)
Block 3/Canuku	Offshore	Caama, Kuma, Nunce	Sonangol (100%)
Block 3/85-91	Offshore	Cobo, Pambe	TotalFinaElf (50.0%), Agip/Eni (15.0%), Ajoco (12.5%), Sonangol (6.25%), Svenska (6.25%), Naftaplin (5.0%), Naftgas (5.0%)
Block 4/Kiaobo	Offshore	Kiabo	Sonangol (100%)

Source: *Zhao (2011b)*

Table A.10: Foreign stakes in African oil, Blocks 14-30

Deepwater Blocks (14-30)			
	Location	Oil Fields	Foreign Stakes
Block 14	Offshore Cabinda	Kuito, Benguela, Belize, Tomboco, Lobito, Landana, Tombua, Gabela, Negage	ChevronTexaco (CABGOC) 31%, Agip/Eni (20%), Sonangol (20%), Total (20%), Petrogal (9%)
Block 15	Offshore	Hungo, Kissanje, Marimba, Dikanza, Chocalho, Xicomba, Mondo, Saxi, Batuque, Mblumbumba, Vicango, Mavacola, Reco Reco, Clochas, Kakocho, Tchihumba	ExxonMobil subsidiary Esso (40%), BP (27%), Agip/Eni (20%), Statoil (13%)
Block 17	Offshore	Girassol, Dalia, Rosa, Lirio, Tulipa, Orquidea, Cravo, Camelia, Jasmim, Perpetua, Violetta, Anturio, Zinia, Acacia, Hortensia	TotalFinaElf (40%), ExxonMobil (20%), BP (16.67%), Statoil (13.33%), Norsk Hydro (10%)
Block 18	Offshore	Platina, Plutonio, Paladio, Galio, Cromio, Cobalto, Chumbo, Cesio	BP (50%), Sinopec (50%)
Block 24	Offshore	Semba	Devon Energy (40%), ExxonMobil (20%), Sonangol, Petronas

Source: *Zhao (2011b)*

Table A.11: Foreign stakes in African oil, Blocks 31-40

Ultra-Deepwater Blocks (31-40)			
	Location	Oil Fields	Foreign Stakes
Block 31	Offshore	Plutao, Satumo, Marte, Venus	BP (26.7%), ExxonMobil (25%), Sonangol (20%), Statoil (13.33%), Marathon Oil (10%), Total (5%)
Block 32	Offshore	Gindungo, Canela, OECanela	TotalFinaElf (30%), Marathon Oil, Sonangol, ExxonMobil, Sinopec and CNOOC (20%)

Source: *Zhao (2011b)*

LIST OF REFERENCES

- AATF (2010). *A Study on the Relevance of Chinese Agricultural Technologies to Smallholder Farms in Africa*. African Agricultural Technology Foundation. Nairobi, Kenya: African Agricultural Technology Foundation.
- AFRICAN DEVELOPMENT BANK (2011). *China and Africa: An Emerging Partnership for Development?* Tunisia: African Development Bank Group.
- AFRICAN ECONOMIC OUTLOOK (2012). *Data and Statistics*. [Online]. Available: <http://www.africaneconomicoutlook.org/en/data-statistics/> [Accessed 15 August 2012].
- AGARWAL, P. (1980). Determinants of foreign direct investment: A Survey. *Review of World Economics*. 116 (4): 739-773.
- AGOSIN, M. (2008). *Is Foreign Direct Investment Always Good for Development?* Working Group on Development and Environment in the Americas. Discussion Paper. 09: 1-10.
- AHARONI, Y. (2010). Behavioral elements in foreign direct investments. *Advances in International Management*. 23: 73-112.
- AHMED, F., AREZKI, R. and FUNKE, N. (2005). *The Composition of Capital Flows: Is South Africa Different?* International Monetary Fund Working Paper. 5/40: 1-28.
- ALDEN, C. (2005). China in Africa. *Survival: Global Politics and Strategy*. 47 (3): 147-164.
- ALESSI, C. and HANSON, S. (2012). *Expanding China-Africa Oil Ties*. Council on Foreign Relations. [Online]. Available: <http://www.cfr.org/china/expanding-china-africa-oil-ties/p9557#p1> [Accessed 15 October 2012].
- AMSDEN, A. (2007). *Nationality of Firm- Ownership in Developing Countries: Who Should "Crowd Out" Whom in Imperfect Markets?* Momigliano Lecture, pp 288-309.
- APPLEYARD, D., FIELD JR, A. and COBB, S. (2008). *International Economics* (6e). New York: McGraw-Hill.
- ASIEDU, E. (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? *World Development*. 30 (1): 107-119.
- ASIEDU, E. (2006). *Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability*. Lawrence: Economics Department, University of Kansas, pp 63-76.
- AYKUT, D. and RATHA, D. (2003). South- South FDI flows: how big are they? Research Note. In: *Transnational Corporations*. United Nations Conference on Trade and Development. Division on Investment, Technology and Enterprise Development. 13 (1): 149-176.
- BBC (2011). China mines in Zambia 'unsafe' says Human Right Watch. *BBC News Africa*. [Online]. Available: <http://www.bbc.co.uk/news/world-africa-15569310> [Accessed 14 May 2012].
- BERTRAND, A. (2004). *Mergers and Acquisitions, Greenfield Investments and Extension of Capacity*. IMF Committee on Balance of Payments Statistics and OECD Workshop on International Investment Statistics. Direct Investment Technical Expert Group. 4, 28, 29: 1-10.

