RE-EVALUATING THE IMPACT OF INSTITUTIONAL DISTANCE ON THE LOCATION CHOICE AND SUCCESS OF FOREIGN INVESTORS: COMPARING CHINESE AND WESTERN INVESTORS IN AFRICA

A thesis submitted for the degree of
Doctor of Philosophy
In
INTERNATIONAL BUSINESS

by
SANNE VAN DER LUGT

Bremen, 14 September 2018

Supervisors:
Prof. Dr. Guido Möllering, Jacobs University Bremen (Germany)
Prof. Dr. Adalbert Wilhelm, Jacobs University Bremen (Germany)
Prof. Dr. Chibuike U. Uche, Leiden University (Netherlands)

Bremen International Graduate School of Social Science

Statutory Declaration

(On Authorship of a Dissertation)

I, *Sanne Van Der Lugt*, hereby declare that I have written this PhD thesis independently, unless stated otherwise. I have used only the sources data and support clearly mentioned and described in the text. All of the intellectual property of other authors used in the dissertation text is credited to them. This PhD thesis has not been submitted for conferral of degree elsewhere.

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Bremen, September 14th, 2018

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Sanne van der Lugt

Dedication

I dedicate this dissertation to my wise, energetic and caring daughter Aya.

Abstract

This dissertation describes a mixed methods research project seeking to add to our understanding how the internationalization process of Chinese firms relates to the internationalization process of Western firms. The focus of this project was on the assumed competitive advantage for Chinese firms in relatively high-risk host countries. In the first and quantitative part of my study I use a conceptual framework presented by Child and Marinova (2014) to study the role of institutional distance for the location choice of Chinese and U.S. firms. I ran an analysis on the determinants of FDI from Chinese and U.S. firms in a group of African destination countries for the period 2003-2011. Contrary to popular believe, I found that Chinese investments are *not* directed to countries with a low level of IM and investments from *both* China and the U.S. are directed to countries with a low level of political stability. The finding that U.S. investments are – and Chinese investments are not – significantly directed to institutionally mature countries, is explained by Chen, Dollar and Tang (2016) as evidence for an indifferent attitude of Chinese investors towards a weak rule of law. However, I find the evidence for this statement too weak. Therefore, I decided to use process tracing to study the causal mechanism that could explain how the levels of political stability and institutional maturity in China could give Chinese firms an advantage in high-risk emerging markets far away from China. I looked at the case of Chinese telecom vendors in Nigeria to study in detail if and how the levels of political stability and institutional maturity in China impact the challenges and advantages for Huawei and ZTE in Nigeria. The combination of the two studies confirms that financial support via the China Exim Bank does play a role in the location choice of Chinese investors in Africa; however, it also shows that the success of Chinese firms in challenging host markets depends on much more than push factors only.

"We don't see things as they are, we see them as we are" (Anaïs Nin, 1961).

Acknowledgements

Conducting a PhD study as a single mother of a 2-year old in a foreign country was not the easiest road to take. Therefore, I am grateful for the persons who supported me along the road and made this journey insightful, valuable and actually do-able.

My heartfelt gratitude goes to my supervisors Prof. Dr. Guido Möllering and Prof. Dr. Adalbert Wilhelm. I thank Prof. Dr. Möllering for his trust in my project from the start, for his encouraging words and for having the patience to go with me through the process that I had to go through in order to get where I am now. Your appreciative feedback and pointed questions were crucial and invaluable to the process of conducting my research and writing this thesis. I thank Prof. Dr. Wilhelm who was willing to jump in when statistics became an important part of my research. Thank you for asking the right questions, letting me enjoy statistics and for setting me on the right track so that I could conduct the analyses myself. I have been very lucky with Prof. Dr. Chibuike Uche as my external supervisor. Prof. Dr. Uche joined my committee at a challenging time for me and showed me that he had my back from day one. His expertise on foreign investment in Africa, the Nigerian business context and his sharp analysis brought more dept to my research.

This journey started with Prof. Dr. Scarlett Cornelissen at Stellenbosch University (SUN) who gave me the opportunity to become a full-time researcher at the Centre for Chinese Studies at SUN during my MA study. I am deeply grateful for the freedom and the trust Prof. Dr. Cornelissen gave me to conduct large scale research projects in various African countries. These experiences in the field were my source of inspiration for this study. I am grateful to Prof. Dr. Möllering and Prof. Dr. Christoph Lattemann who enabled me to materialize my ideas into a PhD project. I thank Prof. Dr. Lattemann for his involvement in the initial stage of my research project, for introducing me to his network and for challenging me to get the best out of me.

When I wrote that I conducted the statistical analyses myself, I meant with the great support of Dr. Georgi Dragolov who helped me working with the latest version of SPSS and my friend Stijn Depla who helped me with the complicated formula for the bubble graphs. I am also grateful for the honest feedback, good suggestions and valuable input I received from Prof. Dr. Marco Sanfilippo who also kept me in the loop about opportunities for publication and interesting conferences.

I am grateful to Prof. Dr. Svetla Marinova who was willing to discuss her article with me during an insightful Skype session. I do hope that this dissertation echoes the immense respect I have for the work of both Prof. Dr. Marinova and Prof. Dr. Child. My sincere thanks also go to Prof. Dr. Derek

Beach who taught me how to use process tracing during a course at Aarhus University and who was willing to review the part of my Methods Chapter in which I explain process tracing.

My heartfelt gratitude goes to Prof. Dr. Margrit Schreier who was like a mentor to me. She was the perfect sparring buddy on issues directly related to my research as well as on more personal issues. These conversations kept me sane.

Without Prof. Dr. Wang Duanyong this research would have been impossible. I cannot thank him enough for his support for my field trip to Nigeria. Prof. Wang actually flew to Nigeria – and made sure that his airplane would land before mine – to stay by my side during the whole field trip because of the reputation of the country. He brought me in contact with senior managers of ZTE and Huawei and translated during the interviews in Chinese. I would also like to thank my friend Tom who provided me with up-to-date information on the security issues in Lagos and Abuja and Chigozie who was the perfect guide in Lagos.

I am also deeply grateful for the trust I received from individuals within the management of Ericsson, Huawei and ZTE who were willing to contribute to this research. Furthermore, I am grateful for the support Mr. Westerhuis from the Netherlands Ministry of Foreign Affairs and Mr. Buitelaar from Smile who all generously shared their time and network with me. Special thanks go to the Chinese Globalization Association and Prof. Dr. William Hua Wang from the Kedge Business School who financed and co-organized a workshop with me in Shanghai on Chinese outward investments. The results from this workshop inspired my field research in Nigeria.

I would also like to thank Chan Yann who helped me as a student assistant to transcribe and translate the Chinese interviews. My heartfelt gratitude goes to Babah Tarawally, Meindert Wolters and Sander Staps for proofreading my dissertation before printing. Thank you all for making time for me. I am also grateful to all the persons whom I met at conferences, who reviewed my papers and asked critical questions after my presentations. The stronger the criticism the more encouraged I felt to do and explain better. No shine without friction. Thank you for giving me the opportunity to shine brighter.

Conducting a PhD study stands or falls by the presence of a supportive community. I am very grateful that Prof. Dr. Möllering and Prof. Dr. Lattemann introduced me to the Bremen International Graduate School for Social Sciences with its warm and supportive atmosphere. My cohort felt like family, my office mates became friends for life and colloquia were like a party that I did not want to miss (thanks to all the homemade food). In this regard I would especially like to thank our Field Coordinator Dr. Franziska Deutsch for her straightforward feedback, unlimited support and medicinal chocolate croissants (that she always brought exactly when they were most needed).

To my beloved office mates and friends for life Dora, Kwaku, Marufa, Nadine and Nazan: you made PhD-life so much fun! You were the best support team I could have wished for. I would also like to thank Marcel for encouraging me to reach for the top, both during our climbing evenings and in my career.

Special thanks go to my parents, step-parents, Meindert and Nils van Oest who travelled many hours to bring me support and a babysitter when I needed it the most. And Jolande Schreijer who always welcomed my daughter Aya with open arms when I needed to travel for my research. The knowledge that I could fall back on them gave me the space I needed to complete this project. My deepest thanks go to Aya who had to stand most of the – at times – stressful PhD-life with me. I thank Aya for her wise words, encouraging hugs, self-made breakfasts and all the paper hearts. Love you to the moon and back!

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List of abbreviations

1G	First generation
2G	Second generation
3G	Third generation
4G	Fourth generation
5G	Fifth generation
A	Accuracy
ACW	America China Worldwide
ADSL	Asymmetric Digital Subscriber Line
AfDB	African Development Bank
AT&T	American Telephone & Telegraph
BCE	Bell Canada
C	Theoretical certainty
CCECC	China Civil Engineering Construction Corporation
CCT	Congo Chine Télécoms
CDMA	Code Division Multiple Access
CIA	Central Intelligence Agency
CMOC	China Molybdenum Co Ltd
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
CSAs	country-specific advantages
CTO	Chief Technology Officer
DP World	Dubai Ports World
DRC	Democratic Republic of the Congo
EMNE	emerging market multinational enterprise
EoDB	Ease of Doing Business
EU	European Union
ExIm bank	The Export-Import Bank of China

EXP	Export
FDI	Foreign direct investment
FDIproj	Number of FDI projects
FhG	Fraunhofer-Gesellschaft
GDP	Gross domestic product
GSM	Global System for Mobile Communications
H	High
HKSCCNL	Hong Kong Securities Clearing Company Nominees Limited
HP	Hewlett-Packard
HQ	Headquarters
IB	International business
ICBC	Industrial and Commercial Bank of China
ICRG	International Country Risk Guide
ICT	Information technology
IFDI	Incoming FDI
IM	Institutional maturity
IMF	International Monetary Fund
IMP	Import
INFL	Inflation
INST	Institutional maturity
ITC	International Trade Centre
ITU	International Telecommunication Union
JV	Joint venture
L	Low
LLL	Linkage, leverage and learning
m	Medium
M&As	Mergers and acquisitions
MD	Managing director
MISTRA	Mapungubwe institute for strategic reflection
MNE	Multinational enterprise

MOFCOM	Ministry of Commerce (China)
MoU	Memorandum of Understanding
NGN	Nigerian Naira
NICTIB	National Information and Communication Technology Infrastructure Backbone
NIGCOMSAT-1	Nigerian Communication Satellite
NNPC	Nigerian National Petroleum Corporation
NPC	National People's Congress
NREXP	Ratio of natural resource exports to merchandise exports
NSN	Nokia Solutions and Network
ODA	official development assistance
ODI	Outward direct investment
OECD	Organization for Economic Co-operation and Development
OLI	Ownership, location, and internalization
ONS	Office for National Statistics
OPEC	Organization of the Petroleum Exporting Countries
OTT	Over the top
P	Prior confidence
POL	Political stability
PR manager	Public Relations manager
PRC	People's Republic of China
PS	Political stability
PwC	PricewaterhouseCoopers
R&D	Research and development
RMB	Renminbi
ROC	Republic of China
SAIS-CARI	School of Advanced International Studies China-Africa Research Initiative
SASAC	State-owned Assets Supervision and Administration Commission of the State Council
SEK	Swedish Krona
SIM	Subscriber identity module
SOE	State-owned enterprise

Somika SPRL	Société Minere Du Katanga
SPC	Stored program control
SUN	Stellenbosch University
TD-SCDMA	time division synchronous code division multiple access
U	Uniqueness
UNCTAD Stat	United Nations Conference on Trade and Development Statistics
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
U.K.	United Kingdom
UMTS	Universal Mobile Telecommunications System
U.S.	United States
USD	U.S. dollar
WCDMA	Wide Band Code Division Multiple Access
WDI	World Development Indicators
WGI	Worldwide Governance Indicators
WTO	World Trade Organization
ZTE	Zhongxing New Telecommunications Equipment Co., Ltd

1. Introduction

1.1. Background

The rapidly growing share in global investment flows from China since the Chinese government implemented the Go Global Strategy in 2001 worries traditionally dominant investors from the West and made scholars wonder whether the on Western studies based foreign direct investment (FDI) theories need to be adapted.

In 2001, Chinese direct investment flows accounted for only 1.8 per cent of global FDI flows; this increased to 12.6 per cent in 2016 (United Nations Conference on Trade and Development Statistics (UNCTAD Stat), 2018). Although China surpassed major FDI source countries like Germany, Japan and the Netherlands in 2016, it is still performing below its relatively size in terms of gross domestic product (GDP) and population size. In comparison, direct investment flows from the United States (U.S.) accounted for more than twenty per cent of global FDI flows in 2016 (UNCTAD Stat, 2018). It can therefore be expected that China's share of global FDI flow will keep increasing over the coming years.

The rise of China as an important source of global investment is reflected in a rising number of academic studies on the topic (e.g. Amighini, Rabellotti & Sanfilippo, 2011; Berning & Holtbrügge, 2012; Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Child & Rodrigues, 2005; Kolstad & Wiig, 2012; Meunier & Bargoon, 2014; Morck, Yeung & Zhao, 2008; Ramasamy, Yeung & Laforet, 2012). The main debates revolve around two issues: the determinants and motives for Chinese direct investment, and the uniqueness of the characteristics of Chinese investment behavior. In short, Chinese investment is assumed to be particularly attracted to countries with weak institutions (Kolstad & Wiig, 2012) and not deterred from political risk (Buckley et al., 2007).

These assumed unique characteristics of Chinese outward investment are often translated into accusations of exploitation and neocolonialism; especially with regards to Chinese investments in South-East Asia, Latin America and Africa. These accusations occur in both news and academic reports in which China is referred to as a hungry dragon ("A hungry dragon," 2004; Cáceres & Ear, 2013; "China's material needs," 2004; Furniss, 2006; Lorenz & Thielke, 2007) exploiting countries with poor institutions and natural resources (Kolstad & Wiig, 2012). And in speeches from

politicians, like for example the speeches by then U.S. Secretary of State Ms. Clinton during her visits to Zambia ("Clinton warns against," 2011) and Senegal ("Chinese state media slam," 2012).

These assumptions are persistent: a week after the New York Times wrote down Chinese economic activities in Africa as driven by the Chinese state, using Chinese workers, focusing on extracting resources and flooding Africa with cheap imports (Larmer, 2017), McKinsey presented a study that refute these accusations (Jayaram, Kassiri & Sun 2017). McKinsey found that around thirty per cent of the about ten thousand Chinese firms in Africa are actually operating in the manufacturing sector, that 86 per cent of their employees are local — as are forty per cent of their managers — and that 85 per cent of the firms are privately owned (Jayaram et al., 2017). Still, during his visit to the African continent as U.S. Secretary of State in March 2018, Mr. Tillerson stated again that Chinese investment is creating 'few if any jobs in most countries' (Koran, 2018).

The perseverance of the accusations towards Chinese economic activities in Africa is related to the enormous success of China in what was long regarded to be Europe's backyard by some and the strategic position of the African region. In the past two decades, China has grown rapidly from being a relatively small investor in the continent to becoming Africa's largest economic partner. In 2009 China surpassed the U.S. and became the largest trading partner of the African region and in 2016 China became the single largest investor in terms of capital (Ernst & Young, 2017). Furthermore, China was the first country in the world hosting a large delegation of Heads of States of 41 African states during the Forum on China-Africa Cooperation Summit in Beijing in 2006 (Shelton & Paruk, 2008). This was only matched by the U.S. in 2014 when President Obama hosted fifty leaders of African states during the U.S.-Africa Leaders' Summit (the Whitehouse, 2014).[1]

Africa is a strategic region because of the abundance of "strategic minerals", access to one of the most strategic maritime passages, the large number of United Nation member states and the enormous market potential. Access to these strategic minerals and maritime passage, and votes in the United Nations could explain the interest of the Chinese government in the African continent. However, Western governments have similar interests on the African continent. If it is not for their unique interests, why would Chinese firms target African countries with "poor institutions"?

The main argument of this thesis is that the assumed unique characteristics of Chinese outward investment have not been sufficiently tested so far. In order to fill this gap, I decided to focus on the four most pertinent assumptions in international business (IB) theory regarding Chinese

[1]The latter could be seen as a sign that the Chinese leadership was ahead of its time by recognizing the economic and political potential of the continent. However, it could also be interpreted as a sign of continuous neo-colonialism by both China and the U.S. who do not seem to find it necessary to treat the 54 African countries as independent nation states and rather prefer to deal with the continent as a whole.

outward investment in Africa, namely: 1.) the perceived advantage of minimum institutional distance for Chinese firms on the African continent, 2.) the advantage of receiving support from the Chinese government, 3.) their lack of choice due to their late-comer position and window of opportunity in Africa due to low competition, and 4.) the window of opportunity in Africa due to low competition. I start this study with a test of the institutional distance theory using quantitative analysis.

Child and Marinova (2014a) state that firms are most successful in host countries with a similar level of political stability (PS) and institutional maturity (IM) as in their home country. Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) argue that Chinese firms are more prevalent in countries with difficult institutional conditions, because their vast experience in navigating complex bureaucracies at home gives them a competitive advantage over Western firms. I link success with location choice based on the insights from Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) and use Child & Marinova's (2014a) framework to empirically test the role of institutional distance for the location choice of Chinese and U.S. investors in Africa. To do this I ran an analysis on the determinants of FDI from Chinese and U.S. firms in a group of African destination countries for the period 2003-2011.

The results of this analysis show that both Chinese and U.S. investments are significantly directed to countries with low levels of PS. Furthermore, the results show that Chinese and U.S. investments are both rather directed to countries with high levels of IM; although this relation is not significant for Chinese investments. Chen et al. (2016) argue that this means that Chinese investors are indifferent with regards to rule of law in the host country; however, they do not provide empirical proof for this statement.

In order to get a better understanding of the particular challenges and advantages of Chinese firms in high-risk host countries far away from their own region, I studied the case of Chinese telecom infrastructure companies in Nigeria. I used process tracing in order to trace down evidence for the four common assumptions in IB literature regarding Chinese outward investment in Africa. Nigeria is one of the countries in Africa with the lowest levels of PS and IM and the largest receiver of FDI from China on the continent. The telecom infrastructure sector is chosen due to its importance for the development of a country and the leading role Chinese firms play in the construction of telephone infrastructure in Africa. Another reason for choosing the telecom sector is the controversy around the involvement of the Chinese government in combination with the strategic position of the African continent and the option of building in spyware.

1.2. Rationale

IB theory has been built largely on the study of Western firms by Western researchers and the contextual factors of the home countries—namely, the United Kingdom (U.K.) and the U.S.—could have been regarded as familiar and quite similar. As a consequence, mainstream international business theory neglects push factors—factors associated with the home country—and focuses mainly on ownership advantages, internalization advantages and pull factors—factors associated with the host country—in order to explain the international location choice of investors.

Traditional FDI theory predicts that firms prefer to invest in politically stable countries with strong institutions in order avoid risk and therefore costs. A possible reason for Chinese firms to invest in such challenging countries according to traditional FDI theory is that these markets do not attract much investment from the traditional investors; and therefore become an interesting opportunity for Chinese investors. As late-comers on the global market, Chinese firms might not have much choice other than investing in the more challenging "left-over" markets since the advanced markets are saturated.

In contrast, more recent empirical studies have over-emphasized the role of push factors to explain the international location choice of investors from emerging markets. Cuervo-Cazurra and Genc and Genc (2008) and Morck et al. (2008), for example, point to the potential advantage of having experience with operating in a challenging business environment at home for operating in challenging countries abroad. They argue that Chinese firms are more prevalent in least developed countries with difficult institutional conditions, because their vast experience in navigating complex bureaucracies at home gives them a competitive advantage over Western firms. Cuervo-Cazurra and Genc define difficult institutional conditions as 'the absence of a well-established infrastructure, well-developed market mechanisms, and a well-developed contracting and intellectual property rights regime' (2008: 960). Moreover Morck et al. focus on 'endemic government interference and related problems' (2008: 346). However, this effect of institutional distance on the location choice and success of Chinese outward investment is currently merely based on assumptions and has not been empirically tested yet.

Child & Marinova (2014a) argue that the contexts of *both* the home and host country are important in order to explain international investment. However, there framework has also not been empirically tested. The allocation of countries to the four quadrants in their matrix based on their levels of PS and IM is based on anecdotal evidence rather than measured.

In other words, the main problem in current research on Chinese outward investment is a lack of evidence for the strong claims on the unique characteristics of Chinese outward investment.

Existing theories do not explain if and why Chinese firms indeed target host countries with relatively weak institutions and high levels of political risk, and if and why Chinese firms are more successful in such host countries than their Western competitors.

Better knowledge about the motives and strategies behind Chinese outward FDI could enable host country policy makers – who are responsible for realizing the potentials of incoming FDI while avoiding negative impacts – to make better informed regulations concerning incoming FDI. Furthermore, better knowledge about the motives and strategies behind Chinese outward FDI could potentially reduce the tension between China and the West on the African continent; and thereby improve their relations in general.

1.3. Problem statement

In order to improve our knowledge about the motives and strategies behind Chinese outward investment this study compares the role of institutional distance for the location choice of Chinese and U.S. investments in Africa and explores the specific advantages and challenges of Chinese firms in a high-risk host country. The main research question is:

Why do Chinese firms invest in (relatively risky) emerging markets far away from their home country?

In order to answer this question, this research is divided into two studies: a quantitative study on a national level and a qualitative study on a firm level.

The main research question for the first study is:

1. Are Chinese firms significantly more attracted to African countries with “poor institutions” than U.S. firms?

And the main research question for the second study is;

2. How does the institutional and political situation in China influence the location choice of Chinese telecom firms for – and their success in– high-risk markets in Africa?

1.4. Concepts

Foreign direct investment (FDI)

Foreign direct investment is defined by the Organization for Economic Co-operation and Development (OECD) as: 'a category of cross-border investment made by a resident in one economy (the *direct investor*) with the objective of establishing a lasting interest in an enterprise (the *direct investment enterprise*) that is resident in an economy other than that of the direct investor' (OECD, 2008: 17). To explain the meaning of this definition we can look at the example of a car manufacturer. When this car manufacturer wants to move (part of) the production process to another country, it can either decide to build a factory from scratch or to buy an existing factory in that country. Both options are considered to be FDI – from the point of view of the host economy: direct investment by a foreigner. It is not considered to be FDI when the car manufacturer only buys stocks of a production company in another country. Direct investment includes both the intention of a long-lasting relation with – and control of – the company abroad; either in terms of voting power (evidenced when the direct investor owns at least 10% of the voting shares of the direct investment enterprise) or day-to-day management.

Outward (foreign) direct investment (ODI)

FDI is differentiated between inward and outward FDI. Inward FDI is the investment made by non-resident investors in the reporting economy. Outward FDI is the investment made by the residents of the reporting economy to external economies. The total outward FDI of a selected economy can be measured in terms of OFDI flow, OFDI stock and number of OFDI projects. OFDI is also referred to as ODI because the term "foreign" is redundant in this acronym since outward direct investment is per definition foreign. Therefore, I refer to "outward FDI" as "ODI" in the remainder of this dissertation.

ODI flows

The value of the yearly ODI flows represent the yearly transactions that increase the investment that investors from a selected economy have in enterprises in a foreign economy, minus any transactions that decrease their investment in that foreign economy (OECD, 2018). Examples of transactions that increase the investment are purchases of equity or reinvestment of earnings. Examples of transactions that decrease the investment are sales of equity or borrowing from the foreign enterprise.

ODI stock

ODI stock is the total value of the equity in – and net loans to – enterprises in foreign economies from all investors from a selected economy since 1980 (when UNCTAD's measurement started). UNCTAD Stats provides a database with inward and outward direct investment flows and stock per economy measured on a yearly basis.

FDI host country/ country of destination

The country that is the recipient of the investment.

FDI source country/ country of origin

The country of nationality of the investor. In other words, the country from which FDI flows or projects originate.

1.5. Methodology

This study starts out with a quantitative analysis in order to test if Chinese firms indeed (uniquely) target high-risk host countries with relatively weak institutions. My former experiences with conducting field research in six African countries over the period 2009-2012 gave me the impression that Chinese firms do not target countries with relatively weak institutions for the assumed "unique" advantages of Chinese firms in such host countries found in the literature. Instead, I assumed more subtle differences – related, but not exhaustively, to certain home country factors – which I was eager to find out throughout in-depth interviews with Chinese firms and their Western competitors in Africa. However, in order to explore the necessity of further research, I first needed to test whether Chinese firms are indeed uniquely targeting countries with a high level of political risk (assumingly due to special government support) and low IM (assumingly due to institutional distance) or not. Therefore, I started with a regression analysis comparing the role of institutional distance for the location choice of Chinese and U.S. investments in Africa (see the Methods Chapter for a thorough explanation of the methods I used).

After disproving the commonly believed claim that Chinese firms are uniquely not deterred from or even attracted to high risk markets due to the similarities between the business environment in China and these host countries, I conducted a qualitative study. The aim of the qualitative study

was to explore the motives of Chinese investors for investing in a typical high-risk country and their specific advantages and disadvantages in such a home country. I adopted a single case study and interviewed senior managers from Huawei Nigeria and ZTE Nigeria – the regional offices in Nigeria of two large, internationally operating Chinese telecom infrastructure companies and their main customers and competitor in Nigeria. I selected Nigeria as a typical high-risk host country since Nigeria is among the five African countries with the lowest levels of PS and IM (according to the World Bank and International Country Risk Guide (ICRG)). Due to the high costs of conducting research in a high-risk country I could only select one of these countries and Nigeria is the largest receiver of Chinese investment on the African continent (UNCTAD Stat, 2018). The results of the qualitative study show that institutional distance, the late-comer position, and little competition are not important determinants for the success of Chinese telecom vendors in Nigeria. The study also shows that the Chinese government is not interested in Nigeria's oil reserves. Instead, it seems that concessional loans are an important factor for the success of the firms in Nigeria.

I then used the findings of the qualitative study to improve the model for the quantitative analysis and re-ran the model. The findings from the second regression analysis confirmed the findings from the qualitative study: concessional loans are an important factor for the location choice of Chinese investors. Or, in other words: concessional loans increase the chance that large investment projects get successfully through the negotiation phase and are actually implemented. In Chapter 7 it is explained that concessional loans are not typical for Chinese ODI; however, at this point of time the Chinese government is in a more favorable position than many Western governments in terms of financial capacity to support its national firms via concessional loans. Furthermore, different levels of success between two large Chinese telecom infrastructure firms in Nigeria that both have access to finance via the Chinese government show that firm-specific advantages do play an important role as well.

1.6. Outline of the remainder of the study

The remainder of this thesis is organized as follows: Chapter 2 provides a literature review and theoretical framework for the quantitative and qualitative studies that I shortly introduced above. Chapter 3 describes systematically the methods that I used for these studies and explains my selections in detail. Chapter 4 provides the context for the quantitative study and describes in more detail the amount, shares and distribution of Chinese and U.S. outward investment; China-Africa and U.S.-Africa relations; and the strategic position of the African continent. Chapter 5 describes the quantitative study in which I compare the role of the levels of PS and IM for the location choice of Chinese and U.S. investors. Chapter 6 provides additional context information for the qualitative

study, including: China-Nigeria relations; the Nigerian business context; the historical and recent developments in the global telecom market; and a detailed description of the two largest Chinese telecom infrastructure firms: Huawei and ZTE. Chapter 7 describes the qualitative study in which I explore the motives for Huawei and ZTE – and their specific advantages and disadvantages of – investing in Nigeria. In Chapter 8 I explain how the results qualitative studies feed into a second quantitative and qualitative analysis; to end with a discussion and conclusion of the findings of the studies and mixed analysis in Chapter 9.

2. Literature review

There are two questions that have been, and are still, central to FDI theory: why do firms invest abroad, and why do they invest in a particular economy? The common starting point of most FDI theory is that investors pursue profit maximization (Stevens, 1974).The simple answer to the question, “why do firms invest abroad?” is therefore, in general, “to make profit.” This answer is, however, not satisfactory and raises further questions about the specific circumstances that trigger outward FDI and the balance between the risks involved in, and the profit that can be made, by investing abroad. FDI theory has developed over time in search of an answer to these and other questions.

Driven by research on mainly Western firms by mostly Western researchers, the answers to these questions in FDI theory have been traditionally based on the following assumptions:

- Firms invest abroad in order to exploit their firm-specific advantages
- All firms strive to increase their long-term profit
- Internalization is an incremental process
- Firms try to keep risk-taking at a low level
- Firms chose their location based on location specific advantages that fulfill their market-, resource- and efficiency-seeking motives

The following sections will discuss: the origin and limitations of these traditional FDI theories; the insights and limitations of the focus on home country factors in research on Chinese ODI; and recent efforts to study the combined effects of home and host country factors translated into “distance” and foreign liability.

2.1. Traditional outward FDI theory

2.1.1.Ownership advantages

The first question that was addressed in studies on foreign investment studies was: why do some firms invest abroad while others do not. Hymer (1976) suggested that a successful multinational has some firm-specific (or ownership) advantages which allow it to overcome the costs of operating

in a foreign country. Dunning defines ownership advantages as 'the intermediate products to which the firm has privileged access and which […] are the privileged property of the firm' (2001: 122).This theory implies that only companies with strong competitive advantages invest abroad. However, ownership advantages were not considerate to be adequate to explain why FDI takes place. Establishing parts of a business in a foreign country involves risks and, therefore, there must be an explanation for why investors establish their businesses in a foreign country instead of licensing or selling their products/processes to a foreign firm and trading with them.

2.1.2. Profit maximizing

During his study of the firm, Coase (1937) developed the idea of transaction costs. Brown and Hogendorn (1994) summarize Coase's theory as follows: 'A firm would follow an internal route if transaction costs exceeded administration costs and would follow an external route if the reverse were true.' In other words, a firm will invest in a new or existing production line of a product instead of purchasing the product from another company when it is relatively cheaper to invest than to purchase. Buckley and Casson (1976) built further on the Coasian nature of the firm and developed the internalization theory in order to analyze the behavior of the multinational enterprise (MNE) and the motives for outward FDI. The internalization theory explains that a firm will invest in a new or existing production line of a product abroad instead of purchasing the product from a foreign company when it is relatively cheaper to invest than to purchase.

The internalization theory is based on the assumption that the central reason for firms to invest abroad is profit making. It is highly likely that this was and still is the case for strong companies from advanced (and often satisfied) markets who look for opportunities to increase their profits by investing abroad. However, this theory neglects the potential strategic reasons for firms with fewer ownership advantages (whether or not from less developed markets) to invest abroad. I will come back to this in the section on Chinese ODI and strategic-asset seeking motives.

2.1.3. Step by step and risk avoiding

The idea of internalization as an incremental progressive process is derived from studies on the internationalization process of U.S. firms during the post-war period. The two main progressive models are the product life cycle theory (Vernon, 1966) and the Uppsala model (Johanson & Vahne, 1977).

The product life cycle theory of Vernon (1966) was the most influential theory on FDI up to the early 1970s (Dunning, 2001: 121). The product life cycle theory states that production processes follow a certain sequence, namely starting from products being produced in the area where the product was invented followed by moving the production to foreign markets where there is a demand for

the product too. However, the theory does no longer apply since the international system of production became more complicated. For example, many parts of a single product are currently produced all over the world, new inventions are often produced abroad before they are produced at home, and there are many products that are produced in a country where there is no market for the product (for example clothes produced in Thailand for the American market and orange articles for Dutch football fans produced in China).

The Uppsala model (Johanson & Vahne, 1977) was developed as an independent model based on the critique among Swedish researchers that the existing theories at that time neglected the challenges of cultural differences. This model assumes that firms move gradually towards culturally and geographically more distant markets while the firms simultaneously gradually increase their commitment in foreign markets (from only sporadic export, to export, to set up foreign sales subsidiaries, towards having foreign production and sales subsidiaries). The main assumption behind these gradual movements is that firms try to keep risk-taking at a low level. Although the Uppsala model has been criticized for not taking into account many other modes of entry (Doole & Lowe, 2008), it is still commonly believed that firms gradually intensify their internationalization following these lines.

2.1.4. Location specific advantages

Dunning (1977) combined the above-mentioned theories and added another dimension, namely: location-specific advantages. Dunning (1977) argues that although ownership-specific and internalization advantages are necessary conditions for outward FDI to take place, it must be profitable to use these advantages in combination with at least some factors associated with the country of destination (or location-specific advantages); otherwise the foreign market could be served exclusively by exports. Dunning (1977) integrated a variety of strands of thinking about the necessary conditions for a firm to invest abroad into the ownership, location, and internalization (OLI) framework. This framework identifies ownership, location, and internalization advantages and is currently the most widely used framework among FDI scholars. Examples of location-specific advantages are favorable government policy; availability, quality and costs of labor, energy, materials, components and semi-finished goods; and good infrastructure (Dunning, 2013). In other words, the location-specific advantages in the OLI framework refer to the factors that attract investors to a certain host country (or pull-factors).Dunning refers to Berhman's (1981) typology of FDI and explains that the primary motivations for choosing a specific host country are: resource-seeking, market-seeking and efficiency-seeking. With the opening of new markets and new technological advances Dunning (2001) acknowledged that not all foreign production is primary a means of exploiting the existing ownership specific advantages and he added strategic-asset

seeking to the list. I will explain more about strategic-asset seeking as a primary motivation for investing abroad in the next section on specific theories regarding Chinese ODI.

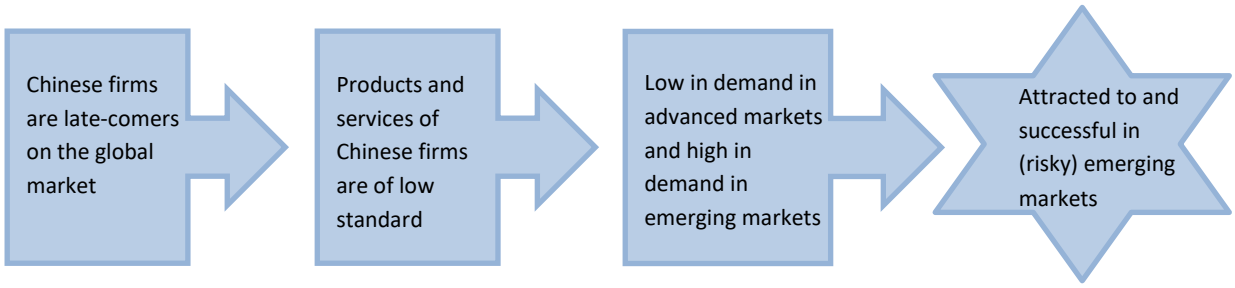
2.1.5. Summary

According to traditional FDI theories it is not common for a firm to invest in a high-risk host country far away from its own region. This goes against the basic assumptions that firms avoid risk and internationalize gradually, starting with host countries that are geographically and culturally close (posing the least risk). However, from the perspective of emerging market investors, other emerging markets (that are often regarded to be high risk environments for advanced market firms) could be attractive as stepping stones towards investing in more advanced markets. The reason for this is that emerging market firms are relatively late-comers on the international market and their products and services often do not comply with the standards in advanced markets when they start to internationalize. Therefore, the demand for their products and services are higher in other emerging markets than advanced markets because of the similarity between the markets.

This leads to the first hypothesis:

1. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to their late-comer position (see Figure 1).

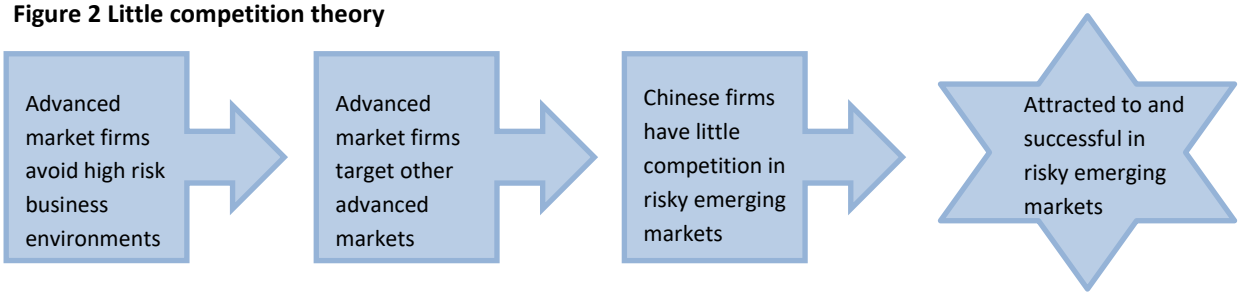
Figure 1 Late-comer theory



Furthermore, since emerging market firms are late-comers on the global market it is likely that the most popular host countries (in terms of low risks and high profits) are already saturated; leaving the more challenging markets available for emerging market firms. Based on traditional outward FDI theory, we would expect that emerging firms will encounter few competitors from advanced market firms in these challenging host markets. This leads to the second hypothesis:

2. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to the relatively little competition from advanced market firms in such markets (see Figure 2).

Figure 2 Little competition theory



2.1.6. Limitations

The OLI framework and Uppsala model are still the most widely used frameworks in FDI theory; however, doubts have been raised concerning the explanation power of these frameworks for the internationalization of firms from emerging markets like China.

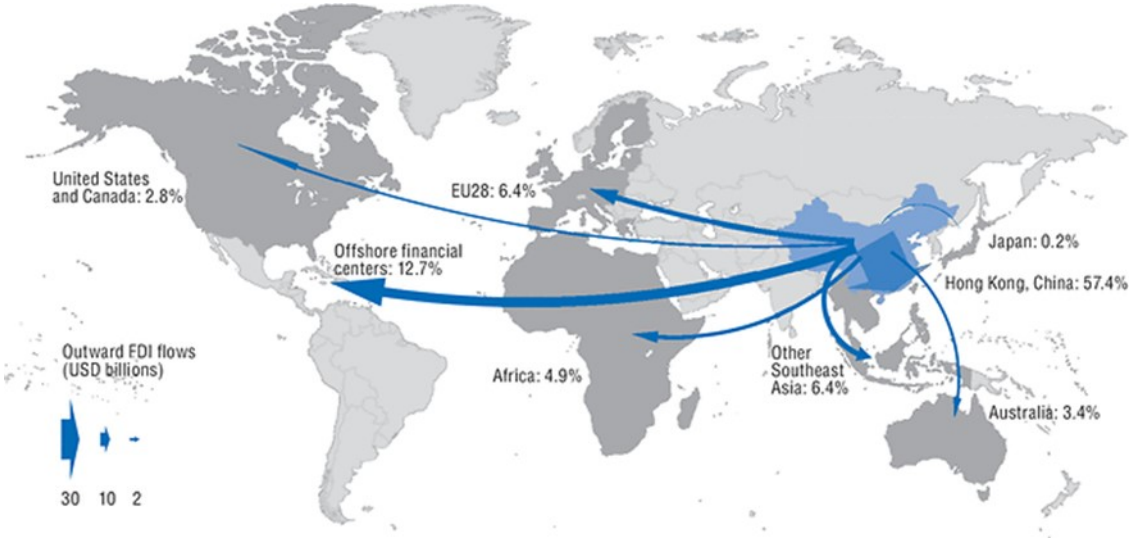
During a doctoral course on International Business at Aalborg University in 2016, Olav Sørensen remarked that while the global economy is dynamic, the OLI framework is static and this could be part of the reason why we cannot see Chinese companies as an integral part of the global business system. For example, the OLI framework neglects the importance of the factors associated with the home country which seems to be caused by its origin in the study of Western firms by Western researchers. Traditional FDI theory has been built largely on the experience of industrialized country investors (Buckley et al., 2007: 501). The contextual factors of the home countries of the main investors under study – namely, the U.K. and the U.S. – could have been regarded as familiar and quite similar. This could have been the reason why pull-factors and firm-specific factors drew the attention of the scholars; leading to the neglect of the factors associated with the home country and the interaction between home- and host country and firm-specific factors in the OLI framework.

The Uppsala model takes into account the relation between the home and host country (referred to as “distance” and including cultural, geographical, linguistic and political differences). However, since the model is based on the study of only four large Swedish companies, it does not take into account differences in various home country contexts that could influence this process. Besides, the Uppsala model starts the process of internationalization when companies move goods and resources across borders and do not take into account foreign competition on the home market (spill-over effects) or internationalizing via outsource contracts as the start of internationalization (Rana & Sørensen, 2013). Again, this can be explained by the fact that internationalization has been studied for a long time from the perspective of industrialized country investors only.

Until quite recently investment was merely directed from advanced markets to other advanced markets or from advanced markets to so-called developing countries. These patterns have changed since large emerging markets became important investors globally. Figure 3 shows how Chinese

investment flows are distributed over the world: from an emerging market to other emerging markets as well as to advanced markets. (Note: the extraordinary share of Chinese "foreign" direct investment to Hong Kong can be explained by the fact that Hong Kong plays an important role in "round-tripping" of money (see page 58 for a detailed explanation)).

Figure 3 The global distribution of Chinese ODI flows, 2011



Source: OECD, 2013

Do these changing FDI patterns require a new international business theory? How can relatively inexperienced Chinese firms with a lack of competitive advantages invest in advanced markets like Western European countries and the U.S.? Why and how do Chinese firms invest in high risk countries outside their own region in Africa? Since these Chinese outward investment patterns go largely against what traditional FDI theories predict, some scholars decided to study what makes Chinese investments different from traditional Western investors. The next section discusses more recent FDI theories with a focus on Chinese ODI.

2.2. More recent theories on Chinese ODI

The rise of China as an important source of global investment is reflected in a rising number of academic studies on the topic (Berning & Holtbrügge, 2012). The main debates revolve around two issues: the determinants and motives for Chinese outward FDI, and the uniqueness of the characteristics of Chinese outward FDI behavior.

2.2.1. Strategic-asset seeking

Dunning noticed that the opening up of new markets and new technological advances led to a shift from foreign production primary as a means of exploiting the existing ownership specific

advantages towards augmenting these advantages by acquiring complementary assets or new markets (2001: 135). However, this insight did not seem to have made much impact until Child & Rodrigues (2005) emphasized the importance of the strategic-asset seeking motive for Chinese ODI. Child & Rodrigues (2005) explain that Chinese firms do not invest in advanced markets in order to exploit competitive advantages, but are rather investing in these countries in order to address competitive disadvantages.

Matthews (2017) argues that once becoming fully international in scale and scope all MNEs enjoy OLI advantages; however late-comers have to strategize their way into a global world—and he argues that his LLL-framework provides them with a strategic framework adapted to their needs as latecomers. LLL stands for linkage, leverage and learning. Matthews (2006) argues that emerging country multinationals take an outward orientation and seek to acquire resources and complementary assets, which can be accessed on the global market rather than in their home countries. Matthews (2006) refers to this acquisition of complementary assets as a firm-specific advantage.

Rugman & Nguyen are skeptical about the success of a strategic-asset seeking motive and ask themselves: 'Seeking yes, but finding?' (2014: 54). Rugman & Nguyen are of course right about the fact that a willingness to augment competitive advantages is not sufficient to gain new competitive advantages. Some support would be welcome to achieve this.

2.2.2. State support

The Chinese government is unique in that it not only encourages inward FDI, but also actively encourages outward FDI via the in 1999 initiated Go Out Policy. Although this initiative is mainly a strategy to encourage and support Chinese firms to become global players and should be seen as a process during which Chinese firms gradually become more independent of the Chinese government, it is often perceived as a sign that the Chinese government is in control of these firms. Beijing's pragmatic and no-strings-attached approach leaves much room for Chinese firms to invest in any country, no matter the political system or human rights record of the host country.

Buckley et al. argue that the Chinese 'state direction over firms (whether formal or informal) is likely to generate a signature in the locational pattern of outward investment that would not be predicted by the general theory of FDI, which assumes that firms are profit maximisers [sic]' (2007: 514).Kolstad and Wiig state for example that 'Chinese FDI outflows differ from FDI from other regions, in their attraction to poorly governed countries rich in natural resources' (2012: 33). Furthermore, Buckley et al. (2007) find that Chinese ODI is attracted to, and not deterred from, political risk.

General FDI theory predicts that when the risk in a host country goes up, investment goes down. The logical explanation is that risks involve costs and firms choose locations for their activities that minimize the overall costs of their operations (Buckley & Casson 1976). Buckley et al. (2007) find in their much-quoted study that when the risk goes down in a host country, Chinese investment goes down.[2] Subsequently Buckley et al. provide a number of reasons for 'why Chinese firms may not behave in the conventional manner' (2007:510). Buckley et al. (2007) argue that the support from the Chinese government – together with home country capital market imperfections and the experience of Chinese firms with operating in a highly regulated and controlled domestic environment – '*may have* equipped Chinese MNEs with the special ownership advantages needed to be competitive in other emerging economies' (2007: 514, emphasis added).

2.2.3. Competitive advantage in so-called "weak states"

Traditional FDI theory predicts that Chinese firms invest in countries with weak states and a high level of political risk because of their late-comer status; arguing that Chinese firms cannot be too picky and need to accept the left-over markets with lower quality demands. However, Morck et al. (2008) argue that Chinese firms might actually have competitive advantages over Western firms in challenging markets. Morck et al. explain that Chinese firms' expertise in managing complex markets at home actually make them more capable than their Western counterparts 'of dealing with burdensome regulations and navigating around the opaque political constraints' in such host countries (2008: 346).

For example, guanxi (Chinese for "connections" or "relations" and commonly described as 'the system of social networks and influential relationships which facilitate business and other dealings'(Oxford dictionary)) is a very more important aspect of Chinese business culture. In the 1980s and 1990s (the early stages of the development of private firms in China) was guanxi considered to be more important than formal contracts since there was more trust in the personal network than the official institutions (McNally, Guo and Hu, 2007). Putting emphasize on personal relationships requires Chinese business persons to develop strong social and networking skills. These skills could be valuable in other countries with inefficient formal structures too.

2.2.4. Start of the internationalization process

Traditional FDI theories tend to start the internationalization process when companies move goods and resources across border. As mentioned shortly before, Rana and Sørensen (2013) argue that these theories reason too much from the perspective of the lead companies (in value chain theory)

[2] The other way around (Chinese investment going up when the risk goes up) would be more convincing; however, this is the way Buckley et al. (2007) describe their finding.

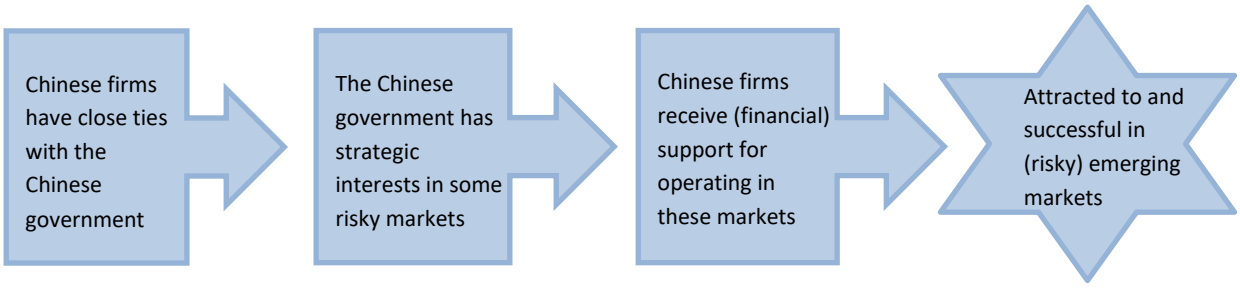
or MNEs (in outsourcing theory) and overlook the perspective of emerging market firms that often start their internationalization process in their home market. For example, emerging market firms might arise in order to serve or compete with foreign companies on their home market (spill-over theory) or receive training or upgrades of their facilities as part of outsourcing contracts. These companies that have a global focus and commit their resources to international ventures from inception are also referred to as "born globals" (Rennie, 1993). Sørensen pointed out (during the doctoral course) that this early start of the internationalization process is a fact for many Chinese firms as well. Since China is a major producer of goods sold in advanced markets – and since the Chinese government forces foreign firms to work closely with local firms – Chinese firms have the chance to quickly adapt to the technology and quality standards of the advanced market firms operating in China; preparing these Chinese firms for going global rapidly.

2.2.5. Summary

Recent theories on Chinese ODI challenge traditional FDI theories and predict that Chinese firms have a higher tolerance towards political risk and low levels of IM due to active support from the Chinese government (e.g. Buckley et al., 2007). This results in the third hypothesis:

3. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to the support they receive from the Chinese government (see Figure 4).

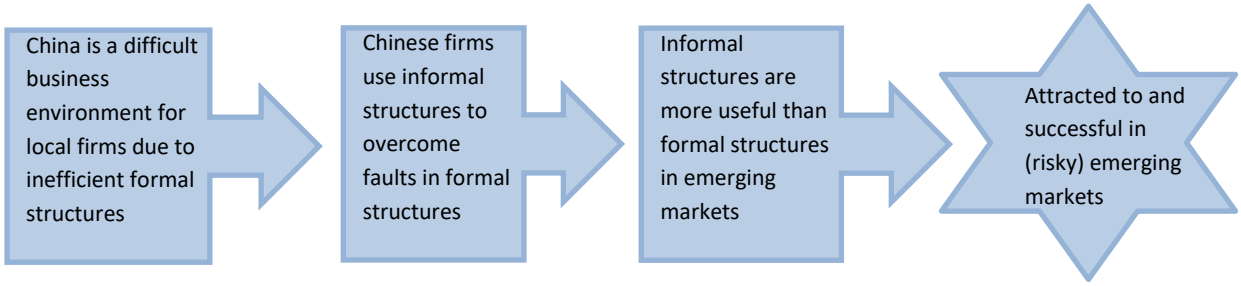
Figure 4 Government support theory



Furthermore, recent theories on Chinese ODI predict that Chinese firms developed a higher tolerance towards inefficient structures (which means a more difficult environment for doing business) due to their experience with operating in complex markets at home (e.g. Morck et al., 2008). The theories by Child & Rodrigues (2005) and Morck et al. (2008) result in the fourth hypothesis:

4. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to their experience with operating in a similarly challenging business environment in their home country (see Figure 5).

Figure 5 Disadvantages become advantages theory



2.2.6. Limitations

It needs to be noted that all above "statements" about the motivation for Chinese firms to invest in high risk emerging markets outside their own region are based on assumption, possible explanations of findings, and not results.

For example, Buckley et al. (2007) presented a number of potential explanations for their findings in their results and discussion section; however, they were not empirically verified as such in the same study. It is interesting to note that these potential explanations have been quoted in later studies as findings (e.g. Amighini, Rabellotti and Sanfilippo (2013); Buckley, Yu, Liu, Munjal & Tao (2016)). Referring to his own study that Buckley published in 2007 with other co-authors, Buckley et al. (2016) write for example: '[…] research suggests that EMNEs have experience of, and high tolerance towards political risk, which makes them different from Western MNEs, and therefore political risk may not negatively affect their location choice decision' (2016: 432). However, so far there is no empirical proof for a higher tolerance towards political risk by Chinese investors compared to other investors.

Kolstad and Wiig (2012) admit at the end of their paper that their results do actually not necessarily point to a unique attraction of Chinese investments to 'poor states'. They state that their results show 'that the interacted term is significant only for fuel exports' (2012: 32) and that 'it is possible that oil investment from China and from other countries is driven by the same set of factors' (2012: 33). However, this confession is not included in references to the findings of this study that Kolstad and Wiig not subtly refer to as: 'our findings are consistent with an image of China as a "ravenous dragon"' (2012: 33).

However, are Chinese investors indeed different from other foreign investors and are they more attracted to countries with relatively weak institutions and high political risk than other foreign investors? The above discussed studies with a focus on Chinese ODI showed us that too much emphasis on home country (or push-) factors and an exaggeration of the role of the Chinese government led to simplistic conclusions. What is needed is the integration of both the push and pull factors with the firm-specific factors (not just advantages) in an elaborate framework that explains the interaction between these different factors.

2.3. Combining host and home country factors

Child and Marinova (2014a) emphasize the importance of looking at both home and host country factors and aim to link them within a theoretical framework. Child and Marinova (2014a) state that investors are most successful in host countries with similar levels of PS and IM as in their home country. This is in line with the institutional distance argument that the costs of doing business abroad (also referred to as 'liability of foreignness' (Zaheer, 1995)) depend on the extent of similarity/dissimilarity between the home and the host country. The concept of liability of foreignness suggests that the risks are relative and differ per investor; depending on how familiar the foreign investor is with the situation in the host country.

To illustrate this, Child and Marinova (2014a) present a matrix in which countries are grouped according to their levels of PS and IM (see Figure 6). They categorize China as a category B country with a high level of PS and a low level of IM.

Figure 6 Countries categorized according to their political stability and institutional maturity

Political Stability \ Institutional Maturity	*High*	*Low*
High	**A** ***United States, Canada, North and West European countries, Australia, New Zealand***	**B** ***China, Central Asia republics, South Africa***
Low	**C** ***French Fourth Republic, Belgium***	**D** ***Sub-Saharan Africa***

Source: Child & Marinova 2014a

Child and Marinova argue that Chinese investors are less successful in category A countries than in category B countries and that Chinese firms are relatively more successful in category D countries (with low levels of PS and IM) than their Western counterparts because of a similarly low level of IM. Child and Marinova (2014a) do not make the link between success in a specific business environment and location choice. However, following the line of argument from Morck et al. (2008) – that Chinese firms are more prevalent in least developed countries with difficult institutional conditions, because Chinese firms are more successful in such countries than their Western competitors – this framework could be used to further study the causal relation between the location choice of Chinese direct investment and the levels of PS and IM in the (potential) host countries.

Child and Marinova define PS as a situation in which the governance system enjoys popular legitimacy, in which changes in government are orderly, and in which the policies of different governments exhibit substantial continuity (2014a: 353). The two possible measurements Child and Marinova (2014a) propose for measuring PS: the worldwide governance indicator 'political stability and absence of violence/terrorism' from the World Bank's Worldwide Governance Indicators and the Economist Intelligence Unit's 'Political Instability Index'.

IM is defined by Child and Marinova as 'a situation in which a country's institutions, such as its legal system and regulatory authorities, function in a transparent manner, adhering to clear rules that are applied in a universalistic manner to all citizens' (2014a: 354). Child and Marinova (2014a) suggest the World Bank's annual country ranking of 'Ease of Doing Business' for measuring the level of IM. Child and Marinova (2014a) did not measure the exact level of PS and IM, but rather categorized the countries based on anecdotal evidence; leaving the need to test their framework.

