



LUNDS
UNIVERSITET

**Lund University Master of Science in
International Development and Management
June, 2013**

Who is to blame? The *players* or the *rules of the game*?

**Performance constraints among local value-adding firms supplying to mining
MNCs in Zambia's liberalized economy**

Author: Wisdom C. Kaleng'a

Supervisor: Turaj Faran

Abstract

Why the performance of local value-adding firms supplying to mining MNCs in Zambia's liberalized economy seems more constrained was the investigated problem. I conducted a multiple case study research involving 15 firms located on Copperbelt Province. Local value-adding firms are cardinal to national industrial development through their backward linkage role to mines. However, their performance is more constrained partly because of their weak internal capabilities. The real constraint for their situation lies in the "rules of the game" of supplying to mining MNCs which are externally engineered and applied by mining companies. Mining MNCs have absolute power to determine who supplies, what is supplied, what price and extent to which supplies are made whilst government acts like a spectator unlike a referee. Government's inactivity emanates from institutional changes birthed by the 1991 economic liberalization. Addressing the firms' situation neither lies in "doing business as usual" where mining MNCs remain more powerful nor in government fully regulating the relationship between local suppliers and mining companies. What could work is a holistic "change of the rules of the game" through government's actively engaging stakeholders and appropriately incentivizing each category to subsequently strengthen the procurement and supplying relationship between mines and local suppliers.

Table of Contents

<i>Abstract</i>	1
<i>List of Figures & Tables</i>	4
<i>Acknowledgements</i>	5
<i>List of Acronyms/Abbreviations</i>	6
1 INTRODUCTION	7
1.1 Research problem, purpose and question	7
1.2 Research significance and concepts	8
1.3 Thesis Outline	10
2 BACKGROUND: MINING AND LIBERALIZATION IN ZAMBIA	10
3 LITERATURE REVIEW	12
3.1 Liberalization as ingredient for firms' improved performance	12
3.2 Firms' internal factors - liberalized external environment nexus	13
4 METHODOLOGY	17
4.1 Research Approach.....	17
4.2 Research Design	18
4.3 Methods	19
4.4 Generalization verses Trustworthiness of findings	21
4.5 Data transcription and analysis	22
4.6 Limitations and Ethical Considerations	23
5 THEORETICAL FRAMEWORK	24
5.1 Institutions and firms in theory	24
5.2 Model of analysis for factors external to the firm.....	25
5.3 Theory of the firm and model of analysis.....	27
5.4 Institutions versus the firm combined model of analysis	29
6 RESULTS AND ANALYSIS	29
6.1 Firms' Internal Capabilities	29
6.1.1 Descriptive Features and Background.....	29
6.1.2 Resources.....	31
6.1.3 Output	36
6.1.4 Flexibility.....	38
6.2 Firms' Strategies and Structures.....	39
6.3 Firms' Exogenous Environment and Institutional Change	42
6.3.1 Mining MNCs	44

6.3.2	Sources of Credit	45
6.3.3	Where is government in all this?.....	46
7	WHO THEN IS TO BLAME?	48
8	REFERENCES.....	51
9	APPENDICES.....	56
	Appendix I: Interview Guide for Firms.....	56
	Appendix II: Consent Form	57
	Appendix III: List of Respondents	58

List of Figures & Tables

Figures

FIGURE 1: EXAMPLE OF CAPACITY ENDOWED FOREIGN FIRMS	15
FIGURE 2: NUMBER OF INTERVIEWS PER RESPONDENTS' CATEGORY	21
FIGURE 3: OSTROM'S INSTITUTIONAL ANALYSIS AND DEVELOPMENT FRAMEWORK.....	25
FIGURE 4: MODEL OF ANALYSIS FOR FACTORS INTERNAL TO THE FIRM.....	27
FIGURE 5: OPERATIONALIZED MODEL OF ANALYSIS FOR EXOGENOUS AND INTERNAL FACTORS	29
FIGURE 6: EXAMPLE OF BASIC FABRICATION PRODUCTS	37
FIGURE 7: EXAMPLE OF FIRMS' PLANT/WORKSHOP	39
FIGURE 8: EXTRACT FROM A LETTER BY AN ANONYMIZED MINING MNC IN ZAMBIA	44

Tables

TABLE 1: DESCRIPTIVE FEATURES OF LOCAL FIRMS	30
TABLE 2: TYPES OF VALUE-ADDING FIRMS CREATED BY LIBERALIZED MINING ENVIRONMENT.....	40
TABLE 3: FIRMS' STRATEGIES AND STRUCTURES AS SOURCES OF PERFORMANCE	41
TABLE 4: FIRMS' STRATEGIES AND STRUCTURES AS CONSTRAINTS TO PERFORMANCE.....	42

Note: All photos in this thesis are the author's, taken with permission (except the Sandvic photo) during fieldwork

Acknowledgements

Lunda (mother tongue) version: Nzambi muneni! Hinelukiliku nami impinji yambakashika yakwila nikatang’i na kutambula ipepa hashikola yamung’ong’i ku Lund, Sweden. Zhezhiba zhafumini hampinji nabulakeni Agnes Andersson – ntang’shi wakuluka yitembi ha shikola yamung’ong’i ku Lund – mu Lusaka mumwaka wa 2007 hampinji yayiliyi na kusandasanda wunsanhu. Nasakililang’a anvwali a Charlotte Wonani nawa Mukata Wamulume hakunung’a na Agnes kulonda niluki Lund University.

Kufuma mu 2007, chimwenu chakwinza ku Lund chazhimang’eni. Kukoleka kweneni nankashi, mu 2011 Swedish Institute yansakwili nakunenta ku Lund nakuntang’isha – chenokuwaha nawa nasakililang’a nankashi hawukwashi weniwu!

Hakwila ami ni thesis yami tuwumbewi chenichi, makasa awanthu kuvula anankwashi. Swezhe nasakilili antu ezhima ku Zambia ankwashili kunyinka wunsahu winatwasha kusonekelaku iyi thesis. Chakadi antu awa, mutenowu kachi hinasoneki chochenichiku. Ntang’ishi wakuluka yitembi Turaj Faran nanlomboli chakubula kuzeya muntang’ilu yami yezhima nakunkwasha kulonda nisoneki nakuhanuka ing’esekele yeniyi. Akwetu atudizi adi neyi Natasha Plulikova, Emilie Fourdholdt, Julia Popova na Laura Schuppler mwanatulombweliwu kudi ntang’ishi yeniwu nawa anankwashi nankashi mwashiyashana. Kunung’ang’ana na muzang’alu mukachi kawakwetu atudizi ezhima mukuvula mutunatang’ili hamu kufuma mu 2011 ndo nilelu mu 2013 chanentesha chiseki. Lisa Eklund nezanvu dindi nawa nayisakilili.

Mukulumpi wakuluka yitembi Soeren Jeppesen waku Copenhagen Business School hamu namukwawu Peter Kragelund waku Roskilde University ku Denmark nayisakilili nankashi hakunlombola; hamu nezanvu dawu da SAFIC project hawukwashi wamali nazatishili kuyanokusandasanda wunsahu ku Zambia. Anankwashi nawa hampinji yakusoneka thesis yeniyi. Nasakililang’a nawa atata na chisaka chezhima cha Kaleng’a-Luwaya hawukwashi wamboka impinji yezhima. Ibwambu dami wahamuchima inakuli nindi kufuma kuwansi Gloria Wime Sakanyi nading’i himpanda muwumi wami impinji yezhima helatuhu namutamishili kumuchima – Nzambi ang’anakeni. Mukukunkulula, hasi mama wading’a wamuumi kulonda hakumona kuwaha chakumfumba chanfumbiliyi hampinji nading’i kanshi munyanya – wumi wa mama wunoki mu kuwunda!

English translation: God is great! I never knew this time would come when I would graduate from Lund University. Connecting the dots, it all started in 2007 during my bachelor’s studies when I met Agnes Andersson (Lund University professor) in Lusaka, Zambia when she went for some fieldwork. Thanks to Charlotte Wonani and Mukata Wamulume (UNZA professors) for linking me to Agnes through whom my interest about Lund and Sweden was birthed.

From 2007, my motivation and hope to come to Lund diminished until 2011 when thanks to a Swedish Institute (SI) Study Scholarship I finally arrived in Lund to be what I am today – a LUMIDER! Without SI, this LUMID foundation laid in my life would never have been possible.

My thesis and I are definitely a product of many hands behind the scene. Many thanks to all respondents in Zambia: without their input writing this thesis would not have been possible. From topic identification, through fieldwork to thesis writing my LUMID supervisor, Turaj Faran, didn’t withhold his invaluable comments and inspiration for which I am so grateful. Thanks also to my thesis group comprising Natasha Plulikova, Emilie Fourdholdt, Julia Popova and Laura Schuppler for their all-time inspiration and comments. The entire LUMID experience was never boring with a togetherness and fun-rich 2011-2013 LUMID group besides support from Lisa Eklund’s team.

I am so thankful also to Soeren Jeppesen (Copenhagen Business School professor) and Peter Kragelund (Roskilde University professor) for being my ‘informal’ supervisors through the SAFIC project which provided financial support for fieldwork in Zambia. My dad and the entire Kaleng’a-Luwaya family have always been an overflowing source of diverse and varied support for which am grateful. I have never thanked my dearest and childhood friend Gloria Wime Sakanyi enough for her being a pillar in my life even when times and LUMID were hard. Last not least, my mum should have been alive to witness what her inspiration during my childhood has meant in my LUMID life and the foundation laid – MHSRIP!

List of Acronyms/Abbreviations

AAC	Anglo-American Corporation
CEEC	Citizens Economic Empowerment Commission
CEOs	Chief Executive Officers
DBZ	Development Bank of Zambia
EIZ	Engineering Institution of Zambia
FDI	Foreign Direct Investment
FNDP	Fifth National Development Plan
GRZ	Government of the Republic of Zambia
IAD	Institutional Analysis and Development
ICT	Information Communication Technology
IMF	International Monetary Fund
LUMID	Lund University Master of Science in International Development and Management
MCTI	Ministry of Commerce, Trade and Industry
MMD	Movement for Multiparty Democracy
MMMD	Ministry of Mines and Minerals Development
MNCs	Multinational Corporations
MSMEs	Micro, Small and Medium Enterprises
NCC	National Construction Council
OEM	Original Equipment Manufacturers
R&D	Research and Development
RST	Roan Selection Trust
SAFIC	Successful African Firms and Institutional Change Project
SI	Swedish Institute
SNDP	Sixth National Development Plan
SOE	State Owned Enterprises
TNDP	Transitional National Development Plan
TNCs	Transnational Corporations
UNCTAD	United Nations Conference on Trade and Development
UNIP	United National Independence Party
UNZA	The University of Zambia
USD	United States Dollar
WIR	World Investment Report
WTO	World Trade Organization
ZACCI	Zambia Chamber of Commerce and Industry
ZACM	Zambia Chamber of Mines
ZCCM	Zambia Consolidated Copper Mines
ZDA	Zambia Development Agency
ZMK	Zambian Kwacha
ZMW	Zambian Kwacha – Rebased/new currency

1 INTRODUCTION

1.1 Research problem, purpose and question

Through linkages between foreign affiliates and domestic enterprises, TNC participation may play a catalytic role in the development of related industries (WIR01) and, under certain conditions, of an extractive industry cluster. Linkages can take place along and beyond the extractive-industry value chain. Backward linkages occur when foreign affiliates acquire inputs (goods and services) from local suppliers...Linkages can be developed with domestic firms or with other foreign affiliates in the host country (UNCTAD, 2007: 140).

The two questions which instantly made me curious when I read the above quote in UNCTAD's 2007 World Investment Report (WIR) were: does this, especially the backward linkages, happen in my own country Zambia whose economy is copper-based and has had TNCs¹ influx since economic liberalization in 1991? And, if so, how does it influence local firms' performance? The equally immediate response on the backward linkages from local suppliers to MNCs-owned mines was in the affirmative. The next question required a review of literature and further investigation. I analytically read the 2007 WIR after receiving an invitation to align my thesis research to an academic research project seeking to address a similar objective nascent in its title - the 2012 to 2016 Successful African Firms and Institutional Change (SAFIC) project².

This background became the entry point into my LUMID research on local firms. Moreover, it is argued that "why businesses succeed or fail continues to be a topic of popular as well as research interest" (Yin, 2009: 142). The generally held view remains that:

The fortunes of Zambian businesses have ebbed and flowed with the political and economic policies of the country, and with changes in the world copper market. Key events include independence from Britain in 1964, widespread nationalization in the late 1960s and early 1970s, and market liberalization in the early 1990s...Many of the large conglomerates have evolved from small-scale family businesses, often started by entrepreneurs of foreign origin— mainly Indian and European – who have since become Zambian citizens (Sutton & Langmead, 2013: 13).

¹ transnational corporations also called and hereafter referred to as MNCs – multinational corporations

² It involves the Copenhagen Business School's (CBS) Centre for Business Development Studies (CBDS), Roskilde University and The University of Zambia's (UNZA) Department of Geography and Environmental Studies among other partner universities in Kenya and Tanzania. The Zambian component of the project focuses on local suppliers in the agricultural and mining sectors as the following link details: <http://www.cbs.dk/forskning/forskningsprojekter/successful-african-firms-and-institutional-change>, accessed in 2012 and 2013

My research's point of departure became the 1991 economic liberalization and its impact on the performance of local value-adding firms supplying to MNCs owned mines. Therefore, the purpose was *to investigate why the performance of local value-adding firms supplying to mining MNCs in Zambia's liberalized economy seems more constrained*. The main research question was *why does the performance of local value-adding firms supplying to mining MNCs seem more constrained in Zambia's liberalized economy?* The following were the sub-questions:

1. What major institutional changes have impacted the performance of local value-adding firms supplying to the mines in Zambia's liberalized economy?
2. What are the sources, if any, of improved performance among local value-adding firms supplying to the mines?
3. How can the firms' performance enhancing factors be harnessed and constraining factors eliminated?