- BEVAN, A. and ESTRIN, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*. 32: 775-787.
- BLOMSTRÖM, M. and KOKKO, A. (2003). The Economics of Foreign Direct Investment Incentives. *Bundesbank Conference Working Paper*. 168: 1-19.
- BORENSZTEIN, E., DE GREGORIO, J. and LEE, J-W. (1998). How does foreign investment affect economic growth? *Journal of International Economics*. 45: 115–135.
- BP (2012). *BP Statistical Review of World Energy June 2012*. British Petroleum. [Online]. Available: http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2012.pdf [Accessed 15 October 2012].
- BRAUTIGAM, D. (2009). *The Dragon's Gift. The Real Story of China in Africa*. Oxford: Oxford University Press.
- BRAUTIGAM, D. (2011a). Aid 'with Chinese Characteristics': Chinese Foreign Aid and Development Finance Meet The OECD-DAC Aid Regime. *Journal of International Development*. 23: 752-764.
- BRAUTIGAM, D. (2011b). *China in Africa: Seven Myths*. Analysis of the Real Insitutio Eclano: Sub-Saharan Africa. 23: 1-7.
- BRAUTIGAM, D. (2011c). *China's Special Economic Zones in Africa*. China in Africa: The Real Story. Digging into the myths and realities. [Online]. Available: <http://www.chinaafricarealstory.com/2011/02/chinas-special-economic-zones-in-africa.html> [Accessed 6 November 2012].
- BRAUTIGAM, D. and XIAOYANG, T. (2009). China's Engagement in African Agriculture: "Down to the Countryside". *China Quarterly*. 199: 686-706.
- BRAUTIGAM, D. and XIAOYANG, T. (2011). China's Investment in African Special Economic Zones: Overview and Initial Lessons. In: Farole, T. and Akinci, G. (eds). *Special Economic Zones: Progress, Emerging Challenges, and Future Directions*. Washington, D.C: World Bank Press, pp 69-100.
- BUCKLEY, P. and CASSON, M. (1976). *The Future of the Multinational Enterprise*. London: Macmillan Press LTC.
- BUCKLEY, P., CLEGG, J., CROSS, A., LIU, X.; VOSS, H, and ZHENG, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*. 38: 499-518.
- BÜTHER, T. and MILNER, H. (2008). The politics of Foreign Direct Investment into Developing Countries: Increasing FDI through International Trade Agreements? *American Journal of Political Science*. Manuscript. 52 (4).
- CALVET, A. (1981). A Synthesis of Foreign Direct Investment Theories and Theories of the Multinational Firm. *Journal of International Business Studies*. 12 (1): 43-59.
- CATTANEO, N. (2011). *BRICS, South Africa and Africa: growing South-South cooperation in trade and investment*. Presentation made to the Centre for Economic Journalism in Africa. CEJA/Financial Times Master Class, School of Journalism and Media Studies. Grahamstown: Rhodes University, 28 July.
- CAVES, R. (1982). *Multinational enterprise and economic analysis*. Cambridge: Cambridge University Press.

