



Mopani Copper Mine, Zambia.

Source: Action Aid

Using Foreign Direct Investment to the developing country's advantage

Zambia's experiences

Oskar de Roos

Student number: 375742

Supervisor: Prof.dr. A.G. Dijkstra

Word count: 24628



12th of May 2014

Contents	Page
Abstract	3
Acknowledgements	4
Chapter 1. Introduction	5-9
- Objective	5
- Problem formulation	6
- Approach	7-8
- Relevance	8-9
- Thesis contents	9
Chapter 2. Literature Review	10-28
- Concepts and definitions	10-11
- FDI effects on development	11-15
- Empirical research	17-25
- Conclusion	25-27
- Figure 1: channels and circumstances	28
Chapter 3. Research Design	29- 38
- Type of study	29
- Case	29-30
- Type of data	30-31
- Operationalization of the theoretical framework	31-34
- Figure 2: Channels, indicators and methods.	35
- Triangulation	36
- Interview data	36-38
Chapter 4. Zambia's Conditions and Circumstances	39-65
- Zambia's copper industry	39-45
- Variable 1: Foreign investors' motives and policies	45-48
- Variable 2: Type of FDI in Zambia	49-52
- Variable 3: Level of human development	53
- Variable 4: Regulatory authorities and policy framework	53-63
- Implementation of regulation	63
- Conclusion	63-65
Chapter 5. FDI output in Zambia	66-81
- The importance of copper for the Zambian economy	66-68
- Channel 1: FDI filling resource, trade and tax gaps	68-74
- Channel 2: Linkages	74-76
- Channel 3: Spillovers	77-78
- Channel 4: Side effects	78-80
- Conclusion	80-81

Chapter 6. Conclusion	82-86
- Answer main question	82-84
- Recommendations	84-86
- Reflection	86
References	87-93
Data sources of tables, graphs and figures	94
Appendix 1	95-99
Appendix 2	99-101
Field study Zambia: Some pictures	102-103

Abstract

This thesis assesses FDI effects on development in Zambia. The copper sector has attracted vast amounts of FDI and potentially generates Zambia's economic wealth that could be the catalyst of development. However, Zambia is bottoming many rankings and belongs to the poorest countries of the world. The main question therefore is: *Why is FDI in the copper sector in Zambia not beneficial for national development and what is the role of the government?* First, I conduct a literature review and elaborate on the research design. Thereafter, I will analyze the copper sector's development and determine conditions and circumstances. There are four intermediary variables, also called the conditions and circumstances affecting FDI outcomes: the level of human development, the policy of foreign investors, the type of investment and lastly the local policy framework regulating FDI. Then, FDI effects on Zambia economic development is analyzed with the use of various channels: linkages, spillovers, the filling of resource, trade and tax gaps and finally the side effects of mineral mining. The empirical findings suggest that the one-dimensional economy depending on the copper price and export volumes makes Zambia vulnerable for global booms and busts, resulting in uncertain revenues. Additionally, the practices of foreign investors, focused on cheap copper extraction and export, undermine development. Zambia's economic and human development is pressurized by the relative power of multinational companies, which focus on refining and exporting copper, repatriating profit and adding value abroad. Eventually I conclude that the weak regulatory framework gives foreign investors a free hand.

Acknowledgements

I like to thank the following people who helped me with making my trip to Zambia a success. I came to this number of respondents after long period of preparation and with the help of: Alastair Fraser, teaching at the Cambridge University; Math Wells, researcher for Human Right Watch; and Judith Fessehaie, industrial development expert at TradeMark Southern Africa. They all supplied me with contact details of relevant people to speak to in Zambia. I also like to thank Nkuruma Chama Kalaluka, the Trade and Investment Officer at the Honorary Consulate of The Netherlands in Lusaka. I am very grateful to him because not only did he familiarize me with the Zambian culture, he also directed me to useful sources in Lusaka and on the Copperbelt. I am especially thankful for the family Mondoka offering me shelter in Kalalushi township and supplying me with helpful directions on the Copperbelt. Last but not least I like to thank my supervisor prof.dr. A.G. Dijkstra for her support and guidance.

Chapter 1

Introduction

The questions asked in this Master's thesis indicate the challenges for a resource rich developing country in Africa. One country's development in particular is of interest: Zambia. The historical development will be analysed, as well as the current inflow of Foreign Direct Investment (FDI) in Zambia's most important industry, the copper sector. The copper industry has been a flourishing industry ever since the British colonial rule started exploiting mineral mines. Soon after independence, 1964, the mines were nationalised to secure maximal government benefits from the copper export. However the copper mines were mismanaged and the copper price went down due to global economic downturns in the 1970s and 1980s. International donors, the World Bank and the International Monetary Fund (IMF) called for reforms, such as privatization. As soon as the privatization of the mines started, only in the late 1990s, international mining companies showed their interest and bought up the copper mines (Fraser, 2012). Some mines just needed to be reopened, others needed millions of US dollar investments in order to be operational again. Besides companies from resource rich Western countries, like Canada and Australia, Asian companies from upcoming powers, such as China and India, invested great amounts of money in the copper sector. The mining and smelting activities by foreign investors are located the north of Zambia, a region called the Copperbelt. Currently all mines are owned by foreign companies and mainly export copper to China, although exact figures are either confidential or not being recorded.¹

Objective

This Master's thesis aims to clarify the role of the government and regulatory authorities with respect to policy formulation, regulation and law enforcement in order to facilitate an environment in which the economy and the people of Zambia benefit from FDI in the copper sector. This means that an important aspect of this study is a policy analysis of government's FDI regulation and an assessment of the performance of regulatory institutions. Additionally, opposing forces obstructing the tasks of Zambia's authorities, such as the policy of foreign investors, are scrutinized. All in all, the FDI effects on

¹ Interview with the Director of Strategy & Business Development of Konkola Copper Mines (KCM), on the 18th of October 2013.

development will be analyzed and subsequently a judgement can be made if the selected case has appropriate conditions and circumstances so that FDI may enhance development.

Problem formulation

Despite the inflow of money and the investment in Zambia's copper industry, the economy is not performing as it could or should. Some argue that FDI should be promoted in order to generate economic growth (e.g. Mytelka and Barcaly, 2003; Boudier-Bensebaa, 2008; Hansen and Rand, 2005). Others argue that inward FDI is not the only solution for economic development and can even hamper growth. In other words; is FDI advantageous or disadvantageous for national development? In the last three decades most publications are on this discussion; pros and cons of FDI (e.g. Biersteker, 1978; Moran, 1985, Cassen and Pearce, 1987; Korten; 2001).

According to the World Bank data, Zambia belongs to the low-income countries (World Development Indicators, World Bank data, 2014). However in the colonial era, when the British rule operated the mines and governed the country, Zambia belonged to the middle-income countries. Nowadays Zambia is known for its copper reserves. But still this mineral wealth and the vast amount of FDI did not lead to a prosperous economy. This leaves us with some pressing questions.

Main Question:

Why is FDI in the copper sector in Zambia not beneficial for national development and what is the role of the government?

To answer the main question, three sub-questions are formulated.

Sub-Questions

1: Is FDI good for development and what can governments do to increase the benefits of FDI, with the focus on FDI in resources, and what obstacles will they meet?

2: How are the effects of FDI on development influenced by the conditions and circumstances in Zambia?

3: What are the effects of FDI in the copper sector on Zambia's development?

Approach

This thesis comprises of a qualitative design and a case study is included. Sources of data are academic publications, official documents, newspaper coverage and existing databases. The Zambian case study will mainly be composed of interviews with companies, government officials and trade unions in Zambia. A recent fieldtrip to Zambia has led to twenty-two interviews with various stakeholders in the copper sector. Below I will briefly give an overview of the content of this thesis.

The first sub-question is theoretical. FDI theory and case studies from various developing countries will be analysed. Academic sources and other's case study material will be used (e.g. Hansen and Rand, 2005; Markusen and Venables, 1997; and Morrissey, 2012). Theories on the obstacles governments meet in making FDI beneficial for development will be included (e.g. Jensen, 2003; Meyer, 2004; Morrissey, 2011).

The second sub-question focuses on the case study: Zambia's copper sector. I first describe the copper sector's history and then discuss four intermediary variables; the foreign investors' motives and policies; the type of FDI; the level of human development and the practices and the range of activities enfolded by regulatory institutions. Data from various scholars will be analysed (e.g. Baylies and Szeftel 1992; Haglund 2008; Fraser, 2007, 2010), as well as data collected in interviews with stakeholders in the mining sector and policy documents. Eventually I will confront theory on optimal FDI policy and obstacles, with Zambia's practice and predict outcomes of Zambia's conditions and circumstances for economic development.

The third sub-question is again empirical and will first describe Zambia's economic situation. Then with the use of four clusters of channels the effects of FDI on development will be assessed. In the end I will compare actual development outcomes, with theoretical expected outcomes and draw my conclusions.

Relevance

Academic

The impact of FDI on developing countries has been the topic of many publications (e.g. Asiedu, 2002; Haglund, 2008; Morrissey, 2012) However, the academic world is still not conclusive on the understanding of the impact of FDI and its externalities. Some explanations can be found in the fact that channels of FDI impact are complex and

interwoven. It is therefore not clear what causes the diverse outcomes in different developing countries. Many researchers however use a theoretical approach and therefore cannot analyse the discerning of the routes through which impacts arise. This makes heroic assumptions essential and finesse is sacrificed. Besides, the impact of FDI does not occur in a vacuum, and so the context is very important. Another flaw in current research is that of the ignorance of the difference in time-scale effects. The research designs seldom make a distinction between for example 5-year or 15-year effects (Zhan and Mirza, 2012; Morrissey, 2012).

This study aims to clarify what the short and long-term effect of FDI is on economic development in sectors like the copper sector in Zambia. Thus, new case study material will be supplemented to the current literature.

Policy

The core problem for developing countries is their limited capacity to extract benefits from FDI. Therefore knowing where the constraints lie is critical in helping these governments with selecting effective policy towards FDI (Morrissey, 2012: 27). This study will make a contribution to gain knowledge in order to formulate adequate policy for inward FDI.

Thesis contents

The following chapter will be a literature review. First I will look at the existing literature and the answers to my questions that already have been given. I will include studies on positive and negative effects of FDI on development, as well as the role of the government in regulating FDI. More specific I will look at studies that focused on the outcomes in Sub-Saharan Africa only. At the end of chapter two, I will answer the first sub-question and formulate theoretical expectations. Chapter three then continues with the research design and starts with the operationalization of theoretical framework. I also discuss the methods, which are used to answer the empirical sub-questions.

The empirical part of this thesis begins with chapter four, which covers sub-question two and consists of the case study: Zambia's copper sector. I will discuss for intermediary variables; the policy and motives of foreign investors; the type of investment; the level of human development and lastly the local policy framework regulating FDI. The focus is on the performance of regulating institutions and

government's FDI policy, as well as the opposing forces or obstacles, that may influence government's regulatory task. For example the relative negotiation power of foreign firms. The outcomes are indicators of FDI effects on development. Policies and regulations for example concern: taxation issues, investment conditionalities and tendering and bidding processes.

The fifth chapter answers the last sub-question. It focuses on the channels through which FDI affects development: filling up of resource, trade and tax gaps; linkages; spillovers and side effects. Outcomes, the indicators of development are first of all the net benefits of investments in the copper sector. Growing GDP, employment figures and human development are indications of success. FDI effects on development will be explained by comparing with theoretical expectations: given the conditions and circumstances in Zambia and in particular the copper sector, certain results in economic development can be expected. After answering the sub-questions, the sixth chapter will include a discussion of the findings, the answer to my main question, recommendations and a reflection.

Chapter 2

Literature review

This chapter will review existing literature in search for empirical and theoretical answers to the questions. My first sub-question deals with the effects of FDI on development, in particular FDI in the natural resource sector. The performance of governments in developing countries managing their natural resources will be included in the analysis. The focus is on the role of the government in facilitating and regulating FDI and the obstacles the government faces in executing policies. I will cover some literature that is generalizable for developing countries throughout the globe, but others focus on (Sub-Saharan) Africa only, since it seems that this part of the world stands alone in some decisive development characteristics (e.g. Geda, 2006; Haglund, 2010; Kaplinksy and Morris, 2009 and Morrissey, 2012). In order to prevent ambiguities I will start with definitions of the concepts I use in this study. At the end of this chapter I will formulate theoretical expectations.

Concepts and definitions

The central concepts in this study are Foreign Direct Investment (FDI) and economic development.

Economic development

Economic development can be expressed in terms of different variables. One could look at GDP growth, increasing levels of employment and purchasing power. If we consider development in a broader sense, one should also look at the level of human development. The main problem with the latter is that learning and increasing technological knowhow, both components of human development, cannot be easily expressed in figures and is therefore difficult to measure (e.g. Borensztein, De Gregorio and Lee, 1998). Productivity level is also an important determinant for economic development. However if higher productivity of the foreign firm is at the expense of lower productivity in domestic firms, there might be no implication for aggregate output or economic growth (Lipsey, 2004: 367).

Foreign Direct Investment (FDI)

FDI is defined as:

Private capital flows from a parent firm to a location outside of the parent firm's home nation (Jensen, 2003: 588).

A crucial factor that defines FDI is the transfer of ownership. This makes FDI different from other capital flows, because the transfer of ownership implies risks. There are just two types of FDI flows according to Asiedu (2002). First, there is FDI that is market-seeking. The main objective is to serve the domestic market and goods are produced in the host country and sold at the local market. The second type is non-market seeking; goods are produced in the host country, but sold abroad.

FDI effects on development

The benefits and costs of FDI are heavily debated. The controversy over the role and impact of FDI is not only about the influence of multinational corporations (MNCs) on traditional economic aggregates such as investment, GDP and manufacturing growth rates, but also on the fundamental economic and social meaning of development. In this part I will first differentiate two concepts: linkages and spillovers. Thereafter I list the factors that may influence FDI's impact, positively or negatively. Then I look more specifically at the effects in Sub-Saharan Africa. Studies with empirical evidence trying to explain the varieties in outcomes, focusing on the role of the government, will also be discussed.

Channels resulting in positive effects

The channels through which FDI is growth-inducing and translate into effects on productivity and development are diverse. Todaro (2012) formulated general theory on positive channels. First, FDI can fill the resource gap between targeted investment and locally mobilized savings. Second, the trade gap can be filled. FDI fills the gap between targeted foreign-exchange requirements and net export-earnings. The first two effects are in general positive effects of capital flow. A third contribution to development, generated by FDI in particular, is the inflow of governmental tax revenues. The gap between targeted revenues and locally raised taxes can be filled. Fourth, foreign

investors bring management experience, entrepreneurship and technology with them, which can be transferred to local companies (Todaro, 2012: 688).

Linkages and spillovers

Two specific channels, the concepts of *linkages* and *spillovers*, need a more detailed description in order to better understand the output of FDI. Many effects of FDI can be categorized as either linkages or spillovers. Other channels, such as financial effects, like tax income and balance of payment issues, cannot be categorized under these concepts. First of all, different types of spillovers are all centred around, usually positive, effects of FDI for development: the transfer of ideas, expertise and knowledge. On the other hand three basic types of linkages resulting from FDI are, first of all related to employment, second additional demand for local suppliers and lastly, extra supply of input to local producers. So here is the difference: linkages are related to the employment of locals, increasing demand and additional supply. Whereas spillover effects usually refer to some kind of transfer of knowledge. Together these concepts reinforce each other. Linkages facilitate spillovers and provide benefits themselves. Learning is on the other hand associated with spillovers and increases the benefits of linkages (Morrissey, 2012: 27).

Morrissey's (2012) published on FDI in Sub-Saharan Africa and how this may result in a knowledge transfer and learning process by domestic firms. One of his concerns is the treatment of spillover effects in other scholar's empirical fieldwork. The spillover effects concentrate around the basic idea that domestic people and firms learn from foreign investors. Foreign investors most likely bring the newest technological knowledge about production processes and transfer this knowledge to local communities with the use of modern production chains. However this learning element is hardly ever studied. Rather, spillover is inferred from some observed relationship between a measure of performance of the host country and a feature of the foreign sector. An example is that the productivity of domestic firms increases through the use of intermediate inputs from foreign firms. The blurring of the distinction between linkages (no learning element required) and spillovers (all about learning) is seen in more studies, and are in some cases used as synonyms. This can be justified if the scholar talks about general effects of FDI. However, if one tries to explain the learning element of FDI, one ought to differentiate between transfer of knowledge, spillovers, and

the implication this has for the performance of the company or industry, linkages. Since the success factor of both concepts is amplified by each other.

Morrissey (2012) also argues that most FDI to Sub-Saharan Africa is either in resource-extraction, such as the copper sector in Zambia, or privatized utilities (public transport and telecom) and the tourist industry. That is why one should actually not be looking at spillover effects, but more to linkages alone. For example, FDI brings employment to developing countries. The demand for low-skilled labour is positively related to FDI inflows, however high-skilled labour is often executed by expatriates (Asiedu, 2002: 107). Linkages capture more about the effects of MNCs in these African developing countries than do spillovers (Morrissey, 2012 : 29).

Channels resulting in negative effects.

Arguments refuting positive effects of FDI centre around the idea of FDI worsening the position of the host country and widening the gaps instead of closing them. This means that for the arguments above a negative counter argument can be given. First, FDI may substitute for private savings and eventually result in lower investments rates. Second, the foreign-exchange earnings may be reduced on the long-run. This may be caused by the import of intermediate products and capital goods and because of the repatriations of profits and other earnings overseas. Third, the practice of transfer pricing (investors can avoid taxation by artificially inflating the price it pays for intermediate products purchased from overseas), liberal tax concessions, public subsidies and tariff protection provided by the host government, may result in considerably less tax revenue than it could have been. Fourth, the skills, ideas and technology provided by foreign investors may have little impact on developing local sources as a result of the dominance of foreign firms in local markets. The transfer of technology is not always sufficient in order to be able to compete with MNCs. This may in fact inhibit the development of the host country by the lacking growth of indigenous entrepreneurship (Todaro, 2012: 688-690).

More fundamental objections against the positive effects of the inflow of FDI coming from e.g. Görg and Greenaway, (2001), Haglund, (2008), (2010), Morrissey (2012), Romer, (1993), are, first, the impact of foreign firms on development is uneven and reinforce dualistic economic structures and therefore exacerbate income inequalities. Second, in light with the substantial employment problems of developing

countries, a major criticism of foreign investor's practises is that multinationals produce inappropriate products, which are only demanded by a small and rich minority, and produced with the use of capital intense technologies of production that as a result create little employment. Third, foreign investors use their economic power to influence government policies in favour of the foreign firm and in directions unfavourable to development. This may result in a race to the bottom, since they are able to extract economic concessions from competing developing countries' governments. Host countries give tax rebates, investment allowances and cheap provisions of factory sites in order to lure in foreign investors. Multinational corporations gain control over local assets and jobs and exert considerable influence on political decisions. In some cases foreign investors influence the political process of host countries by payoffs to corrupt public officials and contributions to political parties. As a result, the profits made by investors may exceed the social benefits. Fourth, host economies may be damaged by the arrival of foreign investors because domestic companies are suppressed. With the use of superior knowledge, and a range of essential support services, locals are not in the position to compete. This practice was seen in a wave of privatization of public corporations in developing countries in the 1980s and the 1990s. Foreign investors have been able to acquire potentially most lucrative businesses and thereby crowded out local investors (Todaro, 2012: 691). An example of this practise is the case study later discussed in this study: the copper industry in Zambia. Additionally, specifically investments in the mining industry may cause environmental damages and pollution. Not only the environment is affected, also the local communities for example depending on the polluted water supply are suffering (Fraser and Lungu, 2007: 33). Concluding, the violation of labour rights and the violation of human rights in the mining sector is not a new fact in Africa (e.g. Wells, 2011).

FDI effects in Africa

The following part will focus on developing countries in Sub-Saharan Africa. A limited capacity to extract benefits from FDI of many developing countries on this continent exists (Morrissey, 2012: 27). First of all, the failure of many countries to develop coherent FDI regulation policy is decisive for truly benefitting from FDI. Since policy is inadequate or missing, corruption is thriving and these countries are unable to identify the important linkages to promote through FDI (e.g. Haglund, 2008 and Jensen, 2003).

Second, many investors in Sub-Saharan Africa are more interested in natural resource extraction than in local production. In terms of spillovers and linkages this specific type of FDI is therefore usually of the wrong type and does not necessarily lead to beneficial effects at all. Chinese (state) companies for example invest increasingly in resource-rich African developing countries and problematic, from the host country perspective, is that Chinese firms typically cause very little spillovers and linkages. They do not have the intention to involve local businesses and even bring their own workers, machinery, and equipment to the host country (Morrissey, 2012: 29).

Third, Borensztein et al. (1998) suggested that FDI is only an important vehicle for the transfer of technology and contributing to development when the host country has a minimum level of threshold stock of human capital available. Most Sub-Saharan African countries do not have a sufficient level of human capital, therefore the absorptive capability of the advanced technologies is low and FDI cannot contribute to economic development.

Positive effects of FDI: decisive role government

In this part the role of the government in enhancing positive effects of FDI will be discussed. Governments can use their power to intervene in the economy through various means: fiscal, monetary and trade policies influence the behaviour of private companies. Worker, consumer and environmental protection laws also regulate economic agent's behaviour. The state can also redistribute income through subsidies and transfer payments. Morrissey (2012) believes that industrial policy is the mechanism that enables domestic producers to ultimately benefit, adopt and adapt to the technology and knowledge of foreign investors. In sum, the government plays a large role in how FDI contributes to economic development.

Brewer (1993) describes the type of policy that influences the outcomes of FDI for development. Among the policies that affect FDI are monetary policy concerning money supply, exchange rates, and interests rates. In general, also capital control and antitrust (competition) policies can be particularly important in their effects on imperfections of the host's market and FDI flows. Government's failure to pursue policies which could reduce the market imperfections makes FDI less beneficial and is often an advantage for foreign investors. Firms may act as monopolies and set the prices. On the other hand, labour related policies, like minimum wages and enforced

holiday leave policies, can secure positive outcomes for workers. Finally, intellectual property rights and government policies may affect international licensing and can enforce patents, copyrights and licensing agreements to the benefit of local communities (Brewer, 1993: 108).

Reiter and Steensma (2010) argue that policies can be formulated in favour of the objectives of the foreign investors or that of the state. How FDI is used and directed, strategically and discriminately will determine economic growth. Restricting economic sectors from an inflow of FDI and discriminating against foreign investors may reduce to total amount of FDI. However the trade-off of less FDI for FDI that is strategically used, is more beneficial in the long run to human development. Part of the reasons for this is that development is promoted when the employees and firms from the host country are motivated to learn from foreign investors, but also able to participate. This means that the existence of FDI is necessary but not directly competes with domestic investors, which try to benefit from spillovers. While the local community is learning and getting up to speed, the constraints on the inflow of FDI allow for some protection. This is actually similar to the protection of infant industries from advanced competitors (Reiter and Steensma, 2010: 1690).

Dunning (e.g. 1994, 2010) published extensively on the way host government's policies affect, negatively and positively, the outcomes of FDI. First, he argues that countries should have minimal structural distortions or institutional impediments in order to upgrade indigenous assets. Second, industrial areas should be promoted as well technological learning facilities, such as local universities and schooling. This positively influences the level of human capital and increases the adaptation of FDI benefits. Third, transfer-pricing abuse should be limited with adequate taxation policy. Fourth, there should be policy that promotes local entrepreneurship, in order to develop an economy that is not solely depending on FDI inflow. Lastly, government policy should encourage foreign investors to upgrade their value adding processes and also invest in activities that enhance the comparative advantage of indigenous resources.

Empirical research

Evidence for positive FDI effects on development

Lipsey (2004) concentrates on several components that can be affected by inward FDI: wages, productivity levels and eventually economic growth.