1.2 Research significance and concepts

Local enterprises supplying to MNCs-owned mines in Zambia could be vital to national industrial development given the centrality of mining to the less-diversified economy. However, it should be acknowledged that industrial and manufacturing diversification efforts have been made but no major break away from the reliance on copper has been witnessed. Zambia still ranks highly, seventh in 2012, among global copper producers and hosts some of the world giant mining MNCs such as Barrick Gold, Vedanta Resources and Glencore (E & MJ, 2012: 130).

Linking mining MNCs and suppliers largely arises from the complex minerals' production processes requiring diverse inputs at different levels such as exploration, plant construction, ore extraction, transportation, processing and recycling of scrap metals (Kaplinsky & Morris, 2001:4-6; Bridge, 2008:397/9). At every level, many opportunities arise for supplier firms - foreign or local - to provide appropriate services and/or goods relative to their capacities. Most big suppliers with immense capacity like Sandvic and Atlas Corpco, are equally MNCs whose subsidiaries are registered locally and have offices within Zambia. Such MNCs thus manufacture most needed products from wherever it is cost-effective to do so making them have unchallenged competitive advantage to supply to mining companies. Moreover, their strong financial endowments enable them to supply highly specialized equipment and services. As for local suppliers, their activities are

largely domestic even if they procure some inputs and products from abroad. Their manufacturing or value-adding activities therefore potentially provide good backward linkages to mining MNCs with possible tangible spillover effects on national industrial development.

In this thesis, the studied local supplier firms are the value-adding ones given their perceived and actual contribution to industrial development. Suppliers are categorized into two: “value-adding” or manufacturing suppliers; and traders (non-value adding). Both supply to mines but from different positions. The value-adding ones are those manufacturing and supplying goods or supply, for instance, civil engineering services. These are crucial products to the mines’ actual production and operations. The trading firms are usually viewed as some kind of:

import agents, generally operating on an ad hoc basis, without formal, established premises. Rather than developing technical competencies or specializing, these “briefcase businessmen” lobbied governments and developed social networks within the mining companies to secure orders. With low overhead costs, their transactions were highly profitable and displaced established suppliers (Fessehaie, 2012: 446).

The Government of the Republic of Zambia (GRZ) in recent years has also recognized value-adding firms’ role in national development. For example, in its Fifth National Development Plan (FNDP), government envisaged developing “an open, competitive, dynamic, and sustainable manufacturing sector that is driven by the private sector, with emphasis on upstream and downstream manufacturing activities based on the mining and agro-industry sub-sectors” (GRZ, 2006: 116).

It is in this regard that the performance of local value-adding suppliers in a liberalized economy involved in myriad downstream activities as backward linkages to mines was academically interesting and relevant to study. Moreover, improved performance of local value-adding suppliers, all things being equal, has strong effects on subsequent re-investments and retention of profits generated within an economy. Such firms help to harvest some benefits of globalization from the mining MNCs through technological acquisition which also builds their capacity. Employment creation and income distribution opportunities are also created to broadly enhance poverty reduction among other spillover effects (Blomström & Sjöholm 1999:916).

Localness of firms was difficult to define because some respondents did not clearly disclose the ownership of the firms. Therefore, I purposively settled on firms whose ownership was clearly

revealed to be absolutely in indigenous Zambians' hands either as families, business partners or individual proprietors. Other firms were thus treated as informants to triangulate views from the targeted firms. As detailed later in the theoretical framework, performance was understood and assessed through three broad indicators: resources; output; and flexibility.

1.3 Thesis Outline

Having introduced the investigated research problem in section 1, section 2 provides a background on mining and liberalization in Zambia. This is followed by literature review and methodology as sections 3 and 4 respectively. The theoretical framework is the fifth section which is followed by the presentation and analysis of results as the sixth section. To conclude in section 7, a question about who to apportion the blame on for why local value-adding firms are more constrained is posed and answered.

2 BACKGROUND: MINING AND LIBERALIZATION IN ZAMBIA

Zambia traditionally exports minerals since its founding in 1964 when it gained independence from Britain. The most significant mineral exported has been, and still is, copper which has ordinarily been mined on the Copperbelt Province. Since 2004 however, there has been increased MNCs investments and mining activities in North Western province which lies next to and in the western part of Copperbelt (GRZ, 2006; Negi, 2010:209).

Increased visibility of indigenous entrepreneurs engaging in free and private enterprise supplying to mines could be said to have occurred alongside FDI increase in Zambia's mining sector since the 1990s. In 1991, there was a remarkable return to multiparty democracy in which Frederick Chiluba's MMD party defeated Kenneth Kaunda's UNIP which was the only party (and its president) ruling the country for 27 years since independence. Chiluba professed consolidating liberal democracy and widespread economic liberalization (Burnell, 2001: 95).

Before large-scale economic liberalization, Zambia inherited a private sector-led economy at independence but later opted for "Zambianization" initiated by the 1968 and 1969 Mulungushi and Matero reforms, respectively, enacted by parliament. As the trend was for most newly independent states in Africa which embraced Socialism, Zambia Zambianized or nationalized to transfer the

foreign-owned mines and other major enterprises into state hands hence the name “Zambianization”. Zambianization also meant “the progressive replacement of British and other expatriates by indigenous Zambians” (Negi, 2011: 28). Therefore, the state acquired 51% shares in all mines previously privately owned by the Roan Selection Trust (RST) and Anglo-American Corporation (AAC). It was hoped that Zambianization would yield significant benefits by channeling profits towards socio-economic development. At that time, copper mining accounted for over 80% of the country’s export earnings and a source of about 50% government revenue (Lungu, 2008: 404; Simutanyi, 2008: 1).

To secure these benefits, government merged the mining companies to form the Zambia Consolidated Copper Mines (ZCCM) in 1982. This initiative helped government to construct schools, hospitals and provide other services including subsidizing state-owned companies involved in manufacturing. Consequently, a local supply cluster meant to diversify flourishing manufacturing activities through state-owned enterprises (SOEs) and some smaller private firms by some Zambians and foreign entrepreneurs was established (Fessehaie, 2012: 445; Lungu, 2008: 404; Simutanyi, 2008: 1).

Despite these successes, more challenges emerged. Plummeting copper prices and the first and second oil crises in 1974 and 1979, respectively, culminating into a foreign debt crisis slowed-down the country’s development process. Overall, “for twenty years, the economy collapsed at an internationally unprecedented rate as copper prices fell relative to the prices of imports” (Lungu, 2008: 405). All these factors crippled ZCCM such that it could no longer effectively develop the local supply chain. Besides, suppliers usually lacked necessary technical capacities to efficiently produce quality goods and services. Other inadequacies included lower competitive levels and frail R&D capabilities. Notwithstanding these inefficiencies, ZCCM was mandated to embrace local suppliers especially that it also lacked foreign exchange to procure internationally (Fessehaie, 2012: 445).

Throughout the nationalization process and economic decline, the private sector was insignificantly in the picture. Actually, it is argued that the state further stifled private sector participation by forcefully introducing extensive control mechanisms, licensing procedures and taxes. This meant

the lean foreign entrepreneurs-dominated private sector equally became inefficient. As for the public sector, Zambianization further dampened the inefficiencies. Many people so long as they were Zambian even if they lacked the right set of qualifications, skills and experience were appointed to key positions ordinarily requiring high managerial skills (Gulhati, 1991: 242).

To ameliorate these challenges, Zambia in the late 1980s unsuccessfully attempted to implement the IMF backed SAPs which included economic liberalization (Simutanyi, 2008: 1-2). Coupled with the prolonged socio-economic malaise, widespread discontent among people was generated leading to UNIP government's defeat by Chiluba's MMD in 1991 to return to neo-liberal tenets and market economics. Consequently, Zambia passed the Privatization Act in 1992 and the Mines and Minerals Act in 1995. These established the base for privatizing ZCCM in 1996 to finally unleash the much constrained private and free enterprise. MNCs and FDI begun triumphantly flowing into Zambia after ZCCM was sold to seven, mainly Western, MNCs (Lungu, 2008: 405, 407).

During Chiluba's 10 years in office as president, privatization of SOEs moved from the drawing board to the actual increase in MNCs penetration in the mining and other sectors. This momentum continued even after Chiluba left office such that copper production and exports considerably grew due to FDI which revitalized the economy's backbone. For example, copper and cobalt exports accounted for approximately four fifth of total exports in 2006 at USD 3.2 billion (UNCTAD, 2007: 136). Overall, Zambia's copper exports rose from about USD 474 million to about USD 4 billion during the 2000 to 2008 peak period until the global economic crisis briefly reduced the earnings to about USD3.17 billion in 2009 (Fessehaie, 2012: 445). It is against this background that the private sector, narrowed-down to local value-adding suppliers dealing with mining conglomerates, in Zambia was investigated and is discussed in this thesis.

3 LITERATURE REVIEW

3.1 Liberalization as ingredient for firms' improved performance

Discussing how liberalization would ensure the private sector in a developing country's economy contributes to industrial development through backward linkages to MNCs has existed for many decades now. For example, in 1981 the World Bank's publication of the most influential Berg Report is arguably the genesis of standard interpretation of value-adding firms in Africa (Arrighi,

2002:7). In the Berg Report, Africa's "bad policies" beside "bad governance" were blamed for heavily protecting local manufacturing industries thus inhibiting firms' performance and overall being responsible for the African crisis. Some recommendations were that there should be reduced protection of industries, relaxation of import restrictions and less direct control by government (World Bank, 1981: 29-31, 96; Bigsten & Söderbom, 2005: 2). Generally, replacing public with private enterprise was a strongly recommended option. Similarly in the same year, 1981, another influential scholar - Robert Bates - authored the *Markets and States in Tropical Africa* in which he contended (as one of the "good policies") that state power must be dismantled to leave the infant manufacturing firms with freedom to identify and maximize market opportunities (Arrighi, 2002:7).

Furthermore, it is argued that when MNCs are allowed into an economy they will contribute to industrial development. This is because they are viewed not only to create employment and maximize the cheap labour available in a developing country but also help the economy gainfully exploit its natural resources and harvest other benefits from globalization. In this process, the MNCs will inevitably and increasingly subcontract to local firms. In this sense, most previously state-dominated economies in developing countries implemented neo-liberal policies to enable MNCs' entry (Hilhorst, 1998:11). Additionally, with an open market, local firms are more likely to have their efficiency standards on supplies to MNCs or exports improved; and enabled to import cheaper inputs and products (World Bank, 2008: 7). Zambia is located within this general argument. It is a "good case" of liberalization since the early 1990s where mining MNCs, at least in theory, have been envisaged to necessitate improved value-adding firms' performance; and help the country industrialize through the creation of linkages.

3.2 Firms' internal factors - liberalized external environment nexus

Although it appears much empirical evidence on local value-adding firms' performance in Zambia is lacking, for more than two decades now, several large-scale surveys on manufacturing firms across Africa have been conducted on a two-fold rationale: to try and establish what has gone wrong in this sector; and devise remedial measures. The findings have been that much of Africa's, Zambia included, manufacturing sector remains small and largely so stagnant that there has not been a breakthrough (Bigsten & Söderbom, 2005: 1-2).

The World Bank in 2002 started conducting the Enterprise Survey in some countries globally including Zambia. This firm-level survey focuses on improving the business environment in those countries within which the firms operate (World Bank, 2008: 1). This and many other surveys have addressed issues pertinent to different firms but have not significantly explored the development of local value-chains (Fessehaie, 2012: 444). This thesis does not extensively explore the mining local value-chain either but attempts to add to the currently lean stock of knowledge on the subject by investigating why local-value adding firms in Zambia's mining sector face constraints to achieving improved performance.

Empirical evidence shows firms' performance being constrained by factors categorized into two. On one hand, factors internal to the firm such as capital outlay available to the firm or its ability to acquire credit; the extent to which entrepreneurs and workers in the firm are educated or skilled; and how the firm is organized to conduct business efficiently and profitably are recognizable. On the other hand, external factors such as physical infrastructure availability and institutional environments surrounding the firms hold (Clarke, 2012:5).

Fewer local firms that hailed from Zambia's pre-liberalization era had fragmented capacity to match the emerging competition. Emerging entrepreneurs also lacked substantial skills, experience and financial capacity to position themselves well into the rapidly burgeoning market. Additionally, the MNCs which bought the mines introduced new and higher standards that supplier firms must observe. Consequently, local value-adding firms were exposed to stiff competition from the better capacity-endowed foreign suppliers on one hand and local trading supplier firms on the other hand (Fessehaie, 2012: 445). Moreover, both old and new entrants tend to fail to establish market niches for them to stand out and minimize stiffer competition (Hilhorst, 1998:13).

Mining MNCs are also accused of relying on local-based foreign supplier firms for the bulk of local procurements (Fessehaie, 2011; Hanlin, 2011:5). These foreign supplier firms, which include original equipment manufacturers (OEM) such as Sandvik and Atlas Copco locally stock most supplies such as heavy machinery from their parent companies based, for example, in Canada, Europe, USA and Australia. Hence, such companies dominate the supply chain thereby greatly obscuring local firms' visibility (Fessehaie, 2011). The foreign supplier firms further consolidate

their grip by providing after-sale services through their locally registered offices situated within close proximity to the mines (E & MJ, 2011: 59; Fessehaie, 2012: 446/8).

Figure 1: Example of Capacity Endowed Foreign Firms



Source: Author's

This illustrates concerns about the extent to which MNCs' entry has on local firms and the economy in general. While it is true that multiple beneficial spillover effects arise from MNCs investments in a host country, such spillovers in a sector like Zambia's mining industry are neither automatic nor guaranteed. The economy and industry hosting the MNCs need to have institutional environments and absorption capacities that support the harvesting of such spillovers. One such feature should be the existence of a narrower technological gap between the MNCs and local firms to ensure the learning scope between them is mutually beneficial (Blomström & Sjöholm, 1999: 916; Bastholm & Kragelund, 2009: 118).

