
THE COPPER BOOM AND THE DEVELOPMENT BUST: INSTITUTIONAL IMPEDIMENTS TO RESOURCE-LED DEVELOPMENT IN ZAMBIA

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Abstract: Whether or not resource abundance leads to sustained economic growth and structural transformation has been the subject of intense debate for half a century. History has shown us that it is indeed possible but econometric studies of correlations between resource abundance and development in the past four decades have likewise revealed that the likelihood of success for less-developed countries taking this development route is slim. Of late, the pendulum in the debate has swung back. Based on insights from the linkage literature researchers, politicians and think tanks alike now advocate 'local content' policies as a panacea for resource abundance to lead to sustained economic growth and structural transformation. The majority of this literature, however, overlooks the importance of what Farooki and Kaplinsky (2014) call 'contextual factors' or what Hansen et al. (2015) term 'political economy' in accounting for the resource-development nexus. This paper uses primary data from private sector organisations, government entities, and suppliers to the mines in Zambia's Copperbelt and 'New Copperbelt' (Northwestern) Provinces to shed new light on which 'contextual factors' are of importance in explaining the resource-development nexus and how policies at macro-, meso- and micro level may impede or assist structural transformation. Thereby it adds to the existing literature on local content by opening the black box of 'contextual factors' to further our understanding of how institutional developments affect mines-supplier linkages. It argues that in Zambia the current work on implementing local content policies in the mining sector most likely will not have its intended beneficial effects as other policies pull in the opposite direction.

1. INTRODUCTION

In the decade that followed the turn of the Century, the Zambian economy was catapulted upwards by booming commodity prices. Despite the commodity bust that followed the global financial crisis the Zambian economy has grown close to 6% per year from 2000-2010 and GNI per capita (PPP) has increased almost 60 percent between 2007 and 2014 (from USD 2,310 to USD 3,690)¹. This has enabled the Zambian government to progress towards its vision 2030 where Zambia is classified as a middle-income country based on average per capita incomes. Due to Zambia's renewed ability to borrow money in international financial markets, the country has been able to initiate several large-scale infrastructural investments that accentuate the government's vision of modernity and growth.

¹ <http://data.worldbank.org/country/zambia>

Based on rising commodity prices for about a decade Zambia has become one of Africa's largest economies (Negi 2014).

This boom, however, has neither led to widespread elimination of poverty nor of spatial inequality. In fact, inequality has risen in Zambia in the past decade and Zambia is according to the most recent African Economic Outlook report now among the most unequal societies in Sub-Saharan Africa (henceforth: Africa) (AfDB and OECD 2015). Only the capital, the copper-rich provinces and the tourism centre around Livingstone in the Southern Province perform markedly better on UNDP human development measures today than when the boom took off – the remaining six provinces have not benefitted from the boom.

The literature is rich on cases of aggregate analyses of tendencies of 'resource curses' and 'paradoxes of plenty'. These cases enhance our understanding of the positive correlation between resource abundance and economic and political malfunctions but they are less good at enhancing our understanding of causation – especially at the country level. Moreover, these mostly econometric studies do not enhance our understanding of why resources have led to development historically and why some countries still perform well in spite of resource abundance.

The post-millennium commodity boom and the associated investments in resource extraction in the Global South has revived the study of the resource-development nexus. Most notably, multilateral organisations such as the World Bank, UN agencies and Regional Development Banks have bought into the 'making most of commodities' argument (cf. (Morris, Kaplinsky, and Kaplan 2012)) and are now advocating 'local content policies' as a panacea towards broad-based development and structural transformation in resource-rich African economies.

Although local content policies can lead to sectoral transformations that may, or may not, lead to 'positive developmental outcomes' (Ovadia 2014, 2016), local content is often 'limited, shallow, and inefficient' (Hansen et al. 2015). This paper seeks to build on the growing literature on resource-development nexus in Africa by opening the black box of local content policies. Based on insights from Zambia, it argues that even if local content policies are well-designed, well-implemented, and accepted by the main stakeholders they fail to make a positive difference if they are offset by other policies at the macro-meso- and micro-level. What is important, therefore, is the policy climate more broadly – not the local content policies.

This paper uses primary firm-level data from suppliers to the mines in Zambia's Copperbelt and 'New Copperbelt' (North-Western) regions, and interviews with private sector organisations and

government entities in Zambia to show how governance of the mining sector, and in particular the passing and revoking of numerous laws governing the sector, has led to a continuous marginalisation and exclusion of the locally owned suppliers to the mines despite the fact that these very suppliers are on the top of the local content political agenda.

Zambia is a classic resource extraction case in Africa: It has more than 50 years of experience governing resources and resource-led foreign investments. If Zambia cannot make local content policies work the chance is that so-called new entrants into the resource boom will have even more difficulties ‘making most of commodities’. Conclusions from this study thus further our understanding of potential institutional pitfalls in designing and implementing local content policies in other resource-rich African economies.

The argument is structured as follows. Section 2 presents a brief version of the resources and development story and provides an overview of the theoretical accounts of why resource-abundance has only in seldom cases led to broad-based inclusive development. It also explains why resource-led development has once again come on top of the agenda. In doing so it refers to the most recent insights from the linkage theory debate and the related ‘local content’ debate. Section 3 provides a short introduction to the role of copper in the Zambian economy before section 4 describes the minimal role of role of Zambian-owned sub-suppliers to the mining sector. Section 5 then uses the analytical framework presented in section 2 to explain why the politically articulated focus on copper as an engine of growth has not led to linkage development to Zambian-owned suppliers. It tells the story of how policy after policy year in and year out has had (unintended) negative effects on the possibility of local suppliers to link up to large-scale transnational mining corporations. Section 6 then concludes that the resource boom has led to a development bust due largely to inappropriate policies that have prevented spillovers from the TNCs to the local suppliers.