2.3.1. Empirical studies

Although there is no account of an empirical test of Child & Marinova's (2014a) framework yet, there exist empirical studies on the effect of the levels of PS and the level of IM on the location choice of Chinese investors. For example, the work by Quer, Claver and Rienda (2012) in which they use data on 35 Chinese firms listed in Fortune 500 and show empirically that political risk is not detrimental to the location choice of the investment. Their sample is, however, relatively small and biased towards bigger firms who might have exploited opportunities to buy cheaper assets in more risky contexts.

Chen, Dollar and Tang (2016) also conducted an interesting study on the motives behind Chinese investments in Africa which seems to present evidence for the statement that Chinese firms invest more in poor governance environments than Western firms. However, there are three critical

points to this research. Firstly, Chen et al. (2016) used two measures from the same database (namely "rule of law" and "political stability and absence of violence/terrorism" from the worldwide governance indicators (WGI) from the World Bank (2017a)). Since rule of law and political stability are related concepts it is recommendable to use measures derived from different backgrounds in order to avoid correlation effects. Secondly, for the first part of their study in which they look at the effect of poor governance on the location choice for Chinese investments they use FDI stock instead of number of investment projects. FDI stock is expected to be a less accurate measure of location choice for investment since the results can be biased due to single very large investments especially in the mining sector (see page 30 for a more detailed discussion on the matter). Thirdly, Chen et al. (2016) did not conduct a comparative analysis, but only compared total FDI stock in Africa with Chinese FDI stock in Africa. Since Western firms have been investing on the African continent for a long time already, for reasons that might have changed over the years, this comparison does not give an accurate picture of how the current motives between Western and Chinese firms differ.

2.4. Conclusion

In other words, there is still a need for a more accurate comparison between the impact of the levels of PS and IM on the location choice of Chinese and Western investors. Quantitative studies do however not show whether Chinese ODI is *attracted* to certain host countries or not. Regression analysis can point out the strength of a certain correlation but cannot proof a causal relation. These studies rather show that Chinese investment is not deterred from countries with a weak rule of law (Chen et al., 2016; Kolstad & Wiig, 2012) and a high level of political risk (Buckley, et al., 2007; Quer et al., 2012). Based on these findings, some bold statements are made about why Chinese investors are (relatively) attracted to countries with "poor" institutions. However, there is no empirical evidence for any of these claims. In order to further explore the reasons for Chinese firms to invest in high-risk markets outside their own region, we need to conduct qualitative studies. Case studies can make inferences on which causal mechanisms may have been at work by examining intervening variables in individual cases using process tracing. Beach and Pedersen (2016) refer to the causal mechanism as a system of entities that engage in activities that 'move the mechanism from an initial or start condition through different parts to an outcome' (Beach & Pedersen, 2016: 83). Furthermore, Beach and Pedersen argue that if we theorize causal mechanisms as systems, 'the theory needs to develop all of the important parts of the mechanism that link X with Y, with a clear causal explanation for what takes us from one part to another to ensure 'productive continuity' through the mechanism' (2016: 98). We need to construct from what we have, then deconstruct, then reconstruct, and finally generalize so that we can build new theories.

Based on the possible explanations for the choice of Chinese investors to invest in high-risk markets outside their own region derived from reviewing both traditional and more recent FDI theories I constructed a causal mechanism (see Figure 7) that I will test in the remainder of this study. See Figure 8 for the legend. In the next Chapter I will explain the working of this rather complex causal mechanism in full detail. It needs to be noted that I changed the order of the hypotheses in order to make the flow of the mechanism clearer:

Figure 7 Causal mechanism

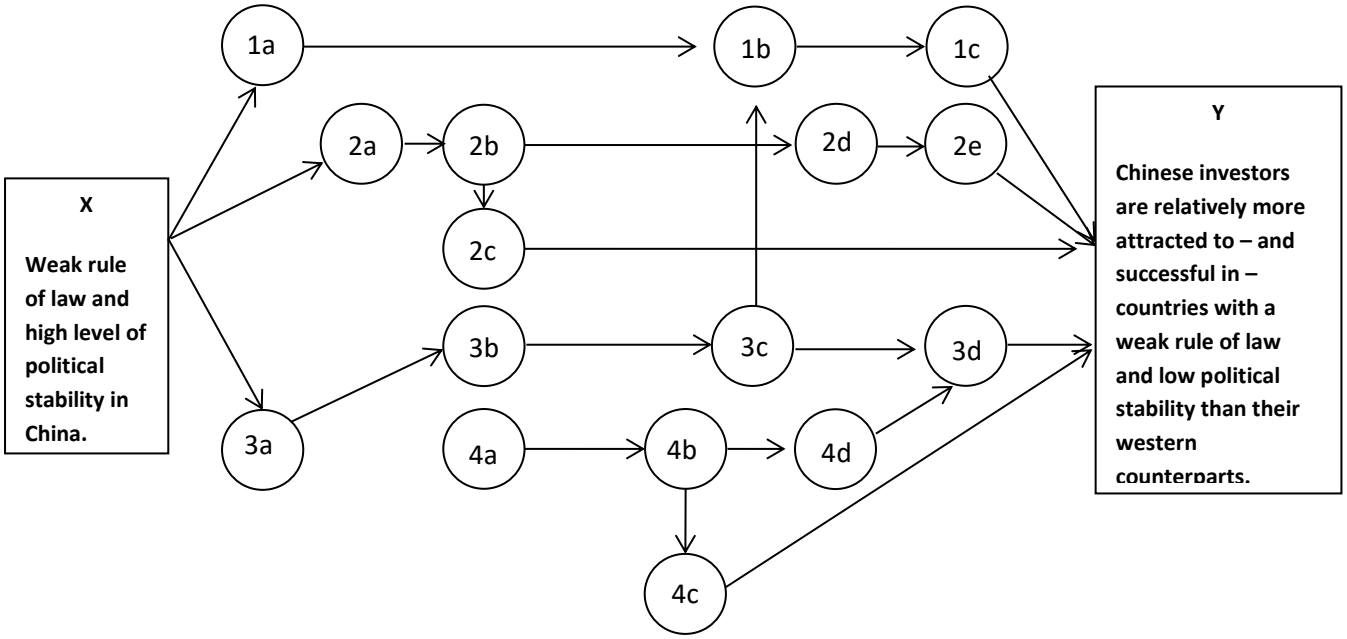


Figure 8 Legend

1.
    a. China is a difficult business environment for local firms due to inefficient formal structures.
    b. Chinese firms use informal structures to overcome faults in formal structures.
    c. Informal structures are more useful than formal structures in emerging markets.
2.
    a. Chinese firms are late-comers on the global market.
    b. Products and services of Chinese firms are of low standard.
    c. Low in demand in advanced markets.
    d. Products and services are cheaper than products and services from advanced market firms.
    e. High in demand in emerging markets for their low costs.

3.
    a. Chinese firms have close ties with the Chinese government.
    b. The Chinese government has strategic interests in some risky markets
    c. Chinese firms receive (financial) support for operating in these markets
    d. Chinese firms have more room to operate in such challenging host markets.

4.
    a. Advanced market firms see markets with low levels of IM and PS as too high-risk business environments.
    b. Advanced market firms avoid high risk business environments.
    c. Advanced market firms target mainly other advanced markets.
    d. Chinese firms experience not much competition in risky emerging markets.

3. Methods

3.1. Overview

As described in the introduction, the purpose of this study was to learn more about the motives behind Chinese investments in high-risk markets and the particular advantages and disadvantages of Chinese investors in such countries. This research was born out of my observation that statements in international business literature about the determinants of Chinese foreign investments do not seem to match with the reality on the ground of Chinese economic activities in Africa. As described in the previous chapter, the dominant view in international business literature is that – in contrast to general FDI theory – Chinese overseas investment is not deterred by political risk (Buckley et al., 2007), and is directed to countries with weak institutions (Kolstad & Wiig, 2012). The causal mechanism presented in Figure 7 at the end of the Literature Review shows the various possible explanations for the choice of Chinese investors to invest in high-risk markets outside their own region. However, so far these causal relations have not been empirically tested yet.

In order to get a better understanding of the causal relation between the home country situation in China and Chinese investments in countries with relatively weak institutions, I have divided my research into two studies. The first study compares the location choice of Chinese investors with U.S. investors in Africa. The aim is to study the role of institutional distance in the location choice of Chinese and U.S. investors. The cross-case study allows me to either reject or not reject (NOT confirm) the hypotheses. For positive inferences one needs mechanistic within-case evidence. Therefore, the second study is a qualitative study and uses process-tracing in order to study the specific motives, challenges and advantages for two large Chinese telecom firms in Nigeria – a country with relatively low levels of PS and IM that attracts much Chinese FDI.

The two studies have a different ontological and epistemological base. We can find out how much Chinese investment is going to certain countries and how this compares to investment from other FDI source countries. However, success is subjective and motives can be partly unconscious and therefore require an interpretivist approach. Therefore the first study is situated in a realist ontology with an objectivist epistemology, while the second study is situated in a relativist ontology with a subjectivist epistemology. The first study requires a statistical analysis while the second study requires ethnographic research and/ or in-depth interviews. Therefore this research project requires a mixture of quantitative and qualitative data collection and analysis methods. This means

that my research design is a mixed method design. To be more precise: a parallel mixed method design in which the methods are mixed during the data analysis.

In the next section I will explain what mixed method design is, ending with the introduction of the specific mixed method design used in this study. After this, I describe the quantitative and qualitative studies separately in more detail. This chapter ends with an explanation of how the quantitative and qualitative study feed into each other at the level of data analysis and how I have come to my final results.

3.2. Mixed method design

Teddlie and Tashakkori (2003: 11) define mixed methods designs as designs that use qualitative and quantitative data collection procedures or research methods. Teddlie and Tashakkori (2003: 14-15) mention three areas in which mixed methods designs are superior to single approach designs, namely:

- Mixed methods research can answer research questions that the other methodologies cannot;
- Mixed methods research provides better (stronger) inferences;
- Mixed methods provide the opportunity for presenting a greater diversity of divergent views.

Creswell and Clark further expand that:

> Research problems best suited for mixed methods are those in which one data source may be insufficient, results need to be explained, exploratory findings need to be generalized, a second method is needed to enhance a primary method, a theoretical stance needs to be employed, and an overall research objective can be best addressed with multiple phases, or projects (Creswell and Clark, 2011: 8).

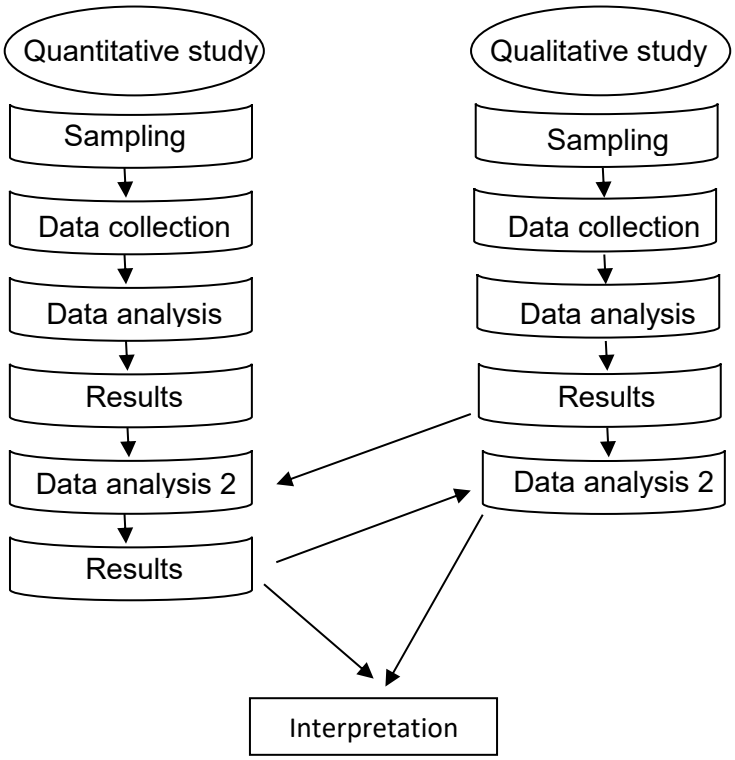
In the case of my study the results from the quantitative strand were "surprising" –in terms that the results were in contrast with what general international business theory predicts. These results convincingly show the necessity for more explorative research on the motives, challenges and advantages for Chinese firms in African host countries. Teddlie and Tashakkori point out that '[a] major advantage of mixed methods is that it enables the researcher to simultaneously answer confirmatory and exploratory questions, and therefore verify and generate theory in the same study' (2003: 15). As the case of my study shows, it can also be about disproving and exploring.

The term "mixed methods designs" covers both mixed method and mixed model research. Teddlie and Tashakkori explain that '[m]ixed method research studies use qualitative and quantitative data

collection techniques in either parallel or sequential phases' (2003: 11). This mixing occurs in the methods section of a study. Mixed model research, by contrast, is mixed in many or all stages of the study (questions, research methods, data collection and analysis, and the inference process) (Teddlie & Tashakkori, 2003: 11).

In this study I am conducting mixed method research: I first use qualitative and quantitative data collecting, sampling and analyzing methods in parallel phases and then start mixing the methods in the analysis phase. My parallel mixed methods design looks as follows:

Figure 9 The parallel mixed methods design used in this study



The findings from my qualitative study feed in and prompt a follow up analysis of the quantitative data that in turn helps me interpreting the results of my qualitative study. Combining my quantitative and qualitative study this way helps me to further explore and explain the phenomenon of Chinese investments in host countries with a challenging business environment outside their own region. I will now describe the quantitative and qualitative studies in more detail.

3.3. Quantitative study

3.3.1. Design

The purpose of this quantitative strand is to test if Chinese and U.S. investments to Africa are indeed directed to host countries with similar levels of IM and PS. The study is conducted using a correlational design, which means that the extent of a relationship between the variables is measured by using statistical data. This design is also referred to as a descriptive design since the variables are not manipulated.

The reason for choosing this design is that I am interested in information about: the allocation of Chinese and U.S. investment in Africa and the correlation between outward investment and institutional distance. Based on the institutional distance theory and Child and Marinova's (2014a) framework I hypothesize that:

Hypothesis 1: Chinese FDI is directed to African countries with a low level of IM.

Hypothesis 2: Chinese FDI is directed to African countries with a high level of PS.

Hypothesis 3: U.S. FDI is directed to African countries with a high level of IM.

Hypothesis 4: U.S. FDI is directed to African countries with a high level of PS.

I test my hypotheses based on the number of U.S. and Chinese FDI projects per African country as reported by respectively fDi Markets and the Chinese Ministry of Commerce (MOFCOM). I will now first explain my sampling and data collection methods before I introduce the model.

3.3.2. Sample

The two populations that I compare are Chinese and U.S. investment projects on the African continent. Due to limitations in the availability of data, I look at all registered investment projects by respectively fDi Markets and MOFCOM for the period 2003-2011. The selected period of time is representative for China's rising outward investments to Africa that rapidly increased since 2003 and for the fluctuations in U.S. investments to the African continent (see Figure 22) for the developments of Chinese and U.S. total investments to the African continent from 2003 to 2015). The sample includes 35 of the 54 African countries due to the fact that ICRG has limited data on the level of government stability for many African countries. When using "political stability and absence of violence" from the WGI this study could include 51 countries. However, I was strongly advised against using the measures for PS and IM from the same database. In paragraph 1.1 I motivate my

choice for focusing on the African continent. I will now first explain which data is included in the fDi Markets and MOFCOM data bases in order to show that the data are comparable and robust. Furthermore, I note where gaps exist or what was excluded.

FDi Markets– a service from the Financial Times – is a leading source of information on FDI. It collects data on greenfield FDI at the project level; including information on the home and host countries, the sector and the timing of each investment. There are three main drawbacks with the fDi Markets data: the first drawback is that fDi Markets does not cover mergers and acquisitions (M&As). However, I do not expect that this will have a significant effect on the results of my study because the spread of U.S. M&As over the African continent is similar to the spread of U.S. investment projects in Africa. Ellis, Lamont, Reus & Faifman (2015) found 136 cases of M&As by U.S. firms in Africa in the period 2003-2012. They also found that by far the most M&As in Africa took place in South Africa (1766), Egypt (360) and Nigeria (189) (Ellis et al., 2015); which are also the top-three African countries with the most U.S. investment projects according to fDi Markets. The second drawback is that information on the real capital expenditure at the project level – though available – is not precise as it often reflects an estimated project size. Therefore, I decided to use the number of investments as a more precise proxy of FDI activities. The third drawback is that the fDi Market data is not complete for Chinese investment projects in Africa. Therefore, I use the MOFCOM database for the number of China projects. Despite the mentioned drawbacks, fDi Markets is still the most reliable source of information on U.S. outward investment projects.

The MOFCOM database is freely accessible and shows all registered overseas investment projects by Chinese companies. MOFCOM used to provide the data on the names of the parent company and foreign entities, the province of origin in China, a short description of its activities, and the registration date of the project. From the descriptions of the business activities I found that the MOFCOM database also does not include Chinese M&As in Africa for the period 2003-2011 and therefore MOFCOM and fDi Markets data are comparable. The main drawback of the MOFCOM database is that these registered projects have been approved, but not necessarily implemented. It is likely that some of the projects have been cancelled in the process because of difficulties encountered during the implementation phase. Therefore, using this data allows me to measure the serious intention of the investor to invest in that specific host country, but not the actual success of the investment. However, the same could be said about using the fDi Market database since the database does not tell anything about the continuation of the projects after the initial investments. In short, the two databases are comparable and their combined use gives me the opportunity to compare the location choice of Chinese and U.S. investors in Africa.

3.3.3. Data collection

The data for the dependent, main and control variables in this study were collected – or computed – from different sources. In this section I will identify the variables being measured and describe the methods used to obtain the data. All data was pre-existing or computed from pre-existing data.

Variables and measures

Table 1 summarizes the variables, measures, and data sources.

Number of FDI projects. The independent variable is the total number of Chinese (and U.S.) investment projects to Africa per host country over the period 2003-2011 as registered by MOFCOM (China) and fDi Markets (U.S.). Prior studies have used FDI flow (e.g. Buckley et al., 2007) or stock (e.g. Chen et al., 2016) to measure Chinese investments abroad. Although one could argue that FDI stock is generally a more important basis for requesting and deploying political capital for both companies and governments, FDI flow and stock are not very accurate measures of location choice for investment. The reason is that the results can be biased due to single large investments in especially the extractive industry. When using FDI flow or stock the results are therefore expected to be biased to countries with natural resources since the mining and oil industries require much higher investments than most other industries. With the resource-curse theory in mind, the use of FDI stock or flow could thus lead to bias towards more instable countries. There are good arguments for the use of both stock and number of FDI projects; however, the use of project numbers is generally regarded to be less biased and therefore I choose to use project numbers.

Table 1 Variables, measures and sources of data

Variable	Description	Measure	Main or control variable	Data source
lnFDIproj (dependent variable)	Number of FDI projects	Annual number of Chinese/U.S. FDI projects to Africa (per host country)	Dependent	Computed using data from fDi Markets and MOFCOM (2016)
POL	Political stability	Annual estimate of governance stability in host country	Main	Data from ICRG, published by the PRS Group
INST	Institutional maturity	Annual estimate of governance of rule of law in host country	Main	Data from worldwide governance indicators database, World Bank (2017a)

lnGDP	Absolute market size	Host country GDP at market prices (current USD)	Control	Data from World Development Indicators (WDI) database, World Bank (2017b)
NREXP	Natural resource endowment	The ratio of ore, metal, minerals and precious stones exports to merchandise exports of host country	Control	Computed using data from ITC Trade map (2017)
INFL	Host country inflation rate	Host country annual inflation rate	Control	Data from World Economic Outlook, International Monetary Fund (IMF, 2017)
lnEXP	Chinese (and U.S.) exports to the host country	Total export per year	Control	Computed using data from ITC Trade map (2017)
lnIMP	Chinese (and U.S.) imports from the host country	Total import per year	Control	Computed using data from ITC Trade map (2017)
lnIFDI	Openness to FDI	Ratio of inward FDI stock to host GDP	Control	Computed using data from UNCTAD Stat (2017) and the WDI database, World Bank (2017b)

The two main variables are IM (INST in the model) and PS (POL in the model). Prior studies have either used composite measures or two or more separate measures from the same database to measure the level of governance and institutions in host countries. For example, Buckley et al. (2016) use both Government Stability and Rule of Law from the ICRG database to measure the quality of host countries' institutions. Chen et al. (2016) look at "governance" using two measures from the Worldwide Governance Indicators: Rule of law and Political stability and absence of violence/terrorism. Child and Marinova's (2014a) framework suggests to separate PS and IM.

Institutional maturity. Child and Marinova mention the Ease of Doing Business ranking from the World Bank as a measure for IM; however this ranking includes many more aspects of a good business environment than their description of IM, namely: 'a situation in which a country's institutions, such as its legal system and regulatory authorities, function in a transparent manner, adhering to clear rules that are applied in a universalistic manner to all citizens' (2014: 353). Therefore, I use "rule of law" from the WGI from the World Bank to measure the level of IM.

However, for a robustness check I replicate the measure using the Ease of Doing Business ranking from the World Bank as an alternative.

Political stability. PS is in prior studies often measured from its negative opposite: political instability or political risk. The much quoted study from Buckley et al. (2007) for example uses "political risk" from the ICRG. The political risk rating from ICRG is composed of the following risk components: government stability; socioeconomic conditions; investment profile; internal conflict; external conflict; corruption; military in politics; religious tensions; law and order; ethnic tensions; democratic accountability; and bureaucracy quality (ICRG methodology at website PRS Group). Since this composite political risk measure includes also measures for IM, I decided to focus on the component "government stability" only to measure PS.

The government stability component from ICRG is an assessment of both of the government's ability to carry out its declared program(s), and its ability to stay in office. It includes the following three subcomponents: government unity, legislative strength, and popular support. The risk rating assigned is the sum of the three subcomponents, each with a maximum score of four points and a minimum score of 0 points. A score of 4 points equates to Very Low Risk and a score of 0 points to Very High Risk. The measure government stability (POL) therefore fits Child and Marinova's (2014a) description of PS, namely: a country which governance system enjoys popular legitimacy, in which changes in government are orderly, and in which the policies of different governments exhibit substantial continuity (2014: 353). As a robustness check I replicate the measure using "political stability" from the WGI from the World Bank.

Control variables

I control for the standard variables that have been included as controls in prior research and that apply to my sample, including: market size, natural resource endowments, inflation, existing trade relations, and how welcoming the host country is towards FDI in general.

Market (GDP). The data are obtained from the WDI using GDP at market prices (current USD).

Natural resources (NREXP). Amighini et al. (2011) refer to Buckley et al. (2007), Cheung and Qian (2009), and Kolstad and Wiig (2012) and state that the results of these studies show that Chinese investments are motivated by the need to satisfy their growing demand for primary resources, especially for investments going to developing countries. However, Buckley et al. (2007) and Cheung and Qian (2009) actually find that natural resources are insignificant, and Kolstad and Wiig

(2012) find only an interaction effect for natural resources and weak institutions in the host country. Despite these results, the popular assumption is still that Chinese firms are attracted to countries with natural resources, especially in developing regions. I use Buckley et al.'s (2007) measure for natural resource endowment, namely: the ratio of ore and metal exports to merchandise exports of the host country and add the categories precious stones and mineral fuels and oils (in order to include gold, silver, diamonds, oil and gas).

Inflation (INFL). The conventional idea is that macroeconomic instability (proxied by high inflation) is a deterrent for foreign investors. I use the World Economic Outlook to measure the inflation rate, measured as the percentage change in consumer price index.

Trade (EXP and IMP). Research has shown that trade and FDI have a strong relationship (Blomström & Kokko, 1997; Wells, 1983). FDI could be in support of trade or trade could be a substitute for exports for example (see springboard theory by Luo & Tung, 2007). For the export to and import from African countries of China and the U.S. I use data in current dollars from the International Trade Centre (ITC) Trade map.

Welcoming to FDI (IFDI). Traditional FDI theory assumes that the more open a country is to international investment, the more attractive it is likely to be as a destination for FDI (Chakrabarti, 2001). I am using the same proxy for the openness of the host economy to international investment as Buckley et al. (2007), namely the ratio of inward FDI stock to host GDP. I do this by excluding respectively Chinese and U.S. FDI to the total FDI received by each host country.

I excluded Buckley et al.'s (2007) measures for cultural proximity, geographical distance, exchange rate and patent registration; and Amighini et al.'s (2011) measures for telephone mainlines, secondary education enrollment, research and development (R&D) expenditures and geographical distance. First of all, geographical distance is not very relevant for this study since the distance to the African host countries is not significantly different for both the U.S. and China. Cultural proximity is defined by Buckley et al. (2007) as when the percentage of ethnic Chinese of the total population is more than one per cent. However, when comparing between the cultural proximity of Chinese investors with U.S. investors African host countries then there are many other factors that play a role, like for example the enormous influence of U.S. food and pop culture in the world and number of African students that study in the U.S. versus in China. Coming from an anthropological background I find the concept of cultural proximity too complex to capture in a single or few measures. Amighini et al. (2011) use the number of telephone mainlines as a proxy to

indicate the availability of infrastructures and communication facilities in the host country. However, in most African countries mobile phone connection is much more developed than landline connection (Kefela, 2011). Furthermore, the lack of road, rail and telecom infrastructure in many African countries is actually an important factor that attract Chinese (and other) investors rather than withhold them. Secondary education enrollment, R&D expenditures and patent registration are proxies for strategic assets that could be obtained when investing in host countries with high levels of human capital and advanced technologies. I decided to not include these measurements since strategic asset seeking motives are associated with investments in advanced markets and not in Africa (see for example Child and Rodrigues (2005)).

3.3.4. Data analysis

Given the structure of the data and the expected relationships I apply a panel regression model using fixed covariate effects and a random intercept to account for the heterogeneity in receiving countries. Based on theoretical considerations and visual exploration of the data, I apply logarithmic transformations to some of my variables to stabilize linearity of the relationships and homoscedasticity of variances. Using the MIXED linear model command in SPSS (version 24) I fit to the data via generalized least squares a mixed effects model with fixed main effects and a random intercept:

$$\ln FDIproj = \alpha + \beta_1 \ln GDP + \beta_2 NREXP + \beta_3 INFL + \beta_4 \ln EXP + \beta_5 \ln IMP + \beta_6 \ln IFDI + \beta_7 POL + \beta_8 INST + \varepsilon_{it}$$

I expect some correlation between POL and INST since countries with a high level of PS are more likely to have a high level of IM and vice versa. Therefore I also run two separate models for PS and IM and compare the results with the results of my combined model. The advantage of combining the two variables in one model is that I compare the same group of countries for both IM and PS. Separately the IM model includes 51 of the in total 54 African countries and the PS model only 35, due to a lack of data on these countries. The combined model can therefore include a maximum of 35 countries. In order to control for the impact of analyzing fewer countries on the results for IM, I also run a separate model for IM including only the 35 countries that are included in the PS model.

The data on the number of FDI projects (FDIproj), GDP, export (EXP), import (IMP), and inward FDI (IFDI) are transformed into natural logarithms as I expect nonlinearities in the relationship on the basis of theory and previous empirical work. In order to be able to take logarithms, all values for IFDI are shifted by the smallest negative number plus one, so that only positive scores occur. Furthermore, I add one to all values for FDIproj so that zero projects become one project in order to be able to take the logarithms.

The results of this quantitative study show that, other than often assumed, both Chinese and U.S. investments in Africa are significantly directed to countries with low levels of PS. Furthermore it shows that both Chinese and U.S. investments in Africa are directed to countries with high levels of IM; however this relation is only significant for U.S. investments.

3.4. Qualitative study

There exists a common (mis)understanding in international business literature that Chinese investments are especially attracted to countries with relatively "weak" or "poor" institutions and or a high level of political risk. Quantitative studies do however not show that Chinese ODI is attracted to such host countries. These studies rather show that Chinese investment is – other than expected from the results of FDI in general – not deterred from countries with a weak rule of law (Cheung and Qian, 2009; Kolstad and Wiig, 2012) and a high level of political risk (Cheung and Qian, 2009; Buckley et al., 2007). Based on these findings, some bold statements are made about why Chinese investors are (relatively) attracted to countries with "poor" institutions. However, as the results of my quantitative study show: there is not much difference between the location choice of Chinese and U.S. investors in Africa. The most that could be said based on these findings, is that Chinese investors are more indifferent towards a weak rule of law (Chen et al., 2016).

The purpose of this qualitative strand is to further explore the reasons for Chinese firms to invest in high-risk markets outside their own region, by studying the link between the levels of PS and IM in China and the challenges and advantages Chinese firms experience in high-risk host markets. The study is conducted using a case study design. The purpose of this case study is to describe in-depth the experience of two large Chinese telecom companies in Nigeria. The main research question in this qualitative strand is:

How does the institutional and political situation in China influence the location choice of Chinese telecom firms for – and their success in– high-risk markets in Africa?

The next sections will explain the research design, the case selection, the expected causal mechanism, and the empirical prediction.

3.4.1. Design

In order to answer this question, a single case study is adopted. A case study is an empirical investigation of a contemporary phenomenon within its real-life context. According to Yin (2003: 1), 'case studies are the preferred strategy when —how and —why questions are being posed.' It is often thought that the case study method allows for depth of investigation at the expense of

generalization (e.g. Bennett, 2004). However, Schreier (2017) explains that case studies lend themselves well for the recently reconceptualized notions of generalization, namely: "transferability" in the case of descriptive case studies and "analytical generalization" (also referred to as theoretical generalization) in the case of explanatory case studies.

Transferability acknowledges the importance of the context and the core concern is 'to determine whether the findings obtained for one instance or set of instances in one specific context also apply to other instances in a different context' (Schreier, 2017: 86). In other words, transferability does not refer to actual empirical cases that I study, since I adopted a single case study. Instead it is about specifying the details of my case in such a way that my readers can decide to what extent the findings of my case also apply to other cases the reader has in mind – depending on how well the characteristics match. The extent to which the findings from one case can be transferred to another case can be assessed based on detailed information about the context in which the study was conducted, also referred to as 'thick description' by Geertz (1973).

The most pertinent strengths of a case study approach are the ability to engage with complexity, to deal with unexpected issues, and to show the processes involved in causal relationships (Hodkinson & Hodkinson, 2001). According to Hodkinson and Hodkinson (2001) the depth and complexity of case study data can illuminate the ways in which such correlated factors influence each other. Currently, most studies on the motives behind emerging market outward FDI are based upon statistical correlation (for example, Buckley et al., 2007; Kolstad& Wiig, 2010; Ramasamy et al., 2012; Rasiah, Gammeltoft & Jiang, 2010). However, regression analysis can point out the strength of a certain correlation, but cannot proof a causal relation. Therefore, regression analysis alone is not sufficient for studying the motives behind Chinese outward investments.

Instead, case studies can make inferences on which causal mechanisms may have been at work by examining intervening variables in individual cases using process tracing. Collier argues that 'process tracing is a fundamental tool of qualitative analysis' that can contribute decisively to evaluating causal claims (2011: 823). Process-tracing involves a mechanistic understanding of causality. Venesson defines process tracing as: 'a procedure designed to identify processes linking a set of initial conditions to a particular outcome' (2008: 224). It is the search for intervening variables[3] that link an independent variable with a dependent variable, commonly referred to as the causal mechanism.

[3] It may sound contradictory to mention variables in a single case study; however, a single case can also contain variation, e.g. across time, subunits, and space. And when you do process tracing, you make use of the variance of that one case over time and look which factors coincide with which changes in the case.

Beach and Pedersen (2013) identify three types of process-tracing, namely: theory-testing, theory-building, and explaining outcome process tracing. According to Beach and Pedersen (2013) "explaining outcome process-tracing" is the most common in practice, and it is used in a 'situation where we want to explain a particularly puzzling historical outcome' (2013: 11). Theory-building process-tracing 'involves building a theory about a causal mechanism between X and Y that can be generalized to a population of a given phenomenon, starting from a situation where we are in the dark regarding the mechanism' (Beach & Pedersen, 2013: 11). In contrast, theory-testing process-tracing is used when it is possible to theorize a mechanism linking a cause or causes with an outcome. Beach and Pedersen describe theory-testing process-tracing as follows:

> A causal mechanism is hypothesized to be present in a population of cases of a phenomenon. The researcher selects a single case where both X and Y are present, and the context allows the mechanism to operate. Here the goal is to evaluate whether evidence shows that the hypothesized causal mechanism linking X and Y was present and that it functioned as theorized (2013: 11)

In the case of my study of the role of institutional distance for the location choice and success of Chinese outward investment various theories are available to hypothesize a causal mechanism from that we can test. Beach and Pedersen (2013) suggest five steps for theory-testing process-tracing, namely: 1) select typical cases, 2) conceptualize and operationalize the causal mechanism, 3) collect empirical material and evaluating whether the predicted evidence was and if we can trust it; when evidence is not found for the whole mechanism: 4) investigate whether the chosen case was idiosyncratic; when evidence is not found for a part of the mechanism: 5) engage in theory-building in order to revise the theory. The following sections will describe these steps, starting with sampling.

The ultimate goal of process tracing is to provide a narrative explanation of a causal path that leads to a specific outcome. I will use a within-case theory-building process-tracing method to find out if and how institutional similarity is connected to the location choice and success of foreign investment. The main drawbacks of process-tracing are the large amount of analytical resources required in order for conducting it properly, and that it only enables you to make within-case inferences. However, in return for this constraint on generality, 'process tracing has the potential to generate relatively complete explanations' (Waldner, 2012: 68).

3.4.2. Sample

The difference in sampling between variance-based designs and case-based research can be referred to top-down versus bottom-up. Whereas variance-based designs are taking the population

– or a sample thereof – as the analytical point of departure, the 'population' of cases in case-based research emanates from the sum total of all comparable individual cases in which the causal theory plays out in a similar fashion. In quantitative research case selection is often meant to be random, while in qualitative research case selection is intentionally.

Beach and Pedersen define a "case" as 'an instance of a causal process playing out, linking a cause (or set of causes) with an outcome' (2016: 21). Beach and Pedersen argue that in any given case either a hypothesized causal relationship has taken place or not; which implies causal determinism and asymmetry (2016: 22). Causal homogeneity is vital when generalizing deterministic causal claims to other cases. Beach and Pedersen define a causally homogenous population as 'one in which a given cause can be expected to have the same causal relationship with the outcome across cases in the population' (2016: 53). It is important to make the contextual conditions under which the theorized relationship is expected to hold as explicit as possible (Beach & Pedersen, 2016: 98).

Causally homogenous populations are created by using 'thick' definitions of concepts used in the definition of the population. The aim of thick definitions of concepts according to Beach and Pedersen is to 'include more attributes and/or define them more narrowly' so that fewer cases result being a member of the concept (2016: 107). When concepts are defined too broadly we allow too many cases to enter the population and are likely to create a causally heterogeneous population.

This study focuses on two cases of Chinese multinationals investing in a high-risk host country in Africa outside the extraction industry. "Chinese multinationals" are defined as: enterprises operating in several countries but managed from China and that derive at least a quarter of their revenue from operations outside of China. I exclude investments in the extraction industry because the location choice for investors in this industry is limited to the host countries with natural resource endowments. Besides, based on the resource curse theory – although contested - we could expect a bias because of the tendency for low and middle income countries with an abundance of natural resources (that are relatively easily accessible) to have less economic growth, and PS than countries with fewer natural resources (e.g. Ross, 2006).

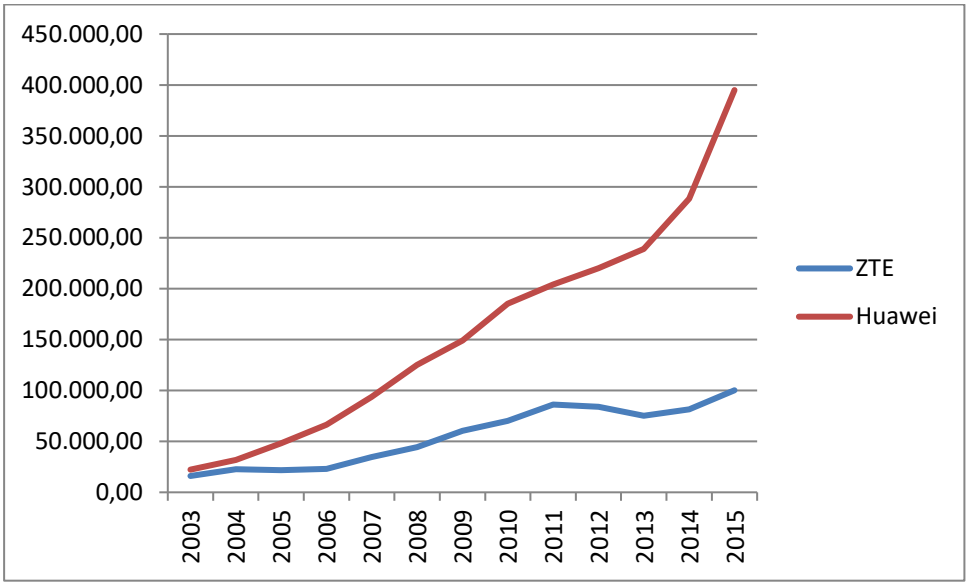
I selected Huawei and ZTE: two large Chinese telecom equipment vendors, founded in the 1980s. Both have strong links with the Chinese government and receive indirect financial support from Chinese policy banks without being fully state-owned enterprises (SOEs) registered at the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). Both Huawei and ZTE started winning their first overseas contract end 1990s and entered the Nigerian market around the millennium (see Table 2).

Table 2 Main similarities and differences between Huawei and ZTE.

	Founded	First overseas contract	Year of entrance in Nigeria	(SASAC registered) SOE	Number of employees 2017	Revenue 2015 (RMB bln)
ZTE	1985	1998 (Pakistan)	2002	No	+-75,000	100
Huawei	1987	1997 (Hong Kong)	1999	No	+-180,000	395

Although Huawei and ZTE were of about equal size when they first started to invest abroad, Huawei became about four times larger than ZTE in 2015 in terms of revenue (see Figure 10).

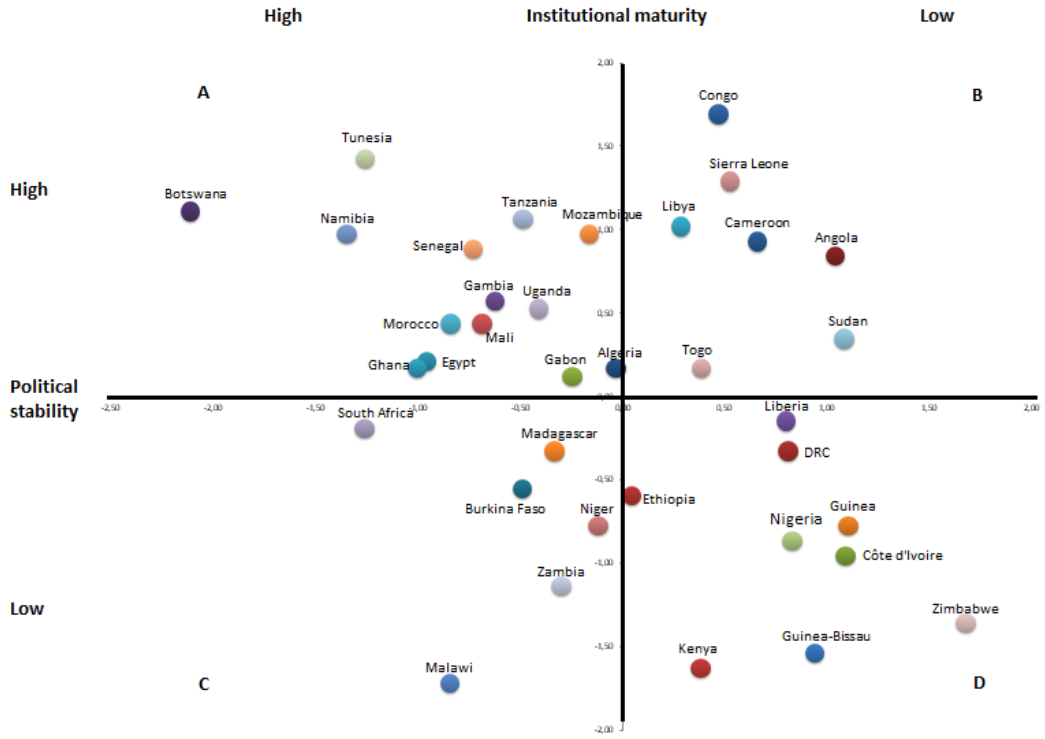
Figure 10 Revenue growth Huawei and ZTE, 2003-2015



Source: Created by the author based on the annual reports of Huawei and ZTE.

"High-risk host countries in Africa" are conceptualized as the African countries in quadrant D of Child and Marinova's (2014a) framework applied to the African continent only: with a low level of PS and a low level of IM. These countries are: Côte d'Ivoire, the Democratic Republic of the Congo (DRC), Ethiopia, Guinea, Guinea-Bissau, Kenya, Liberia, Nigeria and Zimbabwe (see Figure 11).

Figure 11 Levels of PS and IM standardized among African countries, 2003-2011



Sources: created by the author based on data from WGI and ICRG

PS is measured by using "government stability" from the ICRG, and IM is measured by using "rule of law" from the WGI from the World Bank (see page 31for a more detailed explanation). Nigeria stands out as the "high-risk" African host country that received most Chinese FDI over the period 2003-2011 (see Table 3).

Table 3 Main similarities and differences between the African host countries in quadrant D

Country	Level of PS	Level of IM	Chinese FDI stock in USD mln (2011)	Number of Chinese FDI projects (2003-2011)
Côte d'Ivoire	-0.95	1.09	35	14
DRC	-0.32	0.81	709	68
Ethiopia	-0.59	0.04	427	94
Guinea	-0.77	1.10	168	16
Kenya	-1.63	0.38	309	54
Liberia	-0.14	0.80	115	16
Nigeria	-0.86	0.83	1416	191
Zimbabwe	-1.36	1.68	576	40

Source: Created by the author based on ICRG, WGI, MOFCOM and fDi Markets

I exclude investments in the extraction industry because the location choice for investors in this industry is limited to the host countries with natural resource endowments. Besides, based on the resource curse theory – although contested - we could expect a bias because of the tendency for low and middle income countries with an abundance of natural resources (that are relatively easily accessible) to have less economic growth, and PS than countries with fewer natural resources (e.g. Ross, 2006).

3.4.3. Data collection

The data for this study consists of both primary and secondary data that were collected during field studies in China and Nigeria. In this section I will describe the methods used to obtain the data and identify the causal conditions that are the focus in this study.

The data were collected using face-to-face interviews, observation techniques and public company documents like for example annual reports. I conducted semi-structured face-to-face interviews. The advantages of face-to-face interviews compared to surveys are that the interviewee can: clarify questions when the respondent does not understand the question, ask follow-up questions and build rapport with the respondent. The latter is especially important since my study touches upon sensitive information for these Chinese firms, namely the company's strategies and challenges. Furthermore, a semi-structured interview leaves much space for the respondent to mention the most pertinent issues according to him or her and has therefore a smaller risk to overlook important issues than with structured interviews or surveys. Another advantage of face-to-face interviews is that it allows for observations on location. In the case of this study, the observations of the differences between the offices of the Chinese firms in Nigeria provided extra information on the respective success of both firms in Nigeria. A disadvantage of face-to-face interviews is that it involves bigger costs in terms of time and money in order to meet the respondents in person. A disadvantage of semi-structured interviews is that it takes much time to transcribe and analyze the interviews.

In order to get a full picture of the main challenges and advantages for Chinese firms in Nigeria, I did not only interview senior managers from both multinationals, but also representatives of the Chinese embassy and Ministry of Commerce, and the chairman of the Nigeria-China Business council. I also spoke with the main competitor of these Chinese firms (Ericsson) and two important clients (MTN and Smile) in Nigeria. Furthermore, I spoke with other Chinese business persons in Nigeria, an important Nigerian investment service group and representatives of the Dutch and U.S. embassies in Nigeria in order to explore the wider picture of the investment climate in Nigeria. **Fout! Verwijzingsbron niet gevonden.**shows the full list of the organizations, functions and l ocations of the interviewees. The reason for interviewing not only the regional managing directors

of these firms is that I asked about sensitive information, namely: their company specific challenges and advantages of investing in Nigeria. Talking about these topics requires a level of trust and vulnerability that is not easy to create in the limited time available. The information that I received from the main competitors (on a company and country level) and clients helped me asking better informed questions which possibly made the managers of the Chinese telecom firms feel more comfortable sharing their information with me. Furthermore, the information from the partners and competitors around the Chinese firms helped me putting the information I received from the Chinese managers better in perspective.

During the interviews I have asked my respondents about the challenges they experience in Nigeria for their company. Talking about challenges can make someone feel or seem vulnerable and that could be a reason for my respondents to not tell me in great detail about their challenges. Furthermore, the knowledge that the purpose of the interview is academic research and that the information will become publicly available has likely impacted the calculation my respondents made to decide what to tell me and what to keep for themselves. Especially talking about corruption could bring my respondents into serious trouble. Realizing the sensitivity of this topic, I tried to make it easier for my respondents by talking about corruption as a scale and by comparing as "corruption"-labeled behavior when it happens in Africa with as "lobbying"-labeled behavior when it happens in Europe. I tried to radiate a neutral stance to behavior that could be generally described in terms of networking and let my respondents talk about where they draw the limit and why. I stayed away from an ethical discussion about corruption and instead invited my respondents to talk about corruption in terms of to what extend it poses a risk for business and what ways they found to deal with the risk. This seemed to work since all my respondents were willing to at least discuss the topic of corruption and other challenges they encounter. However, I am aware of the fact that they are professionals and gave calculated responses.

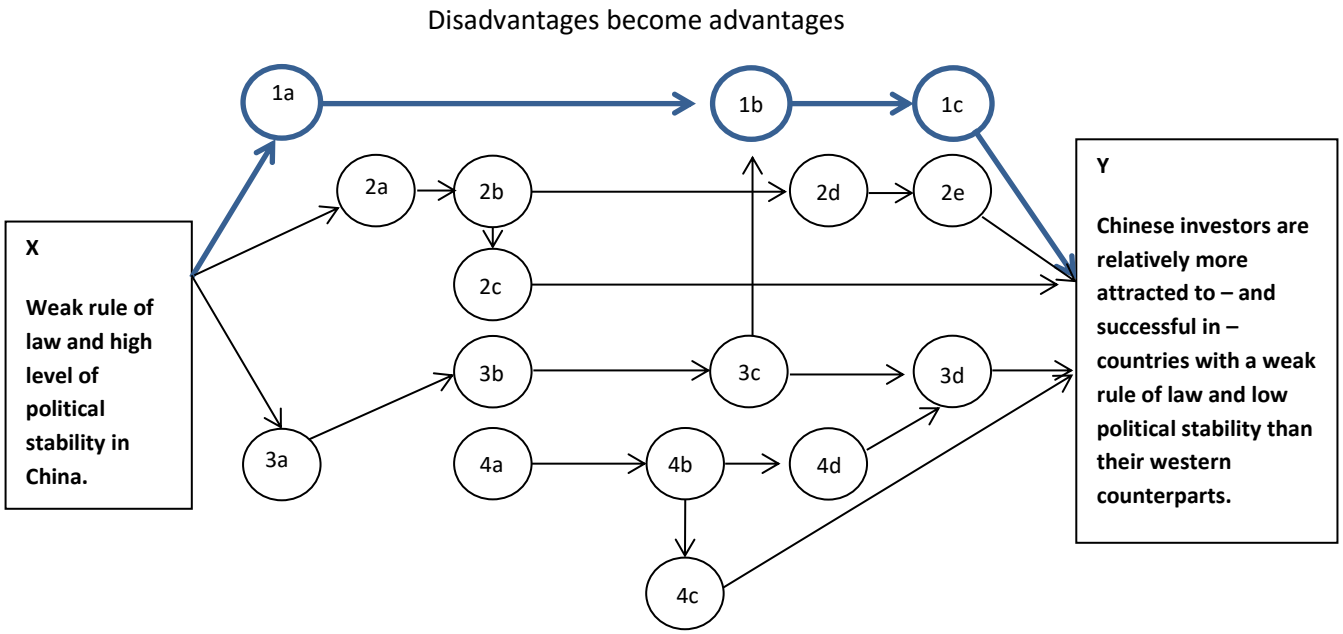
The interviews were conducted in January 2016 and reflect therefore the political and economic context of that time. President Buhari was inaugurated in May 2015. During his election campaign Buhari vowed to fight against corruption and insecurity and he made a clear stance by giving MTN a 3.9 billion dollar fine (which was later reduced to a bit less than half of that amount) after he became President. Some interviewees mentioned that this fine changed the way foreign firms behave in Nigeria realizing that the government is no longer looking away from scandals. This change of policy might have impacted the way my respondents spoke about corruption in Nigeria. Another important event during the time of the interviews is that the Naira dropped tremendously as a cause of falling oil prices due to the production of shale gas in the U.S., a country to which Nigeria exported most of its oil to until 2014.

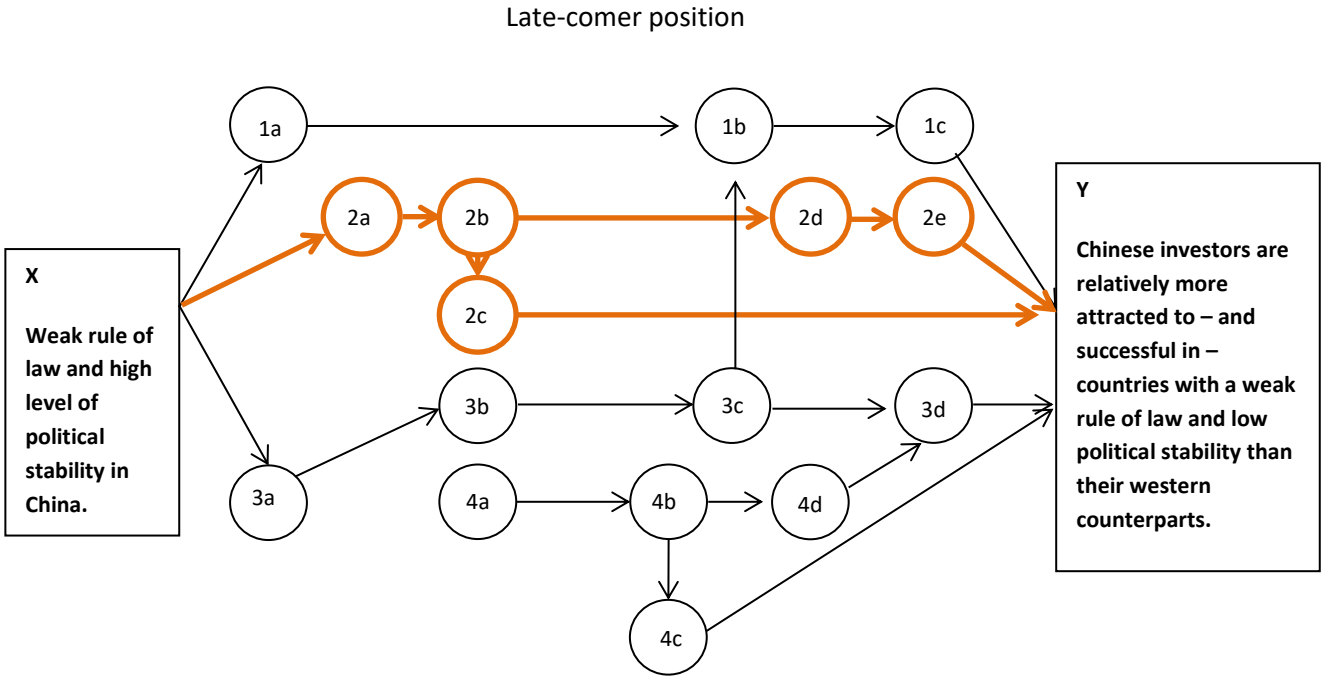
Access to these persons was provided via my connections in China and Africa. My good friend and colleague in China-Africa research Prof. Dr. Wang Duanyong introduced me to a senior manager of ZTE in Johannesburg (South Africa). The manager in Johannesburg introduced me to senior managers at the headquarters (HQ) of ZTE in Shenzhen (China) and to senior managers at the ZTE offices in Lagos and Abuja (Nigeria). An employee at the Dutch Ministry of Foreign Affairs who interviewed me on China-Africa relations introduced me to the Dutch embassy in Abuja and consulate in Lagos. A representative of the Dutch consulate brought me in contact with MTN, Ericsson and Smile. Prof. Wang joined me on my trip to Nigeria and brought me in contact with the Chinese embassy, the Ministry of Commerce, the Chinese Lekki Free Zone Development Company, the Nigeria-China Business council, Huawei, Stanbic bank and a Chinese hostel in Lagos where we met more Chinese business persons. A representative of the Dutch embassy brought me in contact with the U.S. embassy and a good friend and ambassador from Uganda brought me in contact with United Capital.

To support the semi-structured interviews, I used an interview guide. The topics on this interview guide have been carefully selected based on the expected causal conditions resulting from the literature review (see **Fout! Verwijzingsbron niet gevonden.**). I will now explain the process of the s election of these topics. Given the small number of cases in this study, measurement error potentially has huge impacts on the analytical results. To minimize the risks associated with this I will be as transparent as possible in developing the measures and assessing the cases in order to ensure inter-research reliability of measurement. I will provide clear descriptions of the procedures and sources used in order to enable other researchers to scrutinize and/or replicate my measures.