This imbalance in capacity endowments seems to have made most local players in Zambia having a distant participative role. For example, according to Fessehaie (2012), local value-adding suppliers registered with the mining MNCs in 2009 ranged between 150 and 200 whereas the bulk of the local suppliers estimated at about 5000 were into the non-value-adding category. The value-adding category requires skills and capital intensity. Conversely, the other category's huge number of suppliers is attributed to lower entry and exit barriers. Such a scenario constrains developing the former category (Fessehaie, 2012: 446).

The prevailing situation is also associated to institutional and policy sides of extractive economies. Mining MNCs do not operate as an island for them to be entirely blamed for the constraints local suppliers face (Morris et al, 2011: 3). Others include bank financial institutions and government; with government inevitably having the overarching mandate over all stakeholders. After its liberalization policies in the early 1990s, government abandoned interventionist policies making local firms face the overwhelming competition unaided. No major government policies and initiatives were developed to address this dynamic challenging environment until the early 2000s. The 1995 Mines and Minerals Act as the mines privatization framework could have been the first remedial measure had its non-binding provisions for local supply chain development been observed. The mining MNCs and government were not preoccupied with the implementation of these provisions. Government at that time is particularly blamed for lacking political will to promote backward linkages as such linkages were regarded marginally significant (Fessehaie, 2012: 445/6).

Soon after Levy Mwanawasa became the new MMD and Republican President in 2002, succeeding Fredrick Chiluba, he re-introduced national development planning following the recognition that:

From independence in 1964, three national development plans were implemented. The Fourth National Development Plan was launched in 1989 but later abandoned in 1991 in preference for an open market system that brought momentous changes to our country. One of the important lessons learnt from the 1990s was the realization that even in a liberalized economy, development planning is necessary for guiding priority setting and resource allocation (GRZ, 2006: i).

Therefore, the Transitional National Development Plan (TNDP) 2002 – 2005 was established to pave way for subsequent five-year national plans to feed into the country's realization of her overarching "Vision 2030" which aims specifically to "improve the investment climate and boost the private sector's contribution to economic growth" (OECD, 2012: 20); and broadly making Zambia "a prosperous and middle-income nation by 2030" (GRZ, 2011: xii). The FNDP 2006-2010 followed. Currently, the country is implementing the Sixth National Development Plan (SNDP) 2011-2015. It has to be noted here that much of the SNDP is being implemented by a different government - 2011 September to 2016 Michael Sata led government - whose Patriotic Front political party ideals are different from those of the MMD.

Within these broad-based initiatives, supporting policies and strategies for specific sectors such as mining and manufacturing have been designed. Government acknowledges that “the manufacturing sector is a pivot of economic growth through its backward and forward linkages to economic growth, exports and employment creation” (GRZ, 2011: 133). Recognition is evident and good but what is lacking is establishing and prioritizing implementation of initiatives targeting the firms in context. Where manufacturing is stressed, it could be that the focus on export markets overshadows the firms’ potential backward linkage role in the local market with the mining MNCs. For example, the first objective in the 2007 Commerce, Trade and Industrial Policy is about stimulating and encouraging “value-addition activities on primary exports” (GRZ, 2007: 13). Local firms are broadly included in the seventh objective which seeks to help them “increase their levels of efficiency and competitiveness, and therefore withstand competition in domestic and international markets” (GRZ, 2007: 13).

This thesis is not an evaluation of all national development plans, policies and/or initiatives but an analysis of local value-adding firms surrounded by the country’s myriad national development plans and policies; and by the mining MNCs and banks. Therefore, the findings are analyzed through institutional change theory to address factors external to firms. The theory of the firm also helps to analyze the firms’ core capabilities (or lack of) which enhance or impede their performance in the changing liberalized environment.

4 METHODOLOGY

This section discusses the research approach and research design utilized in my fieldwork. Methods used to collect data and how generalizable or trustworthy the findings were are equally discussed. How data were transcribed and analyzed are other items highlighted after which limitations of the study and ethical considerations are presented.

4.1 Research Approach

The first thing to be resolved before my fieldwork was the research approach— whether deductive or inductive. Before commencing fieldwork, institutional theory potentially related to the investigation and analysis of the impact of liberalization on local firms. This in Bryman’s (2008) view, I was considering a deductive approach where based on my knowledge about the topic through literature

and general understanding about Zambia being my home country, I could deduce a hypothesis to be empirically tested. From the theory enriched hypothesis I could then have concepts translated into researchable questions. Nevertheless, the research purpose meant taking an inductive approach.

Induction is whereby “the researcher infers the implications of his or her findings for the theory that prompted the whole exercise” (Bryman, 2008: 9). At the end of fieldwork, I inferred the findings to institutional theory (specifically institutional change theory) and observed that it was only adequate for analyzing factors external to the firms investigated. Therefore, I identified the theory of the firm to analyze factors internal to firms which made them either positively or negatively impacted by the external environment arising from liberalization. Ultimately, even if the research approach was inductive, some deductive elements were also present.

4.2 Research Design

I utilized a case study design in my fieldwork in anticipation of its logicity and sequential relationship between empirical data and my research question which kept being adjusted and consolidated during fieldwork (Yin, 2003: 44). Per definition, “[t]he essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a *decision* or set of decisions: why they were taken, how they were implemented, and with what result” (Yin, 2009: 17).

A case study may either be an individual, event, institution, organization, programme or an entire country among other cases (Gomm et al, 2007: 3; Yin, 2009: 17). It is an in-depth investigation of fewer cases or often a single case. These features demarcating a case study however are not distinct to only such a design. For example, Gomm et al (2007) argues that an experiment may equally involve the investigation of one or fewer cases unlike a survey which I could have alternatively used in my research. The core focus of case studies however is on “cases of decisions” (Yin, 2009: 17). It is in this view that the research design was appropriate to investigate the topic where liberalization is basically a “decision” which was made in Zambia in 1991. Besides, as in Yin’s definition, the liberalization decision had a rationale and its implementation has had results on firms.

Zambia’s Copperbelt Province was purposively selected as a case study physical location. The province was viewed as a bounded system whereby it was possible to locate firms as multiple cases

within it for a detailed study of the subject matter (Creswell, 2007: 73-4). Creswell (2007: 73) uses a “bounded system” to imply a context or setting. Hence, I considered the location hosting the firms as the context since the province hosts more mines than any other location in the country. Kitwe and Ndola towns were purposefully selected as case study towns given that the former is the commercial hub and the later an administrative capital for the province. These characteristics entailed the presence of many local suppliers within proximity.

4.3 Methods

Considering what data collection techniques should be employed in my research commenced with understanding what types of data and sources would help answer the research question. Both primary and secondary data were deemed crucial. There are six commonly used case study data sources: “documentation, archival records, interviews, direct observations, participant-observations, and physical artifacts” (Yin, 2009: 101). Obviously, all these data sources have strengths and weaknesses. Despite their weaknesses, only three – documentation, interviews, and direct observations – were feasible sources in my research.

Documentation as a secondary data source included government policy documents. These were used for the identification of relevant factors external to the firms which characterize the changing institutional environment posing opportunities and challenges to their performance. Articles, books and the internet were equally significant for a review of literature addressing the firms’ internal and external factors, and for a theoretical understanding. Overall, documentation was the major source for answering the first sub-research question.

The main primary data sources were interviews with three types of respondents: central target were local value-adding firms; then some foreign or other firms and key informants from government were useful data-triangulation source besides the documentation. Overall, as Gomm et al (2000) argue, the case study design aided in collecting data through interviews linked to the research purpose and question investigated. Besides interviews, direct observations were made. All respondents from firms were interviewed at their offices usually located in Kitwe’s heavy industrial area and a few others in Ndola town. This was instrumental to learning *what life is like for an “insider” while remaining, inevitably, an “outsider”* (Mack et al, 2005: 13). It helped me to see

(and in some cases take photos) for example some metal fabrication workshops and the products the firms supply to the mines making such observations vital to analysis.

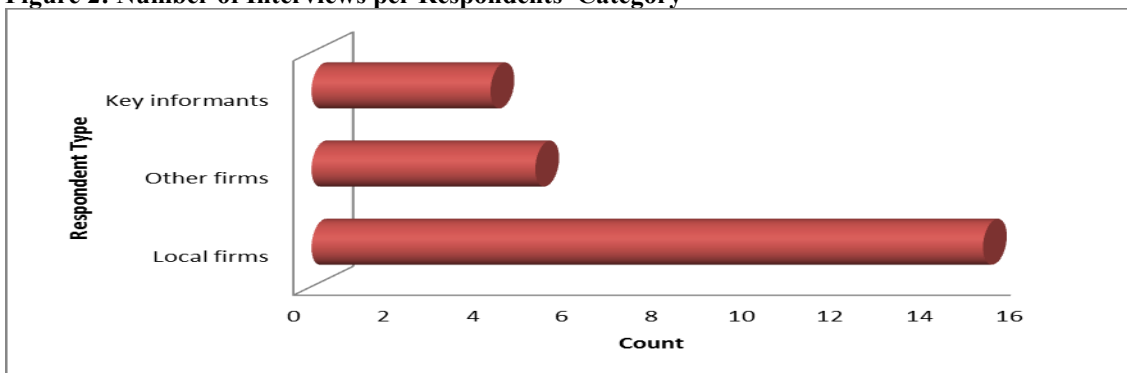
Sampling firms and having access to the field was facilitated by the gatekeeper SAFIC project. The project was preparing to conduct a mapping exercise of local value-adding firms on the Copperbelt Province due to the lack of a comprehensive list from authorities such as ZACCI. Often, there is a warning that gatekeepers' interests may conflict those of the researcher and the researched (Scheyvens & Storey, 2003: 153). Luckily for me, within the academic-oriented SAFIC project, I was funded to freely conduct my research whilst contributing to the mapping exercise.

When I arrived in Lusaka Zambia at the beginning of November 2012, it was evident that entering the field and having access to respondents required my utilizing the project's preliminary work. This then leads to how I sampled the firms. I commenced fieldwork by purposively utilizing the initial list of relevant firms my gatekeeper project had earlier contacted. Therefore, throughout fieldwork the number of firms grew such that some were not interviewed because a saturation point – where responses from next respondents do not seem to add new views to the already collected data - was reached. Through snowballing I asked the respondents to link me to others “who would be willing to discuss their experiences with me” (Bryman, 2004: 101). Some firms on the initial list suggested others I could interview. This means two sampling methods – purposive and snowballing – combined in the fieldwork.

The reality on the ground however was not always as per the initial sample obtained through my gatekeeper. For example, the first firm I visited and understood to be locally owned turned out to be completely foreign owned. However, the introduction the respondent gave about himself as a Zambian and having worked in different firms on issues relevant to the research question made me continue with the interview using the interview guide initially meant only for local firms (later modified to make it appropriate for either type of firms – *see appendix I*). The only change however was to ask him questions as an expert or informant. In this sense he, and a few other cases where respondents could not provide clear details about the firm's ownership, served as key informants in addition to government officials.

The total sampled local firms interviewed was therefore 15. Additionally, some government officials from the Ministry of Mines and Minerals Development (MMMD) and Ministry of Commerce, Trade and Industry (MCTI) were interviewed as key informants. The total number of interviews was therefore 24 as shown in figure 1 (see also appendix III). From both the local and other firms, respondents were either proprietors (who in some cases serve as CEOs in their firms) or high ranking employees where a management structure existed in those firms.

Figure 2: Number of Interviews per Respondents' Category



Source: Author's own based on field data

Two semi-structured interview guides were initially developed - one targeting firms and another for key informants from government. Whereas the interview guide for firms got modified and utilized during fieldwork, the one for informants became irrelevant and was not used. Key informants were “pregnant” with information about the subject such that my self-introduction as a student researcher was adequate for lengthy unstructured interviews. The only roles I played were to probe and take notes since voice recording during interviews with government officials was not allowed.

4.4 Generalization verses Trustworthiness of findings

In a case study, “the main concern may be with understanding the case studied in itself, with no interest in theoretical inference or empirical generalization” (Gomm et al, 2007: 4). Since my research was anchored more on induction than deduction, theoretical inference and generalization of investigated cases to similar ones across Zambia was not a preoccupation. Nevertheless, it is also true that the analysis of collected data and review of policy documents among other documents shows a general picture in the country. Besides, firms narrated their own situation on the Copperbelt province but also analyzed the situation in mining and manufacturing sectors country-wide since most of them conduct business with mines located in other parts of the country. Moreover, the

experts from the foreign-owned firms and government officials gave a national perspective thus triangulated views from the targeted firms. Therefore, my focus was on maximizing the data-enhancing attribute of qualitative research to enable clear links between main themes of the findings and how they relate to theory (Ragin, 1994 as cited in Mikkelsen, 2005: 141).

This process made the data collection exercise and its aftermath strong ingredients for trustworthiness of the findings. Trustworthiness (similar to the concept of validity in quantitative research) in qualitative research denotes aspects such as: credibility which is about how believable the findings can be; transferability implying whether the findings can apply in other contexts; dependability (reliability in quantitative studies) is concerned with the likelihood of the findings being applicable at other times (Bryman, 2004: 30). Reliability, or dependability in this sense, arises from the demonstrated data-collection procedure as allowing the obtainment of same results and drawing similar conclusions if the procedure is repeated (Yin, 2009: 40).

4.5 Data transcription and analysis

During and after fieldwork I transcribed the interviews which, together with field notes, were the basis for analysis. Despite having a research assistant (largely responsible for logistical support) provided by my gatekeeper project, I personally conducted all interviews (except one) in English (Zambia's official language) because all respondents spoke the language. Therefore, possible misrepresentation of views both during interviews and transcription was eliminated hence improving the findings' reliability.