Wages can be affected in several ways by the entrance of foreign firms. Evidence from various studies (e.g. Harrison, 1996 and Lipsey and Sjöholm, 2004) is overwhelming and shows that foreign-owned firms in all kinds of sectors pay higher wages than domestically owned firms. Given the differences in required quality and level of education, it is difficult to argue whether they also pay a higher price for labour. However, there is also evidence that wage levels are linked and domestically owned firms eventually pay higher wages too. Thus, the average wage in developing countries is positively affected by FDI. The proof for this strong statement comes from studies of wages in foreign owned plants in developing countries. Their findings are based on data from surveys in the manufacturing-sector. One example is Harrison's (1996) study. She found statically significant differences between wages in firms owned by foreigners and domestically owned firms. In eight sectors, out of nine in Venezuela, in twelve out of eighteen sectors in Morocco and three out of twelve industries in Cote d'Ivoire. One problem with this cross-sectional analysis of wage differences is that of plant heterogeneity. This is not measured and thus not controlled for. However, this is dealt with by examining wages in individual plants over time. Doing this, the relationship between wages and foreign ownership of a plants becomes weaker. Still, foreign ownership of a plant, controlling for the industry, the plant size and capital intensity, resulted in higher wages up to eighteen percent (Aitken, Harrison and Lipsey, 1996: 368).

FDI also affects productivity levels of the host country. The measuring of capital input however is the hardest hurdle to take and is sometimes neglected in studies. That is why we should be careful in drawing conclusions. Nevertheless, the evidence on productivity is close to unanimous on the higher productivity of foreign owned plants. Productivity increase is in some cases caused by a higher capital intensity or larger scale of production in foreign-owned plants. This is proved by studies that compared companies in manufacturing sectors in developing countries. Examples of studies are Blomström and Wolff (1994) they measured both value-added and gross output per

employee in Mexico. They found that foreign owned plants relatively produce twice as much as their local counterparts. Okamoto and Sjöholm (1999) studied micro data from Indonesian manufacturing firms in the 1990s and had similar findings. Sjöholm (1999) looked into technology differences leading to higher output between foreign and domestic owned firms. The differences in technology were measured as the coefficients on ownership dummies in equations relating added value per worker as a proxy for capital intensity. In twenty-six out of twenty-eight industries the technology differences were found to be in favour of foreign firms. He found a difference between inter- and intra-industry effects. Knowledge spillovers from FDI indeed boost productivity in local establishments at the inter-industry level. However increased competition from the FDI may also decrease measured productivity at the intra-industry level, through a downward pressure on prices or through a decrease in capacity utilization or scale of operation. The closer the local and foreign establishments are operating geographically, the more likely they are competing. This in turn leads to lower prices. Therefore, intra-industry spillovers from FDI could be diminished by strong competition from MNCs in the industry, which pressurizes prices that leads to a lower value added and thus to lower overall productivity (Sjöholm, 1999: 573)

Productivity levels and development

The productivity levels of domestically owned firms do not automatically rise with the entrance of FDI. However, there is some evidence from several countries that inward FDI flows are mostly beneficial to the productivity of local firms which are not far from the performance of multinational affiliates. Additionally, overall economic growth is mostly affected by productivity spillovers from foreign-owned to domestically owned firms. To be more specific on the evidence, studies such as Blomström and Persson (1983) found that in Mexico, using data from Mexican Industrial Census, the labour productivity in domestic plants was positively related to the extent of foreign presence in the industry. Other scholars disagree and Görg and Greenaway (2001) argue that the results of the studies looking at productivity spillovers only found limited evidence in the support of positive effects. Spillovers are in some developing countries discouraged by the very large operational and technical gaps between foreign and domestic owned firms and also by restrictive regimes. In general, economies with an inward oriented trade regime have done worse, benefitting less from FDI, than countries with an open

trade regime. Borensztein et al. (1998) published a study called *How does Foreign Direct Investments affect economic growth?* Their objective was to empirically analyse the role of FDI in the process of technology diffusion and the impact on economic growth in developing countries. Technological diffusion plays a vital role in developing the economy. Through a variety of channels the transmission of ideas and technology can take place. One of them is FDI. Investments by multinational corporations is considered to be one of the most important channels for the transfer of advanced technologies to developing countries. Since MNCs account for a substantial part of the world's research and development investment, they are amongst the most technologically advanced entities. Other channels for technological spillovers are for example the imports of high-technology products. Borensztein et al. (1998) tested the effect of FDI in a cross-country regression framework. Their empirical work is motivated by a model of endogenous growth. The long-term growth rate of income is determined by the rate of technological progress. Data on FDI flows from industrial countries to sixty-nine developing countries were collected from the early 1980s until the late nineties.

The model used by Borensztein et al. (1998) highlights the roles of both human capital and the introduction of advanced technology. First technological progress takes place through the process of 'capital deepening', which is the introduction of new capital goods. Because more advanced techniques are used by MNCs, companies are more efficient and capital goods can be introduced at a lower cost. Second, the applications of advanced technologies requires the presence of a sufficient level of human capital in the developing country. This is because of the absorptive capability of the country, which is dependent on the stock of human capital available and determines the transferring of advanced technology. Hence the model suggests the empirical investigation of the complementarities between human capital and FDI in the process of productivity growth. They use several FDI data sources, including publications of IMF and OECD. Human capital data on secondary schooling is coming from Barro and Lee (1994). Their results suggest that FDI spillover effects do occur and that FDI is in particular an important vehicle for the transfer of knowledge and technology. Technological knowledge also contributes relatively more to growth than domestic investments. They also found a strong complementary effect between human capital and FDI. This means that the contribution of FDI to economic development is strongly enhanced by its interaction with the level of human capital.

Hansen and Rand (2005) analysed the Granger causal relations between FDI and GDP in a sample of 31 developing countries. They concluded that this selective survey seems to indicate a strong relationship between FDI and economic growth. Although, across countries, the relationship is highly heterogeneous. Their findings suggest that on average, FDI has an impact on growth in the Granger causal sense. They found a significant composition effect; a higher ratio of FDI in gross capital formations has a positive effect on the level of GDP. Another interesting finding is that the impact in African countries is not systemically lower than the impact of FDI in Asian and Latin American countries. This means that African countries potentially benefit from increased FDI flows, just as much as other regions in the world. Overall they conclude that, on average, FDI has a significant long-run effect on GDP, irrespectively of the level of development (Hansen and Rand, 2005 : 15-16).

Markusen and Venables (1997) also published work on linkages. Their working paper *Foreign Direct Investment as a catalyst for industrial development* zooms in on effects of FDI on local firms in the same industry. The objective of their paper is to provide an analytical framework within which they can assess the effects of FDI and industrial linkages. They use a complex multi-industry model with an input-output structure, imperfect competition and increasing returns to scale. The assumption of their model is that foreign investment can occur in the market for final goods. This creates backward linkages to intermediate goods suppliers, which can change efficiency and real income levels. Their main idea is that the effects of FDI on the home country may operate through several different channels, but they only concentrate on two: product market competition and linkages effects. The first means that multinationals may substitute for domestic firms; the second means that multinationals may be complementary. The outcomes of their model indicate that it is possible for FDI to act as a catalyst, leading to development of local industry. This may even become so strong as to reduce the position, relative and absolute, of multinationals in the industry.

To measure the positive influence of FDI on overall economic growth of the host-country, comprehensive cross-country studies are conducted (e.g. Blomström, Lipsey and Zejan, 1994; Borensztein, et al. 1998, and Lipsey, 2004). The rate of growth of real domestic product or GDP per capita, is related to the stock of inflow of FDI. Overall the results of these studies indicate that the size of FDI inflows is somehow positively related to growth. So indeed, positive effects of FDI can occur through channels, such as

technology diffusion; various methods of processing; managerial expertise and enhancing labour skills. Only if the host country has the abilities to utilize these transfers, FDI can indeed be beneficial for productivity gains and that can be expected to improve growth performance (Morrissey, 2012: 27).

Evidence for negative FDI effects on development

Most scholars study general effects of FDI and sometimes they may conclude that FDI does not enhance economic development, or even have a negative impact on development. One study that found negative effects of FDI on development is conducted by Konings (2000). He looks at the net effect of FDI: some negative effects overrule the positive effects. He therefore does not deny that positive spillovers can occur through various channels such as the introduction of new products for the local market. Also the production processes by foreign firms can positively influence domestic firms through the diffusion of new technology. The positive externalities generated by foreign firms, however, may vanish by counter factors such as the increased competition from foreign firms which may lead to a reduction in the production of the domestic firm. It could be the case that a negative competition effect dominates a positive technological spillover effect. With the use of firm level data from Eastern European countries such as Poland, Romania and Bulgaria and his modelling strategy, using OLS, he comes with evidence that suggests that there are negative spillovers effects to domestic firms in Bulgaria and Romania, while there are no spillovers effects to domestic firms in Poland. He argues that his findings suggest that FDI can result in a negative competition effect that dominates a positive technology effect.

Romer (1993) suggested that the FDI is not beneficial for the development because of the gap in knowledge and the productivity levels. The main obstacle for local firms in a developing country, which are trying to keep up with firms from advanced countries, is the gap in knowledge, rather than the gap in physical capital. Therefore real competition is not possible and local companies are suffering from the FDI inflow. In order to overcome this problem and benefit from FDI, the government plays a crucial role. The most important and also easily implemented policies by the government of developing countries is an incentive to close the knowledge gap. An economic environment should be created that offers an adequate reward to MNCs when they bring

ideas from the home country and put them to use with domestic resources (Romer, 1993: 548).

Empirical research on the role of the government

As the above studies suggested, the effects of FDI on development is somewhat ambiguous. The inflow of FDI may result in economic growth, but in the aggregate it may hamper development of local businesses and pressurises human development. The absorptive abilities of the host country are an important factor determining the effects of FDI, but also the facilitating role of the government: policy determines FDI effects. Most studies however look at government policies attracting FDI (e.g. Asiedu, 2006 and Banga, 2009), rather than looking at the outcomes of government policy. Lall (2004) looked at the industrial strategies of governments and the role of the government policy in building industrial competitiveness. The nature of globalization and FDI flows is a growing divergence in competitive performance of the developing world. She argues that policy interventions are necessary to overcome market failures and building host countries capabilities in order to pursue development. The strategies adopted by the Asian Tigers proved to be successful in building industrial competitiveness and economic development. This should be an example for developing countries in Africa. However, there is no general policy model. South-Korea for example kept FDI out unless FDI was necessary for technology access or export. Taiwan pushed local technology diffusion, but all FDI was screened and discouraged in sectors where local companies were strong and Singapore only admitted FDI in high value added activities. Therefore, government policy does have impact on FDI inflow and outcomes, but each economy or sector seem to require specific policy.

Reiter and Steensma (2010) findings suggest that FDI may promote economic growth in developing countries by providing jobs and capital, and perhaps indirectly through technology spillovers. However, if not steered by any policy, FDI can increase industry concentration and drive out domestic firms. Without passing on advanced techniques. Above all, foreign investor's primary interest is profit maximization and not national development. Their findings show that policies restricting foreign investor from entering some sectors, result in positive influences on improvement in human development. This suggests that perhaps foreign investment's contribution to development enhances when they are restricted to invest in sectors where foreign

expertise is needed to promote development. FDI and the presumed effects on economic growth, evoke regulating and promoting policy in developing countries. Policy makers and development agencies alike are important for growth-inducing effects of FDI and thus, the industrial policy environment matters. As there might not be a direct causal relationship between FDI and growth, national government will have to ensure that the absorptive capacity of the national economy exists. That is why another finding is not very surprising; high levels of government corruption can block human development improvements, since it obstructs the benefits of FDI from reaching the population (Reiter and Steensma, 2010: 1689).

Empirical research on FDI effects on development in Africa

Reiter and Steensma's (2010) study starts with arguing that it is impossible for scholars to argue that FDI is only beneficial for economic growth. Simply because empirical evidence continues to provide contradictory results in for example Sub-Saharan Africa. Whether FDI is positive or negative for economic growth depends on things like the ability of locals to participate and learn from foreign investors. It also depends on the sector and the ability of host government to use the inflow of FDI to their advantage.

The problem in Sub-Saharan Africa is that linkages are not associated with spillovers. As there is no learning or knowledge transfer and even the linkages are often modest because the human capital is low and financial markets are undeveloped. Additionally, local investments do not increase productivity rates, in comparison to foreign investments. Another problem for many African countries is that FDI is not concentrated in the manufacturing sector, which is the most important sector for developing and spillover effects. Most FDI goes to resource extraction sectors. This is indeed important in providing employment for at least unskilled labour. Since usually expatriates fill the high-skilled jobs. However there are typically few linkages to domestic firms and few spillover opportunities in this sector (Morrisey, 2012: 28).

Haglund's (2008) research focuses on regulation of FDI in weak Sub-Saharan African states. Especially Chinese rapidly growing engagement with Sub-Saharan African countries is scrutinized. His paper explores the ability of host country regulators and various stakeholders to effectively regulate Chinese investments. He argues that Chinese FDI can pose significant challenges for effective regulations of businesses. The key finding is that corporate governance features prevalent among Chinese investors, in

combination with the existing weak regulatory frameworks of many African countries, undermines the host country's FDI regulation and eventually risks sustainable development. In detail, understanding a foreign investor's predispositions towards engagement with local stakeholders, means that one should look at corporate governance structures: the rights and responsibilities structure of shareholders in the firm. This includes the relationships with external parties which provide inputs for the production process and intangible resources like political legitimacy. The role of the Chinese state's and policy makers in, first, financing outward investment into Africa and, second, controlling investments, determines corporate governance structures: it gives firms incentives to minimize cost; it results in a lacking firm transparency; tax evasions; undermining laws and regulations and eventually conflicts with local stakeholders (Haglund, 2008 : 557-58)

Another issue is the value-adding process, which is usually small or even missing. This process is seen as an ideal way to attract benefits from FDI in the natural resource sector. The degree of technology and knowhow required is much greater and therefore there is more potential for transfer and learning. However, most commodities are exported as raw materials and the processing is done in the home country. This is also a recognized problem in for example the case study, Zambia. In other words, the most important sector that attracts FDI in sub-Saharan Africa, provides few benefits (Morrissey, 2012: 29).

Role foreign investors in Africa

The foreign investor's interests and objectives may vary and determine the relationship between the host country and the multinational corporations. Especially between sectors differences can be found and result in different outcomes of FDI. What if foreign investors buy domestic companies and start producing not for the host country, but for export only? This is a trend specifically seen in the natural resources sector. But can also be seen in the agriculture, clothing and car industry. As long as it generates enough employment usually host countries do not complain. However, the long-term effect is negative and if the prices of commodities go down companies can leave the country without leaving any substantial benefits behind (e.g. Haglund, 2008).

All in all, traditional FDI in Sub-Saharan Africa has not been associated with significant linkages or spillovers. Additionally there is little reason to believe that this

will change soon. Upcoming powers such as China and India have become major investors in Sub-Saharan Africa, but their FDI delivers almost no factors that contribute to economic development (Morrissey, 2010: 5-6). Chinese state owned and private firms have increased their investment last decades, in particular in the oil and mineral sector, but also in infrastructure projects. China's government also subsidises investment, either directly by giving grants to Chinese firms or indirectly by building infrastructural projects necessary for the in- and export of goods. Morrissey (2012) concludes that often firms that entered with machinery and expatriate labour easily established themselves in the local economy. As a result this reduced the potential linkages and even undermined local firms. His simple and harsh conclusion is therefore that most FDI to Sub-Saharan Africa, currently and historically, has done little to provide linkages and spillovers.

Conclusion

The above literature review gives us a better idea of the dilemmas of the practical development outcomes of FDI flows. The answer to the first sub-question can now be formulated: *Is FDI good for development and what can governments do to increase the benefits of FDI, with the focus on FDI in resources, and what obstacles will they meet?*

First of all FDI can be beneficial for economic development through various channels that result in effects such as: knowledge transfer, productivity gain, higher employment, growing human development and eventually a growing GDP. The theoretical expectations for factors that enhance positive effects, concern specific circumstances in which the developing country is situated. These circumstances that influence the effects of FDI are first of all the stock of human development available in the developing country. Human development determines the absorptive abilities of the local community: the higher human capital the more the host country benefits from FDI in terms of, for example, the transfer of technology (e.g. Borensztein et al. 1998). Another important factor is the attitude and the purpose of the foreign investor. The host country often negotiates with MNCs about the rights and obligations the investors have to meet. When the governance structures are weak and the MNCs are exploiting its relative power, the investors are often able to create ideal conditions in order to maximize profit (e.g. Haglund, 2008). The type of investment is also crucial for development outcomes. Not only the sector determines if local communities will benefit from investment. For

instance, labour intensive sectors like mineral mining can hire more local people than high technology sectors. Also the production chain and the value adding process is important determinant for local communities. The more value is added in the host country the larger the FDI effects on development are (e.g. Morrissey, 2012). Lastly, the policy framework regulating FDI is a key factor determining FDI outcomes. This framework comprises of policies that are needed in order to promote local benefits (e.g. Jensen, 2003).

The policy framework can be divided in a number of policies. First, governments can intervene in the economy through; fiscal, monetary and trade policies influencing the behaviour of private entrepreneurs. The level of taxation and the amount of royalties that have to be paid also determine government's revenues. Additionally, taxation policy should limit the abuse of transfer pricing. Also, worker, consumer and environmental protection laws regulate economic agent's behaviour. The mandatory hiring of local people and the restriction on expatriates increase local employment and human development. The state can also redistribute income through subsidies and transfer payment in order to promote development of certain communities and sectors (e.g. Dunning, 2004 and Reiter and Steensma, 2010). Second, policy should promote industrial areas, as well as technological learning facilities, such as local universities. This has a positive influence on the level of human capital and increases the adaptation of FDI benefits. There should also be policy that promotes local entrepreneurship, in order to develop an economy that is not solely depending on FDI inflow. Third, the liberalization trend from the 1980s, is often seen as a key factor of, first increased FDI inflow, and second developing the host country's economy. Liberalization can be promoted by balance-of-payment policies that counter issues such as a chronic deficit.

Fourth, government policy should encourage foreign investors to upgrade value-adding processes and also invest in activities that enhance the comparative advantage of indigenous resources (Dunning, 1994).

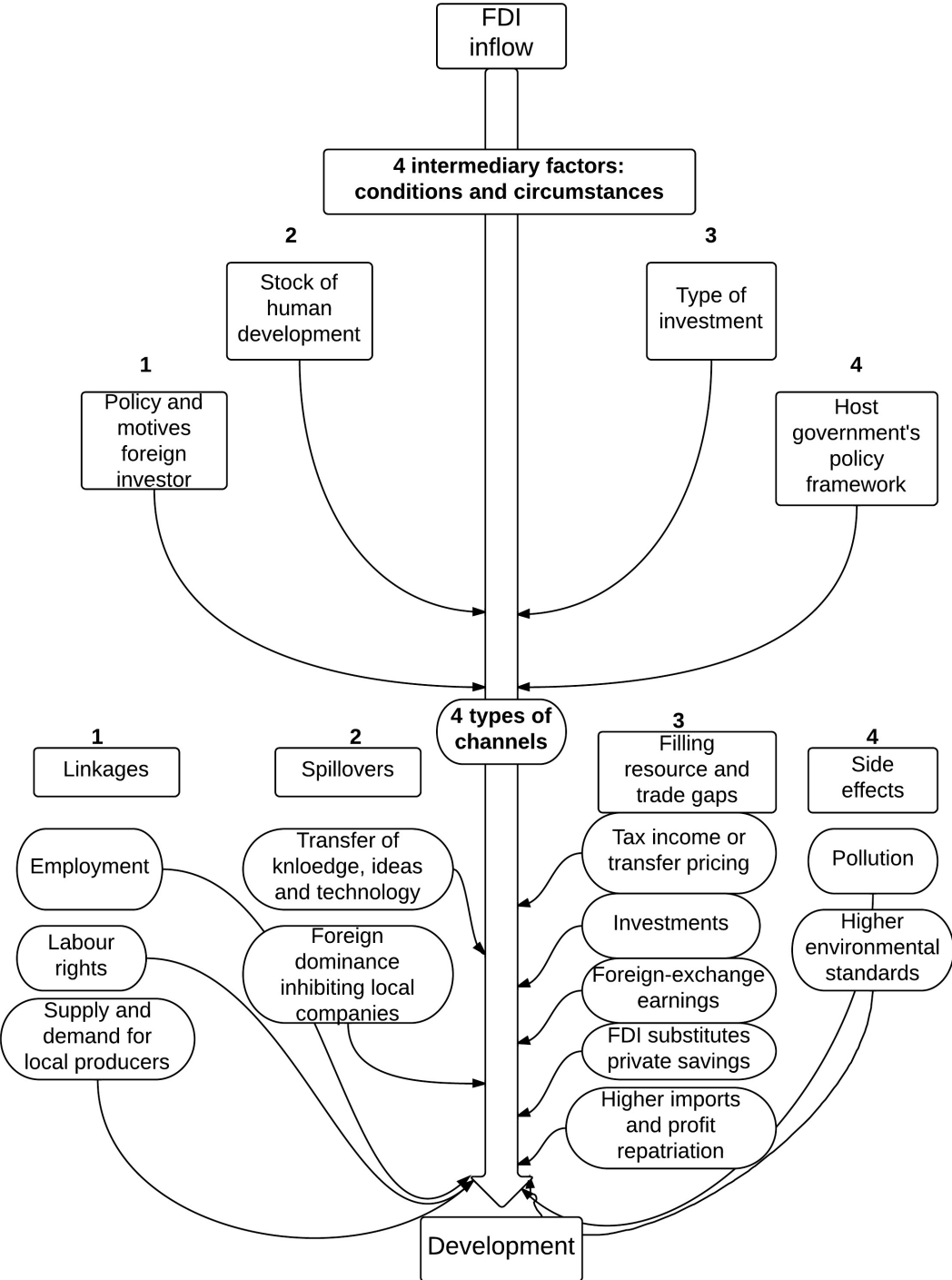
Finally, government policies on intellectual property rights may affect international licensing and can enforce patents, copyrights and licensing agreements to the benefit of local communities (Brewer, 1993: 108).

These examples of policies regulating FDI indicate possibilities for the government to ultimately benefit from FDI. However, it is important to emphasise the fact that policies regulating FDI are often formulated in Sub-Saharan Africa after a

'constructive' dialogue with the investors. A 'partnership' negotiation results in policy outcomes that are often in favour of the foreign investor. MNCs gained a strong position at the negotiation table for contracts formulation, which resulted in favourable policies for them and allowed them to extract host country's (mineral) wealth. Government's failure to pursue policies, which could reduce the market imperfections, makes FDI less beneficial and is an advantage for foreign investors. MNCs can often act as monopolies, control the market and set prices (e.g. Graham and Woods, 2006 and Haglund, 2010).

The causal diagram below shows the relationship between FDI and development, represented by the large arrow. Four intermediate factors that have influence on the relationship between FDI-development are indicated at bottom of the diagram. The channels that affect the relationship between FDI and development are displayed on the left and the right. The channels may have positive or negative effects, depending on the fact that the channel may (not) occur.

Figure 1: conditions, circumstances and channels



Chapter 3

Research design

The research design starts with a short overview of the methods and data. Then, I will elaborate on the type of study and the selected case. Thereafter, the theoretical framework is operationalised. I will evaluate the relation between the previously indicated variables and clarify theoretical concepts. The figure included at the end will give an overview of the research design.