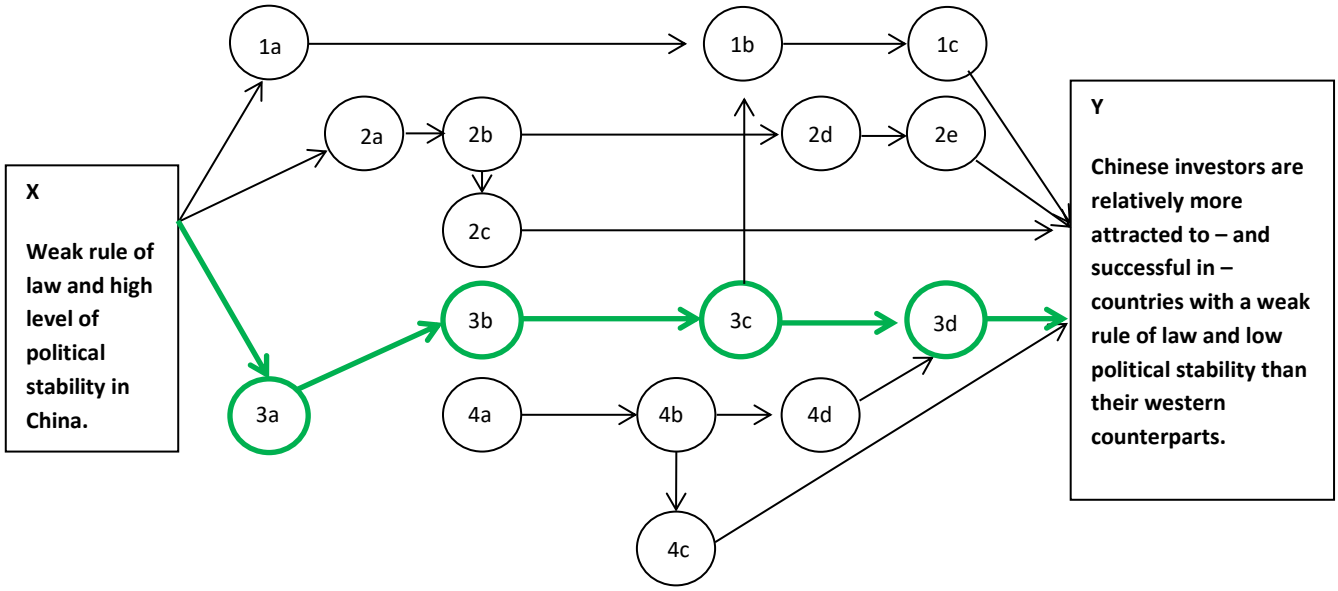
The way these causal conditions are expected to interact create different potential paths in the causal mechanism (see Figure 12) that could explain how the institutional and political conditions in China can make Chinese firms more successful than their Western competitors in countries with low levels of PS and IM.

Figure 12 **4 paths in the causal mechanism**

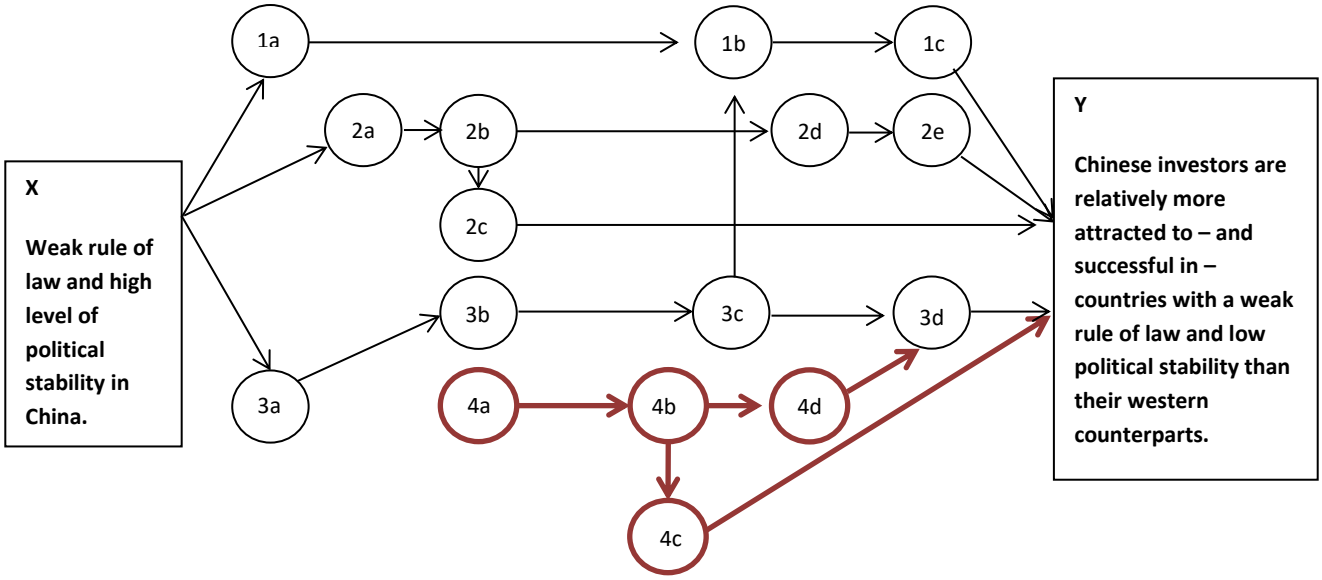




The role of the Chinese government



Lack of investments from advanced market firms



In order to be able to test the causal mechanism we need to identify the potential observable manifestations (potential empirical fingerprints or predicted evidence) of the causal conditions identified in the literature. Testing a causal mechanism could be compared with the work of Sherlock Holmes who looks for evidence that proves or disproves his theories. In the same regard, "empirical fingerprints" are like fingerprints of which the presence could help prove or disprove a causal relation. We need to ask ourselves the question: if X causes Y, what do we expect to observe?

Beach and Pedersen's (2016) suggest to first identify as many potential observable manifestations as possible and to evaluate the pros and cons of these different observable manifestations in a systematic fashion before selecting the appropriate evidence (empirical fingerprints) of the causal relation. Table 4 shows an overview of the potential observable manifestations that I have identified. The table includes the clarity, match with the underlying causal structure, the fit with the semantic meaning, and sources for the proposed observables. The table is followed by a discussion on the choices I made.

Table 4 Potential observable manifestations

Causal concept	**Potential observable manifestations**	**Vague terms?**	**Match underlying causal structure?**	**Captures the semantic meaning of attribute?**	**Sources**
1. Inefficient formal structures in China	A) Low ranking in "enforcing contracts"	Vague – "low ranking"	Depends on how measure is further specified.	Clearly captures meaning of attribute.	Ease of Doing Business ranking (World Bank)
	B) Complaints of MNEs regarding efficiency and affectivity of legal institutions	Vague – "complaints" "efficiency" "affectivity"	Yes	Not objectively	Media reports, interviews
2. Chinese firms prefer informal contracts over formal contracts	A) Contracts from Chinese firms broadly define the deal and do not include much detail	Clear	Indirectly	Focus on the formal contracts only.	Publicly available contracts
	B) Chinese firms renegotiate their contracts after signing	Clear	Indirectly	Focus on the formal contracts only.	Media reports, interviews
	C) Senior managers of Chinese firms have personal relationships with decision makers in important institutions in Nigeria	Vague – "personal relationships" "important institutions"	Depends on how measure is further specified.	Focus on the informal contracts only.	
	D) senior managers of Chinese firms state that they rely more on informal contracts than formal contracts	Vague – "informal contracts" "formal contracts"	Yes	Not objective	Interviews

3. Informal contracts are more successful than formal contracts in Nigeria	A) Chinese firms are praised for their flexibility after the contract is signed by their customers in Nigeria	Vague – "praised" "flexibility"	Depends on how measure is further specified.	Not objective	Interviews
	B) Local business persons state that informal contracts are more important than formal contracts in Nigeria	Vague – "informal contracts" "formal contracts"	Yes	Clearly captures meaning of attribute.	Interviews
4. Late-comers on the international market	A)Time spend from establishing the firm until internationalization	Vague – "internationalization"	Yes	No, focus is on "coming after Western firms".	Annual reports
	B) There are at least 10 years between when Ericsson internationalized and the moment the Chinese firms internationalized	Vague – "internationalization"	Yes	Clearly captures meaning of attribute.	Annual reports
5. Lower quality standards	A) Clients and competitors of Chinese firms state that Chinese firms have lower quality standards than Ericsson and Nokia	Vague – "lower quality standards"	Yes	Not objectively	Interviews
	B) Chinese firms use older technology than Ericsson and Nokia	Vague – "older technology"	Yes	Clearly captures meaning of attribute.	Media reports, annual reports, interviews
	C) Chinese firms use less advanced management systems than Ericsson and Nokia	Vague – "less advanced management systems"			
6. Chinese firms make cheaper offers	A) Customers in Nigeria declare that Chinese firms are cheaper than Ericsson in tenders	Clear	Yes	Not measurable	Interviews
7. Nigerian customers prefer Chinese firms due to low costs	A) Statements of customers from telecom infrastructure firms in Nigeria that they prefer Chinese firms due to their low costs	Clear	Yes	Not objective	Interviews
8. Advanced markets block Chinese investments out of fear for political agenda	A) Investments from Chinese firms in advanced markets are blocked out of fear for Chinese political agenda	Vague – "blocked" "advanced markets" "fear for Chinese political agenda"	Depends on how measure is further specified.	Clearly captures meaning of attribute.	Media reports
9. Chinese firms not successful	A) Market shares of Chinese firms are low in U.S. and Europe	Vague – "low"	Yes	Clearly captures meaning of attribute.	Not specified

in advanced markets					
10. Chinese firms target less-advanced markets	A) Chinese firms' internationalization process: first targeted similarly less-advanced countries	Vague – "target" "similarly less-advanced countries"	Looks at the process not on actual focus countries.	Looks at the process not on actual focus countries.	Publicly available documents
	B) Chinese firms' official internationalization strategy is to target less-advanced markets	Vague – "official internationalization strategy" "target"	Depends on how measure is further specified.	Clearly captures meaning of attribute.	Interviews, internal documents
	C) Shares of Chinese firms' investments in less-advanced markets are higher than in advanced markets.	Vague – "less-advanced markets" "advanced markets"	Not necessarily, because less investment could buy a larger market share in less-advanced markets.	Not necessarily, because less investment could buy a larger market share in less-advanced markets.	Not specified
11. Advanced markets saturated before Chinese firms arrived	A) Hardly any new telecom infrastructure projects developed in advanced markets since Chinese firms started to invest abroad	Vague – "hardly"	Yes	Clearly captures meaning of attribute.	Media reports
12. Chinese government interferes in Chinese businesses	A) Foreign firms are disadvantaged in favor of Chinese firms in China	Vague - "disadvantaged" "favoring"	Indirectly	Not really	Media reports, interviews
	B) Board members of Chinese firms are high government officials	Vague - "high government officials"	Yes	Clearly captures meaning of attribute.	Annual reports
	C) Huawei and ZTE are SOEs	Clear	Yes	Yes	SASAC, Financial Times
13. Chinese government uses Chinese firms to secure access to oil	A) China imports large quantities of oil from Nigeria	Vague – "large quantities"	Only to one part of the causal structure.	Only to one part of the causal structure.	ITC Trademap
	B) There is an infrastructure-for-oil deal between China and Nigeria	Clear	Yes	Yes, if the deal includes telecom infrastructure.	Media reports
14. Chinese government assists Chinese firms abroad	A) Chinese firms have access to loans from the Chinese government for projects in Nigeria	Vague – "access to loans"	Depends on how measure is further specified.	Only when the loans are directly provided by the Chinese government to the Chinese firm.	Interviews, media reports
	B) The Chinese embassy is involved in business deals for Chinese firms in Nigeria	Vague – "involved" "business deals"	Depends on how measure is further specified.	Clearly captures meaning of attribute.	Interviews, media reports

15. More room to deal with challenges in Nigeria	A) Chinese firms experience fewer challenges in Nigeria than Ericsson	Vague – "fewer challenges"		Not objectively	Interviews
	B) Some coping strategies of Chinese firms for challenges in Nigeria are no option for Ericsson	Vague – "coping strategies"	Yes	Clearly captures meaning of attribute.	Interviews
16. Advanced market firms perceive less-advanced markets as high risk business opportunities	A) Statements in media about high risks in less-advanced markets from advanced market firms	Vague – "less-advanced markets" "advanced markets"	Depends on how measure is further specified.	Clearly captures meaning of attribute.	Media reports
17. Advanced market firms target advanced markets	A) Ericsson's internationalization process: first targeted similarly advanced markets	Vague – "target" "similarly advanced countries"	Looks at the process not on actual focus countries.	Looks at the process not on actual focus countries.	Publicly available documents
	B) Ericsson's official internationalization strategy is to target advanced markets	Vague – "official internationalization strategy" "target"	Depends on how measure is further specified.	Clearly captures meaning of attribute.	Interviews
	C) Shares of Ericsson's investment in advanced markets are higher than in less-advanced markets.	Vague – "less-advanced markets" "advanced markets"	Not necessarily, because less investment could buy a larger market share in less-advanced markets.	Not necessarily, because less investment could buy a larger market share in less-advanced markets.	Not specified
18. Little competition from advanced market firms in less-advanced markets	A) Market shares Chinese firms are much higher than Ericsson's share in Nigeria	Vague – "much higher"	Yes	Clearly captures meaning of attribute.	Not specified
19. Nigerian government accommodates to Chinese firms	A) Chinese firms pay less tax in Nigeria than Ericsson does	Clear	Only when tax for similar activities is compared.	All potential reasons for a difference in tax need to be explored.	Not specified
	B) Chinese firms have less troubles with corruption/ regulations in Nigeria than Ericsson	Vague – "less troubles with corruption"	Depends on how measure is further specified.	Not objectively	Interviews
	C) Chinese firms report to receive some kind of support from the Nigerian government	Vague – "some kind of support"	Depends on how measure is further specified.	Not objectively	Interviews

In the case of a singular proposed observable, this observable is automatically selected. When more than one observable is proposed then the best observable is selected based on a consideration of the clarity, match with the underlying causal structure, fit with the semantic meaning of the attribute and the sources. In some instances more than one observable is selected since these observables are expected to be linked.

For the first causal condition I select "low ranking in enforcing contracts" because it clearly captures the meaning of the attribute. I improve the clarity of the observable by adding that China needs to be in the lowest 25 per cent of the ranking for "enforcing contracts" measured by the Ease of Doing Business ranking of the World Bank.

For the second and third causal condition I rely on data that I acquire via interviews. I select "senior managers of Chinese telecom infrastructure firms state that they rely more on informal contracts than formal contracts" and "local business persons state that informal contracts are more important than formal contracts in Nigeria". These proposed observables match the underlying causal structure best and capture best the semantic meaning of the attributes. I aim to triangulate the data by collecting data from interviews with managers of the Chinese firms, local business persons, and clients and competitors of the Chinese firms.

In order to test the late-comer position of Chinese telecom infrastructure firms I select "at least ten years between when Ericsson internationalized, and the moment Chinese firms internationalized" since this proposed observable matches the underlying causal structure best and captures best the semantic meaning of the attribute. The data will be retrieved from the annual reports of Ericsson, Huawei and ZTE.

I select "Chinese firms use less advanced technology than Ericsson" and "Chinese firms use less advanced management systems than their Western competitors" for the causal condition that Chinese firms have lower quality standards than their Western competitors. I will use media report, annual reports and interviews in order to look for evidence whether Chinese telecom infrastructure firms used older technology than Ericsson and Nokia during the period under study (2003-2011).

I expect to find the most pertinent evidence for whether Chinese telecom infrastructure firms target less-advanced markets by interviewing senior managers of the Chinese firms at their HQ in China and ask them about their official internationalization strategy. I aim to triangulate the data with internal documents on the internationalization strategy of these firms and evidence of their internationalization process – which markets did they target first?

In case the Chinese government interferes in the firms under study I expect to find that the government is the main shareholder of the companies; in other words that Huawei and ZTE are SOEs.

In the case of the causal condition that the Chinese government uses Chinese firms to secure access to oil, large imports of oil are a necessary condition. Only after finding evidence that China is importing large quantities of oil from Nigeria I look for evidence of an infrastructure-for-oil agreement between the Chinese and Nigerian government that includes telecom infrastructure. In case the hard evidence of an infrastructure-for-oil deal is not found, then there could be still reason to suspect the Chinese government to actively support Chinese telecom firms to build the telecom infrastructure in Nigeria in case Nigeria is a large supplier of oil for China.

The assistance of Chinese firms abroad by the Chinese government could be observed in two clear ways: either the Chinese firms receive financial support from the Chinese government for projects in Nigeria – most likely in the form of loans – or the Chinese embassy is actively involved in business deals for these Chinese firms in Nigeria. In the case of the loans, it needs to be clarified if this financial support is consistent and if the Chinese firms can rely on this financial support. In case of the involvement of the Chinese embassy it needs to be clarified in what way this support is different from the support provided by embassies from the U.S. and Europe to their firms in Nigeria. The data is triangulated by using media reports and interviewing Chinese firms, representatives of the Chinese embassy and representatives of the U.S. and European embassies.

The fifteenth causal condition is on purpose very broad, because the main challenges for Ericsson and the Chinese firms and their coping strategies for these challenges will come out of the interviews. In case Chinese firms have indeed specific advantages in Nigeria due to the above mentioned reasons, then it is expected that the Chinese firms have some coping strategies that are not an option for Ericsson.

I expect to find the most pertinent evidence for whether Ericsson targets advanced markets by interviewing the MD of Ericsson in Nigeria and ask him about Ericsson's official internationalization strategy. I aim to triangulate the data with internal documents on the internationalization strategy of Ericsson and evidence of its internationalization process – which markets did Ericsson target first?

I decided to add the causal condition that China is the most valued investor in Nigeria. I will compare the number of investment projects per country of origin to see whether China is the main FDI source country for Nigeria.

It is very tough to find evidence for special support from the Nigerian government to Chinese firms. The Chinese managers are not likely to admit in case they receive a special treatment in order to protect "the face" of their Nigerian partners and to avoid that they lose the support. Despite these considerations, I do a serious attempt in this study to find evidence by asking the Chinese managers more broadly about the support they received from the local government when starting their business in Nigeria and if they experience challenges with regulations and corruption in Nigeria. I expect that in case the Chinese firms receive more government support than Ericsson that the MD of Ericsson would report more difficulties with the regulations and corruption in Nigeria than the Chinese MDs do.

The above discussion results in the following list of the expected empirical fingerprints:

Figure 13 List of expected empirical fingerprints

1. China is in 25% lowest ranking countries with regards to enforcing contracts.
2. Senior managers of Chinese telecom infrastructure firms state that they rely more on informal contracts than on formal contracts in less-advanced markets.
3. Local business persons state that informal contracts are more important than formal contracts in Nigeria.
4. There are at least ten years between when Ericsson internationalized and the moment Chinese firms internationalized.
5. A) Chinese firms use older technology than Ericsson and Nokia.
   B) Chinese firms use less advanced management systems than their Western competitors.
6. Customers from telecom infrastructure firms in Nigeria declare that Chinese firms are most often cheaper than Ericsson in tenders.
7. Customers from telecom infrastructure firms in Nigeria state that they prefer Chinese firms due to their low costs.
8. Investments from Chinese telecom infrastructure firms in advanced markets are blocked out of fear for Chinese political agenda.
9. The market shares of Chinese telecom infrastructure firms are relatively low in the U.S. and Europe.
10. Chinese firms' official internationalization strategy is to target less-advanced markets.
11. Hardly any new tenders for telecom infrastructure projects in advanced markets since Chinese firms started to invest abroad.
12. Huawei and ZTE are SOEs.
13. A) China is importing large quantities of oil from Nigeria.
13. B) There is an infrastructure-for-oil agreement between the Chinese and Nigerian government that includes telecom infrastructure
14. Chinese telecom infrastructure firms receive financial support from the Chinese government for projects in Nigeria.
15. Chinese firms have some coping strategies that are not an option for Ericsson.
16. Advanced market telecom infrastructure firms state in media that they perceive less-advanced markets as high risk business environments.
17. Ericsson's official internationalization strategy is to target advanced markets.
18. The market shares of Chinese telecom infrastructure firms are much higher than Ericsson's share in Nigeria.

19. China is the most valued investor in Nigeria.
20. Chinese firms experience fewer difficulties with regulations and corruption in Nigeria than their Western competitors.

Based on the selection of these observables I developed the Interview Guides for the interviews (see Appendix 2 and 3 on pages III and VI). The order of the questions was consciously chosen in order to build rapport before getting to the more sensitive questions and the words were consciously chosen in order to make the respondent comfortable to talk about challenges. However, the order and precise formulation of the questions was only used as a guideline and not strictly followed in order to have a natural conversation on these topics.

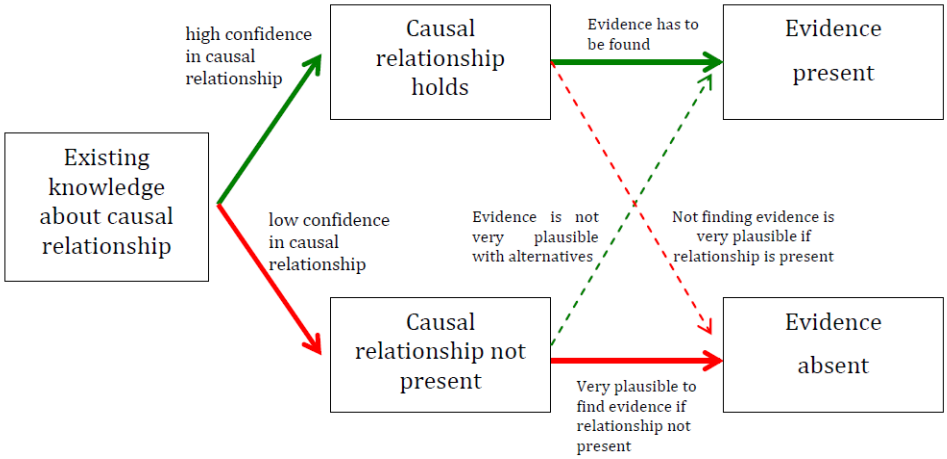
3.4.4. Data analysis

Upon arrival I of my field trips to China and Nigeria I transcribed the recordings of the interviews. Then I searched for the relevant passages mentioning the causal conditions that I am interested in. Most often I used the data from the interviews as guideline for searching further information on the topic, rather than taking the individual statements as individual proof for the (non-)existence of the causal condition. Furthermore, I use abstracts from the interviews as introduction to a specific empirical fingerprint in the empirical chapter. Due to the limited number of interviews and the different reasons for interviewing the various stakeholders, I decided to analyze the data manually. Another reason for not using software for qualitative data-analysis is that I was not looking for patterns in the data, but for particular evidence.

According to the Bayes' theorem – on which process tracing is build – new empirical evidence updates our belief in the validity of the hypothesis. It can either increase or decrease our belief in the hypothesis based contingent upon: 1) our prior confidence based on existing research, 2) the theoretical weight of the evidence in relation to the hypothesis, and 3) the amount of trust we can place in the evidence being accurate (Beach & Pedersen, 2016: 178).

Prior confidence in a causal hypothesis is the result of our assessment of how confident we can be in its validity based upon existing research. The level of the prior confidence in our hypothesis (high or low) affects whether we should focus on collecting confirming or disconfirming evidence. Beach and Pedersen (2016) explain that if our prior confidence is high, given that only very strong confirming evidence would further increase our confidence, it is more productive to focus on disconfirming evidence in an attempt to potentially learn something new. In the case of a low prior confidence, even relatively weak confirming evidence will update our confidence (see Figure 14).

Figure 14 **Prior confidence, certainty and uniqueness of evidence in relation to a causal hypothesis**



Source: Friedman in Beach and Pedersen (2016: 189).

Therefore it is important to determine the high (H), low (L) or medium (M) levels of prior confidence (p), theoretical certainty (c), uniqueness (u), and accuracy (a) of the selected empirical fingerprints based on theoretical arguments before collecting and analyzing the data. Figure 35, Figure 37, Figure 40, and Figure 46in the second empirical chapter show per theory the updated causal mechanism based on the carefully selected empirical fingerprints with the levels of prior confidence, uniqueness, accuracy and theoretical certainty for each selected empirical finger print. The second empirical chapter that focuses on the qualitative study describes in detail the reasons for the high, low and medium levels of the prior confidence, theoretical certainty, uniqueness, and accuracy of the selected empirical fingerprints; supported by theoretical arguments.

The causal mechanisms look slightly different from the ones presented in the data collection section because I refined my understanding of the causal relations during the process of determining the levels of prior confidence, certainty, uniqueness and accuracy.

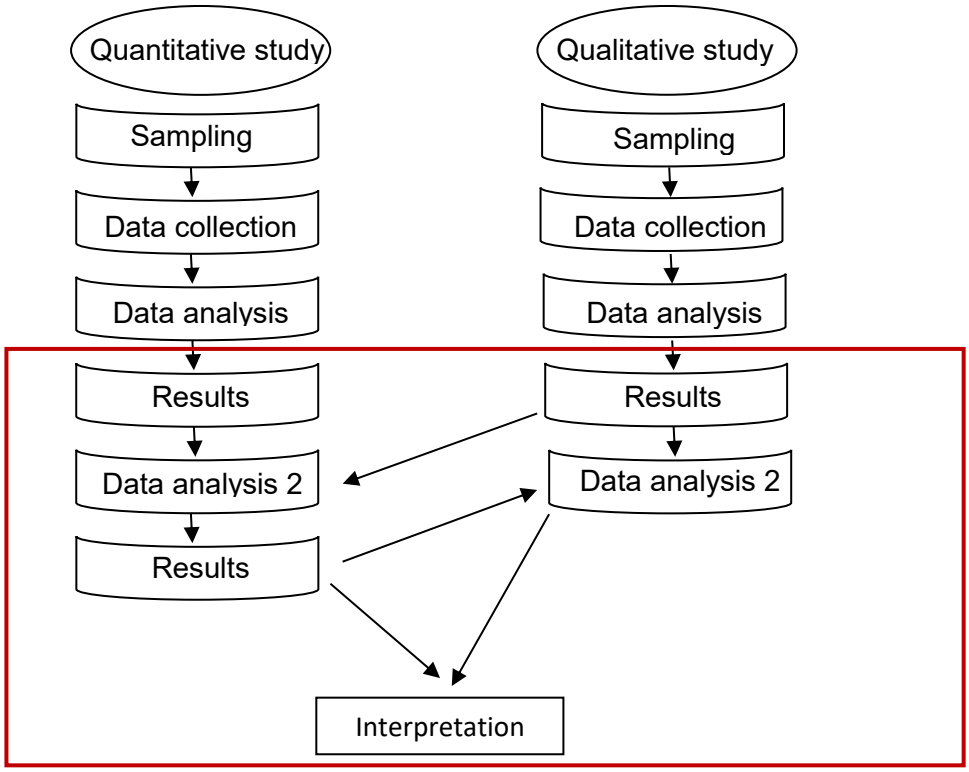
3.5. Sequential Mixed Methods Analysis

After analyzing the data of the qualitative study it appeared that Chinese government loans to the host country could be a key explanation factor for the success of Chinese firms in high-risk host countries outside their own region; and therefore a key explanation factor of the location choice of Chinese outward FDI. I had not taken government loans into account as a variable in the first quantitative study. Therefore I decided to run the regression analysis again, this time including government loans as a main variable. The results of the new regression analysis confirmed the results from the qualitative study that government loans is a strong explanatory factor for the

success (and therefore the location choice) of Chinese firms in high-risk countries outside their own region. The confirmation from the quantitative analysis was then used to further explore the causal relation between the institutional and political situation in China and the success of Chinese firms in high-risk host countries. During the second qualitative analysis[4] it became clear that the two Chinese firms under study benefit in a similar way from Chinese government loans to the Nigerian government; however, Chinese Huawei is much more successful in Nigeria than ZTE, due to – among other reasons – differences in management style. This led to the conclusion that host- and home-country factors are mediated through firm-specific factors.

In other words, part of the output of the first qualitative analysis was used as input for a second quantitative analysis. The confirming output from this second quantitative analysis was then used for a second qualitative analysis to further explore the causal relation between the institutional and political environment in China > Chinese government loans to Nigeria > and the success of Chinese firms in Nigeria. This sequential mixed methods analysis is visualized in Figure 15.

Figure 15 **Sequential mixed methods analysis**



[4] While the first qualitative and quantitative studies are clearly organized separately, the second qualitative and quantitative analyses are more difficult to distinguish from each other as the analysis evolved simultaneously.

4. Chinese and U.S. investments and the strategic position of Africa

Counting the number of ODI projects is a very resource-intensive task which makes access to this data very costly. For the quantitative analysis in the next chapter, I did manage to get access to data on the number of Chinese and U.S. ODI projects in Africa for the period 2003-2011; however, not for Chinese and U.S. investments globally. Therefore, in this introduction about the share of Chinese and U.S. ODI globally and their global distribution, I focus on ODI flow and stock data that is freely available on the website of UNCTADStat. UNCTADStat provides a database with inward and outward direct investment flows and stock per economy measured on a yearly base.

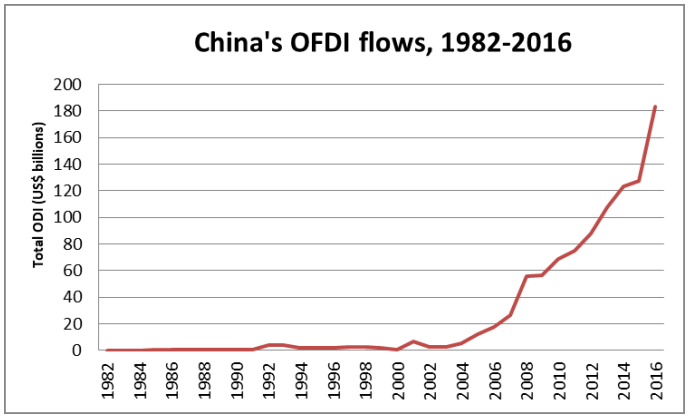
4.1. Chinese and U.S. outward investments globally

4.1.1. Increasing amount of ODI flows

Until quite recently, most investment came from the so-called advanced markets in the West; particularly from the U.S. and Western Europe. Investment was merely directed from advanced markets to other advanced markets or from advanced markets to so-called developing countries. These patterns have changed since large emerging markets like China became important investors globally.

Chinese outward investments grew rapidly since the Chinese government implemented the Go Global Strategy in 2001. Figure 16 shows the increase of China's ODI flows over the period 1982-2016.

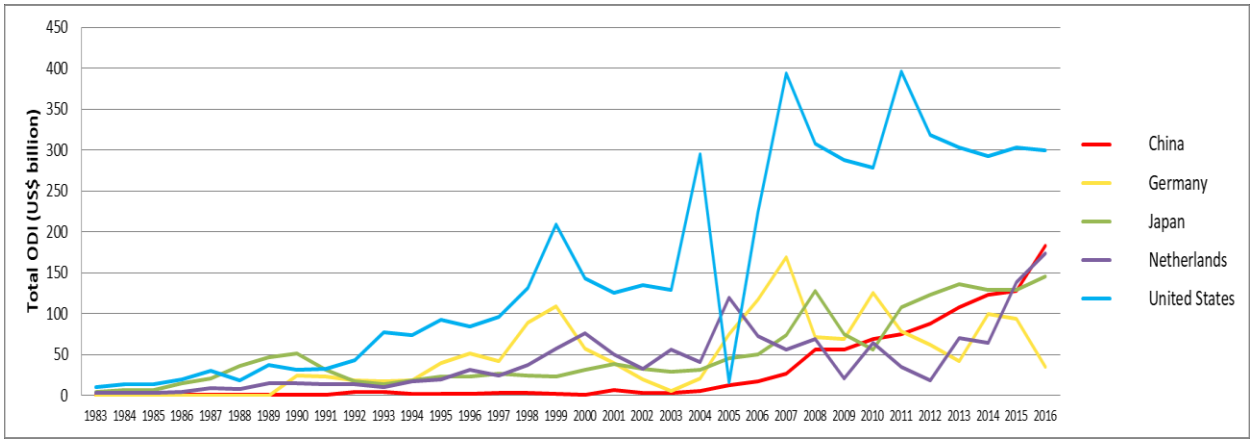
Figure 16 China's outward FDI flows, 1982-2016



Source: Calculated with data from UNCTADStat

In 2011, China became the second largest FDI source country in the world in terms of ODI flows (see Figure 17).

Figure 17 Outward FDI flows of the 5 major FDI source countries, 1982-2016

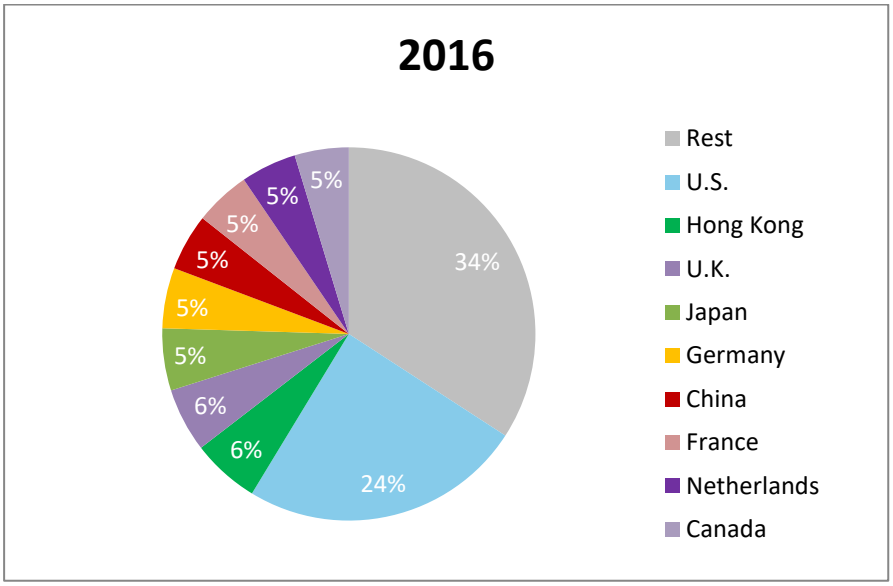


Source: Calculated with data from UNCTADStat

However, the distance between the U.S. (the world's largest FDI source country) and China is still enormous.

In terms of ODI stock China stepped up with historically major FDI source countries like Canada, France, Germany, Japan and the Netherlands in 2016 (see Figure 18).

Figure 18 Global shares in ODI stock of the major FDI source countries, 2016



Source: Calculated with data from UNCTADStat

In short, China is still performing below its relatively size in terms of GDP and population size and it can therefore be expected that China's share of global ODI stock will keep increasing over the coming years. However, it is important to note that China's share in global ODI flows is likely to be

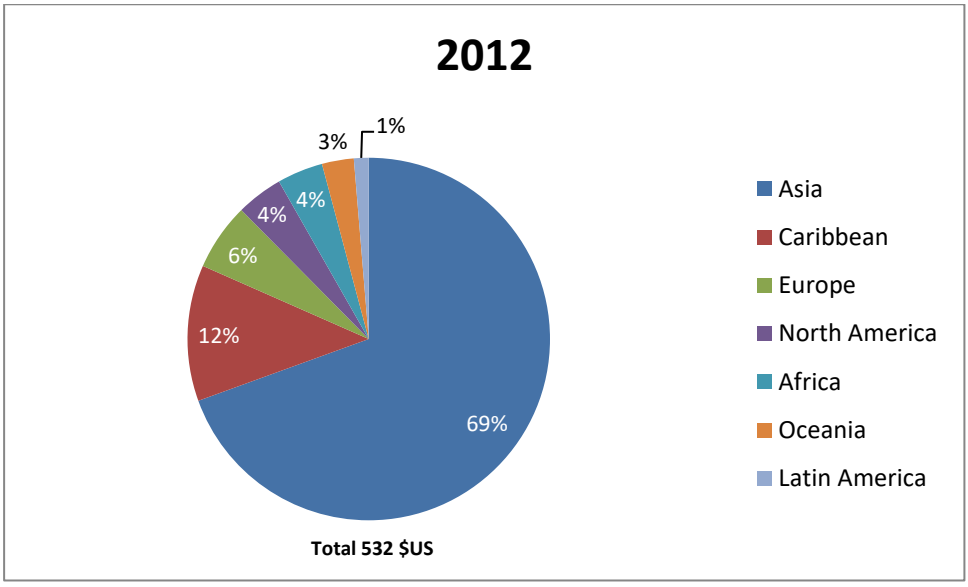
over-estimated because the biggest chunk of Chinese ODI is actually directed to its own special administrative region Hong Kong – which is largely re-invested in Mainland China. The next sub-section will explain this phenomenon in more detail.

4.1.2. Global distribution Chinese ODI

Between 2012 and 2016 Chinese global ODI stock has been more than doubled (from 532 billion USD in 2012 to 1281 billion USD). Since there is no data available for the distribution of Chinese ODI after 2012, we do not know if Hong Kong was still the main destination of Chinese ODI in 2016. In other words, it is impossible to know how much China will lose of its 12.6 per cent share of global FDI flows in 2016 if we take out Chinese investments to Hong Kong.

UNCTAD provides bilateral FDI statistics until 2012. This database is based on the data reported by the investing country. Figure 19 shows that by far most Chinese ODI was directed to Asia in 2012. This finding seems to be in line with general FDI theory that predicts that firms start to invest in geographically and culturally close regions and gradually move to geographically and culturally more distant locations.

Figure 19 Global distribution of Chinese ODI stock, 2012



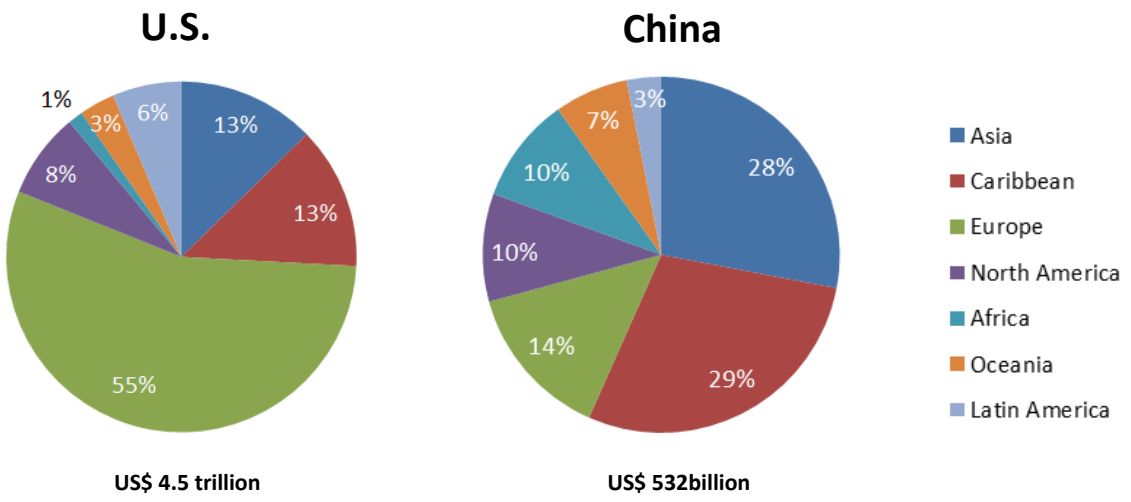
Source: Calculated with data from UNCTAD bilateral FDI statistics

However, as I mentioned before, most Chinese ODI to Asia is directed to one single economy, namely Hong Kong. A staggering 83 per cent of Chinese ODI stock in Asia (and 58 per cent of Chinese global ODI stock) was invested in Hong Kong in 2012. Hong Kong plays a crucial role in the round-tripping of capital from China: value that is created in China is transferred to Hong Kong from where it is re-invested in China in order to take advantage from the special benefits foreign investors

receive in China. Geng (2004) argues that '[i]n the past two decades, about 40% to 60% of China's FDI inflows were from Hong Kong. However about half of Hong Kong's FDI to China, as reported by China, cannot be verified or confirmed from the related statistics collected in Hong Kong' (Geng, 2004: 2). Because of Hong Kong's status as special administrative region to China (and additionally this round-tripping of money between mainland China and Hong Kong), I do not consider investments from mainland China into Hong Kong as ODI.

When we leave out Chinese investments to China's special administrative regions (Hong Kong, Macau and Taiwan), we find that Chinese ODI is actually much more spread over the different regions in the world than often assumed. More diversified than for example U.S. investments that are mostly directed to Europe (see Figure 20).

Figure 20 Global distribution of U.S. and Chinese ODI stock, 2012



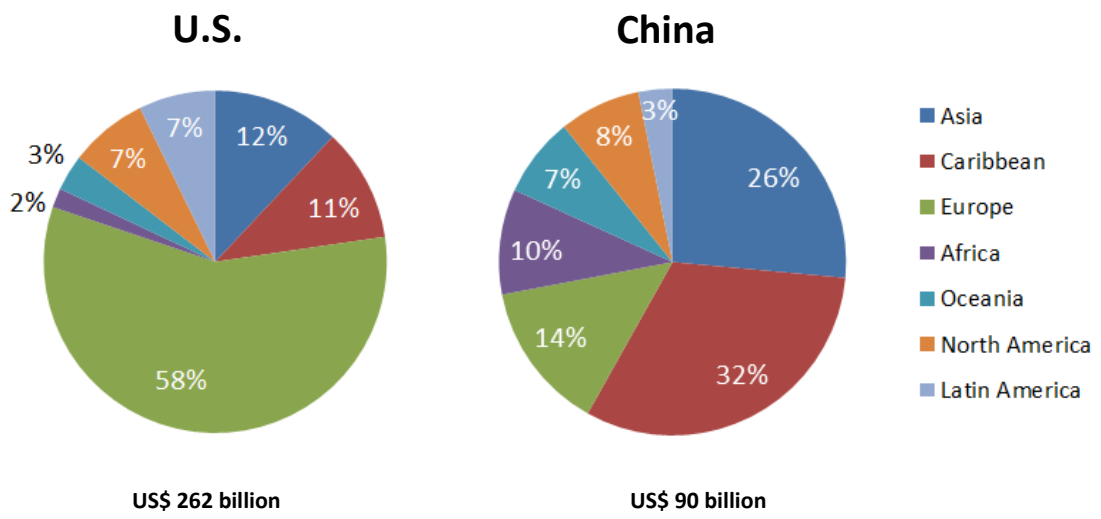
Source: Calculated with data from UNCTAD bilateral FDI statistics

Most of Chinese ODI stock in 2012 was invested in the Caribbean. The Caribbean islands are notorious for their tax haven status; most notably the British Virgin Islands and the Cayman Islands. Also quite a large portion (thirteen per cent) of U.S. investments went to the Caribbean. By far most Chinese and U.S. ODI stock invested in these territories will be re-invested again in China/ the U.S. itself as well as in other countries; however it is unknown to which extent. This uncertainty does make comparisons between the location-choice of FDI source countries challenging; however, it is still telling to compare the overt information on the direction of ODI flows.

When we look at flows instead of stock, it is interesting to see that Africa has been a prominent receiver of Chinese direct investments during the period under study, namely from 2003 to 2012. The African continent received ten per cent of Chinese ODI flows during that period while Latin

America received only three per cent. Data on U.S. ODI flows show that Africa became a less important destination for U.S. investments compared with the period before 2003 (see Figure 21).

Figure 21 Global distribution of U.S. and Chinese ODI flows, 2003-2012



Source: Calculated with data from UNCTAD bilateral FDI statistics

Let us have a closer look at Chinese and U.S. investments in Africa.

Why do Chinese investments in Africa make headlines in the U.S. despite the marginal interest of U.S. investors in the African continent? Why do U.S. Secretaries of State warn their African partners for these Chinese investments?

4.2. Chinese and the U.S. firms in Africa

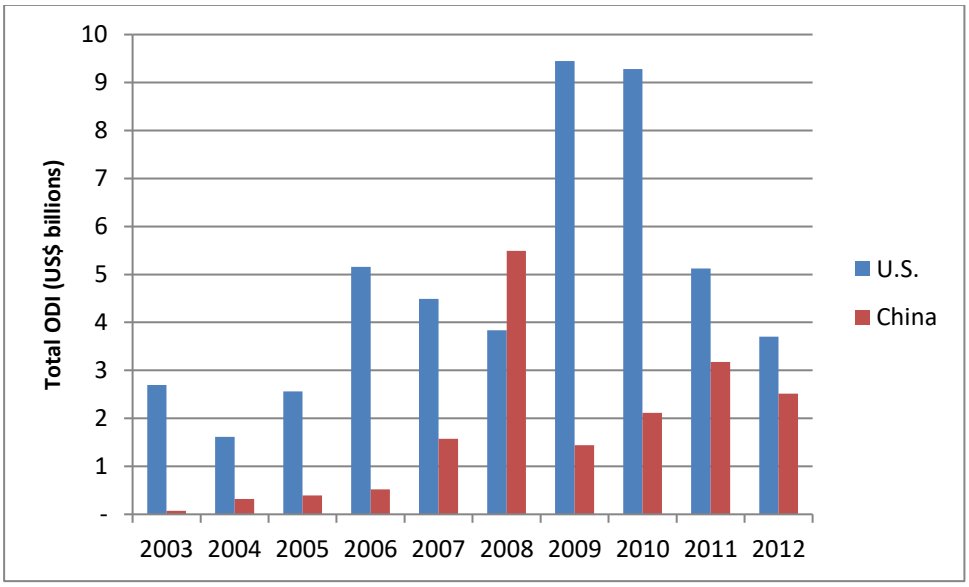
Africa is not a key destination for global FDI; it received only three per cent of the world's total FDI inflow in 2016 (calculated with data from UNCTADStat, 2018). Part of the reason is that many private firms perceive most of the African economies as high risk business environments. Another reason is that many African countries receive other major flows of finance in the form of official development assistance (ODA). However, China's influence on the continent is rising and in order to keep a foot on the African continent, national governments of traditional donors are increasingly willing to support their national companies in Africa with their aid budgets.

In 2009, China became Africa's largest trading partner – surpassing the U.S. (AfDB, OECD, UNDP, UNECA, 2011). However, that is when export and import flows are added. When only the export flows from Africa are taken into account, African countries together exported almost USD 20 billion

more to the U.S. than to China in 2009. According to ITC Trademap statistics, China became also the main export destination for the African continent in 2012. Furthermore, a McKinsey report shows that China is also by far the largest financer of infrastructure projects in Africa: in 2015 China financed seven times more infrastructure projects in Africa than Japan – the second largest infrastructure financer in Africa (Jayaram et al., 2017: 20).

The success of China in Africa has both spurred critique from the West and sparked a renewed interest in the continent by the West. The renewed interest in Africa by the U.S. for example could be seen in the sudden increased investments on the African continent after the peak of Chinese investments in 2008 (see Figure 22).

Figure 22 Chinese and U.S. ODI flows to Africa in USD billions, 2003-2012



Source: Calculated with data from UNCTAD bilateral FDI statistics

Furthermore, the change of perspective in the West about Africa can also be seen in the changes of the title pages of The Economist for issues on Africa. Africa went from a 'hopeless continent' in 2000, to a rising continent in 2011 and to an aspiring continent in 2013 (The Economist, 2000; 2011; 2013) (see Figure 23).

Figure 23 The changing attitude towards Africa of the Economist

2000 2011 2013

The Chinese government has taken the lead in integrating aid and investment in its Africa policy supported by the publicly announced aim for win-win cooperation. This win-win cooperation – first described in China's first Africa policy paper in 2006 – has been often misunderstood by Western scholars and government officials as a claim that Chinese development cooperation with Africa is well-balanced. However, the Chinese aim for a win-win situation should actually be understood as an opposition to the rhetoric of the West: claiming to be in Africa just to assist African countries with their development. Instead, Chinese government representatives state that they are in Africa to do business and that development cooperation should also serve China's own development goals. As stated in a news report by Xinhua about China's second Africa policy paper published in 2015:

> The core principle is to connect assistance to developing countries, including those in Africa, for their independent and sustainable development with China's own development, achieve win-win cooperation and common development, and promote more balanced, inclusive and sustainable development of the world at large (Huaxia, 2015, December 4).

While media coverage in the West portrays China in Africa as a dragon hungry for resources("A hungry dragon," 2004; "China's material needs," 2004; Lorenz & Thielke, 2007), Western actors have long concealed their economic interests in Africa and instead promised to bring civilization, democracy and good governance to the continent. Yet, the success of China in Africa and the revival

of the discussion on the advantages and disadvantages of aid with the publication of Moyo's book Dead Aid in 2009 led European governments rethink their Africa policies.

In 2013, the Netherlands introduced "A World to Gain: A New Agenda for Aid, Trade and Investment", a policy document that sets out its vision for combining aid, trade and investment. The country's approach is characterized by three objectives: eradicate extreme poverty, promote sustainable and inclusive economic development worldwide, and facilitate business of Dutch companies abroad. In this report the Dutch Ministry of Foreign Affairs states that the Dutch Government eradicates extreme poverty out of solidarity while it stimulates trade and investment mostly out of their own interests.

In 2017 Germany presented its new Africa policy: Marshall Plan with Africa. Some critiques were quick to point out that it is a Marshall Plan *for* Africa since the African partners were not consulted, as usual. The report states that the German government wants to support German investments in Africa.

Why do Western nations step up and use their development support budgets increasingly to support their firms in Africa?

4.3. Strategic position of the African region

Africa is a strategic region because of the abundance of "strategic minerals", access to one of the most strategic maritime passages, the large number of United Nation member states and the enormous market potential.

4.3.1. Strategic minerals

The five main strategic minerals in Africa are: platinum group metals (South Africa), chromium (South Africa), manganese (South Africa), cobalt (DRC) and uranium (Niger and Namibia) (Burgess, 2010). These strategic resources are needed for the production of many defense products such as jet engines and missile components (Hagerman, 1984, no page number).

<u>Platinum group metals</u>

Platinum is, among other things, used as a catalyst to improve the efficiency of fuel cells (Royal Society of Chemistry, 2017a). South Africa has 85 per cent of the world's platinum group metal resources. The country's endowment is valued at some US$2.5 trillion (MISTRA, 2013). By far most platinum from South Africa goes to the U.S., the U.K. and Germany. China is the sixth destination

of platinum from South Africa; importing less than four per cent the amount of platinum the U.S. imports from South Africa (ITC Trademap, 2018).

Chromium

Chromium is used to harden steel and to produce stainless steel (Royal Society of Chemistry, 2017b). South Africa is by far the number one global chromium ore producer and China is by far the main customer for South African chromium ore: 56 per cent of South African chromium ore went to China in 2017 while the second and third largest customers of South African chromium ore (the U.S. and the Netherlands) imported only two per cent (ITC Trademap, 2018).

Manganese

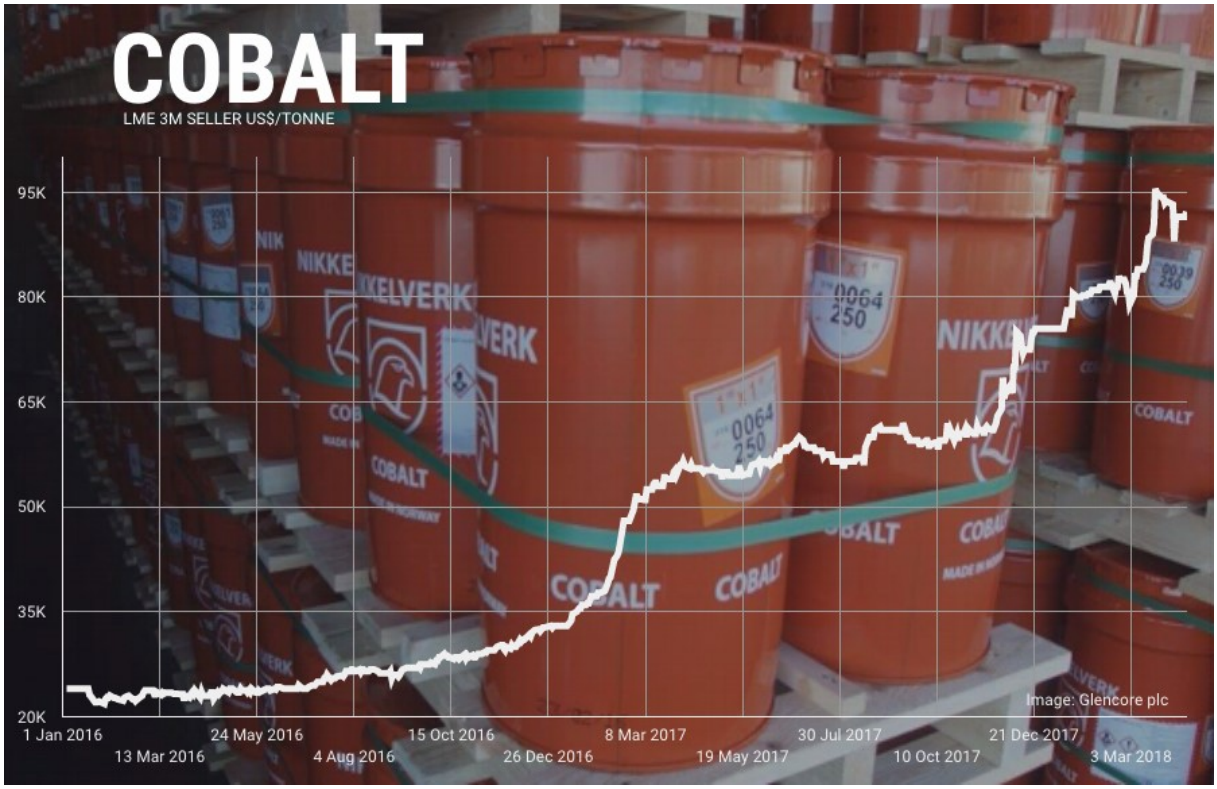
Manganese is too brittle to be of much use as a pure metal and is therefore mainly used in alloys, such as steel. Manganese steel contains about thirteen per cent manganese and is extremely strong. It is used for railway tracks, safes, rifle barrels and prison bars (Royal Society of Chemistry, 2017c). South Africa is the main producer of manganese and China is by far the main importer of manganese from South Africa. More than fifty per cent of the South African production of manganese goes to China; India – the second largest destination for South African manganese – imports less than twelve per cent (ITC Trademap, 2018).A report from the U.S. army war college from 2003 states that 'the United States consumes over a million tons of chromium and manganese every year primarily in their ferroalloy form' (Butts, 1993). Butts warns that 'without sufficient stockpiles of these materials, the United States is vulnerable to a shortfall in munitions and armaments in time of surge capacity' (1993).

Cobalt

Chinese firms are now dominating the supply chain of cobalt, a raw material crucial to developing batteries (for electric cars and smart phones) and for industrial and military purposes (super alloys, catalysts, magnets, pigments). Demand for the material is expected to soar by more than two-thirds over the next decade (Sanderson, 2016).

The DRC is the world's biggest source of cobalt ("Cobalt to be," 2018, March 14, 2018). The DRC has currently six of the top 10 cobalt mines globally; and by 2022 the central African nation will host the nine largest cobalt producers – due primarily to Chinese investment (Els, 2018). The price of cobalt more than tripled since the beginning of 2016 due to the increasing demand from the electric car industry.