2. RESOURCES AND DEVELOPMENT: IS IT GOOD OR BAD FOR DEVELOPMENT?

Natural resources have long been high on the development agenda in Africa – and for good reasons. First, natural resources were the backbone of many ‘now-developed’ economies’ early take-off such as Canada and Australia. Secondly, the development of this sector was supported by economic thinking of the time. In short, David Ricardo argued that with constrained supplies commodity prices inevitable would increase over time and Joseph Schumpeter made a case for innovation in the manufacturing sector that would lead to lower prices for these goods. Finally, most African

economies did not have a manufacturing sector at independence. Therefore economic advisors as well as African heads of states reasoned that they had to stick with what they had, namely natural resources.

History did not turn out as successful in most resource-rich African economies as economist and political scientist thought in the late 1950s and 1960s. In fact, a combination of elite appropriation of resource rents, inadequate tax systems, and volatile commodity prices meant that African economies failed to tap the full potential of their resources. The result was that after three decades of resource-led economic development strong statistical evidence suggested that resource abundant economies had performed less well than their resource-poor counterparts in terms of overall economic growth, low savings and high unemployment rates, and low export diversification, as well as in terms of democratic and institutional development. This situation is often referred to as the resource curse or the paradox of plenty (Terry Lynn 1999; Di John 2011; Rosser 2006; Mikesell 1997).

The resource curse is often explained by way of declining terms of trade, unstable commodity prices, and Dutch disease². Each of these three economic explanations have been criticised for the key assumptions underpinning the models, and the methodologies adopted. More importantly, they have been criticised for not explaining why strategic growth enhancing policies that could counter each of these three processes have not been adopted by the political elite. A number of hypotheses have been presented to explain this political paradox. They include historically specific institutional arrangements (path dependency), emotional behaviour on the part of the elite where periods of boom bring about a tendency to optimism which results in excessive government spending, and rational actor hypotheses that pay attention to the fact that resources provide the elite with an opportunity to engage in rent seeking (Saad-Filho and Weeks 2013; Di John 2011; Mikesell 1997; Beblawi 1990; Terry Lynn 1999).

Despite the statistical evidence and the theories that predict a negative relationship between resource abundance and social and economic development, natural resources have once again come high on the development agenda in Africa (UNECA 2013). Industrial expansion in major emerging markets led to rising commodity prices which made resource-rich African countries' economies sky-rocket for more than a decade. On top of this, public-private initiatives have been set in motion to manage

² Dutch disease refers to a situation where an export boom leads to an upsurge of foreign exchange that sets in motion an appreciation of the exchange rate and a rise of domestic income, which results in a situation where tradables become less competitive in world markets and simultaneously inflate goods and services that cannot be imported. This brings about a movement of labour and capital to nontradables, rising imports and eventually, a distorted economy.

resource rents better, voluntary norms and standards have been imposed to increase transparency and accountability (and thus minimise developmentally harmful rent-seeking behaviour³), TNCs are changing their outsourcing patterns, new actors, especially from China and India, have altered the bargaining position between ‘traditional’ TNCs and the state, and new mining laws have been drafted and implemented (Carbonnier, Brugger, and Krause 2011; Besada and Martin 2015). This has led to a renewed focus on the (potential) positive developmental effects of resource extraction.

Key in this debate is the break with the enclave concern⁴ and thus a focus on the developmental benefits of linkages from extractive industries. In short, linkages are ‘*inter-firm transactions that go beyond arm’s length, one-off transactions and involve longer term collaborations between the parties*’ (Hansen, Pedersen, and Petersen 2009: 122). In the past, three types of linkages were singled out, namely production linkages (forward and backward), fiscal linkages and demand linkages. Production linkages, in particular, were singled out as being of utmost importance for development in terms of accumulation, learning, technology transfer (short-term benefits), and economic transformation, added value, and taxation (long-term benefits) (UNCTAD 2007; Morrissey 2012; Hansen 2013). The more recent literature broadens the concept of linkages to include *inter alia* side stream / horizontal linkages that refer to how some capabilities are transferable, i.e. that capabilities developed in one sector - as a result of being linked up to a TNC - may contribute to a company’s ability to be profitable in another sector. Likewise, it introduces the concept of depth and breadth of linkages to denote the degree of value added in the linkages and the multiplicity of actors involved and the share of sales going to local customers, respectively (Hansen 2013; Bastida 2014; Farooki and Kaplinsky 2014; Dietsche 2014; Morris, Kaplinsky, and Kaplan 2012).

Despite the potential benefits of linkage formation: ‘*a common feature of the extractive industries, especially when TNCs [Transnational Corporations] are involved, is the relatively limited incidence of linkages with domestic suppliers*’ (UNCTAD 2007: 140). This is supported by Morrissey (2012) who argues that in the extractive industries only few linkages are formed and those linkages form even fewer spillovers, i.e. transfer of knowledge as a result of a linkage.

As a result of the renewed focus on ‘resources-for-development’ the linkage debate has been revived and alongside this, local content policies have been rejuvenated by academics, think tanks and politicians alike. In the words of Ovadia (2016), local content policies are perceived to ‘*open a path*

³ For an excellent discussion of rents and structural transformation in Africa, see (Whitfield et al. 2015).

⁴ It should be noted though that the enclave metaphor has not been thrown out with the bath water altogether, cf. (Phelps, Atienza, and Arias 2015).

to economic development through natural resources'. This is echoed by Dietsche (2014: 93) who states that: *'the story goes that if linkages were built, more people would at least indirectly benefit from capital-intensive mineral resources exploitation because access to economic opportunities would be broadened'*. In reality, however, focus has been rather one-sidedly on backward linkages. This has come about via formulation of local content policies, where responsibility is put on mining companies to provide economic opportunities for local suppliers, directly or indirectly.

According to Hansen et al. (2015: 2) local content is *'the extent to which MNCs [multinational corporations] purchase inputs and services locally'*. This definition hints at two issues related to local content policies that are of importance. First, the term 'local' has a spatial, an economic and a legal dimension. The spatial dimension refers to where local suppliers are located. It may refer both to the proximity of the supplier to the mining company (this is normally what is implied in mining companies' CSR policies), or to the nation (what is normally the case in official documents). The economic dimension includes everything from employment, purchase of locally produced products/services, and value-addition in locally purchased products/services. The legal dimension refers to ownership. Whereas ownership of local suppliers was previously perceived as important in order to 'make commodities work for development' now value addition is perceived as more important. In fact, there is now a tendency in the literature to totally disregard ownership (Kazzazi and Nouri 2012; Bloch and Owusu 2012) and instead focus on spatial location⁵. Secondly, it is important to distinguish between legally binding⁶ and non-binding regulation as well as positive (incentive schemes and subsidies) and negative (thresholds) policies. These two aspects entail that the various actors involved in local content policies may easily 'side-track' the original meaning and intention of the policy and instead pursue counter-productive policies.

