University of Bath



PHD

Policy evolution and organisational learning in Zambia's mining sector

Haglund, Dan

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Policy evolution and organisational learning in Zambia's mining sector

Thesis submitted for the degree of Doctor of Philosophy

Dan Haglund dan.haglund@gmail.com Department of Social and Policy Sciences University of Bath

November 2010

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Abstract

This thesis explores how policy evolves in weak commodity dependent African states, in a context of increasing organisational diversity due to fast-growing foreign investment from emerging markets. Through a case study of the Zambian mining sector, where state-firm relations have been highly contentious following privatisation in the late 1990s, I develop an interdisciplinary and empirically grounded account of how policy evolves. My findings are based on over 100 interviews conducted with employees of Chinese, Indian and 'western' case-study firms, as well as government officials, NGOs and other stakeholders.

My aim is to give adequate attention to both state and firm perspectives on regulatory policy making. To this end, the thesis first reviews the literature on policy making in the African state as well as theories of institutional change. It then draws on evolutionary economics and organisational theory, to develop a framework for understanding firm behaviour that emphasises the role of organisational routines and objectives. I develop and define the concept of organisational learning as the process through which organisational routines and objectives change over time.

I find that policy development in Zambia, in its formal expression, appears framed around a 'partnership approach' to regulation. This approach is based on a view of government as enabler of private investment, emphasising state-firm consultations and consensus in policy development. This approach contrasts but co-exists with an alternative expression of state power through the Presidency, which maintains strong informal links with the foreign mining companies.

I find significant yet nuanced variation in organisational routines and aims across the companies under study. This includes the tendency among western companies to seek operational stability by engaging with local stakeholders directly, whilst Chinese investors prefer to operate through close relationships with the Presidency, relying on the Zambian state to 'broker' its wider social relations.

Over time there is some evidence of organisational learning taking place among the mining companies, including through convergence in regulatory standards and practices. Yet differences persist because routines and aims – conditioned by a firm's institutional background – change slowly over time, even in the presence of inefficiencies.

Zambia's mining sector was during the period under study subject to various pressures for policy reform, stemming from discontent with limited tax contributions and pervasive negative environmental and safety impacts. These reform proposals, however, failed to move ahead despite support from some of the mining companies. I show how Zambia's accommodating and pro-investor regulatory framework sits uneasily with an interventionist political culture and a diverse mining sector. The consensus among the regulated companies – on which effective partnership regulation relies – proves elusive in a 'presidential' state that readily accommodates different articulations of state-firm relations.

Acknowledgements

Producing this thesis has been an emotional as well as intellectual journey. Arriving in Zambia with a relatively open-ended and inductive research design, I knew I had one shot. At something. As a social science researcher you then immediately get 'stuck in', start collecting information, try to understand context, tirelessly negotiating access. Being in constant and open pursuit of new avenues of exploration makes you open also to developing close personal bonds with people from all walks of life. It is a very special feeling that field researchers everywhere no doubt will recognise.

My supervisor Professor James Copestake provided ongoing, helpful and always thoughtful guidance throughout this project. I thank Dr Dibyesh Anand for supervision during the first-year formation of a research topic, and for inspiration and practical advice since. I owe an enormous debt of gratitude to all my interviewees who gave so generously of their time and insights – if it were not for your openness with me this project would not exist. Heartfelt thanks are due to Sergio Bettega for his great hospitality, and to Lucy and Tembo for taking care of me during my time on the Copperbelt. Kim Otteby, Mwangala, Ruud Walgaard, D&T, and the guys at the Bowling Club all contributed very different but uniquely defining experiences of my fieldwork.

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I dedicate this thesis to the Stanislawski family because they know how to look at international development best – with a sharp eye and sharp wit.

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Abbreviations

Abbreviation	Full name
BGRIMM	Beijing General Research Institute of Mining and Metallurgy
BoZ	Bank of Zambia
CBE	Citizens for a Better Environment (Zambian NGO)
CCS	Chambishi Copper Smelter (managed by NFCA)
CEMP	Consolidated Environmental Management Plan
CEO	Chief Executive Officer
CEP	Copperbelt Environmental Project
СМ	Chambishi Metals plc (subsidiary of Enya Ltd.)
CML	Cargo Management Ltd.
CNMC	China Non-ferrous Metal and Mining Group
CoM	Chamber of Mines
CSR	Corporate social responsibility
DA	Development Agreement
ECZ	Environmental Council of Zambia
ECC	Economic and Commercial Council (of the Chinese Emb.)
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EMP	Environmental Management Plan
EPF	Environmental Protection Fund
EPPCA	Environmental Protection and Prevention Control Act
EPs	Equator Principles
FQML	First Quantum Minerals Ltd
GM	General Manager
GRZ	Government of the Republic of Zambia
HR	Human Resources
KCM	Konkola Copper Mines plc. (subsidiary of Vedanta Resources)
LCM	Luanshya Copper Mines plc. (subsidiary of Enya Ltd.)
MCM	Mopani Copper Mines plc
Ministry of Finance	Ministry of Finance and National Planning
Ministry of Mines	Ministry of Mines and Minerals Development
Ministry of Labour	Ministry of Labour and Social Security
MSA	Mines Supplier Association
MSD	Mines Safety Department
MSDP	Mining Sector Development Programme (donor programme)
MMA	Mining and Minerals Act
MUZ	Mineworkers Union of Zambia
NFCA	Non-ferrous Mining Corporation Africa (subsidiary of CNMC)
NUMAW	National Union of Mining and Allied Workers
PRC	People's Republic of China
SMP	Social Management Plan
UNDP	United Nations Development Programme
ZCCM	Zambia Consolidated Copper Mines
ZCCM-IH	Zambia Consolidated Copper Mines - Investment Holdings
ZCCZ	Zambia-China Cooperation Zone
ZRA	Zambia Revenue Authority
	Lamola Revenue Authority

"Development is no longer seen primarily as a process of capital accumulation but rather as a process of organisational change" (Hoff & Stiglitz 2001)

1 Situating the study

1.1 Introduction

The overarching objective of this thesis is to explore how regulatory policy evolves in a context of weak state capacity, high organisational diversity and the political ramifications of the commodities cycle. I pursue this objective through a study of the Zambian mining sector, chosen as location for this study partly due to the significant (and growing) presence of Chinese and Indian investors following privatisation of the country's copper mines in the late 1990s. It focuses on four case study companies: a Chinese firm, an Indian firm, as well as two 'western' multinationals.