Figure 24 Rising cobalt prices since the start of 2016



Source: Els (2018)

The price of cobalt is set to rise further since the DRC government said that it will declare cobalt (and coltan) strategic resources which means that royalties paid to the government from cobalt mining will jump from two to ten percent ("Cobalt to be," 2018, March 14, 2018).

Despite the fact that China has not cobalt reserves of its own, Chinese firms are top-producers. The Chinese Zhejiang Huayou Cobalt, the world's top cobalt refiner, was on its own responsible for twenty per cent of global output in 2017 (Els, 2018). According to Els (2018), the company sources nearly half its requirements from mines it owns in the DRC.

In January 2017, China Molybdenum Co Ltd (CMOC) assisted the Chinese private equity firm BHR in acquiring a 24 per cent stake in the Tenke mine from Canada's Lundin Mining ("China Moly to," 2017, January 22). CMOC promised to provide financial guarantees and other assistance to BHR. As part of the agreement CMOC would have the right to purchase BHR's stake at a pre-agreed price if BHR left the project ("China Moly to," 2017, January 22).CMOC also announced that it would purchase a 56 percent stake from Freeport-McMoRan Inc in Tenke mine for $2.65 billion; however, in June 2017 Freeport and CMOC agreed to determinate the discussions without closing a deal

("Freeport, China Moly," June 14, 2017). With the Freeport deal, CMOC would have become the majority owner of the Tenke mine.

Apple seems to be worried about a possible cobalt shortage and wants to secure its supply and talks with mining companies about purchasing several thousand tons of cobalt over the next five years (Farchy & Gurman, 2018). Following Apple, Samsung C&T has approached one of their suppliers of copper (Somika SPRL) to buy also the cobalt produced at its Kisanfu mine in the DRC (Clowes& Kim 2018). In both cases it is still unclear how much cobalt will be bought.

4.3.2. Strategic maritime passage

The Suez Canal is an artificial sea-level waterway in Egypt, connecting the Mediterranean Sea to the Red Sea through the Isthmus of Suez. It was constructed by the Suez Canal Company and officially opened on 17 November 1869. The canal offers ships a shorter journey between the North Atlantic and northern Indian Oceans via the Mediterranean and Red seas by avoiding the South Atlantic and southern Indian oceans, and reduces the journey by approximately 7,000 kilometers(Mohit, 2018). Under the Convention of Constantinople, 'The Suez Maritime Canal shall always be free and open, in time of war as in time of peace, to every vessel of commerce or of war, without distinction of flag' (Convention respecting the free navigation of the Suez Maritime Canal, 1988: 123.)

Two professors in transport state on a widely used online reference source about transportation that:

> A closure of a maritime chokepoint in the current global economy, even if temporary, would have important economic consequences with the disruption of trade flows and even the interruption of some supply chains (e.g. oil). These potential risks and impacts are commonly used to justify military naval assets to protect sea lanes even if such benefits are difficult to demonstrate (Rodrigue & Notteboom, 2018).

For this reason, Djibouti is home to many foreign military bases. Djibouti is strategically located at the southern entrance to the Red Sea on the route to the Suez Canal. It is home to Africa's largest US army base and France's biggest Foreign Legion deployment. Japan and Italy also have their own base, while troops from Germany and Spain are hosted by the French. These bases were all from nations with friendly relationships between them, until when China opened its first overseas military base in Djibouti, just a few kilometers away from the American camp, in August 2017 ("China formally opens," 2017). In March 2018 concerns grew in the U.S. when the story went that a key port in Djibouti was seized illegally from Dubai Ports World, one of the world's biggest port operators, in order to give the port to China as a gift (Ali & Stewart, 2018). Marine General Thomas Waldhauser, the top U.S. military commander overseeing troops in Africa, has been paraphrased

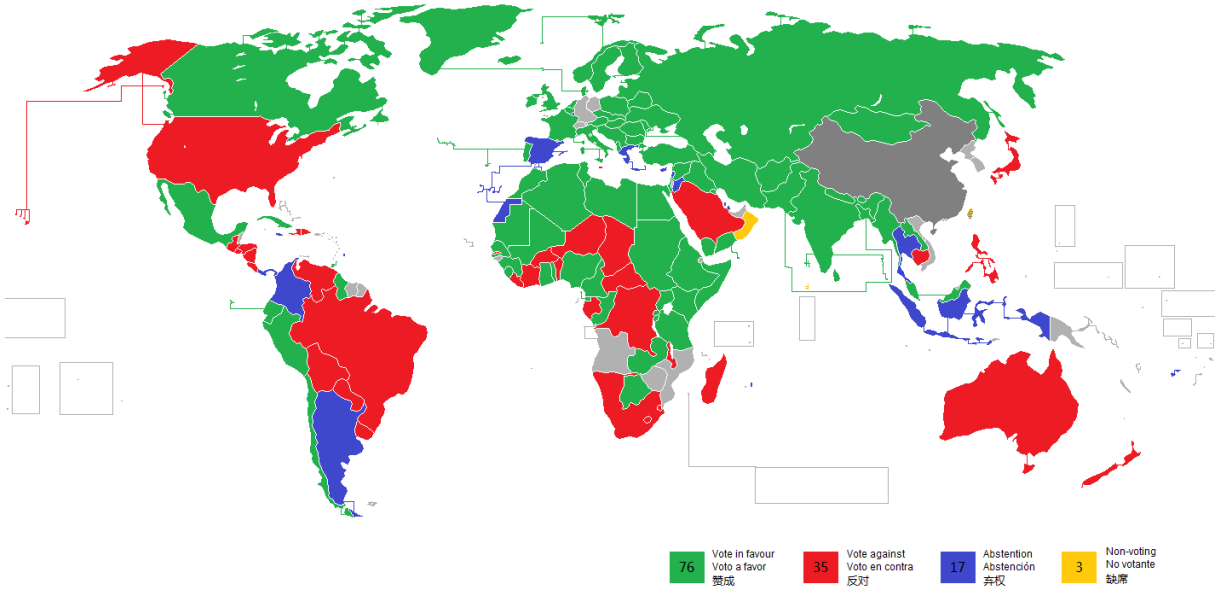
by Reuters stating that 'if China placed restrictions on the port's use, it could affect resupplying the U.S. base in Djibouti and the ability of Navy ships to refuel there' (Ali & Stewart, 2018).

4.3.3. United Nations

Africa is the continent with the largest number of UN member states. Having a strong foothold in the region could also lead to strong support within the UN. The newly independent African states played for example an important role in replacing the Republic of China (ROC) in the UN and the Security Council of the UN for People's Republic of China (PRC).

"China" refers nowadays to the PRC; however, that has not always been the case. When the UN was established in 1945, the ROC was one of the founding members and occupied the seat for China in the UN and in the UN security Council.[5] In 1949, the PRC seized power in China and claimed to have replaced the ROC. However, only since 1971 – with the support of newly independent countries from Africa and other regions (see Figure 25) – the PRC was recognized as the sole representative of China and took over the UN seat from the ROC.[6] The remainder of this dissertation refers to the PRC as "China".

Figure 25 Voting situation in the UN general assembly respect to resolution 2758 (1971).



[5]http://www.un.org/depts/dhl/unms/founders.shtml.
[6]https://china.usc.edu/sites/default/files/legacy/AppImages/1971-UN-China-seating.pdf.

5. A quantitative analysis of Chinese and U.S. investments in Africa[7]

5.1. Introduction

The purpose of this quantitative strand is to test if Chinese and U.S. investments to Africa are indeed directed to host countries with similar levels of IM and PS.

As explained in Chapter 4, Africa is a strategic region because of the abundance of "strategic minerals", access to one of the most strategic maritime passages, the large number of United Nation member states and the enormous market potential. These are all good reasons that could explain the interest of the Chinese government in the African continent. However, why would privately owned Chinese firms invest in the African continent, despite the political risk and corruption? Why are Chinese firms not deterred from political risk and perhaps even attracted to "poor institutions"? Are Chinese firms significantly more attracted to African countries with "poor institutions" than U.S. firms?

Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) provided a theoretical explanation for the assumed attraction of Chinese firms to countries with weak institutions. They argue that Chinese firms are more prevalent in least developed countries with difficult institutional conditions, because their vast experience in navigating complex bureaucracies at home gives them a competitive advantage over Western firms. Cuervo-Cazurra and Genc define difficult institutional conditions as 'the absence of a well-established infrastructure, well-developed market mechanisms, and a well-developed contracting and intellectual property rights regime' (2008: 960). Moreover Morck et al. focus on 'endemic government interference and related problems' (2008: 346).

[7] This chapter is based on a paper that I wrote in cooperation with Prof. Dr. Sanfilippo and Prof. Dr. Wilhelm. Both Prof. Dr. Sanfilippo and Prof. Dr. Wilhelm added valuable additions to my draft. Furthermore, Prof. Wilhelm guided me in choosing the right statistical analysis method and Prof. Sanfilippo asked the right questions to help me improve the paper and helped me getting access to some of the data. I would like to thank Prof. Dr. Möllering who encouraged me to do a "quick" empirical check of the Child & Marinova thesis, as a warm-up and background study for the case-study work I had planned; which turned out to be a mayor part of my research project. I would also like to thank Prof. Dr. Lattemann for his involvement in the initial drafts of this paper and Prof. Dr. Marinova for making the time to explain the intention of her paper to me in detail over a Skype meeting. Furthermore, I would like to thank Prof. Dr. Jean-Francois Hennart, Prof. Dr. Jorma Larimo, Prof. Dr. Andrei Panibratov, Prof. Dr. Teemu Santonen, Prof. Dr. Per Servais, Prof. Dr. Oded Shenkar, Prof. Dr. Olav Jull Sørensen, Prof. Dr. Romeo Turcan, participants to the International Business Conference in Aalborg in 2016, participants to the 5th International CA/AC conference in Brussels in 2018, and the Field C colloquia at BIGSSS for insightful discussions and for their suggestions on earlier draft versions of the paper. I am indebted to BIGSSS colleague Dr. Georgi Dragolov who helped me working with the newest version of SPSS and to my friend Stijn Depla who helped me with the complex formula for the bubble graphs.

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Taking stock of the above discussion, the aim of my study is to compare the role of institutional distance for the location choice of Chinese and U.S. investors in Africa. Child and Marinova present a conceptual framework – which they adapted from Rodrigues (2010) – that could be used to further study the role of regulative institutional distance for the location choice of Chinese firms (2014a: 354). In line with Cuervo-Cazurra and Genc (2008) and Morck et al. (2008), Child and Marinova (2014a) state that firms are most successful in host countries with a similar level of PS and IM as in their home country. Their framework groups countries in four clusters, defined by their levels of PS and IM. Since Child and Marinova allocate China to the cluster with a high level of PS and a low level of IM, they expect that Chinese firms are most successful in host countries with similar high levels of PS and low levels of IM (2014a: 354-359).

Although Child & Marinova (2014a) mention similar advantages and disadvantages as Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) do for Chinese firms in more or less challenging host countries, they do not make a link with the location choice like Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) do. However, Child & Marinova (2014a) define PS and IM better and the framework they introduce clearly shows the link between the home and host country context. Therefore, I link success with location choice based on the insights from Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) and use the framework to empirically test the role of institutional distance for the location choice of Chinese and U.S. investors in Africa. To do this I run an analysis on the determinants of FDI from Chinese and U.S. firms in a group of African destination countries for the period 2003-2011.

The results provide interesting new insights on the role of institutional distance, and on the uniqueness of Chinese FDI. I find that – contrary to popular belief – investments from both China and the U.S. are significantly directed to countries with a low level of PS and both Chinese and U.S. investments are directed to countries with a high level of IM (though this latter relation is only significant for investments from the U.S.). These results seem to reject the hypothesis that Chinese investments in Africa are attracted to high risk countries because of the relatively small regulative institutional distance that should give Chinese firms a competitive advantage over their Western counterparts in these countries. The results remain robust to different empirical specifications, and their sensitivity is supported when comparing Chinese FDI to Africa with those by other developed and emerging economies.

The chapter proceeds as follows. First, I review the existing literature on the rise of Chinese outward FDI and the assumptions regarding the uniqueness of Chinese outward investments. I then discuss the theoretical framework, grounded in the work by Child and Marinova (2014a) and its antecedents. Based on this review, hypotheses are developed. After this I present the data, the

model and the methodology for the empirical analysis. Next, I present the results of the empirical analysis and discuss their implications. I conclude by outlining the contributions of the present study to existing knowledge and drawing some implications for future research.

5.2. Short literature review and theoretical framework

As mentioned in the Literature Review, general FDI theory predicts that when the risk in a host country goes up, investment goes down. The logical explanation that is given is that risks involve costs and firms choose locations for their activities that minimize the overall costs of their operations (Buckley & Casson 1976). More generally, poor governance is associated with low levels of attraction for FDI, given that it often poses a threat to the protection of property rights and contract enforcement (Dixit, 2012). However, literature seems to suggest that MNEs from emerging markets (EMNEs) might be an exception to this rule. The literature on location choices by EMNEs generally shows that these firms are relatively indifferent to the institutional conditions in host countries and this has been so far considered to be a competitive advantage related to their domestic experience in coping with poor governance (Cuervo-Cazurra & Genc, 2008; Dixit, 2012). China represents a case in point.

Deviating from this general theory Buckley et al. (2007) find that when the risk goes down in a host country, Chinese investment goes down. Subsequently Buckley et al. provide a number of reasons for 'why Chinese firms may not behave in the conventional manner' (2007:510). Their potential explanations are presented in their results and discussion section but they were not empirically verified as such in the same study.

General FDI theory focuses merely on competitive advantages that enable foreign investment (Dunning, 1977; Horst, Caves & Baumann (in Dunning, 2000); Hymer, 1976; Johanson & Vahne, 1977; Vernon, 1966), and host country factors that attract foreign investors (Dunning, 1977; Dunning, 2013). The Location factors in the famous OLI-framework for example refer to host country factors only (Dunning, 2013).

More recent empirical studies on Chinese direct investment put much more emphasis on the impact of home country factors (Buckley et al., 2007; Kolstad & Wiig, 2012; Morck et al., 2008; Ramasamy et al., 2012). For example, Morck et al. argue that Chinese firms' expertise in managing complex markets at home makes them more capable than their Western counterparts 'of dealing with burdensome regulations and navigating around the opaque political constraints' in host countries (2008: 346). Buckley et al. argue that 'capital market imperfections and institutional factors in China may have induced a perverse attitude to risk' (2007: 510). Kolstad and Wiig state

that 'Chinese FDI outflows differ from FDI from other regions, in their attraction to poorly governed countries rich in natural resources' (2012: 33). However, at the end of their paper Kolstad and Wiig admit that their 'results show that the interacted term is significant only for fuel exports' (2012: 32) and that 'it is possible that oil investment from China and from other countries is driven by the same set of factors' (2012: 33). Both Ramasamy et al. (2012) and Amighini et al. (2013) argue that this apparent aversion towards risk is more likely to characterize the internationalization pattern of SOEs, rather than private firms.

As mentioned in the Literature review, Child and Marinova (2014a) emphasize the importance of looking at both home and host country factors and aim to link them within a theoretical framework. One of the arguments in their paper is that investors are most successful in host countries with similar levels of PS and IM as in their home country (Child and Marinova, 2014a). To illustrate this, Child and Marinova (2014a) present a matrix in which countries are grouped according to their levels of PS and IM (see **Fout! Verwijzingsbron niet gevonden.**.

However, so far the mentioned relationships are mostly based on anecdotal evidence. My study aims to provide a more accurate comparison between Chinese and U.S. investments on the African continent in order to get a better understanding of the role of regulative institutional distance for the location choice of Chinese investments. This will provide a first empirical assessment of the framework proposed by Child and Marinova (2014a) – although I am aware that I do not measure the success of the firms, but their location choice based on this success according to Cuervo-Cazurra and Genc (2008) and Morck et al. (2008) – while bringing fresh comparative evidence on the different drivers of location choice of foreign investors from countries with different institutional contexts.

Based on the institutional distance theory and Child and Marinova's (2014a) framework I hypothesize that:

Hypothesis 1: Chinese FDI is directed to African countries with a low level of IM.

Hypothesis 2: Chinese FDI is directed to African countries with a high level of PS.

Hypothesis 3: U.S. FDI is directed to African countries with a high level of IM.

Hypothesis 4: U.S. FDI is directed to African countries with a high level of PS.

5.3. Research design and methods

I test my hypotheses based on the number of U.S. and Chinese FDI projects per African country as reported by respectively fDi Markets and MOFCOM. Chapter 0 specifies which data is included in the fDi Markets and MOFCOM data bases and which gaps exist; in order to show that the data are comparable and robust. Furthermore, chapter 0elaborates on the selection of the variables and the methods used to obtain the data and summarizes the variables, measures, and data sources.

Given the structure of the data and the expected relationships I apply a panel regression model using fixed covariate effects and a random intercept to account for the heterogeneity in receiving countries. Based on theoretical considerations and visual exploration of the data, I apply logarithmic transformations to some of my variables to stabilize linearity of the relationships and homoscedasticity of variances. Using the MIXED linear model command in SPSS (version 24) I fit to the data via generalized least squares a mixed effects model with fixed main effects and a random intercept:

$$\ln FDIproj = \alpha + \beta_1 \ln GDP + \beta_2 NREXP + \beta_3 INFL + \beta_4 \ln EXP + \beta_5 \ln IMP + \beta_6 \ln IFDI + \beta_7 POL + \beta_8 INST + \varepsilon_{it}$$

I expect some correlation between POL and INST since countries with a high level of PS are more likely to have a high level of IM and vice versa.

5.4. Results and discussion

Table 5 shows the results for the effect of IM and PS on the location choice for Chinese and U.S. investments to Africa for the period 2003-2011.

Table 5 IM and PS as determinants for Chinese and U.S. investments to Africa, 2003-2011

	Significance for Chinese FDI	Hypothesis supported	Significance for U.S. FDI	Hypothesis supported
INST	0.115		0.252***	Yes
	(0.076)		(0.063)	
POL	-0.164***	No	-0.045+	No
	(0.029)		(0.024)	
lnGDP	0.003		0.220***	Yes
	(0.051)		(0.050)	
NREXP	0.005***	Yes	-0.003**	No
	(0.001)		(0.001)	
INFL	0.017**	No	0.007	
	(0.005)		(0.005)	
lnEXP	0.364***	Yes	0.253***	Yes

	(0.040)		(0.045)
lnIMP	0.054**	Yes	-0.005
	(0.020)		(0.019)
lnIFDI	-0.133**	No	0.120
	(0.044)		(0.079)
Observations	293		293

Standard errors in parentheses

+if p < 0.10, * if p < 0.05; ** if p < 0.01; *** if p < 0.001.

The strong positive relation with GDP for U.S. investments to Africa is conventional and confirms the importance of market-seeking motives explained in general FDI theory.

Natural resource endowments are positive and significant for Chinese investments in Africa; supporting the view that natural resource-seeking is a key motivation of Chinese FDI in the region. For U.S. investments the relation with NREXP is negative and significant. In other words, the data shows that U.S. firms invest more in relatively resource-poor countries in Africa. A possible explanation for this finding is that by far the most U.S. investment in Africa is directed to South Africa. South Africa is a resource-rich country; however, the South African economy is more diversified than most other African countries and the revenue from natural resources is therefore lower compared to the other resource-rich countries in Africa.

It is interesting to note that inflation is significantly and positively related to Chinese investments to Africa. This means that there are significantly more Chinese investment projects in countries with relatively high levels of inflation. This finding is in contrast with general FDI theory that predicts that investors target countries with relatively low levels of inflation which are deemed to be economically more stable. Buckley et al. (2007) find the same for their sample of Chinese FDI over the period 1984-2001 and provide two possible explanations: first, moderate demand inflation accompanies economic growth and this growth could attract Chinese firms. Second, Buckley et al. argue that 'this may support the view that the investment decisions of Chinese firms are unusually tolerant of less stable countries with respect to local economic conditions' (2007: 511). However, since inflation is also positively related to U.S. investments to Africa – albeit not significantly – the first explanation seems to be more plausible.

Welcoming FDI is negatively and significantly related to Chinese investments. This shows that there are more Chinese investment projects in countries that are receiving relatively little FDI in general.

An explanation could be that as late-comers, Chinese firms have little choice except to invest in less saturated markets.

As predicted by Child and Marinova (2014a) U.S. investment is significantly directed to countries with a relatively high level of IM. This is in line with general FDI theory – which predicts that FDI goes up when the level of IM goes up. A more interesting finding however is that Chinese investments are not directed to countries with a low level of IM. These results support Hypothesis 3, and do not support Hypothesis 1.

I did check the effect on my results if I would use the Ease of Doing Business (EoDB) data instead of Rule of Law from the WGI as a proxy for IM. When I use EoDB U.S. investment projects are still, and Chinese investment projects become, highly significantly directed to host countries with a high level of IM (see Table 6). This is in line with general FDI theory, but not with the assumptions regarding the unique characteristics of the location choice of Chinese investors.

Table 6 Comparing the results when using a different proxy for institutional maturity

	Significance for Chinese FDI	**Significance for U.S. FDI**		**Significance for Chinese FDI**	**Significance for U.S. FDI**
POLICRG	-0.164***	-0.045+	**POLICRG**	-0.155***	-0.015
	(0.029)	(0.024)		(0.029)	(0.025)
INSTWGI	0.115	0.252***	**INSTEoDB**	0.014**	0.012**
	(0.076)	(0.063)		(0.004)	(0.004)
Observations	293	293		248	248

Standard errors in parentheses

+if p < 0.10, * if p < 0.05; ** if p < 0.01; *** if p < 0.001.

Another important finding is that both Chinese and U.S. investment projects are significantly directed to African countries with a relatively low level of PS. These results are contrary to both Hypothesis 2 and 4. As discussed in the literature review, Buckley et al. (2007) found that Chinese FDI is not deterred from political risk; however they claim this finding to be unique for Chinese FDI. My findings show that both Chinese and U.S. investments in Africa do not seem to be deterred by political instability.

The attraction of Chinese FDI towards countries with a low level of PS could be partly explained by being attracted to countries rich in natural resources in combination with the resource curse theory. The following countries are in the top ten FDI host countries on the African continent for China: Nigeria, South Africa, Zambia, Egypt, the DRC, Sudan and Angola (in order of their importance Chinese investors). Zambia, Nigeria, the DRC and South Africa (from very low to higher levels of PS) are all in the top 20 of African countries with the lowest levels of PS; and Egypt, Sudan and Angola

follow soon thereafter. In the case of the U.S. this finding is mostly explained by the large number of U.S. investment projects in South Africa and Nigeria.

I also checked the effect on my results if I would use the WGI data on "political stability and absence of violence" instead of the ICRG as a proxy for PS. The directions stay the same for U.S. investments. However, the directions for Chinese investments do change significantly(see Table 7).

Table 7 Comparing the results when using a different proxy for political stability

	Significance for Chinese FDI	**Significance for U.S. FDI**		**Significance for Chinese FDI**	**Significance for U.S. FDI**
POLICRG	-0.164***	-0.045+	**POLWGI**	0.122+	-0.004
	(0.029)	(0.024)		(0.063)	(0.049)
INSTWGI	0.115	0.252***	**INSTWGI**	-0.197*	0.150*
	(0.076)	(0.063)		(0.098)	(0.074)
Observations	293	293		420	420

Standard errors in parentheses

+ if p < 0.10, * if p < 0.05; ** if p < 0.01; *** if p < 0.001.

The difference in the results for the relationship between Chinese investments and the level of PS in the host country seems to be mainly caused by the fact that South Africa and Zambia – both in the top three Chinese FDI project destinations in Africa – are much more negatively evaluated by the ICRG than the WGI over the period 2003-2011.

Furthermore, I also checked how my results would be affected by using another proxy for the dependent variable, namely using FDI flow instead of number of FDI projects. Table 8 shows that my results are not affected by this change.

Table 8 Comparing the results when using investment flows instead of number of projects

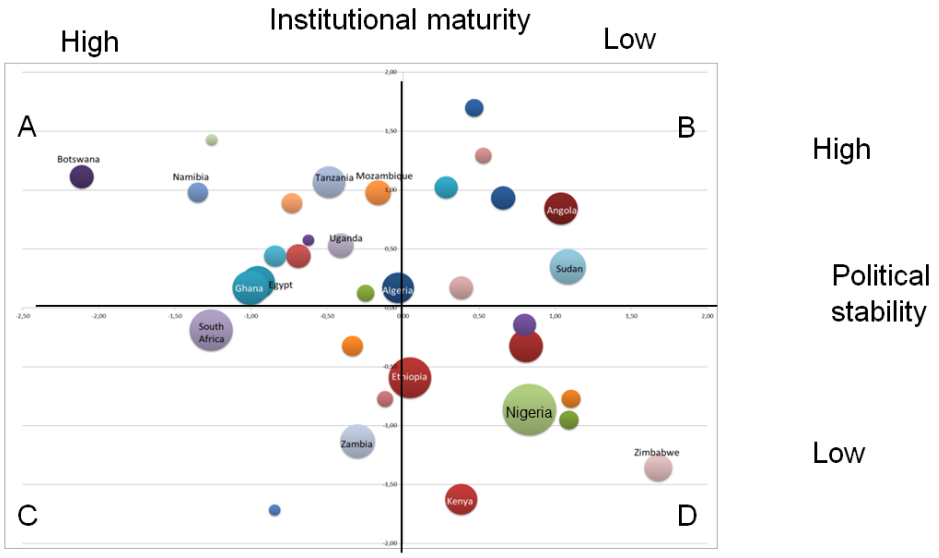
	Results FDI flow China	Results FDI projects China	**Results FDI flow U.S.**	Results FDI projects U.S.
POL	**-0.334*** **	-0.164***	**-0.169***	-0.045+
	(0.053)	(0.029)	**(0.075)**	(0.024)
INST	**0.071**	0.115	**0.056**	0.252***
	(0.137)	(0.076)	**(0.196)**	(0.063)
Observations	**293**	293	**292**	293

Standard errors in parentheses

+ if p < 0.10, * if p < 0.05; ** if p < 0.01; *** if p < 0.001.

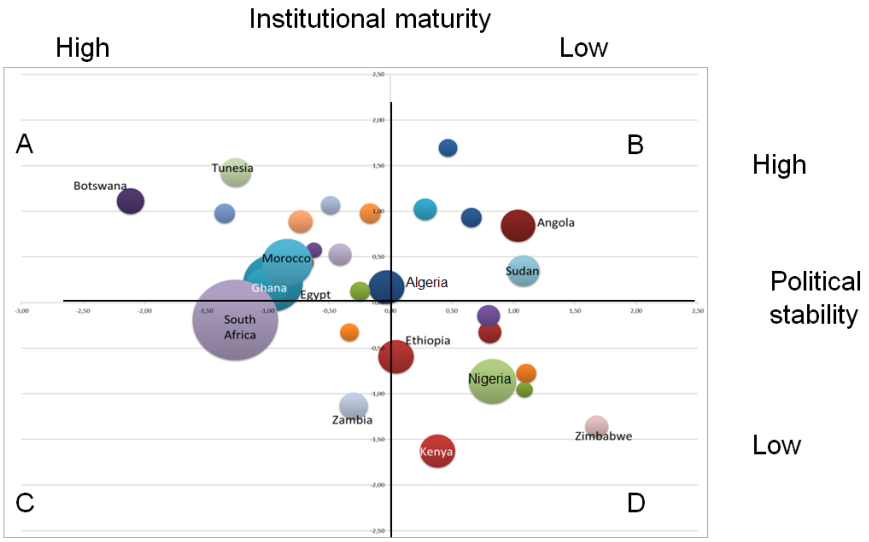
Figure 26 and Figure 27 show the spread of African countries based on their levels of PS and IM and the number of Chinese and U.S. investment projects they hosted on average in the period 2003-2011.

Figure 26 **Chinese investment projects in Africa for the period 2003-2011**



(Source: Authors' elaboration on MOFCOM data)

Figure 27 **U.S. investment projects in Africa for the period 2003-2011**



(Source: Authors' elaboration on FDi Markets data)

The graphs show that both Chinese and U.S. investments are spread all over the continent. I do not see a clear preference for category A countries for U.S. investments or for category B countries for Chinese investments. When I compare these results of Chinese and U.S. investment projects in Africa for the period 2003-2011 I find that the country choice of U.S. and Chinese investors in Africa is surprisingly similar and not based on the institutional distance.

As a last robustness check I decided to compare these results with the results for U.S. and Chinese investments globally. For the same reasons as explained in paragraph 4.1.2, I decided to leave out the main tax havens and the special administrative regions of China. Since I do not have access to the number of Chinese and U.S. investment projects globally, I decided to use the less favorable FDI flows instead as a measure for Chinese and U.S. investments abroad. I left out the variables export, import and welcoming to FDI due to time constraints. In all other aspects the model is the same as for Chinese and U.S. investments in Africa. Table 9 shows the results.

Table 9 IM and PS as determinants for Chinese and U.S. FDI flow excl. tax havens, 2003-2011

	Significance for Chinese FDI	Hypothesis supported	Significance for U.S. FDI	Hypothesis supported
INST	0.114+	No	0.826***	Yes
	(0.062)		(0.110)	
POL	-0.080*	No	-0.145*	No
	(0.033)		(0.059)	
lnGDP	0.175***	Yes	0.294***	Yes
	(0.016)		(0.028)	
NREXP	0.017***	Yes	-0.001	
	(0.002)		(0.003)	
INFL	0.024**	No	-0.018	
	(0.009)		(0.014)	

Standard errors in parentheses

+ if $p < 0.10$, * if $p < 0.05$; ** if $p < 0.01$; *** if $p < 0.001$.

Going against general FDI theory (that states that firms tend to avoid risks when investing abroad) both Chinese and U.S. global investments are significantly directed to countries with low levels of PS. These results are quite surprising, knowing that almost sixty per cent of U.S. investment flows over the period 2003-2011 were directed to Europe (see paragraph 4.1.2). Furthermore, when looking at global investments both Chinese and U.S. investments are significantly directed to countries with high levels of IM.

Lastly, I compared the results for Chinese and U.S. investments to Africa with the results of investments from other advanced and emerging markets, namely: the U.K., France, Canada, Russia and India. The results show that investments in Africa from all countries under study are directed to host countries with relatively low levels of PS and high levels of IM; albeit with different levels of significance. These stable results point to a general trend in the international location choice of firms that transcends political, economic and cultural differences between the FDI source countries.

5.5. Conclusion

Child and Marinova 'tried to revive the tradition of developing a different way of looking at things through an argument that opens up some new space for academic debate' (2014b: 409). However, they were also constraining themselves by discussing differences in opportunities for firms mostly on a national level. Furthermore, they perceived Chinese firms to be different than firms from other home countries based on assumptions about specific benefits and challenges Chinese firms face in host countries with different levels of PS and IM. For example, Child and Marinova state that '[o]ne reason why China can be regarded as a different case concerns *the suspicion* that the motives for its overseas investment are informed by a political agenda' (2014a: 348, my italics).

Child and Marinova argue that I should not focus on the host or home country alone; neither should I focus on 'the simple 'distance' between them' (2014b: 405). They state that it is rather 'the qualitative interface between the two that is key to understanding what happens when companies engage in outward foreign direct investment' (2014b). I agree with and applaud the idea of studying the 'qualitative interface'. However, first I need to make clear that Chinese firms do not target institutionally immature or politically instable countries more than Western firms do, because this singling out of Chinese firms is not contributing to a better understanding of Chinese investment behavior or the internationalization process of firms in general.

Therefore I decided to focus on the first part of Child and Marinova's argument and to use the framework they presented on PS and IM in order to test the role of institutional distance for the location choice of Chinese and U.S. investments in Africa. I focused on the African region because of the heavy criticism towards Chinese investments in especially this region that accuses "China" (as if it is one monolithic actor) of exploiting countries with "poor institutions" without convincing empirical evidence.

To conclude, my findings do neither confirm my hypotheses that Chinese firms are most prevalent in countries with a similarly high level of PS and low level of IM as China (or category B countries) nor that U.S. firms are most prevalent in countries with a high level of PS and a high level of IM (or category A countries). Instead, my findings show that both Chinese and U.S. investments to Africa are directed to countries in all four categories due to resource-seeking and market-seeking motives. In other words, Chinese firms do not differ substantially from U.S. firms in their location choice on the African continent and regulative institutional distance is not a key explanatory factor for the international location choice of Chinese and U.S. investment.

6. Context: China-Nigeria relations and the telecom equipment market

6.1. China-Nigeria relations

'In 1956 the first Chinese came to Nigeria: four business men from Hong Kong settled down in Kano. They owned textile factories in Hong Kong and learned about Nigeria from the Lebanese traders. Both Hong Kong and Nigeria used the pound and the Lebanese traders travelled between Hong Kong and Nigeria to buy Chinese fabric and sell it in Nigeria. This way the Chinese learned that there was a market for their fabric in Nigeria. Nigeria is a good market for textile because Nigerians are using about seven yards per dress and they have many dresses per person for weddings and other big events. My father belonged to the second group of Chinese business men from Hong Kong who went to Nigeria end 50s. He established ten textile factories in Nigeria with each more than 1,000 employees. At that time it was quite easy to do business in Nigeria. The demand was high and there was not much competition. It is currently much more difficult because there are many more Chinese in Africa and the image of China is deteriorating in Africa' (Mr. Hu Jieguo, President of the Golden Gate Group in Nigeria and Deputy Director of the China-Africa Business Council, personal communication, January 11, 2016).

This section discusses the political and economic relations between China and Nigeria since the independence of Nigeria. The first subsection provides a short history of the establishment of diplomatic relations between China and Nigeria, and an overview of official state visits and bilateral agreements between the two nations. The second part of this section discusses the trade, aid and investment relations between China and Nigeria.

6.1.1. Political relations

'China and Nigeria, the two nations with the biggest population and economies in their continents', (Chinese Ambassador to Nigeria Zhou Pingjian emphasizes the similarities between China and Nigeria in: "Special bond exist," 2018, March 21).

Nigeria and China established formal diplomatic relations on February 10, 1971 (Chinese embassy to Nigeria, 2004a). At that time General Yakubu Gowon was the leader of Nigeria. General Gowon had visited China one time during his period in power (from 1966 to 1975). In July 1975 General Murtala Mohammed took over in a bloodless coup, accusing General Gowon of corruption and

delaying the promised return to civilian rule. It took 25 years before a Nigerian Head of State would visit China again (see Table 10).

Table 10 State visits from Nigeria to China from 1971

Date	Key persons	Head of State Nigeria
1973	Mr. Okoi Arikpo, Foreign Minister	Gen. Yakubu Gowon
1974	Gen. Yakubu Gowon, Head of State	Gen. Yakubu Gowon
1983	Dr. Alex I. Ekwueme, Vice-President	Shehu Shagari
1984	Gen. Ibrahim Babangida, Chief of the Army Staff	Maj. Gen. Muhammadu Buhari
1989	Gen. Sani Abacha, Chief of the Army Staff	Gen. Ibrahim Babangida
1997	Gen. Abdulsalami Abubakar, Chief of the Defense Staff	Gen. Sani Abacha
1999	Olusegun Obasanjo, (about to be inaugurated) President	Gen. Abdulsalami Abubakar
2001	Olusegun Obasanjo, President; Anyim, President of Senate	Olusegun Obasanjo
2002	Abubakar, Vice President; Nwuche, Deputy Speaker of the National Assembly	Olusegun Obasanjo
2005	Oluyemi Adeniji, Foreign Minister; Olusegun Obasanjo, President	Olusegun Obasanjo
2006	Olusegun Obasanjo, President	Olusegun Obasanjo
2008	Umaru Yar'Adua, President	Umaru Yar'Adua
2010	Jubril Martins-Kuye, Minister of Commerce and Industry	Goodluck Jonathan
2013	Goodluck Jonathan, President	Goodluck Jonathan
2014	David Mark, Senate President	Goodluck Jonathan
2016	Muhammadu Buhari, President	Muhammadu Buhari

Source: Chinese embassy to Nigeria, 2004a; 2005a; 2011a; 2014a; 2016a

It is striking that successive Nigerian army chiefs have visited China. Agubamah (2014) attributes the visit of general Abacha to the fact that both China and Nigeria faced international isolation at the time due to brutal military actions against their own citizens. One could also argue that these visits suggest strong military cooperation between China and Nigeria at the time. However, I think the main reason is that by far most of the Nigerian Heads of State right after independence were military leaders.

In that light it is interesting to note that four Nigerian heads of state had visited China during an official state visit before becoming Head of State: Babangida visited China one year before he overthrew the Buhari government in August 1985, Babacha visited China four years before taking office, Abubakar visited China one year before replacing Abacha and Obasanjo visited China one month before his inauguration in May 1999. After President Obasanjo, Nigerian presidents made it into a habit again to visit China while they are in office. China-Nigeria relations were growing especially strong under President Obasanjo who visited China three times as President of Nigeria.

The first official state visit from China to Nigeria after China and Nigeria established diplomatic relations took place in 1978 when Geng Biao, the Vice Premier, visited Nigeria. Twenty other Chinese state leaders followed in his footsteps until the state visit by Foreign Minister Wang Yi in 2017 (see Table 11).

Table 11 State visits from China to Nigeria from 1971

Date	Key persons
1978	Geng Biao, Vice Premier
1981	Huang Hua, Vice Premier
1984	Tian Jiyun, Vice Premier
1990	Wu Xueqian, Vice Premier
1995	Qian Qichen, Vice Premier and Foreign Minister
1996	Luo Gan, State Councilor and Secretary General of the State Council
1997	Li Peng, Premier
1999	Ismail Amat, Special Envoy of the President and State Councilor
2000	Tang Jiaxuan, Foreign Minister
2002	Jiang Zemin, President
2003	Han Qide, Vice Chairman of the Standing Committee of the National People's Congress (NPC)
2004	Hu Jintao, President; Wu Bangguo, Chairman of the Standing Committee of the NPC
2005	Wen Jiabao, Premier

2006	Hu Jintao, President; Zhai Jun, Assistant Minister of Foreign Affairs and Secretary General of the Preparatory Committee of the Beijing Summit and the 3rd Ministerial Conference of the Forum on China-Africa Cooperation; Li Zhaoxing, Foreign Minister
2010	Yang Jiechi, Foreign Minister
2013	Zhang Dejiang, Chairman of the Standing Committee of the NPC
2014	Li Keqiang, Premier
2015	Han Changfu, Chinese President Xi Jinping's Special Envoy and Minister of Agriculture
2017	Wang Yi, Foreign Minister

Source: Chinese embassy to Nigeria, 2004a; 2006a; 2006b; 2010; 2011a; 2013; 2014a; 2015a; 2017

It can be concluded from this data that the governments of both Nigeria and China attach great importance to their relationship. Both countries have sent high officials over the course of time: five Nigerian heads of state have visited China in the period 1974-2016 and two Chinese presidents and 3 Chinese premiers have visited Nigeria in the period 1997-2017. Although, it seems that the Chinese leadership was a bit more reluctant than the Nigerian leadership until about 1995.

Since 1971, China and Nigeria have signed at least 21 key bilateral agreements focused on strengthening the respective political, economic and cultural ties (see Table 12).

Table 12 Key bilateral agreements signed since 1971

Date	**Agreement**
1971	Joint Communiqué on the Establishment of Diplomatic Relations between the PRC and the Federal Republic of Nigeria
1972	Agreement on economic and technical cooperation
2001	Trade agreement; Agreement on Investment Promotion and Protection
2002	Agreement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income
	Agreement on Consular Affairs
	Agreement on Cooperation and Strengthening Management of Narcotic Drugs, Psychotropic Substances and Diversion of Precursor Chemical
	Agreement on Tourism Cooperation

2003	Trilateral agreement of South-South cooperation between China, Nigeria and the Food and Agriculture Organization of the United Nations
2005	Strategic Partnership Agreement (covering investment, telecommunication service and technical cooperation)
2006	Memorandum of Understanding (MoU) on petroleum cooperation
2008	Joint Press Communiqué between the Government of the PRC and the Government of the Federal Republic of Nigeria
	Strategic Partnership in power and energy and in transport infrastructure
2013	Agreement on comprehensive financial cooperation
	Preferential buyer credit agreement for Nigeria's four airports expansion project
	Agreement on economic and technical cooperation
	Agreement on mutual visa exemption for holders of diplomatic and official passports from both countries
	Agreement for the prevention of the theft, illicit import and export of cultural property
	Agreement on Space Science and Technology Cooperation
2014	Joint Statement between the PRC and the Federal Republic of Nigeria
2016	Agreements on cooperation in infrastructure, production capacity, investment, aviation, science and technology, and finance
2017	Agreement on "One China" policy

Source: Chinese embassy to Nigeria, 2004a, 2014b, 2014c, 2015b, 2016b; "China, Nigeria to," 2005; "Nigeria, China sign," 2017, January 11; Agande, 2013; Rindap, 2015.

Among the more common diplomatic, trade and investment agreements, there are two agreements that deserve special attention, namely: the agreements on space science and the 'One China' policy.

The China-Nigeria space cooperation started in 2004 (Chinese embassy to Nigeria, 2014d).In 2007,Nigeria commissioned China Great Wall Industry Corporation to design and build a Nigerian Communication Satellite (NIGCOMSAT-1) and to launch it into orbit at the Xichang Satellite Launch Center in China's southwestern Sichuan Province ("Chinese contractor hands," 2007, July 7). NIGCOMSAT-1 was Nigeria's second satellite and Africa's first communication satellite (Osuagwu,

Elebeke, Youdeowei & Nwankwo, 2017). Its launch marked the return of China's space industry on the international market after U.S. restrictions prohibited export of satellites and components to China since 1999 (Shea, 2016). Since that first launch China-Nigeria space cooperation only intensified. In January 2013, China and Nigeria signed the Agreement on Space Science and Technology Cooperation which includes the building of a satellite designing center and a satellite assembly, integration and testing center in Nigeria and supporting training programs (Chinese embassy to Nigeria, 2014d). In 2016, the Chinese government offered to build a ground receiving station in Nigeria that would link Nigeria to China's satellite base and training for 1,000 Nigerian engineers in the space development sector ("China to train," 2016, April 18).

The Chinese government has used Nigeria's strong position in the region for its One China policy – the insisting of the PRC for official international recognition that both Taiwan and mainland China are inalienable parts of a single "China". In 2004, the Chinese government set up the West African Council for the Promotion of Peaceful Reunification of China in Lagos, Nigeria. A Proclamation that was adopted at the conference called on all Chinese citizens and ethnic Chinese in West Africa to unite against "Taiwan independence" and support the reunification cause of China (Chinese embassy to Nigeria, 2004b). During a seminar on Sino-Nigerian Relations hosted by the Chinese ambassador to Nigeria, the ambassador disclosed attempts by the "Taipei Trade Mission" to make "two Chinas" or "one China and one Taiwan" in Nigeria, and urged the Senate to continue to uphold one China policy (Chinese embassy to Nigeria, 2005b).

Finally, during the visit of the Chinese Foreign Minister in 2017, the Chinese and Nigerian Foreign Ministers signed the agreement on 'One China' policy ("Nigeria, China sign," 2017, January 11). During this meeting the Chinese Foreign Minister stated that:

> A few days ago, the Nigerian side asked Taiwanese offices in Nigeria to remove their "false names" and "false plates", move out of the capital city as well as reduce power and personnel and reiterated its adherence to the one-China policy, which China highly appreciates (in Chinese embassy to Nigeria, 2017).

In January 2017 the Nigerian government indeed ordered Taiwan to move its office from the capital, change the name of the office and cut the number of office staff (Hou, August 3, 2017). Furthermore, on March 31 the Nigerian government demanded that the trade office's director leave the country and on June 30 Nigeria sent armed police to seal off the trade office and force the staff to leave (Hou, August 3, 2017). This is a clear example of the economic and political power the PRC has gained over the past decades. The next section discusses the economic cooperation between China and Nigeria.

6.1.2. Trade, aid and FDI

'Nigeria is the biggest Chinese investment destination in Africa, the second largest export market and the third largest trading partner of China in Africa' - Deputy Chinese Ambassador to Nigeria, Lin Jing (in Okonedo, 2018).

Trade

Nigeria's main export product is crude oil, namely: it accounts for 96 per cent of its total export (ITC Trademap, 2018). For long the U.S. has been by far the largest trade partner of Nigeria due to its large demand of Nigerian crude oil. However, the U.S. had stopped the importation of crude oil from Nigeria in 2014 – a development that was tied to the discovery of shale oil and gas in commercial quantity at home. Nigeria started looking at China and India as new markets for Nigerian crude oil. China and India bought indeed more crude oil from Nigeria in 2014 (see appendix 4). However, India's appetite shrank again quickly and China never had been very interested in Nigerian oil because of the quality of the oil.

Nigerian oil is sweet and light; which makes it highly appropriate for processing it into gasoline, kerosene, and high-quality diesel. However, Chinese refineries work better on heavy oil (from Angola for example) which is processed into fuel oil for China's booming industries. The main reason for China to buy crude oil from Nigeria is to do something about its trade imbalance with Nigeria. All Nigerian oil Chinese actors buy is sold on the international market.[8]

In 2015, China became Nigeria's largest trade partner – merely based on the vast amounts of Chinese exports to Nigeria (see Appendix 5). Nigeria imports mostly machinery and vehicles from China (ITC Trademap, 2018).

Aid

According to the 2011 white paper on China's foreign aid, published by the State Council of the PRC, China offers foreign aid in eight forms, namely: complete projects, goods and materials, technical cooperation, human resource development cooperation, sending medical teams, emergency humanitarian aid, volunteer programs in foreign countries, and debt relief (State Council of the PRC, 2011). China and Nigeria signed the first economic and technical agreement in 1972. Since then the

[8] This information was shared with me by three of my respondents during my fieldwork in Nigeria. This seems a plausible explanation for the low demand for Nigerian oil from China. I also found corresponding evidence in this blog from a senior editor of Oil News: http://blogs.platts.com/2015/05/25/two-crudes-nigeria-angola/.

two sides have been engaged in various technical cooperation projects including well-digging and water supply, a large hospital, rural primary schools, a Friendship and Culture Center and solar traffic lights. Since 1993, the Chinese government provides scholarships for Nigerian students to study in China. According to a message from the Chinese embassy to Nigeria (2004a) there were 24 Nigerian students studying in China, from 2002 to 2003. The number of Nigerian students studying in China on a Chinese scholarship increased rapidly. Around 2011 there were about 100 Nigerian students on government scholarships studying in China (Chinese embassy to Nigeria, 2011b) and in 2016 this number increased to 237 Nigerian students (Saliu, 2016).

The financial resources provided by China for foreign aid mainly fall into three types: grants (aid gratis), interest-free loans and concessional loans (State Council of the PRC, 2011). Grants are mainly used to help recipient countries to build hospitals, schools and low-cost houses, and support well-digging or water-supply projects, and other medium and small projects for social welfare. In addition, grants are used for human resources development cooperation, technical cooperation, assistance in kind and emergency humanitarian aid. Interest-free loans are mainly provided to developing countries with relatively good economic conditions. Both grants and interest-free loans come from China's state finances (State Council of the PRC, 2011). Concessional loans are mainly used to help recipient countries to set up productive projects that are generating both economic and social benefits, like for example infrastructure projects. Concessional loans are loans with substantial more generous conditions than market loans in terms of interest rates and grace periods and are provided by the Export-Import Bank of China; as designated by the Chinese government. Table 13 provides an overview of a selection of the main financial aid flows from China to Nigeria over the period 2001-2017.

Table 13 Chinese financial aid flows to Nigeria, 2001-2017

Date	Amount in USD	Type of aid	Purpose
2001	200,000,000	Concessional	National Rural Telephony Project
2002	297,750,000	Concessional	Papalanto plant (electricity)
2003	600,000,000	Grant	Equipment for the Akwa Ibom refinery
2003	2,500,000	Grant	Unidentified
2003	2,515,044	Debt cancellation	Debt cancellation
2005	200,000,000	Export credits	Purchase of communication satellite
2006	1,000,000,000	Concessional	Fast rail system from Lagos to Abuja

2006	627,082	Grant	Anti-malaria products and training
2006	20,000,000	Concessional	Private telecoms operator Reltel wireless Limited
2007	300,000,000	Concessional	Hydroelectric project on the Mambila plateau
2008	500,000,000	Concessional	Construction of the space satellites NigComSat 2 and 3
2008	7,200,000	Grant	Schools in rural areas
2010	600,000,000	Concessional	National Public Security Communication System
2012	30,600,000	Concessional	Digitization of the State Media Corporation
2012	500,000,000	Concessional	Fast rail system from Lagos to Abuja – part 2
2012	100,000,000	Concessional	Galaxy backbone information technology (ICT) network
2013	500,000,000	Concessional	New terminals at all 4 Nigeria's national airports
2013	12,700	Grant	Nigerian Red Cross Society in Benue
2015	927,000,000	Concessional	700 megawatt hydropower station
2017	6,700,000,000	Concessional	Various railway projects

Source: Dreher, Fuchs, Parks, Strange, & Tierney, 2017plus additional cross-checking with various sources

China's first white paper on China-Africa relations was published in 2006 and introduced the Chinese approach towards development cooperation, namely: an integration of aid and investment. This new approach – the approach to contribute to economic development in Africa via investments – is welcomed and applauded by many African leaders and embraced by Dambisa Moyo, the author of the best-seller "Dead Aid" ("Economist Dambisa Moyo", 2013, February 28). Kjøllesdal and Welle-Strand (2010) point out that the development cooperation of China is outspokenly meant to be mutually beneficial – in contrast to much development assistance from traditional donors that is (at least according to their official discourse) to be helping the recipient (see also page 62).

Traditional donors to Africa – used to managing these two flows of capital through separate ministries – tried to pursue the Chinese government to use their framework of ODA; with alternating success. However, recently some traditional donors started to adopt a similar approach

as the Chinese government and integrated aid and investment in order to support their national companies abroad (see for example the recent Dutch and German Africa policies: German Federal Ministry for Economic Cooperation and Development, 2017; Ministry of Foreign Affairs of the Netherlands, 2013).

6.2. Nigerian business context

Nigeria is the largest economy of Africa and has a population of more than 190 million. Although Nigeria's GDP was estimated at $1.1 trillion USD in 2017 (CIA Factbook, 2018), GDP per capita was only $5,900 USD. According to a 2010 estimation, seventy per cent of the Nigerian population lives below the poverty line (CIA Factbook, 2018).

Nigeria is perceived to be not an easy environment for business. Although being applauded for rising 24 places in the ranking of countries, Nigeria was still number 145 in the EoDB ranking of the World Bank of 190 countries in 2017 ("Nigeria among most," 2017, October 31). The EoDB ranking is aimed to measure the costs to firms of business regulations in 190 countries. The study has become one of the flagship knowledge products of the World Bank Group in the field of private sector development, and is claimed to have motivated the design of several regulatory reforms in developing countries. In some quarters, the EoDB ranking is seen as a scorecard for a deregulatory race to the bottom ("The World Bank's", 2018, January 20). With this in mind it is interesting to see that close to the Nigerian elections of begin 2015 – that were won by President Buhari who promised more transparency and accountability – Nigeria's ranking went down significantly (see Figure 28).

Figure 28 **Ease of Doing Business ranking Nigeria, 2008-2017**

The EoDB ranking from the World Bank is under fire after Paul Romer's – then Chief Economist of the World Bank – critique of the impact of changes in the methods on the ranking of countries

(Zumbrun & Talley, 2018). In that regard, the scores of the WGI from the World Bank are much steadier (see Figure 29). According to the WGI, Nigeria scores very low in terms of "rule of law", "political stability and absence of violence" and "control of corruption" all through 2006-2016 (World Bank, 2017a). High levels of corruption and low levels of PS are usually associated with high risks for businesses; and not an attractive location for investment.

Figure 29 WGI scores Nigeria, 2006-2016

Indicator	Country	Year	Number of Sources	Governance Score (-2.5 to +2.5)	Percentile Ra... (0 to 100)	Standard Error
Voice and Accountability	Nigeria	2006	18	-0.62	29.81	0.11
		2011	19	-0.71	27.23	0.11
		2016	16	-0.30	35.96	0.11
Political Stability and Absence of Violence/Terrorism	Nigeria	2006	7	-2.03	2.42	0.25
		2011	8	-1.96	3.32	0.24
		2016	8	-1.85	6.67	0.21
Government Effectiveness	Nigeria	2006	11	-0.97	16.59	0.17
		2011	11	-1.10	13.27	0.19
		2016	12	-1.09	12.50	0.17
Regulatory Quality	Nigeria	2006	10	-0.91	19.12	0.17
		2011	11	-0.68	27.01	0.16
		2016	11	-0.92	18.27	0.17
Rule of Law	Nigeria	2006	17	-1.07	13.88	0.14
		2011	18	-1.18	12.68	0.13
		2016	15	-1.05	13.94	0.15
Control of Corruption	Nigeria	2006	15	-1.12	10.73	0.15
		2011	16	-1.17	10.90	0.14
		2016	15	-1.04	13.46	0.14

Source: World Bank, 2017a

Located on Africa's western coast on the Gulf of Guinea (see Figure 30), Nigeria is rich in many natural resources: petroleum, natural gas, tin, iron ore, coal, limestone, niobium, lead and zinc. Petroleum is the main engine of Nigeria's economy. According to the Organization of the Petroleum Exporting Countries (OPEC) the oil and gas sector accounts for about 35 per cent of gross domestic product, and petroleum exports revenue represents over ninety per cent of total exports revenue (OPEC, 2018). It is therefore not surprising that Nigeria's economy has been heavily impacted by the recent steep drop in crude oil prices; falling more than sixty per cent between 2014 and 2016 (Ngai, 2016; Wallace and Doya, 2016).

Figure 30 Gulf of Guinea

In January 2016 the Nigerian government calculated its expenditure at Nigerian Naira (NGN) 3.1 trillion (USD 15.4 billion) and its revenue at NGN 1.8 trillion (USD 8.9 billion); meaning a deficit of USD 6.5 billion (source: presented on the Nigerian state television during my field trip in Abuja in January 2016). In a response, President Buhari, announced plans to increase transparency, diversify the economy away from oil, and to improve fiscal management. The government is working to develop stronger public-private partnerships for roads, agriculture, and power. The regulator hopes for the telecoms sector to account for up to 25 per cent of GDP by 2025 (Elebeke, Udofia & Iruoma, 2015).