Type of study

The study I conducted is an empirical case study focusing on Zambia's copper sector. I perform an observational study, observing reality and by no means an experiment. I attempt to sort out effects without the benefit of randomly assigned treatment groups. I will evaluate my theoretical claims by looking at the channels and circumstances, discovering what kind of effects FDI may have on development. The predictions used in the analysis are deduced from theory. This type of research is subjected to some controversy among scientists. The value of a case study is questioned by some social scientists. Those using a large-n design to test general theories use a narrow definition of science and causal inference. Namely, that science is reducible to testing general theories and additionally that causal inference is reducible to a frequentist framework (Sinkler, 2001 :1). However, this study shows that using theory to explain an individual outcome, the case study, is also a legitimate goal of science: a qualitative analysis of a unique case. Indeed, receiving my goal requires different standards of inference with respect to those used in "large-n" designs. My analysis is therefore based on a logic of retrodution. Observed empirical facts are used as the starting point and are explained with the use of various logical ways of reasoning and theory. As such, the analysis provides the basis upon which different insights upon the same problem are combined (Gijssels, 2006: 130). By doing this I can assess how different factors, the conditions and circumstances, contributes to the effects of FDI on development.

Case

The case study constitutes of Zambia and more specific its copper sector. In my search for an applicable and accessible country for further desk research and fieldwork I came

across many options. I decided to concentrate on FDI in natural resources, except energy resources, such as oil. The latter would have needed a different approach and different theories. Also oil-rich countries are not generalizable to other resource-rich countries. Therefore I decided to look for countries, which are rich of minerals in general, such as iron ore, copper and rare earth minerals. I decided to concentrate on Sub-Saharan Africa, because of the new debate centred around the concept of *a new scramble for Africa*.

Reading academic articles on FDI flows and investments in the natural resource sector, such as Fraser (2007, 2010), Haglund (2008), and Fessehaie (2011), I was directed towards the copper sector in Africa. In the centre of Africa there is a region called the Copperbel, cutting across the borders of Angola, Congo and Zambia. This region has the largest copper reserves in Africa and one of the largest in the world. The copper industry is most thriving in Zambia and nowadays controlled by foreign investors from all over the world. Besides companies originated from the BRIC countries like India and China, Australian and Canadian companies are major stakeholders in this sector. Because of the developments that the industry has gone through, from nationalisation to privatisation, this case study seems ideal to study government policy and regulation. Also, as Ching Kwan Lee (2010) argues, Zambia is an ideal case study to investigate whether FDI by different firms, has different effects. The presence of a number of multinational companies, from different origin, provides a natural experiment. It is possible to examine whether different 'national' management and various relationships between foreign investors and local policy makers has different outcomes for development.

Type of data

In order to answer the empirical sub-questions I use two methods to collect data.

The first empirical sub-question is: *How are the effects of FDI on development influenced by the conditions and circumstances in Zambia?*

In order to answer this sub-question I will analyse the intermediary factors influencing the effects of FDI on development. First and foremost I conduct a host country's policy analysis. This method gives me the opportunity to analyse current policies and looking over time I may also indicate policy changes. I conducted fieldwork in Zambia and

interviewed several stakeholders in the mining sector: mine workers, trade unionist, government officials, regulatory authorities, international organisations and non-government organisations. I held interviews in order to analyse policy implementation, the regulatory performance of government authorities and the investor's motives and operations. With World Bank data on secondary school completion I will estimate human development, which determines the absorptive abilities of local communities.

The second empirical sub-question is: *What are the effects of FDI in the copper sector on Zambia's development?*

In order to answer this question I will look at various channels influencing the effects of FDI on development. First, I use secondary work from scholars researching Zambia's economic development and circumstances. Data is coming from International Organisations and Zambia's regulatory authorities. More specific I use the work of scholars that looked into the effects of changing ownership structures and inflow of FDI in the copper sector, on development. Second, I use interview material. Below I will indicate in detail how I measure the channels and I will conclude this part with a table showing channels, indicators and methods of measurement.

Operationalization of the theoretical framework

I will now clarify theoretical abstract concepts and define these as measurable quantities. I will discuss the 'circumstances', as intermediary variables and later focus on the operationalization of the channels through which FDI affects development.

Development

As I have formulated in the previous chapter, economic development of the host country is the dependent variable. As defined in chapter 1, the concept of development is far-reaching. Similar to other scholars e.g. Borensztein et al (1998), Hansen and Rand (2005) and Reiter and Steensma (2010) I use the growth of the gross domestic product (GDP) as an indicator. Data is coming from local sources, such as the Bank of Zambia and the International Council of Mining and Metals (ICMM). Additionally, I analyse the effects of the FDI on development with the use of various channels: linkages, spillovers, filling up resource, trade and tax gaps and the side effects of FDI. I therefore use additional

indicators for development, such as increasing knowledge, sustainable living standards and local involvement in the production of copper. This type of development is more focused on human capital, rather than economic development and the primary source of data is interview material.

Intermediary variables

In this case study I try to analyse the effects of FDI, the independent variable, on development. Additionally, there are multiple intermediary variables, previously referred to as 'circumstances'. These variables influence the effects of FDI on development. In order to prevent ambiguities and to control for other effects, the intermediary variables are included in the analysis.

The first intermediary variable is the regulatory policy framework of the host country. Based on the literature the expectation is that policy implemented by the host country's government has considerable influence on the impact of FDI on development (e.g. Fraser and Lungu, 2007). I will look at policies that constitutes the regulatory framework of the mining sector, as well as the enforcement abilities of Zambia's government authorities to regulate foreign investors. With the use of interview data I will be able to assess these issues. Additionally I will look at policy documents, which are in place to extract financial benefits from foreign investors and try to direct investment into specific sectors. I will also look at worker, consumer and environmental protection laws. Interview material with trade unions and environmental organizations on government's action concerning these issues will be analysed too.

The second variable affecting FDI's influence on economic development is the behaviour of the foreign investor. The motives, policy and the relationship with the local community and the government authorities will be analysed. Interviews I had with the mining companies and other stakeholders are a supply of data, as well as documents with company statements.

The third decisive variable that influences FDI's effects on development is the stock of human capital already available. With the use of data from the World Bank on secondary school completion I can analyse the level of human development over the years, which determines the absorptive abilities of the local economy. This means that technology transfer is more likely to take place when human capital is high

(Borensztein, et al. 1997: 117). I will compare secondary school completion with neighbouring countries in order to put the level of human development into perspective.

The last intermediary variable is the sector in which the FDI is done. I use data from the Bank of Zambia, published by UNCTAD. I will only look at one sector, the copper sector, thus no variance will occur. However, sector specific conditions determine the outcomes on development. The production chain and the value adding process for example are conditions that affect the FDI-development relation. In order to determine how important the copper sector is within the total amount of FDI in Zambia I will analyse in which sector most FDI is done and evaluate what this means for development.

Channels

First category of channels is linkages. This category focuses on general employment of locals and on an increasing demand for local products and services and additional supply to local producers. Which is leading to growing local production. These concepts can be measured looking first at employment rates of mining companies and additionally at hiring of local workers in the Copperbelt region. In order to estimate growing production by locally owned companies I use interview data. Interviews are also the primary source of data for the measurement of upholding labour rights by foreign investors. Additional data is coming from international organizations such as Human Right Watch.

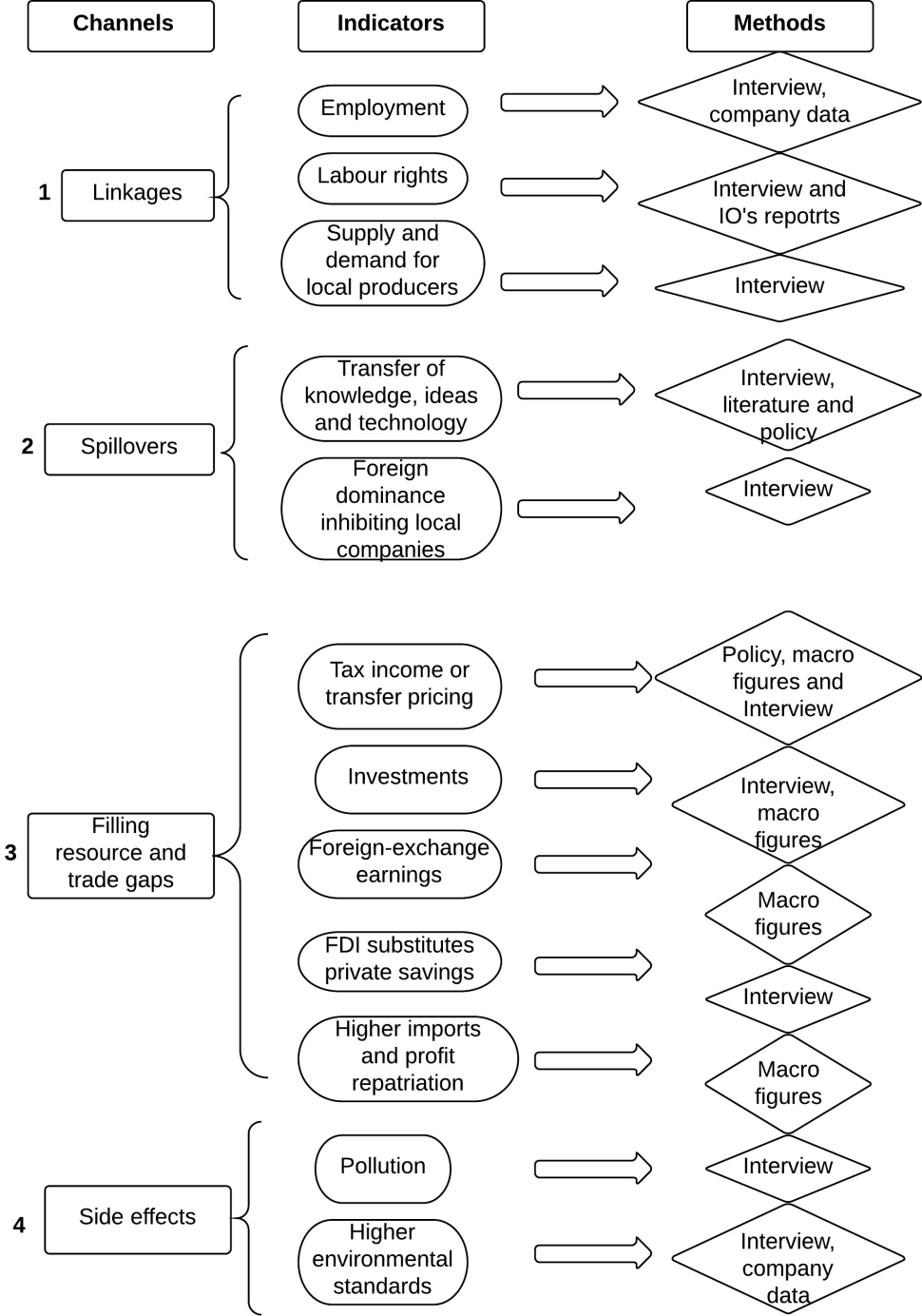
The second type of channel is spillovers, which are all centred around, usually positive, effects of FDI for development: the transfer of ideas, expertise and knowledge. This learning element is difficult to operationalize. The main focus is therefore on the transfer of technology and the education of local workers. In order to measure these concepts I will look at the ratio of local workers-expatriates employed for high skilled jobs. The transfer of technology is measured by analysing the practices of local companies. Are they able to compete with foreign owned companies? Or can we speak of a foreign dominance inhibiting local companies? Interview material is the primary source of data.

The third type of channel is the filling of resource, trade and tax gaps. I will look at the Balance of Payment (BOP), macro FDI and profit figures, and compare the figures

between the period before and after privatization. The privatisation process started in 1997 and was completed in 2004. Foreign companies are subjected to pay tax and mineral royalties to the local government. Government's tax policy and generated income from tax revenues will be analysed. What are the investment incentives: tax concessions for FDI in copper? The practice of transfer pricing is also assessed, which means that foreign investors can avoid taxation by artificially inflating the price it pays for intermediate products purchased from overseas. Interviews will be used to measure these channels. Macro data is coming from the Zambian Revenue Authority (ZRA), Zambia Development Agency (ZDA) and policy documents will be analysed too. The differences between tax income of the government and tax paid by the companies will also be investigated using data from the Extractive Industries Transparency Initiative (EITI) and interviews. FDI may also fill the saving-investment gap. There is a desired level of resources necessary to achieve development. Looking at the investments made in the mining companies I will assess if privatisation led to additional investment in the mining companies. Or was it just the purchase of existing stock? Foreign exchange earnings and higher imports will be measured using macro data from the ZDA and ZRA. The practice of profit repatriations will be analysed with interviews.

The last channels are the so-called side effects of FDI. The environmental standards of foreign mining companies will be compared to standards of the previous owners of mining companies, the state. Environmental reports on issues like pollution will be analysed, as well as interview material. Figure two bellows gives an overview of the channels, indicators and methods.

Figure 2: Channels, indicators and methods



Triangulation

All in all, this research method can be described as triangulation. Triangulation is defined by Denzin (1978) as a combination of methodologies in the study of the same phenomenon. By doing this, multiple viewpoints and sources allow for greater reliability accuracy. I also interviewed many stakeholders with different opinions and experiences, which contributed to the creation of an overview of multiple viewpoints. Also Campbell and Fiske (1959) developed the idea of "multiple operationism". They argue that more than one method ought to be used in the process of validation to ensure that the variance reflected that of the trait and not of the method.

Interview data

Questions I asked were roughly divided into two sections. I first asked general questions, not depending on the respondent. Second, I asked questions which were only applicable for the specific respondent. Categories of respondents were: foreign investor, Non-Government Organization, government-organization or government authority. The interviews were conducted in a variety of settings including ministries, labour union's offices and the headquarter of a mining company.

General questions concerned the respondent's opinion on issues like Zambia's economic performance. See Appendix 2 for a complete overview of the questions. Examples of questions are:

How would you describe the development of the Zambia over the years and what are the determining factors?

What is the relation between Zambia's economic development and the performance of the copper sector?

What is the role of the foreign investors in Zambia?

What is the role of the government concerning policy and regulation in the copper sector?

Examples of question specific for each respondent are:

Foreign investor:

What is your opinion on the investment climate in Zambia?

What does your company contribute to Zambia's development? E.g. Tax payment, local provision of basic needs, schooling etc.

What is your relation with the local community and the authorities?

Government authority:

In what way is Zambia's government promoting development?

What kind of regulatory FDI policy did the government formulate and how is this carried out?

How would you describe the relationship with the foreign investor?

NGO; trade unions, development organizations and environmentalist:

How would you describe the: regulatory performance of the government and the government-foreign investor relation?

Are local communities benefiting from foreign mining companies, in comparison to the mine owners in the past?

In what way are labour rights upheld?

Are the environmental issues concerning mining pollution addressed?

These questions relate to the theoretical framework in several ways. I tried to cover the causal relation between FDI inflow and development by addressing the intermediary variables. With a special focus on the performance of the government authorities. I created a brought picture of the different standpoints of each stakeholder. I also checked for contradictory results in the sense that stakeholders may value their relationship differently. I also tried to focus on the differences between each foreign investor, especially the difference between Chinese and Indian companies.

Analysing qualitative interview data: addressing issues of measurement bias, validity and reliability

Measuring the concepts of interest confront me with some difficulties. First the concepts need to be clear and unambiguous. Second, the measure should be valid and reliable.

The operational measurement of the concepts I use are reliable to the extent that is repeatable and consistent. This is the case for the collection of data on FDI stock and human capital. I used one source for each variable: the World Bank. Also the analysis of policy documents can be repeated. However, for some data measuring the concepts concerning the Zambian circumstances, collected during the interviews, I have to address the issue of 'rigour': questions to the respondents can be interpreted in multiple ways, which influences the answers and measurement bias may occur. To address this issues, I only used face to face interviews and in some cases, prior or after the interview, I had some additional email correspondence. I used open questions. By using open-ended questions the respondents were encouraged to expand on their own experiences and thus a wealth of detailed information was obtained. The interview schedule was semi-structured. I made as many field notes as possible and after each interview highlighted key significant material from the interview. Eventually I conducted twenty-two interviews ranging from thirty minutes up to three hours of talk. See the Appendix 1 for the list of respondents. Each respondent was categorized in a group and I prepared similar questions for them beforehand. I did not manage to interview as many companies as I liked, because of the suspicion that I had aroused apparently. Many investors are scrutinized by international organization, like Human Right Watch, because of the poor working conditions. I was also refused to enter the mining sites, and when I once almost entered with local employees the guards deported me.

In the following chapter I will go into detail of my case study and present my data.

Chapter 4

Conditions and circumstances

This chapter starts off with the empirical part of the thesis. Eventually an answer to sub-question two will be given: *How are the effects of FDI on development influenced by the conditions and circumstances in Zambia?*

The intermediary factors influencing FDI's effect on development will be discussed: Zambia's policy framework and regulatory authorities, motives and policy of foreign investors, the sector in which FDI is done and the level of human development. The focus is on the performance of regulating authorities and government's FDI policy, but first, I will discuss Zambia's copper sector's evolution from nationalisation to privatisation. Next, I will discuss the motives of foreign companies to invest in Zambia and their policies. Then I will discuss the type of FDI inflow and FDI figures and thereafter Zambia's level of human capital. There upon I will cover the practices and the range of activities enfolded by the regulatory authorities and at last I will discuss actual regulation and the implementation of FDI regulation, including paragraphs on taxation issues and labour conditions. Eventually I will confront theory on optimal FDI policy and obstacles, with Zambia's practice, leading to expectations on the outcomes.

Zambia's copper industry

The British South Africa Company (BSAC) explored Northern Rhodesia, now Zambia and secured many mineral deposits. Around 1895 copper was discovered in the north of Zambia, a region later called the Copperbelt. The first commercial mine was opened in 1928 at Roan Antelope, currently named Luanshya (Fraser and Lungu, 2007: 7). The British used the income from the mineral wealth to support the much more significant industrial and governmental infrastructure in Southern Rhodesia, now Zimbabwe. Until independence, the copper mining was controlled by two major companies; Anglo American Corporation and the Rhodesian Selection Trust. The mining rights were held on by BSAC (Fraser, 2010 : 4). Northern Rhodesia was seen as the model for a continent moving rapidly towards independence, politically and economically. Industrialisation was on the rise and the end of poverty was in sight. When the copper production was at its peak in 1969, the country was listed as middle-income country. In Africa, Zambia belonged to the most developed countries, with one of the highest GDPs. In comparison to other countries Zambia's GDP per capital was higher than that of Brazil, Turkey and South Korea (Ferguson, 1999 : 6).

Until now the mining industry and the prospects for Zambia's economy have been closely tied to global markets. Periodic global booms and bust have had severe consequences for the development of Zambia. The emergence of the Copperbelt started booming in the late 1920s. The establishment of the copper mines transformed the region from an underdeveloped colonial region into one of Africa's most important producers of strategic minerals. However the revenues from the mines were far from certain incomes (Larmer, 2010: 32). Due to the dependency on the global economy, copper prices went up and down. The Great Depression was the first downturn and most mines shrank to minimum levels, laying off many mineworkers. The Second World War did not affect the demand for copper too much, only in the late 1950's a downturn was taking place. Until the 1970s the mining industry was profitable and expanding (Larmer, 2010 : 35).

On the eve of independence, early 1960s, nationalism was rising and was fuelled by the insurrection about distributing revenues generated by the mines. The United National Independence Party (UNIP) successfully negotiated the transfer of mining royalties to the new state of Zambia (Roberts 1997: 223). From this moment onwards the UNIP developed a close relationship with the mining companies and the industry expanded. After independence in 1964, The First Republic's (1964-1972) political discourse was dominated by the debate of how the wealth generated from copper export should be utilized for the development of Zambia. Previously the colonial authorities directed mining revenues to support the agricultural sector. Mainly to the benefit of white farmers. Zambian nationalist in power were divided about how to convert the countries mineral wealth into sustainable development, increased living standards and economic diversification. However nationalisation soon dominated political discour (Larmer, 2010 : 33).

Nationalisation mining companies

The first president, Kenneth Kaunda, initiated the process of nationalisation already in the late 1960's. The president and the political elite raised their concern that since the independence of Zambia the two companies controlling the mining sector had little money invested in their mining operations. According to the companies the tax and royalty system was to blame and was not promoting investments. Soon after the debate started the government responded and in 1969 the process of nationalisation of the

mining companies were forced to give up 51 percent of shares to the state. All rights of ownership of minerals and mining licenses were reverted to the state (Fraser and Lungu, 2007: 7). After a transition period, Zambia's mining industry was dominated by Zambia Consolidated Copper Mines (ZCCM). ZCCM was founded in the early 1980s and was owned by the Zambian state for 60.3 percent (Sutton and Langmead, 2013: 163-164).

The motivations for nationalization were diverse. Some argued that nationalization was an attempt to generate additional income for the state. Others linked it to international trends toward state-dominated development and Zambia following their example, hoping for similar results. Also the local political turbulence, with the founding of The United Progressive Party (UPP) challenging the UNIP, played an important role. It all started with interregional competition over the distribution of government money, mining revenues and eventually led to increasingly agitating for nationalist policies (Larmer, 2010 : 36).

Effects of nationalisation

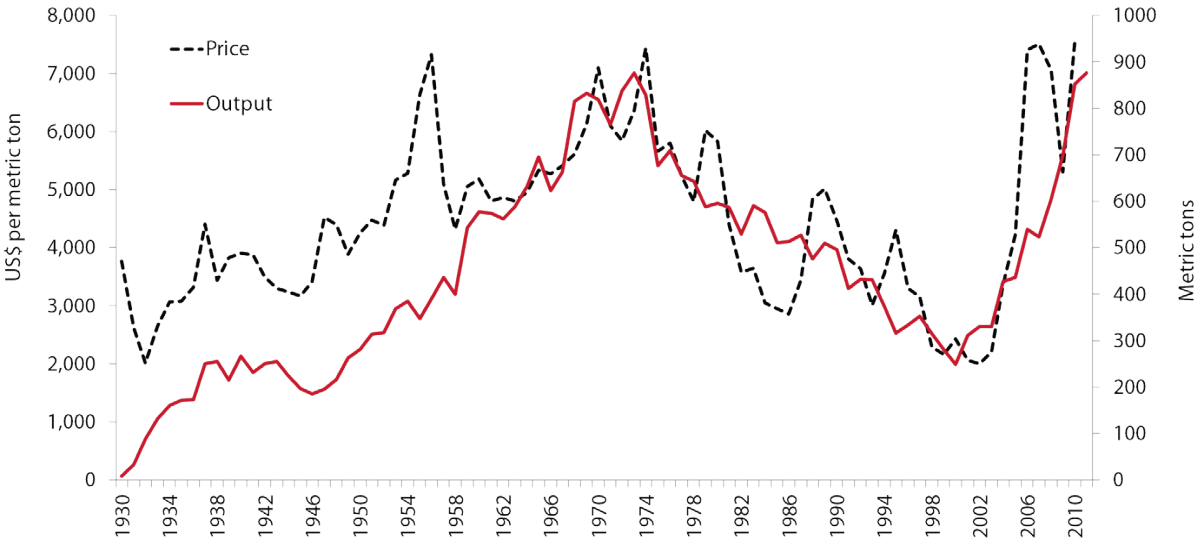
Prior to nationalisation the private mining companies had become responsible for the provision of basic needs for mineworkers. Besides building entire villages for their employees, the much-needed facilities such as hospitals, schooling, recreational clubs and the infrastructure were put up. When ZCCM took over the mines, they continued providing these needs. Not only was there no other option. Who else was there to do it? It was also seen as a reflection of the state's development philosophy. Whatever the private companies already offered was kept and expanded. ZCCM unrolled a welfare policy, from cradle to grave. Everything was taken care of: education, food and water supply, electricity and transportation. Not just the state was responsible for these measures. Also powerful unions, such as Mineworkers Union of Zambia (MUZ), developed such plans and demanded improvements in terms and conditions (Fraser and Lungu, 2007: 7-8).