To understand the evolution of policy I examine processes of organisational change as well as changes to government's regulatory institutions.¹ My aim is to understand how state-firm relations are articulated, in a way that is theoretically informed and empirically grounded. I analyse regulatory policy making through a framework that sees changes within organisations as well as between organisations and external actors, as simultaneously determined and mutually dependent.² In this framework neither policy nor firm behaviour is completely endogenous to the local context: government policies are heavily influenced by donors, whilst company behaviour tends to reflect international capital markets, home country institutions, and managers' prior experiences.

This chapter begins by situating the study with reference to two global trends that were evident during the commodity price boom that lasted roughly from 2004 to 2008. First, it discusses the growth of foreign direct investment (FDI), including its development promises as well as potential pitfalls. In doing so it highlights the need for effective business regulation. Such regulation is a necessary (but not sufficient) condition for government to be able to demonstrate local benefits (of national resource extraction), the absence of which can easily translate into political pressures in the form of resource nationalism. This section notes how such pressures, including the re-assertion of states versus foreign capital, was on the rise during the short but unprecedented commodities boom of 2004-2008.

The chapter then examines the growing trend of multinational investors from developing and emerging economies investing in other developing countries, or 'south-south' FDI. Greater investment by Chinese and other emerging-market firms was a prominent feature of the international expansion of mining investment during the period under study. I argue that influence arising from home-country standards, international capital markets, inter-state relations and commodity prices are all significant in shaping the behaviour of multinationals, but vary between 'western' and emerging market investors.

¹ The approach follows North's conceptual distinction between institutions and organisations: institutions as the rules of the game whereas the organisations are the players of the game (North 1990). The separation of rules and organisations can be traced back to the 'old institutionalist' economist John Commons who favoured a separation between the "mechanisms and rules of conduct" (Scott 1995).

² Organisations are seen as groups of individuals bound by a common purpose to achieve objectives, including political (political parties, regulatory agencies), economic (businesses, trade unions) and social (churches, clubs) bodies.

Having situated the study in this way, the chapter then presents the research questions and a note on how I conceptualise this study. Finally it elaborates on my choice of Zambia as a case study and specifies the ways in which my study contributes to the literature.

1.2 Foreign direct investment and development

This thesis is concerned with the role of foreign direct investment (FDI) in national development. ³ UNCTAD defines FDI as "investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (the 'home country') in an enterprise resident in an economy (the 'host country') other than that of the foreign director investor" (UNCTAD 2006: 1). Dunning (2001) defines FDI as investment made outside the home country of the investing company, but within the organisational structure of the investing company, where the investor retains control over any resources transferred. Both definitions emphasise the control by an *external* entity over productive activities in the host country.

1.2.1 Development promises and potential

Within the context of rapidly globalising markets, observers have emphasised the role of FDI as a potentially significant contribution to economic growth and development.⁴ The contribution FDI could make to local development was emphasised at the United Nations (UN) Conference on Financing for Development in Monterrey, Mexico in 2002, which highlighted the ability of FDI to "transfer knowledge and technology, create jobs, boost overall productivity, enhance competitiveness and entrepreneurship, and ultimately eradicate poverty through economic growth and development" (UN 2002:5). More directly, host governments could capture tax revenue from foreign investment into productive assets, and demand generated through forward and backward economic linkages can generate jobs and catalyse the local manufacturing sector.

In theory the positive mechanisms by which FDI can contribute to development centre on taxation, local economic linkages, externalities (or 'spillovers') and employment. First, host states that are able to effectively tax foreign mining companies may significantly increase the contribution of FDI to government resources (see Otto 2000 for a review of mining sector taxation frameworks). Second, forward and backward linkages to the local economy, via intermediate products, can be a key driver of local economic development (Hirschman 1958, 1971). The relevance of such linkages to local development may be significant in a context of large-scale investment into sectors that generate sufficient demand to push manufacturers of intermediate inputs to reach an efficient scale (Krugman 1994). Third, positive externalities may occur through the transfer of technological and human (management) knowledge, spread without a property-rights-allocating (contractual) relationship (Meyer 2004: 260). This view reflects the idea of FDI may

³ Although the literature distinguishes between foreign portfolio investment (non-controlling minority stakes in overseas assets) and foreign direct investment (as defined above), for the remainder of this thesis I use the terms foreign direct investment and foreign investment interchangeably.

⁴ The term 'development' is broad and unless otherwise noted I use it to refer to improvements in human well-being that involves increased economic opportunity; is socially inclusive and equitable; and that is environmentally sustainable.

be seen as a 'package' of assets and intermediate products, such as capital, technology, management skills, distribution channels to access markets and entrepreneurship (UNCTAD 2006: 155-157). Finally, in environments of widespread unemployment the contribution of FDI to raise incomes may be significant, but depends crucially on the level of technology-intensity of the sectors targeted by foreign investors. Yet despite these theoretical arguments, development benefits of FDI remain uncertain, as discussed below.

1.2.2 Development problems and pitfalls

Growing liberalisation of markets and capital flows in the 1980s illustrated the perverse effects of transnational corporations (TNCs), when corporate scandals – often 'outed' by civil society – demonstrated companies' faltering accountability to their impacts (Utting 2005).⁵ More recently some academics have criticised the causal links between FDI and development as lacking empirical support. Promised employment generation and technology spillovers have often failed to materialise (Nunnenkamp 2004: 657) and appear to vary across sectors and to depend on institutional conditions of the host country (Görg & Greenaway 2004; Meyer 2004; see also UNCTAD 1999: chpt 11).

Explanations for the failure of FDI to promote economic growth and development are based on the empirical phenomenon that resource abundance is often associated with lower and even negative economic growth, often referred to as the resource curse (Auty 1993, 2001; Sachs & Warner 1995). Some explanations emphasise economic mechanisms, such as the empirical observation of real exchange rate appreciation in response to commodity booms, the so-called Dutch disease (UNCTAD 2007: 35; Weeks 2008). Economic effects also include 'crowding out', where capital and skills are transferred from non-tradable sectors of the economy (in particular nascent manufacturing) to resource-sectors with fewer linkages to the local economy.