Nigeria is the largest and most lucrative telecommunications market on the African continent with more than 150 million mobile phone subscribers (CIA Factbook, 2018). The rapid growth in the number of subscribers led to problems with network congestion, quality of service and security, prompting the telecom regulator to impose fines and sanctions on the network operators (Lancaster & Lange, 2018). Telecom operators have responded by investing billions of dollars in base stations and fiber optic transmission infrastructure to support the ever increasing demand for bandwidth (Lancaster & Lange, 2018). This offers a huge chance for the three main telecom infrastructure companies in Nigeria, namely: Ericsson, Huawei and ZTE.

The registration process in Nigeria is extremely thorough in part to undercut Boko Haram's communication capacity (Bergstresser, 2016: 156). When the South African telecom operator MTN Group – the market leader controlling more than forty per cent of the Nigerian mobile phone market – refused to deactivate almost 40 million improperly registered subscriber identity module (SIM) cards it received a USD 5.2 billion fine in October 2015 (from interviews in Nigeria and

confirmed by a report from Financial Times (Cotterill & Fick, 2017)). MTN has been able to negotiate the money down till 1.7 billion USD (Cotterill & Fick, 2017), but serious damage was done already. At the moment of the settlement with the Nigerian government MTN's share price was 36 per cent lower than a year earlier (Palazzo & Hill, 2016).

6.3. Global telecom market

6.3.1. History of telecommunications

For thousands of years people have been able to communicate over long distances via for example smoke signals, beacons, lighthouses, drumbeats, and whistles. However, 20th and 21st century technologies rapidly increased the distance over which could be communicated, the length of the message, the speed with which the message could be transmitted and the number of people that could be reached. In a speaking comparison, Huurdemann argues that 'if automobile technology had progressed at the same pace as telecommunications, a Rolls-Royce would cost less than $2 and get 40,000 miles to the gallon (equal to 17,000 km/L)' (2003:10).

Increasing knowledge about the theory of electromagnetism, basic laws of electricity and the basic theory of sound supported the evolution from telegraphy to telephony (Huurdemann, 2003). Furthermore, the discovery of electromagnetic radiation and the creation of electronic tubes started the electronic era, which enabled the evolution from radio-telegraphy to radio-telephony and mobile radio (Huurdemann, 2003). In 1932, a plenipotentiary Telegraph Conference and the International Radiotelegraph Conference met in Madrid and decided to merge into a single entity: the International Telecommunication Union (ITU). The new term "telecommunication" was defined in the Convention as follows: any telegraphic or telephonic communication of signs, signals, writing, facsimiles and sounds of any kind, by wire, wireless or other systems or processes of electric signaling or visual signaling (semaphores) ("International Telegraph Conference," 2018). Currently, the ITU defines telecommunication as: any transmission, emission or reception of signs, signals, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems (ITU, 2012).

Commercial radio broadcasts began in the 1920s, but the development of radio communications remained a priority for the military ("Breakthrough for mobile," 2018). It took many years before frequency allocation authorities were willing to grant frequencies for mobile telephony. One

problem was that the frequencies available for mobile telephony could not be used sufficiently effectively. Besides the necessary technological development there was also a political obstacle. In most countries, telephony had long been the domain of state-owned monopolies and interest for development and change was limited. According to Ericsson, it was only when telecom industry was liberalized that mobile telephony could achieve a breakthrough ("Breakthrough for mobile," 2018).

Since the 1970s we went through three new generations of wireless technologies and the fifth generation will be available to the public soon. The first generation (1G) was not used to identify wireless technology until the second generation (2G) was released. From 1G to 2G was a major jump in the technology when the wireless networks went from analog to digital.

Table 14 Overview of five generations of wireless technologies

1G	2G	3G	4G	5G
1977	1991	1998	2008	-/+ 2020
Analog. First cellular phone system in Chicago licensed to Illinois Bell. Only simple phone calls possible.	Digital. Simple text messaging possible.	Faster data transfer speeds (at least 2 Megabits per second). Made the smartphone possible.	Data transfers of 1 Gigabit per second.	Promises to be roughly 1,000 times faster than what is available with a 4G connection.

Source: Agar, 2013

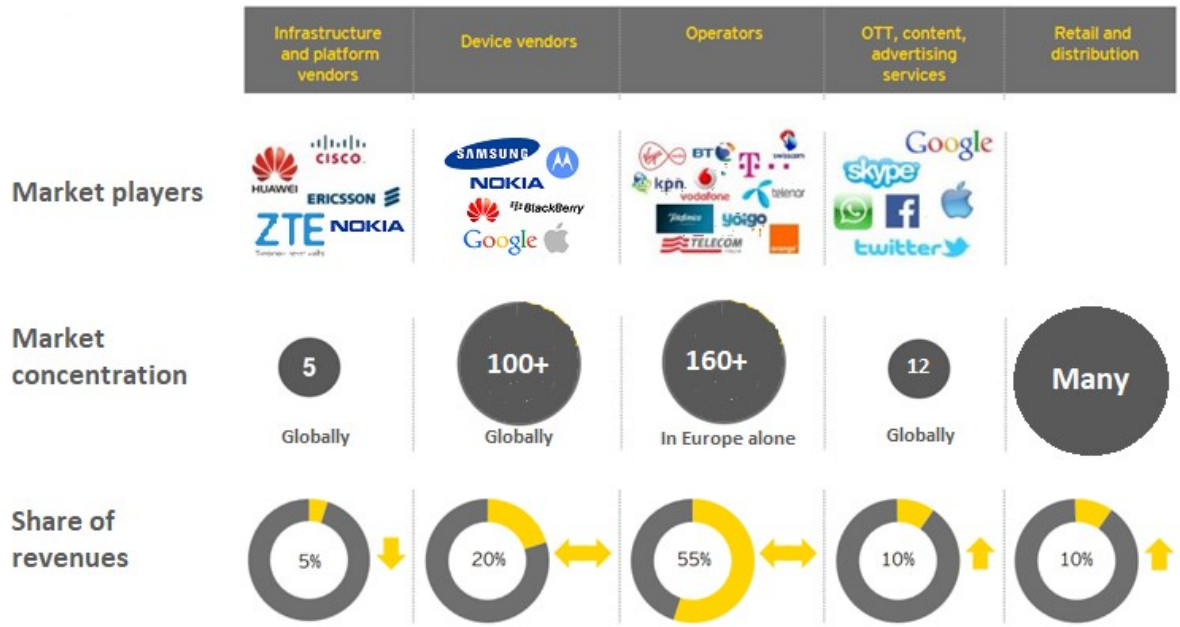
With new technologies 5G promises to be roughly 1,000 times faster than what is available with a 4G connection – opening up complete new possibilities in transportation, medicine, manufacturing, and many other areas of life. The first tests are done with 5G but analysts expect that smartphones running on 5G will only have a noteworthy market share from about 2021 (Boden, 2018).

6.3.2. Telecom market structure

The mobile telecom market exists of network equipment vendors, mobile device vendors, mobile network operators, over the top (OTT) communication providers + content service providers, and retailers. Telecom equipment vendors build the telecom equipment for telecom operators. A mobile network operator, also known as a mobile network carrier, is a provider of wireless communications services that owns or controls all the elements necessary to sell and deliver services to an end user. This includes radio spectrum allocation, wireless network infrastructure,

back haul infrastructure, billing, customer care, provisioning computer systems and marketing and repair organizations. Figure 31 shows the various segments of the telecommunications industry and their share of revenues.

Figure 31 Telecommunications industry value chain — 2015 share of revenues by segment



Source: Adapted from Ernst &Young (2015), based on "All phone manufacturers" (2018).

The data shows that by far most revenue is made by the operators and that telecom infrastructure vendors only earn a small share of the total revenue. This has not always been the case.

In the early days of the building of the first mobile networks, telecom vendors made a fortune selling expensive infrastructure equipment to operators. However, those days are at an end. For example, Ericsson now runs with an operating margin of six to eight per cent (Nordstrom, 2015). The strongly decreased profit margin has three main reasons. Firstly, the mobile telecom infrastructure market has transformed from a fast-moving, high-growth emerging sector into an established mature market that delivers much lower returns. Thirty years ago we had no mobile subscriptions and no mobile networks: in 2017 we had 7.8 billion mobile subscriptions worldwide and networks that cover 95% of the world's population (Ericsson Mobility Report, November 2017). Secondly, mobile networks became cheaper because of technology advances and international standardization (every node in the network not only costs just ten to twenty per cent of what it did

fifteen years ago, but can also handle hundred times more network traffic). Thirdly, price pressures from increasing competition with Chinese telecom equipment vendors (namely Huawei and ZTE).

According to an analyst from a Dutch independent market research and consulting firm focused on the ICT industry, the rise of Huawei has driven a consolidation in the telecom industry (Bilderbeek, 2015). Around the year 2000 there were about twenty large telecom companies worldwide active in the telecom equipment sector. Due to the aforementioned changes in the market, many telecom equipment vendors were outcompeted or bought up by more successful firms or moved to a niche sector. Marconi, Alcatel, Lucent, Siemens Communications, Nortel and Motorola no longer exist. Belkin, Avaya, Alcatel Lucent Enterprise (Huaxin), BenQ, Gigaset, Unify, Microsoft, Lenovo, Motorola Solutions, Sony and Mitel now compete in consumer and enterprise telecoms markets. Cisco focuses on enterprise networking. Currently there are only four telecom infrastructure companies left, namely: Huawei, Ericsson, Nokia Networks, and ZTE. These vendors today face a reality of declining volumes and intense price competition (Nordstrom, 2015).

6.3.3. Telecom market in China

Most Chinese consumers have leapfrogged to mobile telephony without having owned fixed-line telephones. By end-2015 there were about 1.3 billion mobile-phone subscribers in China compared with 231 million fixed-line subscribers, according to the National Bureau of Statistics ("China's infrastructure leap" 2016, February 12).

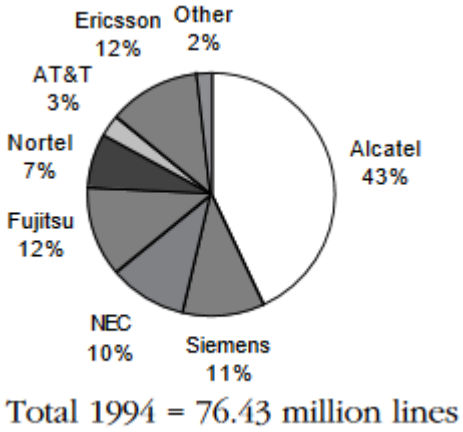
Prior to the 1980s, China was heavily dependent on foreign companies for telecommunications equipment, a core component was telephone exchange switches. In 1982, the Chinese government opened up the telecom equipment market by allowing joint ventures (JVs) between Chinese and foreign companies. Leading multinationals in the telecom industry set up JVs in China in order to circumvent import restrictions and agreed to transfer technology as a condition for access to the Chinese market (Nolan 2001: 795). Alcatel Shanghai Bell was founded in 1984 and in 1988 Beijing Nokia Mobile Telecommunications was founded.

In 1985 a group of Chinese investors associated with China's Ministry of Aerospace Industry established the precursor of ZTE which was tasked to develop stored program control (SPC) technology – the most widely applied telecommunications technology for telephone exchanges that had just been introduced from abroad (Guo, 2005). In November 1989, the precursor of ZTE developed the ZX500, the first homegrown digital SPC exchange of China with independent intellectual property rights (Guo, 2005). In the meantime, Ren Zhengfei – a former deputy director

of the Engineering Corps of the People's Liberation Army – decided to use reverse engineering with local researchers in order to develop Chinese telephone exchange technology. Mr. Ren founded Huawei in 1987.

In the 1990s, when 2G came about, the telecom business was booming in China, but there was still fierce competition in advanced technologies from international competitors. Figure 32 shows that Chinese firms did not play a significant role in developing 2G networks in China.

Figure 32 Digital switching market share in China in 1994



Source: Rehak & Wang (1996)

Domestic firms received support from the Chinese government. The in 1998 established Ministry of Information Industry (since 2008 the Ministry of Industry and Information Technology encouraged Chinese operators to purchase telecommunications equipment from Chinese manufacturers, notably from Huawei, ZTE, Datang and Great Dragon (Low, 2005). During the late 1990s the market share of key domestic players strongly increased (Nolan 2001). Huawei, for example, had established a twenty per cent domestic market share in network switches (Nolan, 2001: 795).

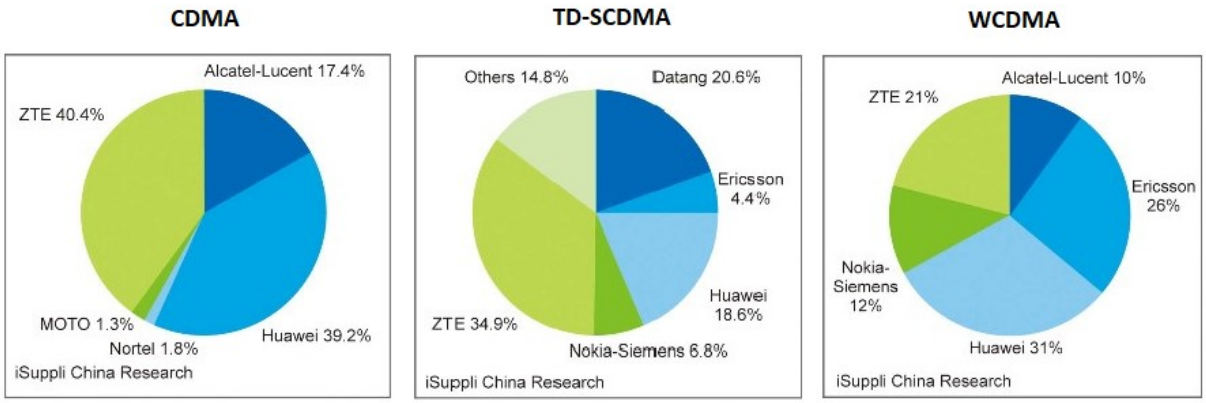
Further, government assistance was available to help local manufacturers compete globally, driving research and development spending, in advance of the impending World Trade Organization (WTO) 2002 timeline for removal of industry assistance. By the end of the 1990s both Huawei and ZTE started to look outward for projects. Huawei had its first “overseas” contract in Hong Kong in 1996 and ZTE followed suit with a large overseas investment in Pakistan in 1998. In 1999 the Chinese

government initiated the Going Global strategy in order to actively promote Chinese investments abroad and ZTE formalized its internalization strategy in 2001.

In 2008, the Chinese government restructured the telecom sector in China. China Unicom merged with China Netcom to form the new China Unicom and China Telecom purchased China Unicom's Code Division Multiple Access(CDMA)-network. The three remaining mobile telecom operators in China were all granted a 3G license based on a specific technology: China Telecom was granted a 3G license based on CDMA2000, China Mobile on Time Division Synchronous Code Division Multiple Access (TD-SCDMA) and China Unicom on Wide Band Code Division Multiple Access(WCDMA). CDMA was 2G technology and all China Telecom needed to do was to upgrade its CDMA-network to a 3G CDMA2000 network. It managed to do so in just two months' time. In March 2009, China Telecom had the world's largest CDMA-network built in the shortest time frame ("China Telecom: CDMA2000," 2011, December 10). TD-SCDMA is a standard that was developed in China (encouraged by the Ministry of Posts and Telecommunications and the Ministry of Science and Technology) with the main purpose to avoid or reduce the license fees that have to be paid to non-Chinese patent owners. In 2000, TD-SCDMA was approved by ITU as one of the three 3G mobile communication standards. WCDMA is worldwide the most-commonly used member of the Universal Mobile Telecommunications System (UMTS) family and sometimes used as a synonym for UMTS.

The three Chinese telecom operators subsequently put out tenders for the upgrade of their networks. Huawei and ZTE benefited strongly from the upgrade to 3G in China. The Chinese government purposefully postponed the launch of the 3G network in China until the TD-SCDMA technology was ready; so that the Chinese telecom industry did not have to rely on expensive imported standards WCDMA (in the European Union (EU)) and CDMA2000 (in the U.S.) (Emiroglu, 2015). See Figure 33 for an overview of the CDMA, TD-SCDMA and WCDMA market shares per telecom equipment vendor in China in 2009.

Figure 33 CDMA, TD-SCDMA and WCDMA market shares in China, 2009



Source: Kong, 2009

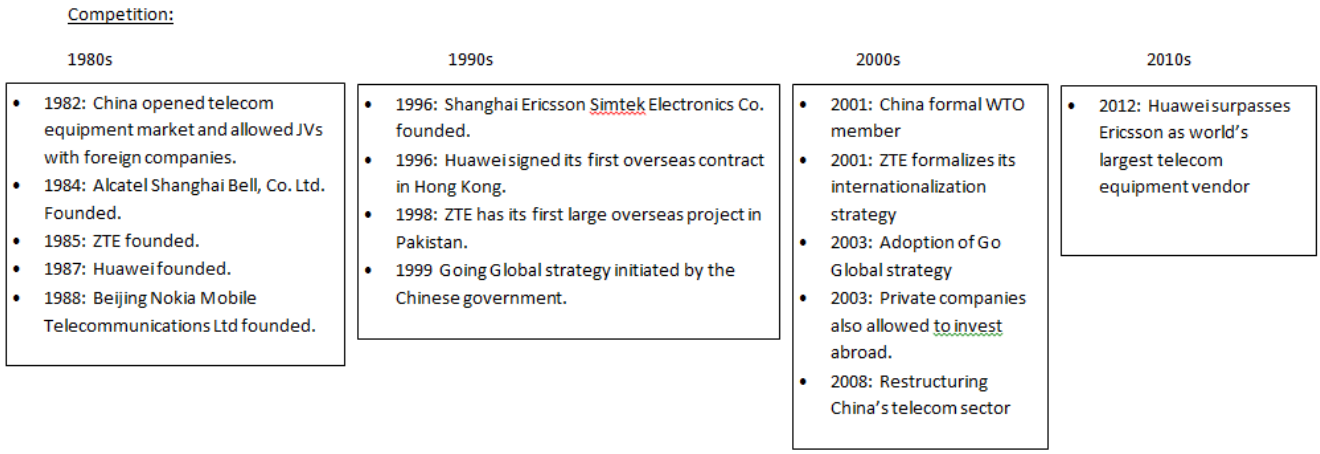
The left circle diagram in Figure 33 shows that Huawei and ZTE were by far the main beneficiaries of the upgrade of the CDMA networks in China. An explanation for this is that Huawei and ZTE already built 2G CDMA networks and could relatively easily upgrade their networks to the 3G CDMA2000 standard. It is not surprising that ZTE and Datang, the two state-owned companies established with the aim to develop Chinese telecom switching technology, had the largest share in TD-SCDMA networks. It is actually interesting that foreign firms like Nokia and Ericsson also got a share in the development of this network in China. The reason for this might be that Chinese Mobile created space on purpose for foreign companies to invest in TD-SCDMA technology in order to boost the importance of TD-SCDMA as an international standard. Patrick Donegan, senior analyst at Heavy Reading, explains that while TD-SCDMA was an unwelcome distraction from global standards from the perspective of foreign equipment vendors, they did not want to risk their positioning for WCDMA equipment contracts in the largest telecom market in the world (Donegan, 2007).

After 2009, ZTE and Huawei managed to take over market shares from Datang by promising free upgrades of China Mobile's network when China mobile replaced Datang technology for ZTE or Huawei technology. Although the Datang networks were of good quality and did not need to be replaced by ZTE or Huawei technology, China Mobile could not turn down the offer of free upgrades of its network. ZTE and Huawei could make up their losses with these free of charge replacements with the revenues from other product lines such as global system for mobile communications (GSM), CDMA and WCDMA. Since TD-SCDMA is Datang's only product line and therefore Datang could not afford to do free replacements ("ZTE says wins," July 15, 2009).[9]

[9] https://www.reuters.com/article/zte-chinamobile/update-1-zte-says-wins-34-pct-of-china-mobile-network-deal-idUSPEK13005020090715

The experiences Huawei and ZTE gained from building the 3G network in China led to their global success. In 2012, Huawei surpassed Ericsson as the world's largest telecom equipment vendor in terms of sales. And ZTE fulfilled its ambition to become the third largest telecom equipment vendor.

Figure 34 Developments in the telecom infrastructure market in China in the period 1982-2012



Source: created by author

In 2013, China Mobile, the world largest telecom provider with more than 700 mobile subscribers, awarded the contracts for the upgrade of its networks to 4G. Huawei and ZTE each obtained about 25 per cent of the contracts, while Ericsson, Alcatel-Lucent and Nokia obtained a share of about ten per cent each (Yee, 2013). Huawei also won a chunk of Europe's 4G contracts in 2012 (Yee, 2013). The contracts for 4G networks in the U.S. went largely to Ericsson and Alcatel-Lucent.

Huawei's and ZTE's expansion overseas has met criticism in the U.S. and Europe. In 2013 the European Commission threatened with trade sanction against China if the Chinese government would not stop with 'illegal subsidies' to ZTE and Huawei (together occupying almost a quarter of the European market in 2013) (Bilby, 2013). However, in October 2014 the EU dropped the anti-subsidies case against the two Chinese telecoms companies because of too much division on the matter within the EU: leading European telecom companies such as Alcatel-Lucent, Nokia Solutions and Network (NSN) and Ericsson did not want a trade war with China; southern European companies were afraid of China's threat to block European wine imports as a countermeasure; and individual member states made separate deals with China (Oliver, 2014).

Telecom operators in the U.S. stay away from Huawei and ZTE after a 2012 congressional report said their hardware could be used by the Chinese government for spying purposes (Moritz, Gurman & Shields, 2018). According to a spokesman from Huawei, 'the only purpose of such a report is to impede competition and obstruct Chinese (telecom) companies from entering the U.S. market' (in Wolf, 2012). However, U.S. carriers were still selling phones from the two Chinese suppliers for several years; until 2018, when six intelligence community chiefs advised American customers not to buy products from Huawei and ZTE for security reasons. An article in Bloomberg called the evidence against Huawei and ZTE 'flimsy' and argued that it is more about protectionism than about security (Bershidsky, 2018). Chris Smith from Boy Genius Report explains that the real reason why the U.S. government is so afraid of Huawei is that it fears that China will get widespread 5G coverage before the U.S. does (Smith, 2018). Smith (2018) argues that this will allow China to accelerate the development of specific 5G-reliant technologies, setting the standards and possibly displace Silicon Valley as the world's innovation center.

Meanwhile, Huawei has signed 25 MoUs with European and other global telecom operators to trial 5G equipment; including agreements with Britain's BT, Bell Canada (BCE), France's Orange Germany's Deutsche Telekom and global player Vodafone.

6.3.4. Huawei

Huawei was founded in 1987 by Ren Zhengfei, a former engineer in the People's Liberation Army. About thirty years later (in 2018) Huawei became the second largest smartphone manufacturer in the world. Huawei's strategy was: "Using the countryside to surround the cities" (with reference to Mao). From 1992 to 1997 Huawei focused merely on China's rural market. In 1997-2000 Huawei shifted its focus to China's urban market. The orange line in Table 15 shows the period in which Huawei was focused on the Chinese market. Fu (2015) explains in his book "China's path to innovation" that Huawei looked abroad for continued growth because while business was booming in China in the 1990s the competition in advanced technologies from advanced markets was fierce. The founder of Huawei (Mr. Ren) compared Huawei's situation to that of a mountain goat that needed to run faster and climb higher in order to avoid being eaten by the lion. Mr. Ren concluded that Huawei needed to become a wolf; a metaphor he used for years and which the Public Relations(PR) Manager of Huawei West Africa refers to as well in my interview with him. First, in the period 2000-2004 (yellow) Huawei focused on the global emerging market and since 2004 it shifted its focus to the global developed market (green) (see Table 15).

Table 15 Huawei's development as an MNE

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hong Kong (first overseas contract)	Russia	Thailand South Africa Kenya	Brazil Nigeria India	Sweden (R&D)	UK; USA (4 R&D centers)			Netherlands (first big contract in Europe); Australia	Global Framework Agreement with Vodafone; Contract with British Telecom; Over 50% of revenue from international contracts			Contract with Telus and Bell Canada	LTE contract with TeliaSonera (Norway)			

Source: developed by the author

6.3.5. ZTE

ZTE was initially founded as Zhongxing Semiconductor Co., Ltd in Shenzhen in 1985 as a JV involving mainly subsidiaries of the then-Ministry of Aerospace Industry. In March 1993, Zhongxing Semiconductor changed its name to Zhongxing New Telecommunications Equipment Co., Ltd (ZTE) and created a new business model as a "state-owned and private-operating" economic entity. ZTE is listed on both the Shenzhen (1997) and Hong Kong (2004) Stock Exchanges.

By the end of the 1990s both Huawei and ZTE started to look outward for projects. Huawei had its first overseas contract in Hong Kong in 1996 and ZTE followed suit with a large overseas investment in Pakistan in 1998. In 1999 the Chinese government initiated the Going Global strategy in order to actively promote Chinese investments abroad and ZTE formalized its internalization strategy in 2001. ZTE moved from the domestic market to Pakistan, via Russia, to Europe (Fu, 2015: 296).

Table 16 ZTE's development as an MNE

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indonesia (branches)		Pakistan (first big over-seas project)	Kenya	Russia	Zambia; UK; Interna-tionaliza-tion strategy formali-zed	Nige-ria; Brazil	India; largest CDMA provi-der for BSNL (India)	South Africa; overseas market for mobile phone and 3G are the two principal growth sources for the company	Australia; Germany; collaborations with Alcatel, Ericsson, France Telecom and Portugal Telecom)	Long-term partnership with France Telecom, long-term contract with Telus (Canada)	Strategic partner-ships with Vodafone, Telefonica and Hutchison				60% of revenu from interna-tional opera-tions	

Source: developed by the author

7. The role of institutional distance in the challenges and advantages for Chinese telecom vendors in Nigeria[10]

7.1. Introduction

The results of the quantitative analysis show that both Chinese and U.S. investments are directed to countries with a high level of IM; however only for U.S. investments is this relation significant. Some argue that this indicates that Chinese investors are indifferent regarding the rule of law in the host country (Chen et al., 2016). Chinese firms are generally regarded to be more successful in host markets with a low level of IM than advanced market firms for various reasons. From the literature review I identified four popular theories explaining the relatively attractiveness of host countries with a low level of IM for Chinese firms, namely:

1. Their experience with operating in a difficult business environment at home give Chinese firms a competitive advantage over advanced market-firms in emerging markets;
2. Chinese firms have a higher tolerance towards low levels of IM due to the active support they receive from the Chinese government;
3. Due to their late-comer status, the products and services of Chinese firms are more in demand by less advanced markets than advanced markets;
4. Due to their late-comer status, Chinese firms are more or less forced to invest in the more challenging markets that are still available.

Quantitative studies are limited to proving or disproving a correlation between various factors and are not able to identify a causal relation, let alone the mechanism of the causal relation. In order to study the causal mechanism one needs to collect qualitative data and analyze the data using process tracing. Beach and Pedersen argue that if we theorize causal mechanisms as systems, 'the theory needs to develop all of the important parts of the mechanism that link X with Y, with a clear causal explanation for what takes us from one part to another…' (2016: 98). In line with this idea, I developed a preliminary causal mechanism based on the literature review that I tested by conducting a case study, namely the case of large Chinese telecom equipment vendors in Nigeria.

[10] Prof. Dr. Wang Duanyong joined me on my field trip to Nigeria. I prepared the list of topics for the interviews myself and led the interviews. Prof. Dr. Wang helped me getting access to the Chinese managers and embassy, translated during the interviews in Chinese and took care of our safety. The Dutch Embassy and Mr. Buitelaar from Smile brought me in contact with the other interviewees. Mr. Chan Yann helped me transcribing and translating the interviews on my return to Bremen.

The results led to the rejection of three of the four hypotheses and a careful indication that the main reason for these Chinese firms to be relatively successful in Nigeria – despite the challenging business climate – is linked to the financial support they receive from Chinese financial institutions.

In the remainder of this chapter I will shortly discuss the relevant literature and present the theoretical framework (See page 10 for a lengthy literature review); explain the research design and methods I used; and present and discuss the results; ending with the conclusion.

7.2. Short literature review and theoretical framework

For this short literature review I change the order in which I mention the hypotheses that are discussed in more detail in the Literature Review in order to be consistent with the causal mechanism that resulted from the literature review.

Traditional FDI theory suggests that a successful multinational has some firm-specific (or ownership) advantages which allow it to overcome the costs of operating in a foreign country (Hymer, 1976). As mentioned in the Literature Review, Dunning (2001) noticed that the opening up of new markets led to a shift from exploiting the existing ownership specific advantages towards augmenting these advantages elsewhere. However, this idea seemed to only have received widely recognition since Child & Rodrigues (2005) emphasized the importance of the strategic-asset seeking motive for Chinese ODI. Again, Chinese investment behavior was set apart from the behavior of investors from other FDI source countries.

Besides Child & Rodrigues (2005), Morck et al. (2008) also argue that Chinese firms developed a higher tolerance towards inefficient structures (which means a more difficult environment for doing business) due to their experience with operating in complex markets at home.

The theories by Child & Rodrigues (2005) and Morck et al. (2008) result in the first hypothesis:

1. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to their experience with operating in a similarly challenging business environment in their home country (see Figure 5).

From the study of the internationalization process of U.S. firms during the post-war period and Swedish firms in the 1970s the idea of internalization as an incremental progressive process derived (e.g. Johanson & Vahne (1977); Vernon (1966)). The main assumption behind the tendency of firms to internationalize gradually is that firms try to keep risk-taking at a low level. General FDI theory predicts that when the risk in a host country goes up, investment goes down.

As explained in the Literature Review, the logical explanation is that risks involve costs and firms choose locations for their activities that minimize the overall costs of their operations (Buckley & Casson 1976). Not in support with this general theory, Buckley et al. (2007) find that when the risk goes down in a host country, Chinese investment goes down. Buckley et al. (2007) argue that the support from the Chinese government could be seen as a special ownership advantage of Chinese firms operating in other emerging economies. This results in the second hypothesis:

2. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to the support they receive from the Chinese government (see Figure 4).

As explained above, according to traditional FDI theories it is not common for a firm to invest in a high risk host country far away from its own region. This goes against the basic assumptions that firms avoid risk and internationalize gradually, starting with host countries that are geographically and culturally close (posing the least risk). However, from the perspective of emerging market investors, other emerging markets (that are often regarded to be high risk environments for advanced market firms) could be attractive as stepping stones towards investing in more advanced markets. This would mean that emerging market firms also internationalize incrementally, starting with investing in more similar emerging markets and slowly moving towards more advanced markets. This leads to the third hypothesis:

3. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to their late-comer position (see Figure 1).

Furthermore, since emerging market firms are late-comers on the global market the chance is high that the most popular host countries (in terms of low risks and high profits) are already saturated; leaving the more challenging markets available for emerging market firms. Based on traditional outward FDI theory, it is likely that emerging firms can expect few competitors from advanced market firms in these challenging host markets.

This leads to the fourth and last hypothesis:

4. Chinese firms are more attracted to – and successful in – (risky) emerging markets than their competitors from advanced markets due to the relatively little competition from advanced market firms in such markets (see Figure 2).

These hypotheses have been translated into the preliminary causal mechanism presented in Figure 7. The next section discusses the methods used for this study and explains how the causal mechanism is used for the analysis.

7.3. Research design and methods

The main research question in this qualitative strand is:

How does the institutional and political situation in China influence the location choice of Chinese telecom firms for – and their success in– high-risk markets in Africa?

In order to answer this question, a single case study is adopted and process tracing is the selected method for the qualitative analysis. Collier argues that 'process tracing is a fundamental tool of qualitative analysis' that can contribute decisively to evaluating causal claims (2011: 823). As explained in the Methods Chapter, process-tracing involves a mechanistic understanding of causality. It is the search for intervening variables that link an independent variable with a dependent variable, commonly referred to as the causal mechanism. Beach and Pedersen (2013) identify three types of process-tracing, namely: theory-testing, theory-building, and explaining outcome process tracing. Theory-testing process-tracing is used when it is possible to theorize a mechanism linking a cause or causes with an outcome; as is the case in this study.

In my study I test a theorized causal mechanism by carefully studying the case of two Chinese multinationals investing in a high-risk host country in Africa, namely: Huawei and ZTE in Nigeria. Huawei and ZTE share many similarities: they offer the same services and products (handsets and telecom infrastructure equipment), were founded in the 1980s, entered the Nigerian market around the millennium and are both large Chinese firms with strong connections with the Chinese government. However, do they also share the same challenges and advantages when operating in Nigeria? And are these linked to their shared home country conditions?

The data were collected using face-to-face interviews, observation techniques and public company documents like for example annual reports. I started with interviewing senior managers of ZTE at their HQ in Shenzhen. These interviews provided valuable information about the motives of ZTE for investing in Africa and their internationalization strategies. Unfortunately, I was not allowed to quote from these interviews, and therefore I needed to find other sources of evidence. However, these interviews in Shenzhen in August 2015 were very useful for my case selection and the preparations for my fieldwork. It also made me more careful about relying on interviews as my main source of information and I included more observations and online document analyses.

In order to get a full picture of the main challenges and advantages for Chinese firms in Nigeria, I did not only interview senior managers from both multinationals, but also important partners and competitors from these Chinese firms. Appendix 1 shows the full list of the organizations, functions and locations of the interviewees. Access to these persons was provided via my connections in China and Africa. To support the semi-structured interviews I used an interview guide. The Methods

chapter (starting from page 35) further explains the process of how the topics on my interview guide were translated into potential observable manifestations and empirical fingerprints of the causal conditions identified in the literature.

According to the Bayes' theorem – on which process tracing is build – new empirical evidence updates our belief in the validity of the hypothesis. It can either increase or decrease our belief in the hypothesis based contingent upon: 1) our prior confidence based on existing research, 2) the theoretical weight of the evidence in relation to the hypothesis, and 3) the amount of trust we can place in the evidence being accurate (Beach & Pedersen, 2016: 178). The levels of prior confidence, uniqueness, accuracy and theoretical certainty are explained per empirical fingerprint in the next section. Every sub-paragraph in the results section starts with a causal mechanism showing the levels of prior confidence, uniqueness, accuracy and theoretical certainty for each selected empirical finger print per theory.

The causal mechanisms look slightly different from the preliminary one I presented after the literature review, because I refined my understanding of the causal relations during the process of determining the levels of prior confidence, certainty, uniqueness and accuracy (see method chapter starting from page 35). Figure 13 shows the final list of the expected empirical fingerprints.

7.4. Results and discussion

7.4.1. The political and institutional contexts in China and Nigeria

Before we can ask ourselves the question ‘if X causes Y, what do we expect to observe?’ we need to find out whether X and Y are true, or merely assumptions. Let us first have a look at X.

As stated in the literature review, the high level of PS and low level of IM in China are rather assumed than measured. Do these assumptions hold when measured? Similar to the quantitative study, I use “government stability” from the ICRG to measure the level of PS for the period 2003-2011. With an average score of 10.6 China ranked 9 out of 140 countries. This means that China was indeed within the 25 per cent highest ranking countries in terms of PS.

Government stability from ICRG focuses on the narrow definition of PS and includes: government unity, legislative strength, and popular support. In contrast, the “political stability and absence of violence/terrorism” indicator from the WGI measures perceptions of the likelihood of political instability and/or politically-motivated violence, including human rights. Human rights are measured by using data from Amnesty International, the U.S. State Department and Human Rights

Watch. It will not be surprising that China scores much lower on “political stability and absence of violence/terrorism” than on “government stability”, merely due to its very low ranking in human rights. According to the WGI China ranked 152 out of 215 countries and territories. However, since human rights are not seen as a risk for doing business – unfortunately rather the opposite – I do not take them into account in measuring the level of PS. A report from Human Rights Watch states for example: ‘In countries characterized by severe human rights violations, like Nigeria, corporations often justify their presence by arguing that their operations will enhance respect for rights, but then adopt no substantive measures to achieve that end’ (1999: 3)

Therefore I classify China indeed as a country with a high level of PS.

Similar to the quantitative study, I use the “rule of law” indicator from the WGI to measure the level of IM for the period 2003-2011. China ranked 123 out of 214 countries in terms of IM. That means that China was among the 50 per cent lowest ranking countries in terms of IM, but not in the 25 per cent lowest ranking countries. However, China ranked much lower than all Western European countries and the U.S.; which all ranked above 40. In other words, according to the threshold I set, China was not a very low ranking country in IM. However, compared to its Western counterparts, it is.

To conclude: X = relatively low level of IM and high level of PS in China.

Nigeria ranked 96 in government stability in the dataset of the ICRG with an average score of 7.7. This means that Nigeria was among the fifty per cent lowest ranking countries in terms of government stability, but not in the 25 per cent lowest ranking countries. In other words, according to the threshold I set, Nigeria was not a very low ranking country in PS. According to the WGI Nigeria ranked 209 and is therefore within the 25 per cent lowest ranking countries in terms of “Political Stability and Absence of Violence/Terrorism”. The lower scores for Nigeria in the WGI dataset are caused by very low scores on human rights and low scores on security risks. Since security threats is an important indicator for doing business, I classify Nigeria indeed as a country with a low level of PS based on the analysis of both the ICRG and WGI databases.

According to the rule of law indicator of the WGI Nigeria ranked 195 out of 214 countries. That means that Nigeria was indeed among the 25 per cent lowest ranking countries in terms of IM.

Although there is no accurate source on the market shares of Chinese and Western firms in the various economic sectors in Nigeria, it is clear that the success of Chinese firms differ much per economic sector. The oil production in Nigeria is for example mainly in the hands of six U.S. and European multinationals in JVs with the Nigerian National Petroleum Corporation (NNPC), namely: Shell, Mobil, Chevron, Total, Agip, and Texaco. However, Chinese firms are big in the oil and gas infrastructure in Nigeria, but also in railways, road construction and telecom infrastructure. The Chinese firms Huawei and ZTE together captured the majority of the telecom infrastructure market since they first arrived in Nigeria about two decades ago. What role does the institutional distance play in the success of Chinese telecom infrastructure firms in Nigeria?

To conclude: Y = Chinese (telecom) infrastructure firms benefit from the lows level of IM and PS in Nigeria and are taking over successfully from Western firms in Nigeria.

The next sub-sections provide an analysis of the suggested four paths in the causal mechanism based on the four hypotheses derived from the literature, namely: 1) disadvantages become advantages, 2) late-comer position, 3) government support, and 4) not much competition from advanced market firms.

7.4.2. Disadvantages become advantages

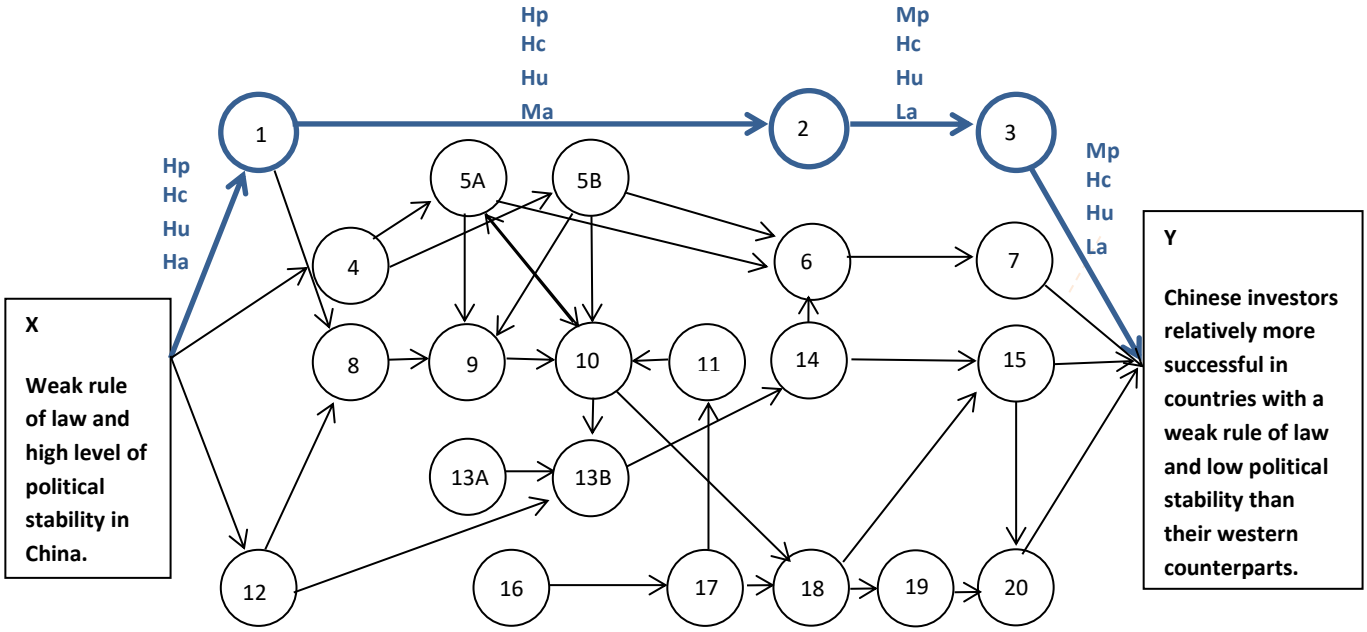
Prof. Wang's suitcase gets checked thoroughly upon arrival at Lagos airport. I can just pass the security without my suitcase being checked. When the security is done with my friend's luggage, Prof. Wang tells me that this is a standard procedure for Chinese travelers in Africa and that he is used to it. 'You know, we Chinese always carry a lot of cash with us and the security knows that. Plus we Chinese we do not want to make any trouble. So if a security officer asks for money, Chinese travelers usually give money in order to avoid a scene. They know that and therefore they always pick us.' I asked him if he gave the security guard some money. 'No of course not, I have travelled to many African countries before and I know what is going on.'

What is it about "having experience with operating in challenging institutional conditions in China" that can cause Chinese firms to be more successful in host countries with challenging institutional conditions and low PS than their Western competitors? A popular thesis found in the literature on the use of informal contracts states that: when formal institutions fail, personal relations become more important (Birkenbach & Liu, 2012; Tamilina & Tamilina, 2012). "Failing institutions" in China and Nigeria are observed as (relatively) low levels of rule of law. Morck et al. (2008) argue that the discomfort of many Chinese executives with contractual arrangements may be an understandable response to judicial inefficiency in China, where free market institutions remain a work-in-progress. Morck et al. explain that Chinese firms' expertise in managing complex markets at home actually

make them more capable than their Western counterparts 'of dealing with burdensome regulations and navigating around the opaque political constraints' in host countries with a weak rule of law (2008: 346). In this section I explore the existence of the empirical fingerprints that I expect to find if this thesis holds, namely:

1. China is in 25% lowest ranking countries with regards to enforcing contracts.
2. Senior managers of Chinese telecom infrastructure firms state that they rely more on informal contracts than on formal contracts in less-advanced markets.
3. Local business persons state that informal contracts are more important than formal contracts in Nigeria.

Figure 35 Causal mechanism highlighting the role of disadvantages that become advantages



Empirical fingerprint 1: China belongs to the 25 per cent lowest ranking countries in terms of enforcing contracts.

The **prior confidence** in this theoretical hypothesis is **high**: China has a relatively low level of rule of law.

The level of **theoretical certainty** of this piece of evidence is relatively **high**; meaning that I will significantly downgrade my confidence in the hypothesis if I do not find this evidence.

The **uniqueness** of this evidence is **high** too. If I find that China is indeed ranking very low in terms of enforcing contracts, then this confirms that China has no credible legal system and that the use of formal contracts is difficult in China.

The **accuracy** of the data is **medium**. I am using the Ease of Doing Business Ranking from the World Bank. The yearly Ease of Doing Business report from the World Bank has a long record of being reliable. However, the recent statement from the World Bank's chief economist, Paul Romer, regarding unfair and misleading methodological adjustments made a major dent in the image of the World Bank's report and the trustworthiness of its methodology (Woody, 2018).[11] In order to make it right, Mr. Romer has announced to recalculate the national rankings of business competitiveness going back to at least four years. The last major changes in the methodology and parameters of the EoDB rankings were done under the watch of Romer's predecessor Kaushik Basu. Mr. Basu was World Bank's chief economist from 2012-2016. In order to be safe I look at the ranking of China in 2007 (the earliest available EoDB ranking for "enforcing contracts) and 2011 (the last ranking before Mr. Basu became the Chief Economist of the World Bank).

In 2007, China ranked 63 out of 175 economies in terms of enforcing contracts and in 2011 China climbed up to rank fifteen out of 183 economies. This means that in 2007, China belonged to the fifty per cent high ranking economies in terms of enforcing contracts and in 2011 it belonged even to the 25 per cent highest ranking economies.


To conclude, I found **disconfirming** evidence for empirical fingerprint 1.

Since the theoretical certainty of this piece of evidence was high, it would make sense to reject the hypothesis that Chinese firms have an advantage over Western firms in host countries with a low level of IM due to their experience with using personal relations instead of formal contracts. However, the data shows that China has improved much in terms of enforcing contracts from 2007 and 2011 – a period of just four years. It is therefore plausible that China ranked much lower in terms of enforcing contracts during the period from when Huawei and ZTE were established (1987 and 1985) until when they first entered the Nigerian market (1999-2002). The EoDB does not provide data for this period, but the importance of *guanxi*– the system of social networks and influential relationships which facilitate business and other dealings – in Chinese business culture

[11] http://www.businessinsider.de/world-bank-says-it-unfairly-influenced-business-rankings-and-will-redo-2018-1?r=US&IR=T.

could be attesting for this historical low level of enforcing contracts in China. Therefore, I will continue exploring evidence for the preference of Chinese managers for informal contracts over formal contracts and the necessity of using informal contracts in Nigeria.

After passing two speed bumps, heavily armed security guards and a tanker – which belong to the neighboring U.S. Consulate – we arrive at the gate of the Netherlands Trade and Investment Office in Lagos. A security guard checks our passports and makes a phone call to check if we are indeed expected. We now enter what looks like the garden of a desolated villa and pass an empty swimming pool on our way to a newly build extension of the main house. A local receptionist appoints us a table in the middle of the room before she calls Mr. Westerhuis – the Senior Economic Advisor. Mr. Westerhuis is interested in our research and immediately starts talking after a short introduction round:

> *Doing business in Nigeria is often like the 'Wild West' of America back in those days: it offers opportunities, but it is also a fighting market. This also counts for the telecom market. Everything is negotiable. And it is all about your networks. All the big companies here have influential people in their boards. And when you think of it, this is actually not so different from the Netherlands, China or whatever country. But in the Netherlands or China it would not be called corruption, but lobbying capacity.*

Empirical fingerprint 2: Senior managers of Chinese telecom infrastructure firms state that they rely more on informal contracts than on formal contracts in Nigeria.

The **prior confidence** in this theoretical hypothesis is **medium**: much has been written about the importance of *guanxi* in Chinese business culture (see for example Wong & Chan, 1999). However, so far the use of *guanxi* by Chinese firms in Nigeria has not been studied.

The level of **theoretical certainty** of this piece of evidence is relatively **high**.

The **uniqueness** of this evidence is **high**. If

The **accuracy** of the data is **low**. I rely on self-report.

The PR Manager of Huawei in West Africa believes that *guanxi* relationships are important in every country. 'Even in Europe' [smiles]. He does not believe that the success of Chinese firms in challenging African markets has anything to do with Chinese firms' expertise in networking.

However, personal networks have been repeatedly mentioned in the interviews I had with senior Chinese managers in Nigeria as an important factor for the success of Chinese firms in Nigeria – although not in the form of replacing formal contracts. It has more to do with good connections within the Chinese community in Nigeria. For example, Mr. Hu Jiego – one of the most promising Chinese business persons in Nigeria– explains that the success of the Chinese textile firms in Nigeria can be explained by the fact that they are very well organized via a textile association (personal communication, 11 January, 2016). Mr. Shonibare, the MD Investment Banking, United Capital Plc in Lagos – a leading African investment banking and financial services group – also noticed that Chinese investors do not make use of their services but instead 'come in via Chinese firms' (personal communication, 8 January, 2016).

These observations during my visit of a Chinese hostel in Lagos illustrate the close personal connections among Chinese workers in Nigeria:

Late in the afternoon on January 5, we are picked up by "George" and his Nigerian driver. George is one of Prof. Wang's teaching colleagues in Lagos. They met about one and a half year earlier at the training program for the teachers of the Confucius Institute in China. George and his colleagues live in a Chinese guesthouse in Lagos and the moment they heard that their friend Prof. Wang is in Lagos they invited us over for dinner at the guesthouse. When we arrive at the guesthouse a Nigerian security guard checks who is in the car and then opens the security gate for us. We follow George upstairs where we enter a common room with a large TV corner, a large round table and a bar with behind it an entrance to the kitchen. The table is set for eight persons and the one delicious Chinese dish after the other is brought in from the kitchen by a Nigerian girl. Busy sounds come from the kitchen and I see about two Nigerian and two Chinese men in the kitchen. The owner of the guesthouse – a Chinese lady who lives in Nigeria since 1989 – invites us to sit on the large couch in the TV corner and gives us a paper cup with tea. She is very eager to hear what we are doing in Lagos and to share her life story with us. It is not clear to me who is related to the woman in terms of family and who is working at the guesthouse. Everyone refers to her as "aunt" and to each other as "friend" or "older brother". When we are sitting around the table and everyone introduces himself it becomes clear to me that all the men around the table are in Lagos for work. The teachers live in the guesthouse during their four year stay in Nigeria and many Chinese managers who come to

Nigeria for a shorter period of time (about 2 months) stay in the guesthouse too. One of the teachers cooked the fish. They all agree that he is a great cook. They cook, eat and play (cards, computer games, etc.) together, creating a "home" far away from China.

During an interview with a senior manager of ZTE in Abuja the manager explains: 'There is a large Chinese community in Nigeria and we support each other. You can see how many Chinese are here during the basketball and football tournaments we organize in Abuja; employees from many different Chinese companies play together' (personal communication, 12 January, 2016). ZTE cooperates closely with the China Civil Engineering Construction Corporation (CCECC) providing information and communications system equipment for its railways. The ZTE manager explains that about 30 years ago the German company Julius Berger did most of the infrastructure in Nigeria, but that nowadays CCECC took over the leading position. Their strong network among Chinese firms in Nigeria could be part of their success story.

A few days after our meeting with the manager of ZTE in Abuja we meet two Chinese engineers from CCECC in the swimming pool of a five-star hotel in Abuja. Like us, they were taking a break and looked for a way to escape the heat – it is close to forty degrees Celsius in Abuja these days. They approach my friend Prof. Wang and soon have a lively conversation in the pool about their work, our research and life in Abuja. At the end of the afternoon we exchange numbers and they invite us for the next day to have dinner at their home. The two engineers live together with their boss and another employee in a villa in a quiet area just outside the city.

This is in great contrast with the life of Mr. Buitelaar – a Dutch expat who is the MD of Smile in Nigeria – a small specialized South African telecom company that is a customer of Ericsson, Huawei and ZTE. Mr. Buitelaar lives alone in a spacious apartment along the river in a chic neighborhood just outside Lagos. He spends his time by –among other things – bargaining at the local markets, going out for dinner in restaurants and playing tennis looking for social interaction with the locals. He has Nigerian and international friends, but does not meet up regularly with other Dutch expats in Nigeria. It seems to be a Dutch trait to prefer to explore a new environment yourself rather than to learn from the experiences and make use of the networks fellow countrymen have built up already. I am happy that Mr. Buitelaar makes an exception for me and shows me the out and about in Lagos and introduces me to the MD of Ericsson.

There is something to be said for both strategies. On the one hand, Chinese expats are not likely to make the same mistakes as their fellow countrymen who arrived first and they can quickly immerge in the life of the new country. However, it could also be argued that their circle stays quite limited, while Dutch expats are not constricted by ready-made networks and can end up with a much more

varied local network. All in all it seems that Mr. Westerhuis and the PR manager of Huawei are right: personal networks are important everywhere and for everyone and all business persons engage in networking. However, some are better in networking than others and some have extraordinary networking skills... Meet Mr. Hu Jieguo:

Mr. Hu Jieguo postponed a few meetings in Lagos and flew straight to Abuja from Canada – where he visited his son– in order to be able to meet with us. Mr. Hu came to our hotel to pick us up and bring us to his hotel where he invited us for a dinner. He wears a bright orange T-shirt; no sign of fatigue. Mr. Hu studied hotel management in Canada, but his hospitality seems to come naturally. He is the Chairman of the West Africa Golden Gate Group with two hotels in Nigeria, two hotels in Liberia and one hotel in Ghana. The hotels are a success and presidents and government officials from various countries have lived in his hotels. Although the hotels are its main business, the Golden Gate Group is also involved in real estate, construction, production of construction materials, machinery and international trade. Mr. Hu is also the Deputy Director of the China-Africa Business Council. He sees hotels as a good and natural place to start communication between different cultures in order to reach a better understanding. The hotels are clearly only the starting point of his bridging project: on the back of his bright orange T-shirt is written "Press". Mr. Hu also publishes a newspaper in Chinese English and French.

Mr. Hu is an extraordinarily good networker and proudly tells us about his good relations with high officials in Nigeria and that he even has a direct communication line with the President of Nigeria since his been officially appointment Chief of the area he lives. He tells us how one day he was driven home from a dinner at his Golden Gate Hotel in Lagos by the Deputy-Inspector General of the police (he explains that in China this would be equivalent to the Deputy Minister of Police) – a good friend of his. His friend drove, and Mr. Hu was sitting next to him. When they were stopped by a police road block a police officer looked at both their faces and asked something. When his friend answered, the young policemen said shortly: 'No, I want to speak to the Master.' Mr. Hu said immediately: 'No, no he is the Master.' His friend was not amused and asked the police officer to show him his batch number. 'Tomorrow you will leave to a border post!' Mr. Hu could not stop laughing. Even when he tells me the story now he laughs out loud (personal communication, 11 January, 2016).