The end of state-owned mining companies: privatization

The first period of the nationalisation of the copper mines can be considered as successful. However, after a decade or so, it was the first oil Crisis in 1974 that made

clear how dependent Zambia’s copper industry is on global economic tides. Additionally, it became clear how much Zambia’s economy and the government’s budget is depending on sustainable copper revenues. Due to economic down turns, revenues declined. See figure four below. Eventually, Zambia’s authorities were forced to borrow money in order to maintain the level of social provision. After the second oil crisis in 1979 the economic situation worsened. Zambia was dragged into a debt crisis. The interest rates rose to extreme levels, copper prices declined further and Zambia’s economy literally collapsed, enduring over twenty years. Zambia bottomed many rankings and between 1974 and 1994 the per capita income declined with 50 percent. From a middle-income country, Zambia belonged to the 25 poorest countries in the world (Ferguson, 1999: 6). Finally, state owned ZCCM, failed to raise enough money, investments were put to a hold and eventually the copper production collapsed from 750.000 tonnes just before the first oil crisis to 250.000 tonnes in 2000². Figure three below indicates the fluctuating copper prices and relation to the output of copper.

Figure 3: Copper price and total output measured in US dollars at current price

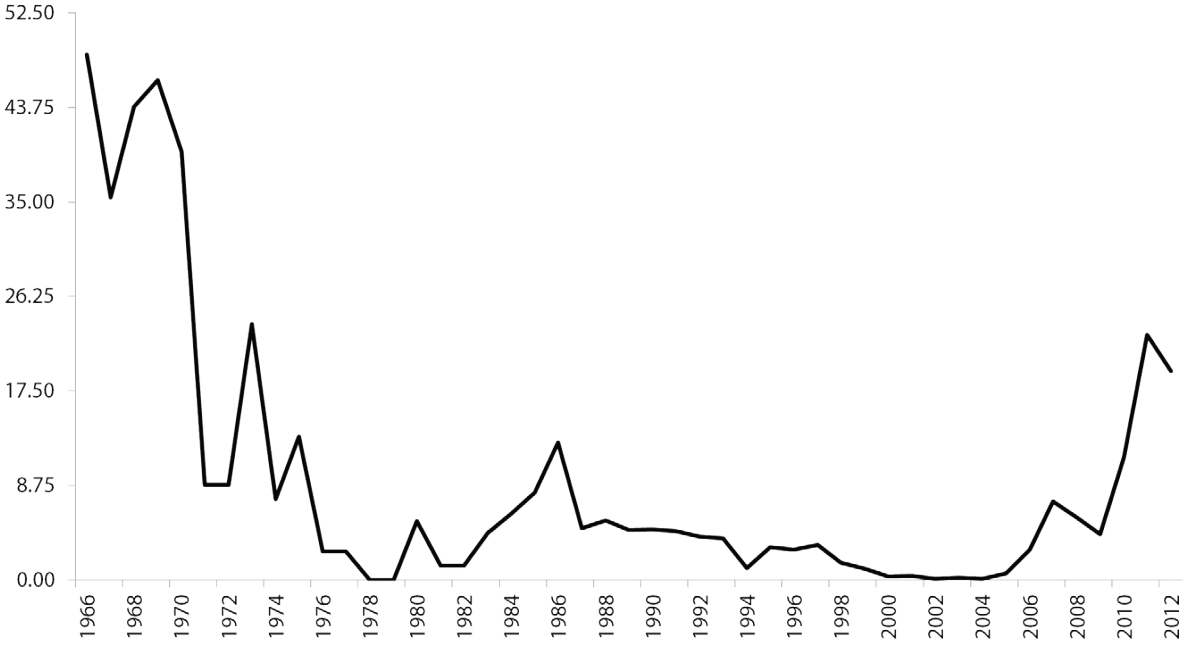


Source: Simpasa et al. UNDP and EU, 2013

² Interview with the Public Relation Officer of Chamber of Mines, on the 17th of October, 2013.

Together with figure four, we can conclude that the declining copper price from the 1970s onwards led to decreasing copper revenues for the government. Eventually this situation could not last much longer and international donors intervened.

Figure 4: Government mineral revenue (percent of total revenue)



Source: Simpasa et al. UNDP and EU, 2013

The role of international donors

Due to the copper price drop in the 1970s, copper revenues vanished resulting in deficits for the state owned ZCCM. To overcome the crisis and prevent an overall bankruptcy, Zambia received loans from the International Financial Institutions (IFIs) such as the International Monetary Fund (IMF) and the World Bank. Together with the IMF the World Bank extended their loans in the mid-1990s and demanded Zambia to adopt plans for splitting up ZCCM in separate private units: privatization (Devarajan et al. 2001). Already in the 1980s the World Bank and the IMF started to push the country to adopt economic liberalisation policies. Zambia received its first conditioned loan from the IMF in 1973 and ten years later entered the World Bank’s Structural Adjustment Programme (SAP). However, Zambia resisted complying with the adjustment programmes. The government rejected the conditions of its loans and started with a “New Economic Recovery Programme” on its own initiative. On top of that, in 1987,

Zambia's refused to pay off IMF's loans, which led to a withdrawal of Zambia's donors. More than a year the Zambian government stood firm, but eventually they had to give up their steadfastness and the government decided that it had little choice but to accept. Zambia re-engaged with the IFIs and accepted a new adjustment programme (Sassa and Carlsson, 2002: 46).

SAP was only implemented consistently from 1991, with the newly elected government, led by Frederick Chiluba. The Second Privatisation and Industrial Reform Credit from the World Bank and their Economic Recovery and Investment Project (ERIP) was followed by Economic Structural Adjustment Credit (ESACII) and Structural Adjustment Fund (SAF). The IMF supplemented with Enhanced SAF. One aspect of the SAP was the privatisation of the mines. However, privatization was not something the government fully cooperated with. Many tactics of delay were used and the relationship with donors became tense. Once again the World Bank proved to be decisive and qualified Zambia for the Heavily Indebted Poor Countries (HIPC) initiative. Debt relief could be delivered after IFIs assessed the performance of the privatization process. Zambia was encouraged, or pushed, to take action and eventually choose for debt relief (Devarajan et al. 2001).

This entire process also initiated political changes. The leading party UNIP was held responsible by the people for the unrest in the mining sector and the demise of the social welfare programmes. The federation of the unions, ZCTU, formed an opposition Movement for Multiparty Democracy (MMD) and won the elections in 1991 (Bayliss and Szeftel, 1992 : 54).

The privatisation process started in the early nineties and took over ten years to complete. Foreign investors were attracted, since there were no local companies in the position to buy and operate copper mines. The German Kienbaum Development Service filed the first report on how to extract and regulate FDI. Other international consulting companies like Rothschild and Clifford Change advised on the practical modalities of privatizing ZCCM and the regulation of foreign investors. Substantial majority interests in all ZCCM assets should be offered to foreign investors in a number of packages. ZCCM-IH, the newly founded state owned investment holding, could still own one of these packages. In the second stage, the government could sell off more of their shares. Eventually a tender and bidding process resulted in the sale of assets in package deals (Fraser and Lungu, 2007: 10-11).

Between 1992 and 1997 ZCCM was dismantled and mines were, partly, sold to foreign investors (Fessehaie, 2011: 17-18). Between 1997 and 2000, ZCCM was split up into several units and these units were sold separately. By 2000 only one mine was left in the hands of Zambians, Konkola Copper Mines (KCM). In that year, Anglo-American chose to exercise its pre-emptive rights granted in an earlier stage and took 65 percent of KCM: hereby the privatization process was completed. In 2004 KCM was sold to its current owner, Vedanta, an investment company with an Indian signature (Fraser and Lungu, 2007 : 13). Glencore, Swiss origin and First Quantum, Canadian origin, invested in several mines and are currently the biggest producers of copper in Zambia. Metorex is South African and also invested in mines on the Copperbelt. Besides these somewhat traditional investors in Zambia, the newest trend is FDI inflows from companies originating from Asia. Indian companies that invested in Zambia are Binani Industries Ltd and Vedanta. The biggest Chinese company is China Non-Ferrous Metals Corporation (CNMC). See for an overview of the mining companies figure 5 (Fraser and Lungu, 2007 and Sutton and Longmead, 2013).

Intermediary variable 1: Foreign investors' motives and policies

The motives of foreign investors to invest in Zambia are first the relative low price for potentially high value mining sites. Glencore, Vedanta and First Quantum are world-wide operating mineral exploiters and traders and benefit from the potentials in Zambia.³ In the case of Chinese investments, the growing demand from the home country for copper is an important determinant, as well as Chinese state interference. Chinese (state) companies are all over the world looking for potentially profitable investments in commodity sectors. The Chinese government-owned Exim-Bank provides debt-financing and financial incentives to Chinese companies in order to promote foreign investments that can maintain resource security essential for continuing economic growth. But also to secure political support in the geo-political arena. Investing in Africa and pleasing Africa's political leaders is a means to win the African nations as a voting bloc in multilateral settings (Alden, 2005: 153). A survey amongst Chinese firms indicated that the second-most important reason for Chinese

³ Interview with the Executive Secretary of the Indian Business Council Zambia (IBCZ), on the 7th of October 2013, the Economic and Commercial Counsellor of CBC, on the 16th of October 2013 and the Director of Strategy & Business Development of KCM, on the 18th of October 2013.

private firms to go abroad is the government support (Broadman, 2006: 305).

Before the assets of the state company ZCCM were sold to foreign investors, the investors and Zambia's authorities negotiated on the Corporate Social Responsibilities (CSR). ZCCM offered many basic needs to the mineworkers and these facilities could not simply come to an end. Many of the facilities therefore were handed over to local municipalities and some were taken over by the foreign investor.⁴ This resulted in demise of many social welfare programmes. Municipalities lacked funding and knowledge and private companies had less urge to provide these 'secondary' working conditions. The KCM hospital for example was previously accessible to the mineworker's family, however these days only work related injuries are treated.⁵

Haglund's (2008) key finding is that company's policies and certain corporate government features of primarily the 'new' Chinese investors, combined with the weak regulatory framework of Zambia, undermines regulation and eventually sustainable development. Looking at the corporate governance of foreign investors helps us to better understand the foreign investor's predispositions towards engagement with Zambia's stakeholders in the copper sector. Corporate governance defined by Haglund (2008) as 'the structure of rights and responsibilities among the parties with a stake in the firm'. In the case of Chinese investments it is important to look at the role of the Chinese state in financing outward investment and also the Chinese policy makers' monitoring mechanisms in order to control these investments. However, Chinese authorities deny state influence and state-led corporate governance and refer to the free market and the mechanism of supply and demand.⁶

The relationship between the Ministry of Foreign Affairs and Chinese Authorities is tense. Zambians more and more feel used and not benefiting enough from their mineral deposits. At high diplomatic levels Zambia and China are negotiating trade and aid deals. However, Zambia is being held hostage by Chinese investors, with the help of Chinese authorities. Zambia is in no position to negotiate favourable deals with China, since they are dependent on Chinese companies mining and selling copper on the world

⁴ Interview with the Corporate Officer of Consolidated Copper Mines Limited (ZCCM-IH), on the 2th of October 2013 and the Director of Strategy & Business Development of KCM, on the 18th of October 2013.

⁵ Interview with the head of Research of MUZ, on the 11th October, 2013.

⁶ Interview with the Economic and Commercial Counsellor of CBC, on the 16th of October 2013.

market. Chinese companies do pay tax, but the production figures are not clear and transfer pricing occurs.⁷

In order to keep up a good name, especially Chinese firms with the help of their embassy and government officials enrolled a CSR programme. The local Chiefs on the Copperbelt receive considerable gifts in the form of cattle and machinery. By providing these goods, the Chinese try to win the locals on their side and perhaps disguise or attract attention from their mining practices.⁸ Also Chinese policy makers monitor firms to ensure that they do not undermine wider diplomatic goals and spread anti-Chinese sentiments (Haglund, 2008 : 558). Corruption is something Chinese authorities openly strive against. As soon as a Chinese company is accused of being corrupt, or bribe authorities, it can expect to be forced to leave Zambia by Chinese officials.⁹ Other foreign investors are not known for enrolling similar policies and strategies.

To conclude, the motives to invest in Zambia are first and foremost initiated by the unique opportunities and fine prospects. Copper mines were on the market for a good price and had a lot of potential considering the growing demand on the world market. Additionally, Chinese investors, private and partly state-owned, had an extra motive. Their home-market is the biggest consumer of copper and the Chinese state is promoting and backing up Chinese investments in minerals, like copper, in order to secure a sufficient copper inflow.

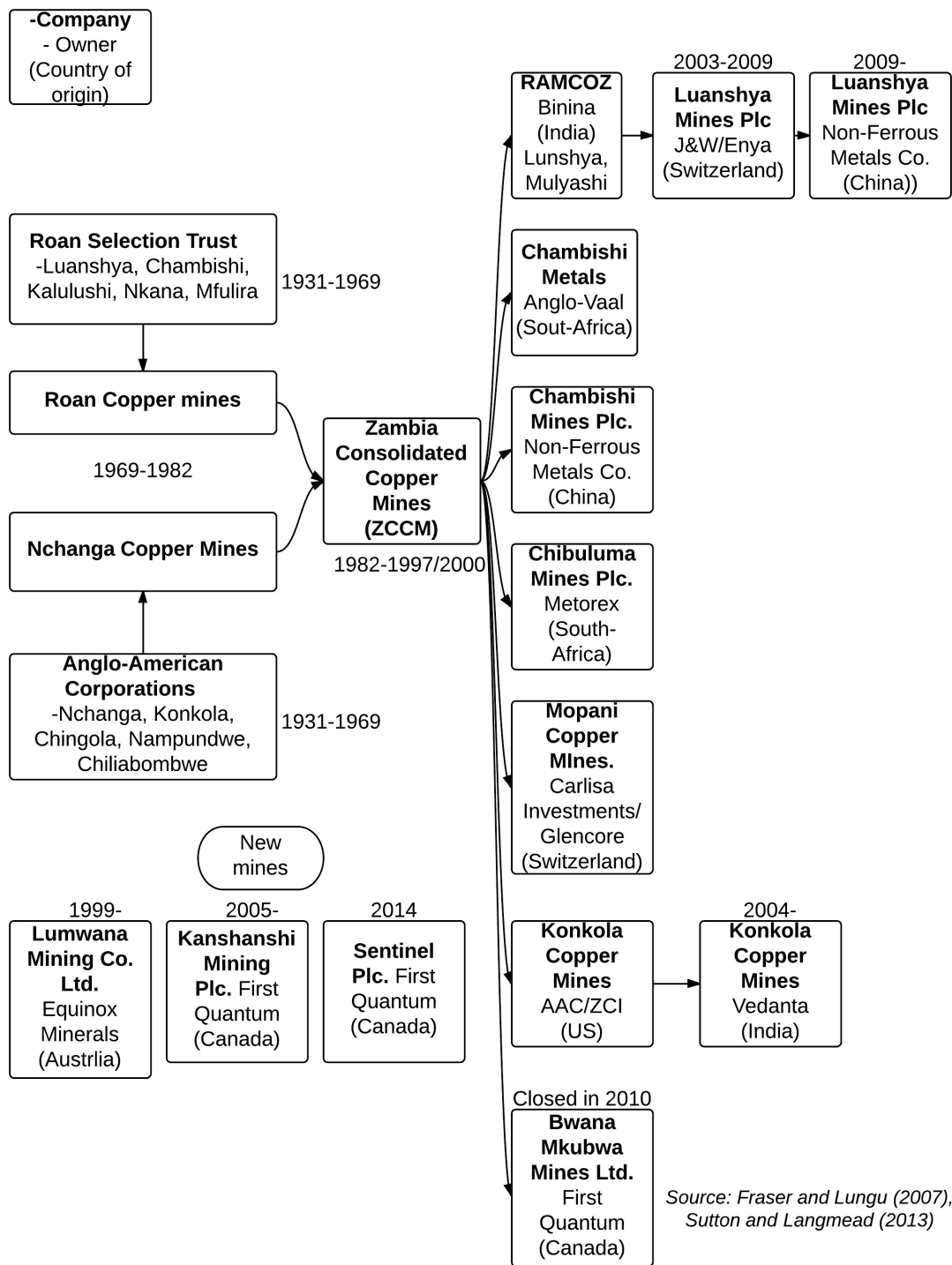
The policies conducted by foreign owned mining companies are, firstly, inherited when they took over the mining rights from state-owned ZCCM. However, the provisions granted by the mining companies, CSR, were soon in demise. Zambia's weak regulatory framework and the corporate governance of the investors resulted in less urge to provide secondary working conditions. Lastly, Chinese investors are known for granting considerable gifts to Chiefs and local communities in order to keep up a good name.

⁷ Interview with a Policy officer from the Ministry of Foreign Affairs, on the 16th of October 2013.

⁸ Interview with a Policy officer from the Ministry of Foreign Affairs, on the 16th of October 2013.

⁹ Interview with the Economic and Commercial Counsellor of CBC, on the 16th of October 2013.

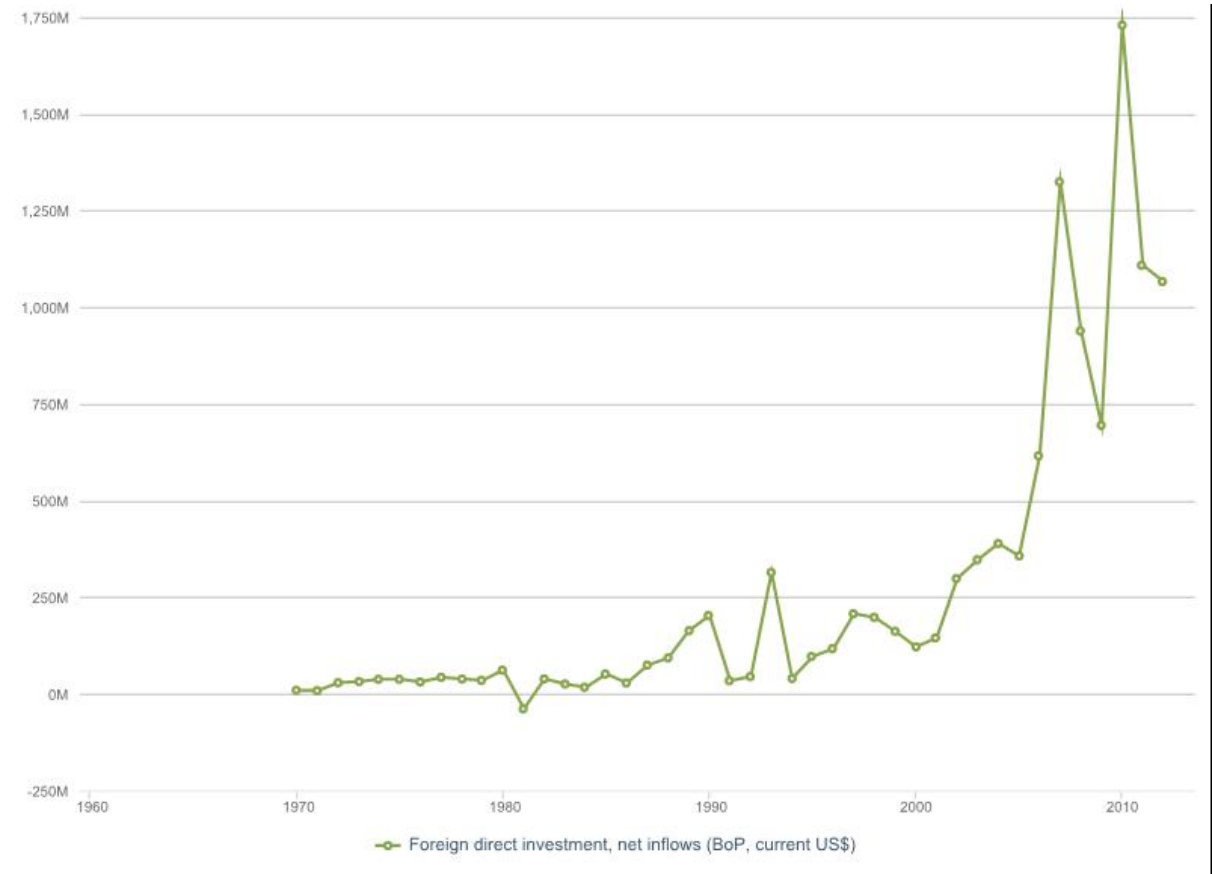
Figure 5: Overview mining companies



Intermediary variable 2: Type of FDI in Zambia

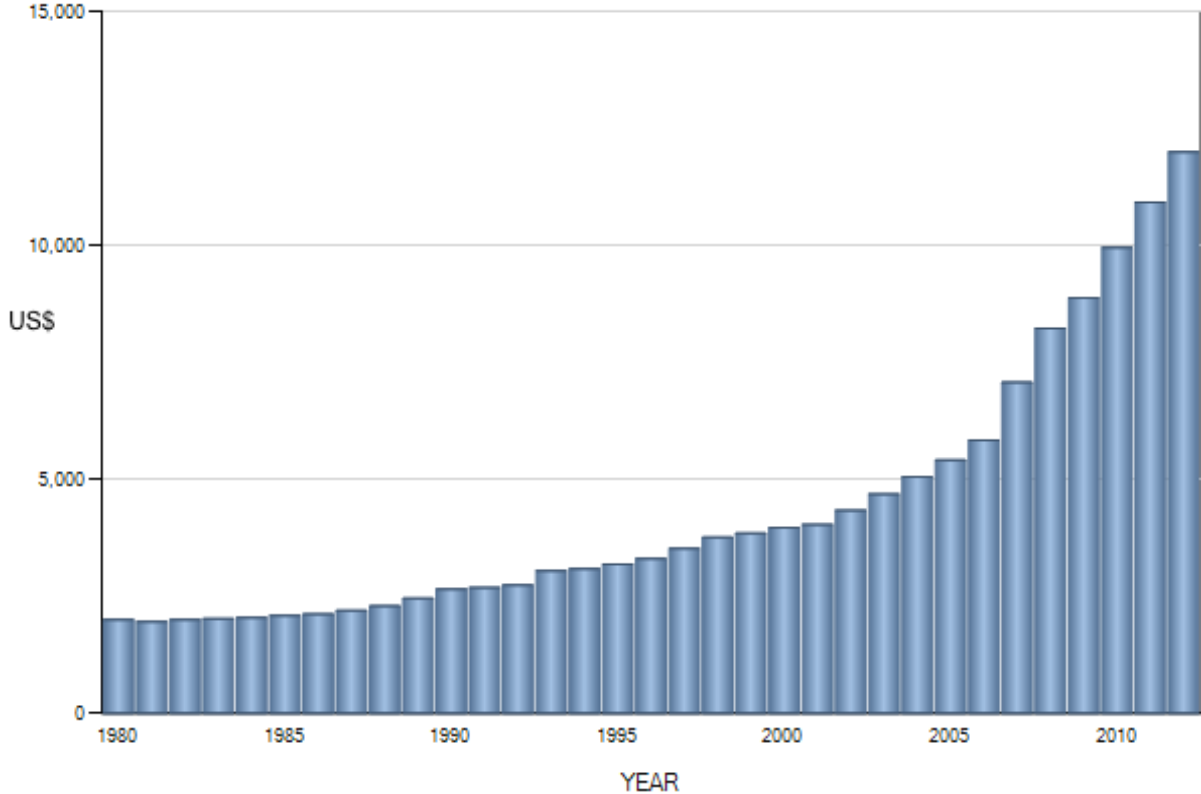
The figures below show the amount of overall FDI that flowed into Zambia’s economy over the years and also the FDI stock by year. More detailed information on FDI per sector is stipulated in the tables thereafter. The past three decades three phases of inward FDI can be identified. First, the FDI stagnated in the 1980s when the mining companies were nationalised. Second, in the 1990s investments increased. Figure 6 shows ups and downs in that period, averaging around four percent growth each year. Third, in the 2000s privatization was completed and FDI inflow and stocks increased rapidly: peaks in the figure 6 are visible. The only downward trend are caused by the recent economic crisis and the financial crisis in 2008, causing a decreasing demand for copper and resulting in less investments (Green, 2009: 2).

Figure 6: Zambia FDI net inflow measured in current US Dollars



Source: World Development Indicators, World Bank data, accessed in February 2014.