Moreover, it is important to keep in mind that as local content policies predominantly focus only on backward linkages, other linkages of equal importance for structural transformation are overlooked. Likewise, the political economy nature of local content policies are most often ignored (Hansen et al. 2015), and most importantly the one-sided focus on local content policies neglects the crucial and often contradictory roles played by other policies.

⁵ It should be noted, though, that the role of ownership is also debated with regard to where TNC headquarters are registered and thus the extent to which nationality of the firm affect the governance structures and thus the breadth and depths of linkage formation, see e.g. Fessehaie and Morris (2013).

⁶ Legally binding local content regulation is often at odds with WTO provisions that prohibits amongst others discriminatory treatment and performance requirements

Inspiration from the renewed debate on linkages and industrial policies may inform our understanding of how other policies influence the outcome of local content policies. It points towards the **contextual factors** as an explanatory factor for whether or not linkages develop and bring about spillovers that may facilitate upgrading and structural transformation. Contextual factors are divided into macro-level, meso-level, and micro-level policies, as well as coordination and collaborative action. In a framework proposed by Farooki and Kaplinsky (2014) *macro-level policies* include enforcement of property rights, macro-economic stability, exchange rate regime, overall skills development, physical infrastructure. *Meso-level policies* include specific support to the sector including capacity building, skills development, and innovation, and *micro-level policies* refer to policies that address firm-level challenges and include firm-level upgrading, and direct support to lead-firms to develop their supply chain strategies. *Coordination and collaborative action* simply refers to the necessary organization of public and private entities to make the policies happen.

In this framework contextual factors determine whether or not local content policies will succeed in bringing about backward linkages and thus facilitate capability building, upgrading and eventually structural transformation.

3. IMPORTANCE OF COPPER IN THE ZAMBIAN ECONOMY

Zambia is currently the largest copper producer in Africa and the 6th largest in the world and depending on the exact year of counting copper production makes up between 70 and 78 per cent of Zambia's foreign exchange earnings and 70 per cent of the total exports (Bova 2012; Mobbs 2012). Recently, copper prices have been growing rapidly and they reached almost USD 9000 / metric ton just before the outbreak of the global financial crisis in 2008 upon which prices lost two-thirds of their value in six months. Since then copper prices have picked up once again and passed the pre-financial crisis level in 2014 whereupon they dropped drastically to USD 4,500 / metric tonne in the beginning of 2016.

Industrial copper mining is by no means a new thing in Zambia. It began in the Western half of Northern Rhodesia (Zambia) in the late 1920s, but large-scale production did not really take off until the post Second World War boom of the 1940s. At independence in 1964 the Zambian mining sector was owned and controlled by two American companies. They owned all big mines in the country. A combination of domestic struggle over the 'right' ethnical and spatial distribution of the mineral wealth and dissatisfaction with the level of investment in the mines from the two owners led Zambia's

first President Kenneth Kaunda to 'Zambianise' the mines. The result was that the Zambian state got 51 percent ownership over the mines while the original owners kept management and marketing contracts until 1974 whereupon the companies were merged into Zambia Consolidated Copper Mines (ZCCM) (Larmer 2010).

By the end of the 1990s copper prices were historically low, many deposits were depleted, some mines were closed down, capital equipment was run down, and hardly any resources had been devoted to exploration of new ores (Adam and Simpasa 2010; Fraser 2010). This was then the situation when Zambia embarked upon its privatisation programme. The Privatisation Act was passed in 1992, but the privatisation of ZCCM did not begin until 1996 whereupon interested companies handed in bids in the beginning of 1997. The main document guiding the process was the Mines and Minerals Act from 1995 which allowed the government to enter into so-called 'Development Agreements' (DA) with the new buyers. These DAs were designed by two international consultancy companies and turned out to be extremely lucrative for the new mine-owners (cf. (Fraser and Lungu 2007)).

The result of the privatisation process was that ZCCM was split up into seven mining companies with majority ownership from India, South Africa, China, Canada, and United States. The Zambian state retained minority ownership in most mines through ZCCM Investment Holdings (ZCCM-IH). Since then, some mines have changed ownership and several new mines have opened. The seven mining companies have now become eight operating 14 different copper mines in Zambia⁷. Today more than one-third of the mines are majority Chinese-owned, almost one-fifth is Indian owned. The rest are Swiss, Canadian and South African owned (Kragelund and Carmody Forthcoming).

Critical for this study the privatisation also entailed major changes for the suppliers. While ZCCM had one central database of suppliers containing some 400 companies most of which had long-term collaborations, all the new mine-owners created their own supplier database. These databases soon ended up being massive. First, the large-scale retrenchment - as a part of the privatisation process - meant that many former miners created their own one-man businesses. All of these one-man businesses were eager to enter the database. Secondly, the DAs allowed mining companies to import equipment and supplies from abroad⁸. In other words, they brought their home supplier base with them to Zambia. The result was that '*privatisation saw the demise of [local] manufacturing activities and the emergence of a vast array of [local] service providers*' (Fessehaie 2012a:168).

⁷ Most mines have ZCCM-IH minority-ownership and some mines have several owners.

⁸ It should be noted though that the DAs did stipulate that the mines' should make use of local sub-suppliers (also)

The financial crisis of 2008-9 also impacted greatly on the copper sector in Zambia and hence on the sup-suppliers to the sector. First, the crisis forced mining houses to reorganise supply chains to cut costs which meant that many one-man businesses were forced out. Secondly, many suppliers sought to diversify their markets targeting agriculture, the industrial sector construction and transport (Fessehaie 2012a). In addition to this, the global mining equipment was reorganised resulting in mergers of companies from the Global North and emergence of new large-scale mining equipment firms from Emerging economies (Farooki 2012). In sum, less space was available for local suppliers to the mines to operate.