Institutional explanations for the resource curse focus on the centralisation of political and institutional mechanisms to capture resource rents and the characteristics of the state bureaucracy (e.g. limited transparency, high corruption); and the risk of militarisation of the state in attempting to limit wider access to resource rents. This literature conceptualises the state as an actor that is largely independent of the resource sector itself, paying scant attention to how diversity of business interests and claims shape government policy formulation and implementation.⁶

FDI also risks undermining development where negative external costs (be they environmental, social, or economic) are generated but not captured by the investor, such as pollution, migration and infrastructure dilapidation. These issues are of particular concern in the extractive industries and infrastructure sectors (World Bank 2003). Here, unchecked investment into pollution-intensive industries may lead to long-term damage to people's health and livelihoods. Civil society organisations have also criticised TNCs for exploiting local workers by taking advantage of weak regulations in developing countries.

⁵ These include the 1984 Union Carbide gas leak in Bhopal, India, the Exxon Valdez oil spill in 1989 and the uncovering of sweatshop conditions within the supply chains of Nike (see Utting 2005: 14). BP's 2010 Gulf of Mexico quagmire starkly illustrates the dangers of inadequate regulation, even among supposedly highly developed regulatory frameworks.

⁶ Independent, that is, over and beyond transfer of financial resources through formal (taxation payments) as well as informal (corruption, kick-backs) means.

Lastly, where local regulatory oversight is limited, companies can often reduce their tax bill through various grey-area accounting provisions, including transfer pricing (Christensen & Murphy 2004).⁷ This leads to misappropriation of resource rents and limits the state's ability to provide public services and fund regulatory agencies.

The above discussion cautions against simplistic arguments that FDI is good for economic and social development. Widespread negative development impacts arising from mining sector activity led the World Bank to launch an Extractive Industries Review (EIR) in 2000, resulting in an independent report and subsequent World Bank Board-level response in August 2004.⁸ The lack of effective regulation has also been observed by leading firms in the mining industry itself, resulting in the two-year multi-stakeholder consultative process Minerals and Mining for Sustainable Development (MMSD) Project.⁹

1.2.3 The importance of business regulation

Effective business regulation is needed wherever external costs arising from the firm's production function are not borne by the firm in question, and where governments fail to capture resource rents. Chang (2003: 157) defines regulation as the government directly prescribing or proscribing what the private sector can and cannot do, through the provision of incentives and disincentives, to prevent the private sector from contradicting or undermining the 'public interest'. I similarly define regulation broadly, conceptualising it as the institutions and relationships that allocate costs and benefits of FDI. Business regulation includes formal as well as informal state-firm contracts, and covers both top-down (state-led) regulation as well as multi-stakeholder initiatives that may be more or less driven by firms themselves.

Yet the responsible of regulation rests in large part on governments. Effective regulatory oversight requires the development of costly regulatory frameworks that place demands on the organisational capacity, financial resources and the political legitimacy of the state. As international investment continues to increase, many developing countries have been unable to provide corresponding ramp-ups in domestic regulatory capacity, resulting in a 'governance deficit' (Newell 2001: 908). In response, the World Bank and other donors have promoted greater self-reporting and market-based incentives, rather than direct command-and-control regulation (World Bank 2000; Graham & Woods 2006).¹⁰ Companies have also adopted a range of voluntary standards on environmental management and health and safety (e.g. ISO 14001 and OHSAS 8000).¹¹ Some of these emanate from international capital markets, for instance the Equator Principles. Banks who sign up to this voluntary set of standards require borrowing firms to have a stringent environmental impact assessment in place, against which borrowers must submit quarterly progress reports.

⁷ Transfer pricing is understood as the practice whereby companies reduce taxes payable to host governments by engaging in intra-company sales and purchases at non-arms-length basis. ⁸ Please see www.ifc.org/eir.

⁹ The project was co-managed by UK-based International Institute for Environment and Development (IIED) and the World Business Council for Sustainable Development (WBCSD).

¹⁰ Kaplow & Shavell (1994) argue that self-reporting has benefits (compared to purely inspectiondriven regulations) for regulators because resources needed to identify non-compliant self-reporters are saved.

¹¹ Newell (2001: 910-912) provides some examples of how codes and standards, even when compliance is not required under the law, may contribute towards holding TNCs accountable.

The sharp rise in civil society and wider stakeholder engagement, ranging from partnerships to naming-and-shaming campaigns, have played some role in promoting accountability among foreign investors.¹² Civil society representing various groups with a 'stake' in corporate activity played a big role in uncovering large-scale corporate misconduct in the 1980s. This drove the corporate social responsibility (CSR) agenda, variously referring to CSR as discourse, policy, specific initiatives, tools and as institutions (Utting 2005).¹³ The social or community investment advocated by this agenda can serve to mitigate risk, but also functions as an input into a policy process with aim of securing the political outcome of preventing future 'hard' regulation (Utting 2005a). I discuss the theoretical and practical implications of recent shifts in regulatory 'ideology' in more detail in chapter two.

Box 1: Evolution of the Corporate Social Responsibility agenda

Over time, conceptions of CSR have changed from largely voluntary activities of companies (community-development) to include initiatives and policies that are partly voluntary yet underpinned by formal law, and where government-sponsored agencies play key roles. Such so-called "articulated regulation" (Utting 2005b: 15) may include partnerships between state and business actors (e.g. the UN Global Compact), as well as initiatives like Ghana's legislation that requires logging companies to enter into Social Responsibility Agreements with customary landowners (Blowfield & Frynas 2005: 203).

However, there are also some problems with these novel forms of regulation. First, although large companies that are wary of protecting their reputations may be inclined to voluntarily improve their operating standards, many smaller companies fall 'below the radar'. For instance, sector-based assurance schemes (including third-party audits) are gaining ground, but usually limited to the largest companies.