Figure 7: Zambia’s FDI stock in US Dollars at current prices and current exchange rates in millions.



Source: UNCTAD, accessed in January 2014.

Figure seven indicates the growing FDI stock in Zambia over the years. Especially the steep rise after 2000 is significant. The explanations for this can be found in the type of investments and the sector the investments were made in. Therefore below two tables from two time spans indicate sector specific FDI flows. Be aware of the different measurements: current prices are used in the graphs, not in the tables.

Table 1. FDI flow in Zambia, by industry, 1993 – 1995. In million US dollars.

Sector/industry	1993	1994	1995
Total	314.4	159.3	194.2
Primary	88.8	72.4	52.7
Agriculture, hunting, forestry and fishing	78.1	54.3	51.3
Mining, quarrying and petroleum	10.7	18.1	1.4
Secondary	132.8	60.3	99.7
Tertiary	92.8	26.6	41.8
Construction	10.3	1.9	4.4
Transport, storage and communications	74.5	19.1	12.5
Other services	8.0	5.6	24.9

Source : Bank of Zambia. Published by UNCTAD, 2006.

Table 2. FDI flow in Zambia, by industry, 2000-2001. In million US dollars.

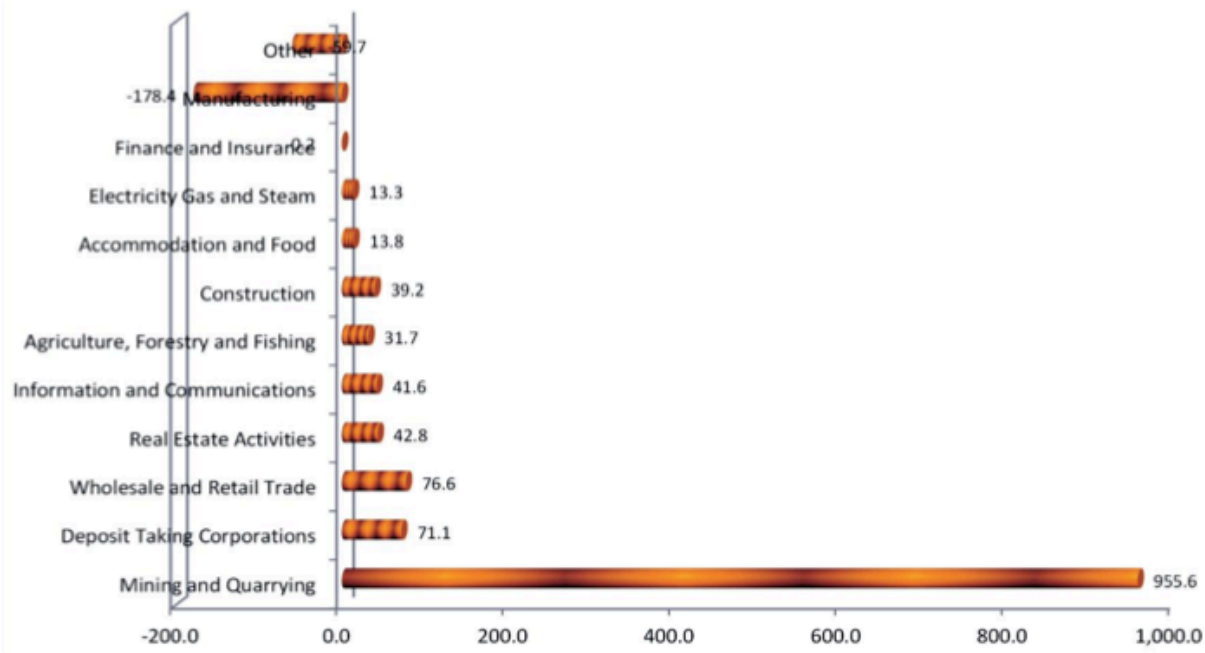
Sector/industry	2000	2001
Total	851	1 085
Primary	288	367
Agriculture, hunting, forestry and fishing	58	127
Mining, quarrying and petroleum	231	241
Secondary	87	144
Tertiary	442	560
Electricity, gas and water	123	109
Construction	2	2
Trade	76	110
Hotels and restaurants	19	45
Transport, storage and communications	12	15
Finance	211	280
Unspecified	33	14

Source : Bank of Zambia. Published by UNCTAD, 2006.

The striking difference between these two tables is the amount of FDI inflow in the mining industry. In the first table FDI in mining was about one to ten percent of the total FDI. The latter period FDI in mining comprises about twenty-five to thirty percent of total FDI. This difference can be explained by the fact that the privatization process of mining companies was conducted in between these two periods. Thus, in table two we see the result of foreign investors investing in Zambia's copper mines.

Most recent figures available on FDI flows to Zambia indicate an even greater predominance of FDI in mining in the share of total FDI. See the figure below.

Figure 8: FDI inflow by sector in 2011. In million US dollars.



Source: Zambian Development Agency, 2012.

Explaining FDI inflows and the predominance of the mining sector, one should first consider the acquiring of mining sites from the mid 1990’s until 2000 by foreign companies. This indeed already meant an increase in inward FDI. However soon after foreign companies owned Zambia’s copper mines the inward FDI really went up. Meaning that investments were done in order to upgrade the mines to modern standards with productivity gains as main goal.¹⁰

To summarize, Zambia faced three phases of FDI inflow of which the last, beginning in the early 2000s, was considerably peaking: after the mines were in the hands of foreign investors, capital was invested in upgrading mining sites to modernise the production process. Currently, there is still a predominance of FDI in the mining sector, leaving other sectors far behind. This may well lead to less overall development

¹⁰ Interview with a Senior Manager Business development of ZDA, on the 2nd October 2013 and the Director of Strategy & Business Development of KCM, on the 18th of October 2013.

and one-dimensional focus on the mining industry, undermining development in other sectors.

Intermediary variable 3: Level of human development

The level of human development of Zambia's population is considered as an important circumstance influencing FDI's effect on further development. Human development determines the absorptive abilities and can be measured using secondary school enrollment figures. In order to determine the relative performance of Zambia I will compare these figures with Zambia's neighbouring countries.

Only secondary school data from 2012 is available. Zambia's gross enrolment ratio is 101 percent. This is the total enrollment in secondary education, regardless of age, expressed as a percentage of the population of official secondary education age. The figure can exceed 100 percent due to the inclusion of over- and under-aged pupils because of early or late school entrance. Zambia's neighbouring countries are Democratic Republic of Congo: 43 percent, Angola: 32 percent, Mozambique 26 percent, Tanzania 35 percent and Zimbabwe: no figures available. (World Development Indicators, World Bank data, 2014). All in all this seem to indicate that Zambia is performing relatively well. But what does this mean for the absorptive abilities? In principle, the level of human development means that spillovers may occur. However, human development is only one condition and it is obviously not sufficient in order to successfully transfer knowledge and technology.

Intermediary variable 4: Regulatory authorities and policy framework

The Ministry of Mines and Minerals Development (hereafter the Ministry of Mines) is responsible for general regulation of the mining sector in Zambia. The Mines Safety Department (MSD) is mandated to monitor safety and health performance of the mining companies. Other regulatory authorities are known for their lacking institutional capacity, characterised by significant shortfalls and weak reporting and accountability practices. Three main authorities are:

Zambian Development Agency

The Zambian Development Agency (ZDA), established in 2006, is responsible for economic growth and development in Zambia and promotes trade and investment. The ZDA came up with a range of regulator simplifications and fiscal incentives to promote FDI. The Zambian Development Agency Act sets this framework (Fessehaie, 2011: 51). The ZDA tries to develop an internationally competitive economy through the promotion of investment requiring high skilled labour. It addresses the obstacles of doing business in African countries and simplifies the process of business creation.¹¹ Since a few years the bidding process for mining licenses proceeds through a internet system called the Flexi Cadastre : <http://www.flexicadastre.com/zambia/>. By using this system, every international mining company has the same rights and chances: who first comes, gets first served. No foreign investor is favoured. This system also prevents corruption and bribery since the more money granted by foreign investor does not influence the outcome of the bidding process. A set price has to be paid.¹²

Zambia Revenue Authority

The Zambian Revenue Authority (ZRA) is responsible for the collection of tax. The state's capacity to tax companies, regulate and control payments is solely dependent on the ZRA. However soon after the privatisation and the founding of the ZRA it became clear that the limited capacity and expertise of the ZRA hampered collecting tax. Specialist competence was lacking to audit the growing and increasingly sophisticated mining sector.¹³

Environmental Council of Zambia

The Environmental Council of Zambia (ECZ) is responsible for the enforcement of environmental policies and regulates the environmental issues caused by mining companies, affecting the direct surroundings of the mining side. The Environmental

¹¹ Interview with a Senior Manager Business development of ZDA, on the 2nd October 2013.

¹² Interview with a Senior Mining Officer of the Ministry of Mines, on the 30th of September 2013, a Senior Manager Business development of ZDA, on 2 October 2013 and a Public Relation Officer of the Chamber of mines, on the 17th of October 2013.

¹³ Interview with the Manager Director of EITI, on the 3rd of October 2013 and a Research fellow of ZGF, on the 30th September 2013.

Protection and Pollution Control Act from 1990 provides a mandate for the ECZ. There are many examples of environmental damages, most common is the discharge of toxic waste water into the nearby river. The government has not sufficient resources to fine companies, or fines are not effective.¹⁴

Policy framework

The World Bank's Governance Matters series provides data on governance indicators and places Zambia's governance performance around the median among African countries (Kaufmann et al, 2012). The relative social stability resulted in institutional development, the creation of regulatory institutions and a policy framework. The regulatory framework, elaborated on below, can be described as one with a relative respect for property rights and a developed legislation providing mandates for regulatory authorities. The legal framework for the privatisation process and the regulation of foreign investors was set by the Mines and Mineral Development Acts, as well as by the Investment Act. Both laws passed parliament in 1995. These acts made it possible for foreign investors to enter the Zambian market and provided tax incentives. Together with the Development Agreements made between the state and the foreign investor, the legal framework cornering FDI in the copper sector was set. The policy environment was, at least in theory, favourable to the development of local enterprises and thus development. However, the years following privatisation yielded economic policy that undermined local development and favoured foreign investors (Fessehaie, 2011: 51).

Development Agreements

Foreign investors operating mining sites have to sign Development Agreements (DA) with the government. The DAs between the state and the privatized mining companies stabilize the fiscal environment and other regulations. The DAs provide concessions to the mining companies such as lower corporate tax and royalty rates. In comparison to other industries the mining taxes are lower. Agriculture is considerably less taxed, 15

¹⁴ Interview with the Manager Director of CBE, on the 9th October 2013 and the head of Research department of MUZ, on the 11th of October 2013

percent corporate tax, because of its underdeveloped status.¹⁵ See detailed information on tax incentives in the paragraphs below.

Despite the seemingly compulsory levels of tax and mineral royalties, companies are individually able to negotiate the amount of tax to be paid. However, information on the content of specific DAs is scarce. The documents signed with individual companies are secret and therefore not accessible. The culture of official secrecy around these agreements makes it difficult for researchers and citizens to access data. It is therefore difficult to put pressure on the government or the companies to deliver greater benefits for local communities. All stakeholders in the copper sector are denied access to the agreements, such as trade unions, local authorities and even the regulating authorities that are still responsible and supposed to keep the companies to the promises they made (Fraser and Lungu, 2007: 17). Some DAs are accessible, in these cases the companies showed goodwill to the people of Zambia and indicated that they did not have anything to hide. Fraser and Lungu (2007) managed to grab a hold on some of the agreements. What we now know is that these documents established the terms under which the mines were sold and the rights and responsibilities of the Zambian government as well as that of the foreign investor.

A major problem with these DAs is that many records are not well kept. The amount of investments made, production figures, employment figures and resulting profits are not consistently recorded. What companies nowadays really contribute to local communities is therefore not clear. The records that are kept, are often secret and not publicly accessible.¹⁶

Information in the public domain is for example the tax regime, which will be discussed later. Although the tax rates supposed to be fixed, it appears that those companies that signed their agreements with the state at a later stage secured more beneficial terms than those that signed some years earlier. For example the corporate tax rate could be 25 percent rather than 35 percent (Fraser and Lungu, 2007 : 17).

Fraser and Lungu (2007) found out that the DAs suggested that the main aim of the agreements should be that Zambia benefits from copper mining. Since the agreements are secret, most of the locals assumed that the privatisation process did not

¹⁵ Interview with a Senior Manager Business development of ZDA, on the 2nd of October 2013

¹⁶ Interview with the head of Research department of MUZ, on the 11th of October 2013 and the Programme Manager of FES, on the 23rd of October 2013.

impose any responsibilities on the companies. Such as the continuation with ZCCM polices and the provision of basic needs, schooling, hospitals et cetera. However, this negative image is not interlay true. The agreements did mention the responsibility to workers, communities and local economies. The agreements tend to either transfer responsibilities to the new companies, such as sports clubs, maintenance of the roads, schooling and hospitals. Or stated that the costs and the labour of maintaining these facilities should be divided between the company the local authorities and the service users (Fraser and Lungu, 2007 : 17). All DAs also include provisions on local procurement to ensure no unfair discrimination. These provisions are in essence linkages that promote the use local or indigenous sources in the process of obtaining personnel, services, supplies, and equipment. Additionally, foreign investors had to submit a local business development programme (Fessehaie, 2011: 51).

All in all, concessions made in the DA reflect the principal aim of privatisation: establishing an attractive investment climate to attract FDI. However, in order to develop the national economy foreign investors accepted responsibilities concerning sharing the mineral wealth and promoting development. One final remark about the negotiations process of the DAs is on the relative power of government negotiators. Zambia's position was weakened due to the fact that foreign investors came in buying up mines when the price of copper was very low. ZCCM made losses and had to be sold, this made it a buyers' market and assets were cheaply sold. Another important factor is that the World Bank was pushing the government to sell the mines. Everyone knew this, so bargaining about the strings attached and the prices of the mines was an unfair game (Fraser and Lungu, 2007: 18).

Development policies

The Sixth (revised) National Development Plan (SNDP) from 2011 guides the development policies of the government. The government reached consensus on the issue that the economic growth spurred by the mining sector failed to reduce poverty levels. Also, the broader development potential of Zambia was pressurised, because of the limited integration of the copper sector in Zambia's economy.¹⁷ In order to benefit more from the copper industry, policies were formulated that encouraged value adding processing in Zambia. The Zambian government also formulated policies aimed at

¹⁷ Interview with a Research fellow of ZGF, on the 30th of September 2013.

cutting the cost of doing business. Also the export-orientated private sector is promoted to improve Zambia's external position. Zambia's export is characterised recent years by the dominance of copper that accounted for an annual average of 77 percent of total exports. This over-dependency on copper makes Zambia vulnerable to shifts in global copper demand and prices and has also a major influence on the volatile exchange rate (Sixth National Development Plan, 2011).

The SNDP covers the period 2013 – 2016 and charts an ambitious path to transform the living conditions of Zambians. It is in a series of medium-term plans aimed at making Zambia a middle-income country by 2030. The core goal of the SNDP is sustainable economic growth and poverty reduction. The focus is on upgrading the infrastructure, diversification, and promotion of rural development and eventually human development (Sixth National Development Plan, 2011).

Development also means innovation. The Act Science and Technology 1997 established a number of institutions promoting innovative businesses, which were endowed with a Strategic Research Fund. Government policy however failed to play a role in encouraging mining companies to increase local content. Also the upgrading and development of local suppliers capabilities lacked behind. On top of that, the most recent mining act from 2008, removed the only legal obligation of the mining companies to develop local supply chains (Fessehaie, 2011 : 52).

Taxation and fiscal incentives

Taxes in the global mining industry take generally the following forms:

- Unit based royalties: volume or weight.
- Ad valorem royalties: the value of production.
- Profit based royalty or tax
- Economic rent based tax. Which is a taxation on the portion of income that is spent on one factor of production, on top of the opportunity costs.

There are also hybrid systems combining a rent or profit based system with an ad valorem system. In this study the term royalty refers to the traditional application in mining legislation: a specific, ad valorem, tax based on an accounting profit base (Guj, 2012: 4).

Tax incentives in Zambia's mining sector are the following:

1. A fixed guaranteed input tax claim for seven years, also known as value added tax (VAT) on preproduction expenditure for exploration companies in the mining sector.
2. 10 year period carry forward of Tax losses (5 years for exploration companies).
3. Any mining company holding a large scale mining license carrying on the mining of base metals is subjected to 30 percent corporate tax.
4. Other mining companies are taxed at 35 percent.
5. Dividends paid by a company holding a large-scale mining license and carrying on the mining of base metals is taxed at 0 percent.
6. 25% Capital allowances on mining equipment and related expenditure when assets brought into use.
7. The debt equity ratio has been reduced from 3.1 to 2.1, to encourage further investment in the mining sector
8. Remission of duty on special mining vehicles and machinery and deduction of 25 percent of such expenditure, like mine locomotives.
9. Property Transfer Tax on transfer of mining rights is 10 percent.
10. Mineral Royalty is 6 percent on all minerals (Base, precious and gemstones)
11. 10 percent export levy on unprocessed copper concentrates

Source: Zambian Revenue Authority, accessed in February 2014.

The tax incentives above were briefly undermined when the Mine and Mineral Act was amended in 2008. All DAs were abolished. However, in practice this did not happen. The idea was that all foreign investors should face the same fiscal rules. Nevertheless, mining companies have been signing new DAs with the government and negotiated their own fiscal regime. This practice was not legally binding, but determined tax payments. This once again indicated the relative weak position of Zambia's authorities and the power of the foreign companies. Eventually this thus results in ignoring the legal framework and backroom negotiations or demands play into the hands of foreign investors (Zambian Economist, January 2011).¹⁸ The amendment created a new tax regime and was expected to add an extra nine percent to the government's domestic revenue collection.

¹⁸ Interview with a Research fellow of Zambian Government Foundation, on the 30th of September 2013 and a Policy officer from the Ministry of Foreign Affairs, on the 16th of October 2013.

One financial measure in place that aimed to extract benefits for Zambia in economic high tides, was the windfall taxation. In cases where the global coppers prices increased significantly and the companies started earning what is called 'windfall' benefits, the society should benefit too. 'Price participation' clauses stated that the government can claim a certain amount of each sale, when the world price of copper exceeds the benchmark of 2700 US dollar per tonne. However, due to the fact that the payments to the government by companies are deductible for income tax purposes, the income tax paid by companies will be reduced. This implied that the net effect, as soon as the government started enjoying income from price participation, was minimal (Fraser and Lungu 2007: 15) Additionally, due to implementation problems, the refusal of several mining companies to pay and the continuation of the DAs, the system was abandoned. Barely nine months after its introduction, the foreign owned copper companies lobbied to the government, resulting in the following concessions to the companies: companies were allowed to write off 100 percent of any investment against tax as depreciation in the year in which the expense occurs. This is well beyond the international norm. The government allowed income from hedging to be included as part of mining income for tax purposes. It is relatively easy to demonstrate a loss on hedging, move profits offshore and consequently minimize tax payments. Lastly, the windfall taxation was scrapped. The copper sector demanded this from the government, arguing that it penalized high cost mines because it was levied on the overall value of copper produced and not on profits. In fact, the copper price was below the level when extra tax had to be paid in October 2008, so no further tax was liable (Green, 2009, 2). Nowadays, the government is considering reintroducing the windfall tax because of the high copper price and the above tax incentives are again in place. The Zambian Revenue authority even denied that taxes are still negotiable ¹⁹. A recent change, which is again indicative for the relative power of foreign investors, comes from the *Zambian Economist* (23-10-13). They reported that the government has lifted the 10 percent export levy on unprocessed copper concentrates until September 2014, starting from October 2013. This tax suspension comes after mining companies asked government to reduce the level of taxes because of a lack of local smelting capacity.

¹⁹ Interview with a Senior Mining Officer of the Ministry of Mines, on the 30th of September 2013 and the Deputy Director Mining Audit and a Senior economist, Research division at the ZRA, on the the 4th of October 2013.

Despite the above, recent fiscal changes to the benefit of Zambia are reported. First, the value of copper sales, determined by the copper price companies claim they are being paid overseas, no longer determines how royalties and taxes are calculated. Instead, the amount of tax will be calculated based on the prices of copper on international commodity exchange markets. This will make the taxation process more transparent (Zambian Revenue Authority, 2014). Additionally to the 30 percent corporate tax rate, companies will also have to pay a variable profit tax of 15 percent. Lastly, starting from April 2014, mining companies will no longer be able to deduct their losses from financial deals, hedging and future sales, from taxable income (Zambian Revenue Authority, 2014).

Multi-Facilities Economic zones: Zambia-China Economic & Trade Cooperation Zone (ZCCZ).

Multi-Facilities Economic zones were established around 2006. Roughly twenty Chinese companies, mostly associated with the mining sector, operate in these zones. In line with the priority sector policies that were identified under the 2009 Commercial, Trade and Industrial Policy, the government decided on a sectoral approach to industrial policy and gave fiscal benefits to large-scale investors (Fessehaie, 2011: 51). These zones generated half a billion US dollars of tax revenue and created twelve thousand jobs for the local community.²⁰ However, practically these zones give tax incentives to foreign investors, to decoy them in, therefore the net benefit for Zambia could be a lot higher if regular taxation rules were applied.²¹

Labour standards, enforcement and the role of trade unions

The Industrial Relations Act entails worker's rights and gives employees the right to, for example collectively bargain and the freedom of association: the basis of trade union rights. The Employment Act stipulates that inspectors have access to mining sites and they are responsible for monitoring labour practices of the firms. The MSD is mandated to enforce safety rules directly on the mining sites. The mining inspector visits mining sites and covers all health and safety issues within the plant area. However, labour

²⁰ Interview with the Economic and Commercial Counsellor of CBC, on the 16th of October 2013.

²¹ Interview with a Research fellow of ZGF, on the 30th of September 2013.

regulation is not functioning at its best, and suffers from some weaknesses. The interview I had at the Mines and Safety department made clear that the authority responsible for regulation and safety issues is not capable of checking on all mining sites because of the lack of funding and personnel. Personnel admitted that in some cases safety regulations are not upheld at all:

*“I won’t be surprised if the head of my department is personally offered money by mining companies in exchange for less regulatory checks and even the withholding of fatal accidents”.*²²

Although above statement is no fact, it indicates that there are these kinds of thoughts about issues like bribery and corruption.

Trade unions

Zambia’s trade unions played a determining role in the copper sector throughout history. The trade unions were in favour of privatization since they too recognized the worsening conditions and the nearing end of the mining sector. Until this day the trade unions mobilize the employees and influence the government in order to improve working conditions.²³

Concerning the DAs made between the government and the mining companies, trade unions were left out in the negotiation process. Additionally, the resulting agreements were not accessible to the trade unions. This meant genuine problems for them in performing their basic task of negotiating on behalf of the workers. Already in 1999, the MUZ wrote to the minister of Labour that they needed access to the sacred DAs in order to judge the practices of the newly privatised mines. They were not in the position to monitor what was pledged and were concerned about the new situation in the mines.²⁴

Recently, trade unions are pitted and played out against each other. Trade unions are not supported and even obstructed by the government. The current president, Michael Sata, is a former head of the trade unions federation ZCTU and knows how

²² Interview with a Senior officer of the Regulations and Safety Department, Ministry of Mines, on the 11th of October 2013.

²³ Interview with the Director Recruitment and Training of MUZ, on the 10th of October 2013.

