



**Copenhagen
Business School**
HANDELSHØJSKOLEN

ZAMBIA COUNTRY BACKGROUND REPORT

Successful African Firms and Institutional Change (SAFIC) Project

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October 2014

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List of Acronyms

AAC	Anglo American Corporation
AGOA	The African Growth and Opportunity Act
AfDB	The African Development Bank
CBS	Copenhagen Business School
CEE	Citizens Economic Empowerment Committee
CIA	Central Intelligence Agency
COMESA	Common Market for Eastern and Southern Africa
CU	Customs Union
Das	Development Agreements
DRC	Democratic Republic of Congo
EAC	East African Community
FDI	Foreign Direct Investment
FRA	Food Reserve Agency
GDP	Gross Domestic Product
GRZ	Government of Zambia
HDI	Human Development Index
IFC	International Finance Commission
IGC	International Growth Center
ILO	International Labour Organisation
IMF	International Monetary Fund
LDC	Less Developed Country
MMD	Mass Movement for Democracy
MoFNP	Ministry of Finance and National Planning
NORAD	Norwegian Agency for Development
OEM	Original Equipment Manufacturer
PF	Patriotic Front
RST	Roan Selection Trust
RUC	Roskilde University
SADC	Southern African Development Community
SAFIC	Successful African Firms and Institutional Change
SBR	State-Business-Relations
SMEs	Small and Medium-Size Enterprises
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organisation
UNIP	United National Independence Party
UNZA	University of Zambia
USD	US Dollars
ZBF	Zambian Business Forum
ZDA	Zambian Development Agency
ZACCI	Zambian Association of Chambers, Commerce and Industry
ZAM	Zambian Association of Manufacturers
ZNFU	Zambia National Farmers Union
ZDPA	Zambia Dairy Processors Association
ZCCM	Zambia Consolidated Copper Mines
WTO	World Trade Organization

Introduction to the SAFIC project

Few would deny that the business environment plays an important role in the success or failure of firms everywhere. Social, political, and economic institutions are crucial determinants of business environment and to a firm's ability to set and implement strategies. Factors such as political stability, the health of the macro-economy, the state of the infrastructure, and the availability of needed skills affect firms' cost structures and ultimately their profits. African business environments are rapidly changing. From being viewed as the 'hopeless Continent' at the turn of the 21st century, Africa is now seen as a place of many opportunities (Economist, 2000 and 2010).

The Successful African Firms and Institutional Change (SAFIC) project was born out of the recognition that although African business environments remain to some extent challenging, it is clear that they are changing rapidly. The research project aims to investigate how and why African firms are able to be successful in such changing business and institutional environments. In this project, we are conducting primary research in three African countries: Kenya, Tanzania, and Zambia. Researchers have since 2012 been studying two sub-sectors in each country. One – food processing – is common to the three countries; the second has been selected by country teams due to its importance for each country's political economy. This paper provides background data and general information for the Zambia studies focusing on local food processing sub-sector; and the local suppliers to the mines.

The paper draws on secondary sources of information, including the findings of international and local studies of the two – food processing; and mining supply - in Zambia, published statistics, and various unpublished sources and primary sources arising from the two research phases of firm mapping and surveying we have undertaken¹. Four sections follow this Introduction. Section A gives a general background including a socio-economic profile of the country, brief descriptions of the country's political history and economic structure, an overview of the international context and business climate, and discussions of the motivation for the study and the methodology used in mapping firms for study. Section B describes the food processing sector, while Section C describes the mining sector, which is the second sector chosen by the Zambia Team. Section D raises some considerations for further investigation, including both the study's policy relevance and methodological issues.

We would like to most sincerely thank the various firms in the food processing sub-sector and suppliers to the mines who have opened their doors to our research team; and enabled us collect invaluable data, which makes our project a success. Furthermore, we thank and acknowledge the contributions from a number of student and research assistants -Janni Raundahl, former master student at Copenhagen Business School (CBS) & student assistant at the Centre for Business and Development Studies, CBS; Douglas Phiri, research assistant at SAFIC Zambia at University of Zambia (UNZA), Simon Manda, research assistant at SAFIC Zambia, Chileshe Chewe, research assistant at SAFIC Zambia and Wisdom Kaleng'a, PhD student affiliated to the SAFIC Zambia team.

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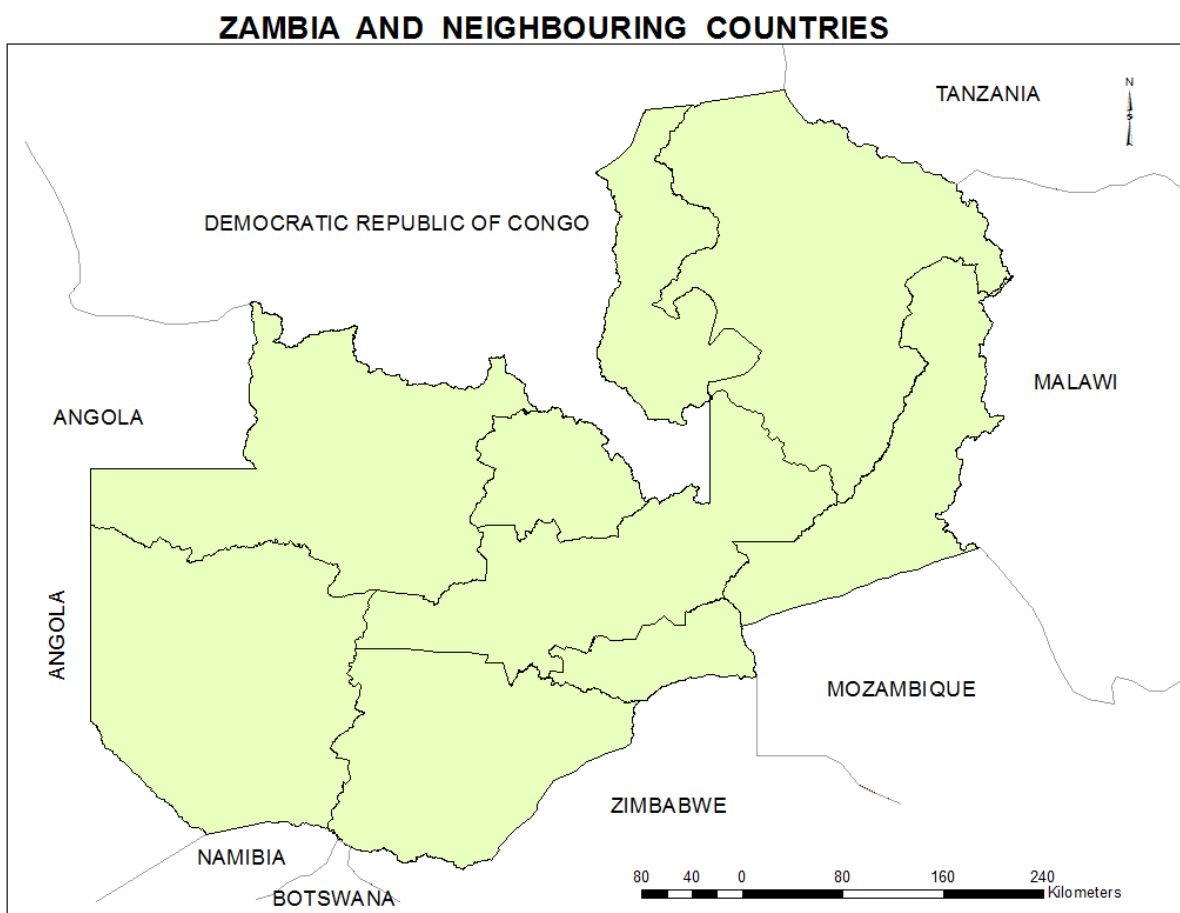
¹ A third phase which involves in-depth interviews with fewer firms selected from those surveyed has since commenced.

Section A: Background

Socio-Economic Profile of Zambia

Located in Southern Africa, Zambia is sparsely populated with just over 14 million inhabitants spread over 752,612 km². English is the official language, together with the native languages Nyanja, Bemba, Tonga, Lozi, Luvale, Lunda and Kaonde. Besides these, over 70 dialects are spoken across the country (SADC, 2013). Zambia is bordering eight countries namely Angola to the west, Democratic Republic of the Congo to the north, Tanzania to the north-east, Malawi to the east and Mozambique, Zimbabwe, Botswana and Namibia to the south (see map 1 below).