The theoretical framework applied to the firm as the unit of analysis. Therefore, I organized and analyzed transcribed data according to theory-enriched themes meant to help answer the research question. Specifically, I applied content analysis to the transcribed text and reviewed literature. Content analysis broadly refers to "any technique for making inferences by systematic and objective identifying special characteristics of messages" (Berg, 1989: 106). My research question implied explaining some causal relationships about why the local firms' performance is the way it is. Content analysis was then useful in what Yin (2009) refers to as explanation building - where some patterns in the data being analyzed are matched to help build an explanation about the case(s) in point.

4.6 Limitations and Ethical Considerations

Being a multiple case study, the cases (firms) covered including the data from informants suggest sufficient data were collected. The time constraint however did not permit thorough triangulation of some views. A follow-up interview with one of the two government ministries would have been vital except it was not feasible given the lengthy procedure of getting permission for a formal interview. It has to be noted here that two of the government officials voluntarily offered to be informally interviewed in their individual capacities. This happened when I visited their ministry for a different purpose but these two officials, upon asking me about my research topic since I introduced myself as a LUMID student, were keen to be hurriedly interviewed before they left their office for other assignments. It turned out to be a brief but very rich focus group discussion-like interview such that their contribution could not be ignored. Other key stakeholders such as mining companies and local suppliers' associations would have been vital primary data sources.

Among firms, fewer interviews conducted towards the close of daily business tended to be longer than the 30 minutes average (excluding introductions) because the respondents were relaxed and had more time. Most interviews were hurriedly done considering that respondents have higher designations and tighter schedules in their firms. Consequently, most respondents could not fill-out a checklist I designed to capture some background information about the firms. They instead opted for my e-mailing or leaving the checklist with them so that they could e-mail it later. Realizing the non-response risk (which eventually materialized), I probed for relevant details during general introductions each respondent gave. Thus, the interviews were enough to abandon the checklist even if some of the data from the few completed ones were incorporated into the thesis.

During every interview, I introduced myself and explained the rationale for my LUMID research including my gatekeeper project. This was meant to ascertain my identity and clarify why the data were being collected so that major ethical issues of harm to respondents, lack of informed consent, privacy invasion and deception were out-rightly handled (Bryman, 2004: 509). The respondent's consent to be interviewed and have their voices recorded to ease and back-up my note taking was sought using an informed consent form (*see appendix II*). Consequently, most respondents from firms signed the informed consent form (Cresswell, 2007: 89) and accepted to be recorded whereas fewer did not consent to voice recording but verbally consented to the interview. For the formally

interviewed government officials, a formal request in writing with the consent form attached was submitted for approval. A verbal consent to the interview was made but no voice recording was allowed.

During my introductions, I urged respondents to ask questions at any time during the interview and assured them about confidentiality and anonymity of their views presented in the thesis (Scheyvens & Storey, 2003: 142). At the end of most interviews, as a result of a good relationship developed during the interview, some respondents allowed me to tour their offices and/or workshops and take photos.

For deception concerns, one respondent from a firm demanded that I show him an identity card and other official documents before proceeding with the interview. After presenting such, the interview was successful and yielded sufficiently useful data since the respondent was so knowledgeable. He successfully established and operated his firm after working for the mines before which he obtained an engineering master's degree abroad in Europe. This, as an example of the relatively high level of education among respondents, made it easier to conduct interviews without any major ethical challenges. Ultimately, notwithstanding some limitations and ethical concerns, the research process, its findings and analysis provide a basis for credibility and trustworthiness for this thesis.

5 THEORETICAL FRAMEWORK

5.1 Institutions and firms in theory

Institutions can be broadly defined as “the prescriptions that humans use to organize all forms of repetitive and structured interactions including those within families, neighborhoods, markets, firms, sports leagues, churches, private associations, and governments at all scales” (Ostrom, 2005: 3). Ostrom's definition relates to that by Douglass North who views them as “the structure that humans impose on human interaction and therefore define incentives that, together with the other constraints (budget, technology, etc.), determine the choices that individuals make that shape the performance of societies and economies over time” (North, 1993: 35).

From these two definitions, a key distinction between institutions and organizations or firms arises. That is, if we regard institutions as “rules of the game” established for instance in Zambia by

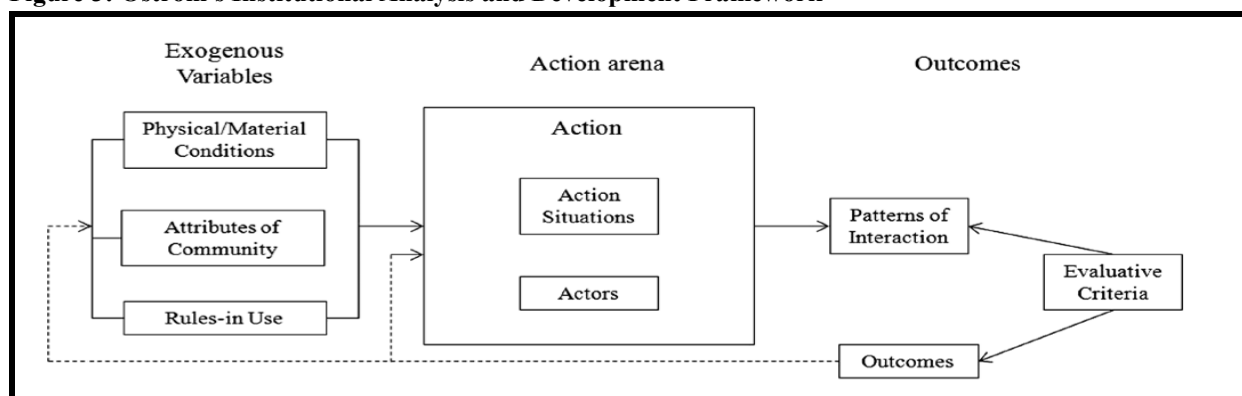
government, the mining MNCs, and banks, then the local value-adding firms (and the entrepreneurs) are the players organizing themselves as teams to play the game according to those rules in a liberalized environment (DfID, 2003: ii; North, 1993: 36; North, 1998: 24). Here the firm can then be defined as “a legal entity – one that signs contracts with its suppliers, distributors, employees and often customers...Once established, a firm becomes a pool of learned skills, physical facilities and liquid capital” (Chandler, 1992: 483). Some scholars have emphasized contracts in their definitions of the firm as “the nexus of a set of contracting relationships among individuals” (Dosi et al, 1998: 154).

The distinction, in North’s view, portrays firms both as beneficiaries and agents of institutional change through their quest to achieve their goals. Institutional change in this regard is viewed as an incremental process of self-transformation to firms actualizing the rules of the game (Kingstone & Caballero, 2009: 154; Ostrom, 1990: 139). If the “players” play based on the rules external to them, as a team they equally have internal rules. Internal rules (which are also an institution) affect how they conform to or deviate from the rules of the game and how they actually play hence their performance. Here we see that firms’ performance is not just based on internal capability but also on opportunities and constraints surrounding environments provide (Hatch & Cunliffe, 2006: 86).

5.2 Model of analysis for factors external to the firm

The relationship between institutions and how they determine the courses of action and performance in firms and in turn macro-level development is not easy to conceptualize or even diagrammatically illustrate. This notwithstanding, Ostrom’s Institutional Analysis and Development (IAD) Framework (figure 3) is a close proxy.

Figure 3: Ostrom's Institutional Analysis and Development Framework



Source: Ostrom (2009: 829) as cited in Drew & Kriz (2012: 71).

Ostrom's IAD framework demonstrates how the institutional environment affects the firm in its business operations to result into outcomes. The IAD framework is a multilayer conceptual map of institutions helping in organizing measures for organizations in their efforts to devise workable solutions. In this framework, there are essentially three key aspects with the focal point being the "action arena" which interacts with and is shaped by "exogenous variables" to result into "outcomes" as the third aspect. These three major aspects have sub-components within them as figure 3 illustrates (Ostrom, 2005: 13, 14, 29).

In figure 3, institutions mainly as exogenous variables have three components: biophysical/material conditions; attributes of the community; and rules. In Ostrom's view, material conditions referred to the features of the biophysical or material world within which it is possible to engage the rules for action to occur and in turn result into goods and services being produced. Beside material conditions are the attributes of the community which the stakeholders possess in their daily interaction. The attributes simultaneously influence the structure of those interactions and the resultant actions in the action arenas. These attributes could include the values of generally accepted behaviour in society, and can be formal or informal (Drew & Kriz, 2012: 67, 71; Ostrom, 2005: 22-27).

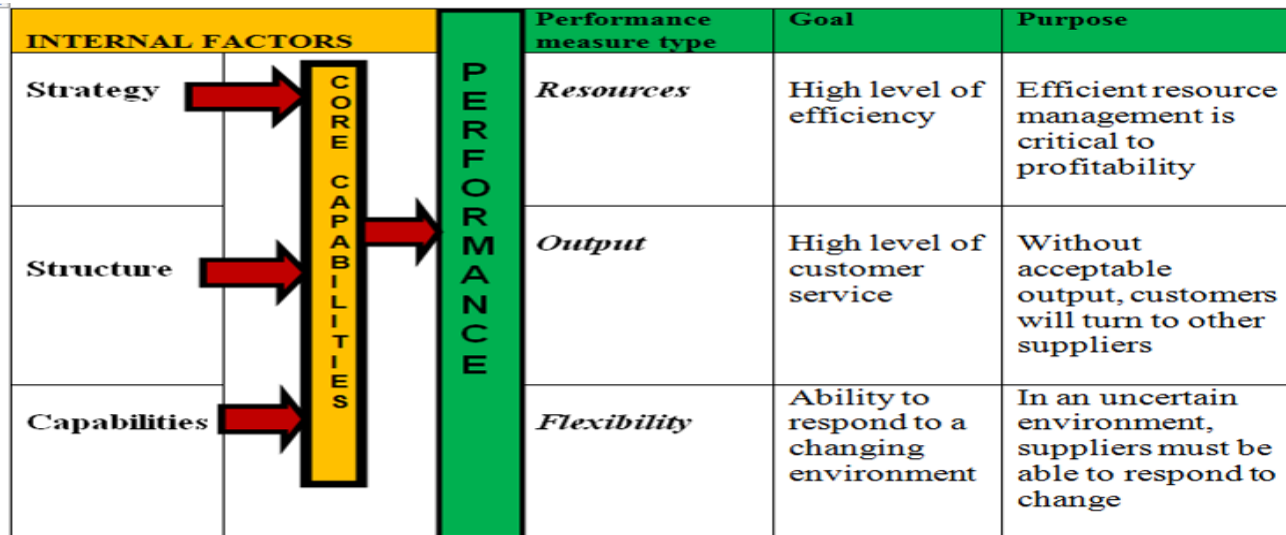
The third category of exogenous variables "rules in use", in Ostrom's view, entails many things basically summarized into four main aspects: regulations, precepts, instructions, and principles. In this thesis I dwell on Ostrom's understanding of rules in use as regulations because they are more applicable to the subject matter. Further, given the complexity of applying material conditions and attributes of the community to the analysis in this thesis, only the rules in use category is adopted as in figure 5. Overall, as regulations, the rules in use denote "something laid down by an authority" (Ostrom, 2005: 16) as a requirement to be upheld by an individual, group of individuals or in this thesis a supplier firm or an MNC. Therefore, the government is like an umbrella covering rules in use by the mines, bank financial institutions and local firms. Similarly, the mines and banks as institutions also set rules in use to be complied by the local firms in their quest to supply to the mines or seek credit from the banks respectively.

In this thesis I have related Ostrom’s conceptualization to how government, mines and bank financial institutions in Zambia influence (or would influence) the success or failure of the local value-adding firms supplying to the mines. This usage is however cognizant of the weaknesses inherent in Ostrom’s IAD framework. It is criticized for its lack of an ontological basis to explain the sources of the initial conditions characterizing the three components of exogenous factors in the framework, and why such conditions are never constant across different scenarios (Drew & Kriz, 2012: 72). Given that this conceptualization is applicable to factors external to the firm, the next section addresses the firm’s internal factors determining its success or failure.

5.3 Theory of the firm and model of analysis

To make the firm as the major unit of analysis, the theory of the firm enables us to assess the local value-adding supplier firms’ performance in Zambia’s mining sector. The firm has a number of internal factors that constitute its performance. Paramount are the firm’s strategy, structure and core capabilities (Chandler, 1992: 491) as illustrated in figure 4.

Figure 4: Model of Analysis for Factors Internal to the Firm



Source: Adopted from Beamon (1999: 282) and modified based on Chandler (1992); Nelson (1991).

According to Nelson (1991), the three aspects - strategy, structure and capabilities/core capabilities - are distinct but interrelated whereby the strategy and structure of the firm ultimately determine its core capabilities. By strategy what Nelson meant is “a set of broad commitments made by the firm that define and rationalize its objectives and how it intends to pursue them” (Chandler, 1992: 491). A strategy broadly defines the desired firm without much detail. As for the structure, it “involves

how a firm is organized and governed, and how decisions actually are made and carried out, and thus largely determines what it actually does, given the broad strategy” (Nelson, 1991:67). Clearly defining core capabilities (even if strategies and structures are part) is not easy. What Nelson (1991) seems to explain is that capabilities are generally the firm’s abilities to innovate and take economic advantage of its innovation to remain repetitively innovative in a competitively dynamic environment.

When all these factors combine in the firm’s core capabilities, they then determine its performance which is assessed through three broad variables: resources; output; and flexibility (Beamon, 1999: 282). In Beamon’s (1999) view, these variables are such that the firm could strive to be efficient in managing its financial and human resources to ensure profitability. It may also endeavour to satisfy customers’ needs through the provision of high quality products or services. This goodwill coupled with the entrepreneurial and managerial skills of the entrepreneur, as well as the skills among the employees would then constitute the flexibility with which the firm responds to a challenging and changing environment shaped by institutional change.