- CHAKRABARTI, A. (2001). The determinants of Foreign Direct Investment: Sensitivity Analyses of Cross- Country Regressions. *Kyklos*. 54 (1): 89-114.
- CHANG, H. (2001). *Intellectual Property Rights and Economic Development- Historical Lessons and Emerging Issues*. Penang, Malaysia: Third World Network.
- CHINA ANALYST (2012). Chinese OFDI: Bolder, Wiser and more Strategic. *China Analyst*. 12 April, pp 11-15.
- CHINA BRIEFING (2009). Africa to get US\$ 10 Billion in Loans from China. *China Briefing*. [Online]. Available: <http://www.china-briefing.com/news/2009/11/09/africa-to-get-us10-billion-in-loans-from-china.html> [Accessed 16 October 2012].
- CHINA DAILY (2010). Cooperation lays foundation for Sudan's economy. *China Daily*. [Online]. Available: <http://www.chinadaily.com.cn/world/2010-10/29/content11477372.htm> [Accessed 6 November 2012].
- CHINA DEVELOPMENT BANK (2011). *Annual Report 2011*. China Development Bank Group. Beijing: China Development Bank.
- CHINA EXIMBANK (2012). *The Export- Import Bank of China*. [Online]. Available: <http://english.eximbank.gov.cn/profile/intro.shtml> [Accessed 5 September 2012].
- CHITRAKAR, R. (1994). *Foreign Direct Investment and Technology Transfer in Developing Countries: Motivating Factors and financial economic performance in Nepal*. Hampshire: Avebury.
- CHOW, G. (2010). *Interpreting China's Economy*. Singapore: World Scientific Publishing.
- CIA (2012). *The World Factbook*. Central Intelligence Agency. [Online]. Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html> [Accessed 9 September 2012].
- CLAASSEN, C., LOOTS, E. and BEZUIDENHOUT, H. (2011). Chinese Foreign Direct Investment in Africa. *Working Paper*. Potchefstroom: North-West University. 261: 1-22.
- COLLIER, P. and PATTILLO, C. (eds). (2000). *Investment and Risk in Africa: Studies on the African Economies*. Centre for the Study of African Economies. London: MacMillan Press Ltd.
- DAHL, J. (2002). Incentives for Foreign Direct Investment- The case of SADC in the 1990s. *Namibian Economic Policy Research Unit Working Paper*. 81: 1-22.
- DANIEL, J. and BHENGU, N. (2009). South Africa in Africa: Still a Formidable Player. In: Southall, R. and Melber, H.(eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 139-164.
- DE MELLO, JR. L. (1997). Foreign direct investment in developing countries and growth: A selective survey. *Journal of Development Studies*. 34 (1): 1-34.
- DEVONSHIRE-ELLIS, C. (2010). China Goes to Africa as New Dynamics Emerge. *China Briefing*. [Online]. Available: <http://www.china-briefing.com/news/2010/09/21/china-goes-to-africa-as-new-dynamics-emerge.html> [Accessed 16 October 2012].
- DORIYE, E. (2010). The next step stage between sovereign wealth investment: China buys Africa. *Journal of Financial Regulation and Compliance*. 18 (1): 23-31.
- DOWDEN, R. (2009). *Africa: Altered States, Ordinary Miracles*. London: Portobello Books.

- DRIFFIELD, N. and LOVE, J. (2005). Intra-Industry Foreign Direct Investment, Uneven Development and Globalisation: The Legacy of Stephen Hymer. *Contributions to Political Economy*. 24: 55-78.
- DUCE, M. and ESPANA, B. (2003). *Definitions of Foreign Direct Investment (FDI): a methodological note*. CGFS Working Group on FDI, pp. 1-19.
- DUNNING, J. (1979). Explaining changing patterns of international production: In Defence of the Eclectic Theory. *Oxford Bulletin of Economics and Statistics*. 41 (4): 269-295.
- DUNNING, J. (2001). The Eclectic (OLI) Paradigm of International Production: Past, Present and Future. *International Journal of the Economics of Business*. 8 (2): 173-190.
- DUNNING, J. (2003). Determinants of Foreign Direct Investment: Globalization-Induced Changes and the Role of Policies. Updated Conference Paper. In: *World Investment Prospects*. (2012). London: Economist Intelligence Unit, pp 279-290.
- EDINGER, H. and SANDREY, R. (2010). *Coming to the Table: China's Agricultural Cooperation in Africa*. Norrag. Network for Policy Research, Review and Advice on Education and Training. [Online]. Available: <http://www.norrag.org/es/publications/boletin-norrag/online-version/a-brave-new-world-of-emerging-non-dac-donors-and-their-differences-from-traditional-donors/detail/coming-to-the-table-chinas-agricultural-cooperation-in-africa.html> [Accessed 27 November 2012].
- EDWARDS, L., NAUGHTIN, T. and RANKIN, N. (2011). *No Chinese Jackets Required: Clothing Quotas, Consumer Prices and Import Quality in South Africa*. Second Draft. 1-50.
- ESTRIN, S., LAIDLER, D. and DIETRICH, M. (2008). *Microeconomics (5e)*. Portland: Prentice Hall.
- FLETCHER, I. (2010). Dubious assumptions of the theory of comparative advantage. *Real World Economics Review*. 55: 94-105.
- FLOYD, D. and SUMMAN, S. (2008). Understanding the main motives for foreign direct investment, an East-West country contrast: is the host country legislation an important factor? *Corporate Governance*. 8 (5): 661-668.
- FOCAC (2011). *China-Africa Trade and Economic Relationship Annual Report 2010*. Forum on China-Africa Cooperation. [Online]. Available: <http://www.focac.org/eng/zxxx/t832788.htm> [Accessed 10 September 2012].
- FOCAC (2012). *Sino-African Relations*. Forum on China- Africa Cooperation. [Online]. Available: <http://www.focac.org/eng/zfgx/> [Accessed 10 September 2012].
- FRENCH, H. (2012). The Next Asia Is Africa: Inside the Continent's Rapid Economic Growth. *Atlantic*. [Online]. Available: <http://www.theatlantic.com/international/archive/2012/05/the-next-asia-is-africa-inside-the-continent-rapid-economic-growth/257441/> [Accessed 5 September 2012].
- GAMMELTOFT, P. (2008). *Emerging Multinationals: Outward FDI from the BRICS countries*. 4th Globelics Conference, Sept 22-24 2009. Mexico City.
- GELB, S. (2010). *Foreign Direct Investment Links between South Africa and China..* Draft Paper for the African Economic Research Consortium Project on China-Africa Economic Relations. The Edge Institute. Johannesburg.
- GILL, B. and REILLY, J. (2007). The Tenuous Hold of China Inc. in Africa. *The Washington Quarterly*. 30 (3): 37-52.