Second, the CSR agenda is rooted in management literature on large, northern, and stock market-listed companies (Fox 2004) and arguments of how CSR is good for business may not be valid in developing-country contexts. The risk of being held to account by local stakeholders is likely to be limited in developing-country contexts with pervasive information asymmetries, a weak press and NGOs that are highly capacity-constrained. Moreover, to be successful such projects require follow-ups and long-term support from business as well as the support of government (Ite 2005; Frynas 2005).

1.2.4 Externally imposed constraints on regulatory policy

Developing countries are increasingly reliant on private capital in seeking national development: a function of dwindling oversees development aid, economic liberalisation ¹⁴ and neo-liberal ideas of markets at the centre of economic development.

States may attract investment by providing a 'business friendly' investment climate, for instance by offering financial and other incentives. Many state-firm

¹² The term stakeholders will be used, in the following, to denote all those actors that have a stake in the firm's behaviour, whose own success or failure in achieving their objectives hinges, in part, on what they firm does. Note however that the term stakeholders say nothing about the *direction of influence*. For example, it includes regulators (who are mainly seeking to influence the conduct of a firm) as well as local communities (who are mainly influenced by e.g. the firm's environmental standards).

¹³ Related concepts include corporate accountability, corporate social performance and corporate citizenship (see Garriga & Melé 2004 for a review of definitional constructs).

¹⁴ The need to attract investment arising from the sudden removal of trade/investment barriers which almost overnight exposed weak local industries to cut-throat international competition.

contracts given to incoming investors also include clauses that 'stabilise' fiscal as well as other regulations (Otto 1998), committing the host government to not change environmental, fiscal and other regulatory parameters (Nayyar 2006, UNCTAD 2003).

Investment incentives may be negotiated at local or the international level (through bilateral or multilateral investment treaties; see Chowla 2005).¹⁵ They are particularly prominent when seeking to attract FDI into sectors where longer-term (and therefore, from the perspective of business, higher-risk) investments are required (IIED 2005).

However, investor incentives can easily distort the economy. Blomstrom & Kokko (2003) find that spillovers (skills and technology) only occur where local firms have the capacity and motivation to absorb these skills and technology (see also Kosack & Tobin 2006: 212).¹⁶ These constraints on a host-country's 'policy space' are thus partly self-imposed but also shaped by international investors' bargaining with the state (Feeney 2002).

The earlier concern that countries would out-compete each other in reducing the 'costliness' of business regulations, in a 'race-to-the-bottom', appears to have been overblown (Mani &Wheeler 1998; see Gray 2002 for a review). Rather evidence exists to support competing claims that FDI improves as well as undermines local regulatory standards (Newell 2001: 908). One reason may be the fact that firms actually prefer a stable and transparent environment, and would value this against any one-off fiscal incentives. However providing an investment environment with clear 'rules of the game', with enforceable property rights and that allows businesses to plan their investments, is a non-trivial task for most governments of developing countries. Reforms to enhance the ease of doing business are notoriously difficult (discussed with reference to the case of Zambia in chapter four).

The evolution of policy in weak commodity-dependent states will be particularly influenced by external influences. Countries that are institutionally weak, in the sense of having existing deficiencies in regulatory and bureaucratic institutions, are more likely to incentivise and accommodate foreign investors.

1.2.5 Growing resource nationalism

The ability of government to ensure capture benefits and minimise costs of FDI can determine its political popularity. Thus, the commodities boom that ended in 2008 with the financial crisis coincided with a sharp rise in resource nationalism in many countries. Booming commodity markets and windfall profits of foreign companies led to calls for greater citizen participation in the economy. In response, many states tried to re-assert their control over economic activity within their borders (see box below). In Zambia there were, at the height of the boom in 2007, strong political pressures on the Zambian state to become more assertive with investors.

During the recent boom, the world also witnessed an unprecedented rise of powerful multinational firms from developing countries, including China and India. A wider choice of development partners emboldened African governments, as did the

¹⁵ Because I did not find international or bilateral investment treaties to be of relevance in the case of copper mining in Zambia, I chose to not pursue this topic further.

¹⁶ They argue that FDI incentives are generally not an efficient way of raising national welfare and that "good governance in the area of FDI policy is to consider the investment incentive packages as part of the country's overall industrial policy, and make any incentives available on equal terms to all investors, foreign as well as local" (2003: 21).

high demand for Africa's resources. As the World Bank noted, "[t]he current boom in commodity prices presents a unique opportunity for governments across Sub-Saharan Africa to mobilise home-generated wealth from natural resources for sustainable development" (World Bank 2008b).

Governments across the world thus moved to secure a greater share of resource rents. This is reflected in the noticeable (albeit conservative) trend towards placing increasing constraints on international capital since 2000 (see figure 1), indicating a growing assertiveness of countries in seeking to capture benefits from FDI.

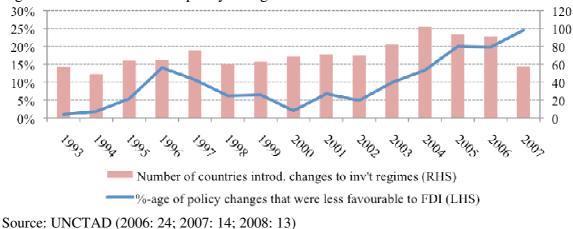


Figure 1. Global investment policy changes

Box 2: Selected examples of renegotiations of state-firm contracts

In Chile, the world's largest producer of copper, the fiscal framework for mining and its zero-royalty legislation came onto the public agenda in 2002 when ExxonMobil sold off a copper mine to AngloAmerican for \$1.3bn, despite the mine having reported net losses (and paid no taxes) for 25 years (The Age 15.6.2005). In 2004 the Chilean government submitted a bill to increase royalties on base metals to 3% via repeal of the zero-royalty law, enacted during military rule in the 1970s. Another Bill was introduced and enacted in 2005, with a 5% royalty imposed from 1 January 2006, expected to lead to an additional \$200m in tax revenue (Ibid.).

In Ecuador the government announced in April 2008 it would revoke 80% of mining concessions, mainly exploration activity or inactive licenses, and impose a 180-day ban on mining activity whilst reviewing the mining laws. The government later stated that it would not force investors to form joint ventures with local companies, contrary to the fear of some foreign mining companies. In July 2008 Ecuador was exploring bilateral cooperation with India to develop the country's mining sector, with Indian Minister of State for Mines quoted as saying "it is just the beginning … we are looking forward to opportunities for bilateral cooperation with Ecuador in the mining sector" (Economic Times 17.7.2008).