4. SUPPLIERS TO THE MINES IN ZAMBIA

The changes in the copper sector – domestically and internationally – have had significant implications on the local suppliers. In ZCCM days, government policies ‘*resulted in the development of a local supply cluster of diversified activities, including a thriving manufacturing sector composed of large state-owned entities, smaller private enterprises established by Zambian and by European and Indian migrants, and, to a less extent, subsidiaries of TNC Original Equipment Manufacturers*’ (Fessehaie 2012b: 445). The situation was not sustainable. It was largely driven by government subsidies and local suppliers that lacked technical capabilities were not able to meet price and quality standards, and consequently were not able to compete with international actors when Zambia began its liberalisation and privatisation programme in the 1990s.

Hence, when new mine owners took over at the turn of the Century local suppliers were not able to meet international standards and due to large-scale retrenchments in the mining sector, a group of so-called briefcase traders mushroomed. Briefcase traders refer to one-man businesses supplying goods, without adding value to them. Many of these traders used to work in ZCCM’s supply chain and thus have contacts to South African or European OEMs.

The mines’ databases of suppliers include briefcase traders and hence do not provide an accurate picture of the state of local suppliers in Zambia. Luansha's database, for instance, includes roughly 1,000 companies; Mopani's includes more than 1,400 companies; and Konkola has some 4-5,000 in its database (Interview, Kitwe and District Chamber of Commerce and Industry, Kitwe, August 17, 2012). The lion’s share of these companies are briefcase traders that never or only seldom have

supplied goods to the mines⁹. The regular suppliers are OEMs many of which are located in Zambia (Kragelund and Carmody Forthcoming). Thus, although some mining companies claim that up to 70 per cent of their procurement *'is directed towards 'local' suppliers, the majority of these firms are branch offices or agents and distributors of OEMs'* (Ahmad and Walker 2005: 11). This picture is echoed by a World Bank employee in Lusaka: *'96% of all inputs for the mining industry in Zambia is sourced from outside the country. Only 4% are sourced from Zambia – and most of this is services'* (Interview, World Bank Office, Lusaka, August 12, 2015).

What is left – despite more than a decade of booming commodity prices – is between 50 and 60 Zambian-owned value adding mine suppliers supplying pumps and valves, vehicle wear or spare parts, storage equipment, health and safety equipment, and civil/construction. Most of these are located in Lusaka, Copperbelt and Northwestern Provinces (Kragelund and Carmody Forthcoming). These suppliers are being marginalised from two sides: from the increasingly globalised capital equipment market, cf. (Farooki 2012) and from local briefcase traders, who are competitive due to low overhead and transportation costs. Furthermore, the new open-pit mines in for instance Northwestern Province make use of new mining capital equipment that comes with a warranty and maintenance scheme, locking the mines into longer-term relations with OEMs. In relation hereto OEMs have entered into aftermarket services and thus supply service for both relatively new as well as older equipment.

5. CONTEXTUAL FACTORS AND THE EFFECTS ON LINKAGE FORMATION IN THE ZAMBIAN MINING SECTOR

Like numerous other African resource-rich economies Zambia is currently formulating a local content policy (cf. (Hansen et al. 2015; Ovidia 2016)). The Zambian version is entitled *'the Zambia Mining Local Content Initiative'* (ZMLCI) and aims to *'make mining work for Zambia'*. Essentially, this policy is a public-private partnership facilitated by the World Bank and the International Finance Corporation (IFC) and supported by several bilateral donors. The aim is to enhance local content and the use of locally manufactured inputs in the mining industry.

ZMLCI was launched in 2012 and since then the World Bank has worked closely with the major stakeholders in the sector, i.e. Zambia Association of Manufacturers (ZAM), the Chamber of Mines,

⁹ According to (Fessehaie 2012b) the number of briefcase traders in Zambia amounted to somewhere between a few hundreds and 5,000 prior to the global financial crisis.

the Bank of Zambia, and the Ministry of Mines to transform the idea into implementable policies. Later consultation with smaller private sector organisations have also taken place in order to make sure that the Initiative fits the needs of the domestic suppliers.

These discussions led to a list of recommendations for the Initiative including the establishment of a credit guarantee facility; financial education for micro- and small enterprises; establishment of a central collateral registry; and development of a national MSMEs financing policy. They also led to the formulation of the document entitled ‘Making Mining work for Zambia’ (World Bank 2015) and the launch of a number of related initiatives including “Let’s work Zambia”, a World Bank sponsored programme to support private sector led growth and in particular to create jobs, and Government of Zambia’s “Jobs Creation & Industrialization Strategy” (MCTI 2012).

Notwithstanding all the hype that has surrounded the ZMLCI not much has actually happened. In fact, the only concrete initiative is the recent launch (October 2015) of an online database for small- and medium-scaled suppliers (in all sectors of the Zambia economy) enabling them to look for business opportunities. Essentially, it is a two-way online search engine where suppliers can look for potential suppliers while simultaneously suppliers can search for business opportunities that match their capabilities. In order to increase the likelihood of success of the database all suppliers have to have their capabilities appraised before they can enter the site. To date, approximately 100 suppliers – Zambian as well as foreign – and in all sectors of the economy – have met the criteria and are now able to use the site. So far, only four mines have signed up to the site: Chibuluma Mines, Konkola Copper Mines, Mopani Copper Mines and Kalumbila Minerals PLC.

ZMLCI, however, should not be judged only on its relatively slow progress and haphazard implementation, even though the slowness of the Initiative is most likely linked to issues of political economy as the establishment of credit guarantee facility, a central collateral registry, and development of a national MSMEs financing policy most likely will not easily translate into rents for the political elite. Hence, these issues are not prioritised (cf. (Hansen et al. 2015)). More importantly, even if local content policies like the ZMLCI were fully implemented, they seldom supersede commercial and industrial acts. Related hereto, other acts often have conflicting effects on the link between the transnational mining companies and the domestic suppliers. Hence, the net effect of policy reforms on suppliers and eventually on structural transformation is thus negligible or maybe even negative.