²⁴ Interview with the head of the Research Department of MUZ, on 11th of October 2013.

powerful trade unions can be undermines presidential authority. Therefore he supported acts that dismantled unions and tries to break down the relative power of the trade unions. Currently, trade unions do not speak with one voice and first strive against each other before they can make a stance against the mining company. International investors are happily using this situation and play out the workers represented by different trade unions.²⁵

Implementation of regulation

All in all, the effectiveness of mining regulation is hampered by a shortage of funding and skilled inspectors. The resources required to physically inspect the growing mining sector are lacking. The MSD is especially chronically underfunded (Haglund 2008: 559). Also the lacking capacity of the ZRA to collect tax and to record what the mining companies pay and should pay demises the tax income.²⁶ Concerning government policy and regulation, Fessehaie (2011) argues that policy makers failed to see the potential for private sector development in the localisation of upstream linkages. Second, Fessehaie (2011) argues that government policy failed to play a role in encouraging mining companies to increase local content.

The government and mining companies argue that the current tax regime is fair, since it does not penalize high cost companies. Nevertheless, the ZRA does not have the internal capacity to effectively force the mines to comply. Additionally, the foreign owned mining companies have the best tax lawyers and they will ensure a positive outcome for them. They have no difficulties in reducing tax liabilities by minimizing profits on paper. The Zambian authorities do not stand a chance against the power of these mining companies (Green, 2009: 3).

²⁵ Interview with the Director Recruitment and Training of MUZ, on the 10th of October 2013 and the Programme Manager of FES, on the 23rd of October 2013.

²⁶ Interview with the Manager Director of EITI, on 3rd of October 2013.

Conclusion

Before we go to the last empirical chapter which contains the effects of FDI in the copper sector on development, I can state some concluding remarks. I made a distinction between several conditions and circumstances: the host country's policy framework and the performance of regulatory institutions; the human development; the type of investment and the motives and policy of the foreign investor. First of all, the effectiveness of mining regulation is undermined by the lacking regulatory capacities and relative power of foreign investors. Second, the type of investment in the copper sector is focused on first and foremost possessing mining sites and second upgrading the mines from old standard mines to big, usually, open-pit mines. Leaving other sectors behind and undermining overall development. All in all these conditions result in less favourable outcomes for the mineworkers and fewer linkages and spillovers.

The stock of human development determining the absorptive abilities of Zambia is measured using secondary education figures. In comparison to the neighbouring countries, Zambia is performing relatively well. Which means that one condition determining Zambia's development is fulfilled, however this is by no means sufficient for spillovers effects to occur.

Last intermediary variable is the policy and motives of the foreign investor. In general motives are: the possibility to cheaply extract copper for the world market. The companies' policies are highly influenced by these motives and generally aim to influence the policy process of the government in order to create an ideal investment climate. The influence of the foreign investor on issues like taxation is unfavourable for development, since Zambia only minimally benefits from copper revenues.

At last I will confront theory on optimal FDI policy with Zambia's practice and formulate expectations for the outcomes. I use various channels: linkages, spillovers, filling up resource and trade gaps and the side effects of FDI. Starting of with the latter, I expect the pollution to negatively affect local communities in such a way that their living standards decrease substantially. By not having easy access to clean drinking water, sustaining a clean and healthy environment is at risk. The spillover effects concentrate around the basic idea that domestic people and firms learn from foreign investors. Human capital is an important factor determining the population ability to learn from

foreign investors. If we look at the secondary school enrollment, Zambia is performing relatively well. Nevertheless, transferring knowledge is likely to be hampered by the fact that expatriates execute high skilled labour. Additionally, foreign companies have less incentives and urges to engage with local businesses. Copper is extracted, exported and then processed overseas. The fact that value addition is not taking place in Zambia will probably mean that linkages are to be minor. Besides, the foreign owned mines are rapidly developing, leaving local suppliers previously responsible for the supply of goods and services used in the process of mining, far behind. Usually, FDI brings employment to developing countries, also for Zambia this is (was) the case. Although high skilled labour is often executed by expatriates from the home country and currently mining processes are requiring less and less mineworkers. Consequently unemployment probably rises. Lastly, FDI in Zambia is expected to fill up resource trade and tax gaps. Foreign money invested in copper mines will most likely have a positive effect on the current account.

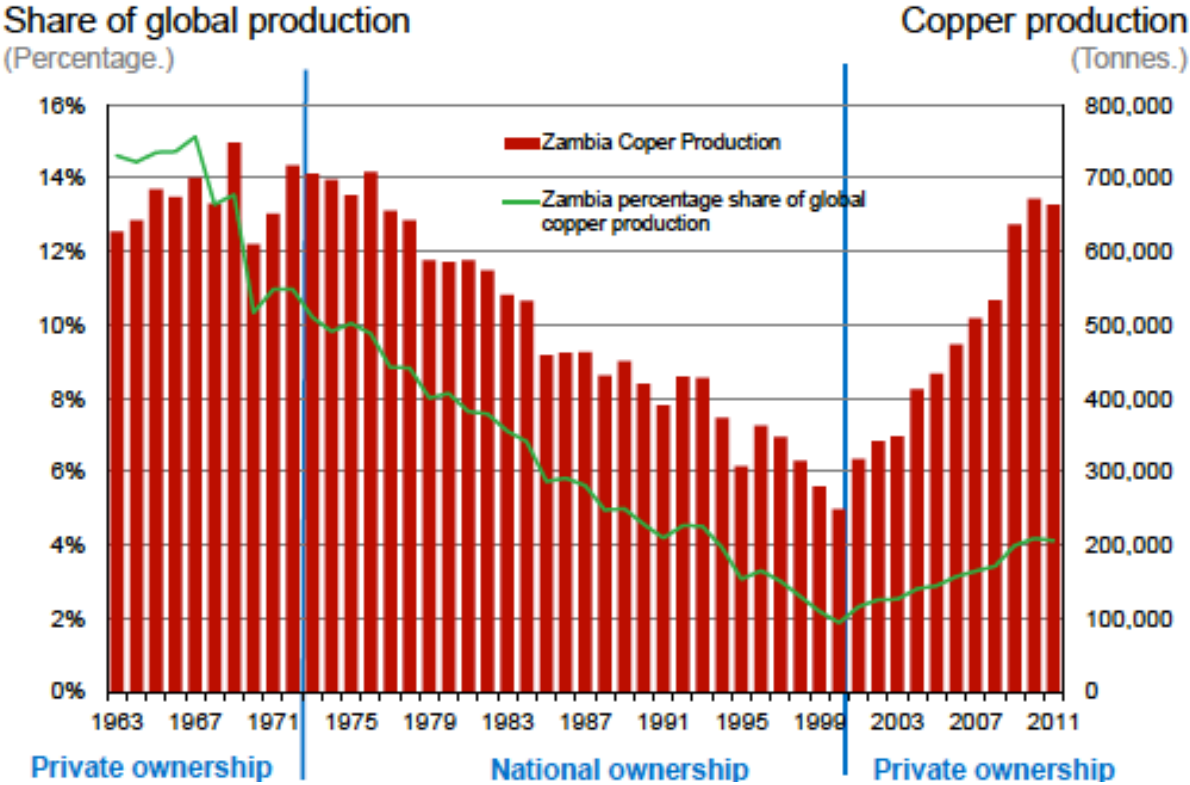
Next chapter will go into detail on Zambia's economic performances and describes the actual effects of FDI in the copper sector on Zambia's development.

This chapter answers the last sub-question: *What are the effects of FDI in the copper sector on Zambia's development?* Now we know Zambia's conditions and circumstances, the four intermediary variables, we can assess FDI's output in Zambia through various channels: linkages, spillovers, filling up resource, trade and tax gaps and the side effects of FDI. I will start this chapter with an analysis of Zambia's economic situation, the key economic indicators and the relationship between the copper production, the copper price and GDP growth. Thereafter the first channel, filling resource, trade and tax gaps will be assessed. This part will be followed by channel two, the linkages and followed by channel three, the spillovers. Lastly, channel four, the side effects like pollution is covered. In the end I will compare actual development outcomes, with theoretical expected outcomes and draw my conclusions.

The importance of copper for the Zambian Economy

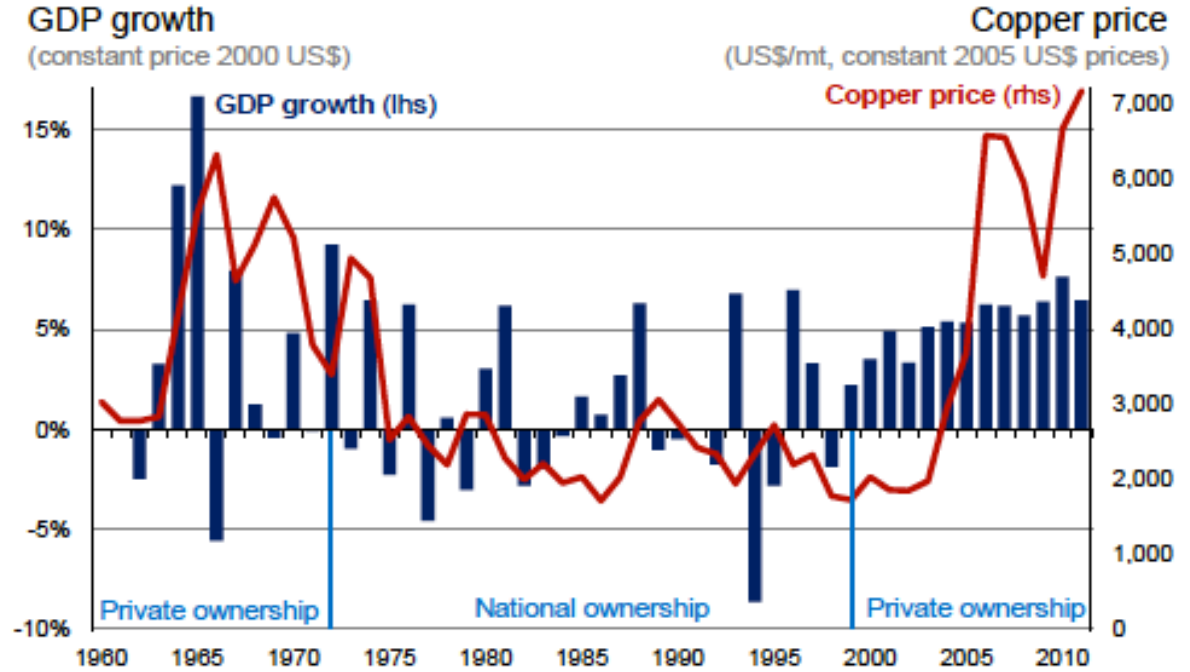
Prior to privatization, the copper industry faced historically low copper prices. The industry was therefore desperately short of money and investments were not made. With the selling of mining companies, the FDI inflow resulted in significant investment and a recovering industry. Eventually old mines were modernised, new plants were created and the newest machinery led to a growing copper production. See figure 9. Consequently, tax revenue from mining grew. However, what are the effects of the copper price on development and what happens with the copper revenue? Figure 10 shows the relation between the copper price and economic growth in Zambia. Not only does this indicate the differences between the period before and after privatisation, also the positive relation between the copper price and GDP growth is visualized. Most strikingly, the relative low world copper price during the period of nationalisation made it difficult for the mining companies to generate and contribute to consistent economic growth.

Figure 9: Zambia's Copper Production



Source: International Council of Mining and Metals (ICMM), 2013.

Figure 10. Relation copper price and GDP growth



Source: International Council of Mining and Metals (ICMM), 2013.

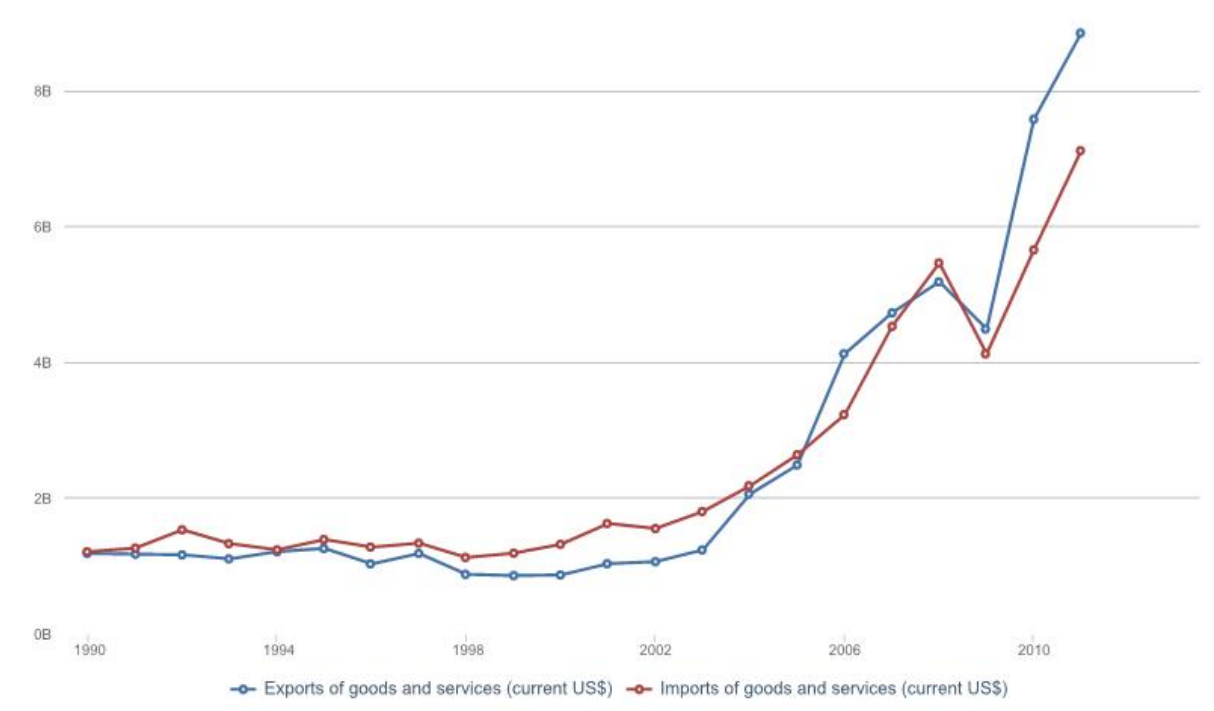
Now that we have seen the figures on copper production and know how important the copper price is for GDP growth, it is time to analyse the channels through which FDI has impact on development.

Channel 1: FDI filling resource, trade and tax gaps

First channel through which FDI may have effect on development is the filling of resource, tax and trade gaps. In previous chapter I already visualised the FDI inflow, which increased after Zambia's mines were privatized and taken over by foreign investors. So initially FDI was done in order to purchase existing stock. However, after foreign investors owned the mining companies, additional investments were made. FDI inflow was not simply the purchase of existing stock. On the contrary: after the global crisis in 2008-09, FDI levels rose to a maximum in 2011, developing and expanding mines and resuscitate the production process. See figures 6 in chapter 4 for a graphical overview of FDI inflow.

Now we take a look at export and import figures and the income that foreign investors transfer abroad, so called profit repatriation. First, the Zambian Balance of Payment (BoP) indicates the monetary transactions between Zambia and the rest of the world. A balance-of-payments equilibrium means X (export) = M (import). The Current account entails : $\text{Exports} + \text{Financial Flows} = \text{Imports}$ ($X+F=M$). Because the BoP is always in balance, so 0, we usually look at the current account, one of the elements of the BoP, which can be positive or negative. A negative result on the current account means that a country builds up an increasing debt and consequently an increased foreign ownership of local assets. If $M > X$, we speak of a trade deficit: importing more goods than it exports. As a result, a country has to borrow (F) from other countries or IFIs. This was the case for Zambia most recent decades. See the figures below for a graphical overview.

Figure 11. Exports and imports in billions current US dollars, 1990 -2011.



Source: World Development Indicators, WorldBank, accessed on 23 March 2014.

Developing mining sites and the operation of copper mines itself required significant import of goods and services. Especially in the light of the weakness of local manufacturing companies. Figure 12 indicates a steep increase in recent years of the level of imports. With a considerable drop during the global crisis around 2009. Most imported products to Zambia include capital goods, mostly equipment, for the mining industry and crude oil. Increasingly consumer goods are imported, which reflects in part the liberalization of the trade that has taken place since the privatization process started. The import of consumer goods consist of both food and non-food products. Despite the intention and efforts of the government to be self sufficient in the production of basic needs such as food, data shows that food had to be imported most years (Zambia Statistical Office, 2014). Export figures differ per source; nobody really knows what the exact (copper) export figures are.²⁷ Using estimates from the WorldBank gives us an idea of the tendency. Indeed when the blue line is above the red, more export than import, a surplus is created on the trade account. Table 3 indicates that only the years '09 '10 '11 the current account is consistently and

²⁷ Interview with the Manager Director of Extractive Industries Transparency Initiative (EITI) on the 3rd of October 2013.

considerably positive. In figure 11 we see that before privatization import levels were above export levels, resulting in a deficit on the trade balance. After Vedanta took over KCM in 2004, for the first time export levels exceeded import levels. Table 3 indicates a considerable trade surplus recent years. I could argue that after all the mines were sold to foreign investors, the modernised production process finally led to an increase in copper export resulting in a surplus on the trade account.

Export increased until a minor decline in 2013. Explanations for the downward trend come from global decline in copper demand. China is the biggest importer of Zambia’s copper and consuming 40 percent of the world’s copper. Only recently, also the Chinese market is slowing down and a declining copper demand means a considerable decline in overall exports of copper (Panckhurst, 2014).

Table 3. Zambia’s current account balance 2008-2014

	2008	2009	2010	2011	2012	2013
Current account balance	-1,360	285	977	554	-190	-1,160
Trade balance	407	906	2,704	2,206	1,453	420
Export value of goods	4,962	4,319	7,414	8,660	9,414	8,600
Import value of goods	4,554	3,413	4,710	6,454	7,961	8,180
Services balance	-607	-420	-567	-728	-782	-840
Income balance	-1,399	-420	-1,363	-1,155	-1,126	-1,070
Transfer balance	239	219	203	232	265	320
Net direct investment flows	939	690	634	1,106	889	1,110
Net portfolio investment flows	-6	-75	74	71	63	80
Net debt flows	235	49	881	-766	2,023	350
Other capital flows (negative is flight)	197	-152	-2,363	-735	-2,067	-590
Change in international reserves	6	797	202	230	718	-220

*Source: The Economist Intelligence Unit (EIU). Accessed on 24 February 2014.*²⁸

Relevant for this analysis is the income that foreign investors transfer abroad. This can be found on the income balance in table 3, which has been negative recent years; income is channelled to the home country, also called profit repatriation. The practice of profit repatriations is finally recognized as a potential source of income for the Zambian government. Until recently the ZDA promoted investment with a 100 percent repatriation of profits. So, profit distributions by Zambian branches of foreign companies were not subjected to withholding tax. Currently the plan is to introduce a 15 percent withholding tax on branch profit repatriation (KPMG Africa, 2013).

²⁸ FDI figures in Table 3 and Figure 6 are not corresponding due to differences in measurement methods.

Foreign exchange earnings

The macro-economic contributions of copper mining in Zambia are the most important source of foreign exchange earning. Up to 80 percent of Zambia export comprises copper products. The International Council of Mining and Metals recently concluded:

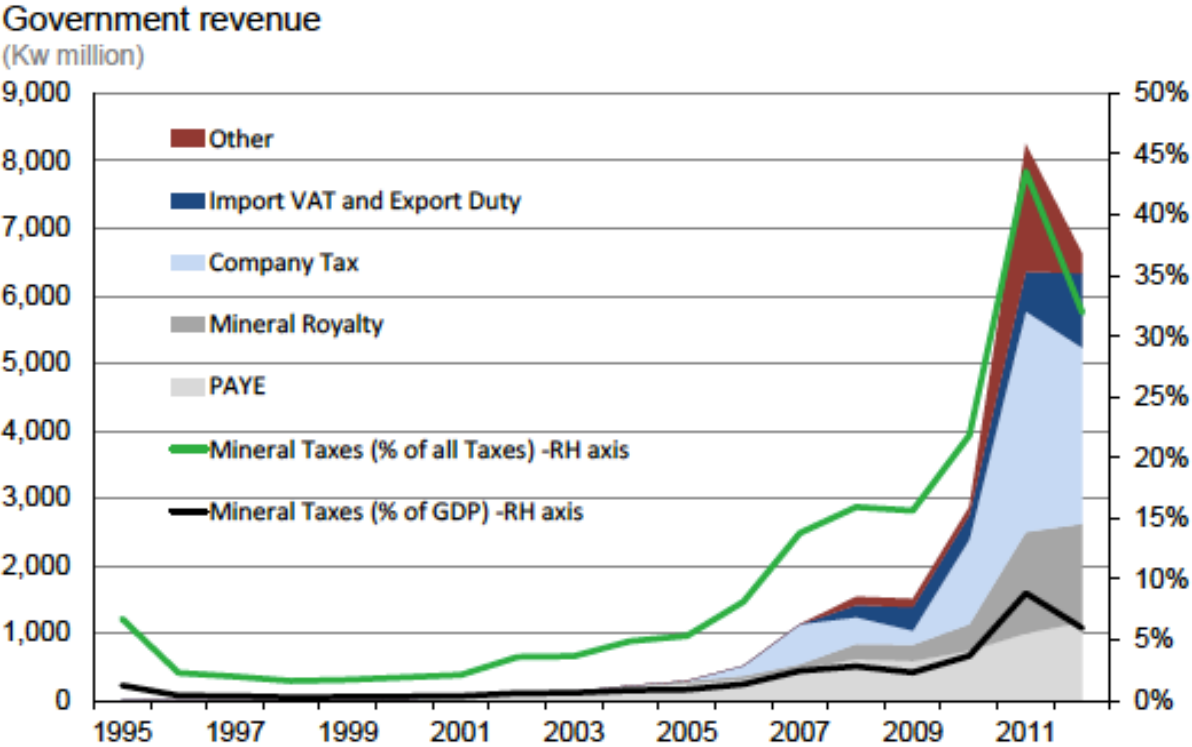
“Zambia still has an exceptionally high level of macro-economic dependence on mining by international standards. Compared to other countries, mining makes an unusually large contribution to total export earnings, to total national investment and to total foreign direct investment. These contributions have increased in recent years” (ICMM, 2013).

This strong relationship and thus dependency, means that the foreign exchange earnings are volatile and linked to global copper demand.

Tax income and transfer pricing

Previous chapter contained an overview of the tax revenue from FDI in copper. The figure below visualizes the proportions of various sources of tax income contributing to total government revenue. For clarification: import VAT is a fixed guaranteed input tax claim for seven years, also known as value added tax (VAT). See chapter four for details. Company tax is the same as corporate tax: different sources use different names for the same data.

Figure 13: Mining’s contribution to Zambia’s government tax revenues, percentage of all taxes.



Source: International Council of Mining and Metals, 2013.

Although Zambia is not a member of the OECD, the Zambian transfer pricing regulations are essentially the same as the OECD guidelines. The ZRA has recently created a Transfer Pricing Practice, in cooperation with other tax jurisdictions. The ZRA signed a Memorandum of Understanding with the Norwegian Tax Administration aimed at strengthening the revenue administration. The Zambian transfer pricing provisions are incorporated in the Income Tax Act (ITA). ZRA officials periodically carry out audits and review whether tax transactions are correct or transfer pricing is occurring. If auditors find inaccuracies, adjustments have to be made and penalties and interest will be levied accordingly. The ZRA is relatively positive about the tax regulation and the auditing performance.²⁹ The mining company I spoke to, KCM, refused to go into detail about

²⁹ Interview with the Deputy Director Mining Audit and a Senior economist, Research division of the ZRA, on 4th of October 2013.

taxation issue. They paid what they had to pay.³⁰ However independent reports and publications in the press on the practices of mining companies such as First Quantum and Glencore in Zambia indicate practices of transfer pricing and tax avoidance (e.g. Haglund, 2008; Robinson, 2013; Lusaka Times, 2013). These companies were found guilty of violating numerous laws and OECD guidelines by manipulating balance statements in regard to productivity and production costs. Financial methods used by foreign mining companies raise questions about the quality of international rule of law enforcement. An example: transfer-pricing actions distort inter-division transactions so that it appears they suffer losses. If the exchanges are according to level of the market price, they are legal, if they are over or under the international market price, they are illegal. The OECD refers to this as the arm's length principle in transfer pricing.