- GLOBERMAN, S. and SHAPIRO, D. (2002). Global Foreign Direct Investment Flows: The Role of Governance Infrastructure. *World Development*. 30 (11): 1899-1919.
- GOLDSTEIN, A., PINAUD, N., REISEN, H. and CHEN, X. (2006). *The Rise of China and India: What's in it for Africa?* Development Centre of the Organisation for Economic Co-Operation and Development. Paris: OECD.
- GRIMM, S., RANK, R., SCHICKERLING, E. and MCDONALDS, M. (2011). *Transparency of Chinese Aid: An analysis of the published information on Chinese external financial flows*. Research Report. Centre for Chinese Studies. Stellenbosch: Stellenbosch University.
- HARTZENBERG, T., ERASMUS, G. and DU PISANI, A. (eds). (2012). *Monitoring Regional Integration in Southern Africa. Yearbook 2011*. Trade Law Centre for Southern Africa. Stellenbosch, South Africa: Tralac.
- HELLEINER, G. (1998). *Private Capital Flows and Development: The Role of National and International Policies*. Commonwealth Economic Papers. 35: 1-40.
- HERZER, D. (2009). Outward FDI and economic growth. *Journal of Economic Studies*. 37 (5): 476-494.
- HÖNKE, J. (2009). Extractive Orders: Transnational Mining Companies in the Nineteenth and Twenty-First Centuries in the Central African Copperbelt. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 274-298.
- HOSSEINI, H. (2005). An economic theory of FDI: A behavioural economics and historical approach. *The Journal of Socio-Economics*. 34: 528-541.
- HUFBAUER, G. and ADLER, M. (2010). The Rise of Emerging Market Multinationals: Economic and Business Challenges Ahead. In: Sauvant, K., McAllister, G. and Maschek, W. (eds). *Foreign Direct Investments from Emerging Markets: The Challenges Ahead*. New-York: Palgrave Macmillan, pp 413-423.
- HYMER, S. (1976). *The International Operations of National Firms: A Study of Foreign Direct Investment*. Cambridge: MLT Press.
- IEA (2011). *World Energy Outlook*. International Energy Agency. Paris: OECD Publishing.
- IMF (2003). *External Debt Statistics: Guide for Compilers and Users*. International Monetary Fund. [Online]. Available: <http://www.imf.org/external/pubs/ft/eds/Eng/Guide/index.htm> [Accessed 18 August 2012].
- IPG (2011). Chinese Interest in Africa. *International Policy Digest*. [Online]. Available: <http://www.internationalpolicydigest.org/2011/12/06/china-africa-relations-the-big-picture/> [Accessed 7 November 2012].
- IRIN (2006). *Africa: China's great leap into the continent*. Integrated Regional Information Networks. United Nations Office for the Coordination of Humanitarian Affairs. [Online]. Available: <http://www.irinnews.org/Report/58530/AFRICA-China-s-great-leap-into-the-continent> [Accessed 17 October 2012].
- JUMA, V. (2011). China, India replace Britain as Kenya's top sources of FDI. *Business Daily*. [Online]. Available: <http://www.businessdailyafrica.com/China--India-replace-Britain-as-Kenya-s-top-sources-of-FDI--/539552/1232240/-/121fmsbz/-/index.htm> [Accessed 4 November 2012].