The Democratic Republic of Congo (DRC) launched a review process of 61 mining concessions granted during the DRC's 1997-2003 civil war and its aftermath. The DRC government called for companies to make proposals for new terms to contracts, including the proportion of equity participation held by government (MiningReview.com 20.4.2009). Counter to initial anticipation that the review would not impact the larger and generally more transparent investors, the government prosecutor ordered the immediate closure of the Kolwezi project operated by First Quantum Minerals Ltd (whose operations in Zambia constitute one of the case studies in this thesis). The company's legal advice was that this order was illegal, and First Quantum announced it was preparing for international arbitration whilst pursuing alternative solutions (MarketWatch 16.9.2009).

Peru – the world's third largest copper producer and sixth largest gold producer – implemented mining legislative reforms in December 2005. The new fiscal regime was to be applied from 2007 onwards for many companies. Only by 2018 – upon expiry of stability clauses – would all mining companies pay royalties. A bill to impose a variable, or sliding scales, royalty had been passed in early June 2004 with a 3% royalty for large-scale mines (Engineering and Mining Journal 2004).¹⁷

In Mongolia, where copper and gold together contribute 56% of export earnings, respectively, the government increased royalties in 2006, from 2.5% to 5%, and introduced a windfall tax on the copper and gold sectors. The receipts of this windfall tax will go into a development fund, two-thirds of which is earmarked for "social programmes and capital spending" (World Bank 2006), and the remainder is to be saved for future uses. The government also introduced a mixture of tax reforms, some of which lower the tax burden for firms (introduction of loss carry-forwards, reduction in corporate income tax) and some which increase the tax burden (e.g. the abolition of tax holidays) (Ibid.).

1.2.6 Section conclusion

In theory there are various positive development impacts of FDI, including taxation, local economic linkages, externalities, and employment generation. However, as argued in this section, these benefits are not a foregone conclusion but depend on host-country capacity to regulate effectively and fairly. Positive impacts of FDI will

¹⁷ However, after President Garcia came to power again in 2006, he claimed imposing royalty charges on holders of stability agreements would cause legal problems for Peru, and negotiated for companies to pay a 'voluntary payment' (amounting to \$172.4m per annum) towards fighting poverty. Thus, 25 large mining companies pay no royalties.

be more elusive when the state lacks capacity to formulate and enforce necessary regulation, both to capture economic rents from foreign investment activities but also to ensure negative externalities are kept under control.

Failures to develop and enforce regulatory policy may be due to lack of resources in government agencies, and other capacity constraints. To mitigate some of the resource deficits at local government agencies, novel approaches to regulation have emerged based around voluntary standards and partnerships with civil society. Yet the state remains crucial in upholding property rights and as political representative of local communities. I define a 'weak state' as one that lacks the ability to effectively formulate and enforce a regulatory framework. The inability of the state to align the state-firm bargains with local political demands (for redistribution, economic opportunity, environmental stewardship) renders it subject to resource nationalism.

I define a 'resource dependent state' as one where the state relies on one or more key commodities for the majority of its foreign exchange earnings.¹⁸ In such countries, the state relies on private capital to bring into the country the highly capital intensive and sophisticated equipment needed to develop the sector. These countries are therefore more likely to offer investment incentives and stability periods to investors. In doing so, however, they are also constraining their *future* scope for changing the rules of the regulatory game, regardless of changing circumstances. This suggests that the ability of host country governments to provide effective oversight is inversely related to the degree to which the country depends on this economic activity.

1.3 Growing south-south FDI

1.3.1 Emergence of south-south economic and political linkages

The period of 2004-2008 saw many commodity prices reaching unprecedented highs, partly driven by the rapid industrialisation of China, India and other emerging economies (Kaplinsky 2005).¹⁹ High prices generated much interest and investment into resources sectors. For the first time these investment inflows featured a significant share of companies from emerging economies. Such 'south-south' FDI formed part of a broader trend of a growing proportion of trade and investment within the 'global south' of low-to-middle income countries (World Bank 2006: 99, Aykut & Ratha 2003).²⁰ South-south FDI has grown rapidly since the beginning of the decade, and by 2006 UNCTAD estimated that a quarter of all TNCs originated in developing and transition countries (UNCTAD 2006: 122). The rise in activity of developing-country TNCs also reflects falling transaction costs of FDI due to advances in information technology, cheaper international logistics, and the internationalisation of financial markets, standards and skills (Autio 2005).

¹⁸ For a small poor country such as Zambia, with a largely undeveloped secondary manufacturing industry, any falls in receipts of foreign exchange will sharply impact on the ability of producers to acquire much-needed foreign-produced inputs (including oil and petrochemicals).

¹⁹ Chinese consumption of various base metals accounted for between 76% and 100% of the global increase in demand between 2000 and 2003 (Kaplinsky 2005).

²⁰ Different definitions for *south* and *north* are used in the literature on international development. Generally the 'global south' refers to 'developing' countries (as per UNCTAD's definition) and 'low-to-middle income' countries (as per the World Bank's definition). Unless otherwise noted, the terms South and North are used as per the World Bank's classification.

Table 1. South-south 1 D1 as 70 of total 1 D1 nows							
(\$bn)	1995	1999	2000	2001	2002	2003e	CAGR
Inflows into South from HI OECD	48.1	95.4	93.7	84.8	55.1	59.4	2.7%
Inflows into South from HI non-OECD ^(a)	28.2	35.0	22.7	24.8	27.2	22.8	(2.6%)
South-South FDI	14.0	33.1	38.3	49.7	53.0	47.4	16.5%
Total inflows	90.3	163.5	154.7	159.3	135.3	129.6	4.6%
South-South FDI as % of total	15.5%	20.2%	24.8%	31.2%	39.2%	36.6%	

Table 1. South-south FDI as % of total FDI flows

Source: World Bank (2006: 111)

Note: South-South data is based on 25 countries that are estimated to account for 85% of total FDI flows to developing countries.