Map 1. Zambia with its neighbouring countries



Source: The Authors, 2014

Consequently, the country has no coastline and due to poor roads and a close to non-existing rail-system, transport into the country is expensive, adding costs to both production and trade.

While Zambia has experienced impressive growth over the last years, the growth has unfortunately not been translated to neither job creation nor poverty reduction (World Bank, 2014a). Formal employment grew with 26 percent between 2005 and 2008, but it still represents only 8.5 percent of total labour force (MoFNP, 2011). Nearly 65 percent are employed in the informal sector and the

unemployment rate is 15 percent. Close to 60 percent are living below the national poverty line (World Bank, 2014a). The differences between urban and rural areas are clear where in the cities about 28 percent are living below the national poverty line, the equivalent number for rural areas is very close to 78 percent (World Bank, 2014a). According to UNDP, Zambia's Human Development Index (HDI) has risen slightly in the past years but is still hovering around 0.4 -0.45 which is in the bottom of the scale. As with many other African nations, Zambia's population is young with 46 percent being under 15 years old (MoFNP, 2011) and the average (median) age being 16, 7 years (CIA, 2014). Life expectancy is low due to among other things AIDS and at presently stands at 51.83 year (CIA, 2014).

For a country like Zambia with a large proportion of young people, "basic skills are important for building human capital. These skills include numeracy, literacy, and behavioral skills that allow young people to interact successfully and perform on the job" (World Bank, 2013c: 23). The core challenge, however, is having higher primary school enrolment rates whilst the progression rates are lower. Given the mismatch between population growth and education infrastructure development, among other factors, provision of secondary and tertiary education has continued to lag behind (MoF, 2012). The challenge is even more pronounced among girls, most of whom have no primary schooling or do not stay longer in school due to family considerations such as early marriage or teenage pregnancy. Consequently, limited education, skills and capabilities characterize most young people entering the labor market at any given time (World Bank, 2013c). Of particular interest to our project are the technical skills and training as they impact the capabilities of for instance, the local supplier firms in the mining sector. It is observed that Zambia's Technical Education, Vocational and Entrepreneurship Training Policy of 1996 turned the blind eye to the skills relevant to the copper sub-sector. As a result, an imbalance exists between the skills the mining sector increasingly demands with increasing FDI, and government's skills development strategies such as those in the FNDP and SNDP (World Bank, 2014d: 150).

The urbanization rate is increasing with an estimate of about 4% per year from 2010-20 (CIA, 2014). The growth has enabled a growing middle class to emerge especially in urban areas, referred to as a 'driver of growth in the consumer industry'. This emerging middle class has the potential to affect the local manufacturing sector in Zambia if it chooses to buy products produced domestically. Simultaneously, there has been a marked change in the urban landscape through the growth of retail outlets for food, clothes etc., that is targeting the domestic market. In addition, other consumer goods are experiencing growing demand too such as light electronics (Abrahams, 2010, p. 133; Hantuba, 2003, p. 11-12; Dinh, 2013, p. 21 and Deloitte & Touche, 2013).

Political History

'In Zambia, agriculture has provided, directly and indirectly, the bulk of employment whereas mining, directly and indirectly, has generated a major part of the country's income and wealth' (McPherson, 2004: 301).

At independence in 1964, Zambia inherited a private sector driven economy dominated by the foreign-owned mining sector contributing almost 50 percent of GDP and even more of government revenues. In line with other newly independent African countries, the Government of the Republic of Zambia (GRZ) transferred ownership to the hands of the state through a series of 'Zambianisation'

reforms in the late 1960s.

The mining sector dominance and the 'Zambianisation' reforms still affect the structure and organisation of the Zambian productive sector. The mining sector has shaped the Zambian economy due to the importance of copper in earning FOREX, tax revenues and employment but also directly due to neglect or lack of interest in other sectors, and indirectly due to for instance appreciation of the local currency during periods of commodity boom or lack of funds in times of bust (Shafer, 1994). Both mining and agriculture figure prominently in all of Zambia's national plans (the first one was launched in 1966 and the most recent one - the sixth - was published in 2012) as well as in the manifestos for the ruling parties the country has had thus far (UNIP, MMD and PF). These sectors are on the one hand praised for their contribution to exports and employment, respectively. On the other hand, alternating governments have all acknowledged the need for reform in order to make these sectors engines of economic growth (and transformation) rather than a burden (McPherson, 2004; Shafer, 1994). Since the publication of the First National Development Plan (1966-1970), therefore, all national development plans (no matter their name and origin) have stressed the need to restructure the economy by giving priority to for instance agriculture and manufacturing and thereby, lessen the dependence on copper. Notwithstanding these declarations, no significant restructuring has taken place. Zambia is still overwhelmingly dependent on copper.

The 'Zambianisation' reforms also impacted on the structure of the productive sector. First, they left only a few sectors of the economy for the private sector to thrive. Hence, when privatisation took off in the 1990s the Zambian-owned private sector was characterized by lack of capital and lack of management experience. Likewise, it left the success of the private sector in the hands of the political incentives emerging from the state (cf. (Bates & Collier, 1995)). Thus, it came as no surprise that Zambian-owned businesses failed to benefit from the large-scale divestment program of the past two decades (Kragelund, 2012). Despite numerous reforms by the GRZ to ease the day-to-day activities of private businesses, Handley (2008) argues that these businesses' historical entanglement with the political elite has given rise to a tendency among Zambian businessmen to seek opportunities through personal ties with those close to political power.

Zambian state-business relations (SBR) are dynamic, reflecting the major structural and political changes in society, but the reality of SBRs does not always fits the official wording. Thus, although SBRs in the 1990s in Zambia were cast in partnership terms based on self-regulation, consultative meetings, and mutual accountability (cf. (Haglund, 2010)), what happened was a further marginalization of the business sector by the state through ignoring or co-opting it (Taylor, 2007, 2012a). Moreover, SBRs are highly complex involving numerous Zambian private and public entities as well as several donor agencies seeking to transform the Zambian economy via support to either private or public entities or both. Most significantly, donor targeting of the Zambian private sector began in 2002. With the establishment of the Zambia Business Forum (ZBF), an umbrella organization seeking to bring the State and Business together, donors have been highly influential in changing the SBR in Zambia. Likewise, donors have influenced the decision to employ private sector desk officers in all key ministries (NORAD, 2002; Taylor, 2007). Although these institutions have not managed to radically change the Zambian SBR to for instance resemble the capable state and highly efficient business associations of say Mauritius (cf. (Bräutigam, Rakner, & Taylor, 2002)) or the developmental states of East Asia, the ad hoc adjustments have nevertheless led to economic

growth. This is so because the GRZ has not systematically disfavored particular companies even though it has provided privileges to others. This has led to some level of competition - especially among start-ups (Taylor, 2012b).

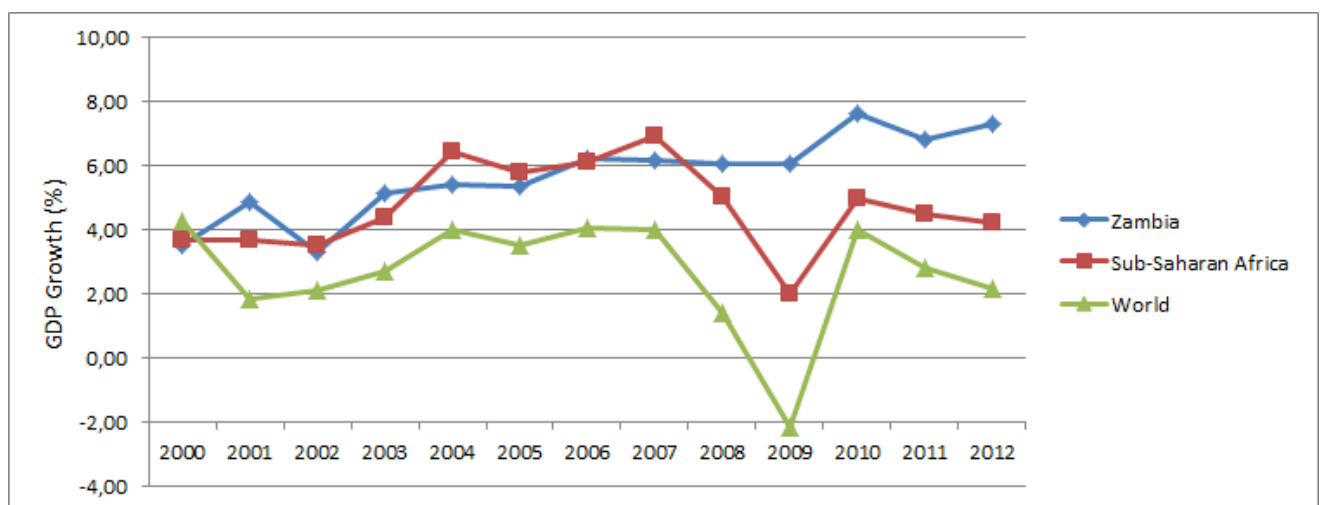
Most recently in 2006, the GRZ passed the Citizen Economic Empowerment (CEE) Act that is defined as '*an integrated broad based and multifaceted strategy aimed at substantially increasing the meaningful participation of targeted citizens [persons who are historically marginalized or disadvantaged with no access to economic resources or opportunities] and companies in the economy and decreasing income inequalities*' (GRZ, 2006). This type of affirmative action on the one hand reincarnates the 'Zambianisation' policies of the late 1960s but on the other hand, and maybe more importantly, reflects the on-going marginalization of the local private sector, the pander to foreign investors by the GRZ, and the real need for affirmative action - despite the fact that Zambia is not a former settler colony (Kragelund, 2012; Taylor, 2012a). However, the CEE Act also allows for close SBRs.