- KAHAI, S. (2006). Traditional And Non-Traditional Determinants Of Foreign Direct Investment in Developing Countries. *Journal of Applied Business Research*. **20: 1**.
- KAMAU, P. (2007). *Kenya: A case study-The Developmental Impact of Asian Drivers on Kenya with Emphasis on Textiles and Clothing Manufacturing*. Mimeo.
- KAPLINSKY, R. (2006). Revisiting the Revisited Terms of Trade: Will China make a Difference? *World Development*. 34 (6): 981-995.
- KAPLINSKY, R. and MORRIS, M. (2009). Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons. *European Journal of Development Research Special Issue*. 24 (1): 1-25.
- KINDLEBERGER, C. (1969). *American Business Abroad*. London: New Haven.
- KOJIMA, K. (1982). Macroeconomic versus International Business Approach to Direct Foreign Investment. *Hitotsubashi Journal of Economics*. 23 (1): 1-19.
- KNICKERBOCKER, F. (1973). *Oligopolistic Reaction and Multinational Enterprise*. Boston: Harvard University.
- KOK, R. and ERSOY, B. (2009). Analyses of FDI determinants in developing countries. *International Journal of Social Economics*. 36 (1): 105-123.
- KUEPPER, J. (2010). *Mining Companies Could See Big Profits in Congo*. The OCT Investor: An Emerging Growth Corp Publication. [Online]. Available: <http://theotcinvestor.com/mining-companies-could-see-big-profits-in-congo-855/> [Accessed 21 October 2012].
- LEE, H. and SHALMON, D. (2008). Searching for Oil: China's Oil Strategies in Africa. In: Rotberg, I. (ed). *China into Africa: Trade, Aid and Influence*. Washington, D.C.: Brooking Institution Press, pp 135.
- LIM, E. (2001). Determinants of, and the Relation Between, Foreign Direct Investment and Growth: A Summary of the Recent Literature. International Monetary Fund. *Middle Eastern Department Working Paper*. 1 (175): 1-20.
- LIPSEY, R. (2004). Home- and Host- Country Effects of Foreign Direct Investment. In: Baldwin, R. and Winters, A. *Challenges to Globalization: Analyzing the Economics*. National Bureau of Economic Research. Chicago: University of Chicago Press, pp 333-379.
- MAGLAD, N. (2008). *Scoping Study on Chinese Relations with Sudan*. Revised Draft Paper. 1-29.
- MARKOWITZ, H. (1959). *Portfolio Selection: Efficient Diversification of Investments*. New York: Wiley & Sons Inc.
- MAY, R. and MASSEY, S. (2009). Oil and War in Chad. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 213-239.
- MELBER, H. (2009). Global Trade Regimes and Multi-Polarity: The US and Chinese Scramble for African Resources and Markets. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 56-82.
- MELBER, H. and SOUTHALL, R. (eds)(2009). Introduction: A New Scramble for Africa? In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp vii-xxvii.
- MICHEL, S. and BEURET, M. (2009). *China Safari. On the Trail of Beijing's Expansion in Africa*. New York: Nation Books.