Table 1 below provides a schematic overview of the main policies and initiatives affecting the suppliers to the mines in Zambia. It briefly describes each of them and carves out the main effects on the mines as well as on the domestic suppliers.

Table 1: Contextual factors affecting linkage development in Zambia's copper Industry

| Levels of policy | Main policies/initiatives/actors | Description | Effects on mines | Effects on domestic suppliers |
|--------------------|--|--|--|--|
| Macro-level | Privatisation Act | Privatisation and commercialisation of state-owned enterprises in Zambia | ZCCM dissolved and new owners taking over | Linkages to so-called sprinter companies collapsed. New linkages established to foreign suppliers |
| | Development Agreements | Additional incentives to the mines | Established a 15-20 years stability period for new mine-owners | Stipulate that mines should <i>also</i> make use of local suppliers |
| | Mines and Minerals Act | Set the incentives under which the mines were to be privatised | Mining companies are <i>expected</i> to support local industry | Establishes a <i>preference for</i> Zambian goods, but <i>does not define local content</i> |
| | Mining Tax regime | Numerous amendments to tax regime ending in 9% and 6% royalty tax for open pit and underground mines, respectively | Decreased profitability Heated discussions with government | Potential source of finance for structural transformation did not materialise Mines claim that they cannot afford to source locally |
| | SI 33 | Prohibition of quoting of goods and services in foreign currency | Costly due to volatile exchange rate | Currency mismatch between Zambian suppliers and creditors |
| | SI 55 | Empowerment of Bank of Zambia to monitor currency flows | Bureaucratic and costly | Potentially allowed for recap of economy to finance diversification |
| | SI 78 | Changed definition of domestic transactions | NA | NA |
| | VAT rule 18 (amendments) | Trade documentation from country of ultimate destination | Administration ↑ → large uncleared VAT backlog (USD 800 mn) | Mines claim that they cannot afford to source locally |
| | Load-shedding | Increased electricity tariffs (30% in 2014) | Rise of costs | Renegotiation of contracts with suppliers |
| Meso-level | Jobs, Prosperity and Competitiveness Programme | TBA | TBA | TBA |

| | | | | |
|--|---|--|---|--|
| | Citizen Economic Empowerment (CEE) Act (2006) | Affirmative action policy that seeks to empower Zambians to take part in economic development. Includes SI 36 on preferential procurement (2011) | Voluntary and mandatory sector codes to make foreign companies procure locally. | Delayed and <i>only partially implemented</i> . Preferential procurement <i>only applies to public entities</i> |
| | Mineral Resources Development Policy (2013) ¹⁰ | Makes provisions in law to compel MNCs to give preference to Zambian products | Mandatory codes to make mining firms procure locally | Reserves a portion of royalty for local business development |
| Micro-level | Zambia Mining Local Content Initiative | Collaborative public-private initiative launched in 2012 to enhance local content and facilitate industrialisation. Links to CEE | Encourages mining firms to develop participatory approaches to local involvement, incl. taking account of local needs | Govn shall <i>identify</i> skills deficiencies and <i>facilitate</i> development of downstream processing capacities |
| | The Copperbelt SME Suppliers Development Program (CSSDP) | 3 year supply chain development programme aiming to assist five mining companies to make use of local SMEs | Boost market-based incentives to use local suppliers. Boost MNCs CSR profile | Value-adding suppliers based in Zambia. <i>No definition of 'local</i> . Training, diversification of products, and access to finance. |
| | KCM SME suppliers Development Programme | Forerunner to the CSSDP. Same objectives. Only one mine: KCM | Do | Do |
| | UNIDO Subcontracting & Partnership eXchange (2011) | Global programme that aims to help local firms face challenges of globalisation. Led by ZDA. Not much progress | No specific focus on mining companies | <i>No definition of 'local</i> . Assessment of firm-level capacity |
| Coordination and collaborative action | Zambian Development Agency | Aim: facilitate trade and investment in Zambia | Instrumental in implementing the Mines and Mineral Act | Special division for MSMEs to facilitate skills training, market access and access to finance Business Linkage programme (<i>Not implemented</i>) |
| | Chamber of Mines | Aim: promote interests of its members, i.e. mostly mining companies | Played a decisive role with regard to e.g. VAT rule 18, SI 33 and 55, and the mining tax regime | Perceives local content as part of a healthy global mining industry |

¹⁰ The government aligned the Policy to the CEE in 2014. Hence, it now stipulates that 25 percent of purchases should go to companies with majority Zambian ownership (Genesis Analytics 2014).

Sources: (Kaiser Associates 2011; Kragelund 2012; Fraser and Lungu 2007; Fessehaie 2013; Conrad 2012; Haglund 2013; World Bank 2011; Fjeldstad and Heggstad 2011; Kragelund 2014; IFC ND).

It is clear from Table 1 that the local content policies do not single-handedly influence the possibilities of establishing linkages between the mining companies and the domestic suppliers in order to bring about structural transformation in the Zambian economy. In fact, several macro-, meso- and micro-level policies either directly or indirectly affect the relationship between the mines and the domestic suppliers to the mines.

At the macro-level three historical acts stand out, namely the Privatisation Act of 1992 that paved the way for the privatisation and commercialisation of state-owned enterprises in Zambia; the Mines and Minerals Acts of 1995 that set the incentives under which the mining companies were to be privatised and furthermore permitted the government to enter into the so-called 'Development Agreements'; and finally, the Development Agreements negotiated between 1997 and 2000, which provided more incentives than the Mines and Minerals Acts permitted. Not only did these three acts totally dissolve the linkages established between ZCCM and its network of suppliers, they also paved the way for new mine owners with markedly different governance structures (cf. (Lee 2014)). Hence, even though the Development Agreements stipulated that mines should *also* make use of local suppliers, they did not define what local meant and they did not set a lower limit for local suppliers. Furthermore, it was unclear who was supposed to monitor and enforce the use local suppliers. The result was that the domestic suppliers, which had thrived in the protected Zambian environment and hence were internationally uncompetitive (cf. (Fessehaie 2012b)), either had to close down or down-scale dramatically. Instead, new mine-owners brought in own suppliers and OEMs located in Zambia expanded operations.