It is important to note that although some firms have failed to adapt to the changing environment, both in terms of market and institutions, others have managed to cope with these adverse conditions. The local private sector in Zambia has thus be categorized into the following three groups: the subsistence entrepreneurs, setting up a business to 'supplement family income', the pioneering entrepreneurs that are 'perceived to have identified a gap in the market', and the growth oriented 'true entrepreneurs' that have identified a 'true gap in the market' (Phillips & Bhatia-Panthaki, 2007). Most enterprises are part of the informal sectors, and the entrepreneurs in the country are mostly ethnic minority Zambians with Asian origin (Dinh, 2013). Only few companies fall into this last category, but they are the focus of this Zambia sub-study.

Economic Structure of Zambia

In the past decade, Zambia has achieved stable and high growth rates of 6 percent or more (World Bank, 2014a). This is due to booming commodity prices combined with an increasingly stable macroeconomic climate with lower inflation.

Table 1: GDP Growth of Zambia

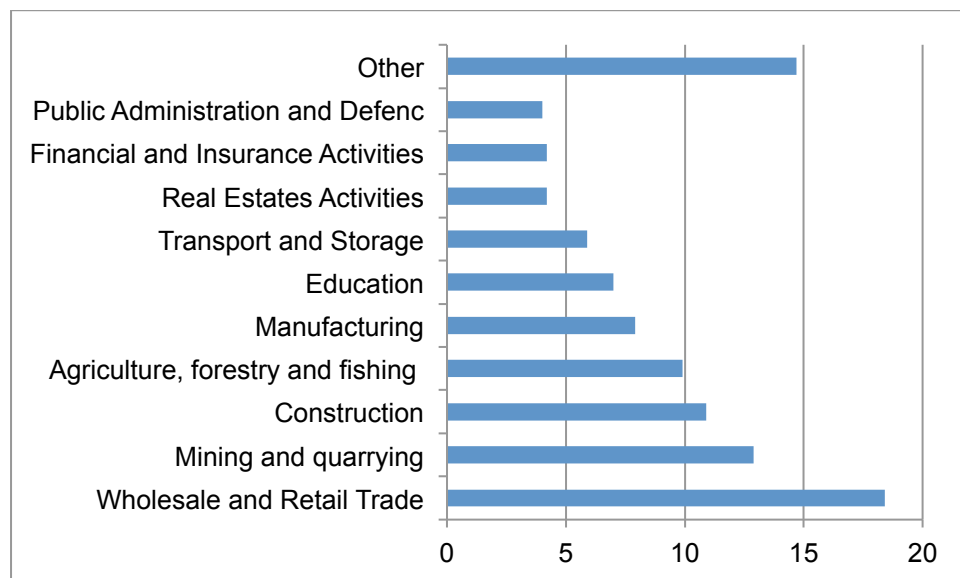


Source: The World Bank, 2014c

Zambia is a factor-driven economy highly dependent on its extractive industry with copper being the leading mineral. The growth in GDP can consequently be ascribed to the increase in world copper price (World Economic Forum, 2013). But the vast majority of Zambians are involved in the agricultural sector as it employs 67 percent of the labor force.

Diversification efforts by the government and development organizations have been discussed since independence, but are only slowly progressing; the economy is still to a large extent reliant on the copper industry with 70 percent of total export earnings coming from this sector. In 2010, the Zambian economy was structured as in figure 1 below with agriculture and mining contributing 22.8 per cent of GDP and manufacturing and construction contributing 18.8 per cent of GDP. The rest was made up of trade, services and public works (CSO, 2010). The World Bank (2012) does however state in a recent report that the growth is getting increasingly broad-based with noticeable growth also in agriculture, manufacture and services. The mining sector contracted in 2010 and 2011, but the overall GDP continued to grow due to other sectors' expansion. Most notably, the sectors focused on the domestic market and the growing middle class grew with an average of around 11 percent. Construction, telecommunication and retailing, but also manufacturing overall, have increased. In the past couple of years, FDI has increased drastically, with the majority going into mining. Between 2003 and 2010, FDI in Zambia grew with over 1000 percent (World Bank, 2014a).

Figure 1: Percentage share by industry to overall GDP in 2010



Source: CSO (2010)

Business Climate

Zambia's competitiveness ratings have gone down lately. World Bank's (2013b) 'Doing Business in Zambia' report places the country as number 90, four places down since last rating. What pulls Zambia down is bureaucracy in relation to registering property and provision of electricity. Still, in comparison to the region, Zambia is seen to be a step ahead in terms of registering a business and

getting access to credit (World Bank, 2013b). Furthermore, the World Economic Forum's report on global competitiveness puts Zambia in top 10 of the most competitive economies in Africa. Although, factors like the access to finance, corruption and poor infrastructure are identified as the most problematic for businesses in Zambia (World Economic Forum, 2013). Furthermore, the country is stable and has had peaceful elections.

International Context

Zambia has been involved in regional groupings for the past two decades. As one of the founding members, Zambia hosted the conference for what would become the Common Market for Eastern and Southern Africa (COMESA) in 1981. Since then the organization has grown and today comprises 19 member states with a total population of over 389 million and an annual import and export bill of US\$32 billion and US\$82 billion respectively (About COMESA, <http://about.comesa.int/>, 2013). The COMESA Free Trade Area (FTA) and Custom Union (CU) were launched in 2000 and 2009 respectively. The launch of the COMESA CU means that member states that join the union have to adopt the agreed Common External Tariff (CET) - of zero percent on capital goods, zero percent on raw materials, 10 percent on intermediate goods and 25 percent on finished goods- to be charged to third parties. For Zambia, the launch of the CU posed a problematic situation as the country is involved in another trade bloc, the Southern Africa Development Community (SADC). SADC has mainly been preoccupied in trade and economic integration just like COMESA the members have discussed the possibility to create a CU.

Zambia is also involved in global trade agreements such as the World Trade Organization (WTO) which the country joined in 1995 when the organization was established. Moreover, EU and Zambia have signed an Economic Partnership Agreement which means that Zambia gets full access to the European market. The African Growth and Opportunity Act (AGOA) also provides duty- and quota free access to the US market, however exports from Zambia under AGOA have been modest. In 2013, exports under AGOA came to a total of (only) US\$ 37 million compared to US\$ 63 million in 2012 (U.S. Dept. of Commerce, Bureau of Census, 2013).

Motivation of the Study

What is puzzling is the fact that despite the attention to economic development in Zambia, little is known about how the local firms have been and/or are doing. This study is therefore designed to try to fill this gap and unravel new knowledge to help understand how the businesses manage to weave through these conditions and remain not only operational, but in some cases also successful.