The transfer price is manipulated by falsely stating the true selling price of copper in order to avoid paying tax on the profits. This means that companies are not complying with the arm's length principle of transfer pricing. The most stunning example is that Mopani mine was 'selling' copper to its parent company Glencore at 25 percent of the official price at the London Metal Exchange. Which means that the company avoided some 75 percent of its tax obligations for copper sold.³¹ Between 2003 and 2008 ZRA auditors estimated \$700 million were lost.³² The mining companies are fined if the ZRA determines that reasonable effort is not made in order to demonstrate that transfer prices comply with the arm's length principle. The Zambia Income Tax Act empowers the ZRA to impose fines, penalties ranging from 17.5 percent to 35 percent for incorrect returns may be assessed on the amount of income understated or expense overstated. Defrauding means a penalty rate of 52.5 percent of the understated income amount. Additionally, the late payment of tax is penalized five percent per month from payment due date, plus interest.³³ However there is no evidence that these mining companies have been fined.

³⁰ Interview with the Director of Strategy & Business Development of KCM, on 18th of October 2013

³¹ Interview with the Manager Director of Extractive Industries Transparency Initiative (EITI) on the 3rd of October 2013.

³² Interview with two Research Fellows of the Zambian Institute for Policy Analysis and Research (ZIPAR), on 4th of October 2013 and the Deputy Director Mining Audit and a Senior economist, Research division at the Zambian Revenue Authority ZRA, on 4th of October 2013.

³³ Interview with the Deputy Director Mining Audit and a Senior economist, Research division of the ZRA, on 4th of October 2013

Concluding, the first channel has ambiguous effects. Zambia faces high FDI inflows, but almost equal profit repatriations, resulting in minor net gains suffocating development. Zambia's dependency on global copper demand and the world market makes the revenue stream uncertain and foreign exchange earnings volatile. Second, Multinational companies operating Zambia's mines still have multiple ways to avoid tax. Third, records on actual import and export are not well kept. Due to a lack of auditors the copper production is estimated, as well as the export figures. Also, the companies are responsible for recording their production, and often this is not even verified.³⁴ With the increased FDI inflow, import has risen too. Zambians benefit from the imported consumer products, which reflects in part the liberalization of the trade that has taken place since the privatization process started. Although the government did not succeed in making Zambia self-sufficient in the production of basic needs.

Channel 2: Linkages

Employment

Around 1976, the peak of employment reached 62 thousand workers in the mines. The next fifteen years, the industry was declining and the total workforce dropped to 56 thousand. Only in the 1990s the government decided something had to change in order to either recover the industry or make it ready for privatisation. ZCCM decided to implement a significant retrenchment programme and the levels of employment dropped to 31 thousand before the first mine got sold in 1997 (Fraser and Lungu 2007 : 21)

After privatisation, until recently, the workforce declined even further. In 2001 only 19 thousand people were still in direct employment of mining companies. The interviews I had with stakeholders in the copper sector on the current labour situation all agreed on the issue that employment rates are still declining and the labour force is under pressure. KCM will be firing another 2000 workers in order to stay competitive and to be able to compete with other copper producers.³⁵ According to the chamber of mines the current numbers of people working in for the mines are 20 thousand. New

³⁴ Interview with the Manager Director of EITI, on the 3rd of October 2013 and the Deputy Director Mining Audit and a Senior economist of the Research division, of Zambian Revenue Authority (ZRA), on the 4th of October 2013.

³⁵ Interview with the head of Research of MUZ, on the 11th October, 2013 and the Director of Strategy & Business Development of KCM, on 18th of October 2013.

mines opening up in North-Western Zambia resulted in overall increasing employment figures.³⁶

Working conditions

Foreign investors taking over mining companies, in general, did not want to take over the labour liabilities that were present under ZCCM. Also when workforce was laid off, responsibilities for ZCCM liabilities were handed over to the government. This idea came actually from Zambian authorities hoping to attract more foreign investors. Current labour regulation suffers from some weaknesses and is undermined by foreign investors. First of all, again, the monitoring and enforcement capacity of the responsible agencies is weak. Second, due to many procedural requirements it is practically impossible to go on strike legally. This reduces the power of unions and also the legitimacy of industrial policy. Third, since the labour laws are outdated there is no distinction made between permanent and temporary employees. Mining companies therefore are used to the practise of 'casualisations': Short-term hire, fire and then re-hire people again. By doing this, companies do not have to pay social benefits and pension to their employees.³⁷

Supply to and demand for local producers

Local manufactures dominated the supply chain in the copper industry before the process of privatisation started. Local producers were supported by government policy via import substitution. Also, ZCCM (controlled by the government) worked closely together with local manufactures. There were three groups of suppliers prior to privatization: State owned enterprises (SOE), local Zambian owned firms and businesses established by European migrants. Local suppliers' performance was not at its optimum and faced problems such as of scarcity of foreign exchange, which curtailed their possibility to import products and poor payment records from ZCCM.

After privatization, the new owners of the mines imposed higher performance requirements on local suppliers, who did not have the excuse of lacking foreign exchange and bad payment records of ZCCM anymore. Initially, the inflow of FDI meant

³⁶ Interview with a Public Relation Officer of the Chamber of mines, on the 17th of October 2013.

³⁷ Interview with the head of Research of MUZ, on the 11th October 2013 and the Director Recruitment and Training of MUZ, on 10th of October 2013.

that local suppliers had to undergo a thorough learning process from their new buyers on the requirements of a highly modernised supply chain. The privatized market resulted in new players and the ones that could not compete did not survive. Therefore the population of the local supply chain changed drastically. First of all, many foreign owned equipment manufacturers established a direct presence in the Copperbelt. This enabled mining companies, first, to control the quality of the goods and services provided to the mines. Second, it secured an increase in revenue stream from after-sale services, such as maintenance and repairs, which were in general highly profitable. Manufacturing of goods was for the most part relocated to more competitive industrial countries. This meant that the value adding process was out of the hands of Zambian local contractors and companies, which resulted in a backdrop of the earning curve (Fessehaie, 2011: 33). This also means that forward linkages are to be minor. Local companies in the supply chain lost competition from foreign owned companies. Besides, unprocessed copper is exported and value addition takes place abroad.

To sum up, linkages are first and foremost employment opportunities. However after the selling of mines to foreign investors, copper mining did not serve as a government's tool to provide work to local communities. Efficiency and cost effectiveness became the new credo resulting in a massive decline in overall workforce. New mining sites opening up in North-Western region are the first indications of a reverse trend and an increasing workforce. The local supply chain has lost the competition to foreign owned companies responsible for the supply of goods and services for the copper production. Above all, value addition is taking place abroad, meaning that unprocessed copper is exported, leaving Zambians empty handed behind.

Channel 3: Spillovers

Transfer of knowledge, ideas and technology

According to the DAs, the mining companies had to provide schooling and trainings to their employees. Most trainings were conducted on the mining site, few were provided by external institutions. However, most on-the-job training was not sufficient and an undersupply of technical skilled labour of local Zambians made way for educated expatriates to fill up this gap (Fessehaie, 2011: 56). The government is partly responsible for facilitating the transfer of knowledge, however budget allocation for skills creation has been low in Zambia. Looking at the national budget last 2004-2013 we see to around 20 to 30 million US dollars a year is spent on skills development, a special fund focused on educating high skilled labour. This is around 0.1 percent of Zambia's GDP. (National budgets, Bank of Zambia, 2013). The total budget for education is much larger, at around 5 percent of GDP in the seventies and eighties and currently two percent. Which means that up to 15 percent of total government budget is allocated to education (World Development Indicators, WorldBank, 2014)

Fessehaie (2011) published a discussion paper on the development and knowledge intensification in industries upstream of Zambia's copper mining sector. Her paper explores the hypothesis that localisation and deepening of spillovers are driven by several factors: sectoral policies, skills' spillovers, regional capabilities, foreign ownership, infrastructure and the National System of Innovations. Especially the role of ownership in shaping value chain governance is scrutinized. Also the role of ownership in promoting industrialisation and knowledge intensification of local industries is assessed. Her findings indicate that from the end of the 1990s the skills spillover from the mining companies to the local supply chain intensified. After privatization, ex-employees from ZCCM' mines operations departments entered the local supply chain. Zambians mostly executed low skilled jobs in foreign owned companies, since competing with new foreign entrants in the supply chain was an uneven battle. Spillovers between the mines and the supply chain were a significant factor upgrading the inflow of goods and services and improving overall performance in the industry to the benefit of Zambians working in the supply chain (Fessehaie, 2011: 56).

Foreign dominance inhibiting local companies

Foreign dominance in Zambia's mining sector seems a clear fact. Local suppliers do not stand a chance against powerful foreign investors, additionally, most capital equipment is imported from abroad, meaning that local producers suffer from a declining demand. Currently value addition takes place outside Zambia's border and copper smelting facilities are operated by foreign owned companies. Consequently, local companies are inhibited and are not in the position to compete with foreign investors.³⁸ The local copper production chain did not receive the much needed funding to develop and to be able to compete with foreign investors. This resulted in few or almost non-existent spillovers between foreign investors and local producers in the supply chain. The Act Science and Technology 1997 did not target specific industries in order to support local companies. The local companies, manufactures and service providers that were left in the copper sector, but were not connected to foreign owned companies faced much higher barriers to technological innovation and know-how, and were doomed to lose the competition (Fessehaie, 2011: 54).

Concluding, to some extent Zambian workers received schooling and on the job training to be able to carry out the modernised copper production process. Also the supply chain, now too controlled by foreign investors, provided with skill spillovers. Former ZCCM workers were hired by foreign investors and educated in order to upgrade the supply of goods and services. However, expatriates mostly execute high-skilled labour and fill up management positions. Overall the foreigner dominance is inhibiting local companies and local workforce is still not in the position to compete with expatriates.

Channel 4. Side effects

Pollution

There are many examples of environmental damages. Most common are the discharge of toxic wastewater into the nearby river and the high emission of toxic gasses causing air pollutions. Other polluting activities are lead poisoning and soil contamination. During

³⁸ Interview with the head of Research of MUZ, on the 11th October, 2013 and the Director Recruitment and Training of MUZ, on 10th of October 2013, the Programme Manager of FES, on the 23rd of October 2013 and a Research fellow of ZGF, on the 30th September 2013.

my stay in Kalulushi, a township in the Copperbelt region, I was directly affected by the Mwambashi stream pollution, since the family I stayed with were depending on that stream. Only in the early morning some water was available from the nearby town, Kitwe. Also KCM mine is known for discharging waste materials in the Kafue River, polluting an important drinking water supply for surrounding local communities. The government has not sufficient resources to fine companies, or fines are not effective.³⁹

Environmental standards mining companies

The Environmental Council of Zambia together with mining companies formulated Private investors' Environmental Management Plans (EMPs) for each mining site. In most cases it was completed with adequate participation of local governments and stakeholder groups, including NGOs and Community-based Organizations (CBOs). Also individual companies, such as KCM, conducted an environmentally conscious policy⁴⁰. In order to monitor compliance with these EMPs and enforce regulation, regulatory authorities are in place. The World Bank concluded that the performance and capacity of ECZ and the Mines Safety Department (MSD) to enforce regulations has been improved resulting from more funds and international pressure from IOs (WorldBank report, 2011). The mining companies that have formulated environmental conscious policy, stipulate this on their websites. Nevertheless it remains to be questioned how effective these policies, the EMPs and regulation are. In what way does ZCCM and current owners of mining companies differ with respect to compliance to environmental standards? The World Bank conducted a study looking at the compliance rate. One of their key findings is that the water quality remained steady despite more than doubling of copper mining. Even more promising is that pollution from rehabilitated project sites into Kafue River watershed has been reduced by 70 percent.

Nevertheless the ECZ en MSD have difficulties checking on al the mining sites and reporting on felonies, due to a capacity lack and a shortage of funding⁴¹.

³⁹ Interview with the head of Research of MUZ, on the 11th October, 2013 and the Manager Director of the Citizens for a Better Environment (CBE) on the 9th of October 2013.

⁴⁰ Interview with the Director of Strategy & Business Development of KCM, on 18th of October 2013.

⁴¹ Interview with the Manager Director of CBE on the 9th of October 2013.

Concluding, I argue that environmental abuses still occur and the consequences for the mining companies are to be minor. However, mining companies gained insight that having a bad reputation does not do them any good. Efforts are made to improve the production process and limit environmental damage.⁴²

Conclusion.

Comparing actual development outcomes, with theoretical expected outcomes result in these concluding remarks. Economically, Zambia is still very dependent on world copper demand. The trade account will only be positive if the copper price stays up and the demand does not decline. This dependency makes the economy weak and vulnerable for volatile copper prices and demands. As long as Zambia stays a raw unprocessed copper producer and value addition takes place elsewhere, this will not change. Additionally, the potential tax revenue is a lot higher than current tax income. Multinational mining companies have gained a strong negotiation position and they know their way to avoid taxes. With regards to linkages, the trend is that foreign companies modernise the mines in order to cut labour costs. Before privatization started the ZCCM already started reducing the workforce in order cut costs and as a lender of last resort hoping the mines became profitable again. Privatization meant a further decline of the employment rate in the mining sector. Copper mines are modernized and the production process is automated. Also the labour standards are pressurized, by all means to keep labour costs at a minimum level. Trade Unions and the government are not able to concur this trend.

Although spillovers do occur, local companies are not able to compete with foreign owned high-skilled companies and Zambians perform low-skilled jobs. The government is also insufficiently allocating money in order to reverse the trend of a dominance of foreign investors inhibiting local companies. Again, value addition should take place in Zambia by Zambians in order to enhance development.

Side effects such as pollution still occur and the consequences for the mining companies are minor. However, also the companies gained insight that having a bad reputation with the local communities and government does not do them any good.

⁴² Interview with the Director of Strategy & Business Development of KCM, on 18th of October 2013

Efforts are made to improve the production process and limit environmental damage.⁴³

It remains to be questioned what the impact of FDI and trade liberalization is on development. It led to a substantial growth in the quantity of consumer goods imported, but are the imported, non-food consumer goods also contributing to the reduction of poverty and leading to overall development? Zambia's development is hampered by the dependency on global copper demand, the dominance of foreign investors inhibiting local companies and spillovers are minor. Additionally linkages are pressurized due to automation and the side effects of copper still results in pollution of the local environment affecting the living standards and health conditions.

⁴³ Interview with the Director of Strategy & Business Development of KCM, on 18th of October 2013

This thesis assessed the effects of FDI on Zambia's development. A country with vast amounts of copper reserves, but unable to benefit from the exploitation of their copper mines. The history of Zambia's copper industry can be divided in a few episodes: mines were developed under colonial rule, nationalised after decolonization and privatized in the late 1990s attracting foreign investors. Once Zambia belonged to the wealthiest nations of Africa, however, nationalizing the mining industry meant a backdrop in production figures and declining economy. So far, privatizing the mining industry did not result in development of Zambia. In this Master's thesis I therefore tried to find an answer to the question: *Why is FDI in the copper sector in Zambia not beneficial for national development and what is the role of the government?*

To answer the main question, sub-questions are formulated.

1: *Is FDI good for development and what can governments do to increase the benefits of FDI, with the focus on FDI in resources, and what obstacles will they meet?*

2: *How are the effects of FDI on development influenced by the conditions and circumstances in Zambia?*

3: *What are the effects of FDI in the copper sector on Zambia's development?*

Answering the first question created a theoretical groundwork for the formulated problem. Literature provided evidence for the ambiguous effects of FDI. First of all, FDI can be beneficial for economic development through various channels that result in spillover effects such as knowledge transfer and linkages such as increasing employment. However, the theoretical expectations for factors that enhance positive effects concern specific circumstances in which the developing country is situated. There are four intermediary variables determining FDI outcomes: the level of human development, the policy of foreign investors, the type of investment and lastly the local policy framework regulating FDI.

The second question looked into Zambia's conditions and circumstances and four intermediary variables that influence FDI effects on development. First of all, the effectiveness of mining regulation is undermined by the lacking regulatory capacities and relative power of foreign investors. Exact production figures are unknown and

copper export is estimated. Second, the type of investment in the copper sector is mainly focused on possessing and modernizing mining sites, ignoring other industries. Third, companies' policies generally aim to influence the policy process of the government in order to create an ideal investment climate. The influence of foreign investor on issues like taxation is unfavourable for development, since Zambia only minimally benefits from copper revenues. Last intermediary variable is the level of human capital. Zambia is relatively performing well with regards to secondary school enrolment. However this is not per definition enhancing spillovers.

The final sub-question analysed the FDI output in Zambia. The effects of FDI on development is assessed with the use of various channels: linkages, spillovers, the filling of resource, trade and tax gaps and the side effects of FDI. Zambia's conditions and circumstances resulted in less favourable outcomes for the mineworkers and fewer linkages and spillovers. Firstly, the filling of resource, trade and tax gaps depends on world copper price and demand. The trade account is positive only if the copper price stays up and the demand does not decline. This dependency makes the economy vulnerable for volatile copper prices and demands. Additionally, the potential tax revenue is a lot higher than current tax income. Multinational mining companies negotiated low tax levels and know how to avoid taxes. Secondly, linkages are pressurised because privatization meant a further decline of the employment rate in the mining sector, because of modernization and automation. Also the labour standards are undermined, by all means to keep labour costs at a minimum level. Trade unions and the government are not able to concur this trend. Thirdly, some spillovers do occur and local employees get educated. However, local companies are not able to compete with foreign owned high skilled companies and expatriates execute high skilled labour. The government is also insufficiently allocating money in order to reverse the trend of a dominance of foreign investors inhibiting local companies. Lastly, the side effects of mining such as pollution affect local communities and jeopardize access to clean drinking water. Nevertheless, the consequences for the mining companies are minor.

FDI not beneficial for development

While answering the sub-questions I analysed the role of four intermediary variables determining or influencing the effects of FDI on development and four clusters of channels through which FDI may have effects on development. The empirical basis to conclude which are the most important factors or intermediary variables that determine the impact of FDI on development is not (yet) sufficiently supported with empirical evidence. It is also difficult to determine through which channels FDI is more contributing to development than others. Nevertheless, empirical evidence did indicate that Zambia's development is hampered by, first, the dependency on global copper demand, second, the dominance of foreign investors inhibiting local companies and third the lacking of spillovers; mostly low-skilled jobs are executed by Zambians. Additionally linkages are pressurized due to automation and the side effects of copper still result in pollution of the local environment affecting the living standards and health conditions.

Personally I come to the conclusion that the practices and dominance of foreign investors and the role of the government in regulating FDI are key variables that influence the outcomes for development. Let aside other intermediary variables, the inability of the local government to regulate foreign investors and, in their turn, foreign investors using the opportunities to exploit Zambia's wealth are crucial circumstances undermining development. Therefore, in my opinion the main problem is that Zambia's copper wealth is being exploited by multinational companies and exported to China without any value addition taking place in Zambia by Zambians. Vast amounts of FDI flow into Zambia's copper sector, but profit is mostly repatriated. Consequently, Zambia's population is not benefitting from the mineral wealth and is left behind with few linkages and spillovers. I therefore argue that as long as the authorities are unable to step up against foreign investors and value addition takes place elsewhere, positive FDI effects on development will likely lag behind.

Recommendations: possible solutions that can change current situation

Zambia's natural resource dependence has been a curse rather than a blessing. The challenge now is to find the right model for the efficient exploitation of the copper reserves and an equitable distribution of the income generated from the exploitation.

Zambia's policy and institutional issues undermine development. So the question is: What is required for growth-supporting institutions and regulatory authorities to develop? A government whose primary concern is its own short-term survival is unlikely to develop institutions and regulations enhancing development. The ongoing culture of corruption and bribery is used by foreign investors to create beneficial circumstances and also opposes regulatory standards. The foreign investors at centre stage, pushing through their demands and pursuing low tax rates and fewer responsibilities, will have to be restrained. However the resources and power these foreign investors have in order to persuade Zambian authorities to favor their demands is a difficult obstacle and hard to change.

I see four possible solutions, distinguished between different actors and policies. First and foremost the international community is responsible for Zambia's performance and beneficiary effects of copper mining. International donors should deliver aid that supports Zambia's position with respect to international investors. First initiative in this direction is the Extractive Industries Transparency Initiative (EITI): a global coalition of governments, companies and civil society. EITI improves openness and accountable management of revenues from natural resources and already has a branch in Zambia ⁴⁴. There is also an important role for international trade union federations such as IndustriAll, which should empower local trade unions and deliver knowledge and support.

Second, the civil society including the religious organizations, face the task of mobilizing the population towards the culture of democracy and an accountable government. To achieve the benefits of resource wealth, there is a need for a bureaucracy of high quality, which is sufficiently independent of foreign investors. The political elite has to obey democratic rights and listen to the demands of all stakeholders in the copper sector.

Third, the local government should prioritize copper refinery and value addition should take place at the host instead of the home country. Enforcing export restraints, such as taxes and quota on unprocessed copper may be an option.

Finally, Zambia's authorities should not only focus on generating wealth from copper production, but should also promote the potentials of the agriculture sector. In order to be self-sufficient in for example the production of basic needs, Zambia should exploit its water reserves. Roughly 40 percent of total water reserves in Southern Africa

⁴⁴ Interview with the Manager Director of EITI, on the 3rd of October 2013.

are situated in Zambia. Current mismanagement however results in scarce access to water and low food production (Margat, 2001).

Reflection and further research

Looking back at this research project and the acquiring of sufficient and reliable data I came across some barriers which I tried to accommodate. I used many possible sources, but the main source of data has been interviews. A few other sources have been unreliable and supplied contradictory figures, which meant that I was forced to underexpose the analyses of economic data, such as the income balance and production figures. Future research could be aiming at the discovery of patterns in attitudes of foreign investors in developing countries. It would also be interesting to analyze the effects of FDI in various countries with similar economic circumstances and conditions. For example comparing foreign investments in the copper sector in Chile and Zambia. Another interesting angle would be the comparison between foreign investors policies and attitudes in developing countries. Are there any good and bad practices?