Lately, a number of laws and by-laws have influenced the possibility of increasing the use of local content considerably. Most importantly, the government issued a number of Statutory Instruments (SI) to control the amount of money that was leaving the country and to stabilise the exchange rate. In short, SI 33 made it illegal to quote goods and services in foreign currency. Moreover, it prohibited the paying, demanding or receiving foreign currency as legal tender for goods, services or any other domestic transactions. The SI 55 in turn compelled exporters to put export earnings into Zambian banks before they used the money and stipulated that 'exporters are required to repatriate foreign currency earned from exports back to Zambia'. Finally, SI 78 changed the definition of domestic

transactions in order to implement SI 33. The SIs were perceived by the mines and the mining organisations as costly due to the paperwork related to meeting the requirements of SI 55 and due to the volatile exchange rates (SI 33). In the words of the mines, this made them less inclined to support local businesses. Specifically, the SI 33 gave way to a *'currency mismatch between Zambian suppliers and their creditors, and given that many inputs are imported, payments are denominated in USD but local invoicing needs to be made in Kwacha'* (Genesis Analytics 2014: 66).

The mismatch also affected the domestic suppliers. As the CEO of a supplier of capital equipment to the mines put it: *'We won a tender but then the SI 33 came into swim and the price was converted at the government designated rate. This negatively affected us, as the FOREX has not been stable over the past couple of months meaning you have to pump in a lot of kwacha for you to bring in a new stock. We are hoping that we can rewrite the order so that it can now match with the current FOREX otherwise it will be a loss'* (Yellow Quip #). Not only did the SIs affect the profitability of the order they also affected the overall relationship: *'The SI 33 and 55 led to a decrease in the invitations the mines were sending to us. After the revocation of the SIs, things have improved a bit. The problem was that sometimes we quoted in dollars at other times in kwacha depending on the kind of work that we did. With the introduction of the SIs this had to stop'* (Supplier, Kitwe, August 11, 2014).

Importantly, all of the SIs were revoked only a couple of years after they had been passed. Thus, not only did the passing negatively affect the development of local content, the political limbo associated with the forceful debate over the policies and the eventual revocation, also negatively influenced linkage building.

Policy uncertainty also characterised the tax regime – both with regard to the mining tax as well as with regard to VAT. As described in detail by Carmody and Kragelund (Forthcoming) the mining tax regime was exposed to major changes lately. The 2015 Budget speech kick-started what became a fierce power game between the government and the mining companies. In short, the Minister of Finance wanted to replace a profit based tax system with a mineral royalty based regime. The proposed amendments to the mining tax regime were retracted because of uproar among the mining companies who threatened to cut jobs, delay investments, and close down operations if they were implemented. Approximately a year after the major changes in the mining regime were first proposed it was reversed and the only change is an increase from six to nine percent for open pit mines and no increase for underground mines. Although the mining regime continued almost unaffected, the lengthy process of mining regime amendments had major negative effects on the possibility of

deepening local content in Zambia. First, what was perceived as a way to finance processes of structural transformation did not materialize. Secondly, the heated discussions led to (increased) mistrust between the government and the mining companies that work against the government-led local content initiatives, which necessitate the collaboration of the mines. Finally, the proposed changes coincided with a major commodity price bust. Hence, it was relatively easy for the mining companies to claim that they could not afford to make use of local suppliers (see also below).

The VAT rule 18, in existence since 1997, was amended in 2013 to incorporate the requirements of SI 55. In short, the amended rule stipulated that companies had to obtain import documentation, i.e. copies of export and import documents, tax invoices, proof of payment etc, from the country of ultimate destination. According to the mining companies, this amendment was so administrative burdensome that it resulted in a large uncleared VAT backlog. The mines claimed that they were particularly hard hit as there is discrepancy between where the money is going (Switzerland) and where the copper is going (China), essentially meaning that it has proven almost impossible to obtain all documentation needed to get VAT refunds. This led one mining company to close down and other companies to declare that they were no longer able to source locally. Due to the heated debate VAT 18 was amended (again) on February 23 2015. The rule now stipulates that companies must obtain either import documentation from the destination country or transit documents – not both.

Finally, the Zambian government's decision to increase electricity tariffs by 30 per cent in 2014 combined with a policy of load-shedding meant that costs increased and profits decreased for the mining companies. The tariff hike led Mopani mine to renegotiate contracts with suppliers. Moreover, it negatively affected suppliers' productivity.

On top of all of this it is worth mentioning the global financial crises that forced some mining companies to downscale operations, some to pursue a cost reduction strategy that involved using only foreign suppliers (Lee 2014), and finally others to close operations all-together.

At the meso-level the most important act is the Citizen Economic Empowerment Act (CEE) that originally was intended to supersede all other commercial and industrial acts in Zambia and thereby to empower Zambians to take active part in the Zambian economy. One of the most important means to this end was the so-called sector codes that should make all companies – private as well as state-owned –operating in Zambia procure locally. Locally in this context, either meant citizen-influenced, citizen-empowered, and citizen-owned companies where the former refers to companies with 5-25 % Zambian ownership, the midmost one refers to companies with 26-49 % Zambian ownership, and the

latter to companies with more than 50 % Zambian ownership. However, neither the sector codes nor most of the other means in the CEE were ever implemented, and CEE never came to supersede all other commercial and industrial acts in Zambia even though a lengthy process was set in motion funded by the World Bank to align all relevant laws and by-laws to the CEE (cf. (Kragelund 2012)).

Then again, the relatively new Mineral Resources Development Policy (2013) that seeks to compel transnational corporations to give preference to Zambian products has since been aligned to CEE and now stipulates that 25% of purchases should go to citizen-owned companies. It is also linked to the amended mining regime and reserves a portion of the royalty for local business development.