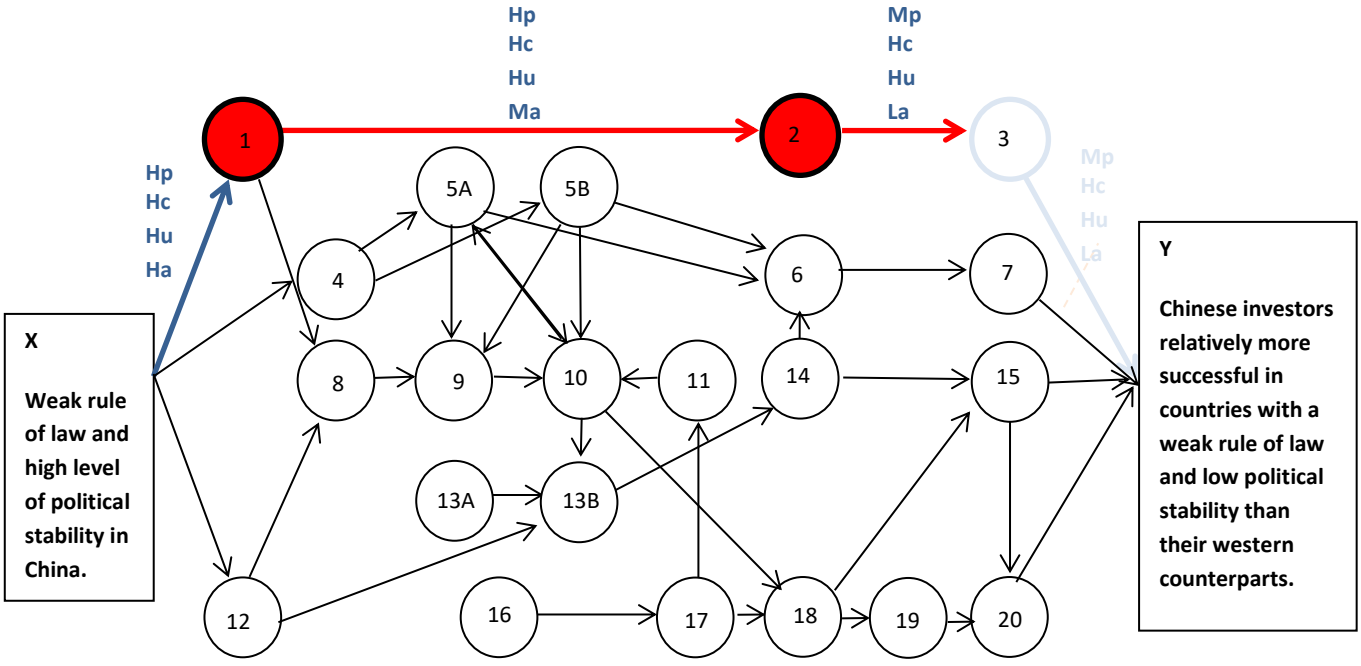
Of course, it is helpful that you know the Deputy-Inspector General of the police of Nigeria when you arrive at a road block right after a party. However, it is not necessarily typical for Nigeria. For example, a good friend of mine from a rich city in Germany told me that the head of police who

lives in his area arranged that there are no alcohol-controls between the city center and the area he and his rich friends live. Connections are important everywhere.

To conclude, I found **disconfirming** – although not strong (since I rely on self-report) – evidence for the second empirical fingerprint. Therefore, I will not continue with exploring the third proposed empirical fingerprint.

To conclude: I reject the hypothesis that having experience with operating in challenging institutional conditions in China is giving Chinese telecom firms an advantage in Nigeria compared to their Western counterparts in terms of adaptation to the use of informal contracts.

Figure 36 Evidence hypothesis 1



7.4.3. Late-comer position

The Chinese cultural counselor in Abuja invited my friend Prof. Wang and me for a hot pot dinner in the Golden Gate hotel in Abuja. During our dinner he tells us about his experience with Nigerian pottery artists:

> *At a meeting with Nigerian pottery artists in Abuja, I showed them a ppt about 8.000 year old pottery from China. After the presentation the Nigerian artists asked me: Who influenced you? Who taught you that? Did the Europeans teach you that? Then they asked if they could do business by sending Nigerian clay to China. Some Nigerian artists – who had been to China –*

explained their colleagues that China has good clay and does not need Nigerian clay (personal communication, 11 January, 2016).

Chinese investors are considered to be late-comers on the African continent. They have been preceded by Arab, European and American traders, conquerors and investors. Relatively little is known about China in the former European colonies and the Chinese government puts much effort in building a positive image of China on the African continent.

While being a late-comer on the market is usually perceived to be a disadvantage, it could also be an advantage for Chinese firms in Africa as suggested by Morck et al. (2008). What is it about "internationalizing later than their Western competitors" that can cause Chinese firms to be more successful than their Western competitors in host countries with challenging institutional conditions and low PS?

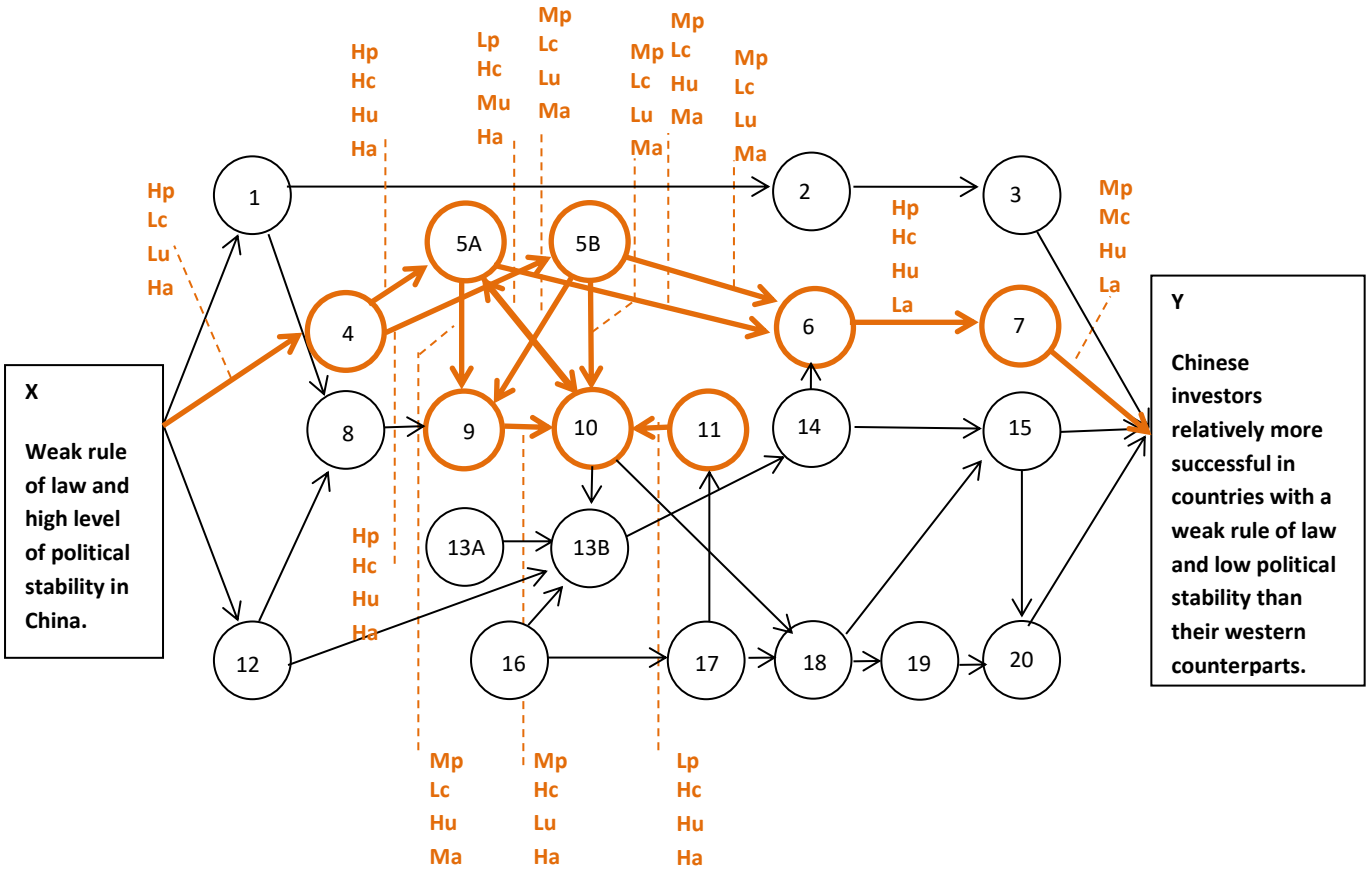
"Internationalizing later" can be defined in two different ways. Firstly, we could look at the time in between when the firm was established until it first started to invest abroad. Secondly, we could look at the time between the moments when the Western competitors of Chinese firms started to invest abroad and when the Chinese firms started to invest abroad. When we focus on the first definition, Chinese firms actually internationalized much quicker than most of their Western competitors. This was due to – among other things – the opportunity they had to learn from Western firms that invested in China because of supportive policies from the Chinese government (Nakai & Tanaka, 2010) – also referred to as the springboard theory (Luo & Tung, 2007). However, compared to their Western competitors, Chinese firms are still fairly new on the international market; and might make other choices because of that. In other words, the late-comer position of Chinese firms is expected to be observed by a large difference in years between when Chinese firms and their Western competitors entered the international market.

In this section I explore the existence of the empirical fingerprints that I expect to find if the thesis holds that Chinese firms are more successful in Nigeria than their Western competitors because of reasons that are linked to the late-comer position of Chinese firms. These fingerprints include:

1. There are at least ten years between when Ericsson internationalized and the moment Chinese firms internationalized.
2. A) Chinese firms use less advanced technology than Ericsson.
   B) Chinese firms use less advanced management systems than their Western competitors.
6. Customers from telecom infrastructure firms in Nigeria declare that Chinese firms are most often cheaper than Ericsson in tenders.
7. Customers from telecom infrastructure firms in Nigeria state that they prefer Chinese firms due to their low costs.

9. The market shares of Chinese telecom infrastructure firms are relatively low in the U.S. and Europe.
10. Chinese firms' official internationalization strategy is to target less-advanced markets.
11. Hardly any new tenders for telecom infrastructure projects in advanced markets since Chinese firms started to invest abroad.

Figure 37 Causal mechanism highlighting the role of the late-comer position



<u>Empirical fingerprint 4: There are at least ten years between when Ericsson internationalized and the moments when Huawei and ZTE internationalized.</u>

The **prior confidence** in this theoretical hypothesis is **high**: Much has been written about the latecomer position of ZTE and Huawei (see for example Fan (2011)).

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **high**: If I find that ZTE and Huawei started internationalizing ten or more than ten years after Ericsson, then ZTE and Huawei are indeed latecomers on the international market.

The **accuracy** of the data is **high**: the data is retrieved from the company websites and can easily be verified.

Ericsson opened its first sales office in the U.S. as early as 1902 (Ericsson, 2018).

Huawei's internationalization process started in 1996 that resulted in its first overseas office in Russia in 1997 (a JV) (Wu & Zhao, 2007).

ZTE established its first overseas office in Islamabad (Pakistan) in 1998 (ZTE, 2012).

 To conclude, I found **confirming** evidence for the fourth empirical fingerprint.

Mr. Hu – a successful Chinese business man in Nigeria – remembers how the Nigerian president kept asking him: 'Please make sure your fellow countrymen stop flooding us with these cheap products.' Until one day when the President said it again during an important meeting with many more people around the table and Mr. Hu decided to reply to him: 'When I studied in Canada my dad gave me some money every now and then if he was happy with my results. Then I went to a restaurant and ordered a steak. The other days I ate hamburgers. [Pause] In China it is the same: we have steak and hamburgers, you can choose.' The President laughed and said: 'You nasty man.' Since that time nobody asked him again about cheap Chinese products in Nigeria (personal communication, 11 January, 2016).

 Empirical fingerprint 5A: ZTE and Huawei are using less advanced technology than Ericsson.

The **prior confidence** in this theoretical hypothesis is **medium**: the quality of Chinese products is under much scrutiny globally. While some praise the quality of products from Huawei and ZTE (Gibbs, 2018; Rutnik, 2018; Segan, 2018) others criticize it.

The level of **theoretical certainty** of this piece of evidence is **low:** When I find that the quality of the technology of Huawei and ZTE is currently similar to or better than the technology of Ericsson I would need to verify if that is the case because the technology of Huawei and ZTE recently improved or if it has been similar to the technology of Ericsson from the moment they started to operate abroad.

The **uniqueness** of this evidence is **high.**

The **accuracy** of the data is **medium**: I use interview data that I triangulate with newspaper articles and other public sources.

The Chief Technology Officer (CTO) from Smile in Nigeria told us that there are no differences in the quality of the technology of these three companies. 'Technology-wise almost everyone is at the same level. Today I might be ahead, the other day… It's like a race' (personal communication, January 6, 2016). 'Looking at the products coming from Huawei now, for instance, they are equal or better and they even have products which Ericsson does not have today' (personal communication, 6 January, 2016). The MD of Ericsson in Lagos did also not claim that Ericsson offers better quality than Huawei and ZTE. When we asked him about the advantages of Ericsson in Nigeria compared to Huawei and ZTE he rather referred to an image of quality based on past success: 'I think the brand name of Ericsson still resonates with quality' (personal communication, 8 January, 2016). Counterpoint Research analyst Peter Richardson even goes so far to state that: 'Huawei is the biggest driver of the standards of 4G and 5G' (in Wang, 2017).

To conclude, currently, Huawei and ZTE offer similar or better – rather than lower - quality products than their competitor Ericsson.


To conclude, I found **disconfirming** evidence for empirical fingerprint 5A.


Empirical fingerprint 5B: ZTE and Huawei are using less advanced management systems than Ericsson.

The **prior confidence** in this theoretical hypothesis is **medium**: Child & Rodrigues (2005) point to studies that conclude that developing country multinationals generally suffer from significant competitive disadvantages compared to MNEs from advanced markets in terms of outdated

technology and heavy reliance on expatriates caused by underdeveloped personalized management systems. Furthermore, they argue that the distinctive Chinese styles of management could prove to be a handicap for the management of overseas affiliates (Child & Rodrigues, 2005). However does this also (and still) count for Huawei and ZTE?

The level of **theoretical certainty** of this piece of evidence is **low:** When I find that the level of management at Huawei and ZTE is currently similar to the level of management at Ericsson I would need to verify if that is the case because the level of management at Huawei and ZTE recently improved or if it has been similar to the management level at Ericsson from the moment they started to operate abroad.

The **uniqueness** of this evidence is **high.**

The **accuracy** of the data is **medium**: I use interview data that I triangulate with newspaper articles and other public sources.

Kevin, the PR manager at Huawei West Africa, tells us that Huawei is still trying to improve itself compared with most of the Western companies. 'We are learning from IBM, the giant company in the industry' (PR manager at Huawei West Africa, personal communication, 6 January, 2016).

In an interview with Xinhua News Agency, Mr. Ren Zhengfei – the founder and chief executive officer of Huawei – spoke about the inexperience of Huawei when it just started to invest abroad:

> When we started venturing into overseas markets, we knew nothing and had no idea of what project delivery was. We asked engineering consultants all around the world to help us. The first step was to study conscientiously so as to graduate toward a standardized management structure ("Huawei boss shares," 2016).

Since 1997, Huawei hired leading consultancies such as IBM, the Hay Group, PricewaterhouseCoopers (PwC) and the German *Fraunhofer-Gesellschaft* (FhG) to improve its management systems in order to comply with international standards (Huawei, 2014; Zhang & Pierre, 2014). In 1997, the company introduced a new hiring and salary system from HAY Group, improved its accounting system and budget system with help from PwC and started improving their production quality and efficiency and automate the logistics system with support from FhG (Huawei, 2014; Zhang & Pierre, 2014). From 1998-2003, Huawei introduced and customized an integrated product development system and an integrated supply chain with support from IBM

(Huawei, 2014; Zhang & Pierre, 2014). In 2007, the company applied customer relationship management from Accenture (Zhang & Pierre, 2014).

Zhang and Pierre (2014) argue that Huawei actively improved its management systems in order to comply with the requirements of some top international network operators (e.g. British Telecom and Vodafone Group) in order to achieve contracts with big international clients. These efforts have been rewarded: in 2005, Huawei signed a strategic cooperation agreement with Telefónica, became an equipment supplier of British Telecom, signed a global procurement framework agreement with Vodafone Group and became the preferred telecommunications equipment supplier for the Vodafone Group's global supply chain (Larçon, 2009; Zhang & Pierre, 2014).

In 2003, ZTE also signed agreements with Accenture and IBM with the aim to improve its management systems to support ZTE's internationalization process (ZTE, 2003a; ZTE, 2003b).

Huawei started improving its management systems with the help of leading U.S. and U.K. consultancies before it started to operate in Nigeria in 1999. However, at that time it was not at the same level of Ericsson yet. Huawei's management systems officially met the standards of leading international carriers since 2005. ZTE has invested in its management systems later; however, ZTE seems to have quickly caught up with Huawei since it became the global asymmetric digital subscriber line (ADSL) supplier for France Telecom (now Orange) in 2005 (ZTE, 2005).

 To conclude, I found **disconfirming** evidence for empirical fingerprint 5B.

 <u>Empirical fingerprint 6: Customers from telecom infrastructure firms in Nigeria declare that Chinese firms are most often cheaper than Ericsson in tenders.</u>

The **prior confidence** in this theoretical hypothesis is **high**.

The level of **theoretical certainty** of this piece of evidence is **high.**

The **uniqueness** of this evidence is **high**.

The **accuracy** of the data is **low**: I am relying on information that was given to me during interviews.

The CTO of Smile Nigeria told us during an interview:

> It is all a price game at the end of the day. What happens typically in the market… You will find very few operators who have used the Chinese vendors as their first vendor. Generally people tend to use Ericsson, or Nokia or Alcatel-Lucent as the first party. Then the Chinese are getting in as a second vendor. When the things get commoditized, when the operator has settled down, then he is just multiplying his network. In that stage, these guys [Chinese firms] come in at much lower prices, because at that stage the risk is much less. The initial risk is higher. When we were setting up our network, we had three vendors in the race. Now finally, for various reasons – of which price was a major one – we did not take Huawei finally. Alcatel-Lucent and Ericsson won the race. Even on price (personal communication, January 6, 2016).

A senior manager of MTN – the largest telecom operator in Nigeria – confirms that there are no quality or price differences between Ericsson, ZTE and Huawei. He argues that the advantages of working with Chinese firms are that they are more flexible than the traditional telecom vendors: they are more willing to adapt to timelines, open to various approaches to revenue and willing to walk the extra mile. 'Although, the bigger they get – Huawei already took over from Ericsson – the more difficult it gets to negotiate with them' (senior manager MTN, personal communication, 8 January, 2016).

In short: in the beginning ZTE and Huawei were cutting the prices. However, the competition quickly moved their production to China and lowered their prices as well.

Currently there is no price difference between Chinese and Western vendors in Nigeria. Chinese firms win contracts with providers in Nigeria mainly based on their flexible attitude and patience.


To conclude, I found **disconfirming** evidence for the 6th empirical fingerprint and therefore there is no need to check empirical fingerprint 7.


Empirical fingerprint 9: The market shares of Chinese telecom infrastructure firms are relatively low in the U.S. and Europe.

The **prior confidence** in this theoretical hypothesis is **medium**: The European Commission threatened to ban ZTE and Huawei in 2013; however, in 2014 they had to drop the anti-subsidies

case due to too much division on the matter with the EU (see the next page and page 56 for more details).

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **low**: if I find that the market shares of Chinese telecom infrastructure firms are indeed relatively low in the U.S. and Europe, it does not necessarily mean that this is caused by the institutional and political context in China.

The **accuracy** of the data is **high**: I retrieve the data from various reliable news outlets and databases.

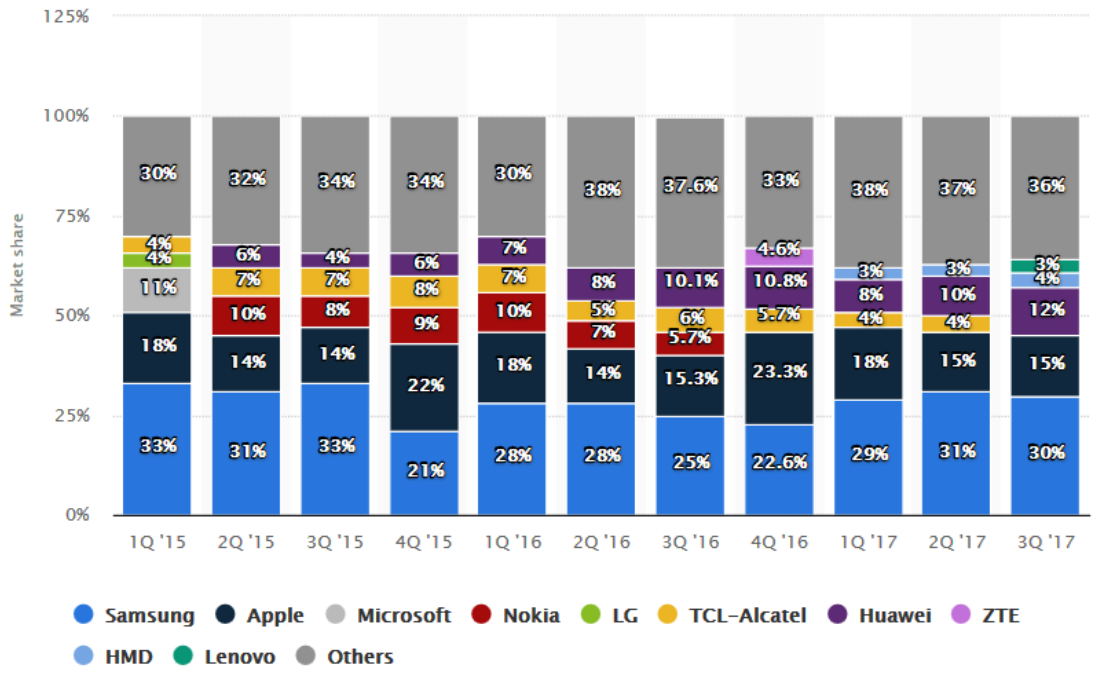
Europe

In 2013, the EU threatened with trade duties against Huawei and ZTE. An internal EU report accused the Chinese firms of dumping cheap telecom equipment on the European market due to the export rebates that Huawei and ZTE receive from the Chinese government (Bilby, 2013). However, in October 2014 the EU dropped the anti-subsidies case against the two Chinese telecoms companies because of too much division on the matter within the EU: leading European telecom companies such as Alcatel-Lucent, NSN and Ericsson did not want a trade war with China; southern European companies were afraid of China's threat to block European wine imports as a countermeasure; and individual member states made separate deals with China (Oliver, 2014).

As a matter of fact, Europe has become Huawei's most successful overseas markets (Wang, 2017). Huawei has long-time partnerships with all the main carriers in Western Europe (Orange in France, Telefónica in Spain, Telecom Italia in Italy, Deutsche Telekom in Germany, British Telecom in the U.K., etc.). Building telecom stations for important European carriers gave Huawei an advantage on the European mobile phone market (see Table 15). Huawei's share in the European mobile market is steadily increasing. First Huawei took from the shares of Telephone Communication Limited and Nokia and now also from Apple and Samsung. Huawei is the top smartphone seller in Portugal and the Netherlands and the second largest in Italy, Poland, Hungary, and Spain (Cendrowski, 2017).

Huawei has overtaken Apple and is the second largest smartphone maker by shipment in Finland, Italy, Poland and Spain.

Figure 38 **Mobile phone market share in Europe by vendor, 2015-2017**



Source: Statista, 2018

U.S.

ZTE is also making inroads in Europe, but not as fast as Huawei. However, ZTE is much more successful in the U.S. market than Huawei. Huawei cannot use the same strategy as in Europe since Huawei does not have strong relationships with the "big four" in the U.S., namely: Verizon, American Telephone & Telegraph (AT&T), T-Mobile and Sprint. These companies are staying away from Huawei and ZTE after a 2012 congressional report said their hardware could be used by the Chinese government for spying purposes. Therefore, no major American carrier uses equipment from Huawei or ZTE in its network (Moritz, Gurman & Shields, 2018). However, all four carriers have been selling phones from the two suppliers in the U.S. for several years.

ZTE has been more successful than Huawei (with a 12.2 per cent mobile market share in 2017) in the U.S. because ZTE adapted more to the U.S. market. ZTE's growth can be attributed to their unique business model, which is referred as: America China Worldwide (ACW) (Richardson, 2013). As the order of the acronyms suggests, ZTE prioritizes the U.S. market over even its home market. While China is the largest mobile phone market in general, the U.S. is by far the largest market for smart phones over $500 dollar.

However, in January 2018, both Verizon and AT&T have dropped their plans to sell the new Huawei phones; under renewed pressure from the U.S. government (Bartz, 2018; Moritz et al., 2018). Until April 2018, ZTE did not receive the same level of pushback from the U.S. government as Huawei did. Until March 2018, AT&T and Verizon were still selling ZTE phones via their websites while not selling a single Huawei phone. In April 2018, the U.S. Commerce Department reactivated a sanction that had been settled before in March 2017, which banned any American businesses from selling products or services to ZTE for the next seven years. Following the order, ZTE had to cease business (Jiang, 2018). However, much to anyone's surprise, U.S. President Trump announced on May 13 that he was working with Chinese President Xi Jinping to find a way to get ZTE back into business, fast.

Huawei is large in Europe and ZTE's mobile market shares in the U.S. had been increasing steadily until the uproar in April 2018. Furthermore, the fact that Huawei and ZTE do not sell telecom infrastructure equipment on the U.S. market is not related to the latecomer position of the Chinese firms, but to geopolitical interests.

 To conclude, I found **disconfirming** evidence for empirical fingerprint 9.

 Empirical fingerprint 10: Chinese firms' official internationalization strategy is to target less-advanced markets.

The **prior confidence** in this theoretical hypothesis is **low**: ZTE's business model is ACW: America, China, and Worldwide.

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **medium**: it could be an old story.

The **accuracy** of the data is **high**: interview data triangulated with data from public reports (annual reports etc.) regarding the order of moving to host countries.

As mentioned in the results for fingerprint 9, the U.S. is ZTE's target market.

On a country level, Huawei's target markets are: Russia, Thailand, Hong Kong, Singapore, India, Pakistan, Indonesia, Malaysia, Brazil, Egypt, Saudi Arabia, Nigeria, Kenya, Zimbabwe and Bulgaria (Huawei, 2004). However, Huawei started to focus on the European market already in the year 2000 with the establishment of an R&D center in Stockholm. The establishment of research centers abroad is recognized as 'a classis IBM technique' that helped Huawei to get closer to potential new customers (Ante, 2012). The European market is currently Huawei's largest market outside China.

ZTE is mainly focused on the U.S. and Huawei's largest market outside China is Europe.

 To conclude, I found **disconfirming** evidence for empirical fingerprint 10.

 <u>Empirical fingerprint 11: Hardly any new tenders for telecom infrastructure projects in advanced markets since Chinese firms started to invest abroad.</u>

The **prior confidence** in this theoretical hypothesis is **low**: constant upgrade of networks.

The level of **theoretical certainty** of this piece of evidence is **high.**

The **uniqueness** of this evidence is **high.**

The **accuracy** of the data is **high**.

Both the U.S. and Europe have already dense telecom infrastructure networks. However, the more their economies rely on devices that are online that are dealing with increasingly large quantities of data, the more data volumes and guaranteed quality connections they need. In order to keep up with the demand for higher capacity, telecom companies around the world (including Huawei and ZTE) team up to continuously upgrade the networks. From the 1980s until now we have seen 4 "generations" of wireless telephone technology: from analog telecommunications standards to

superfast broadband internet access and the development of 5th generation wireless networks (5G) is currently being led by several companies.

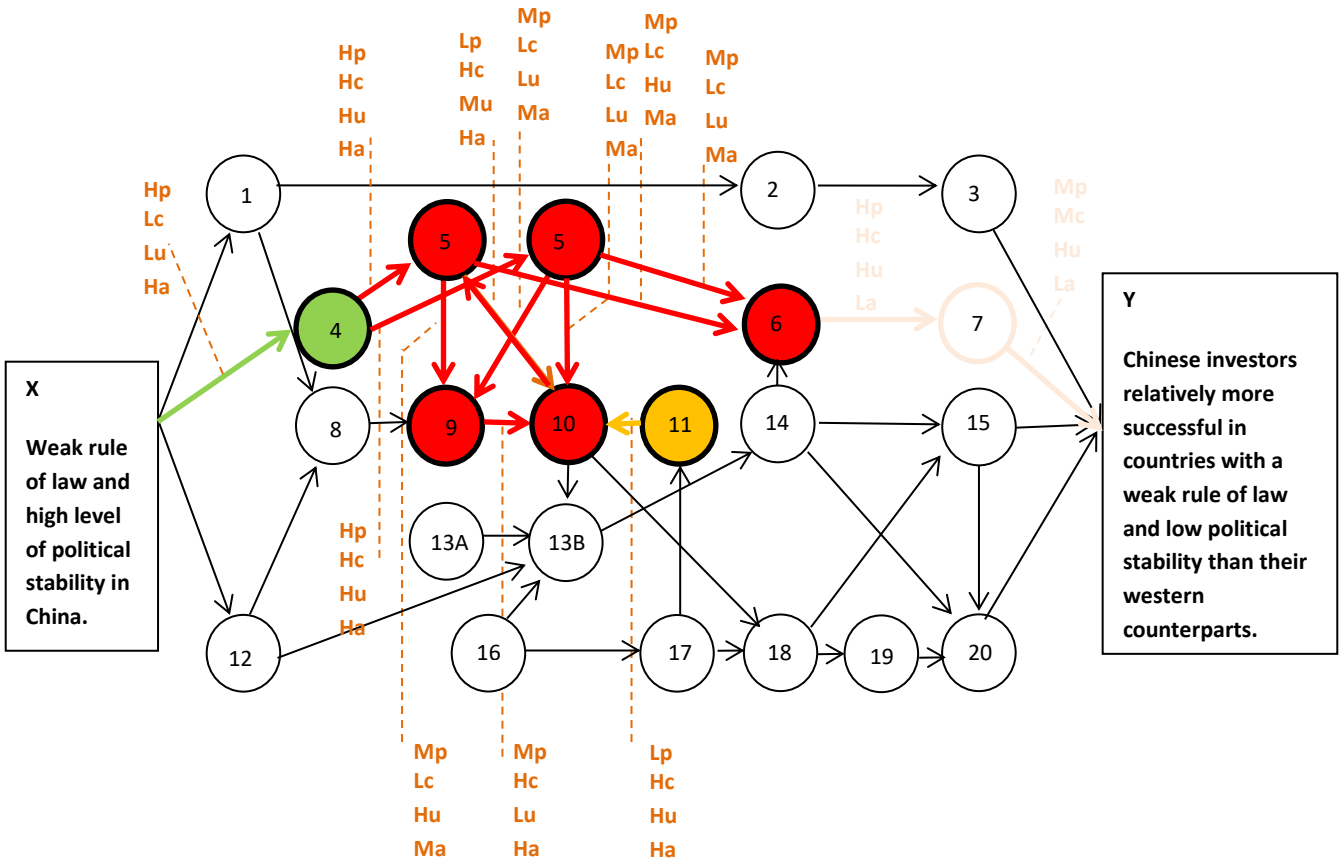
In December 2017 the European telecommunications ministers agreed on a joint roadmap for the development of 5G networks (Boni, 2018). The Federal Communications Commission of the U.S. announced in February 2018 that it plans to launch new auctions of high-band spectrum starting later in 2018, to speed the launch of next-generation 5G networks (Shephardson, 2018). Due to the 2012 congressional report U.S. companies are not allowed to use hardware from Chinese telecom equipment companies. However, many countries allied to the United States do not share Washington's security concerns. Huawei has signed 25 MoUs - pre-cursors to potential commercial contracts - with telecom operators worldwide; including: Britain's BT, BCE, France's Orange Germany's Deutsche Telekom and global player Vodafone (Auchard & Jiang, 2018). 5G is planned to be commercially available worldwide by 2020.

In short: Due to an update of the telecom wireless telecoms networks worldwide to the next generation (5G) there are many new tenders for telecom infrastructure projects expected in the U.S. and Europe from about 2018-2019 onward. However, at the time of my fieldwork in January 2016 the statement was true that the markets in the U.S. and Europe were matured.


To conclude, I found **somewhat confirming** evidence for the 11th empirical fingerprint.

To conclude: I reject the hypothesis that their late-comer position is giving Chinese telecom firms an advantage in Nigeria compared to their Western counterparts.

Figure 39 **Evidence hypothesis 3**



7.4.4. The role of the Chinese government

During our meeting with the PR manager of Huawei West Africa I do not have to raise the question about the role of the Chinese government, because the PR manager mentions it himself:

> *Every year I fly back to Shenzhen to the headquarters to have a global PR meeting. You have to know that we have offices in 170 countries so every year we have about hundreds of PR people flying back to the headquarters for this meeting. And the Chinese PR people will always complain about the same thing: "oh we have been asked so many times by the Western media about our relationship with the Chinese government: do you receive special support from the government?" We are getting quit tired of this question. Only the PR manager in the U.K. does not complain, because there they know that it is not true (PR manager Huawei West Africa, personal communication, 6 January, 2016).*

European firms complain that their Chinese competitors are outcompeting them in Africa because of the extraordinary support these Chinese firms receive from the Chinese government. For example, the German construction company Julius Berger was the most favored infrastructure company in securing both states and federal projects in Nigeria until Chinese construction companies arrived. Furthermore, since the internationalization of Huawei and ZTE most other telecom infrastructure firms are out of competition on the African continent. European businesses have been asking their respective governments for more support in order to stay competitive.[12]

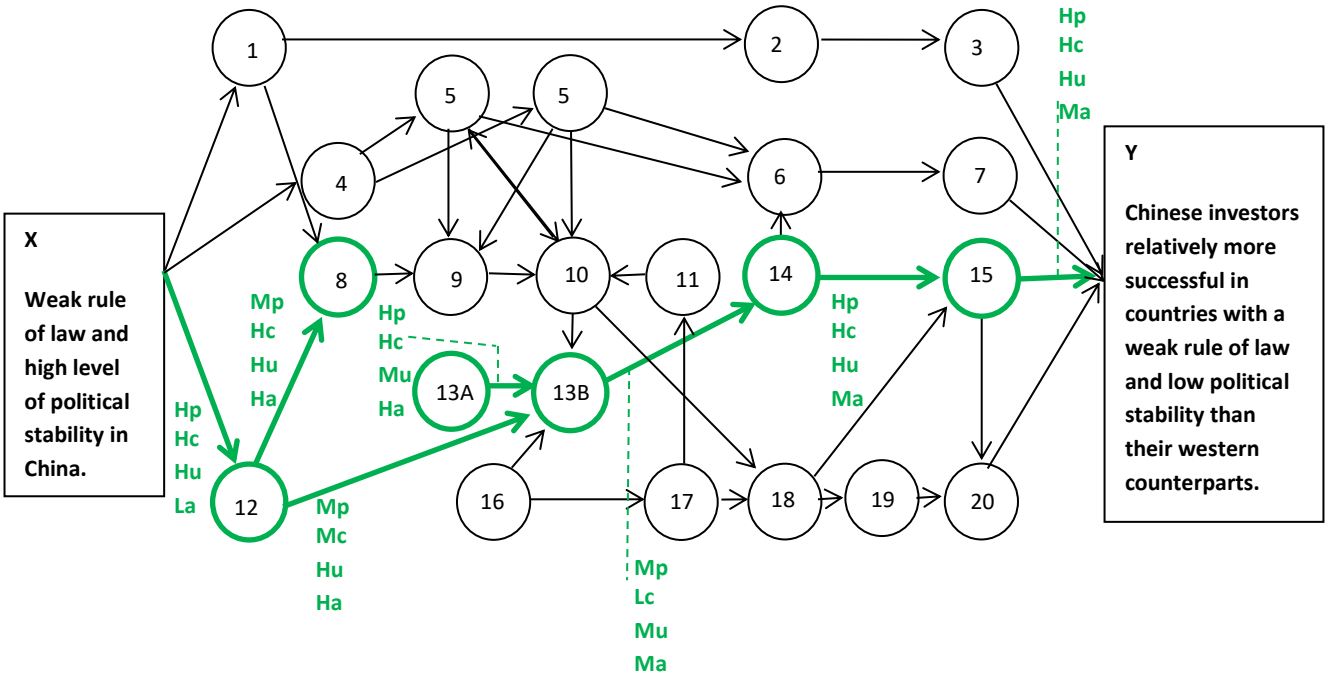
What is it about "the role of the Chinese government" that can cause Chinese firms to be more successful in host countries with challenging institutional conditions and low PS than their Western competitors?

In this section I explore the existence of the empirical fingerprints that I expect to find if the thesis holds that Chinese firms are more successful in Nigeria than their Western competitors because of reasons that are linked to the role of the Chinese government. These fingerprints include:

12. Huawei and ZTE have close ties with the Chinese national government.
8. Investments from Chinese telecom infrastructure firms in advanced markets are blocked out of fear for Chinese political agenda.
13. A) China is importing large quantities of oil from Nigeria.
    B)There is an infrastructure-for-oil agreement between the Chinese and Nigerian government that includes telecom infrastructure.
14. Chinese telecom infrastructure firms receive financial support from the Chinese government for projects in Nigeria.
15. Chinese firms have some coping strategies that are not an option for Ericsson.

[12] From personal communication with representatives of the Dutch and U.S. embassies in Nigeria and a representative of the Ministry of Foreign Affairs in the Netherlands.

Figure 40 **Causal mechanism highlighting the role of the Chinese government**



According to Mr. Hu Jieguo, Chinese SOEs in Nigeria receive much support from the Chinese embassy and much financial support from the Chinese government. ZTE is hundred per cent SOE and Huawei is a bit less clear, but has also close relations with the government, according to Mr. Hu. Interestingly enough there is much competition between these two firms. 'They fight like dogs in Africa,' told Mr. Hu (personal communication, 11 January, 2016). Mr. Hu receives much critique from his Nigerian business partners about the fighting between these two companies.

Empirical fingerprint 12: Huawei and ZTE are SOEs.

The **prior confidence** in this theoretical hypothesis is **medium to high:** various sources come to different conclusions about the ownership of Huawei and ZTE; however, they most often assume a close link to the Chinese government.

The level of **theoretical certainty** of this piece of evidence is **medium:** If I find that Huawei and ZTE are officially not SOEs there could be still close links between the members of the board of the companies and the Chinese government.

The **uniqueness** of this evidence is **high**: If I find that ZTE and Huawei are SOEs, then there are per definition close links with the Chinese government.

The **accuracy** of the data is **high**: the data can easily be verified.

A state-owned enterprise is usually defined as a firm in which a state, a government or a public authority, holds at least 50.01 per cent of the firm‘s shares. Li & Cheong (2016) explain in length how the economic reforms in China have produced three types of state-owned enterprises, namely:

1. State-owned enterprises, state-owned corporations and state legal person joint ownership enterprises: Firms that are hundred per cent owned by the state;
2. State-holding enterprises: Firms of which the state owns more than fifty per cent of the firm’s shares, or has the highest ownership among the other minority shareholders;
3. State joint-ownership enterprises: Firms in which the state has a minority ownership and exercises no control.

These three types of SOEs are in line with the definition of SOEs (enterprises where the state has significant control through full, majority, or significant minority ownership) by the OECD (2015).

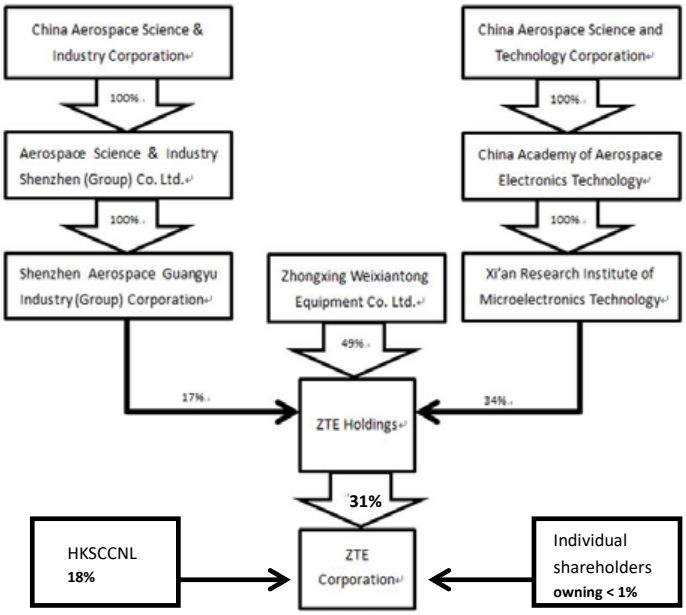
ZTE

According to Li and Cheong’s (2016) definition, ZTE Corporation is a state-holding company: the state – though a minority shareholder – is the largest shareholder among all shareholders, and it also exercises control through its holding company ZTE Holdings. The ownership share of State legal persons in ZTE Corporation has diminished largely in the past twenty years and fell from 68.8 per cent in 1998 to 33.88 per cent in 2015 – making it no longer a majority shareholder (Li & Cheong, 2016). However, state-enterprises still own 51 per cent of ZTE Holdings –the largest stakeholder in ZTE Corporation (see Figure 41). The other stakeholder that owns 49 per cent of ZTE Holding is a group of former employees of the original state enterprise. Li and Cheong argue that since ‘these “insiders” grew up with the Corporation, their “ownership” counts for much more than ownership as legally defined’ (2016: 258). Li and Cheong (2016) believe that these “insiders”– together with Hong Kong Securities Clearing Company Nominees Limited (HKSCCNL; the nominee company voting

with ZTE Holdings which appointed them) – would ensure that there would be de facto state ownership and little contest in board decisions. Furthermore, five of the nine Board members of ZTE Holding are state-appointed and ZTE Holding is represented on ZTE Corporation's Board by five directors (one third of the Board members of ZTE Corporation). All Board directors and senior managers have worked in management positions within the related entities of ZTE Corporation and its parent companies. Like other state enterprises, ZTE Corporation has a (mandatory) Party Committee. However, Li & Cheong (2016) found that the Committee in ZTE Corporation functioned far less intrusively than those in major state enterprises.

Li and Cheong (2016) also point out two indicators of ZTE Corporation's autonomy from state control, namely: exemption from repatriation of the after-tax profits to the state and the fact that ZTE is free to set its own prices.

Figure 41 Ownership Structure of ZTE Holdings (2016) and ZTE Corporation (2015)



Source: Adapted from Li & Cheong (2016)

Huawei

Huawei has a unique ownership structure; although we do not know all the details about it yet. What we do know is that the founder of the company — Mr. Ren Zhengfei — is its biggest shareholder; nevertheless he owns just 1.4% shares. The other 98.6% of the shares are owned by the staff of Huawei – also referred to as the "Union". Huawei says 80,000 of its 150,000 employees have joined the ownership plan (Sevastopulo, 2014). When an employee leaves, she has to sell her shares back to the company unless the person is too senior – having spent 10-15 years working for it – then she can sell the shares back to the company at a later moment in time. The members of

the Union vote every five years to pick 51 representatives, who then select the company's recently expanded board of seventeen directors.

Mr. Ren Zhengfei has veto right on major decisions; however he states that he has never used the power of veto, and instead prefers to talk to his senior management (Thomas, 2014). Mr. Ren rejects the idea of listing Huawei to the stock market stating and told Western journalists in London: '…[public] shareholders are greedy and want to squeeze every bit out of a company as soon as possible' (Thomas, 2014). He continued to state that not listing on the stock market is one of the reasons they have overtaken their competitors.

Both Huawei and ZTE are not listed among the Central Enterprises controlled by SASAC (SASAC, 2017).

According to the definitions of the OECD and Li & Cheong (2016) ZTE is an SOE and Huawei is not.

 To conclude, I found **confirming and disconfirming** evidence for empirical fingerprint 12. This means that the causal mechanism looks different for the two firms.

'When you control telco networks, you can control everything,' said one official involved in the deliberations between the Australian Prime Minister and the Heads of National Security Agency and the Department of Homeland Security in the U.S. (Kehoe, Grigg and Murray, 2018, February, 23).

 Empirical fingerprint 8: Investments from Chinese telecom infrastructure firms in advanced markets are blocked out of fear for a Chinese political agenda.

The **prior confidence** in this theoretical hypothesis is **medium:** In the design phase of this study Huawei and ZTE were effectively blocked from the telecom infrastructure market in the U.S. for

alleged security reasons, while Huawei and ZTE continued building telecom infrastructure in the EU.

The level of **theoretical certainty** of this piece of evidence is **high.**

The **uniqueness** of this evidence is **high**.

The **accuracy** of the data is **high**: the data is retrieved from news reports from multiple highly regarded news sources.

As mentioned in Chapter 6, Huawei's and ZTE's overseas expansion has met with criticism in the U.S. and Europe. The European Commission has threatened with trade sanctions against China if the Chinese government would not stop with 'illegal subsidies' to ZTE and Huawei. However, the EU dropped the anti-subsidy case later due to too much division on the matter within the EU.

The U.S. government has been fiercer and more consequent. At the beginning of 2018, it warned U.S. citizens to not buy products from Huawei and ZTE for security reasons (Bershidsky, 2018, February, 15). Then in April it banned ZTE for seven years from the U.S. ("UPDATE 7-U.S. bans American," 2018) and the U.S. Justice Department is currently investigating Huawei's potential involvement in illegal sales to Iran (Freifeld & Auchard, 2018). On top of that, the U.S. government successfully convinced the Australian government to reconsider Huawei's involvement in the construction of its 5G network.

A U.S. congressman who serves on the influential House intelligence committee has warned that if the Turnbull government allows China's Huawei to help build 5G wireless networks in Australia, the Canberra-Washington security partnership could be damaged (Kehoe, 2018). The U.S. argues that because of the high level of intelligence sharing between Five Eyes countries (U.S., U.K., Australia, New Zealand and Canada) the presence of Huawei or ZTE in any of these countries could present a significant U.S. national security threat.

Meanwhile, Huawei has signed 25 MoUs with European and other global telecom operators to trial 5G equipment; including agreements with BCE and TELUS in Five Eyes country Canada. In fact, Huawei launched its first global end-to-end user trial of 5G in Vancouver; together with TELUS ("Huawei launches first," 2018).

Huawei and ZTE are indeed blocked in the U.S. and the U.S. government tries to assert its influence to block Huawei and ZTE also from Australia. However, both Huawei and ZTE still have access to Canada and European markets.

 To conclude, I found **disconfirming** evidence for empirical fingerprint 8. The results are ambiguous.

 Empirical fingerprint 13A: China is importing large quantities of oil from Nigeria.

The **prior confidence** in this theoretical hypothesis is **high:** Chinese economic activities in Africa are often referred to as the hungry dragon thirsty for oil.

The level of **theoretical certainty** of this piece of evidence is **high.**

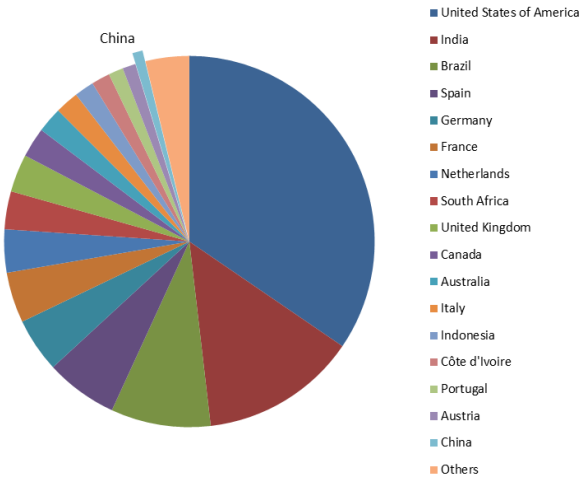
The **uniqueness** of this evidence is **medium:** Chinese firms could import oil from Nigeria without involvement from the Chinese government. However, evidence from Western countries shows that when Western firms import much oil from a certain host country, their national government is involved.

The **accuracy** of the data is **high**: the data is retrieved from ITC TradeMap.

Mr. Hu (the Deputy Director of the China-Africa Business Council) explained to me that China does not import a single drop of Nigerian oil, for the simple reason that Chinese refineries cannot process Nigerian oil (personal communication, 12 January, 2016). The reason, according to him, is that the quality of Nigerian oil is too high for the old refineries in China. Nigerian oil is sweet and light; which makes it highly appropriate for processing it into gasoline, kerosene, and high-quality diesel. However, Chinese refineries work better on sweet and heavy oil (from Angola for example) which is processed into fuel oil for China's booming industries. Mr. Hu explained that the main reason for China to buy crude oil from Nigeria is to do something about its trade imbalance with Nigeria. All the Nigerian crude oil that Chinese actors buy is sold on the international market (Mr. Hu, personal communication, 12 January, 2016).

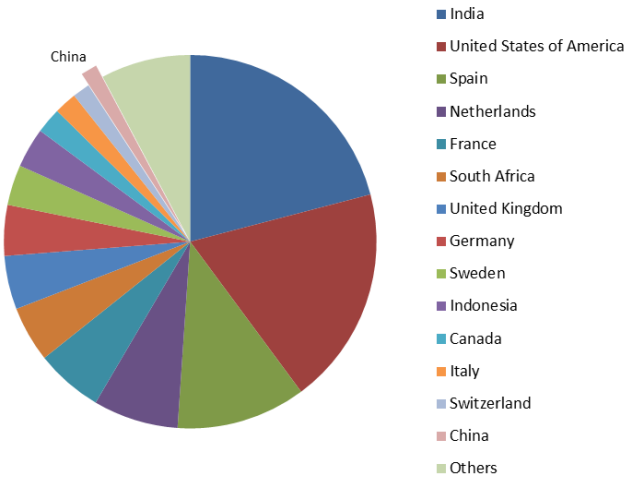
The data from 2007 and 2011 from ITC TradeMap (see Figure 42 and Figure 43) confirms Mr. Hu's statement that China is a consistently small buyer of Nigerian crude oil:

Figure 42 Buyers of Nigerian oil in 2011



Source: created by the author based on ITC TradeMap data.

Figure 43 Buyers of Nigerian oil in 2017



Source: created by the author based on ITC TradeMap data.

In short: contrary to popular belief, China is importing very small quantities of Nigerian crude oil.

To conclude, I found **disconfirming evidence** for empirical fingerprint 13A.

Empirical fingerprint 13B: There is an infrastructure-for-oil agreement between the Chinese and Nigerian government that includes telecom infrastructure.

The **prior confidence** in this theoretical hypothesis is **medium:** Since Chinese firms agreed on resource-for-infrastructure deals with other African countries like Angola and the DRC it makes sense to assume that there is also an oil-for-infrastructure deal in oil-rich Nigeria.

The level of **theoretical certainty** of this piece of evidence is **low:** there can be other ways through which the Chinese government supports Chinese firms to get access to Nigerian oil.

The **uniqueness** of this evidence is **medium:** it would seem to mean that there is a vast interest for the Chinese government to be involved in such a deal. However, evidence from the resource-for-infrastructure deal in the DRC (Van der Lugt, 2011) shows that such a deal can be initiated by the African host country and be between Chinese firms rather than the Chinese and African host country's government.

The **accuracy** of the data is **medium**: the data is retrieved from multiple news outlets.

It was the Nigerian government led by President Obasanjo who proposed the oil-for-infrastructure deals with Chinese firms. A South African researcher specialized on conflict minerals argues that:

> Following persistent lobbying by the Nigerian government, Beijing opted to engage with Obasanjo's plan, believing it created opportunities both to increase China's presence in Nigeria's oil sector and secure lucrative new Nigerian construction contracts for Chinese companies (Mhtembu-Salter, 2009: 2).

In April, 2006, the Chinese President Hu Jintao paid a two-day official visit to Nigeria to consolidate existing bilateral relations between the two countries. During this visit President Hu and his Nigerian host signed an MoU that committed Chinese companies to playing a role in the planned rehabilitation of Nigeria's decayed rail network and the failing Kaduna oil refinery and to build a 600-megawatt hydroelectric power station at Mambilla. In exchange the China National Petroleum Corporation (CNPC) and China National Offshore Oil Corporation (CNOOC) were granted "the right of first refusal" on oil blocks (Taylor, 2007). Although making it until far into the preparation phase, the oil-for-infrastructure deal between China and Nigeria never materialized. There exist various explanations for the failure of this oil-for-infrastructure deal.

The most common explanation is the change of government that took place before the projects were implemented. The Nigerian Senate refused a government-backed amendment of the constitution that would allow President Obasanjo to run for a third term and elections were planned for April 2007. These elections were won by Umaru Musa Yar'Adua who was from the same party as Obasanjo, but from a different ethnic group; resulting in personnel and policy changes. The new President demanded a formal investigation in the last bidding round and also put the rehabilitations of the Lagos–Kano railway and Kaduna refinery and the construction of the Mambilla power station on hold.

Although the new government has cited a variety of concerns, Mhtembu-Salter (2009) is convinced that the key issue is that the new political elite preferred to trade oil blocs for cash and not for infrastructure so that they could pocket the money. A telling example of corruption in the oil industry in Nigeria is that the Nigerian government sold a 51 per cent stake in the Kaduna refinery to Bluestar Oil (a company run by cronies of President Obasanjo) against the interest of CNPC, just before President Obasanjo left office. Downs (2007) argues that the Director-General of Nigeria Bureau of Public Enterprises (Ms. Irene Chigbue) covered up the Nigerian government's cancellation decision by claiming that China was not meeting up to expectations as CNOOC had not been forthcoming with the takeover plans of the Kaduna refinery.

The Nigerian analyst Umejei adds that the new Nigerian leadership also had a valid reason for questioning the oil-for-infrastructure deal since 'China's offer when deploying its infrastructure for resources falls below the prevailing market price' (2013). He quotes a member of Nigeria's House of Representatives (Honorable K.G.B. Oguakwa), saying: 'Nigeria prefers to sell her oil on the international market which is more lucrative than to adopt the Chinese model' (in Umejei, 2013).

Another factor that hindered the deal is that the four blocks that CNPC acquired were of very low quality. According to Downs CNPC decided to relinquish them after doing some seismic work (2007: 54). It could be that the quality of the crude was lower than expected; however, as mentioned in the analysis of fingerprint 13A, it could also be that the quality of the crude oil did not match the needs of the Chinese refineries.

Finally, a last argument provided by Umejei (2013) is that the Western oil companies in Nigeria fiercely opposed the deal out of fear to lose their position in an important oil supplier for especially the U.S. at that time.

Most likely the deal was prevented because of a combination of these reasons. Most important for this analysis, is that the deal was initiated by the Nigerian government, that the Chinese government showed interest at the highest levels; however, it did not materialize and therefore does not play a role in current Chinese investments in Nigeria.

 To conclude, I found **disconfirming evidence** for empirical fingerprint 13B.