The two sub-sectors chosen for investigation – local food processing and the local suppliers to the mines – are both part of key economic sectors (agriculture/agriprocessing and mining) but they are also diverse in terms of size and linkages. The food processing industry has been characterized by large monopolies in meat production, maize, sugar and milk, but is now undergoing change as the business environment has been opened up making new small and foreign companies enter the industry. Still, the former monopolies continue to have a major presence in some sub-sectors (meat, sugar). In mining, the privatization of the former state-owned mines has transferred ownership to foreign companies. This has entailed that the centrally ZCCM-governed supply chain has been split into numerous different supply chains all governed by different principles and providing different possibilities and challenges for local firms supplying to the mines. Simultaneously, the global mining

equipment industry has experienced both a tremendous growth and a tendency towards concentration lately (Farooki, 2012; Fessehaie. 2012b). The combination of major reshuffling of the supply chain and large-scale changes in the global mining equipment industry has put Zambian suppliers to the mines under pressure. They now have to deal with numerous quality standards while simultaneously being faced by stiff competition by global OEMs located in Zambia.

Though Zambia has been and continues to be part of numerous international reports e.g. by the World Bank, the UNDP, UNIDO, ILO, AfDB the vast majority of these reports seem to circulate rather general and macro-oriented information on the private sector in Zambia. Few, or rather very few studies are found with a focus on individual businesses, though lately the ‘Enterprise Map of Zambia’ (IGC, 2013) has been a welcome exception.

In Zambia, numerous overlapping and somewhat conflicting definitions of enterprise size exist. The Small Enterprise Development Act of 1996, for instance, distinguishes between micro-enterprises that employ up to 10 persons (and are engaged in manufacture or service provisions and with investments worth no more than 50 million kwacha (USD 40,000)²) and small enterprises that employ up to 30 people (GRZ, 1996). In contrast, Zambia Development Agency (ZDA), which was enacted in Parliament in 2006, uses the following definition: Micro-enterprises (less than 10 employees), small enterprises (10-50 employees), medium-sized enterprises (51-100 employees), and large enterprises (more than 100 employees) (GRZ, 2008, p. 14)

In this study, we as mentioned focus on local or Zambian owned firms, employing at least 5 employees and having been in operation for five years or more. So, small and young Zambian firms as well as foreign firms in general are excluded.

Mapping Exercise & Survey – Methodology

Due to the limited available information on the two sectors, we carried out an extensive mapping exercise from August 2012 to July 2013. The mapping exercise in the food processing industry was conducted across the country, but with a focus on Lusaka, Eastern, Copperbelt, and Southern Provinces resulting into the identification of a total of 96 firms. Similarly, the mapping exercise for the suppliers to the mines focused on Lusaka, Central, Copperbelt and North-Western Provinces. A total of 69 firms were identified.

In food processing a number of sub-sectors have been selected in agreement with the partners in the SAFIC study in order to allow for comparative analyses. On this basis, the subsectors grain milling, edible oils, dairy, juices, sauces and jams and fish processing have been selected. Concerning the suppliers to the mines, in principle any local supplier has been viewed to be of interest, however, the main interest has been addressed to the engineering, construction and manufacturing oriented firms.

For both of these sectors, we first approached official sources for information on companies. These sources included amongst others lists of registered companies from the Patents and Companies Registration Agency (PACRA), lists of proposed investments from the Zambia Development Agency

² Converted using <http://www.oanda.com/currency/historical-rates/> for July 1 1996.

(ZDA), member lists from key stakeholders such as Zambia Association of Manufactures (ZAM), The Zambia Chamber of Commerce and Industries (including local charters in the above mentioned provinces) (ZACCI), Zambia National Farmers Union (ZANU), Zambia Chamber of Small and Medium Business Association (ZCSMBA), the Mines' Suppliers & Contractors Association, the Engineering Institution of Zambia, Organic Producers and Processors Association of Zambia, Chamber of Mines of Zambia, key ministries and major newspapers. The aim was to build as comprehensive a database as possible of companies that potentially could fulfil the criteria of the study.

The second step in the mapping exercise aimed to single out companies in the two sectors that fulfilled the criteria of the study. Therefore companies were contacted/visited in order to establish firm ownership, firm turnover, years of operation and size of workforce as this information was needed in order to assess whether the firm would qualify to be part of the survey or not. In some cases, also the nature of inputs, products, main markets of the products as well as the sources of the inputs were inquired about.

The result of this mapping exercise was as stated above a list of 96 companies in the food processing sector. Of these 24 turned out to have more than 50% foreign ownership and 26 were either too young or too small (or both). The gross list of food processing companies thus consisted of 46 companies. As regards the suppliers to mines the original list contained 69 companies. Of these 8 were majority foreign owned and seven were either too small or too young or both (see Table 2 below).

Table 2. Overview of number of firms identified during the mapping and survey phases

Category Sector	Mapping	Too young and/or too small	Foreign	Total (Zambian owned)	Declined	Interviewed
Food processing	96	26	24	46	8	38
Suppliers to the Mines	69	7	8	54	10	44

Source: The Authors, 2014

Based on two consolidated lists from all these sources the Zambian team then went on to do a survey of both sectors. The surveys have included employment of a questionnaire, which has been administered by SAFIC team members and research assistants. The surveys have taken place from July 2013-May 2014. In total, 38 companies in the food processing sector were surveyed as 8 firms declined to participate. Similarly, 44 suppliers to the mines were surveyed as 10 firms declined to participate (see Table 2 above). The findings from the surveys are reported in separate documents (see the SAFIC website at: <http://www.cbs.dk/en/research/cbs-research-projects/major-research-projects/successful-african-firms-and-institutional-change-safic>).

Section B: Description of Agribusiness Sector

The development in the Zambian agricultural sector is closely linked to other political and economic developments in the country. Agriculture (and processing of agricultural products) was for a long time perceived as a way to feed the masses in the urban areas (Abrahams, 2010). In order to

facilitate this process, the agricultural policy in the years preceding multiparty Presidential elections in 1991 comprised comprehensive controls over pricing, marketing and financing. Meanwhile, it encouraged the concentration of resources on the production and sale of maize (Copestake, 1998). Widespread liberalization and privatization changed this picture. Even though maize is still the most important food crop, many farmers now grow cash crops such as cotton, tobacco, and sugar (World Bank, 2009). Zambia has a resource endowment for the production and development of a wide range of crops, livestock and fish given the diversity of its agro-ecological zones. The country is divided into three major agro-ecological regions, namely Regions I, II and III. Rainfall as well as the quality of soils differs across these regions (GRZ, 2004).

Agriculture and agro-processing are extremely important in the Zambian economy (contributing with 40 percent of GDP, 12 percent of exports earnings, and 67 percent of employment). Hence, GRZ places agribusiness high on its agenda to diversify the economy and bring about economic and social development and to develop a competitive, export-led manufacturing sector (MoFNP, 2011). The rationale is that Zambia has comparative advantage in the sub-region given the availability of arable land and favorable climate and that backward and forward linkages created can contribute towards sustainable job creation as well as economic diversification. The major processed foods include sugar, wheat flour, stock feeds and maize flour.

The Agro-processing Value Chains

Due to the different nature in raw material as well as final product, the value chains for processed food differ in terms of the number of actors involved, degree of vertical integration and benefits for the farmers, among other things.