HI=High income (WB class'n), CAGR=Cumulative Annual Growth Rate, e=estimate

(a) Includes (inter alia): Hong Kong, Singapore, Saudi Arabia, Israel as well as many island states.

This trend of economic integration is mirrored in greater *political* integration of lowand middle-income countries. Fast-growing middle-income countries are using their economic influence to demand greater political participation in multilateral fora such as the UN and the World Trade Organisation (WTO). In sub-Saharan Africa the economic clout of South Africa makes it a natural leader of the region as it seeks to take on a role as spokesperson for the continent.²¹ The India-Brazil-South Africa Forum (IBSA) seeks to garner a greater role for these countries at the UN, an important aim for India given China's current role as permanent and veto-carrying member of the UN Security Council (Alden & Vieira 2005: 1089).²²

The 2006 Forum on China-Africa Cooperation (FOCAC) in Beijing, which attracted high-level officials of 48 African nations (including over 40 heads of state and government), highlighted China's pursuit of integration with African economies.²³ Tull (2006: 467) argues that deepening economic ties are aimed at generating diplomatic support from African countries, to counter western efforts in the United Nations Commission on Human Rights to condemn China's human rights record. In 2008 India held a similar but smaller-scale India-Africa Summit (Xinhua 9.4.2008), with leaders and delegations from 14 African countries (including Zambia). At the summit the Indian Premier announced a doubling of lending to African countries and greater preferential trade access for many products and services. The summit concluded with the adoption of the Delhi Declaration, containing political commitments to support UN reform.²⁴

Among investors from large emerging economies, Chinese investment in Africa has received the most attention. Early writings focused on concern around the Chinese government's 'non-involvement policy' (BBC News 25.11.2006) as paying paid scant attention to the social and environmental impacts associated with overseas projects. The policy expression of this "state-centred orthodoxy", as Tull (2006) refers to it, dictates that (the issue of Taiwan aside) no political conditions are to be attached to international cooperation, be it trade, investment, development assistance or other forms of cooperation.

²³ People's Daily Online, 2 Nov 2006. Available at

²¹ In Southern Africa as a whole, South Africa accounts for less than one-third of the population but for over 75 percent of the GDP, a size in relation to Africa similar to that of the US economy in relation to the world.

²² An inaugural summit was held in Brasilia in September 2006, promoting cooperation within the areas of energy, transport and climate change (Domain-B 14.9.2006).

http://english.people.com.cn/200611/02/eng20061102_317428.html. Accessed 3 Dec 2006. ²⁴ The declaration stated that "Africa takes note of India's position and its aspirations to become a

permanent member with full rights in an expanded UN Security Council" (Xinhua 9.4.2008).

1.3.2 How 'institutional background' shapes company behaviour

Policy makers and academics interested in knowing whether south-south FDI presents any distinct risks or opportunities for developing host countries could begin by asking what drives the behaviour of a firm. A lot of what a company does and does not do in Zambia (or anywhere else) is clearly determined by what the host government does and does not ask for. However in weak commodity dependent states one can discern a range of influences from what I call the 'institutional background' of the company, also appear to play a prominent role.

The idea that investment from China, India, and other emerging markets would somehow be 'different' from 'western' firms rests on theories that capitalism can somehow sustain different types of political-economic systems: each with their own institutional frameworks and behavioural logics (Thelen 1999: 72; Hall & Soskice 2001).²⁵ It follows that when companies that have 'grown up' within one institutional environment go abroad, they bring with them practices and established ways of doing things that may conflict with, or re-enforce, host-country rules and expectations. Therefore, as Buckley et al. (2007: 515) have argued, research on international business must pay closer attention to the role of home-country institutions. As I discuss in chapter two, company practices change slowly in response to changes in the external environment. Home-country as well as other international influences therefore continue to shape company behaviour in the new host country.

Company-wide policies and procedures set by the firm's home office constitute one institutional influence that shape how managers will engage with state and non-state actors in the host country. These include accounting policies, reporting responsibilities, organisational structures and extent of decision-making decentralisation.

International capital markets are a second influence on company behaviour. Institutional theory suggests that different financing arrangements are associated with different governance mechanisms (Hall & Soskice 2001, Thelen 1999), e.g. international accounting standards. Direct demands on environmental and social safeguards arise when companies get project financing from Equator Principles signatory banks (Amalric 2005), or through World Bank and IFC's 'performance standards' (for environment and social screening of projects).²⁶

Third, large state-owned investors can be influenced by home government's *diplomatic considerations*. Patey (2007) has shown how the trajectory of western companies in the Sudan has been shaped by the international relations between home governments and Khartoum (see also Alden & Davies 2006). Within the management literature, Filatotchev et al. (2007: 557) have argued that ownership structure (including the degree of state ownership) must be given greater analytical prominence, as it impacts on firm behaviour by shaping managers' risk-preferences and decision-making horizons. Even where home-country governments are not involved directly as shareholders, they may provide investment incentives in the form of concessionary loans, tax incentives and investment guarantees (UNCTAD 2001).

Fourth, *international markets* shape firm behaviour. For example, the international market for copper constitutes the main determinant of the financial

²⁵ The 'varieties of capitalism' literature, although useful to establish the founding fact that entire institutional arrangements differ among countries, has to date negated the developing world. Although this presents a potentially fruitful future avenue of research, I do not pursue it further in developing my theoretical framework in chapter two.

²⁶ Another example is the European Investment Bank's Economic and Social Impact Assessment Framework, currently in development following the launch of a pilot initiative in 2005 (Wright 2007).

(mis)fortunes of copper mining firms. With regards to inputs into the production process, the degree of access to international product markets determines the extent to which firms will engage with and seek to develop local input markets.

As noted above, *international NGOs* may also influence corporate behaviour: in the late 1980s and 1990s, the human rights violations attributed to the government of Sudan forced many northern investors to scale down their operations in the country. Chinese and Indian firms stepped in to replace northern investors (Taylor 2006: 950).

1.3.3 Features and potential development impacts of south-south FDI

The discussion up to now has set out some *prima facie* reasons for why companies might vary in their behaviours vis-à-vis domestic regulators and stakeholders. Many of these 'drivers' of behaviour are jointly present among large Chinese, Indian and other emerging market firms. I now present some early indicative findings of broader development impacts from south-south FDI.