At the micro-level, the most important policy is ZMLCI described above. As is clear from Table 1 the ZMLCI did not develop in a vacuum. Rather, the work of the World Bank built upon several programmes seeking to further subcontracting and local content policies in the mining sector in Zambia and years of affirmative action policies in other sectors of the Zambian economy (Kragelund 2012). Common to all of these programmes in the mining sector in Zambia they have all been financially supported and initiated by the donor community. Moreover, none of them have defined what a local company is (IFC ND) or distinguished between ‘participation by Zambians’, i.e. degree of participation in ownership, management and employment, and the extent of ‘value addition in Zambia’ (Kaiser Associates 2011).

6. CONCLUSION

This paper set out to open the black box of local content policies and assess the extent to which they may accelerate structural transformation and hence, aid a country like Zambia to ‘make most of commodities’. The most recent literature on linkage development pointed towards contextual factors in order to explain whether linkages that may bring about spillovers develop at all. Based on this insight this paper analysed the most important contextual factors in the Zambian mining sector and probed how and to what extent policies at the micro-, meso- and micro-level affected the development of local content among the Zambian suppliers to the mines.

This paper has shown that local content policies only have limited effect if they are not aligned to the broader legal practice in the sector. In fact, in Zambia what really mattered in terms on linkage-building between the mines and the domestic suppliers related to macro-economic stability, the tax regime and the exchange rate regime (i.e. the macro-level policies). The meso-level policies, that were meant to empower Zambian-owned businesses, were dysfunctional and never came to play the

empowerment role. Finally, numerous micro-level policies in the mining sector have been implemented lately in Zambia. While it is too early to assess the most recent initiative, the ZMLCI, the other ones have failed to define what local content is all about; they have been voluntary in nature, have only included a small percentage of the mines – and of the suppliers; and have not enjoyed full support from the political and economic elite in the country. More importantly, these local content policies have been vague at points where vagueness negatively affects the local suppliers.

Hence while local content policies are hyped as the panacea to resource led-development, the chance that they will really change anything is extremely slim. First and foremost, ‘local content’ aspects have been part and parcel of all major documents/laws regulating extractive activities in Zambia for the past two decades, including the ‘development agreements’, the mines and minerals act and the CEE Act, without having any real effect on the use of local suppliers in the mining industry. In fact, what has happened is an increasing marginalisation of locally-owned companies since the turn of the Millennium. Secondly, several ‘local’ local content initiatives have been set in motion in Zambia in the past without being able to change the overall tendency of leaving ever more room for transnational OEMs. Finally, it seems that the effects of local content policies are offset by the other initiatives that the government is setting in motion.

The analysis of the contextual factors in Zambia also pointed towards the importance of distinguishing between legally binding and non-binding regulation as well as positive (incentive schemes and subsidies) and negative (thresholds) policies if local content policies are to function as intended. Moreover, it is important to acknowledge that the potential for local content depends on the stage of production in the value chain. While there is hardly any potential for local manufacturing content in the exploration phase, the potential is much higher in the site design and construction phase that is characterised by a more labour intensive process, and relative high in the operation proper phase. It also depends on the particular commodity. While copper mining companies spend up to 20% of their budget over the lifetime of an operation on manual labour this figure is much lower in for instance the oil and gas sectors.

Finally, it is important to distinguish between economic and political conditions that have to be met in order for local content policies to have the intended effects (cf. Hansen et al, 2015). The economic conditions include the policies themselves (are they clear and unambiguous?); the institutions in the host economy (do they support and facilitate the interaction between the multinational resource extractor and the local suppliers?); the level of absorptive capacity in the host economy (does a local

industry exist at all to benefit from the spillovers of the investments?); and the willingness of the investors to outsource products and services to local firms (to what extent does the governance structure allow for outsourcing of key products/services?). The political dimensions are less well established, but include the extent to which local content policies facilitate the continuous command of power by the local elite by allowing them to capture the rent from resource extraction and thus minimise the risk that competing powerful groups emerge (see also Ovadia, 2012).

REFERENCES

- Adam, C. S., and A. M. Simpasa. 2010. The Economics of the Copper Price Boom in Zambia. In *Zambia, Mining, and Neoliberalism. Boom and Bust on the Globalized Copperbelt*, eds. A. Fraser and M. Larmer, 59-90. New York: Palgrave MacMillan.
- AfDB, and OECD. 2015. *African Economic Outlook 2011. Regional Development and Spatial Inclusion*. Paris & Tunis: OECD Development Centre and African Development Bank.
- Bastida, A. E. 2014. From extractive to transformative industries: paths for linkages and diversification for resource-driven development. *Mineral Economics* 27 (2-3):73-87.
- Beblawi, H. 1990. The Rentier State in the Arab World. In *The Arab State*, ed. G. Luciani, 49-62. London: Routledge.
- Besada, H., and P. Martin. 2015. Mining codes in Africa: emergence of a 'fourth' generation? *Cambridge Review of International Affairs* 28 (2):263-282.
- Bloch, R., and G. Owusu. 2012. Linkages in Ghana's gold mining industry: Challenging the enclave thesis. *Resources Policy* 37 (4):434-442.
- Bova, E. 2012. Copper Boom and Bust in Zambia: The Commodity-Currency Link. *Journal of Development Studies* 48 (6):768-782.
- Carbonnier, G., F. Brugger, and J. Krause. 2011. Global and Local Policy Responses to the Resource Trap. *Global Governance* 17 (2):247-264.
- Carmody, P., and P. Kragelund. Forthcoming. Who is in Charge? State Power and Agency in Sino-African Relations. *Cornell International Law Journal*.
- Conrad, R. F. 2012. Zambia's Mineral Fiscal Regime. London: International Growth Centre.
- Di John, J. 2011. Is There Really a Resource Curse? A Critical Survey of Theory and Evidence. *Global Governance* 17 (2):167-184.
- Dietsche, E. 2014. Diversifying mineral economies: conceptualizing the debate on building linkages. *Mineral Economics* 27 (2-3):89-102.
- Farooki, M. 2012. The diversification of the global mining equipment industry – Going new places? *Resources Policy* 37 (4):417-424.
- Farooki, M., and R. Kaplinsky. 2014. Promoting diversification in resource-rich economies. *Mineral Economics* 27 (2-3):103-113.
- Fessehaie, J. 2012a. The Dynamics of Zambia's Copper Value Chain. PhD thesis, School of Economics, University of Cape Town, Cape Town.
- . 2012b. 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 (4):443-451.
- . 2013. The Impact of Privatisation on Technological Upgrading: A Case Study. *African Journal of Science, Technology, Innovation and Development* 5 (6):499-509.