- MILLS, G. (2010). *Why Africa is poor and what Africans can do about it*. Johannesburg: Penguin Books.
- MOFCOM (2010). 2010 *Statistical Bulletin of China's Outward Foreign Direct Investment*. Ministry of Commerce of the People's Republic of China. Beijing: China Statistical Press.
- MOOSA, I. (2002). *Foreign Direct Investment. Theory, Evidence and Practice*. New York: Palgrave.
- MOOSA, I. and CARDAK, B. (2006). The determinants of foreign direct investment: An extreme bounds analysis. *Journal of Multinational Financial Management*. 16: 199-211.
- MORCK, R., YEUNG, B. and ZHAO, M. (2008). Perspectives on China's Outward Foreign Direct Investment. *Journal of International Business Studies*. 39 (3): 337-350.
- MORRIS, R. and AZIZ, A. (2011). Ease of doing business and FDI inflows to Sub-Saharan Africa and Asian countries. *Cross Cultural Management*. 18 (4): 400-411.
- MUSILA, J. and SIGUE, S. (2006). Accelerating foreign direct investment flows to Africa: from policy statement to successful strategies. *Managerial Finance*. 32 (7): 577-593.
- MWANAWINA, I. (2004). *China-Africa Economic Relations: The Case of Zambia*. African Economic Research Consortium. Nairobi: AERC.
- NARULA, R. and DUNNING, J. (2000). Industrial Development, Globalization and Multinational Enterprises: New Realities for Developing Countries. *Oxford Development Studies*. 28 (2): 141-166.
- NARULA, R. and DUNNING, J. (2010). Multinational Enterprises, Development and Globalization: Some Clarifications and a Research Agenda. *Oxford Development Studies*. 38 (3): 263-287.
- NATIONAL CONSULTATION WORKSHOP (2009). *Chinese Aid and Investment in Zambia. A Report*. National Consultation Workshop Conference, 17 March. Lusaka: Courtyard Hotel.
- NIC (2005). *Mapping Sub-Saharan Africa's Future*. National Intelligence Council. Conference Discussion Paper, January.
- NOLAN, P. and ZHANG, J. (2010). Global Competition after the financial crisis. *New Left Review*. 64 (4): 97-108.
- OBI, C. (2009). Scrambling for Oil in West Africa. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 190-212.
- OECD (2006). *Reviews of Foreign Direct Investment*. Organisation for Economic Co-operation and Development. Paris: OECD Publishing.
- OECD (2008a). *Benchmark Definition of Foreign Direct Investment (4e)*. Organisation for Economic Co-operation and Development. Paris: OECD Publishing.
- OECD (2008b). *Investment Policy Reviews. China: Encouraging Responsible Business Conduct*. Organisation for Economic Co-operation and Development. Paris: OECD Publishing.
- ONGUNKOLA, E., BANKOLE, A. and ADEWUYI A. (2008). *China-Nigeria Economic Relations. AERC Scoping Studies on China-Africa Relations*. African Economic Research Consortium, February. Nairobi.
- ONJALA, J. (2008). *A Scoping Study on China-Africa Economic Relations: The Case of Kenya*. African Economic Research Consortium, 5 March. Nairobi.

- OYEJIDE, A. (2005). African Agriculture in the WTO Framework. In: Oyejide, A. and Lyakurwa, W. (eds). *Africa and the World Trading System: Volume I: Selected Issues of the Doha Agenda*. Trenton, New Jersey: Africa World Press Inc.
- OYERANTI, O., BABATUNDE, M., OGUNKOLA, E. and BANKOLE, A. (2010). *China-Africa Investment Relations: A Case Study of Nigeria*. African Economic Research Consortium, 28 February. Nairobi.
- PATEY, L. (2006). *A Complex Reality: The Strategic Behaviour of Multinational Oil Corporations and the New Wars in Sudan*. Copenhagen: Danish Institute for International Studies.
- PEREIRA, C. and DE CASTRO NEVES, A. (2011). *Brazil and China: South-South Partnership or North-South Competition?* Foreign Policy Paper Series. Washington, D.C.: Brookings Institution Press.
- PORTNOY, E. (2012). Foreign Direct Investment in Nigeria. *Dartmouth Business Journal*. [Online]. Available: <http://dartmouthbusinessjournal.com/2012/05/foreign-direct-investment-in-nigeria/> [Accessed 4 November 2012].
- PRICHARD, W. (2009). The Mining Boom in Sub-Saharan Africa. Continuity, Change and Policy Implications. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 240-271.
- PROVOST, C. (2011). China publishes first report on foreign aid policy. *Guardian*. 28 April. [Online]. Available: <http://www.guardian.co.uk/global-development/2011/apr/28/china-foreign-aid-policy-report> [Accessed 27 July 2012].
- RAZAFINDRAVONONA, J., RAKOTOMANANA, E. and RAJAOBELINA, J. (2009). *Impacts of Investment Relations between China and Madagascar*. AERC Team Madagascar African Economic Research Consortium, October. Nairobi.
- REED, D. (2001). *Economic Change, Governance and Natural Resource Wealth. The Political Economy of Change in Southern Africa*. London: Earthscan Publications Ltd.
- REYNTJENS, F. (2007). Democratic Republic of Congo: Political Transition and Beyond. *African Affairs*. 106 (423): 307-317.
- RUI, H. (2010). Developing Country FDI and development: the case of the Chinese FDI in the Sudan. *Transnational Corporations*. 19 (3): 49-80.
- RUI, H. and YIP, G. (2008). Foreign acquisitions by Chinese firms: A strategic intent perspective. *Journal of World Business*. 43: 213-226.
- RUPIYA, M. and SOUTHALL, R. (2009). The Militarisation of the New Scramble in Africa. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 299-323.
- SACHS, J. (2010). Will Natural Resource Constraints Derail Long-Term Global Growth? In: Sauvart, K., McAllister, G. and Maschek, W. (eds). *Foreign Direct Investments from Emerging Markets: The Challenges Ahead*. New-York: Palgrave Macmillan, pp 31-34.
- SANDREY, R. (2012). Chapter 8: Foreign Direct Investment in South Africa. In: Hartzenberg, T., Erasmus, G. and Du Pisana, A. (eds). *Monitoring Regional Integration in Southern Africa. Yearbook 2011*. Trade Law Centre for Southern Africa. Stellenbosch, South Africa: Tralac.