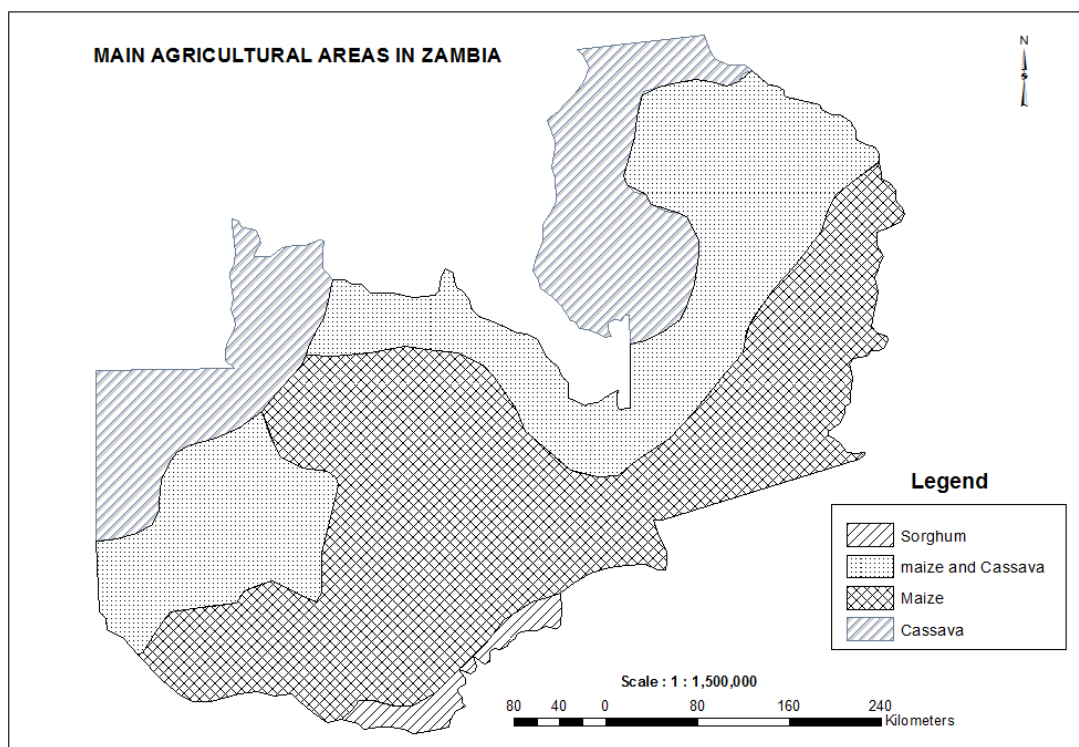
As have been mentioned, maize is the most popular crop in Zambia due to cultural and political reasons. Its value chain is rather fragmented with very little vertical integration. To a large extent the actors, who consist of farmers, millers, traders, independent retailers, supermarkets and consumers, have a market-based relation (World Bank, 2007). The multitude of millers, milling maize and cassava, makes the competition strong domestically (Haggblade & Nyembe, 2008). However, the governmental Food Reserve Agency (FRA) strongly affects the market as it is both a buyer and a seller of maize (World Bank, 2007). The maize market is highly regulated through this agency who has an interest in both keeping the price low for its consumers, as in its mission to feed the masses, as well as to provide a good salary for the maize farmers. Farmers and grain millers have started exploring possibilities to export their crop and/or millet maize to neighboring countries such as the DRC and Zimbabwe, however, the GRZ has made that illegal in order to secure food for the Zambian population (World Bank, 2007).

According to a recent World Bank (2009) study, cotton, tobacco and sugar are also important crops when linking farmers to market and could therefore work as drivers for inclusive growth and a further strengthening of the manufacturing sector. These three value chains provide different opportunities for value addition within the country as well as benefits for the individual farmer. The production of sugar and cotton is for instance dominated by one or a few companies; the Zambia Sugar Company has an almost monopoly in refining raw sugar and the American-owned NWK Agri-Services (formerly Dunavant) and Cargill are the major cotton companies in Zambia (Kabwe,

Grabowski, Haggblade & Tembo, 2014)³. The lead firms in these chains support the farmers with extension services, provision of seeds and a relatively secure outlet (Kabwe et al., 2014; World Bank, 2009).

However, more recently and considering the diversity of the Zambia’s agro-ecological zones, several other crops are being grown and have the potential to contribute towards the expansion of the agro-processing sector. Groundnuts are the most widely cultivated crop after maize and come in fourth in terms of volume produced (Ross & de Klerk, 2012). However, the vast majority of the farmers growing the nuts do it for their own consumption which makes it difficult for private initiatives to start processing on a wider scale. This is furthermore stressed with the absence of a functioning and organized marketing system. Farmers are hence to a large extent de-linked from the market. Though, a handful of companies are reaching out to small-scale farmers and use contract-farming as a way to secure raw material for the production of oils, peanut butter, snacks etc. (Raundahl & Spaeth, 2014; Ross & de Klerk, 2012). Other crops of interest for processing include cashew nuts, rice, cassava, and millet (Zambia, 2004. See Map 2 below for an indication of the presence of key crops in the provinces of Zambia).

Map 2. Areas of main agricultural crops in Zambia.



Source: Schultz, 1976.

³ In fact, earlier studies only identified eight ginning companies operating in Zambia in the 2005/2006 season of which only Continental (Sinda, Eastern Province) and Mukuba (Ndola, Copperbelt) are locally owned. However, the cotton value chain also includes Zambian spinner-weavers, seed oil and seek cake manufacturers, and garment manufacturers.

Agro-processing firms in Zambia

The mapping exercise identified close to 100 firms, of which about half qualified to be part of the study, while the other half did not (see Table 2 above). About a quarter of the firms were either too small (less than five employees) and/or too young (less than five years of operation) and another quarter were foreign owned companies. Among the identified firms grain milling made up for about half, edible oil also a considerable number, while the number of dairies, producers of sauces, snacks & jams was smaller. While grain milling dominated and edible oil producers also were numerous, the mapping showed that food-processing operations are diverse focusing on several agricultural products. Further, the markets for these products are generally local as well as the sources of inputs. It is also significant to observe that some of the firms have been in operation for over 20 years implying that they have existed under a series of changes in terms of institutional and macroeconomic environments. This is an indicator of the resilience by these firms and therefore interesting to investigate how and why they have managed to survive and stay in business.

Institutions & Policy framework

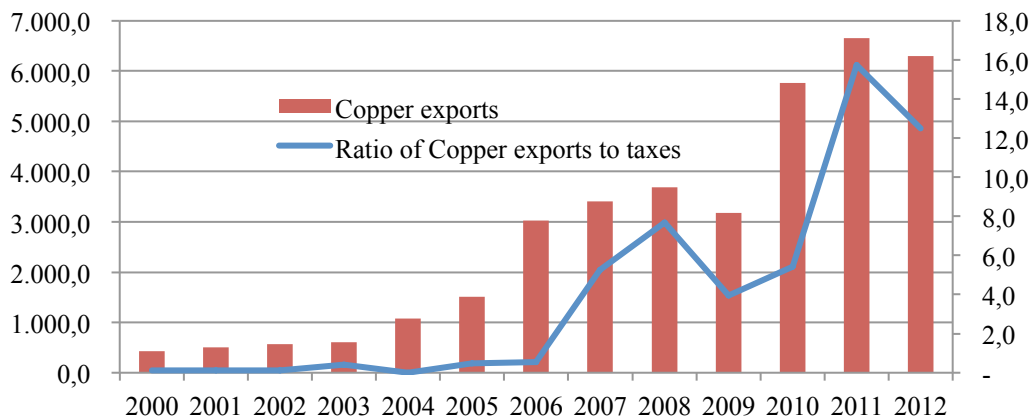
The Government of the Republic of Zambia is the main stakeholder having the overarching policy mandate for the food-processing industry. There are two key ministries which are crucially important in the success of this sector - Ministry of Commerce, Trade and Industry (MCTI) responsible for the manufacturing Sector; and the Ministry of Agriculture and Livestock responsible for the provision of raw materials to the manufacturing sector. Other institutions such as Zambia Development Agency (ZDA) which falls under MCTI, Zambia Association of Manufacturers (ZAM), Zambia Chamber of Commerce and Industry (ZACCI), Zambia National Farmers Union (ZNFU) are all critical institutions for companies involved in food-processing. In addition, there are associations that deal with specific agricultural products namely; Millers Association of Zambia, Poultry Association of Zambia and Zambian Dairy Processors Association (ZDPA). Though our survey showed that early 80% of the interviewed firms were members of a Business Association or a Private Sector Organization, and e.g. close to 80% felt that government provided insufficient support schemes, it is yet to be determined to what extent these institutions are effective in promoting the growth of the food-processing sector in Zambia.

It is noticeable that a number of donor organizations also are involved in the sector and in various ways seek to promote and strengthen it.

Section C: Description of Copper Sector

Zambia is the largest copper producer in Africa and the 6th largest in the world and depending on the exact year of counting copper production makes up between 70 and 78 per cent of Zambia's foreign exchange earnings and 70 per cent of the total exports, including other copper mining-related taxes as shown in figure 2 (Ahmad & Walker, 2005; Bova, 2012; Fessehaie, 2012b; Mobbs, 2012).