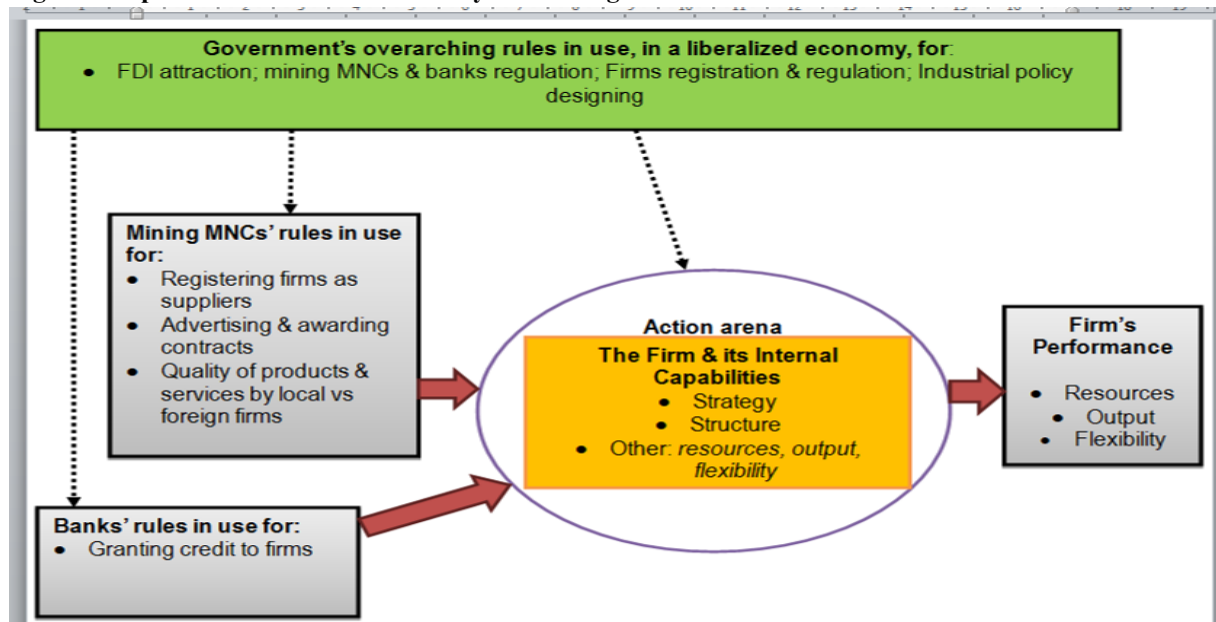
In this thesis, performance was understood and assessed through three broad variables: resources; output; and flexibility. These three aspects arise from a combination of the firms’ core capabilities as already explained. Therefore, the resources meant human and financial resources as well as the plant, equipment and machinery available in the firms. Resources were operationalized by considering the annual turnover the firms made and the number and skills of employees. Output simply meant the goods and services the firms produce and supply to the mining MNCs. Flexibility concerns the ability with which the firms appropriately adjust and respond to a changing business environment (Beamon, 1999: 282). Therefore, flexibility basically meant the firms’ success factors.

The challenge of these aspects in the model of analysis is that they were mainly assessed qualitatively whereas the larger part of the model is more suitable for quantification. Despite this challenge, assessing the performance of local value-adding firms supplying to the mines in Zambia through such aspects still gives a trustworthy picture. It enables viewing the firm as an actor in the action arena where the exogenous institutional factors arising from government, mining MNCs, and banks have a stronger bearing on its performance as in Ostrom’s model.

5.4 Institutions versus the firm combined model of analysis

Given that the two models presented and discussed above are broad and have several aspects that cannot be adequately discussed in this thesis due to lack of space, some external and internal aspects of the firm were merged into a single model of analysis (figure 5). The conceptualization of the components therein remains the same as in figures 3 and 4. The emphasis is on the currently higher influence of mining MNCs and banks on local value-adding suppliers unlike the influence from government.

Figure 5: Operationalized Model of Analysis for Exogenous and Internal Factors



Source: Author's own based on Beamon (1999), Chandler (1992), Nelson (1991), and Ostrom (2005)

6 RESULTS AND ANALYSIS

This section presents and analyzes the results. The firm is the unit of analysis thus commencing with its internal capabilities. As for institutional/exogenous factors, their potentially and/or actually decisive impact on firms' performance in a liberalized business environment as literature and empirical evidence reveals are later discussed to consolidate the analysis.

6.1 Firms' Internal Capabilities

6.1.1 Descriptive Features and Background

The 15 local firms investigated had contrasting and similar features depicting their capabilities. They record varying levels of success and perform differently whilst facing similar challenges in

supplying to the mines relative to their financial, human and other resources. Table 1 summarizes some of their numerable attributes. Overall, the varied features make the firms, to some extent, fall within Zambia’s definition of Micro, Small and Medium Enterprises (MSMEs) which categorizes firms based on total fixed investments, sales turnover, number of employees, and legal status (GRZ, 2008).

The challenge in strictly relating MSMEs’ definition to the reality among the investigated firms however necessitated convenient creation of alternative categories of the firms’ features as in table 1 to uphold confidentiality and anonymity of each firm. The mismatch between the definition and the firms’ reality partly arises from the categorization of medium enterprises (the largest among MSMEs) as those having a turnover from ZMK300 million to ZMK800 million; and employing between 51 and 100 people (GRZ, 2008: 14). Therefore, only two firms by turnover fell in the medium enterprise category whereas very few qualified in that category by virtue of their smaller number of employees.

Table 1: Descriptive features of Local Firms

Feature	Description	Count
Year firm was established/acquired	Before 1991	1
	1991 - 2001	5
	2002 - 2012	9
Type of firm ownership	Individual Proprietor	10
	Joint partnership ³	2
	Family	3
Main line of business	Manufacturing/fabrication	3
	Construction/civil/mechanical engineering	8
	Electrical services/ICT	2
	Trading	2
Number of employees – permanent	1-19	6
	20-99	6
	100+	3
Number of employees – aggregate (permanent + temporal/part-time)	1-19	1
	20-99	9
	100+	5
Turnover per annum	Less than ZMK 1 billion ⁴	2
	ZMK 1 – ZMK 5 billion	5
	ZMK 6 – ZMK 10 billion	1

³ This is used to denote firms with shared ownership between two or more people who are not related/family members. It includes firms where e.g. a foreign national jointly owns the firm with an indigenous Zambian; or where 2 or more Zambians own the business

⁴ At the time of fieldwork, the exchange rate between US Dollar and Zambian Kwacha was USD 1 = about ZMK5, 000. Thus, ZMK 1 billion = about USD 200, 000. At the time of thesis writing however, Zambia’s currency had already been rebased by knocking out three zeros whereby instead of having ZMK5,000 it will now be USD1 = ZMW5

Above ZMK 10 billion	4
Note: n = 15 but does not always equal to that number in the count given missing data	

Source: Author's own; based on Field Data (2013a)

Before discussing the firms' capabilities, it is vital to comment on when they were established to relate them to the liberalization-induced institutional changes shaping the environment within which they operate thus contextualize their performance. All the 15 firms, except one, were established in the post-1991 large-scale liberalization. This unique case successfully manufactured and supplied value-added products and services to the mines both before and during the early years of liberalization. It was established before Zambia's independence in 1953 by some white owners who operated it before an indigenous Zambian, who is currently the owner and owns other big companies, became a major shareholder in 1965. The firm now hardly manufactures anything but largely supplies civil and mechanical engineering services to the mines (Field Data, 2013a). Though a unique case, it provides some insights into how liberalization impacted similar firms' performance as analyzed by respondents. For example, another respondent revealed that his firm currently operates at about 15% utilization capacity with most equipment used in the manufacturing process just packed and gathering dust.

Although liberalization drastically reduced some firms' performance and eventually closures, other firms such as the two other categories which were established during the 1991-2001 and 2002-2012 periods emerged. Five of them were established during the first 10 years of liberalization. It should however be noted here, as earlier, that though the liberalization process started in 1991 with the election of Chiluba as Republican President, the actual privatization of mines commenced in the late 1990s (Lungu, 2008: 407). Most firms were established during the 2002-2012 period. In 2002 government commenced national development initiatives meant to address the impact of liberalization on the economy (GRZ, 2006). This could be an explanation for the firms' performance from 2002 even if the 2008/9 global economic crisis obviously had its own impact. Other capabilities which have constrained or enhanced their performance are observable through their resources, output and the flexibility in responding to changing market environment.

6.1.2 Resources

Based on fieldwork and literature, both quantity and quality matter in explaining why the performance of the firms in Zambia is constrained. Quantity for instance matters regarding

resources – turnover and capital; and number of employees. Quality matters for example concerning education levels and skills among entrepreneurs and their employees; and the quality of goods and services produced and supplied to the mines.

Turnover: theory of the firm contends that the financial, human, technological and other resources a firm has and how it utilizes them is an important determinant for performance (Man & Chan, 2002:129). Particularly, financial and human resources are vital to the firms. Their annual turnover fluctuates depending on the intensity and number of contracts secured and executed per financial year. Most firms' annual turnover fluctuates between ZMK1 billion and ZMK5 billion - implying most firms are small. There was a unique case which in recent years has had turnover fluctuate within the smaller firms' category but exponentially rose to ZMK60 billion in 2012. It has to be underscored that no other firm which disclosed its turnover currently earns such high. Based on available statistics therefore, only three firms have recently been having a turnover ranging from ZMK20 billion to ZMK25 billion making a total of four firms with a turnover of at least ZMK10 billion. The unique firm's financial success in 2012 was attributed to its taking over major contracts for another firm which closed down. Much of the finances the firm earned were spent on building its capacity by hiring more qualified and skilled workers; and purchasing some core equipment it never had before (Field Data, 2013a).

Though some firms record higher turnover, all argued that their current turnover is insufficient to favourably compete and secure contracts like their foreign counterparts. The local firms' actual or sometimes perceived lack of financial capacity is what Hanlin (2011) stresses as one major factor making mining companies prefer foreign suppliers. Moreover, he maintains, the mines' tendency of appointing foreign companies is motivated by the reputation of such companies to deliver capital-intensive projects. The mines fear the financial risk among local firms who if contracted may fail to perform thus jeopardize the mine's progress. A government official also stressed these concerns:

The mines may require suppliers with capacity to supply and maintain equipment. But you find that many local suppliers may not have that capacity considering that supplies to the mines are in huge volumes. Suppliers are also expected to secure letters of credit to supply very expensive and specialized equipment sometimes in volumes. But still you find that local suppliers do not have that capacity (Field Data, 2013c).

Local entrepreneurs and their firms constantly find themselves struggling to sustain their success. The prevailing situation however relates to Casson's (2005) argument that the firms are in constant lack of financial capital because they spend all their available funds. If they reinvested part of their profits to build their capacity it would increase their chances of being contracted by the mines.

Number of employees: the World Bank classifies firms, in the enterprise survey, as small, medium or big if they have 1-19 employees, 20–99 employees, and 100 plus employees respectively (World Bank, 2008). This applied to Zambia's local firms supplying to mines places most of them in the small firms' category with less than 20 full-time employees. Some firms hardly have 10 such employees. Five firms which are in the medium firms' category barely had 50 full-time employees. Only three firms are evidently big with over 100 full-time employees. Most firms however do hire extra labour up to a few hundreds each year depending on the nature and magnitude of projects executed for their clients. Hiring extra labour is commonest among smaller firms where they do not constantly have big projects requiring the maintenance of permanently employed staff as noted by one respondent that "we don't employ many people on a permanent basis because our jobs are task-oriented. For example, if your contractor gives you a task to paint this house, when you finish painting then you release the workers because you hired them for a temporal job" (Field Data, 2013a).

Local supplier firms generally fail to benefit from the mining MNCs' presence because they are resource constrained (Di Guardo & Valentini, 2005: 56). Their lower numbers of full-time employees, even before discussing skills and qualifications among all employees, evidently depict their human resource constraint unlike foreign firms. Most respondents noted this as one major factor constraining the firms' performance:

It is very difficult for *Zambian suppliers* to break into highly technical supplies to the mines. For instance, international suppliers such as Atlas Corpco when they supply equipment, they also supply experts stationed at the mines to provide specialized services related to their equipment. They provide necessary advice to mines (Field Data, 2013c).

As a separate contract from that of supplying all drilling consumables for instance, Sandvik has over 60 permanent employees stationed at Lumwana mine just to execute an extensive maintenance and repair contract (E & MJ, 2011: 59). Sandvik's number of employees on a single project is higher

than what most local firms in figure 2 have. Local firms cannot just employ more people to compete against foreign firms amidst their weak financial capacity. It is known that the resource base expands “only when a firm is mature, and cash flow is strong” (Casson, 2005: 337).

Considering the number of years most firms have existed, they could be called ‘mature’ except their cash flow reality is different. A comparison between annual turnover and number of employees in each firm shows mixed and interesting findings. Generally, the firms can be grouped into two: labour intensive; and non-labour intensive. For example, a firm which supplies ICT services and is among the more successful firms per turnover does not hire extra labour. Besides, its number of permanent employees is almost the same as that for a construction firm which has a comparable turnover but is more labour intensive thus inevitably employs more than 100 temporal workers. The ICT services providing firm also has a turnover double that of another construction company which is more labour intensive and has the highest number of permanent employees as it operates on a ‘no part-time employment’ stance except for highly specialized contracts where the expertise is internally unavailable.

Based on available statistics, a construction engineering company having the highest turnover has an overall less number of employees than another construction company having half its turnover. Among the lower turnover firms category, variations were also observable. Some who earned a little higher than others had fewer permanent employees. Fewer firms whose turnover was relatively higher equally had relatively higher full-time staff numbers. All of them however hired extra labour to execute their labour intensive supplies (Field Data, 2013a).