- SATGAR, V. (2009). Global Capitalism and the Neo-Liberalisation of Africa. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 35-55.
- SETHI, D., GUISENGER, S., FORD JR, D. and PHELAN, E. (2002). Seeking greener pastures: a theoretical and empirical investigation into the changing trend of foreign direct investment flows in response to institutional and strategic factors. *International Business Review*. 11: 685-705.
- SOUTHALL, R. and COMNINOS, A. (2009). The Scramble for Africa and the Marginalisation of African Capitalism. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 357-385.
- SOUTHALL, R. and HENNING, M. (eds). (2009). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press.
- SPARKS, D. (2012). Economic Trends in Africa South of the Sahara. *Europa World*. [Online]. Available:
<http://www.europaworld.com/entry/ass.essay.2> [Accessed 27 May 2012].
- THOMPSON, C. (2009). The Scramble for Genetic Resources. In: Southall, R. and Melber, H. (eds). *A New Scramble for Africa? Imperialism, Investment and Development*. Pietermaritzburg: University of KwaZulu-Natal Press, pp 165-189.
- TRANSPARENCY INTERNATIONAL (2012). *Corruption Perception Index 2011*. Transparency International. [Online]. Available:
<http://cpi.transparency.org/cpi2011/results/> [Accessed 3 November 2012].
- ÜLLENBERG, A. (2009). *Foreign Direct Investment in Land in Madagascar*. Deutsche Gesellschaft für technische Zusammenarbeit. GTZ. Eschenborn: GTZ Print.
- UN (2000). *United Nations Millennium Declaration*. Resolution Paper 55/2. Millennium Summit of the United Nations, 6-8 September. New York, pp 1-9.
- UNCTAD (1999). *Foreign Direct Investment and Development*. UNCTAD Series on issues in international investment agreements. United Nations Conference on Trade and Development. New York and Geneva: United Nations Press.
- UNCTAD (2004). *South-South Investment Flows- A Potential For Developing Country Governments To Tap For Supply Capacity Building*. Background Paper 3. United Nations Conference on Trade and Development. High-Level Forum on Trade & Investment, 5-6 December . Doha, pp 1-9.
- UNCTAD (2007). *World Investment Report: Transnational Corporations, Extractive Industries and Development*. United Nations Conference on Trade and Development. Geneva: United Nations Press.
- UNCTAD (2009). *FDI On-Line Statistics*. United Nations Conference on Trade and Development. [Online]. Available:
<http://stats.uncatd.org/fdi/ReportFolders/reportFolders.aspx?sCS refer=&sCS ChosenLang=en> [Accessed 19 May 2012].
- UNCTAD (2011). *World Investment Report 2011. Non-Equity Modes of International Production and Development*. United Nations Conference on Trade and Development. Geneva: United Nations Press.