- Fessehaie, J., and M. Morris. 2013. Value Chain Dynamics of Chinese Copper Mining in Zambia: Enclave or Linkage Development? *The European Journal of Development Research* 25 (4):537-556.
- Fjeldstad, O. H., and K. K. Heggstad. 2011. The tax systems in Mozambique, Tanzania and Zambia: Capacity and constraints. Bergen: Chr. Michelsen Institute.
- Fraser, A. 2010. Introduction: Boom and Bust on the Zambian Copperbelt. In *Zambia, Mining, and Neoliberalism. Boom and Bust on the Globalized Copperbelt*, eds. A. Fraser and M. Larmer, 1-30. New York: Palgrave MacMillan.
- Fraser, A., and J. Lungu. 2007. For whom the windfalls? Winners & losers in the privatisation of Zambia's copper mines.
- Genesis Analytics. 2014. Design of a Zambia mining local content programme. Johannesburg, June 30.
- Haglund, D. 2013. Zambia mining sector fiscal benchmarking and assessment. Oxford: Oxford Policy Management.
- Hansen, M. W. 2013. From enclave to linkage economies: A review of the literature on linkages between extractive MNCs and local industry in South Sahel Africa: DIIS Working paper.
- Hansen, M. W., L. Buur, A. M. Kjær, and O. Therkildsen. 2015. The Economics and Politics of Local Content in African Extractives: Lessons from Tanzania, Uganda and Mozambique. *Forum for Development Studies*:1-28.
- Hansen, M. W., T. Pedersen, and B. Petersen. 2009. MNC strategies and linkage effects in developing countries. *Journal of World Business* 44 (2):121-130.
- IFC. ND. the Copperbelt SME Suppliers Development Programme (CSSDP), 22. Washington: IFC Private Enterprise Partnership - Africa.
- Kaiser Associates. 2011. Analysis of supply linkages between mines and local suppliers in Zambia. The World Bank. Cape Town: Kaiser Associates Economic Development Practice.
- Kazzazi, A., and B. Nouri. 2012. A conceptual model for local content development in petroleum industry. *Management Science Letters* 2 (6):2165-2174.
- Kragelund, P. 2012. Bringing 'indigenous' ownership back: Chinese presence and the Citizen Economic Empowerment Commission in Zambia. *Journal of Modern African Studies* 50 (3):447-466.
- . 2014. "Donors go home": non-traditional state actors and the creation of development space in Zambia. *Third World Quarterly* 35 (1):145-162.
- Kragelund, P., and P. Carmody. Forthcoming. BRICS impact on local economic development in the Global South: the cases of a tourism town and mining provinces in Zambia. *Area Development and Policy* 1 (1):xx-yy.
- Larmer, M. 2010. Historical Perspectives on Zambia's Mining Booms and Busts. In *Zambia, Mining, and Neoliberalism. Boom and Bust on the Globalized Copperbelt*, eds. A. Fraser and M. Larmer, 31-58. New York: Palgrave MacMillan.
- Lee, C. K. 2014. The spectre of global China. *New Left Review* (89 Sept/Oct 2014):29-65.
- MCTI. 2012. Strategy paper on industrialisation and job creation. Lusaka: Ministry of Commerce, Trade and Industry.
- Mikesell, R. F. 1997. Explaining the resource curse, with special reference to mineral-exporting countries. *Resources Policy* 23 (4):191-199.
- Mobbs, P. M. 2012. The Mineral Industry of Zambia. In *2011 Minerals Yearbook (advance release)*, ed. U.S. Geological Survey, 43.1-43.8. Reston: U.S. Geological Survey.
- Morris, M., R. Kaplinsky, and D. Kaplan. 2012. One Thing Leads To Another. Promoting Industrialisation by Making the Most of the Commodity Boom in Sub-Saharan Africa. Milton Keynes: The Open University/Cape Town, University of Cape Town.

- Morrissey, O. 2012. FDI in sub-saharan africa: Few linkages, fewer spillovers. *European Journal of Development Research* 24 (1):26-31.
- Negi, R. 2014. 'Solwezi Mabanga': Ambivalent Developments on Zambia's New Mining Frontier. *Journal of Southern African Studies* 40 (5):999-1013.
- Ovadia, J. S. 2014. Local content and natural resource governance: The cases of Angola and Nigeria. *The Extractive Industries and Society* 1 (2):137-146.
- . 2016. *The Petro-Developmental State in Africa: Making Oil Work in Angola, Nigeria and the Gulf of Guinea*. London: Hurst & Company.
- Phelps, N. A., M. Atienza, and M. Arias. 2015. Encore for the Enclave: The Changing Nature of the Industry Enclave with Illustrations from the Mining Industry in Chile. *Economic Geography* 91 (2):119-146.
- Rosser, A. 2006. Escaping the Resource Curse. *New Political Economy* 11 (4):557-570.
- Saad-Filho, A., and J. Weeks. 2013. Curses, Diseases and Other Resource Confusions. *Third World Quarterly* 34 (1):1-21.
- Terry Lynn, K. 1999. The perils of the petro-state: Reflections on the paradox of plenty. *Journal of International Affairs* 53 (1):31.
- UNCTAD. 2007. *World Investment Report 2007. Transnational Corporations, Extractive Industries and Development*. New York & Geneva: UNCTAD.
- UNECA. 2013. *Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation*. Addis Ababa: United Nations Economic Commission for Africa.
- Whitfield, L., O. Therkildsen, L. Buur, and A. M. Kjr. 2015. *The Politics of African Industrial Policy: A Comparative Perspective*. Cambridge University Press.
- World Bank. 2011. *Zambia. What Would it Take for Zambia's Copper Mining Industry to achieve its Potential?* Washington DC: The World Bank.
- . 2015. *Making Mining Work for Zambia. The Economic, Health, and Environmental Nexus of Zambia's Copper Mining Economy*. Washington DC: The World Bank.