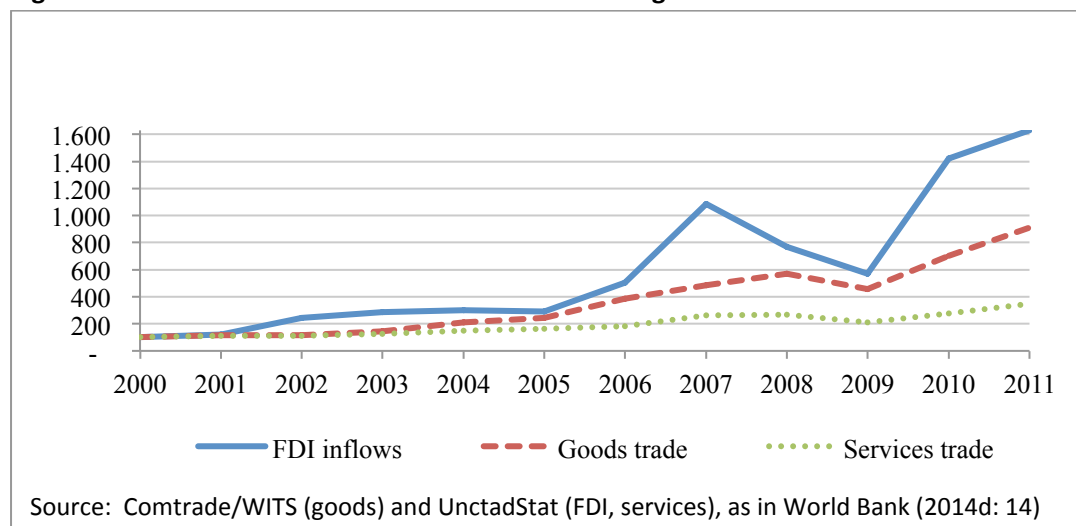
Figure 2. Zambia's Copper Export and Mining Taxes, 2000-2012



Source: World Bank (2014d:4)

Despite Zambia recording an increase in overall and specifically copper mining-related foreign direct investments (FDIs) (see figure 3 below) and the subsequent rise in exports since the year 2000 following the conclusion of the privatization of the mining sector, it has to be noted that the current production level still falls below that in the 1970s when the Zambianization reforms were in effect. According to the World Bank (2013d), Zambia's copper production in 1970 was comparable to that of Chile – 684, 000 tons and 686, 000 tons respectively. In 2012, the story had completely changed with Zambia producing 675,000 versus 5, 370, 000 for Chile.

Figure 3. Growth in value of FDI inflows and trade in goods and services: 2000 - 2011



Source: Comtrade/WITS (goods) and UnctadStat (FDI, services), as in World Bank (2014d: 14)

Recently, copper prices have been growing rapidly - not least because of the growing demand from China and India (Farooki & Kaplinsky, 2012) and they reached almost USD 9000 / metric ton just before the global financial crisis in 2008 during which prices lost two-thirds of their value in six months leading to some companies in the mining sector closing down while others had to lay off staff. Since then, copper prices have picked up once again and have since passed the pre-financial crisis level.

The current commodity boom affects not only Zambia's foreign exchange earnings, exports and employment - though only few formal jobs are created in the sector due to its extremely high capital intensiveness - but also the other export sectors (cf. (Shafer, 1994)). This is so because the commodity boom has affected the value of the country's currency – Kwacha - rising from approximately. 5000 kwacha per USD in late 2004 to 3000 kwacha per USD in mid- 2008 (depreciating fast after the onset of the financial crisis to 5500 per USD in late 2008) (Bova, 2012: Figure 7). This makes exports from Zambia relatively more expensive and thus impacts negatively on the potential for structural transformation.

Industrial copper mining is by no means a new phenomenon in Zambia. It began in the Western half of Northern Rhodesia (Zambia) in the late 1920s⁴, but large-scale production did not really take off until the post Second World War boom of the 1940s. At independence in 1964 the Zambian mining sector was owned and controlled by two American companies, namely: Roan Selection Trust (RST) and Anglo American Corporation (AAC). These owned all big mines in the country. They both had a share in Mufulira mine, RST owned and operated Chambishi and Luanshya/Baluba mines and Ndola copper refinery, whereas AAC owned Rhokana, Nchanga, Bankcroft and Broken Hill Development Company (Fraser, 2010; Kaunda, 2002).

A combination of domestic struggle over the 'right' ethnical and spatial distribution of the mineral wealth that began at the UNIP Conference in 1967 (Larmer, 2010) and Zambia's first President's, Kenneth Kaunda's, dissatisfaction with the level of investment in the mines from the two owners led to the Mulungushi and Matero reforms of 1968 and 1969, respectively, which nationalized major parts of the economy including the mines (normally referred to as the 'Zambianisation' process). Hence, the Matero reform gave the Zambian state 51 per cent ownership over the mines while the original owners - now renamed Roan Copper Mines (RCM) and Nchanga Consolidated Copper Mines (NCCM), respectively, kept management and marketing contracts until 1974 (Fraser, 2010; Kaunda, 1968). RCM and NCCM were later merged into Zambia Consolidated Copper Mines (ZCCM).

The story of the Zambian copper sub-sector is also the story of boom and bust in the Zambian economy: Six years after independence, in 1970, copper production reached 683,300 metric tons and mining and quarrying (of which copper is by far the most important) contributed 36 per cent of GDP. 30 years later, at the turn of the millennium, copper production was reduced to 259,800 metric tons and it only contributed four per cent of GDP (McPherson, 2004: Table 10-2). This did not come about as a result of a deliberate strategy of diversification and structural transformation. Rather, *'the contribution of mining declined because its real output fell faster than non-mining output declined'* (McPherson, 2004: 300). This decline began soon after independence when the oil crisis hit industrialized countries hard and thus affected demand directly. Simultaneously, world copper production grew rapidly due to discoveries of new ores, development of new technologies to make existing ores more profitable, tripling of the number of main producers, putting a downward pressure on prices and technological innovation such as fiber-optic cables (substituting aluminium

⁴ Artisanal mining in the area has a much longer history, but only became of commercial interest when the 'Cape to Cairo' rail reached Ndola in what is now known as the Copperbelt Region in Zambia and thereby made possible commercial exploitation of the concessions that were in the hands of the British South Africa Company.

⁵ Growing from approx. 3,000 metric tonnes in 1928 when large-scale mining in what is now known as Zambia took off.

for copper) led to demand for other commodities than copper.

The bust was reinforced by declining production in Zambia due to underinvestment (no new mines were opened in Zambia after 1979), rising production costs (existing ores were deeper underground, Rhodesia closed its borders with Zambia in 1973 making exports more expensive, and the civil war in Angola cut off another export route), and mismanagement of the mines. The Asian financial crisis in 1997 gave copper prices yet another blow. Thus, when privatization was set in motion at the end of the 1990s copper prices were at their lowest. Moreover, many deposits were depleted, some mines were closed down, capital equipment was run down (investment equaled less than a quarter of the 1970s), and hardly any resources had been devoted to exploration of new ores (Adam & Simpasa, 2010; Craig, 2001; Fraser, 2010; Larmer, 2010; McPherson, 2004; Shafer, 1994). The result was that at the turn of the Century *'Zambia's so-called "crown-jewels" were ultimately worth little more than cut glass'* (McPherson, 2004: 330).

This was then the situation when Zambia, pressed by the international donor community – particularly the World Bank and the IMF, embarked upon its privatization program. The Privatization Act was passed in 1992, but the privatization of Zambia Consolidated Copper Mines (ZCCM) did not begin until 1996 whereupon interested companies handed in bids in the beginning of 1997. The main document guiding the process was the Mines and Minerals Act of 1995 which allowed the government to enter into so-called 'Development Agreements' (DAs) with the new buyers. These DAs were designed by two international consultancy companies and turned out to be extremely lucrative for the new mine-owners (cf. (Fraser & Lungu, 2007; Lungu, 2008)).

The end result of the privatization process was that ZCCM was split up into seven mining companies with majority ownership from – in descending order - India, South Africa, China, Canada, and United States⁶. The Zambian state retained minority ownership in most mines through ZCCM Investment Holdings (ZCCM-IH). Critical for the SAFIC Project, the privatization also entailed major changes for the suppliers. While ZCCM had one central database of suppliers containing some 400 companies most of which had long-term collaborations with the public mining establishment, all the new private mine-owners created their own supplier database. These databases soon ended up being massive for the following reasons: First, the large-scale retrenchment - as a part of the privatization process - meant that many former miners created their own one-man businesses. All of these one-man businesses were eager to enter the database. Secondly, the DAs allowed mining companies to import equipment and supplies from abroad⁷. In other words, they brought their home supplier base with them to Zambia. The result was that *'privatisation saw the demise of [local] manufacturing activities and the emergence of a vast array of [local] service providers'* (Fessehaie, 2012a: 168).