The above shows difficulties local firms have in managing their financial and human resources to perform better. Though their annual expenses on employees’ salaries were not investigated, it seems obvious that some firms have their financial resources spent more on one factor of production (labour/human resources) than building other capabilities such as technological improvements through investing in equipment and machinery. The opposite was also observed through the firm whose turnover exponentially grew from about ZMK5 to ZMK60 billion. This firm spent more money on purchasing equipment to build its initially weak capacity. It hired more short-term employees which are considered cheaper. In both cases however, the firms’ contribution to the

economy through payment of taxes and job creation is evident. The constraint here though is that the entrepreneurs and the firms' management (where they exist) may not be striking the right balance to ensure profitability and higher perform. Particularly for the entrepreneur, the theory of the firm contends that his/her characteristics besides the skills and technical know-how they possess tend to be the most cited factors greatly influencing the firm's performance (Man & Chan, 2002:125).

Employees' skills and Entrepreneur's Capabilities: the extent to which workers are educated and skilled is argued to significantly improve the firms' performance. Moreover, firms having better educated proprietors and managers perform higher (Clarke, 2012:5). In this regard, most firms have their full-time employees possessing a varied combination of technical skills, qualifications and experience in engineering-related fields. It is principally required among firms which supply different engineering-related products and services to the mines to prove their registration with regulatory authorities such as NCC and EIZ. This ascertains their having technically qualified staff or at least some shareholders and/or proprietors for technical understanding of the supplies made. The numbers of technically qualified employees besides the equipment firms have also determine their classification and the nature of contracts they can handle for clients (Uriyo et al, 2004:6).

Most firms have a number of their staff possessing bachelor's degrees in engineering and trades certificates in fields such as metal fabrication and bricklaying. Some of the proprietors who serve as CEOs or Directors for their firms have qualifications as high as Master of Science in engineering-related fields obtained from reputable Western Universities. Others have tertiary education at different levels relevant to value-adding supplies. In fewer cases, the proprietors have tertiary education in other fields such as accounts. For instance, one of the co-founders and co-directors of a family-owned construction company is a qualified accountant whereas his siblings are a civil engineer and quantity surveyor respectively. Another construction firm is also owned and successfully directed by an accountant. Almost all proprietors have had careers either in the mines or related sectors where they worked for some years before establishing their own businesses. Some served in managerial positions whereas others served in technical positions actively and practically involved in activities on site. Some of their employees also have similar backgrounds.

Despite the entrepreneurs' level of education and management experience besides their number of skilled and qualified employees characterizing what should be most firms' strong capabilities, the firms' performance remains constrained against what the theory of the firm postulates. It could be that constraints emanate from the mismatch between firms' capabilities and prevailing market characteristics. Some scholars have expressed it as: "globalization is creating both opportunities and challenges for innovative enterprises, forcing companies to make dramatic improvements not only to compete and prosper but merely to survive" (Waggoner et al, 1999:53). In this view, most local value-adding firms could be merely surviving for many years due to the performance-constraining external environment.

6.1.3 Output

The two main categories –manufacturing and construction- of the interviewed firms suggest their output is either goods or services. Those into manufacturing supply assorted fabricated products. Others are more into supplying civil engineering services such as some concrete works on mines' sites. Most firms from either category sometimes do activities done by others. For instance, some civil engineering companies revealed that when contracted to construct some infrastructure requiring some metal work, they simply buy raw materials and fabricate the required products from their workshops.

This, in their view, is a cost-cutting measure. What it suggests however, are constraints to performance arising from lack of high levels of specialization among firms. Moreover, it points out their inability to subcontract some works to others who can easily deliver hence support each other in building their capacities. This lack of collaboration to maximize each other's endowments and competitive advantage to serve as a source of improved performance extends to competition the firms exert on each other when tendering to supply their output. A government official for example expressed these concerns that:

The other problem that exists among our local suppliers is that they don't tender as a group to maximize each other's advantages and strengths so as to minimize even the collateral issues. They instead tender individually and increase competition against each other, in the end a stronger foreign bidder comes and wins the bid since the local suppliers are already fragmented (Field Data, 2013c).

Though goods, unlike services, as output are quantifiable to measure the firms' performance, quantification was not viable in this qualitative research-based thesis. Qualitative indicators of performance such as product quality and customer service and satisfaction were instead observed (Waggoner et al, 1999:54). According to Beamon (1999), firms strive for output with higher levels of customer service to ensure retention of customers. This, as an aspiration, is also true for the local value-adding firms in Zambia except the mining MNCs tend to bypass their products preferring foreign procurement. One of them observed that:

Things have changed! The mines are outsourcing from abroad bringing in things which can be [cheaply and efficiently] produced here in Zambia. It is even laughable sometimes when you see tanks being transported on big haulage trucks from South Africa. We can make those tanks. We have made a lot of them for Kansanshi and Mopani mines. You wonder why people [the mines] buy those things from South Africa - it doesn't make sense! (Field Data, 2013a).

Figure 6: Example of Basic Fabrication Products



Source: Author's

According to Hanlin (2011), the mining companies are to blame mainly for their lack of contact with local suppliers some of which produce high quality products. He observes that:

Even when a procurement function is located on the operational mine site the procurement officers [who are often foreign experts] may have little interaction with the local economy preferring to use corporate procurement structures and bypassing local potential. This tends to occur due to the insular and geographically remote nature of many mine sites. Lack of exposure to the local environment tends to lead to lack of appreciation of what can be feasibly procured from local suppliers (Hanlin, 2011: 9).

Hanlin's (2011) view interestingly supports local suppliers' concerns although it fails to acknowledge that many local value-adding suppliers are registered in the mines' databases and both parties have electronic (and sometimes physical) access to each other despite their geographical location. Moreover, local suppliers do bid to supply whenever tenders are floated. Some local manufacturers have a track-record of supplying quality products but for some reasons the mines would abruptly stop procuring locally. It is obvious that during the 2007/08 global economic crisis most mines cut-down some procurement as a cost-saving measure. Conversely, the situation currently is such that internal capabilities among local firms to produce quality output are not an automatic guarantee for their being preferred by the mines. It is evident that "supplying to mines is just like any other business around the world where people need to compete and be able to supply quality products and services. So the mines go for whatever is in their best interest [and not local suppliers' interest]" (Field Data, 2013c).

6.1.4 Flexibility

The firm's "ability to respond to a changing environment" (Beamon, 1999: 281) determines its staying in business. Such flexibility is part of its sources of improved performance in supplying to the mines thereby having backward linkages. It is difficult for local value-adding firms to navigate through the currently challenging market due to, among other reasons, how to lower production costs where competitors who simply trade would cheaply purchase similar sometimes inferior products from abroad as noted by a respondent:

For companies like ours, its challenging since there has been the mushrooming of these-not companies per se but- suppliers/traders that have flooded this business such that they will quote similar products like ours but they will go and get *gong'a* [fake] ones from a cheaper source abroad (Field Data, 2013b).

To have the flexibility to respond to customers' demands and competitors, local value-adding firms require an optimal presence of heavy-duty or industrial machinery both at their plants and on site where their clients' tasks are executed. This also makes such business capital intensive. The more manufacturing and fabrication works-inclined firms have workshops/plants at their premises equipped with some necessary machinery but the visibility of such machinery is relative to the financial size of each firm. Based on observations and acknowledgement from most respondents, only one firm has an outstanding and more admirable fabrication and manufacturing reputation among them. The more construction-oriented big firms also have necessary machinery and haulage

trucks – some visibly displayed on their websites also. For some smaller firms which did not clearly display value-adding endowments, the tendency was that they (using their own employees) occasionally rented other firms’ workshops to fabricate some required supplies (Field Data, 2013d).

Figure 7: Example of Firms' Plant/Workshop



Source: Author's

6.2 Firms' Strategies and Structures

The highly competitive external environment to which the entrepreneur and his firm are exposed demands them to devise efficient and sophisticated internal institutions to ensure the firm survives, performs and grows (Ostrom, 1990: 40-41). Firms exist to take advantage of the opportunities created by institutions because there is a symbiotic nature of interaction between institutions and firms whereby the later evolve due to incentive mechanisms provided by the former. Where there is a feedback mechanism, it enables the entrepreneurs or the firms to respond to the opportunities the institutions avail (North, 1990: 7).

Even if some firms have been squeezed-out of the market, many firms have emerged to take advantage of the opportunities liberalization has unlocked in the mining sector. Overall, the impact of institutional change associated to the 1991 initiated liberalization of Zambia's economy has been the existence or emergence of three types of firms. The first typology is those which were smaller at

the time of liberalization or those which just emerged. Their performance and growth has significantly improved over the years. The second category has those firms whose performance has been improving but experiencing slower or fluctuating growth. The last type depicts firms which were vibrantly existent at the time of liberalization but have somewhat constantly experienced a performance downward spiral as table 2 details.

Table 2: Types of value-adding firms created by liberalized mining environment

Main feature of the firm	Performance spiral	Dominant strategy	Outcome
<i>Once small or currently emergent firms</i>	Upward	High diversification away from the mines	High growth in mining & non-mining market share
<i>Average firms</i>	Fluctuating	Low diversification away from the mines	Slow growth in mining market share
<i>Once vibrant firms</i>	Downward	Heavy dependence on the mines	Firm closures

Source: Author's, based on fieldwork

For the manufacturing or metal fabrication-based firms, there exist fewer possibilities of diversifying their market share away from the mining sector. This is largely because the non-mining sector where fabrication products, such as door and window frames, are required such products are easily produced by many informal sector entrepreneurs who for example in 2008 accounted for about 90% of the increased MSMEs sector activities since liberalization (GRZ, 2008: 9). Therefore, where efforts to increase market share for their products in the mining sector fail, manufacturing oriented firms inevitably reduce their production capacity or consequently shutdown. As for construction-based firms, their ability to supply to the mines tends to increase their competitiveness to secure tenders to supply similar services in other sectors (such as schools and clinics construction) which usually have less-stringent requirements and are less capital intensive. This has therefore made most such firms to significantly diversify away from supplies to mines. Interviews revealed that this diversification trend intensified during the 2008/2009 global economic crisis thus enabled firms to bridge turnover gaps emergent from reduced contracts with the mines. The only challenge such firms experienced was the prolonged delay in being paid especially if the executed projects were government funded. Generally, after the global economic crisis such firms had comparatively better financial capabilities to successfully bid for tenders in the mining sector hence their currently upward performance trajectory.

Since institutions and institutional change can either be performance enhancing or impeding to the firm, the firm needs to have strategies and structures to maximize the enhancing qualities whilst optimizing constraints. Internal capabilities constitute the firm’s decision making processes for profit maximization and are crucially significant as they define the “internal organization of the firm and the accompanying structure” (Gaynor, 1989: 59). The strategies, structures and other capabilities serving as the investigated firms’ performance enhancing sources are summarized in table 3.

Table 3: Firms' Strategies and Structures as Sources of Performance

	Manufacturing/metal fabrication based	Construction engineering/other services based
Sources of improved firms' performance	<i>Strategy</i> <ul style="list-style-type: none"> - Increased and improved quality of production - Diversification and Increased mining market share 	<i>Strategy</i> <ul style="list-style-type: none"> - Increased and efficient service provision - Diversification and Increased non-mining market share
	<i>Structure</i> <ul style="list-style-type: none"> - Existent or near existent management structure - Entrepreneur’s administrative/managerial or technical background - Permanent presence of qualified/trained personnel 	<i>Structure</i> <ul style="list-style-type: none"> - Existent or near existent management structure - Entrepreneur’s administrative/managerial or technical background - Permanent presence of qualified/trained personnel
	<i>Other capabilities</i> <ul style="list-style-type: none"> - Improving turnover and re-investments - Visible presence of plant and equipment - Potential to secure credit from banks - Existent marketing departments/staff - Ability to supervise workers at plant & on site - Ability to provide after-sale services - Joint bidding and project execution ability - Goodwill development 	<i>Other capabilities</i> <ul style="list-style-type: none"> - Improving turnover and re-investments - Visible presence of equipment - Potential to secure credit from banks - Existent marketing departments/staff - Ability to supervise workers on site - Ability to provide after-sale services - Joint bidding and project execution ability - Goodwill development

Source: Author’s own, based on fieldwork

Although some firms have strategies and structures shaping their internal capabilities, others do not have. Therefore, the reverse of the performance enhancers characterizing the firms are shown in table 4.

Table 4: Firms' Strategies and Structures as Constraints to Performance

	Manufacturing/metal fabrication based	Construction engineering/other services based
Constraints to improved firms' performance	<p><i>Unclear Strategy for:</i></p> <ul style="list-style-type: none"> - Increased and improved quality of production - Diversification and Increased mining market share <p><i>Structure</i></p> <ul style="list-style-type: none"> - Non-Existent management structure or nearly “a one man’s show” assisted by few individuals to prepare bids - Lack of Entrepreneur’s administrative/managerial or technical background - Reliance on temporarily recruited qualified/trained personnel <p><i>Lack of other capabilities</i></p> <ul style="list-style-type: none"> - Constantly low turnover and low re-investments - No substantial plant and equipment - Secure credit from informal sources 	<p><i>Unclear Strategy for:</i></p> <ul style="list-style-type: none"> - Increased and efficient service provision - Diversification and Increased non-mining market share <p><i>Structure</i></p> <ul style="list-style-type: none"> - Non-Existent management structure or nearly “a one man’s show” assisted by few individuals to prepare bids - Lack of Entrepreneur’s administrative/managerial or technical background - Reliance on temporarily recruited qualified/trained personnel - Over employment of part-time workers <p><i>Lack of other capabilities</i></p> <ul style="list-style-type: none"> - Constantly low turnover and low re-investments - No/fewer necessary equipment - No ability to secure credit from banks

Source: Author’s own, based on fieldwork

6.3 Firms’ Exogenous Environment and Institutional Change

Indisputably, Zambia’s 1991 economic liberalization is a landmark institutional change that has had diverse effects on local supplier firms and their corporate relationships with mining MNCs and banks as a source of credit. Similarly, strong consensus exists among respondents that government’s liberalization decision consequently allowing FDI flows has over the years enabled many mining MNCs to invest in the country thereby increasingly expands the market available to local suppliers. One respondent affirmed that “I can say government did well because in the past we never had so many mines. We didn’t have Kansanshi or Lumwana mines – they just came up. At least government on that note has worked, and we can say it has helped create jobs and grow the market for us to supply”. Another one added that “before privatization there were fewer jobs and contractors. I think everyone just depended on working for the mines - being in formal employment; but after privatization everything opened up and not just looking at the mines” (Field Data, 2013a).