- UNCTAD (2012). *World Investment Report: Towards a New Generation of Investment Policies*. United Nations Conference on Trade and Development New York and Geneva: United Nations Press.
- UN COMTRADE (2012). *International Merchandise Trade Statistics*. United Nations Commodity Trade Statistics Database. Statistics Division. [Online]. Available: <http://comtrade.un.org/pb/CountryPagesNew.aspx?y=2011> [Accessed 24 July 2012].
- UN CONFERENCE (2011a). *Harnessing South- South Cooperation for Financing Development in Africa*. Issues Paper 5. Forum on Financing for Development: Mobilizing Resources for Economic Transformation in Africa, 18-20 May. Addis Ababa: United Nations Conference Centre, pp 1-6.
- UN CONFERENCE (2011b). *Mobilizing Public Finance and Managing Natural Resource Revenues*. Issues Paper 1. Forum on Financing for Development: Mobilizing Resources for Economic Transformation in Africa, 18-20 May. Addis Ababa: United Nations Conference Centre, pp 1-9.
- UN CONFERENCE (2011c). *Mobilizing Public Financing Infrastructure and Structural Transformation in Africa*. Issues Paper 3. Forum on Financing for Development: Mobilizing Resources for Economic Transformation in Africa, 18-20 May. Addis Ababa: United Nations Conference Centre, pp 1-10.
- UN CONFERENCE (2011d). *Review of the Progress since the Doha Follow-up International Conference on Financing for Development*. Issues Paper 9. Forum on Financing for Development: Mobilizing Resources for Economic Transformation in Africa, 18-20 May. Addis Ababa: United Nations Conference Centre, pp 1-9.
- VERNON, R. (1966). International Investment and International Trade in the Product Cycle. *The Quarterly Journal of Economics*. 80 (2): 190-207.
- VERNON, R. (1971). *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York: Basic Books.
- WANG, C., HONG, J., KAFUROS, M. and BOATENG, A. (2012). What drives outward FDI of Chinese firms? Testing the explanatory power of three theoretical frameworks. *International Business Review*. 21: 425-438.
- WESTON, J., CAMPBELL, C. and KOLESKI, K. (2011). *China's Foreign Assistance in Review: Implications for the United States*. Staff Research Backgrounder. Washington, D.C.: U.S.-China Economic and Security Review Commission.
- WHITEHEAD, E. and GREEN, R. (2012). Africa: WEF Africa 2012- Africa's Special Economic Zones. *AllAfrica*. [Online]. Available: <http://allafrica.com/stories/201205291262.html?page=3> [Accessed 3 November 2012].
- WINT, A. and WILLIAMS, D. (2002). Attracting FDI to developing countries. A changing role for government? *The International Journal of Public Sector Management*. 15 (5): 361- 374.
- WONACOTT, P. (2009). In Africa, U.S. watches China's rise. *Wall Street Journal*. [Online]. Available: <http://professional.wsj.com/article/SB10001424053111903392904576510271838147248.html?mg=reno-secaucus-wsj> [Accessed 16 October 2012].
- WORLD BANK (2006). *Where is the wealth of Nations? Measuring Capital for the 21st Century*. Washington, D.C.: World Bank Press.

- WORLD BANK (2007). *Snapshot Africa- Madagascar. Benchmarking FDI Competitiveness*. World Bank Group. Multilateral Investment Guarantee Agency. Washington, D.C.: World Bank Press.
- WORLD BANK (2012a). *Doing business in a more transparent world: Comparing regulations for domestic firms in 183 countries*. Washington, D.C.: World Bank Press.
- WORLD BANK (2012b). *Niger*. Countries. The World Bank [Online]. Available: <http://go.worldbank.org/YS7XVZXHC0> [Accessed 9 November 2012].
- WORLD ECONOMIC FORUM (2011). *The Africa Competitiveness Report 2011*. Geneva: World Economic Forum.
- WTO (2009). *Trade Policy Review. Reports by Niger and Senegal*. World Trade Organisation. Trade Policy Review Body Report. 223: 1-24.
- WTO (2012). *Niger*. Trade Profiles. World Trade Organisation. [Online]. Available: <http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=NE> [Accessed 14 December 2012].
- ZAFAR, A. (2007). The Growing Relationship between China and Sub-Saharan Africa: Macroeconomic, Trade, Investment, and Aid Links. *The World Bank Research Observer*. 22 (1): 103- 128.
- ZHAO, S. (2011a). China's Energy Strategy and the Role of Government Oil in Africa. *China Briefing*. [Online]. Available: <http://www.china-briefing.com/news/2011/05/03/chinas-energy-strategy-and-the-role-of-govt-oil-in-africa.html> [Accessed 16 October 2012].
- ZHAO, S. (2011b). The China-Angola Partnership: A Case Study of China's Oil Relations in Africa. *China Briefing*. [Online]. Available: <http://www.china-briefing.com/news/2011/05/25/the-china-angola-partnership-a-case-study-of-chinas-oil-relationships-with-african-nations.html> [Accessed 15 October 2012].
- ZHAO, S. (2011c). The Geopolitics of China-African Oil. *China Briefing*. [Online]. Available: <http://www.china-briefing.com/news/2011/04/13/the-geopolitics-of-china-african-oil.html> [Accessed 15 October 2012].
- ZWEIG, D. and JIANHAI, B. (2005). China's Global Hunt for Energy. *Foreign Affairs*. 84 (5): 25-38.