References

- Aitken, B. and Harrison, A. (1999) Do domestic firms benefit from direct foreign investment? Evidence from Venezuela. *The American Economic Review* 89(3), pp. 605-618.
- Aitken, B., Harrison, A. and Lipsey R. (1996) Wages and foreign ownership A comparative study of Mexico, Venezuela, and the United States. *Journal of international Economics* 40: pp. 345-371
- Alden, C. (2005) China in Africa. *Survival* 47, pp. 147-165
- Alden, C. and Vieira, M. (2012) *The new diplomacy of the South: South Africa, Brazil, India and trilateralism*. Taylor & Francis, Ltd.
- Asiedu, E. (2002) On the Determinants of Foreign Direct Investment to Developing Countries : Is Africa Different? *World Development* Vol. 30, No. 1, pp. 107-119
- Banga, R. (2009) *Drivers of outward foreign direct investment from Asian developing economies - Trade and Investment Linkages*. ESCAP: Bangkok
- Barro, R. and Lee, J. (1993) *Sources of economic growth*. Carnegie Rochester Conference
- Baylies, C. and Szeftel, M. (1992) The Fall and Rise of multiparty Politics in Zambia. *Review of African Political Economy*, vol. 19.
- Biersteker, T. (1978) *Distortion or Development : Content Perspectives on the Multinational Corporation*. MIT Press, Cambridge.
- Blomström, M. Lipsey, R. and Zejan, M. (1994) *What Explains Developing Country Growth?* NBER Working Paper No. 4132
- Blomström, M. and Persson, H. (1983) 'Foreign investment and spillover efficiency in an underdeveloped economy: Evidence from the Mexican manufacturing industry.' *World Development*. Volume 11, pp. 493-501
- Blomström, M. and Sjöholm, F. (1999) Technology transfer and spillovers: does local participation with multinationals matter? *European Economic Review*. Volume 43, Issues 4-6 pp. 915-923

- Boudier-Bensebaa, F. (2008) 'FDI-assisted development in the light of the investment development path paradigm: evidence from Central and Eastern European countries' *Transnational Corporations* UNCTAD. Volume 17. pp. 37-69.
- Borensztein, E. De Gregorio, J and Lee, J. (1997) How Does Foreign Direct Investment affect Economic Growth? *Journal of Internal Economics* vol. 45 pp. 115-135.
- Brautigam, D. (2011) *The Dragon's Gift*. Oxford University Press, USA
- Brewer, T. (1993) Government Policies, Market Imperfections, and Foreign Direct Investment. *Journal of International Business Studies*, Vol. 24, pp. 101-120
- Broadman, H. (2006) *Africa's Silk Road: China and India's New economic frontier*. IBRD/Worldbank, Washington, DC.
- Campbell, D. and Fiske, D. (1959) Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56: 81-105.
- Cassen, M. and Pearce, R. (1978) *Multinational enterprises in LDCs, in Surveys in Development Economics*. Blackwell Oxford pp. 90-132.
- Chang, H. (2002) *Kicking Away the Ladder: Development Strategy in Historical Perspective*. Anthem Press.
- Chang, K. Fine, B. and Weiss, L. (2012) *Developmental Politics in Transition: The Neoliberal Era and Beyond*. Palgrave Macmillan: New York
- De Mello, L. (1997) Foreign Direct Investment in Developing Countries and Growth: A Selective Survey. *Journal of Development Studies*, 34(1) : 1-34.
- Devarajan, S. Dollar, D. and Holmgren, T. (2001) *Aid and Reform in Africa. Lessons from Ten Case Studies*. The WorldBank, Washington DC.
- Denzin, N. (1978) *The Research Act*. McGraw-Hill, New York.
- Dunning, J. (1994) Re-evaluating the benefits of foreign direct investment. *Transnational corporations*. UNCTAD.

- Dunning, J. and Narula, R., J. (2010) Multinational enterprises, development and globalization: Some clarifications and a research Agenda. *Oxford Development Studies* 38 (3) pp. 263-287
- Fessehaie, J. (2011) *Development and Knowledge Intensification in Industries Upstream of Zambia's Copper Mining Sector*. MMCP Discussion paper No. 3. Cape Town.
- Ferguson, J. (1999) *Expectations of Modernity : Myths and Meanings of Urban life on the Zambian Copperbelt*. University of California Press, Berkeley.
- Fraser, A. and Lungu J. (2007) *For Whom the Windfalls. Winners and Losers in the privatisation of Zambia's copper mines*. CSTNZ/CCJDP. Lusaka Zambia.
- Fraser, A. and Larmer, M. (2010) *Zambia, Mining and Neoliberalism. Boom and Bust on the Globalized Copperbelt*. Palgrave MacMillan. New York.
- Geda, A. (2010) *The Impact of China and India on Africa: Trade, FDI and the African Manufacturing, Sector Issues and Challenges*, Addis Ababa University
- Gijssels, C. (2006) *Kritisch realisme en sociologisch onderzoek*. Academia Press, Gent.
- Görg, H. and Greenaway, D. (2001). *Foreign direct investment and intra-industry spillovers : a review of the literature*. Leverhulme Centre for Research on Globalisation and Economic Policy, No. 37
- Graham, D. and Woods, N. (2006) Making Corporate Self-Regulation Effective in Developing Countries. *World Development* vol. 34 pp. 868-883.
- Green, D. (2009) *A Copper-Bottomed Crisis? The Impact of the Global Economic Meltdown on Zambia*. Oxfam International
- Guj, P. (2012) *Mineral royalties and other mining- specific taxes*. International Mining for Development Centre.
- Haglund, D. (2008). Regulating FDI in weak African states : a case study of Chinese Copper mining in Zambia. *J. of Modern African Studies*, 46, 4 , pp. 547–575.

- Haglund, D. (2010). *From Boom to Bust: Diversity and Regulation in Zambia's Privatized copper Sector*. In; *Zambia Mining and Neoliberalism*, edited by Fraser, A. and Larmer, M. Palgrave MacMillan. New York.
- Hansen, H. and Rand, J. (2005) *On the causal links between FDI and Growth in developing countries*. Research paper, UNU-WIDER, United Nations University (UNU) no. 32
- Harrison, A. (1996) Determinants and effects of direct foreign investment in Cote d'Ivoire, Morocco and Venezuela. In *Industrial evolution in developing countries*, ed. Mark J. Roberts and James R. Tybout, 163-86. Oxford University Press, New York
- International Council of Mines and Metals (2013) *ICMM assesses mining's contribution to Zambia's national and local economy*. ICMM Toolkit Application in Zambia.
- Jensen, N. (2003) Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct. *International Organization*, Vol. 57, No. 3 pp. 587-616
- Kaplinsky, R. and Morris, M (2009) Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons. *European Journal of Development Research* Vol. 21, 4, 551–569
- Kaufmann, D. Kraay, A. Mastruzzi, M. (2012) *The Worldwide Governance Indicators (WGI) project*. The World Bank Group. <http://info.worldbank.org/governance/wgi/index.aspx#home>. Accessed on the 15th of February 2014.
- Korten, D. (2001) *When Corporations Rule the World*. Berrett-Kohler. San Fransisco.
- Konings, J. (2000) *The Effects of Direct Foreign Investment on Domestic Firms: Evidence from Firm Level Panel Data in Emerging Economies*. ICOS, Centre for Transition Economic, Economics Department Catholic University of Leuven.
- KPMG Africa (2013) *Consolidating Growth and Social Justice: Zambia 2013/14 Budget Speech*. <http://www.blog.kpmgafrica.com/consolidating-growth-and-social-justice-zambia-201314-budget-speech/>. Accessed on 3 March 2014.

- Larmer, (2010) *Zambia, Mining and Neo-Liberalism. Boom and Bust*. Edited by A. Fraser and M. Larmer. Palgrave Macmillan. New York.
- Lee, C.K. (2009) Raw encounters: Chinese managers, African workers and the politics of casualization in Africa's Chinese enclaves. *The China Quarterly* Vol. 199 pp. 647-666
- Lipsey, R. (2004) *Home- and Host-Country Effects of Foreign Direct Investment*. In: Volume Challenges to Globalization: Analyzing the Economics. Editors: Baldwin, R. and Winters, A. University of Chicago Press
- Lipsey, R. and Sjöholm, F. (2004) Foreign direct investment, education and wages in Indonesian manufacturing. *Journal of Development Economics* 73 415–422
- Lusaka Times 6th of May 2013. *Tax avoidance by multinational companies still rampant in Zambia-Action Aid*. Accessed on 11 March 2014. <http://www.lusakatimes.com/2013/05/06/tax-avoidance-by-multinational-companies-still-rampant-in-zambia-action-aid/>
- Margat, J. (2001) *Computation of long-term annual renewable water resources by country*. Food and Agriculture Organization (FAO) of the United Nations. Accessed on 27 March 2014. http://www.fao.org/nr/water/aquastat/data/wrs/readPdf.html?f=WRS_ZMB_en.pdf
- Markusen, J. and Venables, A. (1997) *Foreign Direct Investment as a Catalyst for Industrial Development*. National Bureau of Economic Research. Working paper 6241.
- Meyer, K. (2004) Perspectives on multinational enterprises in emerging economies. *Journal of International Business studies*, Palgrave Macmillan. 35,2 59-276
- Moran, T. (1985) Multinational Corporations and the developing country: an analytical overview. *Multinational Corporations*. pp. 33-24.
- Morrissey, O. (2010) Impact of China and India on SSA countries. *Trade Hot Topic Issues 80*. London: Commonwealth Secretariat.

- Morrissey, O. (2012) FDI in Sub-Saharan Africa: Few Linkages, Fewer Spillovers *European Journal of Development Research*. Vol. 24, pp. 26–31.
- Mytelka, L. and Barclay, L. (2003) 'Using Foreign Investment Strategically for Innovation'. Paper presented to the Conference on Understanding FDI-Assisted Economic Development, University of Oslo.
- Okamoto, Y. and Sjöholm, F. (1999) FDI AND THE DYNAMICS OF PRODUCTIVITY: MICROECONOMIC EVIDENCE. *The European Institute of Japanese Studies*. Working Paper No. 83
- Panckhurst, P (2014). *China's Exports Unexpectedly Drop Blow to Confidence*. <http://www.bloomberg.com/news/2014-03-08/china-feb-exports-unexpectedly-fall-18-1-imports-rise-10-1-.html>. Accessed on the 10th of March 2014.
- Reiter, S. and Steensma, H. (2010) Humand Development and Foreign Direct Investment in Developing Countries: The Influence of FDI Policy and Corruption. *World Development* Vol. 38, No, 12. pp. 1678-1691.
- Roberts, A. (1997) *A history of Zambia*. Heinemann, London.
- Robinson, M. (2013) Tax avoidance: Developing countries take on multinationals. *BBC news*. <http://www.bbc.com/news/business-22638153>. Accessed on 11 March 2014.
- Romer, P. (1993) Idea gaps and object gaps in economic development: Using ideas and producing ideas. In: *Proceedings of the World Bank annual conference on development economics, 1992*. 32 (3): 543-73.
- Sassa, O. and Carlsson, J. (2002) Aid and Poverty Reduction in Zambia : Mission Unaccomplished. The Nordic Africa Institute, Uppsala.
- Sixth National Development Plan 2011 – 2015 “SUSTAINED ECONOMIC GROWTH AND POVERTY REDUCTION”. January 2011. Government documents. siteresources.worldbank.org/.../SNDP_Final_Draft_20_01_2011.pdf. Accessed on 14 March 2014.

- Sjöholm, F. (1999) Technology gap, competition and spillovers from direct foreign investment: evidence from. *The Journal of Development Studies*. Vol. 36. pp. 53-73
- Sutton, J. and Langmead, G. (2013) *An enterprise map of Zambia*. International Growth Centre. London Publishing Partnership
- Todaro, M. (1989) *Economic development in the Third World*. Longman. New York
- Todaro, M. And Smith, S. (2012) *Economic Development*. Pearson Education. Boston.
- Wells, M. (2011) *China in Zambia: Trouble Down in the Mines*. Human Right Watch. Published in the Huffington Post: November 21, 2011.
- World Bank Implementation Completion and Results Report (22 October 2011) *Copperbelt Environment Project*. IDA-37410 IDA-3741A IDA-H0260.
- Zambian Economist, *The Return of Mining Development Agreements?* 17 January, 2011. <http://www.zambian-economist.com/2011/01/return-of-mining-development-agreements.html>. Accessed on 11 February 2014.
- Zambian Revenue Authority (2014) *Tax summary 2014*. <https://www.zra.org.zm/commonHomePage.htm?viewName=IncomeTax>. Accessed on 17 December 2013.
- Zambian Statistical Office (2014) *Import and Export figures 2013*. <http://www.zamstats.gov.zm>. Accessed on 13 February 2014.
- Zhana, J. and Mirzab, H. (2012) 'Some Observations on Scholarly Research on FDI Impact on Development' *European Journal of Development Research* vol. 24, pp. 38–40.

Data sources of tables, graphs, figures and cover page.

Bank of Zambia. *UNCTAD WID - Country Profile: ZAMBIA*. Published by UNCTAD, 2006.

The Economist Intelligence Unit (EIU). <http://www.eiu.com/home.aspx>. Accessed on 24 February 2014.

Fraser, A. and Lungu J. (2007) *For Whom the Windfalls. Winners and Losers in the privatisation of Zambia's copper mines*. CSTNZ/CCJDP. Lusaka Zambia.

International Council on Mining and Metals (ICMM) (2013) *ICMM assesses mining's contribution to Zambia's national and local economy: The macro-economic contributions of mining*.

Simpassa, A. Hailu, D. Levine S. and Tibana, R. (2013) *Capturing Mineral Revenues in Zambia: Past Trends and Future Prospects*. United Nations Development Programme (UNDP) and EU-UN Global Partnership on Land, Natural Resources and Conflict

Sinkler, A, (2001) *Retrodution, Congruence Analysis, and Causal Inference in Case Study Research*. WPSA conference San Antonio

United Nations Conference on trade and Development (UNCTAD) Database. <http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx>. Accessed on 14 March 2014.

World Development Indicators, World Bank. <http://data.worldbank.org/data-catalog/world-development-indicators>. Accessed in March 2014.

Zambian Development Agency (ZDA) (2012) *FDI inflow by sector in 2011*. Internal documentation. Accessed on 14 October 2013.

Photo on the cover page:

Action Aid:

<http://www.actionaid.org/nl/nederland/dit-doen-wij/belastingontwikking/meer-verdieping/glencore-zambia>. Accessed on 9th of May 2014.

Appendix 1

For background information and contact details I spoke to:

Alastair Fraser. A teacher at Cambridge University, Africa studies.

Where: Lusaka Backpackers, Lusaka.

When: 27-9-2013

Nkuruma Chama Kalaluka. Trade and investment officer at the Dutch Consulate.

Where: Dutch consulate, Lusaka

When: 30-9-2013

Reuben Mondoka. Former mineworker.

I stayed with the Mondoka family in Kalulushi Township on the Copperbelt for a week.

Mr. Mondoka told me a lot of stories about his work and about the changing mining sector. He worked since the early 1980's until 2003 in Chibuluma mine, first as a plant fitter and later as the chairman of the Chibuluma Mines branch.

List of respondents structured according to their affiliation:

Public sector

Respondent 1.

Fred Banda. Senior Mining Officer, Ministry of Mines

Where: Ministry of Mines, New government Complex, Lusaka.

When: 30-9-2013

How long: 1 hour

Respondent 2.

Noah Ndumingu. Senior Manager Business development. Zambia Development Agency (ZDA)

Where: ZDA headquarters, Lusaka,

When: 2-10-2013

How long: 1 hour

Respondent 3.

With: Joseph Nonde. Deputy Director Mining Audit, Zambian Revenue Authority (ZRA)

Where: ZRA office, Lusaka.

When: 4-10-13

How long: 1 hour.

Respondent 4.

Ezekiel Phiri. Senior economist, Research division, Zambian Revenue Authority (ZRA).

Where: ZRA office, Lusaka.

When: 4-10-13

How long: 1 hour.

Respondent 5.

Alfred Chileya. Senior officer Regulations and Safety Department, Ministry of Mines.
Where: Ministry of Mines and Safety Department office, Kitwe.

When: 11-10-13

How long: 1 hours

Respondent 6.

Joseph Makumba. CEO Misenge Environmental and Technical Services, former ZCCM.
Where: Former ZCCM investment building, Kitwe.

When: 10-10-13

How long: 1/2 hours

Respondent 7.

Brian Saka. Policy officer, China India and Japan department. Ministry of Foreign Affairs.
Where: Ministry of Foreign Affairs, Lusaka.

When: 16-10-13

How long: 2 hours

Respondent 8.

Mwansa James Musonda, Senior Trade Advisor. Common Market for Eastern and Southern Africa (COMESA)

Where: COMESA office, Lusaka.

When: 23-10-13

How long: 1 hour.

NGOs

Respondent 9.

Chilufya Chileshe. Representative of the Zambian Government Foundation.

Where: 09 Mansansa Close, Off Bwinjimfumu Road, Rhodespark, Lusaka.

When: 30-9-2013

How long: 1 hour

Respondent 10.

Siforiano Banda. Manager Director Extractive Industries Transparency Initiative (EITI), Zambia.

Where: EITI office, Lusaka

When: 3-10-13

How long: 1 hour

Respondent 11.

A dual interview with Bernard Banda and Joseph Simumba, Research Fellows of Zambian Institute for Policy Analysis and Research (ZIPAR)

Where: ZIPAR office, Lusaka.

When: 4-10-12

How long: 1 hour

Respondent 12.

With: Peter Mendeka. CEO Citizens for a Better Environment (CBE).

Where: CBE headquarters, Kitwe.

When: 9-10-13

How long: ½ hour.

Respondent 13.

Kathy Short. Programme Manager Friedrich Ebert Stiftung (FES).

Where: FES office, Lusaka

When: 23-10-13

How long: 1 hour

Unions

Respondent 14.

Jonas Mwenya. Director recruitment and training Mineworkers Union Zambia (MUZ).

Where: MUZ headquarters, Kitwe.

When: 10-10-13

How long: 1 hours

Respondent 15.

Charles Muchimba. Head research Mineworkers Union Zambia (MUZ).

Where: MUZ headquarters, Kitwe.

When: 11-10-13

How long: 1 hours

Private sector, foreign investors or representatives

Respondent 16.

With: Charles Mjumphi. Corporate Officer, Zambia Consolidated Copper Mines Limited (ZCCM-IH)

Where: ZCCM office, Pension house, Lusaka

When: 22-10-13

How long: ¾ hour Respondent 8.

Respondent 17.

Binod P. Menon. Executive Secretary of the Indian Business Council Zambia (IB CZ)

Where: IB CZ office, Lusaka.

When: 7-10-13

How long: 1 hour.

Respondent 18.

Mr. Chai Zhijing. Economic and Commercial Counsellor, Chinese business council, Zambia.

Where: Chinese embassy, Lusaka.

When: 16-10-13

How long: 1/2 hour.

Respondent 19.

Tanet Ngadwet. Public relation officer, Chamber of Mines.

Where: Chamber of Mines, Lusaka.

When: 17-10-13

How long. ½ hour.

Respondent 20.

With: Bradapan Gnanasivam, Director Strategy & Business Development, Konkola Copper Mines (KCM)

Where: KCM head quarters, Lusaka

When: 18-10-12

How long: 1 hour

Appendix 2

Interview model

This is a semi-structured interview model, an open method which allowed me to ask additional questions during the interview. Below a framework of questions and general themes is put up in an interview guide for each category of respondents.

- 1: Zambian authority
- 2: foreign investor
- 3: non-governmental organization

Introductory questions to each respondent:

- What is your description of your job?
- How would you describe the development of Zambia over the years and what are the determining factors?
- What is the role of the foreign investors in Zambia?
- How would you describe the development and current performance of the copper sector?
- What is the role of the government concerning policy and regulation in the copper sector?

Questionnaire specific for each type of respondent:

1: Zambian authorities

Theme 1: Policies

- What kind of regulatory FDI policy did the government formulate and how is this carried out?
- In what way is Zambia promoting FDI?
- How is the local law enforcement functioning?
- How are labour rights upheld?
- How is the taxation and royalty system performing?

Theme 2: Foreign investors

- How would you describe the relationship between Zambia's regulatory authorities and the foreign investor?
- What are the differences between the Indian and Chinese investors?

- How are licence applications for mining in the Copperbelt provided?
- Are foreign investors taxed enough?

Theme 3: Development

- Are foreign investors developing Zambia's economy?
- In what way is Zambia's government promoting development?
- Are foreign investors encouraged to add value in their production process?
- Is the hiring of local people encouraged?

2: Foreign investors

Theme 1: Zambia

- What is your opinion on the investment climate in Zambia?
- How would you define competition in the copper sector?
- What are the differences between the foreign investors in Zambia (e.g. Indian vs Chinese)?

Theme 2: Government and policies

- What is your relation with the regulatory authorities?
- What is your opinion on the regulatory framework?
- Is their regulation policy implemented at your company? If so what do you think about that?

Theme 3: Development

- What does your company contribute to Zambia's development?
- How many local employees do you hire? What is the ratio local-expatriate?
- In what way do you involve local businesses in the production chain?
- Is there some kind of transfer of knowledge to the local businesses?
- What is your opinion on the level of taxation?
- How much tax is paid by your company?

3: Non-governmental organizations: trade unions, development organizations and environmentalists:

Theme 1: The organisation

- What kind of work does your organisation do?
- What does your work mean for the companies in mining sector?

Theme 2: Government

- What is your relation to the government?
- What is the role of the government in facilitating and regulating foreign mining companies.
- How would you describe the regulatory performance of the government?
- How would you describe the government to foreign investor relation?
- Are local communities benefiting from foreign mining companies, in comparison to the mine owners in the past?
- Is the government controlling the production figures in order to be able to tax the right amounts?

Theme 3: Foreign investors

- What is the function of foreign companies in the Zambian society. Did they improve or worsen the working environment?
- In what way are labour rights upheld?
- Are local people hired, what is the ratio local-expatriate?
- Is knowledge transferred or are skilled expatriates hired?
- Are the environmental issues concerning mining pollution addressed?
- How much tax is paid and should there be paid?
- What are the differences between the Indian and Chinese investors in Zambia?

Field study Zambia: some pictures

Charles Muchimba. Head research Mineworkers Union Zambia (MUZ).

Where: MUZ headquarters, Kitwe.

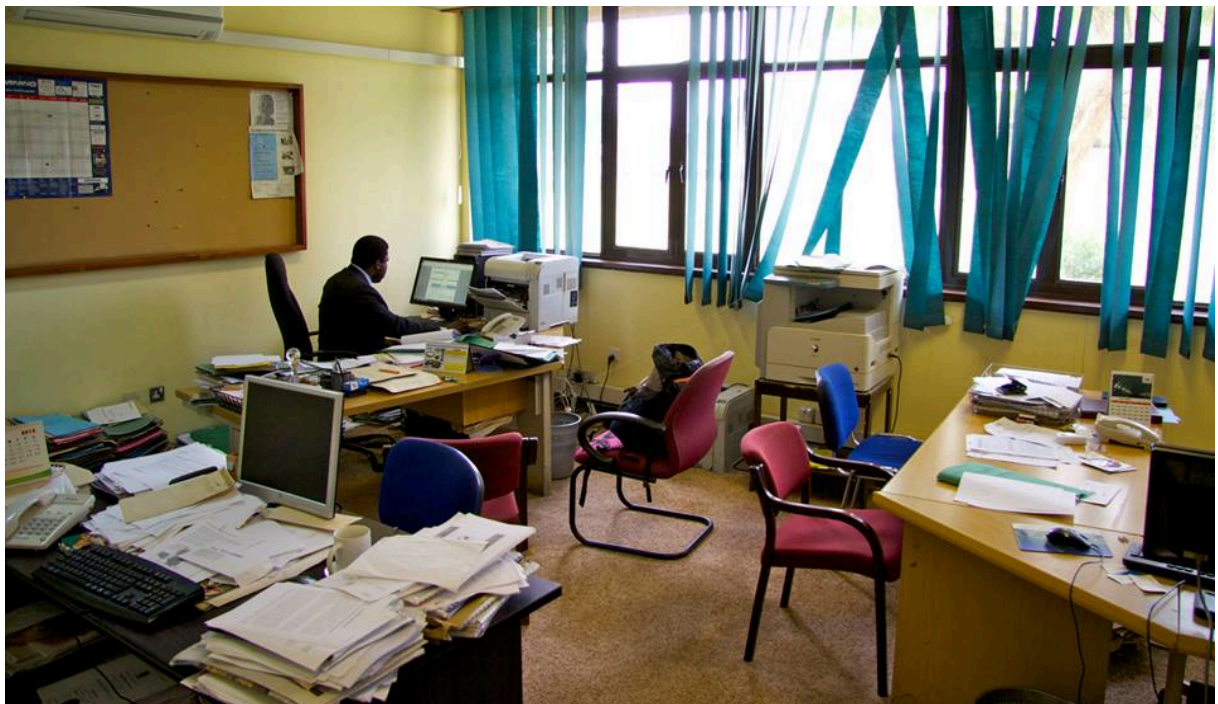
When: 11-10-13



Noah Ndumingu. Senior Manager Business development. Zambia Development Agency (ZDA)

Where: ZDA headquarters, Lusaka,

When: 2-10-2013



Mwansa James Musonda, Senior Trade Advisor. Common Market for Eastern and Southern Africa (COMESA)
Where: COMESA office, Lusaka.
When: 23-10-13



With: Bradapan Gnanasivam, Director Strategy & Business Development, Konkola Copper Mines (KCM)
Where: KCM head quarters, Lusaka
When: 18-10-12