Whereas tangible benefits from liberalization are evident, the equally substantial negative impact on the manufacturing sector shows external factors constraining the firms' performance and their contribution to industrial linkages. A view held by most respondents was well expressed by one of them that:

The manufacturing industry in Zambia, specifically on the Copperbelt, has been declining for over 20 years now since the economy was liberalized. When I joined this company, the whole of this street, on both sides, had a lot of companies manufacturing at full capacity. Most companies have since closed down; and for the few remaining ones I don't know at what production capacity they are operating. For us here we are almost at 50% production capacity and we have now moved from making things into this trading thing largely...The manufacturing sector here in Zambia has collapsed so there are very few companies which manufacture things here [on the Copperbelt]. Those manufacturing in Lusaka it's biscuits and plastic things they produce but not engineering products (Field Data, 2013b).

What this implies according to institutional change theory is that the external environment exerts thrust on firms from two dimensions. On one hand, the external environment could pose technical, economic and physical demands on the firm; and on the other hand be responsible for social, cultural, political and legal pressures. Pressures from the first dimension compel firms to effectively and efficiently produce and sell their products and services or simply closedown if they cannot compete. The second dimension shapes the firm's public face as a legal entity adhering to rules (Hatch & Cunliffe, 2006: 86).

This applied to my thesis places the mining MNCs and banks in the first category actively and constantly exerting pressure on local value-adding firms whereas government's role, in the second dimension, is passive in the background. When the two dimensions combine (even if the mining companies are more dominant), they set the rules of the game governing how the firms play. This means even if every individual firm has internal capabilities different from those of others, the existent structural aspects significantly and ultimately influence their general behavior (Morris et al, 2012: 411). This is where mining companies, banks and government come in as factors external to firms.

6.3.1 Mining MNCs

The most significant rules of the game are those determining the relationship between the local value-adding firms and the mining MNCs. It is obvious that how the firms secure contracts to supply to mining companies amidst high competition from both local and foreign firms has greatly changed since Zambia's liberalization in 1991. Interviews revealed mining MNCs' unchallenged dominance in shaping rules and standards governing suppliers. Local procurement which externally determines local firms' performance is absolutely dictated by the mining MNCs. This disadvantages local-value adding suppliers and in the long run national industrial development. To decisively demonstrate this influence, a firm interviewed photocopied for me a letter recently received from one of the big mining MNC directing suppliers to reduce prices for their products without questioning.

Figure 8: Extract from a Letter by an anonymized Mining MNC in Zambia

To that end, we have assigned a 10% reduction in costs across the board. All contractors are hereby required to reduce by 10% their overall billing to [REDACTED] without decreasing the quality and quantity of services or goods implied in their contracts. We believe that there are several efficiency opportunities for your entity to employ to achieve the said reduction.

Through this communication, we are therefore requesting all Suppliers and Contractors to review their current contracts and/or Orders with [REDACTED] and inform us of the reworking of your prices and costs to the reduced prices so that we can amend our contracts/records/orders accordingly.

If we have not heard from you by November 30th, we'll have to amend the prices in our system accordingly. We should also inform you that we shall not be entertaining any price and cost increases discussions in the foreseeable future, especially with regards to 2013 business as we need to improve our financial situation to ensure sustainability.

Thanking you for your understanding in these challenging times, we look forward to a continued and favorable partnership.

Source: Field Data (2013a)

Through government's efforts, especially from 2002, to improve the investment climate for mining MNCs, the years before the global financial crisis were "revolutionary in terms of increasing investment, exploration concessions and improving infrastructure development" (E&MJ, 2007: 62). With such investments which resumed after the global economic crisis, Zambia has had many opportunities to experience diverse and substantial spillover effects through local suppliers dealing with the mines. Most respondents observed that the reality on the ground contrasts general expectations as reflected in comments such as these:

And then on the new big mines that are coming up such as Lumwana and Kansanshi: when they were starting [mine development phase] we thought as an eligible panel manufacturer and supplier here in Zambia we would have an opportunity to supply. We never really got much in terms of supplying electrical switchboards because they came in with complete things - the machinery and the boards [were all imported thus cutting us off] (Field Data, 2013c).

If you asked the mines: how are you contributing to the economy and working with local contractors and companies? They will tell you 80% of their business is with local supply or local purchases. Yet on the ground you don't see that filtering down to the locals. If a mine in a year spends, for argument sake, USD 4 billion as part of its expenditure on the operations of the mine and then we calculate 80% of that money as being spent to source local suppliers and whatever goods and services that are supplied by local suppliers, you would have seen the economy change. But then why is it not changing? The question that comes in then is who is a local supplier? You will discover that a local supplier is actually a multinational company such as Sandvic or Atlas Corpc which has offices locally within Zambia (Field Data, 2013a).

All these views illustrate how difficult it is for local value-adding firms, despite their internal capabilities, to improve their performance. Their capabilities may indeed be weaker than those of most foreign firms but their potential is huge and has been well demonstrated in the contracts they have executed over the years. If harnessed, their potential can contribute to both harvesting benefits from mining MNCs and industrial development. Their sources of improved performance lie in their human and financial resources, output and the strategies they employ to navigate through the challenging market mining MNCs provide; and how well they structure resources at their disposal to realize their corporate objectives. For most firms, access to credit would help build their capital base and strengthen their capacity to successfully compete when mining companies avail opportunities.

6.3.2 Sources of Credit

Even if financial capital is a crucially significant need among local value-adding firms, where to source credit is a major challenge constraining their performance. Currently, all firms interviewed need financing but do not have access to 'formal' credit. Firms hold accounts with some banks simply as a means through which they transact with mines and other suppliers but do not hope to secure credit through such banks. The procedure - labourious collateral requirements, high interest rates and the time lag between application submission and its approval - significantly constrains firms' efforts to borrow from banks. Consequently, there is a tendency to rely on informal means of credit from individuals:

So, what we normally do is we go to individuals: maybe there is a retiree who just got his pension money, you negotiate with him; he will give you favourable conditions. But it is not favourable because you are getting money maybe at 20% interest per 2 or 3 months [payback period]. So, you find that the profit you were expecting to get from the contract [executed for the mines] is taken-up by the interest from the borrowed money; of which if we were getting money from banks at lower rates that would help us a lot. But we don't have access to bank loans (Field Data, 2013a).

The money that some firms borrow through informal means does not sustainably consolidate their capability to secure and execute huge contracts with the mining MNCs. Government officials interviewed agree on the significance of firms' huge financial outlay, and one of them expressed it that: "the other challenge is we don't have banks which are willing to lend more and huge sums of money to our local suppliers so they can have capacity to supply to mines on huge projects" (Field Data, 2013c). Government however has agencies such as Development Bank of Zambia (DBZ); and especially Citizens Economic Empowerment Commission (CEEC) which was established in 2006 to finance viable initiatives such as those by local entrepreneurs supplying to mines (CEEC, 2013). It remains unclear how the targeted entrepreneurs have benefited from CEEC.

6.3.3 Where is government in all this?

Seeing the reality through the eyes of the researched and seeking some kind of truth, as per the positivist methodological orientation employed in my research, the following three quotes clearly express most respondents' views on government:

I feel there is some negligence on the part of government – it hasn't done much to protect the local industry. Imagine if so many of us local companies had gotten our hands on all those contracts with the big and upcoming mines, we would have grown, increased our capacity, and put more people in employment! (Field Data, 2012b).

The problem we have is: you go around government institutions in Zambia, including just here in my office [as a government office], the furniture and everything is imported. How then can you support or promote local suppliers in such a scenario when you rely on imports?" (Field Data, 2013c).

The challenge is that we haven't had any [government] policy to send our suppliers to specialized schools so that they can acquire the required skills and qualify to supply to mines. Also we don't have banks which are willing to lend more and huge sums of money to our local suppliers so they can have the capacity to supply to the mines. But individual suppliers overtime are able to organize their own resources to be able to supply to the mines (Field Data, 2013c).

Zambia's 1991 economic liberalization as a neoliberalism anchored undertaking was meant to introduce institutional changes that would make it effective for IMF and World Bank engineered policies encouraging free enterprise. Most importantly, such policies were envisaged to enable MNCs to transfer and invest their capital in developing countries to enhance development processes (Kiely, 2007:169). No doubt that FDI has been transferred to Zambia, but as the respondents' views show, government's role to make FDI work for the economy through local suppliers' industrialization enhancing role has been pushed to the periphery. According to Fessehaie (2012), government has the overall responsibility of developing local value chain in the mining and industrial sectors. However, in a liberalized economy, government is constrained to directly influence the mining companies' procurement of products and services from local suppliers. The firms widely observe the bad side of liberalization being that "government has got little say such that mining companies will do whatever pleases them" (Field Data, 2013a).

Government is also accused of failing to support local firms to favourably compete with foreign suppliers. For example, Chinese firms have an "unfair advantage because they are believed to receive financial support from their government which we as Zambian contractors don't get" (Field Data, 2013a). Subsidies Chinese firms allegedly receive from their government enable them to bid for tenders at lower prices hence out-competing others. Though the few firms in the above ZMK10 billion category (see table 1) have built financial capacity to favourably compete with some foreign firms, most local suppliers contend that recent years have had heightened competition from Chinese firms especially. This stiff competition has partly been attributed to lack of government support to local suppliers even in awarding public contracts. One respondent highlighted the fierce competition Chinese firms posed in public sector contracts especially during President Rupiah Banda's regime which ended in September 2011 and was strongly pro-Chinese: "in the previous regime we faced fierce competition in getting government contracts. There were no controls to promote Zambian contractors as we had to compete with the Chinese" (Field Data, 2013a).

Zambia's public sector contracting builds a good case justifying the mining MNCs' stronger advantageous point in contracting local suppliers. Most local firms that have diversified away from the mining sector into public sector projects could be able to grow their financial capacity required for huge projects in the mines if government supported them in public contracts.

Although mining MNCs are required to provide government with what are called Local Business Development Plans – an outline of how the mining company intends to support the development of local businesses – interviews revealed that such plans are never observed or enforced. The mines, if confronted, would clearly justify why they preferred foreign suppliers to local ones. Government also argues that penalizing the mines may only be feasible if there are clauses in such plans tying them to certain products and services locally available with the required standards and quantities. Furthermore, observing and changing procurement processes in the mining sector is currently not within the confines of government mandate. Government just recognizes the link between the mines and suppliers in general but its priority is on developing the mining processes. The mere recognition of suppliers arises because “local suppliers are registered as a trading activity that is linked to the mining industry. Supplying business is essentially a social corporate responsibility activity linked to the mines” (Field Data, 2013c).

7 WHO THEN IS TO BLAME?

Deducing from evidence unraveled through my research, augmented by literature and theory, local value-adding firms supplying to mines in Zambia are actually more constrained amidst stiff competition from especially foreign suppliers and local non-value adding suppliers. If placed on a continuum, local value-adding firms are at one end as players in Zambia’s liberalized economy whereas the rules of the game of supplying to mining MNCs are on the other end. The players have internal capabilities – resources, output, flexibility, strategies and structures - as their controllable sources of improved performance to favourably compete and succeed. It is common knowledge that everyone faces constraints. A budget constraint is one major reason why local firms’ performance is constrained since they cannot independently execute huge value-adding supplies to mines and out-compete most foreign suppliers whose capital base is stronger. Besides, they hardly collaborate with other local suppliers to collectively bid for tenders to stand a better chance of being procured by the mines.

Often, players are blamed for failing to score. However, the real constraint to be blamed for the firms’ situation does not lie in their weaker internal capabilities but in the rules of the game which are externally engineered and applied by mining MNCs as rules’ architects and referees

simultaneously. Mining companies have absolute power to determine who supplies, what is supplied and the extent to which the supplies are made. Mining conglomerates can unquestionably terminate local suppliers' contracts or decide at what price they can purchase their output making local firms' internal capability more vulnerable.

Whereas government recognizes local value-adding suppliers' role in the country's industrial development process, it does not directly and actively intervene to make mining MNCs locally procure whatever is of the required standard and is produced by local suppliers. This inactivity emanates from institutional changes birthed by the 1991 economic liberalization. Undoubtedly, liberalization unlocked many opportunities for the country particularly through FDI which revitalized the mining sector as the country's backbone. Until 2002, government's nearly absolute non-interventionist approach to the liberalization aftermath meant local suppliers were completely in a phase requiring survival of the fittest strategies. National development planning (and the resultant policies for the manufacturing and mining sectors) re-introduced in 2002 was thought to be a means through which the intense pressure on local value-adding suppliers would be distilled. To date, a sigh of relief for local suppliers seems far-fetched to the blame of government whose overarching role has not delivered on the policies.

Based on both literature review and my investigation, the research question culminated into the underlying argument that: firstly, local value-adding firms supplying to mining MNCs strongly recognize the crucially significant role manufacturing and other value-addition activities play throughout the mining supply chain, and to economic growth in general. Secondly, institutional changes in recent years - all strongly related to economic liberalization - have overall constrained more than they have enabled the said suppliers to easily, consistently and profitably engage in value-adding activities oriented to mining. However, the opportunities availed to them to conduct multiple business activities are indisputably innumerable given the constantly increasing market in the mining sector. Thirdly, most such suppliers currently successful are those, beside other factors, who have diversified away from value-adding supplies for only the mines but to other value-adding activities targeting clients in other sectors of the economy.