South-south FDI almost by definition occurs between countries that share similar levels of economic as well as institutional development: the World Bank governance indicators are highly correlated with levels of income (Kaufmann et al. 2007).²⁷ Therefore, investment between countries of similar levels of institutional development may hold particular challenges and opportunities for developing countries. In exploring what these might be, most research to date has been limited to exploratory surveys (Henley et al. 2008) or quantitative 'high-level' analysis (Aykut & Ratha 2003; Jenkins & Edwards 2006; Broadman 2007).²⁸

These early efforts have highlighted both theoretical and empirical reasons for why so-called southern TNCs would, relative to established western firms, be associated with different development impacts. First, there is some evidence of emerging-market firms operating and applying different business strategies from their northern counterparts (Hoskisson et al. 2000; Henley et al. 2008), leading to differences in technology transfer and linkages to local markets. Investment by emerging market TNCs may embody lower technological gaps compared to skills and knowledge available in the host country, thereby facilitating technology transfer. On the other hand there are indications that positive linkages to the local economy may be

http://siteresources.worldbank.org/DATASTATISTICS/Resources/CLASS.XLS).

²⁷ The World Bank's governance indicators (Kaufmann et al. 2007) – which seek to quantify countries' institutional development, including government effectiveness, voice and accountability, and property rights – are highly correlated with countries' level of economic development, as per World Bank classifications (available at

²⁸ Quantitative accounts of south-south FDI are complicated by the lack of available statistics. Government balance-of-payments and mergers-and-acquisitions statistics are often incomplete or distort the picture of south-south FDI. First, most developing countries do not report the source of FDI inflows and destination of FDI outflows by country (UNCTAD 2006: 137), and even relatively developed countries (notably Mexico and Malaysia) often do not report FDI outflows in their balanceof-payment statistics at all (Aykut & Ratha 2003: 161). Second, statistics are distorted by the practice of shifting capital abroad – often to an offshore financial centre such as Cayman Islands, Bermuda, or the British Virgin Islands (UNCTAD 2006: 116) – only for it to be subsequently repatriated. This practice is motivated by concessions to foreign investors, such as tax holidays, land rights, exchange controls. Third, difficulties in distinguishing between 'ultimate' and 'immediate' investor lead to additional problems (UNCTAD 2006: 106). When investment is undertaken by a subsidiary, but where subsidiary (immediate investor) and the company headquarters (ultimate investor) are located in different countries, the usual convention of reporting immediate rather than ultimate investor may lead to distortions of south-south FDI statistics.

more limited for emerging market investors, that appear to prefer imports from cheap home-country product markets (Kaplinsky 2008). There appears to be differences between Chinese and Indian investors in this regard: Broadman (2006) found that Indian investors into Africa are more likely to integrate with the local economy, relative to their Chinese counterparts.

Second, many southern TNCs herald from environments of weak property rights and limited state capacity for enforcement, which increases transactions costs associated with enforcement of contracts (Hoskisson et al. 2000: 254). When transaction costs associated with 'formal' institutions are high, alternatives of more personalised and informal means of contracting become more attractive (North 1990: 34). Gelb (2005: 204) has suggested that southern TNCs will tend to organise themselves along such informal lines and that this makes them better suited to developing-country conditions.

Greater informality in business practices may undermine formal governance but may also increase the stability of businesses, if it allows companies to better navigate an institutionally 'emerging' investment climate. There are early indications that emerging-market investors may also be better able to manage operational and political risk in developing countries due to experience of similar situations at home (World Bank 2005: 99). In Africa, Tull notes that "Chinese firms appear to be significantly less risk-averse than their Western counterparts, especially in war-torn states such as Angola, DR Congo and Sierra Leone" (2006: 468).

Third, a higher degree of state ownership appears to be common among the largest 'southern' TNCs compared to their 'northern' counterparts, in particular for firms investing in primary resource sectors (UNCTAD 2006: 122). The largest Chinese investments in Zambia are managed through a Special Economic Zone, the first of China's five 'special economic zones' announced at FOCAC in 2006. Questions around the state-ownership of large southern TNCs have been raised in particular with reference to large Chinese investment into Africa's extractive industries.²⁹ State-owned TNCs may engage in construction, infrastructure and other highly 'visible' projects as a way of generating political goodwill, which may subsequently be used to open commercial doors in separate sectors (Tull 2006: 468). They can be instructed to overpay for an asset if it is considered to be strategic to the home country's national interest (Alden 2007), or bid for public works contracts at or below cost in order to generate diplomatic support at international fora.

Fourth, concerns have been raised that developing-country TNCs with less stringent environmental standards at home might export lower standards, vis-à-vis northern investors (TI 2006).³⁰ This is supported by evidence that TNCs harmonise environmental standards across different operating locations (to economise on transaction costs associated the use of varying standards; see UNCTAD 1999: 292).

Fifth, the potential for CSR to contribute to strengthening standards may be more limited in the case of southern TNCs.³¹ The CSR 'business case' typically rests on notions of risk management, emphasising how firms can lower operational risk –

²⁹ For instance, the extent to which FDI from China is used as an effective foreign policy tool is an emerging area of research (Gill & Reilly 2007).

³⁰ In Transparency International's '2006 Bribe Payers Index' reviewing overseas companies from the 30 largest exporting nations – representing 82% of the global exports in 2005 – ranks Chinese, Indian and Russian firms (all with significant corruption is their 'home' countries) as the most corrupt, in that order (TI 2006).

³¹ Doh & Guay (2006: 49) have argued that different national institutional frameworks result in varying expression (and effectiveness) of CSR initiatives and civil regulation.

including the risk of NGO-driven 'naming-and-shaming' campaigns or consumer boycotts – through adoption of CSR practices (UNCTAD 2006: 237). Yet given that developing countries often feature less developed civil society movements (Smith 2003: 58, cited in UNCTAD 2006: 233), the reduction in risk from improving community relations, labour standards and so on may not be worth the emerging market firm's while.³²

1.3.4 Section conclusion

In developing a research agenda to explore how policy evolves in a context of growing south-south FDI, a simple dichotomy of southern and northern TNCs may be of limited use.³³ Rather it becomes necessary to look for particular characteristics that are shared by groups of foreign investors and explicate the origins and impacts of these characteristics. This section has defined an investor's 'institutional background' as the mix of influences that arise externally to the host-country context (e.g. from home-country head office, home government, international markets, capital providers, and other international organisations). A firm's institutional background is likely to retain some relevance for explaining its behaviour, even when it enters into a new institutional environment in the host country.