The PR Manager of Huawei in Lagos elaborates on his remark that the PR managers of Huawei get tired of questions about the support they receive from the Chinese government:

PR manager: For our PR in the U.K. they will say no I don't have this kind of questions. They know that you don't have because, even for the financial part about the funding for example, we are trying to find some competitive financial services for our partners. But usually we do not choose China Construction Bank or eh yes they are one of our global strategic partners, but just one of them. Like we are also working with HSBC and we are also working with Standard Chattered here. So we are still trying to say that Huawei is a global company.

S: Yes but I still think that any big company in the world… when you operate abroad you will every now and then ask support from your embassy. Do you have situations like that as well in which the Chinese embassy can help you?

PR manager: Ehm we hardly have that situation, because most of our customers are telecom operators. It is a private industry so we are not much into that. Even, for example, when we are working in Nigeria with the federal government to provide a national information and communication technology infrastructure backbone network [National Information and Communication Technology Infrastructure Backbone (NICTIB)]. We are working with a Nigerian state-owned company to provide this network for the federal government, but we are still working with our local partners first. Galaxy Backbone is the local partner. We work with them. They work with the Nigerian Federal Government. Yes the funding we get from China Exim Bank. Yes for that part we need to communicate a lot with the Chinese embassy, because yes it is a kind of policy. They need to report back to the Chinese government to say OK which industry needs the support. Eh OK we need to get the funding from China so eh yes we do communicate with the embassies, but I think it is common for every business of every country. It is not a special case.

Empirical fingerprint 14: Chinese telecom infrastructure firms receive financial support from the Chinese government for projects in Nigeria.

The **prior confidence** in this theoretical hypothesis is **high:** It is an often heard complaint from Western firms.

The level of **theoretical certainty** of this piece of evidence is **high.**

The **uniqueness** of this evidence is **high.**

The **accuracy** of the data is **medium**: the data is retrieved from interviews with multiple stakeholders including Chinese firms and their competitors, Chinese and Western embassy representatives and an employee from a Chinese bank in Nigeria.

A manager at MTN (the largest telecom operator in Nigeria) believes that it is easier for the Chinese telecom infrastructure companies than for Western companies in Nigeria, because Chinese firms 'have more financial muscle, because they have upfront investment' (personal communication, 8 January, 2016). Telecom infrastructure projects are extremely expensive and it is difficult for governments of especially emerging countries like Nigeria to finance these projects. The manager at MTN told me that: 'the Chinese firms have an advantage over other firms because they can offer a financial-package in cooperation with a Chinese bank to ensure that the project can be financed' (personal communication, 8 January, 2016). He seemed to refer to the Export-Import Bank of China(China Exim Bank) since there are no Chinese banks in Nigeria; except maybe for Stanbic IBTC Nigeria.[13]

A senior manager of ZTE Abuja confirmed the statement from the MTN manager: 'Part of the success of Chinese firms is the support we receive from the Chinese government. We are still developing, so of course we get much support from our government' (personal communication, 12 January, 2016). The manager continues to explain how ZTE receives support from the Chinese government: 'ZTE Nigeria only gets loans from Chinese banks. Not just one, but different ones'

[13] Stanbic IBTC Nigeria belongs to the South African based banking group Standard Bank Group in which the Industrial and Commercial Bank of China (ICBC) has a twenty per cent stake since 2007 (Chen & Bosch, 2007). A Chinese employee at Stanbic IBTC Nigeria explained that Stanbic does not provide loans for Chinese infrastructure projects in Nigeria because it cannot compete with the concessional loans from China Exim Bank. However, she told me that Chinese small and medium enterprises interested in doing business in Nigeria can go to ICBC and Stanbic then provides the guarantee in Nigeria (personal communication, 10 January, 2016).

(personal communication, 12 January, 2016). Many bids in Nigeria include the sentence: "you have to use a local bank for the bid security." However, the interest rates of banks in Nigeria are very high (both Nigerian and foreign banks on the Nigerian market) because of the high risks of currency devaluation, which is also linked to the falling oil prices. The Nigerian currency depends too much on oil (for about 30%). Therefore, ZTE uses Chinese banks to give a guarantee to Nigerian banks. The dollars never touch ground in Nigeria, because as soon as they touch ground, they are already controlled. To illustrate the difficulties with the banking system in Nigeria, the manager of ZTE gives the example of its USD sixty million deal with MTN signed in March 2012. At the moment of our interview ZTE was still waiting for the payment. MTN was willing to pay; however, it had difficulties getting the dollars into Nigeria (personal communication, 12 January, 2016).

Both Huawei and ZTE admit to have received (indirect) financial support from the Chinese government via the Chinese Exim Bank.


To conclude, I found **confirming evidence** for empirical fingerprint 14.


Empirical fingerprint 15: <u>Chinese firms have some coping strategies that are not an option for Ericsson.</u>

The **prior confidence** in this theoretical hypothesis is **high:** the support from the Chinese government is generally expected to give Chinese firms an edge over Western firms.

The level of **theoretical certainty** of this piece of evidence is **high.**

The **uniqueness** of this evidence is **high.**

The **accuracy** of the data is **medium**: the data is retrieved from interviews with multiple stakeholders including Chinese firms and their competitors, Chinese and Western embassy representatives and an employee from a Chinese bank in Nigeria.

The China Development Bank, for example, is the largest quasi-commercial bank in the world. With assets of USD 350 billion, it is bigger than the World Bank and the Asia Bank. The China Exim Bank is the world's third largest export credit agency – its principal mandate being 'to implement Government economic, trade and finance policies' (The Export-Import Bank of the Republic of China: Annual Report, 2016).

By providing preferred lines of credit to Chinese state-owned enterprises and foreign governments wishing to purchase Chinese made goods, the China Exim Bank supports the overseas expansion of Chinese firms in line with the country's "Go Global" strategy.[14] The long-run goal of the "Go Global" strategy is to increase the productivity and competitiveness of these enterprises vis-à-vis their global competitors. Foster, Butterfield, Chen and Pushak state that:

> In the case of concessional loans, there is a requirement that a Chinese enterprise be selected as the contractor or exporter. Moreover, no less than 50 percent of the equipment, materials, services, or technology needed to implement the project should be secured from China (2009: 55).

For example, Nigeria received USD 200 million in loans from the China Development Bank in 2004 to buy Huawei equipment (Executive Research Associates, 2009: 77).

The Swedish MD of Ericsson in Lagos expects that his Chinese competitors have more options than he has, but he is not sure about it (personal communication, 8 January 2016). One of his theories is that his 'Chinese friends' found a way to deal with the challenge to get paid in dollars in Nigeria by closely cooperating with other Chinese firms who buy oil from Nigeria. He can imagine that a currency swop takes place in which Chinese telecom companies are paid in Naira and then exchange the Naira for Renminbi(RMB) with Chinese investors who use the Naira to buy oil from Nigeria. I asked him if it is possible for him to set up a similar construction with another Swedish or European company. In answering my question, he noticed an important difference between the Chinese and Swedish (and other European) governments. He was thinking aloud and suggested that it could work if there would be a European investment bank located in Lagos who would connect European firms in a similar way as he expects that a Chinese investment bank is facilitating the cooperation between Chinese firms in Nigeria. However, then he realized that there is not any European investment bank that would promote European companies to buy from other European companies, because protectionism is seen as unethical. 'That is different in China. So from that aspect it is not an equal playing field' (MD Ericsson, personal communication, 8 January, 2016).

[14] http://english.eximbank.gov.cn/tm/en-TCN/index_617.html

Mr. Westerhuis, from the Netherlands Representative Office in Lagos, explained that similar financing packages are possible for Dutch infrastructure companies via the programs Drive, Oreo and Develop2Build (personal communication, 7 January, 2016). However, he admits that the Chinese government has much more money available for infrastructure projects in Africa. The Dutch government prioritizes nine top-sectors in which the Netherlands excels internationally and supports these sectors. The (infrastructure) construction sector is not one of the nine selected top-sectors. Is this unfair competition? Maybe China is now in a favorable position in Africa where western European countries have been for a long time. Mr. Westerhuis forwarded the thought that maybe the Western countries have failed to grab the opportunity because of their emphasis in their Africa policy on development aid/cooperation and on development money. 'Moreover, among Western development cooperation policy advisers, for decades there was an almost religious believe that business should stay out of development. The Chinese now see this differently'(personal communication, 7 January, 2016).

What the MD of Ericsson suspects was confirmed by Huawei and ZTE managers: the Chinese government is facilitating cooperation between Chinese firms and the Chinese Exim Bank supports Chinese firms in a way that cannot be matched by European investment banks. However, this has more to do with a lack of money and setting priorities on the European side than with a difference in ethical standards.


To conclude, I found **confirming evidence** for empirical fingerprint 15.

The above analysis result in two separate causal mechanisms for Huawei and ZTE due to the fact that ZTE is considered to be an SOE and Huawei not. However, this difference does not seem to result in a difference between the amount of support both Huawei and ZTE receive from the Chinese government.

Figure 44 **Evidence hypothesis 2 (Huawei)**

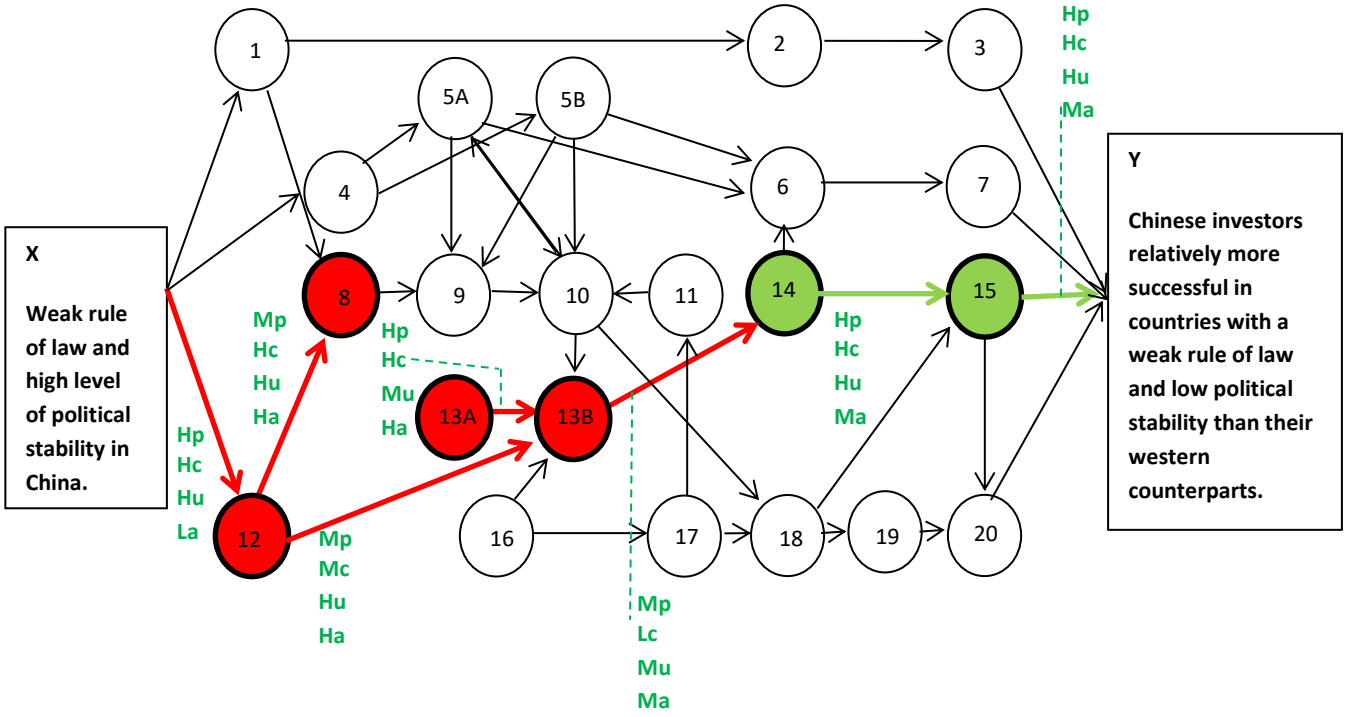
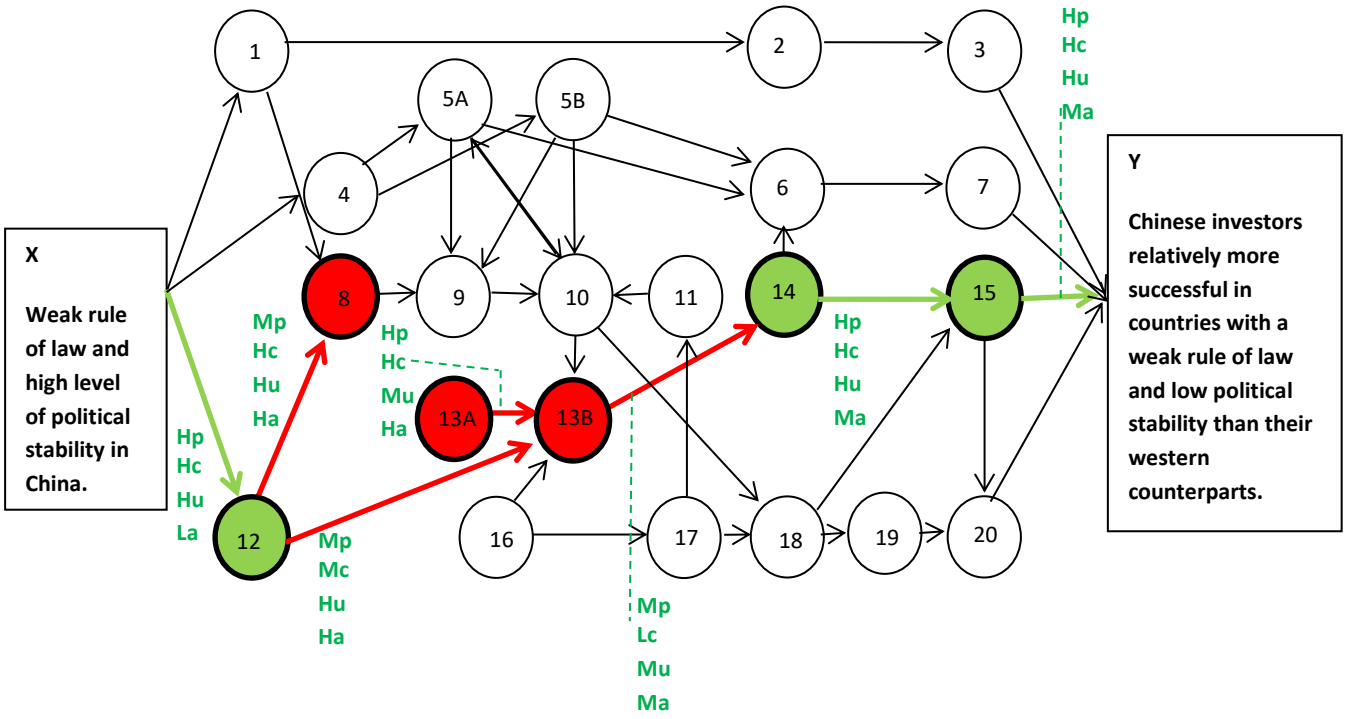


Figure 45 **Evidence hypothesis 2 (ZTE)**

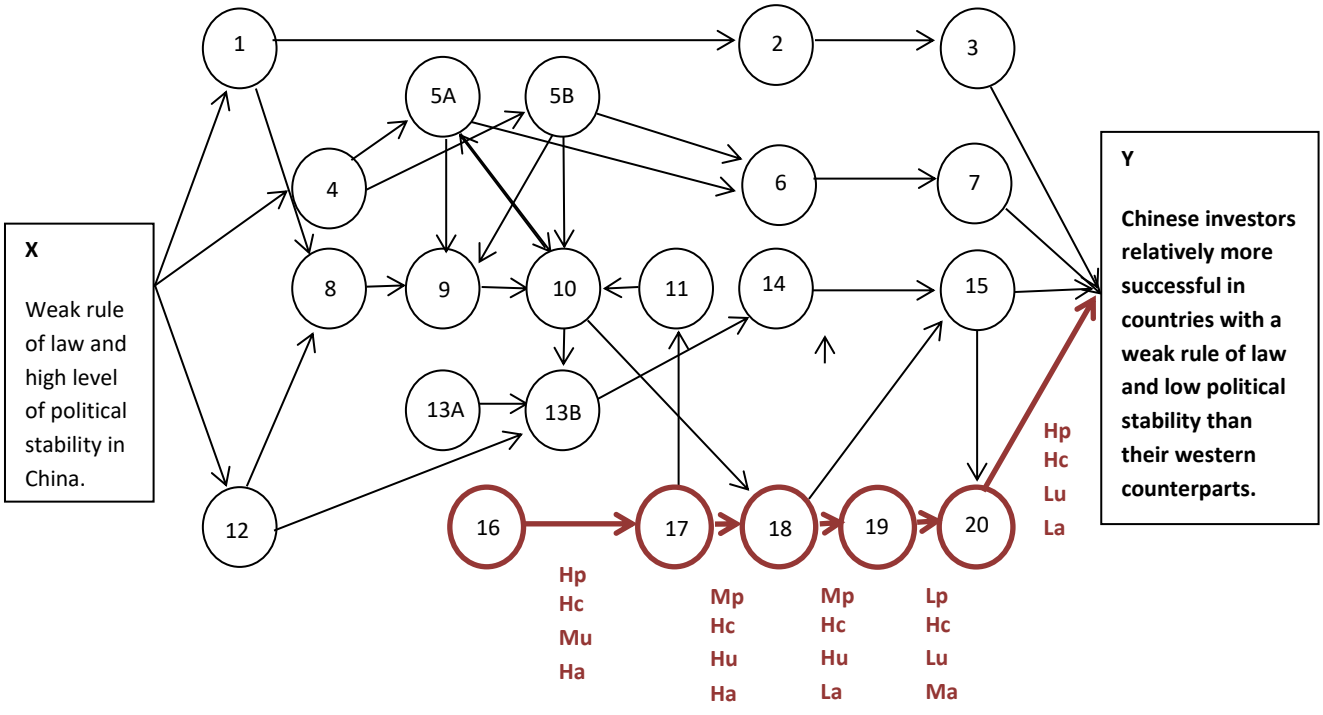


7.4.5. Little competition from advanced market firms

In this section I explore the existence of the empirical fingerprints that I expect to find if the thesis holds that Chinese firms are more successful in Nigeria than their Western competitors because of reasons that are linked to receiving little competition from advanced market firms in Nigeria. These fingerprints include:

9. Advanced market telecom infrastructure firms state in media that they perceive less-advanced markets as high risk business environments.
10. Ericsson's official internationalization strategy is to target advanced markets.
11. The market shares of Chinese telecom infrastructure firms are much higher than Ericsson's share in Nigeria.
19. China is the most valued investor in Nigeria.
20. Chinese firms experience fewer difficulties with regulations and corruption in Nigeria than their Western competitors.

Figure 46 Causal mechanism highlighting the role of lack of investment from advanced markets



 Empirical fingerprint 16: Advanced market telecom infrastructure firms state in media that they perceive less-advanced markets as high risk business environments.

The **prior confidence** in this theoretical hypothesis is **high.**

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **medium**.

The **accuracy** of the data is **high.**

The only negative statement from Ericsson about the business environment in less-advanced markets I can find is quite resent and reads: 'We see macro economic [sic] uncertainty in Middle East and Africa that is hurting investment' ("Ericsson remains in," 2017). However, this statement was not made to indicate why Ericsson does not invest (much) in such markets, but instead as one of the explanations for its continuous losses since the third quarter of 2016. Ericsson was betting on the fast-growing demand for mobile Internet services in sub-Saharan Africa to boost its sales (Motsoeneng, 2016). Ericsson is not the only advanced market telecom infrastructure company seeing potential in emerging markets: In a World Bank paper, Nokia is quoted stating that 'in the next five years more than 80% of the growth in global mobile subscriptions is expected to come from emerging markets with relatively low levels of current penetration and high populations'(in Bray, 2005: 13).

 To conclude, I found **disconfirming evidence** for empirical fingerprint 16.

Empirical fingerprint 17: Ericsson's official internationalization strategy is to target advanced markets.

The **prior confidence** in this theoretical hypothesis is **medium**: Child & Marinova (2014a) predict that Ericsson is more successful in other advanced countries. General FDI theory predicts that firms invest in low-risk host countries. However, the advanced markets are maturing and the growth opportunities are in emerging markets.

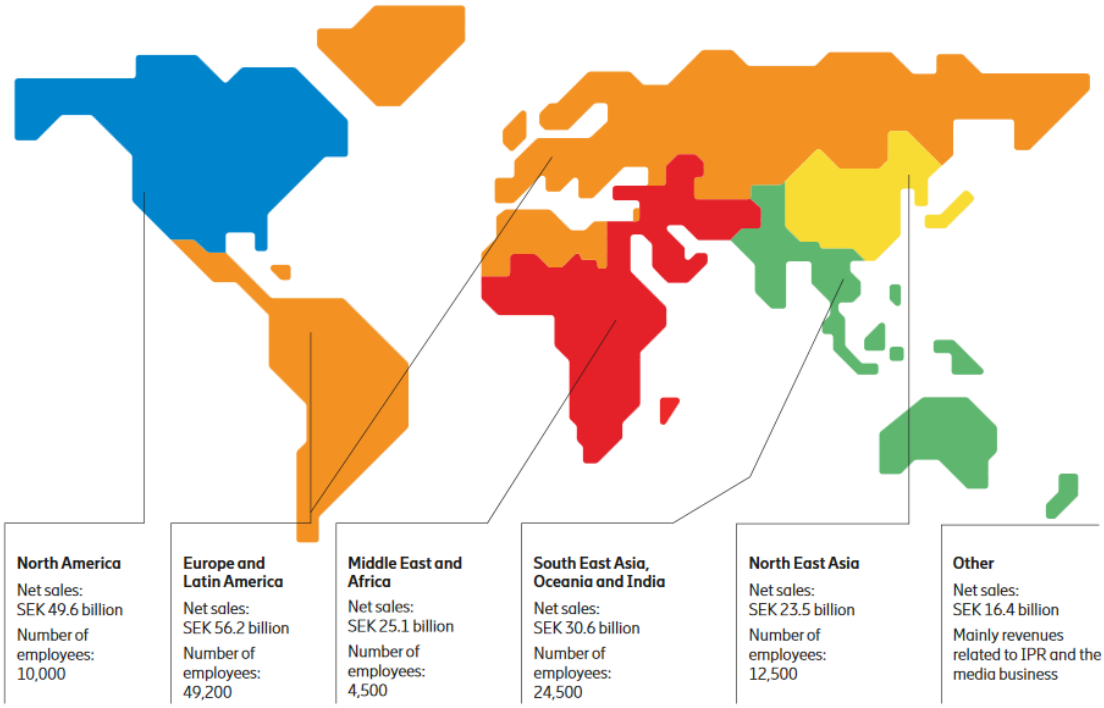
The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **high**:

The **accuracy** of the data is **high**:

Ericsson has offices in more than 180 countries in the world and "Europe and Latin America" is its biggest market area (Ericsson, 2018). This sounds as if Latin America and Europe are the two main markets for Ericsson. However, this is not the case. In March 2017, Ericsson reorganized its business structure in order to increase efficiency and reduced their division of their global market from ten Regions to five Market Areas. See Figure 47 for Ericsson's division of its global market into five areas and the net sales numbers per area.

Figure 47 Five market Areas of Ericsson since March 2017



Source: Ericsson annual report 2017: 5

When we compare the net sales numbers for the ten regions in 2016 with the net sales numbers of the five area markets in 2017, we see that Ericsson's largest market by far is North America, followed by North East Asia (mainly China) and South East Asia and Oceania.

Table 17 Net sales numbers Ericsson per region (SEK bln), 2016-2017

Region	Net sales 2016	Net sales 2017
North America	54,7	49,6
Latin America	17,9	56,2
Northern Europe and Central Asia	9,1	
Western and Central Europe	16,2	
Mediterranean	20,9	
Middle East	19,2	25,1
Sub-Saharan Africa	9,2	
India	10,7	30,6
South East Asia and Oceania	22,2	
North East Asia	27,4	23,5

Sources: Annual reports

The data from Table 4 show that Ericsson's main market is indeed an advanced market; however, they also show that Ericsson is not only targeting advanced markets.

To conclude, I found **disconfirming evidence** for empirical fingerprint 17.

 Empirical fingerprint 18: The market shares of Chinese telecom infrastructure firms are much higher than Ericsson's share in Nigeria.

The **prior confidence** in this theoretical hypothesis is **medium**:

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **high**:

The **accuracy** of the data is **low**:

Unfortunately I was not successful in obtaining detailed information regarding the market shares of Ericsson, Huawei and ZTE in Nigeria. According to Ericsson, MTN and Smile, Ericsson and Huawei were the two largest telecom equipment vendors in Nigeria of about equal size and ZTE the much smaller third player of the only three telecom equipment vendors active in Nigeria during the time of my field research. A manager of ZTE in Nigeria boosted that Huawei and ZTE together occupied the majority of the Nigerian market, but that had more to do with Huawei's impressive market share, than with ZTE's market share. Without knowing the exact numbers, the size and architecture of the offices of the telecom equipment vendors in Nigeria speaks volumes.

Figure 48 shows the office of ZTE in Lagos, hidden in an old villa in a gated community, not showing any signs of being the office of a multinational. One could assume that this is a temporary office while for example waiting for the construction of a large office building. However, the similar status of ZTE's office in Abuja and the fact that the address in Lagos has not changed in August 2018 substantiate my suspicion that this is the long-term situation of ZTE's office in Lagos.

Figure 48 Office ZTE in Lagos

Source: Google Maps

ZTE's offices in Lagos and Abuja are both located in residential areas. We would not have found the office in Abuja by ourselves if our driver arranged by ZTE would not have dropped us of in front of it. There is no sign that this villa houses a telecom infrastructure giant. (I remember Mr. Buitelaar's story about the extremely high costs of licenses for logos and signs on the property of a company in Nigeria.) The contrast could not have been bigger with the entrance of ZTE's HQ in Shenzhen. The reception hall of ZTE's HQ has been clearly designed with the aim to impress visitors: very spacious, marble floors and walls, lots of light from giant windows and an endlessly high ceiling. The men and women behind the marble reception desk are highly professional and dressed up very well. A woman carefully maintained a giant planter with beautiful orchids while we were waiting to meet with a senior ZTE manager. How different is ZTE's office in Abuja with the old garage door turned into the main entrance. No cozy decor. It looks like a temporary office: as if a secret service quickly put up something in a residential area that can easily be removed again. We enter a room the size of a small class room in which many desks are cramped together in three rows. A local staff member works at one of the desks. The Chinese staff member who welcomed us at the entrance asked us to sit down behind one of the desks and wait. We see a few young Chinese employees walking in and out. It takes about five minutes before we are asked to walk upstairs to the office of the senior manager. The office of the manager is large and light, but also quite empty and it again gives the feeling of a temporary office. The office seems to be in the former master bedroom of the villa with the bathroom with Jacuzzi attached to it (there was no door so we could look into it).

Figure 49 shows the castle-like solid office of Huawei in Lagos towering high above the other buildings in its area, showing that Huawei is an established company and here for the long-run.

Figure 49 Office Huawei in Lagos

Source: courtesy of the author

Huawei's office in Lagos is a sturdy modern building with hints of the traditional Tang architecture in the design of the roof. It towers above the further low buildings at this part of Victoria Island. The lobby of the impressive building is small with a low ceiling and feels a bit cramped. Four local security guards are sitting at cheap desks on the left side right after entering the door. They are wearing ill-fitting cheap uniforms and hats that are most likely manufactured in China. Opposite of their desks are three lines of blue plastic connected seats as you can also find at airports. Most of the seats are taken. It is quite chaotic with too many people for the small waiting area and delivery people bringing in things. The PR manager – whom we have an appointment with – comes down personally to pick us up. He takes us into the elevator and tells us that he will show us the areas in which visitors are allowed to come. He first shows us a spacious room that again reminds me of a class room due to the fact that the desks are connected in eight long rows facing one wall with two electronic boards. About half of the desks are in use. I see mostly local and some Chinese employees in the room. Most work alone behind their desk, some others stand together in small groups to discuss something. The PR Manager explains that the electronic boards are there for the employees to use when they need to solve a problem together. We then walk into a large open space where about thirty Chinese-style desks are neatly arranged in the back of the room – leaving much space to walk or sit or stand together in small groups to discuss something. The atmosphere is relaxed. Many

employees are standing between the desks and chat. In various corners of the big open space are people sitting together for a short meeting – Chinese, local and "other" (Indian?), all quit young. I see more local than Chinese employees, but in every room and corridor I see at least also one Chinese person. The PR manager tells us that Huawei has about 1500 staff members in Nigeria, from thirteen different countries of which about seventy per cent is Nigerian. The Chinese and local staff seem to mingle in a natural way. The only clear separation happens when we go downstairs for lunch after our meeting. There are two giant canteens: one serving local food and one serving Chinese food. I cannot detect a single Chinese person in the canteen with local food and not a single Nigerian in the canteen with Chinese food.

Figure 50 shows the modern shining office of Ericsson in Lagos, radiating the "business" image of Ericsson.

Figure 50 Office Ericsson in Lagos

Source: Emis Int.

Without having access to the exact market shares, the different head offices in Nigeria makes the information from the interviews – that Ericsson and Huawei are the two largest telecom equipment vendors in Nigeria of about equal size and ZTE the much smaller third player – highly plausible.

To conclude, I found **disconfirming evidence** for empirical fingerprint 18.

Empirical fingerprint 19: China is the most valued investor in Nigeria.

The **prior confidence** in this theoretical hypothesis is **low**:

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **low**:

The **accuracy** of the data is **medium**:

It is not common for a government to highlight one specific investor as their most valued investor because it could upset other investors who might become less willing to invest more in the country. The same counts for Nigerian government officials who would not highlight just one investor as their most valued investor. However, we could use statistics to measure the importance of Chinese investments for the Nigerian economy. Following the discussion on bias in FDI statistics on page 30, I look at the number of FDI projects from fDi Markets instead of FDI flows or stock.

In terms of number of projects the U.S. was by far the largest FDI source country in Nigeria (see Table 18). China was the sixth largest FDI source country for Nigeria in the period 2003-2011; right after France, but still much smaller than South Africa and India.

Table 18 FDI projects in Nigeria by geographical origin, 2003-2011

Economy	Number of FDI projects
United States	75
United Kingdom	59
South Africa	42
India	36
France	20
China	14
Germany	13
South Korea	12
Netherlands	11
Mauritius	10

Source: fDi Markets, Financial Times

To conclude, when looking at the number of FDI projects, China is not the most valued foreign investor in Nigeria.

 To conclude, I found **disconfirming evidence** for empirical fingerprint 19.

During a dinner in his hotel Mr. Hu Jieguo tells us: 'The Nigerian government tries to block Chinese textile, but they do not manage to do so. During the day there are long lines with trucks from Benin waiting for the border to Nigeria. They don't get access. However, during the night everything gets smuggled in. Under the military regime this did not happen. When the country was led by the regime the people said: "it was better during colonial times." Now the people are saying: "it was better under the regime." The regime was tough on smugglers and thieves. It was safe and the foreign reserve was high. The regime blocked imports in order to support local industries. You could not even import one biscuit; only with a special license. The result was that the production in Nigeria improved and there were many jobs for the local workers. I do not want to go against what the WTO says, but free trade is not good for everyone. It is only good for the rich who export a lot.'

At the U.S. embassy in Abuja they have another opinion: 'Officially there is no import ban, but do not ask about the formal market for foreign currency… Since June 2015 there are 41 commodities (very broad commodity groups: 700-800 products) you can get foreign currency for. ICT is the fastest growing sector in Nigeria. However, with this regulation they force IBM, HP and Microsoft to buy locally. This way the government artificially forces to create the local capacity to produce both hard and software. It is likely that there are some big monopolists benefitting from this regulation. However, it will not benefit the country. They need to set up import substitution, but you cannot do this overnight. We emphasize free trade. The advice from the U.S. to Nigeria: maybe it is better to use quotas and tariffs than to ban imports. But the response from the Nigerian government is: that is too prone to corruption.'

 Empirical fingerprint 20: Chinese firms experience fewer difficulties with regulations and corruption in Nigeria than their Western competitors.

The **prior confidence** in this theoretical hypothesis is **high**:

The level of **theoretical certainty** of this piece of evidence is **high**.

The **uniqueness** of this evidence is **low**:

The **accuracy** of the data is **low**:

This statement implies a larger influence of Chinese firms to bend the rules to their will in Nigeria when they are a more valued investor. The former exercise showed that China is not the most valued investor in Nigeria and therefore the 20th fingerprint could be ignored. However, since China is by far the largest financer of infrastructure projects in Nigeria (Jayaram et al., 2017), it is possible that Chinese firms involved in important infrastructure projects (like for example telecom infrastructure) might have this special leverage.

When asked about their main challenges of operating in Nigeria senior managers of Ericsson, Huawei and ZTE mentioned very similar challenges:

Table 19 Main challenges for telecom equipment vendors in Nigeria, 2016

	Ericsson	Huawei	ZTE
1.	Unstable currency	Bringing stakeholders together	Different time perception
2.	Power shortages	Lack of funding for large infrastructure projects	Safety
3.	Area boys	Power shortages	Find and keep high-skilled workers
4.	Lack of long-term thinking		Power shortages
5.	Lack of funding for large infrastructure projects		
6.	Safety		
7.	Find and keep high-skilled workers		

Source: from personal communication with senior managers of Ericsson, Huawei and ZTE in January 2016.

Power shortages are mentioned by all managers as one of the main challenges of operating in Nigeria which they all hope to see addressed as quickly as possible. Lack of funding for large infrastructure projects is linked to the challenge of bringing stakeholders together. The PR manager of Huawei West Africa explained to us that it is usually the government who is leading the project and decides whether or not a large infrastructure project will be implemented or not (personal

communication, 6 January, 2016). However, in Nigeria all the infrastructure (roads, railway, ports, electricity, telecom, etc.) need investment and the government does not have enough funding available. Therefore it becomes a complicated project involving many stakeholders (Ministers, investors, telecom operators, telecom equipment vendors, etc.) and it appears a challenge to bring all stakeholders together and implement projects (PR Manager Huawei, personal communication, 6 January, 2016). Finding and keeping high skilled workers is a concern for both Ericsson and ZTE. A senior manager of ZTE in Abuja told us that he is often asked by Nigerians why ZTE does not set up an R&D center in Nigeria. He explained to us that it is not possible because it is difficult for ZTE to find the necessary skilled local workers and ZTE is lacking support from the Nigerian government (personal communication, 12 January, 2016).

Huawei has no lack of skilled local workers. Their experience is that there are plenty highly educated Nigerians and Huawei is not so concerned about the movement of high skilled workers between firms (personal communication, 6 January, 2016). 'Some high-skilled workers move to one of the operators after some experience and training within Huawei; however, we consider this to be part of the network building with the telecom operators' (PR Manager Huawei, personal communication, 6 January, 2016). Safety is also not mentioned as a challenge by Huawei, because Huawei employees live in a guarded compound and the company provides free transportation and free food in the staff cantina (personal communication, 6 January, 2016). The Chinese workers at Huawei are likely more concerned about the level of safety in the country, because it restricts their movements, but it is not considered to be a serious challenge impacting the business of Huawei in Nigeria. Unstable currency is only mentioned by Ericsson, perhaps because of the earlier mentioned advantage of Chinese firms that they receive support from Chinese banks so that they can get paid in Chinese RMB directly instead of the local Naira.

What is most striking is that none of them mentioned corruption as a main challenge, although the MD of Ericsson mentioned one aspect of it, namely the area boys. When directly asked about corruption, all managers started to sigh and moan. It is one of the things in Nigeria that gives them most headaches. However, they were prepared and knew that it was part of the business in Nigeria. A British expat wrote about Nigeria and said that although corruption is found everywhere, it is the degree – or extent – of corruption which makes Nigeria different from for example the U.K. (Newman, 2013). To give an idea of the extent of corruption in Nigeria Newman lists the following examples:

> …falsifying a CV (I don't mean enhancing, I mean pretending you're a Lead Piping Engineer of 12 years experience [sic] when actually, until yesterday, you were a fisherman); selling positions in a company; stealing diesel from the storage tanks

> you're paid to protect; issuance of false material certificates; impersonating an immigration officer to access an office, from which you then tap up the people within to fund your latest venture; selling land which isn't yours; deliberately running down the country's refining capacity in order to partake in the lucrative import of fuels; falsifying delivery notes of said refined fuels in order to receive greater government subsidies; deliberately restricting the country's power generation capacity in order to benefit from the importation of generators (which must be run on imported fuel); theft of half-eaten sandwiches and opened drink containers from the office fridge; tinkering with fuel gauges at petrol stations to sell customers short; conspiring with company drivers to issue false receipts indicating more fuel was supplied than actually was; supplying counterfeit safety equipment; falsifying certificates related to professional competence (e.g. rope access work); paying employees less than stipulated in their contract (or not at all); cloning satellite TV cards, meaning the legitimate user gets their service cut off when the other card is in use (the cards are cloned by the same people who issue the genuine cards); the list is literally endless. There is no beginning or end to corruption in Nigeria, it is a permanent fixture (Newman, 2013).

All managers admit that it is impossible to do business, or even live, in Nigeria without being involved in some sort of corruption. However, all companies also draw clear lines regarding what they except. For example, an area boy (another word for a gang member) who asks for a "protection fee" in order for workers to get access to the site where they have a job to do is hard to ignore, since it is about the safety of the worker. However, a container that sits unopened in the harbor because an officer wants "a service fee" before he opens and clears it can be ignored. And that is what both Ericsson and the Chinese firms do: wait instead of pay. It is not just a matter of integrity. From a business perspective it is better to show that you have patience and cannot be bribed, because that can save you much money in the future.

When I asked the managers about the rules and regulations in Nigeria, they are considered to be stable and fair. Since Buhari became President in 2015 the rules are better enforced. According to the MD of Smile in Nigeria, international companies thought for a long time that they could get away with certain behavior, because the former government warned without any consequences (personal communication, 4 January, 2016). However, Buhari warned the telecom operators only once that they had to comply with Section 20(1) of Registration of Telephone Subscribers Regulations 2011 which states that states that all SIM cards across all mobile networks in the country should be registered. According to the MD of Smile, MTN – the largest telecom operator in Africa – did not expect any consequences and ignored the warning (personal communication, 4 January, 2016). However, President Buhari followed through and handed down a 3.9 billion USD

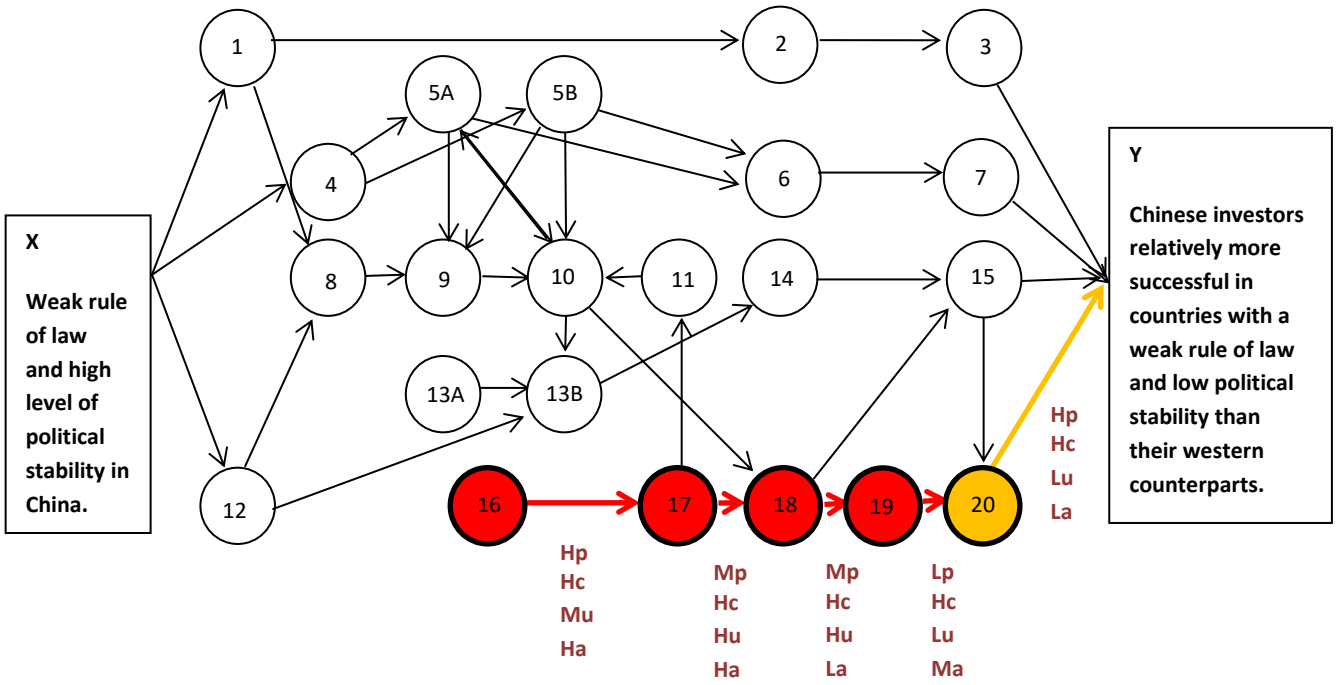
dollar fine[15]. The leadership of MTN was shocked and feared even bankruptcy ("Fine threatens to," 2016). With help of the South African government and former U.S. Attorney General Eric Holder, MTN could negotiate the fine down to 1.4 billion USD which it agreed to pay in terms (Brock & Laessing, 2016).

In short, being the most valued infrastructure financer does not give Chinese telecom equipment vendors an edge over their competitors in terms of compliance with rules and regulations. Corruption is a challenge for all companies in Nigeria and they also have to all act carefully to not be affected by President Buhari's fight against corruption. However, the support Chinese firms receive from Chinese banks make them better equipped for dealing with the foreign currency restrictions in Nigeria.

To conclude, I found **mostly disconfirming** evidence for empirical fingerprint 20.

To conclude: I reject the hypothesis that little competition from advanced market firms is giving Chinese telecom firms an advantage in Nigeria

Figure 51 **Evidence hypothesis 4**

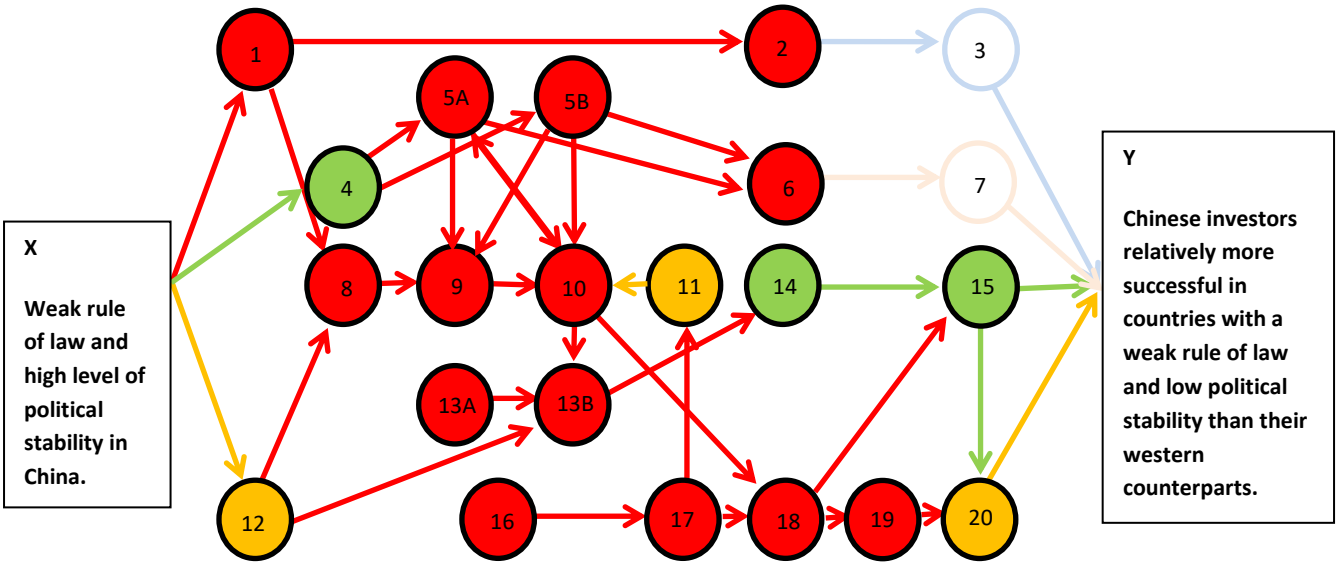


[15] The initial fine that was imposed in October 2015 was 5.2 billion USD. This amount was reduced by 25 per cent by the Nigerian Communications Commission to 3.9 billion USD in December 2015 (without a written statement explaining the reasons for this reduction) (Shapshak, 4 December, 2015). MTN then hired former U.S. Attorney General Eric Holder in January 2016 to help it reduce the fine further with success: a deal was struck in July and the final fine amounted to 1.7 billion USD (Brock & Laessing, 2016).

7.5. Conclusion

The results of the tests of the four hypotheses using process tracing show that the existing theories do not produce a causal mechanism that links the initial condition X with outcome Y (see Figure 52).

Figure 52 Resulting causal mechanism



However, the results do give a strong indication that the explanation for the seemingly indifferent attitude of Chinese investors towards the rule of law in a host market is mostly linked to the late-comer status of Chinese firms and the role of the Chinese government. However, far less direct support than often assumed. The main difference between the Chinese telecom equipment vendors and Huawei is that the Chinese firms can circumvent the foreign currency challenge and the challenge that the local government does not have much funding available for large infrastructure projects due to loans from Chinese policy banks.

In order to test if loans from Chinese policy banks are a unique factor for the location choice of Chinese telecom equipment vendors or if these loans play an important role in the location choice of Chinese firms in Africa in general, I test the relation between location choice and Chinese loans with another regression analysis. The next chapter discusses the results of both the quantitative and qualitative study and combines the results for a more thorough analysis.

8. Mixed analysis

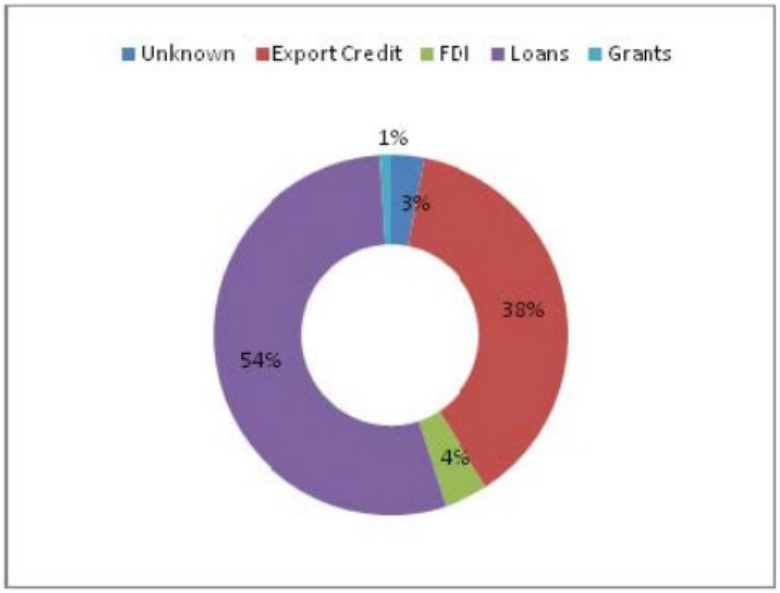
8.1. Introduction

This chapter discusses the results from both the quantitative and qualitative strand of this research project. Furthermore, it shows how the results of the qualitative study triggered a follow-up quantitative analyses and how these results triggered another in-depth analysis of the qualitative study. In other words, this is the part of my study in which the quantitative and qualitative research methods are mixed.

Chapter 7 showed that the only specific advantage Chinese telecom infrastructure firms in Nigeria have over their competitors from the West is their ability to add a financial package to the deal in the form of a concessional loan from the China Exim Bank. A concessional loan from the China Exim Bank is usually for 15 to 20 years with a grace period of 3 to 7 years (which is subject to negotiation) (MOFCOM, 2016). During the grace years the receiving government only pays interest and does not have to start to repay the loan yet (MOFCOM, 2016). The Chinese Government provides concessional loans to governments in order 'to support other developing countries with concessional funding' (Exim Bank, 2018). The China Exim Bank is the only bank designated by the Chinese Government to implement such facilities (Exim Bank, 2018).

These types of loans were the most commonly used finance modality for Chinese infrastructure projects in Africa, accounting for more than half of Chinese finance of infrastructure projects within the continent for the period 2001-2009 (see Figure 53)

Figure 53 Chinese infrastructure financing modalities in Africa, 2001-2009

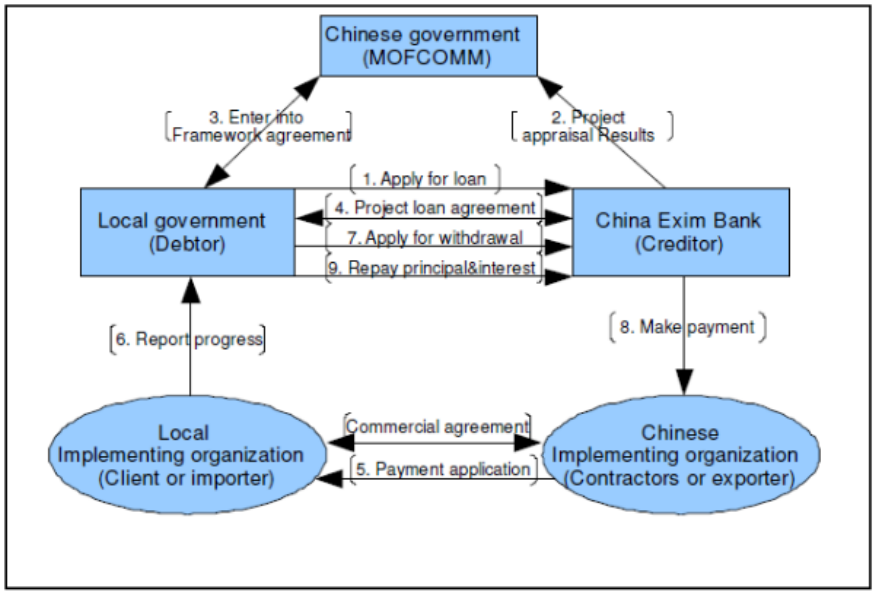


Source: Massa (2011)

Atkins, Brautigam, Chen, and Hwang (2017) from the Johns Hopkins University School of Advanced International Studies China-Africa Research Initiative (SAIS-CARI) found that the share of concessional loans actually increased over time, because they found that in the period 2000-2015 almost 67 per cent of all Chinese loans to Africa came from the Chinese Exim Bank.

Figure 54 shows the application and execution process of Chinese concessional loans: first, a borrowing government applies to the China Exim Bank for the loan. The Bank then sends a preliminary appraisal report to MOFCOM who signs a Framework Agreement with the borrowing government. The borrowing government then signs a Project Loan Agreement with the China Exim Bank. The Chinese contractor then submits the documents according to the contract and requests the payment from the foreign executing agency upon which the foreign executing agency submits the documents and reports the process to its national government. The borrowing government reports the process to Exim Bank and requests the China Exim Bank to disburse the loan. The loan is then disbursed from the China Exim Bank to the Chinese contractor directly. The foreign government is responsible for the payment of interest and fees to China Exim Bank.

Figure 54 Schedule process of Chinese concessional loans



Source: Chen in Massa (2011)

A downside of this bureaucratic process is that it can take long before the Chinese firms receive the money from Exim Bank. In order to make the agreed deadlines, Chinese infrastructure firms often have to start building before they have received any money and bear the financial risk (this was

revealed to me during interviews with managers from various Chinese infrastructure companies in the DRC (see Van der Lugt (2011) and my current study in Nigeria).

This construction in which the money flows directly from China Exim Bank to the Chinese contractor avoids the difficulties of bringing in foreign currency to Nigeria and removes exchange rate costs. The fact that Chinese firms receive the money directly from China Exim Bank could be part of the explanation for my finding that Chinese investments are significantly directed to countries with relatively high levels of inflation (see the results of the first quantitative study in Table 5).

In order to test if loans from Chinese policy banks are indeed a major factor influencing the location choice of Chinese telecom equipment vendors (and Chinese firms in general), I test the relation between location choice and Chinese government loans with another regression analysis. This chapter describes this second and last quantitative study and discusses the findings in combination with the findings from the qualitative study.

8.2. Research design and methods

Based on the findings of the qualitative study I hypothesize that:

Hypothesis: Chinese ODI is attracted to African countries that receive relatively more concessional loans from China.

Similar to the first quantitative study, I test my hypothesis in this second quantitative study based on the number of Chinese FDI projects per African country as reported by MOFCOM. Chapter 0 specifies which data is included in the fDi Markets and MOFCOM data bases and which gaps exist; in order to show that the data are comparable and robust. I use the same variables as in the first quantitative study (namely: IM, PS, market size (GDP), endowment of natural resources, inflation, trade (im- and export), and welcoming to FDI) and add the variable “loans”.

The most trustworthy source for data on Chinese loans to Africa at the moment is SAIS-CARI (Atkins et al., 2017). Their “Chinese loans to African governments” database includes all mainland Chinese loans to Africa, coming from a variety of sources, including: MOFCOM, the two Chinese policy banks— China Exim Bank and China Development Bank, Chinese private/commercial banks, and Chinese SOEs or private businesses providing suppliers credits or investment loan financing.

Atkins et al. (2017) differentiate between various types of loans, namely: commercial loans, zero-interest loan, concessional loans, export buyers’ credit, preferential export buyers’ credit, suppliers’ credit, and master facility loans. For my research I am mostly interested in concessional loans;

however, the part of the database that is publicly available only provides data per African country for the sum of all these loans per year. A separate table – in the part of the database that is publicly available – provides the data per lender per country; however, that table presents the data for the period 2000-2015 combined. Therefore, I decided to use the broad category of loans that include all the loans Atkins et al. (2017) identified in order to be able to use the same regression model for the same period of time. Using a broad category for "loans" will produce a good estimation for the effect of concessional loans on the location choice of Chinese investors in Africa since almost 67 per cent of all Chinese loans to Africa came from the Chinese Exim Bank in the period 2000-2015 (Atkins et al., 2017).