The financial crisis of 2008-9 also impacted greatly on Zambia's copper sector and hence on the suppliers (particularly the local ones) to the sector. First, the crisis forced mining houses to reorganize supply chains to cut costs which meant that many one-man businesses were forced out. Secondly, many suppliers sought to diversify their markets targeting agriculture, the industrial sector construction and transport (Fessehaie, 2012a). In addition to this, the global mining equipment was reorganized resulting in mergers of companies from the Global North and emergence of new large-

⁶ Some of these companies have since changed ownership. All of them, however, are still majority foreign owned.

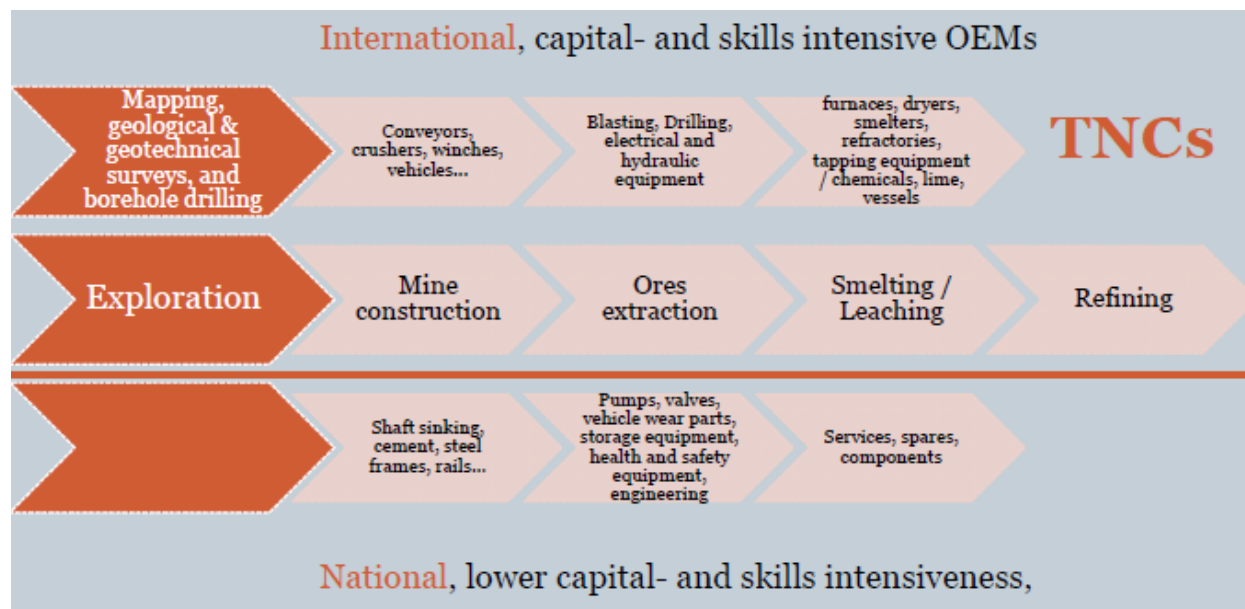
⁷ It should be noted though that the DAs did stipulate that the mines' should make use of local sub-suppliers (also).

scale mining equipment firms from emerging economies (Farooki, 2012). In sum, less space was available for local suppliers to the mines to operate.

The copper value chain in Zambia

Production of copper (and cobalt - the by-product of copper) includes several independent processes - some of which are located in Zambia (or other copper-rich countries) (see figure 4) and others which are predominantly conducted in consuming countries ((see figure 5). These processes include: exploration, mine construction, ores extraction, refining, processing, production of final goods, and scrap recycling. Each of these processes makes use of a variety of sub-suppliers - most of which are extremely capital- and skills-intensive and require economies of scale to be profitable⁸. All processes are done by multinational companies (the top part of figure 4, below). But especially in the 'extraction and production' phase they also include local suppliers characterized by low value addition, and low capital- and skills intensity (the bottom part of figure 4 below).

Figure 4. The copper value chain in Zambia



Source: The Authors, 2014.

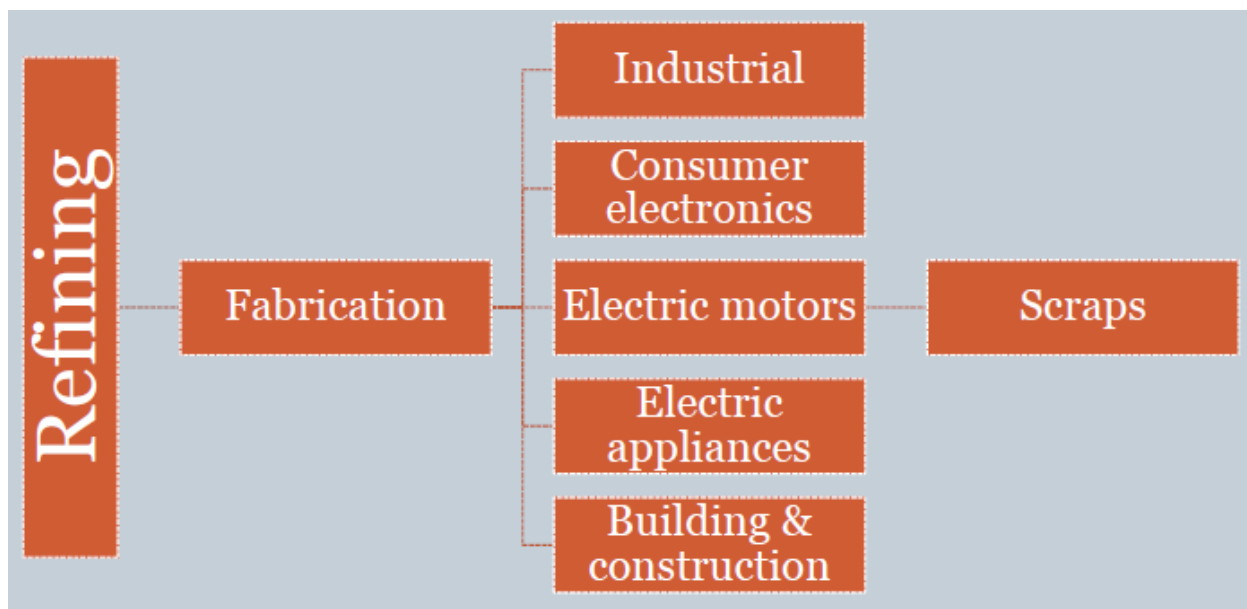
The very first phase, the exploration phase is dominated by relatively small highly specialized companies supported by geochemical, geophysical and logistics service providers⁹. If successful, this is followed by the construction of the mine phase, which is supported by international construction

⁸ According to Shafer (1994), Zambian mining investment made up 40 per cent of gross domestic investment in 1973 and the mining sector has not been less capital-intensive since then (Ferguson, 2006). Add to this long lead times which entails that investors have to be able to deal with huge sunk costs for a long time in order to make profits. With a malfunctioning financial sector local private investors are excluded from the onset.

⁹ According to Mobbs (2010), they include the joint venture of African Eagle (UK) and CGA Mining (Australia), the joint venture of African Eagle and Copperbelt Minerals (UK), the joint venture of African Eagle and Phelps Dodge Mining Ltd (USA), and AIM Resources Ltd. (Australia), First Quantum Minerals (Canada), Goliath Resources Inc. (Canada), and ICS Copper Systems Ltd. (Canada).

and design companies - often in close collaboration with the main company. It also includes local companies supplying shaft sinking cement, steel frames, rails and the like¹⁰. Hereafter follows the mining proper phase that also includes the extraction, crushing, milling, concentration and refining. Basically, two different ways exist in which to produce copper namely smelting (approx. 70 per cent of the Zambian copper) that leads to anode plates, and leaching - solvent extraction (henceforth leaching – approx. 30% of Zambian copper) that leads directly to the process of refining it via copper electrolysis. In general, these processes are vertically integrated and suppliers provide all kinds of services, spares, components to the process, but whereas suppliers provide furnaces, dryers, smelters, refractories, and tapping equipment to the smelters, suppliers to the leaching process include the supplies of chemicals, lime, vessels and handling equipment. The copper cathodes - the product of the smelting or the leaching process is exported (Ahmad & Walker, 2005; Fessehaie, 2012a).