For policy implications and recommendations, reversing all or any of the foregoing neither lies in “doing business as usual” where mining MNCs remain more powerful in determining the extent to which local value-adding suppliers participate in the mining supply chain; nor in government fully regulating the relationship between local suppliers and mining companies. What could work is a holistic “change of the rules of the game” where government actively engages all stakeholders and institutionally offers each category appropriate incentives to subsequently strengthen the buying and supplying relationship between mines and local suppliers. Institutional change theory applies here by specifically “changing the rules of the game” governing the relationship between local value-adding suppliers and mining MNCs. In the long run, this would boost backward linkages in the manufacturing and mining sectors to the benefit of the country’s industrial development and its multiplier effects.

There are some products and services which local firms can easily produce and supply to mines. Government could be like a fair referee or at least a coach actively engaging stakeholders to identify those products and services where foreign expertise is largely unnecessary and encourage and incentivize mining MNCs to procure from local suppliers. It could also be helpful for government to provide substantial incentives for local firms who jointly bid and secure major contracts. This would help a number of local firms to develop capacity whilst employing many people thereby contributing to economic growth in diverse and varying ways.

8 REFERENCES

- Arrighi, G (2002), The African Crisis: World Systemic and Regional Aspects. *New Left Review*, 15 (May-June), 5-36.
- Beamon, M. B (1999), "Measuring supply chain performance", *International Journal of Operations & Production Management*, 19 (3), 275 – 292.
- Bastholm, A & Kragelund, P (2009), State-driven Chinese investments in Zambia: combining strategic interests and profits. In, van Dijk (ed), *The New Presence of China in Africa*. Amsterdam University Press: Amsterdam.
- Berg, B. L (1989), *Qualitative Research Methods for Social Sciences*. Allyn & Bacon: Boston.
- Bigsten, A & Söderbom, M (2005), What have we learnt from a decade of Manufacturing Enterprise Surveys in Africa? World Bank Policy Research Working Paper 3, 798.
- Blomström, M & Sjöholm, F (1999), Foreign Direct Investment, Technology Transfer and Spillovers: Does local participation with multinationals matter? *European Economic Reviews*, 43 (1999), 915-923.
- Bridge, G (2008), Global production networks and the extractive sector: governing resource-based development. *Journal of Economic Geography*, 8 (2008), 389–419.
- Bryman, A (2004), *Social Research Methods*, Oxford University Press: Oxford.
- Bryman, A (2008), *Social Research Methods*, Oxford University Press: Oxford.
- Burnell, P (2001), The first two MMD administrations in Zambia: Millennium dawn or millennium sunset? *Contemporary Politics*, 7 (2), 95-111.
- Casson, M (2005), Entrepreneurship and theory of the firm. *Journal of Economic Behaviour & Organization*, 58 (2005), 327-348.
- CEEC (2013), Citizens Economic Empowerment Commission. <http://www.ceec.org.zm/> Accessed: 2013-05-21.
- Chandler, A, D (1992), What is a firm? A historical perspective. *European Economic Review*, 36 (1992), 483-994.
- Clarke, G (2012), Manufacturing firms in Africa: Some stylized facts about wages and productivity. Munich Personal RePEc Archive (MPRA), paper no. 36122
- Creswell, J. W. (2007), *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, Thousand Oaks: Sage.

- DFID (2003), *Promoting Institutional & Organisational Development*. <http://www.samoapsif.gov.ws/Portals/42/files/Promoting%20Institutional%20&Organisational%20Development%20A%20guide%20DIFID.pdf>, accessed 2012-10-10.
- Di Guardo, C & Valentini, G (2005), Taking Actively Advantage of MNCs' Presence. *Small Business Economics*, 28 (2005), 55-58.
- Drew, A.J & Kriz,A.P (2012), Towards a theoretical framework for examining societal-level institutional change. *Institutional Theory in International Business and Management Advances in International Management*, 25 (2012), 65-98.
- Dosi, G et al., (eds) (1998), *Technology, Organization and Competiveness: Perspectives on Industrial and Corporate Change*. Oxford University Press Inc: New York.
- E & MJ (2007), Zambia: Regaining Former Copper Glory. *Engineering and Mining Journal*, May (2007), 62-65.
- E & MJ (2011). Drilling Format, Fleets Differ at Zambia's Largest Copper Mines. *Engineering and Mining Journal*, December (2011), 58-59.
- E & MJ (2012), Zambia: Africa's Copper Resource. *Engineering and Mining Journal*, June (2012), 130-133.
- Fessehaie, J (2011), Development and Knowledge Intensification in Industries Upstream of Zambia's Copper Mining Sector. Making the Most of Commodities Programme (MMCP) Discussion Paper No. 3. Accessed on: <http://commodities.open.ac.uk/discussionpapers>, 2013-04-03.
- Fessehaie, J (2012), What determines the breadth and depth of Zambia's backward linkages to copper mining? The role of public policy and value chain dynamics. *Resources Policy*, 37 (2012), 443-451.
- Field Data (2013a), Interviews with local firms in Kitwe and Ndola, Zambia. Conducted from December 2012 to January 2013.
- Field Data (2013b), Interviews with informants from other/foreign-owned firms in Kitwe and Ndola Zambia. Conducted from December 2012 to January 2013.
- Field Data (2013c), Interviews with key informants from government. Conducted in December 2012. Lusaka, Zambia.
- Field Data (2013d), Field observations and field notes. 2012 December and January 2013: Zambia.
- Gaynor, M (1989), Competition within the firm: theory plus some evidence from medical group practice. *The Rand Journal of Economics*, 20 (1), 59-76.

- GRZ (Government of the Republic of Zambia) (2006), *Fifth National Development Plan 2006 2010*. Ministry of Finance and National Planning: Lusaka.
- GRZ (2007), Commercial, Trade and Industrial Policy. Ministry of Commerce, Trade and Industry: Lusaka.
- GRZ (2008), The Micro, Small and Medium Enterprise Development Policy. Ministry of Commerce, Trade and Industry: Lusaka.
- GRZ (2011), *Sixth National Development Plan*. Ministry of Finance and National Planning: Lusaka.
- Gulhati, R (1991), Impasse in Zambia. *Public Administration and Development*, 11 (1991), 239-244.
- Gomm, R. et al. (eds) (2000), *Case Study Method*, Sage Publications: London.
- Gomm, R. et al. (eds) (2007), *Case Study Method*, Sage Publications: London.
- Hanlin, C (2011), The drive to increase local procurement in the Mining Sector in Africa: Myth or reality? Making the Most of Commodities Programme (MMCP) Discussion Paper No. 4. Accessed on: <http://commodities.open.ac.uk/discussionpapers>, 2013-04-03.
- Hatch, M.J & Cuncliffe, A. L (2006), *Organization Theory, Modern, Symbolic and Postmodern Perspectives*, 2nd Edition. Oxford University Press: New York.
- Hilhorst, J. G. M (1998), Industrialization and Local/Regional Development Revisited. *Development and Change*, 29 (1998), 1-26.
- Kaplinsky, R & Morris, M (2001), A Handbook for Value Chain Research, IDRC.
- Kiely, R (2007), *The New Political Economy of Development: Globalization, Imperialism, Hegemony*. Palgrave Macmillan: New York.
- Kingston, C & Caballero, G (2009), Comparing Theories of Institutional Change. *Journal of Institutional Economics*, 5 (2), 151-180.
- Lungu, J (2008), Copper Mining Agreements in Zambia: Renegotiation or Law Reform?, *Review of African Political Economy*, 35 (117), 403-415.
- Mack, N. et al (2005), *Qualitative Research Methods: A Data Collector's Field Guide*. North Carolina: Family Health International.
- Man, W.T.Y. & Chan, T. L. K.F (2002), The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17 (2002), 123-142.

- Mikkelsen, B (2005), *Methods for Development Work and Research: A New Guide for Practitioners*, (Second Edition). Sage: London.
- Morris, M et al., (2011), “Commodities and Linkages: Meeting the Policy Challenge”. Making the Most of Commodities Programme (MMCP) Discussion Paper No. 14. Available at: <http://commodities.open.ac.uk/discussionpapers>, 2013-04-03.
- Morris, M et al., (2012), “One thing leads to another” – Commodities, linkages and industrial development. *Resources Policy*, 37 (2012), 408-416.
- Negi, R (2010), The Mining Boom, Capital, and Chiefs in the “New Copperbelt”, in Fraser, A. & Larmer, M. (eds.), *Zambia, Mining, and Neoliberalism: Boom and Bust on the Globalized Copperbelt*, Palgrave Macmillan: New York.
- Negi, R. (2011), The Micropolitics of Mining and Development in Zambia: Insights from the Northwestern Province. *African Studies Quarterly*, 12 (2), 27-44.
- Nelson, R. R (1991), Why do firms differ, and how does it matter? *Strategic Management Journal*, 12 (1991), 61-7.
- North, D (1990), *Institutions, Institutional Change and Economic Performance*. Cambridge University Press: Cambridge.
- North, D (1993), Institutional Change: A Framework of Analysis, In Sjöstrand, S (ed), *Institutional Change: Theory and Empirical Findings*. M.E. Sharpe: New York.
- North, D (1998), Economic Performance through Time. In Brinton, M.C & Nee, V (eds), *The New Institutionalism in Sociology*. Russell Sage Foundation: New York.
- OECD (2012), *OECD Investment Policy Reviews: Zambia 2012*, OECD Publishing. <http://dx.doi.org/10.1787/9789264169050-en>, 2012-08-12
- Ostrom, E (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press: New York.
- Ostrom, E (2005), *Understanding Institutional Diversity*, Princeton University Press: New Jersey.
- Scheyvens, R & Storey, D (eds.) (2003), *Development Fieldwork, A practical Guide*, (e book), London: Sage
- Simutanyi, N (2008), Copper Mining in Zambia: The developmental legacy of privatization. *Institute for Security Studies*. Paper 165, July 2008.
- Sutton, J & Langmead, G (2013), *An Enterprise Map of Zambia*. International Growth Centre: London.

- UNCTAD (2007), *World Investment Report: Transnational Corporations, Extractive Industries and Development*. United Nations Conference on trade and Development: New York and Geneva.
- Uriyo, A. G et al (2004), Development of Contractor Registration scheme with a focus on Small scale civil works contractors: Final Report. National Council for Construction, Zambia. http://www.ilo.org/public/english/employment/recon/eiip/download/zam_contr_reg.pdf, accessed 2013-04-11
- Waggoner, D.B et al (1999), The forces that shape organisational performance measurement systems: An interdisciplinary review. *International Journal of Production Economics*, 60-61 (1999), 53-60
- World Bank (1981), *Accelerated Development in Sub-Saharan Africa: An Agenda for Action*. The World Bank: Washington D.C.
- World Bank (2008), *Zambia Country Profile 2007: Enterprise Surveys*. The World Bank: Washington DC.
- Yin, R. (2003), *Case Study Research: Design and Methods*, Sage: Thousand Oaks
- Yin, R. (2009), *Case Study Research: Design and Methods*, 4th Edition. Sage: Los Angeles.

9 APPENDICES

Appendix I: Interview Guide for Firms

Q1. Firm's/company background

- Year established
- Who the owners are; their characteristics; and shareholding extent in the firm
- Firm's main business activities relevant to the mining sector
- Main clients/market share
- Annual turn over
- Number of permanent and part-time employees
- Skills and qualifications among employees
- Plant and equipment/machinery availability

Q2. Liberalization and mining MNCs presence

- Opportunities and challenges for supplying to mines
- Major competitors
- Mining MNCs' role
- Credit sources
- Government's role

Q3. Firm's success factors

- Firm's own success factors
- What the firm sees as general success factors for firms supplying to mines

Appendix II: Consent Form

Date:.....

Dear respondent,

Thank you for accepting to be interviewed. Your firm/organization has been selected to provide input in this study based on your activities and/or interest in the mining sector. I am seeking to investigate “Factors constraining the performance of local value-adding firms supplying to the mines in Zambia’s liberalized economy” as part of my master’s studies at Lund University in Sweden. It is also a study that fits into a broader study being conducted by Copenhagen Business School in Denmark and The University of Zambia (and other partner universities) for academic purposes; but also with potential of informing policy.

Thus, I would like to assure you that the responses you provide will be treated with the utmost confidentiality – your views will be presented in an aggregative manner with those from other respondents in order to ensure anonymity. Other details collected will only be used for records and future contact should the need for a follow-up by the research network mentioned above arise. Kindly answer the questions honestly, and feel free to ask for clarifications at any time, and I will do my best to provide the relevant answer. I therefore would like to seek your consent to be interviewed and have the interview recorded as a backup for the hand written notes. If this is fine with you, kindly append your signature here:

Signature:.....*Name (optional):*.....

Company/Individual Contact details (provide business card alternatively):.....

.....

Yours sincerely,

Signed

Wisdom KALENG’A (wisdomck11@mail.com or, mid1lwka@student.lu.se)

Appendix III: List of Respondents

a) Targeted Firms

1. Oscat Engineering Limited
2. Chekolm Industries Limited
3. Elios Limited
4. Coppernet Solutions
5. Meltcast Engineering Limited
6. Powerflex Zambia limited
7. Jacma Enterprises
8. Dochib Contractors
9. Saloba Limited
10. Sky Centre Enterprises
11. Rigid Engine Reconditioning
12. Crane Power Zambia Limited
13. Ebsa Investments
14. Wade Adams Piling and Foundations Zambia Ltd
15. Dramoll Construction Company

b) Other firms

1. Afrope Zambia Limited
2. Raphcon Industries Limited
3. Nucco Industries Limited
4. Morganite Zambia Limited
5. Perway Industries Zambia Ltd

c) Government

1. Ministry of Mines and Minerals Development
2. Ministry of Commerce, Trade and Industry

NB: category A and B respondents were interviewed during the last week of November 2012 and second week of January 2013. Category C respondents were interviewed in the second week of December 2012. To ease citation and uphold anonymity in this thesis, they have been quoted as (Field Data, 2013a); (Field Data, 2013b); and (Filed Data, 2013c) respectively. Where (Field Data, 2013d) appears, it refers to direct observations during fieldwork.