I apply the same panel regression model using fixed covariate effects and a random intercept as in the first quantitative study. Based on theoretical considerations, I apply logarithmic transformations to the variable LOANS in order to stabilize linearity of the relationships and homoscedasticity of variances. Using the MIXED linear model command in SPSS (version 24) I fit to the data via generalized least squares a mixed effects model with fixed main effects and a random intercept:

$$\ln FDIproj = \alpha + \beta_1 \ln GDP + \beta_2 NREXP + \beta_3 INFL + \beta_4 \ln EXP + \beta_5 \ln IMP + \beta_6 \ln IFDI + \beta_7 POL + \beta_8 INST + \beta_8 \ln LOANS + \varepsilon_{it}$$

8.3. Results and discussion

Table 20 shows the results for the effect of loans on the location choice for Chinese investments to Africa for the period 2003-2011.

Table 20 Results for loans as a determinant for Chinese investments to Africa, 2003-2011

	Significance for Chinese FDI	Hypothesis supported
INST	0.131+	No
	(0.077)	
POL	-0.168***	No
	(0.029)	
lnGDP	0.001	
	(0.051)	
NREXP	0.005***	Yes
	(0.001)	
INFL	0.014*	No
	(0.005)	
lnEXP	0.367***	Yes

	(0.040)	
lnIMP	0.045*	Yes
	(0.020)	
lnIFDI	-0.120**	No
	(0.045)	
lnLOANS	**0.051****	**Yes**
	(0.017)	
Observations		

Standard errors in parentheses

+if p < 0.10, * if p < 0.05; ** if p < 0.01; *** if p < 0.001.

These results show that Chinese investments are indeed significantly directed to African host countries that receive most loans from China – as predicted based on the findings from the case study on Chinese telecom infrastructure companies in Nigeria.

During my field research in Nigeria I found that competitors of Chinese firms and representatives of the U.S. embassy in Nigeria perceive the indirect financial support Chinese firms receive from the Chinese government as unfair. An EU policy briefing from 2011 also describes Chinese export finance as an 'unfair advantage for Chinese exporters':

> Chinese export finance activities have played an important role for China's "going-global" strategy: they have strengthened China's economic relationships with several developing countries especially in Africa, ensured China of significant access to natural resources, and enhanced China's sphere of influence. At the same time, Chinese export credits have become a competitive threat to exporters from the OECD. China is not a member of the OECD and is therefore not obliged to comply with the OECD guidelines that: limit tied aid; regulate credit practices; impose maximum repayment terms, country risk classification and minimum interest rates; require the exchange of information; and impose social, environmental and governance standards on financing activities. This creates an unfair advantage for Chinese exporters (Massa, 2011: abstract).

However, a representative of the Netherlands trade and investment office in Lagos reflected that the support Chinese firms currently receive from the Chinese government is not so different from the support European and U.S. firms used to receive from their respective governments:

> We would do the same if we still could. We have supported our companies financially in the past. Currently the Chinese are the ones who have the means, so they can offer this

> kind of support to their companies. We have done, and are doing the same (Senior Economic Advisor, personal communication, January 7, 2016).

The MD of United Capital in Lagos told me the same:

> China is a big exporter, and as a result they built up significant external funds and they can deploy those funds for investments abroad. You know if Europe, I mean *when* Europe had those funds, they used it the same way; this is how business runs (MD Investment Banking at United Capital, personal communication, January 8, 2016).

The MD Investment Banking at United Capital went further to show me the irony of the situation:

> European and U.S. companies aimed to increase their profit when they moved their large scale production to China. As a consequence, producing for and exporting to the world built up the foreign-exchange reserves of China which currently enables the Chinese government the advantage to support Chinese firms abroad (MD Investment Banking at United Capital, personal communication, January 8, 2016).

Table 21 shows that China has indeed the largest foreign-exchange reserves in the world by far.

Table 21 Top-3 countries with largest foreign-exchange reserves the end of May 2018

Rank	Country	Foreign-exchange reserves (in USD bln)
1	China	3,111
2	Japan	1,254
3	Switzerland	813

Sources: State Administration of Foreign Exchange (2018); Ministry of Finance Japan (2018); Swiss National Bank (2018).

The enormous foreign-exchange reserves in China and the willingness of the Chinese government to use these reserves to support the internationalization of Chinese firms enables Chinese firms to take the hurdle of the lack of financial resources in Africa for implementing large infrastructure projects. In other words, Chinese firms are not so constrained by the lack of financial resources of many African host countries. The findings of my quantitative study show that this influences the location choice of Chinese firms. However, does this also mean that the success of large Chinese firms in Africa – with close connections to the Chinese government – can be explained merely by the indirect financial support these firms receive via the China Exim Bank? The findings from the qualitative study dispute that.

The case of Huawei and ZTE in Nigeria shows that having access to concessional loans from the China Exim Bank is not sufficient for Chinese firms to be successful abroad. While both firms are large telecom infrastructure firms in China and both firms have access to concessional loans from the China Exim Bank for some of their overseas projects, Huawei is much more successful in Nigeria than ZTE. Bhaumik, Driffield and Zhou (2016) point out that home country-specific advantages (CSAs), by their very nature, are available to all firms operating within an emerging market economy. And they argue that 'there is little attempt to explain how apparently some firms are better able to gain from CSAs than others' (Bhaumik et al., 2016: 165).

Bhaumik et al. suggest that 'a key strategic advantage that emerging market firms which internationalize have over those that do not may be their ability to leverage (or benefit from) CSAs, to begin with' (2016: 169). Bhaumik et al. (2016) argue that

> If, therefore, an emerging market firm has the capability to deploy CSAs better than its counterparts and can cross the threshold to become an EMNE, it may open up a significant gap between itself and its non-MNE counterparts with respect to the ability to leverage CSAs. Thereafter, once they internationalise [sic] and therefore acquire greater ability to deploy and upgrade capabilities through linkage and learning, they further consolidate this advantage over their domestic peers (Bhaumik et al., 2016: 169).

This idea of Bhaumik et al. (2016) has a clear (recognized by the author) compatibility with the LLL hypothesis of Matthews (2002, 2006); which has been shortly discussed in the literature review. This theory seems to be highly relevant for the internationalization processes of Huawei and ZTE. Table 15 and Table 16show that ZTE followed Huawei in its internationalization process. Huawei had its first overseas project two years earlier than ZTE and ZTE entered many overseas markets one or two years after Huawei.

ZTE and Huawei entered the global market as relatively small telecom firms of roughly the same size (see Table 22).

Table 22 Changes in revenue of the 5 largest telecom infrastructure vendors, 2003-2015[16]

	Alcatel/Lucent	Ericsson	Huawei	Nokia networks	ZTE
2003		16,251	2,694	7,054	1,935
2005	13,475	22,381	5,982	7,765	2,672
2010	21,225	29,970	28,007	16,777	10,627
2015	15,501	30,430	60,839	14,240	15,435

[16] It needs to be noted that this table compares total revenue which includes revenue from network infrastructure equipment as well as from mobile devices.

Source: annual reports of Alcatel/Lucent, Ericsson, Huawei, Nokia networks and ZTE

The revenue data shows clearly that Huawei has been much more successful since its internationalization than ZTE. In 2012, Huawei took over Ericsson as the world's largest telecommunications equipment vendor ("Who's afraid," 4 August); while ZTE stayed one of the smallest (and since the acquisition of Alcatel/Lucent by Nokia in 2016 the smallest). Despite the fact that both Chinese firms have access to concessional loans from China Exim Bank. In other words, it seems that Huawei is better able to leverage the CSAs than ZTE is.

Further research needs to be conducted on the exact reasons for the difference in success of Huawei and ZTE on the global market and the role of motives, experiences and support in this difference in success – which is beyond the scope of this research. The aim of this research was to test the role of institutional distance for the location choice of Chinese investors – especially with regard to their investments in relatively risky emerging markets – and to further explore the specific challenges and advantages of Chinese firms in such host markets. The next chapter will recapitulate the main points of this dissertation and draw a conclusion.

9. Conclusions and recommendations

9.1. Research questions and main findings of the study

The aim of this thesis was to test the explanatory power of current theories on the motives behind Chinese outward investments and to further explore the particular advantages and disadvantages for Chinese firms in high-risk markets outside their own region. The main research question of this thesis is:

Why do Chinese firms invest in (relatively risky) emerging markets far away from their home country?

In order to answer this question, this research was divided into two studies: a quantitative study on a national level and a qualitative study on a firm level. The purpose of the quantitative study was to test the widely expressed view that Chinese investment is attracted to host countries with relatively weak institutions by comparing the location choice of Chinese and U.S. investments in Africa. The main research question for the first study was:

1. Are Chinese firms significantly more attracted to African countries with "poor institutions" than U.S. firms?

What I found was that – differently from predicted by theories on Chinese outward investments – the location choice of Chinese firms in Africa is not driven by institutional distance, nor uniquely not deterred from political risk. To the contrary: both Chinese and U.S. investments are directed to institutionally mature and politically instable host countries. The relation between investment and a low level of PS in the host country is significant for both Chinese and U.S. investments. However, the relation between investment and a high level of IM in the host country is only significant for U.S. investments. Some scholars argue that the latter result shows that Chinese firms are indifferent to the rule of law and thus unique in that regard.

I found this evidence not strong enough for the statement that Chinese investors so different in their location choice than Western investors and decided to further explore the role of institutional distance for the location choice of Chinese investors in Africa by conducting a case study. I used

theory-testing process tracing to further test and explore the causal mechanism between the perceived correlation between the levels of IM and PS in China and the levels of IM and PS in the host country.

The aim of this second study was to test the main theories on the motives of Chinese firms for investing in a typical high risk host market and to explore the specific advantages and disadvantages for Chinese firms in such a host market – related to the institutional and political context in China. The main research question for this qualitative study was:

2. How does the institutional and political situation in China influence the location choice of Chinese telecom firms for – and their success in– high-risk markets in Africa?

I found that large Chinese telecom infrastructure firms do not have most of the expected home CSAs that are linked to the institutional and political context in China compared to their competitors from the West. The most likely home country-specific advantage these Chinese telecom (and other Chinese) infrastructure firms have is their possibility to offer their clients a finance package via the China Exim Bank. The indirect support for Chinese firms via concessional loans from China Exim Bank are often referred to as unfair and unique for Chinese overseas investments. However, as some of my respondents in Nigeria (from the Netherlands and Nigeria) openly admitted: Western governments have done the same for their national firms and would still do the same if they had the means for it. In other words, historically seen it is not a unique tool of the Chinese government linked to the Chinese social, cultural, economic or political context. However, at the moment it sets Chinese infrastructure firms apart from their foreign counterparts when investing abroad.

In order to get a better understanding of the importance of accessibility to loans from the China Exim Bank for the location choice of Chinese firms, I decided to conduct a second quantitative study to compare my findings with the findings of the qualitative study. In other words, in this phase of my research project I mixed qualitative and quantitative research methods in order to study different aspects of the same phenomenon, namely: the impact of loans from the China Exim Bank on the success of Chinese firms in high risk host markets far away from China. The main research questions for this third study were:

3. Is Chinese ODI attracted to African countries that receive relatively more concessional loans from China?

And the follow up question:

4. Are Chinese telecom firms more successful than their competitors from the West because of their possibility to offer their clients a finance package via the China Exim Bank?

The results of the quantitative analysis show that Chinese ODI is indeed significantly directed to African countries that receive more concessional loans from China. However, a close look at the situation of Huawei and ZTE in Nigeria shows that access to these concessional loans alone is not enough for being successful in a risky emerging market like Nigeria. While both Huawei and ZTE have the possibility to make use of the concessional loans from China Exim Bank is Huawei much more successful than ZTE in Nigeria.

To conclude, my research shows that:

- Chinese ODI is not unique in being directed to politically instable host countries;
- Chinese ODI in Africa is not directed to host countries with similarly low levels of IM and high levels of PS;
- Home country-specific factors are not the main determinants for the success of Chinese telecom infrastructure firms in Nigeria – the largest receiver of Chinese ODI in Africa.

9.2. Relationship to previous research

This section will give a brief overview of the findings of the study and their relationship to previous work in these areas.

The findings of my first study run counter the conventional wisdom that Chinese investment has unique characteristics that translate in, for example, different location choices compared to the so-called “traditional investors” from the West. The discrepancy between the conventional wisdom and the reality on the ground seems to be for a large part caused by the use of subjective data in previous studies that have not been empirically tested and the lack of comparative studies.

For example, Buckley et al. (2007) find in their much cited study that Chinese ODI is not deterred from political risk. This result is similar to my finding that Chinese investments in Africa are significantly directed to host markets with a low level of PS. However, a key difference with my research is that Buckley et al. (2007) treat this finding as a unique characteristic for Chinese ODI without comparing the results for Chinese ODI with other FDI source countries. After presenting

their finding that Chinese ODI is not deterred from political risk Buckley et al. (2007) provide six possible explanations for this finding. Since Buckley et al. (2007) assumed that their finding was unique for Chinese ODI, all their possible explanations look for specific Chinese characteristics. Unfortunately, these possible explanations have been later referred to as "results" by others – even by Buckley himself (e.g. Amighini et al. (2013); Buckley et al., (2016)). However, the results of my comparative analysis show that Chinese investments to Africa are not uniquely directed to host markets with a low level of PS. To the contrary: U.S., France, U.K., Canada, Russia and India investments are all directed to host markets with a relatively low level of PS.

Regarding the institutional context, my results are in line with general FDI theory that predicts that firms tend to invest in stable and predictable host markets. However, my findings are in contrast with Kolstad and Wiig's (2012) claim that 'Chinese FDI outflows differ from FDI from other regions, in their attraction to poorly governed countries rich in natural resources' (Kolstad & Wiig, 2012: 33). Kolstad and Wiig (2012) find that Chinese investment is more attracted to a country with natural resources, the worse the institutional environment of that country and claim – without conducting a comparative study – that Chinese ODI is different in this regard from ODI from other regions. They even refer to their findings as: 'consistent with an image of China as a "ravenous dragon"' (2012: 33). A closer look at their study teaches me that the interacted term they find is only significant for fuel export and Kolstad & Wiig admit in their conclusion that it is possible that 'oil investment from China and from other countries is driven by the same set of factors' (2012: 33). However, this information is presented separately in their paper and contradicts their main conclusion.

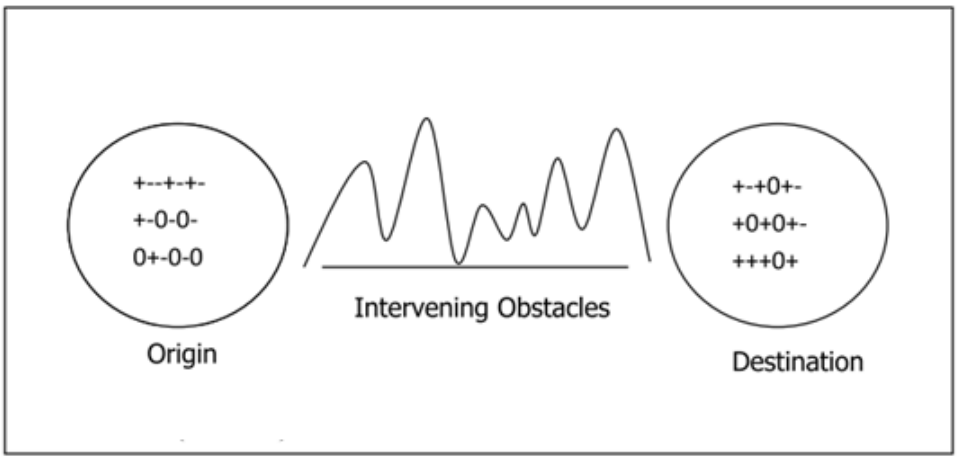
The results of my study also run counter the institutional distance theory and its underlying assumptions. The institutional distance theory predicts that firms are most successful in host markets with similar levels of IM and PS as in their home country (e.g. Child & Marinova, 2014a). Morck et al. (2008) link success in specific host markets with attraction to such host countries and argue that Chinese firms are more prevalent in least developed countries with difficult institutional conditions, because Chinese firms are more successful in such countries than their Western competitors. For my research I used a framework that was adapted from Rodrigues by Child and Marinova (2014a). Child & Marinova (2014a) divided the countries of the world over the matrix without calculating the exact values for their levels of IM and PS and did not test the framework. I developed a model to test this framework and my results show that while U.S. and Chinese firms are coming from different institutional and political contexts at home, both U.S. and Chinese firms tend to invest mostly in African host markets with high levels of IM and low levels of PS. In other

words, when testing Child and Marinova's (2014a) framework I came to other conclusions than what they had predicted based on their framework.

Furthermore, my in-depth analysis of the challenges and advantages for Chinese telecom infrastructure firms in Nigeria shows that the location choice and success of Chinese firms in challenging host countries is much less determined by home-country specific factors than often claimed. And that further research is required in order to improve our understanding of the location choice and investment strategies of Chinese firms.

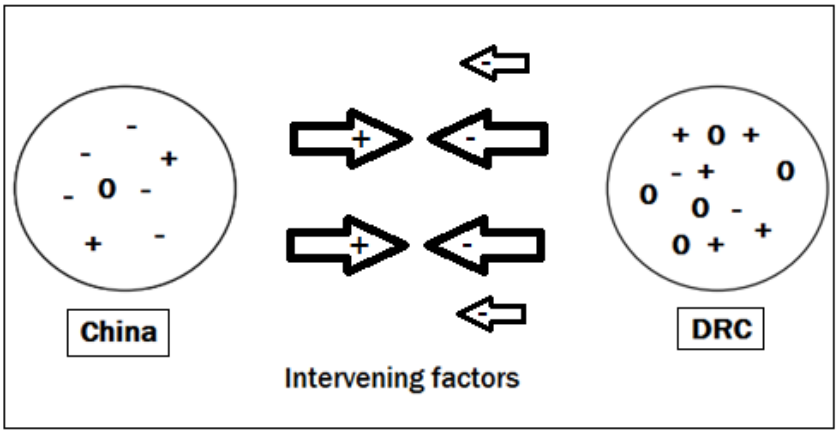
More generally, beyond the topic of ODI in Africa, my work supports the use of a holistic approach in IB research that acknowledges the strong interrelation between firm-specific, push, pull and intervening factors. In previous research (Van der Lugt, 2016) I visualized this interrelatedness by adapting a push-pull framework developed by Lee (1966) in migration theory (see Figure 55) for the use of explaining the location choice of foreign investors (see Figure 56).

Figure 55 Origin and destination factors and intervening obstacles in migration



Source: Lee (1966: 50)

Figure 56 **Push, pull and intervening factors in Chinese infrastructure investments in the DRC**

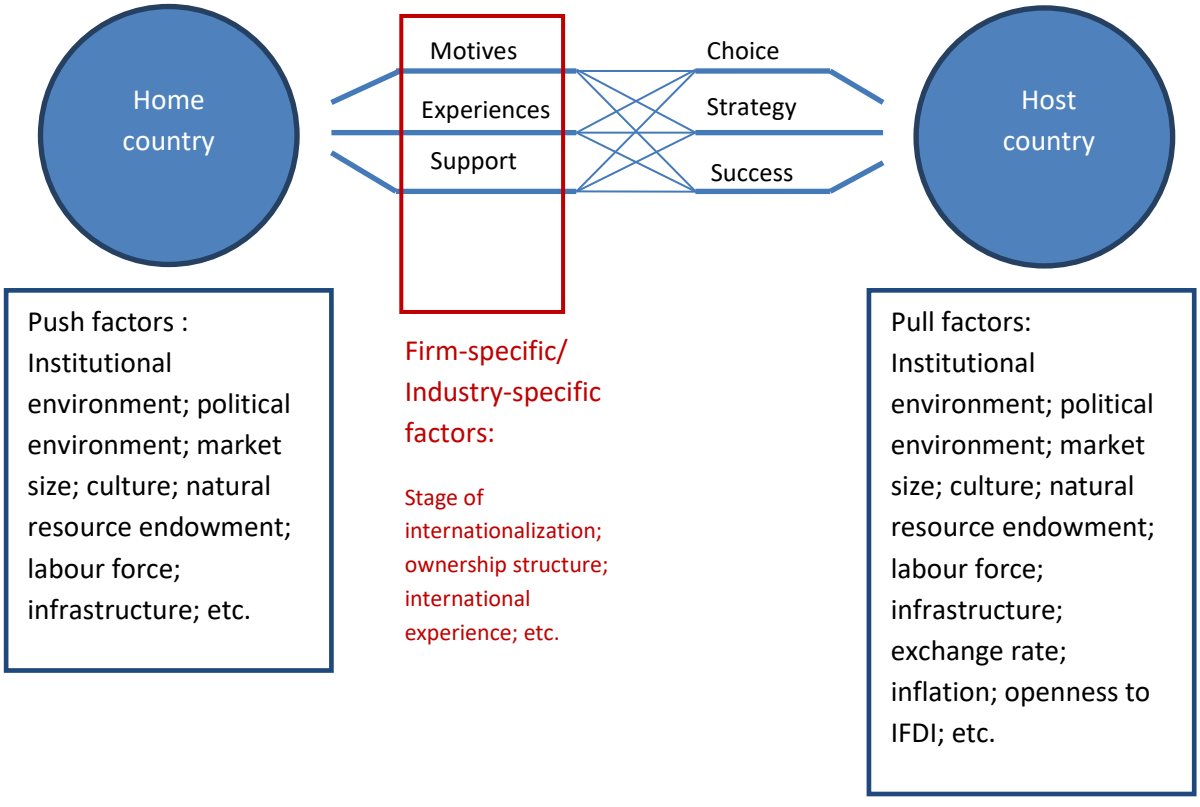


Source: Van der Lugt (2016: 197)

The current study of Chinese telecom infrastructure firms in Nigeria confirms that home country (push) factors do play a role in the location choice of Chinese investors; however the success of Chinese firms abroad depends on more than support from the Chinese government only. I found that firm-specific factors like management style, share of local employees, brand recognition and language skills play an important role in the success of Chinese telecom infrastructure firms abroad.

Based on these findings I further developed my adapted framework from Lee (1966) in order to capture the interrelatedness of push-, pull- and firm-specific factors in more detail (see Figure 57).

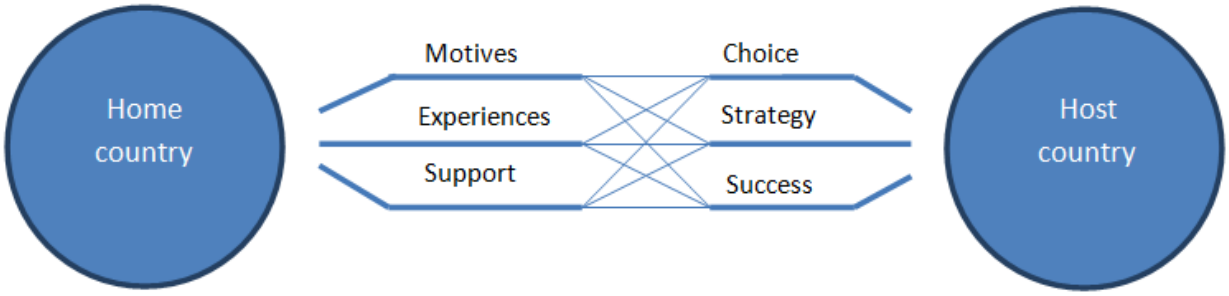
Figure 57 **Interwoven FDI determinants framework with detailed descriptions**



Source: created by the author

And the more simplified version:

Figure 58 Interwoven FDI determinants framework



Source: created by the author

This framework needs further testing; however, it could divert FDI research away from perhaps superficial national differences and give a deeper insight into the internationalization process of both emerging and traditional MNEs.

9.3. Limitations

9.3.1. Selecting Africa

My thesis has concentrated on Chinese investments in Africa. One could argue that Chinese investments to Africa are only a small percentage of its total outward investments and that knowledge about these specific flows can tell us little about Chinese outward investments in general. The same could be said about U.S. investments.

It is true that Chinese investments in Africa accounted for only ten per cent of China's global ODI stock in 2012 (still more than the share of its investments in Oceania or Latin America) and only one per cent of U.S.'s global ODI stock in 2012 (see Figure 20). However, the aim of this study is not to explain the location choice of Chinese firms in general. Instead the aim is to test the explanatory power of current theories on the motives behind Chinese outward investments and to further explore the particular advantages and disadvantages for Chinese firms in high-risk markets outside their own region.

After Asia, the advanced markets in Europe and Northern America, and the tax havens in the Caribbean most Chinese investments were directed to the African continent: a challenging region for business known for its instability. Traditional FDI theory cannot explain the still relatively large share of Chinese investments that flow to these high-risk host markets far away from China so soon in the internationalization process of Chinese firms. Is it because of the late-comer position of Chinese firms that does not give them much choice other than starting with the more challenging markets? Do Chinese firms have an advantage over their competitors from the West because of their experience with operating in a similarly challenging business context in China? Or is it because of the strategic natural resources in, and maritime route along, Africa that triggered the Chinese government to encourage Chinese firms to get a foot in this geopolitically strategic region?

The fact that the share of Chinese ODI stock to Africa is much larger than the share of U.S.'s stock suggests that Chinese firms and/or the Chinese government are more interested in Africa than U.S. firms and/or the government of the U.S. However, one per cent of U.S. global ODI stock is still much larger than ten per cent of China's global ODI stock as Figure 22 shows. In other words, U.S. investments to Africa actually outnumbered Chinese investments in terms of U.S. billions over the period 2003-2012. Furthermore, the relatively small share of U.S. ODI that flowed to Africa in the period 2003-2012 accounted for six to twenty per cent of the total FDI the African continent received. In other words, with a relatively small part of their investments, U.S. firms and/or the U.S. government bought much economic (and political) clout in Africa. Furthermore, the attempt of both former Secretaries of State MS. Clinton and Mr. Tillerson to put China in a bad light during their official visits to the African continent show that Africa is important to the U.S. and that the U.S. Government is ready to defend its strategic position on the continent.

I believe that the increased competition in Africa led to hasty conclusions regarding the motives behind Chinese investments, merely based on assumptions. Therefore I believe that it is useful and necessary to test the assumption that the motives behind Chinese investments are unique by comparing Chinese and U.S. investments to Africa: a strategically important region for both, geographically about as far from China as from the U.S. with many high-risk host markets.

9.3.2. Another comparative analysis with the U.S.

Professor Shenkar from Ohio State University mentioned in his keynote speech at the 6th international business conference at Aalborg University the overemphasis on the U.S. in IB. He encouraged scholars to stop using the U.S. in comparative studies and to use other countries instead since the U.S. is used in almost every comparative study in IB yet not typical for all Western

economies. I do agree with professor Shenkar and would have preferred to conduct an in-depth comparative analysis including many more countries than the U.S. and China. However, the challenge is that only the U.S. and China provide sufficient data for an in-depth comparative analysis of their location choice in Africa.

I noticed this surprising lack of information from other OECD countries for the first time during a study on FDI in sub-Saharan Africa that I conducted for Oxfam (Van der Lugt & Hamblin, 2011). For example, according to data from the Office for National Statistics (ONS, the key source for FDI outflow figures concerning the U.K.) U.K. firms had only invested in two of the fifteen Southern African Development Community countries (namely South African and Zimbabwe) over the period 2000-2005. After contacting the ONS we learned that this was the only information available since some information was suppressed to avoid disclosure of data of individual companies.

In preparation for the comparative analysis in this thesis I collected data on FDI for France, India, Brazil and Russia and found the same suspicious gaps in the data. Therefore, I decided to conduct the detailed comparative analysis with only Chinese investments and U.S. investments; the only two countries that provide detailed information regarding their ODI flows to African countries. And I included a small comparative analysis with the available data for the other FDI source countries as a robustness check (to see if China and the U.S. are outliers in their location choice or if it is a more general trend that firms tend to invest in politically instable and institutionally mature host markets). However, due to the rivalry between China and the U.S., the similar (potential) global reach of both nations and the threat the government of the U.S. expresses to feel from China in Africa[17]. I believe it is highly relevant to compare Chinese and U.S. investments to Africa.

9.3.3. Unreliability of FDI data

I am aware of the challenges with FDI data. Last year, the editor in chief of Columbia FDI Perspectives from the Columbia Center on Sustainable Investment, Prof. Dr. Karl Sauvant, published a paper with the telling title: “Beware of FDI statistics!” In this paper he identifies five shortcomings in FDI statistics that limit their accuracy, and therefore also their usefulness for analysis (Sauvant, 2017). One challenge is that some countries (like for example the U.S.) report FDI stock data at book value instead of market value. Data on FDI flows from FDI home countries that use different reporting standards are as comparable as apples and bananas.

[17] See for example: https://www.gpo.gov/fdsys/pkg/CHRG-110shrg45811/html/CHRG-110shrg45811.htm; McDowell, 2012

Another challenge are tax havens and countries that are not tax havens but that are convenient for channeling FDI to other countries using holding companies (e.g. Switzerland, the Netherlands and Luxembourg). It is clear that these investments are channeled through one country to another country, but we do not know the final destination of this money. Without knowing the final host country of these investments a large part of global investment flows remain unknown which makes the publicly available data on FDI flows incomplete and therewith incomparable.

However, these challenges with FDI data do not impact the relevance of my findings for three reasons. Firstly, I only compare Chinese and U.S. ODI flows directly in one of the context chapters; with the necessary disclaimers. Secondly, for the quantitative analysis I use the number of FDI projects. In this case it does not matter whether the money for the investment project came in via a tax haven or not. Thirdly, I only compare the number of Chinese FDI projects for different African host countries. In another model I compare the number of U.S. FDI projects for different African countries and I compare the results of both models to analyze the differences in location choice between Chinese and U.S. firms.

Another challenge with FDI statistics that does influence my study is that the data provided by MOFCOM on Chinese FDI projects is considered to be unreliable by many Western and Chinese scholars. One could question whether the FDI data of MOFCOM is more unreliable than the FDI data of any Western institute; however, that is beyond the scope of this study. It is true that I rely on data from MOFCOM for the number of Chinese FDI projects in African host countries and it is likely that there are flaws in this data. This means that based on this data I cannot state with certainty that Chinese ODI to Africa is indeed directed to African host countries with high levels of IM and low levels of PS. However, the aim of my research is not to find the truth behind the location choice or motives of Chinese ODI to Africa. The aim is to test the explanatory power of current theories on the motives behind Chinese outward investment that are based on the same unreliable data that my study is based. The point that I make is that based on the publicly available data one cannot state that Chinese ODI is uniquely directed to politically instable or institutionally immature host countries; as is currently stated in the literature.

9.3.4. Are infrastructure development projects investments?

At the 5th Conference of the "Chinese in Africa/Africans in China Research Network" in Brussels in June 2018 we had an interesting discussion among scholars from various disciplines about the definition of investment and whether or not the definition includes infrastructure projects financed with concessional loans. A sociologist from the U.S. was convinced that many scholars use ‘an

unacademically broad definition of investment' that blurs rather than shines light on the phenomenon of Chinese investments in Africa. An economist from Cambridge explained that from an economic point of view these infrastructure projects do indeed count as investments and all other participants agreed with the economist. My previous research in the DRC also shows that these infrastructure projects require large investments from the Chinese infrastructure companies. For example, in the Sicomine deal it was for a long time not certain whether or not the China Exim Bank would provide concessional loans for the infrastructure projects included in the deal (see Van der Lugt, 2016). At first the Bank agreed and the Chinese infrastructure firms started their projects in order to make the deadlines. The firms paid wages and materials while waiting for the money from the Bank. However, when the IMF criticized the project and threatened to block it and the China Exim Bank started to feel insecure about whether or not the allocated mines would produce enough in order to make the deal profitable the Bank decided to step out of the deal. At the time of my interviews, the Chinese infrastructure firms already heavily invested in their projects and had no idea if they would get a return on their investment.

Another example from the telecom infrastructure sector shows that Chinese telecom vendors also invest in their infrastructure projects backed by concessional loans in Africa. The first African country ZTE invested in was the DRC because it had an opportunity to buy a major share in the newly established telecom operator Congo Chine Télécoms (CCT) in 2000 (Mthembu-Salter, 2011). However, telecom operations is not a strength of the telecom vendor and the project failed. ZTE sold its shares to France Telecom-Orange in 2011 (Mthembu-Salter, 2011). When ZTE saw its losses, it made a striking move in 2007 and tried to acquire land in the DRC to grow palm oil.[18] Although this palm oil project never materialized, it shows that ZTE was desperate to earn back some of its lost investment in the telecom sector in the DRC.

To conclude, concessional loan backed infrastructure projects are investments from the perspective of the Chinese firms involved who often need to pay in advance and take the risk.

9.3.5. Single case design

Due to restrictions related to time and finances it was not possible to include more than one case in this study. The study of Chinese investments in another sector or another country could have provided other valuable insights. However, for the scope of this explorative study it was sufficient

[18] See this link for an informed discussion on the exact numbers of hectares ranging from three million to 250 hectares http://www.chinaafricarealstory.com/2010/03/china-and-african-land-grab-drc-oil.html.

to look at the case of two large telecom infrastructure firms in the largest African recipient of Chinese ODI. The insights gained from this study were sufficient to show that the motives and strategies of Chinese firms in Africa are more complex than stated in previous research and require further research.

9.4. Problems arising during the research

Several problems arose during data collection for both my quantitative and qualitative study. For my quantitative study I started off using freely accessible data from the Worldwide Governance Indicators from the World Bank on the rule of law and PS, and from UNCTAD on FDI flows. However, in order to decrease the chance for bias, I decided to use data from the IRCG database for PS and to use number of investment projects from fDi Markets. My access to these expensive databases was restricted to data for the period 2003-2011. That was sufficient for this study; however, it would be interesting to repeat our analysis with more recent data.

Another problem that occurred during the collection of data for my quantitative analysis was that data is relatively scarce for African countries. Due to the fact that ICRG has limited data on the level of government stability for many African countries, my sample included only 35 of the 54 African countries. A third challenge with collecting data for my quantitative study was that fDi Market data is not complete for Chinese investment projects in Africa. To solve this, I used the MOFCOM database for the number of Chinese projects.

Qualitative studies usually rely on the flexibility of the researcher. Especially getting access to companies and persons can be challenging. The biggest problem arose in China, in August 2015. I just arrived in Shanghai after the interviews with the senior managers in Shenzhen and was busy preparing the workshop when Prof. Wang called me. He spoke with our key contact person in ZTE who was angry with us. The senior managers in Shenzhen were not happy with the interview and did not allow us to use anything they told us for our research. We were surprised because during the interviews it did not look like they had a problem with our questions. However, we of course needed to respect their concerns and promised that we would not quote them or use any of the information they provided us. That was very unfortunate; however, at least the conversations gave us strong clues about the strategies, motives, challenges and advantages for ZTE in Africa. We only needed to find other sources for the evidence.

9.5. Recommendations

9.5.1. For future research

Future research should take note of the challenges with FDI statistics when claiming findings regarding the determinants behind the location choice of foreign investors and should keep up to date regarding the newest FDI data available. The Columbia Center on Sustainable Investment works on improving the rules and regulations regarding outward investment and the reporting of FDI might get more transparent in the near future.

As noted in the limitations, my qualitative study is a single case design which was sufficient to show that current theories on the specific advantages for Chinese firms in challenging home countries do not hold. However, further research needs to be done on the specific challenges and advantages for Chinese firms in other sectors and in other high-risk host countries in order to build new theories that can explain the location choice of Chinese firms.

Future research into Chinese economic activities on the African continent should also include more comparative analyses in order to move beyond the unfounded claim that the behavior of Chinese actors in Africa is unique. Comparative analyses will allow us to learn about the specific differences between home countries, sectors and firms within the social, historical, political and economic context of the study. And it could also teach us about the similarities between Chinese and other foreign actors in Africa and the possibilities for cooperation.

9.5.2. For policy

After having conducted fieldwork in many African countries I am convinced that most African policy makers are well-informed on Chinese economic activities in their region. My policy recommendations focus therefore on policy makers from traditional FDI source countries – like the U.S. and Western Europe – and businesses from the U.S., Western Europe and China. Since it is so obvious to African policy makers that Chinese and Western governments and firms are interested in their countries for very similar reasons, it is not in the interest of Western actors to portray "China" as a worse version of them. It makes these traditional investors look untrustworthy. I see two options for Western governments with an interest in Africa: an idealistic and a business option.

In case the idealistic intentions – to protect the environment and local workers in Africa – are real, these governments do best by acknowledging that in this increasingly multi-polar world order they can only change their own actions and at best might inspire others to follow their lead. In other

words, in order to protect the environment and local workers in Africa these governments should focus on the actions of their own national firms and held them accountable for their actions abroad. FDI home countries do have limited legal responsibility for how their national companies are operating abroad since that would question the right of sovereignty. However, civil society organizations in both the host and the home countries can use the technique of naming and shaming: publication of bad practices of companies from a certain nationality can lead to stricter control by their home government. The work of Profundo in the Netherlands is a good example of how successful this technique can be. Especially when the firms are informed before publication and are given the chance to change their policies before the public shaming happens.

However, in case Western European governments and firms are indeed also merely in Africa for doing business (instead of the claimed intentions throughout history to bring civilization, religion, democracy, good governance, etc.) then they better realize quickly that their real intentions are too transparent. Not admitting them makes these traditional investors unreliable business partners in an era in which African host markets have plenty of choices with whom to do business with. Furthermore, in order to make their cry for more transparency on the Chinese side less ridiculous, Western governments should first become at least as transparent as the Chinese government regarding their FDI flows to African host markets.

From a business point of view, ZTE could consider investing in English proficiency among its staff in Nigeria and at the HQ in Shenzhen. Nigeria is the largest market for telecom infrastructure in Africa and some of its customers in Nigeria mentioned language barriers as a reason for why ZTE is less successful in Nigeria than Ericsson and Huawei. This would also encourage closer cooperation between the Nigerian and Chinese employees at ZTE Nigeria whom I saw interacting barely at the times of my interviews – in clear contrast with the intensive interaction between local and Chinese employees at Huawei.

Furthermore, Huawei and ZTE seem to have room for improvement in their efficiency and affectivity in Nigeria by improving professional cooperation between the two companies. Clients, competitors and fellow Chinese business men referred to Huawei and ZTE in Nigeria as two fighting dogs – whose fights are annoying and costly for their clients. According to the MD of Ericsson it is common in the telecom infrastructure sector that after a period of fierce competition during the bidding process the various telecom vendors work closely together in the implementation of the project. Ericsson has very good experiences with cooperating with both Huawei and ZTE. However, when Huawei and ZTE have to cooperate together in a project they are making it difficult for each

other. This behavior can cost Huawei and ZTE projects in the future and strengthen Ericsson's position at the expense of Huawei and ZTE.

Western firms should better evaluate and anticipate long term drawbacks of getting access to the Chinese market. Chinese telecom vendors have been able to catch up quickly with their competitors due to cooperating with these Western firms on the Chinese market. Are a few golden years with access to the largest market in the world worth losing on the global market afterwards? For some shareholders it is; however, not for employment and technological development in the home countries of these Western firms.

9.6. My contribution

In addition to the provision of some directions for future research, my study has made three contributions to the literature on Chinese outward investment.

Firstly, by comparing the location choice of Chinese and U.S. ODI to Africa I show that – based on the available data on FDI stock and flows from UNCTAD and number of FDI projects from ICRG – the argument that Chinese outward investment is uniquely directed to politically instable host markets no longer holds. Instead, my findings show that both Chinese and U.S. investments are significantly directed to relatively politically instable host markets in Africa. I improved the models developed by Buckley et al. (2007) and Chen et al. (2016) to study the location choice of Chinese ODI and this improved model can be used for future comparative analyses between various FDI source countries in Africa – once the data is available for more home countries.

Secondly, the use of process-tracing sheds light on the strengths and weaknesses of some particular assumed causal relations between the home and host markets contexts. By doing that it reveals the flaws in the assumed link between institutional distance and the location choice of investors. My findings show that home and host country factors are not sufficient for explaining the success of Chinese firms in high-risk host countries far away from China and that firm-specific factors play an important role too. These results reveal some of the complexity of the motives and strategies behind Chinese outward investment that require further research.

Thirdly, by interviewing the persons who are behind the decisions made in order to deal with the complexity of a challenging host market, this study put faces to the anonymous statistics on Chinese

ODI to Africa. By going to the field and ask Chinese managers themselves about their main challenges and advantages in a high-risk host country like Nigeria my study reveals – for some perhaps surprising – similarities between Chinese and other foreign firms in Nigeria.

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Appendix 1 List of interviewees

Organization	Function	Location
ZTE	Senior manager	Shenzhen
ZTE	Senior manager	Shenzhen
ZTE	Senior manager	Lagos
ZTE	Middle manager	Lagos
ZTE	Senior manager	Abuja
Huawei	Manager PR Department	Lagos
Ericsson	MD Nigeria	Lagos
MTN	Manager	Lagos
MTN	Manager	Lagos
Smile	MD	Lagos
Smile	CTO	Lagos
Nigeria - China Business Council	Chairman	Abuja
Stanbic	Manager	Lagos
Shijiazhuang Enric Gas equipment	Business development manager	Lagos
Shenkai Petroleum equipment	Africa market manager	Lagos
Lekki Free Zone	Assistant MD	Lagos
Netherlands trade and investment office	Senior economic advisor	Lagos
Embassy of the USA	Counselor for Economic Affairs	Abuja
Embassy of the USA	Economic Officer	Abuja
Embassy of the USA	Political Officer	Abuja

Chinese Consulate	Economic and Commercial Consul	Lagos
Chinese Consulate	Commercial Consul	Lagos
China cultural center in Nigeria	Director	Abuja
United Capital	MD	Lagos
United Capital	Manager	Lagos

Appendix 2 Interview guide Chinese firms

Introduction questions

Before we get to the main questions we would like to ask you some introduction questions in order to get a picture of your position in and experiences with [the company[.

- Could you please share with us since when you work for [the company] and, more specifically, since when you work on your current position?
- Did you also work in other countries for[the company] and if yes in which one(s)?

[the company]'s investments in Nigeria

1. When did [the company] start to invest in Nigeria and could you please tell us how this came about? (If you are familiar with this issue)
    a. Who initiated the first investment in Nigeria?
    b. What was the main reason for investing in Nigeria at that time?
    c. How did the decision process work: which departments were involved and who had to officially agree?
    d. How did [the company]start operating in Nigeria? (For example, as a: JV, Wholly owned sub, strategic alliances, etc.?)
    e. How did [the company]'s operations in Nigeria evolve from that first investment?

2. Since that first investment [the company] has been involved in many projects in Nigeria. How many projects are we talking about roughly?
    a. Could you please give us a rough overview of the kind and number of projects [the company] has been and is currently involved in Nigeria?
    b. Could you please give us an idea of the total volume of the investments in Nigeria (if not precise, then maybe a rough number like: "more than…")

3. Which achievement(s) of [the company] in Nigeria are you personally most proud of and why?

4. Which [the company] project (or more than one if you like) comes first to your mind if you think about a successful project?
    a. What made this particular project successful?
    b. When is a project successful? What measure(s) do you use?

5. What are the main challenges in less successful projects?
    a. How did [the company] respond to these challenges?
    b. What worked? (Could you provide some examples?)
    c. What did not work? (Could you provide some examples?)

6. How would you describe the business environment in the telecom sector in Nigeria?

7. How do you perceive the political environment in Nigeria? Stable or not so stable and why?
    a. In which ways could this pose a threat or opportunity for doing business?

8. How do you perceive the rules and regulations in Nigeria?
    a. How clear are the rules and regulations?
    b. How fair are the rules and regulations?
    c. Are the rules and regulations similar as in China or not and in what way?
    d. What happens to a company if it does not comply with the rules? In what way is that similar or different to China?
    e. In which ways could the rules and regulations pose a threat or opportunity for doing business?

9. What role do formal contracts versus Guanxi-relations have in Nigeria?
    a. Is that similar as in China or not and in what way?

10. Do you feel welcome in Nigeria as a Chinese company?
    a. What kind of support did [the company] receive from the Nigerian government when starting the business in Nigeria?
    b. Do you think this support is related to the good relations between China and Nigeria and in what way?

11. What is the role of the HQ in [the company]'s operations in Nigeria?

a. What kind of support does the subsidiary receive from the HQ? (For example: financial, material, guidance, etc.)
b. In what way does the HQ influence or control the activities of the subsidiary in Nigeria? Or is the subsidiary operating quite independently?

12. What kind of support does [the company] receive from the Chinese government/ embassy?
    a. Financial support?
    b. Diplomatic support?
    c. Opening doors with aid projects?
    d. Other kind of support?

13. (If corruption has not been mentioned yet in the answers to the above questions) Nigeria is known for its high level of corruption. How do you deal with this? What effect does corruption have on [the company]'s activities in Nigeria?
    a. What are the regulations from China regarding dealing with corruption abroad?
    b. How do corruption scandals impact the reputation of [the company] (at home and abroad)?

14. What is your personal opinion about this: Does experience with doing business in China prepare better for doing business in Nigeria than experience with doing business in Europe?

15. Is it easier or more difficult for [the company] to do business in Nigeria than in Europe?

All questions are followed by prompting questions like for example: asking for an example, asking for meaning, asking for evidence, asking for more detail, etc.

Appendix 3 Interview guide Ericsson

Introduction questions

Before we get to the main questions we would like to ask you some introduction questions in order to get a picture of your position in and experiences with [the company[.

- Could you please share with us since when you work for [the company] and, more specifically, since when you work on your current position?
- Did you also work in other countries for[the company] and if yes in which one(s)?

[the company]'s investments in Nigeria

1. When did [the company] start to invest in Nigeria and could you please tell us how this came about? (If you are familiar with this issue)
    a. Who initiated the first investment in Nigeria?
    b. What was the main reason for investing in Nigeria at that time?
    c. How did the decision process work: which departments were involved and who had to officially agree?
    d. How did [the company]start operating in Nigeria? (For example, as a: JV, Wholly owned sub, strategic alliances, etc.?)
    e. How did [the company]'s operations in Nigeria evolve from that first investment?

2. Since that first investment [the company] has been involved in many projects in Nigeria. How many projects are we talking about roughly?
    a. Could you please give us a rough overview of the kind and number of projects [the company] has been and is currently involved in Nigeria?
    b. Could you please give us an idea of the total volume of the investments in Nigeria (if not precise, then maybe a rough number like: "more than…")

3. Which achievement(s) of [the company] in Nigeria are you personally most proud of and why?

4. Which [the company] project (or more than one if you like) comes first to your mind if you think about a successful project?
    a. What made this particular project successful?
    b. When is a project successful? What measure(s) do you use?

5. What are the main challenges in less successful projects?
    a. How did [the company] respond to these challenges?
    b. What worked? (Could you provide some examples?)
    c. What did not work? (Could you provide some examples?)

6. How would you describe the business environment in the telecom sector in Nigeria?

7. How do you perceive the political environment in Nigeria? Stable or not so stable and why?
    a. In which ways could this pose a threat or opportunity for doing business?

8. How do you perceive the rules and regulations in Nigeria?
    a. How clear are the rules and regulations?
    b. How fair are the rules and regulations?
    c. In what way are rules and regulations different from and/or similar as in Sweden?
    d. What happens to a company if it does not comply with the rules? In what way is that similar or different to Sweden?
    e. In which ways could the rules and regulations pose a threat or opportunity for doing business?

9. Do you feel welcome in Nigeria as a Swedish company?
    a. What kind of support did [the company] receive from the Nigerian government when starting the business in Nigeria?
    b. Do you think this support is related to the good relations between Sweden and Nigeria and in what way?

10. What is the role of the HQ in [the company]'s operations in Nigeria?
    a. What kind of support does the subsidiary receive from the HQ? (For example: financial, material, guidance, etc.)
    b. In what way does the HQ influence or control the activities of the subsidiary in Nigeria? Or is the subsidiary operating quite independently?

11. What kind of support does [the company] receive from the Swedish government/ embassy?
    a. Financial support?
    b. Diplomatic support?
    c. Opening doors with aid projects?
    d. Other kind of support?

12. (If corruption has not been mentioned yet in the answers to the above questions) Nigeria is known for its high level of corruption. How do you deal with this? What effect does corruption have on [the company]'s activities in Nigeria?
    a. What are the regulations from Sweden regarding dealing with corruption abroad?
    b. How do corruption scandals impact the reputation of [the company] (at home and abroad)?

13. What is your personal opinion about this: Does the experience Chinese businesses have with doing business in China prepare better for doing business in Nigeria than experience with doing business in Europe?

All questions are followed by prompting questions like for example: asking for an example, asking for meaning, asking for evidence, asking for more detail, etc.

Appendix 4 An overview of the main importers of Nigerian crude oil, 2001-2016

Importers	Exported value in 2001	Exported value in 2002	Exported value in 2003	Exported value in 2004	Exported value in 2005	Exported value in 2006	Exported value in 2007	Exported value in 2008	Exported value in 2009	Exported value in 2010	Exported value in 2011	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016
Total	19226563	15773153	23768387	34153355	45480438	60158752	66779788	87898421	51392077	77694884	106885851	105240558	96089923	90511939	50856987	32770299
India	0	0	0	0	0	5602111	6910731	10035629	5568277	10135266	13464884	13799333	13618746	15500788	10059688	7215433
United States of America	8744232	6163991	10876510	17066368	25044664	28908332	33666481	38991669	19627149	31249294	34310011	19256396	11889703	3808243	1905245	4234266
Spain	1854785	1313558	2187863	2470211	3856405	4691157	4929906	6823419	3808210	5621299	8286038	8949094	7413689	8531603	5049814	3428904
France	1040085	983806	1284754	1032824	1350709	2387386	1696167	4688716	2513158	3258093	5915778	4686084	4955819	5381687	3193250	2290485
South Africa	231994	339544	397672	794270	642271	1353776	1751917	1849395	1806521	2175570	3097209	3692288	3593989	5120539	4565580	2054347
Brazil	1370841	1088764	1516487	3487784	2631094	3876191	5273126	6697838	4756129	5910921	8372704	8004562	9643268	9487351	4625862	1288868
Indonesia	444480	1130686	860327	1073845	945275	0	602698	103290	503633	913190	1606085	2735000	3091955	3286061	1284493	1280080
Germany	601155	482158	670115	312235	810207	1634906	1087976	2466551	1432714	2337708	4436840	5505975	5238762	5053189	1979683	1213161
Canada	132931	124621	302893	39436	1410232	624892	235078	819724	376688	1576097	2451615	1966919	1109459	356991	802356	1147549
United Kingdom	29660	46736	26988	102982	187337	269064	501512	1469087	903861	1155110	3536371	5068646	4881518	3955039	2134015	1067110
Netherlands	272921	56571	278848	43406	746177	1046664	1011928	1367636	1360300	2402956	3629806	5283022	4508744	4780097	3272393	936089
Sweden	52318	30408	0	28161	57954	0	0	214070	123992	80610	26009	1056321	1553254	1625073	786481	661269
China	168596	109815	58231	442829	503895	241776	489235	432175	832740	927640	1380720	1115799	1370753	2144448	768050	556612

Source: ITC Trademap, 2018

Product 27: Mineral fuels, mineral oils, and products of their distillation.

In USD thousand

Mirror data

Appendix 5

Source: ITC Trademap, 2018	In USD thousand
Product: All	Mirror data

Table 23 Top-10 source countries of Nigerian imports

Exporters	Imported value in 2006	Imported value in 2007	Imported value in 2008	Imported value in 2009	Imported value in 2010	Imported value in 2011	Imported value in 2012	Imported value in 2013	Imported value in 2014	Imported value in 2015
China	2852152	3799462	6767052	5475594	6696844	9205574	9296313	12042613	15393425	13701240
Netherlands	1635970	2800570	4510801	3308854	4453405	5300431	3454851	3534243	3502172	3256025
Belgium	519688	858116	1224370	1157179	903392	1994945	1910590	2866616	2181214	1967653
United States of America	2230798	2786673	4101985	3658008	4060548	4904789	5029335	6388833	5967789	3437953
Korea, Republic of	809476	2374958	2535989	816518	805616	2487016	853740	1570323	1323808	685801
India	932942	992814	1369418	1543343	1917926	2557091	2828459	2897204	2872163	2286611
United Kingdom	1540903	2051144	2665074	1935913	2115763	2524425	2523470	2424305	2271627	1620696
France	1543249	1527606	2162068	1734526	2107097	2055067	1730766	2022205	2017181	1434944
Germany	1228367	1486427	1834226	1484773	1436587	1804281	1645968	1791185	1852244	1164420
Brazil	1373624	1512357	1535590	1066463	862541	1192085	1066605	875906	955469	688377

Table 24 Top-10 destination countries of Nigerian exports

Importers	Exported value in 2006	Exported value in 2007	Exported value in 2008	Exported value in 2009	Exported value in 2010	Exported value in 2011	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015
India	5682236	7017395	10124669	5645077	10257572	13604802	13962157	13759369	15663352	10233803
United States of America	28959184	33740486	39217292	19737386	31357508	34465732	19405879	11984702	3935445	2003775
Spain	4757578	5025700	6934186	3895915	5754354	8433305	9074047	7529752	8624936	5124580
Netherlands	1174756	1197147	1557023	1767088	2764044	4136857	5695056	7505982	8682102	5402845
France	2493083	1814462	4807701	2625884	3376437	6047034	4783724	5044576	5524853	3269953
Germany	1762463	1245735	2652588	1646734	2656316	4737131	5701386	5493025	5305428	2185206
South Africa	1366675	1771839	1892426	1838965	2200397	3118515	3721336	3616778	5135808	4579049
United Kingdom	355445	647663	1644949	977655	1234985	3652239	5975151	4962194	4032722	2173267
China	277747	537080	508381	896526	1071622	1583680	1273793	1546603	2656039	1240701
Indonesia	4613	607205	114820	508849	921593	1626871	2770664	3122441	3306301	1288156

Statutory Declaration

(on Authorship of a Dissertation)

I, Sanne van der Lugt, hereby declare that I have written this PhD thesis independently, unless stated otherwise. I have used only the sources, data, and support clearly mentioned and described in the text. The intellectual property of other authors used in the dissertation text is credited to them and properly referenced. This PhD thesis has not been submitted for conferral of degree elsewhere.

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Bremen, September 14th, 2018

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Sanne van der Lugt