Figure 5. The copper value chain outside Zambia



Source: Authors, 2014.

Although all the mining companies have quite extensive supplier databases (Kanshani's database includes roughly 100 companies; Lumwana and Luansha's databases include roughly 1000 companies each; Mopani's includes more than 1400 companies; and Konkola has some 4-5000 suppliers in its database)¹¹ hardly any of these companies are in reality supplying to the mines on a regular basis - and most are in fact one-man trading businesses, which are not even registered with the main regulatory bodies in Zambia and which to a large extent work outside the Zambian tax regime (cf. (Fessehaie, 2012a)). Thus, although some mining companies claim that up to 70 per cent of their procurement *'is directed towards "local" suppliers, the majority of these firms are branch*

¹⁰ Personal communication, John M. Kasanga, Director, Lusaka, 130812.

¹¹ Personal communication, Steven Muzipo, Vice President, Kitwe, 170812.

offices or agents and distributors of international equipment suppliers' (Ahmad & Walker, 2005: 11). Moreover, as is apparent from the brief description of the copper value chain above, the value chain is dominated by foreign companies in all phases of production. These transnational corporations to a large extent make use of original equipment manufacturers (OEM) that stock essential supplies for the mining companies. Some of these companies, like Lafarge, Dunlop and Sandvik, have been in Zambia for a very long time and are perceived to be Zambian despite the fact that they are indeed subsidiaries of foreign big companies. This situation makes it extremely difficult for local suppliers to get a foothold in the market. Finally, most suppliers in Zambia - local as well as foreign - do not produce but only import. According to the General Manager of the Chamber of Mines in Zambia, Frederick Bantubonse: *'the reality [now] is that even the most basic supplies to the mines such as boots and overalls are imported'*¹². This is echoed by a recent IFC study of the situation among suppliers to the mines. According to this study, *'the local manufacturing base along the Copperbelt is weak and capacity for expansion is low'* (Ahmad & Walker, 2005: 9).

Therefore, it comes as no surprise that all the major suppliers to the mines are international companies. The Ministry of Mines and Minerals reckons that some 60 international companies, represented by local distributors, are currently supplying the essentials to the mines. However, local companies also exist. According to the same source some 40 local companies supply materials and services to the mines. The majority of these however, are working closely with international companies. As described in the methods section above, the actual number is a bit higher and new suppliers are being established especially in the so-called 'New Copperbelt' – the North-Western Province where most of the new mining companies operate.

This research focuses in particular on the suppliers to the ores extraction, the refining and the processing of copper. Local suppliers deal in all kinds of supply to this stage of the copper production process including supplies of pumps and valves, vehicle wear parts, storage equipment, health and safety equipment, and civil/construction services. Of particular interest are foundries of which seven existed in 2005, metal fabrication firms and engineering companies (Ahmad & Walker, 2005).

The Zambian suppliers to the copper sector

A large sub-group of the suppliers to the mines are made up of one-man companies. The bulk of these companies are therefore traders and not into value-addition activities. They are widely termed 'briefcase traders' to point to the fact that they have nothing but a briefcase. Whenever a mine is in need of a specific spare part, the 'briefcase trader' goes to South Africa (or elsewhere), purchases it and brings it back by bus or other means to Zambia. The low overhead and transportation costs make these traders competitive.

However, other companies also exist. The survey in the Copperbelt region of Zambia has so far interviewed 44 Zambian-owned companies. While all of them supply to the mines in the region they differ in terms of sector, number of employees, turnover etc. More than half of the companies were engineering companies specializing in civil engineering and construction. Roughly one-fifth were manufacturing companies (foundry and metal fabrication), almost 15 % were service providers (ICT and other services). The rest were trading and logistic businesses. They include small, medium and

¹² Personal communication, Frederick Bantubonse, General Manager, Lusaka, 2008/2012.

large-scale enterprise (number of employees range from 12-800) and yearly turnover (2012) goes from Kwacha 200,000 to 300 million Kwacha.

Institutions & Policy framework for the Mining Sector

Neither the mines nor the suppliers to mines work in a vacuum. As described above, the SBR in Zambia is constantly changing - being influenced by the International Financial Institutions, the bilateral donors and the tectonic shift in global power (cf. (Taylor, 2012a)). Nonetheless, a number of formal institutions have been in existence for a very long time and chart the course for future developments in the sector. They include amongst others the Ministry of Mines and Minerals, Ministry of Commerce, Trade and Industry, the Chamber of Mines, and Kitwe District Chamber of Commerce.

The Ministry of Mines and Minerals is the most important government authority in relation to the mining sector. Its aim is to promote the growth of the mineral and mining sector in Zambia. It, amongst others, oversees the Mines and Mineral Act¹³ and is also responsible for making sure that the mines honor the 'local business development program' which sets out to develop linkages in the Zambian economy. This, however, is sometimes difficult as local capacity and expertise is not available¹⁴. A number of institutions are directly under the Ministry of Mines and Minerals. The most important of those for this project is the Mines Development Department, which is responsible for the prospecting, the issuing (and retention) of mining licenses, and the monitoring of the mining operations.

The Chamber of Mines is also of importance. It is the association of the mining employers. Of the total of 23 members, all but one company, Tranta, are foreign owned. Of these 23 companies eight are mining companies while the remaining 15 are suppliers. Kitwe District Chamber of Commerce is also important. It has some 60-70 members supplying to the mines in the Copperbelt region. Due to the specific regulations of the Chamber (turnover of more than Kwacha 200 million/year and fixed board) most one-man companies are excluded from membership¹⁵. Finally, Zambia Association of Manufacturers (ZAM) represents a few large companies supplying the mines.

Section D: Considerations for Further Investigation

Policy relevance

Given the importance of the two sectors to the economy and the possibilities for economic development and capacitation of the local businesses, further knowledge on food processing and suppliers to the Mines is crucial. A situation with limited or hardly any information on the local (Zambian) firms and the sectors and how local firms operate and manage also impact on the possibilities of formulating sufficiently qualified policies and support schemes in order to assist the sectors in growing, creating jobs and contributing further to the economy.

Our study to date has first and foremost revealed how limited the consolidated data on the specific

¹³ The Mine and Minerals Act of 1995 was the official beginning of the privatisation of the mines. The overall aim of the act was therefore to attract capital and technology to kick-start the process.

¹⁴ Personal communication (Wisdom Kaleng'a), Gideon Ndalama, Director, Lusaka, 171212

¹⁵ Personal communication, Steven Muzipo, Vice President, Kitwe, 170812.

firms in two industries presently is. As earlier mentioned, until the publication of the 'Enterprise Map of Zambia' only fragmented knowledge was present on the agro-processing industry based on information from a very few large firms. While the Enterprise Map of Zambia expanded our knowledge on a broad range of firms in Zambia including agro-processing it included 50 of the supposed biggest firms only. So, a better data foundation is wished for in order to improve the policy environment and policy documents to come.

Likewise, information on the suppliers to the mines has until recently been close to non-existent. Work by Judith Fessehaie (see in particular Fessehaie, 2012a, Fessehaie, 2012b, & Fessehaie, 2013) has, however, provided a good understanding of the link between the mines and its suppliers. While Fessehaie's work thus further our understanding of the processes at work it does not distinguish between Zambian- and non-Zambian owned suppliers. This study thus adds to Fessehaie's work while paying particular attention to how the companies deal with the changing institutional environment.

Methodological issues

Mapping and surveys are the first two steps in increasing our knowledge of the two important sectors in Zambia. In order to dig deeper into the history, development and performance of the firms as well as their relationship to the state and relevant institutions further qualitative, further studies are needed. The SAFIC Zambia project will conduct further analyses on the quantitative data, including comparative analyses on the food processing industry in Zambia, Kenya and Tanzania.

Concluding remarks

Both the selected industries represent a number of specific challenges in terms of market conditions and institutional settings to the local Zambian firms. The local firms in the two industries seem to be struggling with a number of internal challenges too, e.g. in terms of size and financial strengths, expressed by their limited number and a majority of the firms identified to date being very small. The SAFIC Zambia team will select a number of the more/most successful firms in the two sectors as well as a number of less successful firms and follow them over the next three years in order to shed more light on these matters through interviews. In addition, also representatives from formal institutions will be interviewed and the findings will be presented to a variety of stakeholders.

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