At this stage the concept of institutional background is necessarily crude and does not, in and of itself, say much about *how* external influences translate into firm behaviour 'on the ground' and how this influences the evolution of regulatory policy. In order to address such issues, the next chapter reviews the literature on policy making, institutional theory and organisational learning. It thus develops a theory of how organisational behaviour among foreign investors varies systematically, depending on influences that are both internal as well as external to the host-country context.

1.4 Objectives and research questions

My primary objective in this thesis is to understand how policy evolves in weak commodity dependent states, in a context of high organisational diversity. In doing so I want to explicate the mix of external (international) and internal (domestic) influences on state-firm relations. An important part of my overarching purpose is thus to nuance the debate on south-to-south FDI, and to consider the analytical value of this concept more generally. Following from these research objectives, the main research question is thus:

• How do state-firm relations and regulatory policy making evolve in weak resource-dependent countries?

My secondary objective is to investigate the extent to which there is convergence or divergence in regulatory standards and practices due to organisational learning among

³² This can help explain why 'northern' investors are largely absent from the Sudan while Chinese National Petroleum Corporation (CNPC), India's Oil and Natural Gas Corporation (ONGC) and Petronas (Malaysia's national oil company) are all heavily involved in the region (UNCTAD 2006: 161).

³³ As UNCTAD note, developing-country TNCs are diverse and "range widely in terms of country origins, their level of maturity, position in the value chain and strategies" (2006: 155). There are large Southern TNCs such as Mexico's CEMEX and Brazil's Petrobras who are considered leaders in their industries with regards to social and environmental responsibility (Ibid. p.233).

investors from different backgrounds. To this end I pose a secondary research question:

• What shapes processes of convergence or divergence around regulatory standards in the Zambian mining sector?

1.4.1 Conceptualising the study

This study is concerned with how economic, environmental and social business regulation evolves, through policy formulation and enforcement, in a context of a weak state subject to rapid internal and external change. In conceptualising the study I have purposely drawn on a broad range of literatures in order to understand the role of organisational change in policy making and development (Hoff & Stiglitz 2001). Thus, chapter two develops a theory of the state (policy making) as well as a theory of the organisational change (learning) and links these through a theory of institutional change and bargaining. In doing so, I apply a hierarchy of sub-questions to interrogate the literature and later the data collected during fieldwork in 2007 and through follow-up interviews.

At one level I ask how regulatory policy and processes of implementation evolve and whether behaviour among companies directly shapes policy outcomes (Grindle & Thomas 1991). This question is premised on the idea that firms have incentives to engage with policy makers with the objective of minimising regulatory costs (Hillman & Hitt 1999: 825). Such costs are not uniformly distributed across actors but depend on institutional complementarities (i.e. what the company in question is already doing), wherefore not all firms will exert the same influence on policy makers. My case study companies are all significant in the context of the local economy, suggesting that government will be attentive to the preferences of these investors.

I subsequently discuss how regulatory policy can be understood through a lens of institutional theory, by drawing on North (1990) and other institutionalist scholars. Here I discuss the processes whereby states and firms allocate benefits and costs of resource extraction. If companies do play some active role in shaping these processes of allocation, then the question arises as to *how* they engage with local state and non-state actors. Here I draw on evolutionary economics and the view of organisational behaviour as guided by routines and objectives held by the firm (Nelson & Winter 1982).

Finally I ask: how do organisational routines and objectives emerge and change? In particular, why would they continue to influence behaviour once the company moves abroad? I explore these questions by reviewing and developing the concept of organisational learning. I define this concept as changes to firms' routines and objectives (Levitt & March 1988) that occur through continuous interaction between states, firms and markets. After establishing this theoretical 'chain' I am able to make claims about how drivers of organisational behaviour are linked to policy and institutional change, a topic thus far ignored in the literature.

I apply this theoretical framework on three areas of state-firm relations of relevance to the mining sector: fiscal policy and practice; environmental, social and labour governance; and local economic linkages.³⁴ This choice of areas was intended

³⁴ Potentially significant impacts of FDI not explicitly covered by these policy spheres include employment generation and skills and technology transfers. Although these factors will form part of the discussion, they do not constitute independent foci of this study.

to cover a variety of issues concerning regulatory policy and to reflect prominent development challenges associated with large-scale FDI into the extractive industries.

Importantly, the study acknowledges that state-firm relations do not exist in a vacuum but in a broader political economy that includes convergent and divergent 'local' influences arising from actors such as donors, civil society and the media. These stakeholders will at any given point in time exert a range of pressures on the firm. ³⁵ Local pressures on firms may also arise from host-country commercial constraints (scarcity of inputs, labour relations) and intra-industry dynamics (cooperation vs. competition, industry associations, convergence).

The view that firms' behaviour is shaped by demands and needs of multiple stakeholders highlights the need for a qualitative research strategy, to provide the rich contextual account necessary to identify and incorporate diverse influences. A qualitative research strategy also reflects the inductive spirit of this study around the novel phenomenon of south-south FDI: rather than using pre-defined theories and testing them, my aim was to remain open to any empirically grounded explanations of policy evolution.

The qualitative approach of this thesis should not diminish its salience for policy makers. As Walker observes, "[w]hat qualitative research can offer the policy maker is a theory of social action grounded on the experiences – the world view – of those likely to be affected by a policy decision or thought to be part of the problem." (Walker 1985: 19). I elaborate on the methodological implications of this approach in chapter three.

1.4.2 Choice of Zambia as case study

Zambia's mining sector was an apt choice for this study for several reasons. First, the privatised mining sector includes a diverse set of multinational mining companies from China, India, South Africa, as well as various 'western' countries, enabling me to select an appropriate sample of case-study companies.

Second, the mining sector in Zambia is economically as well as politically important, an *a priori* indication that these companies might be expected to have some influence over the policy process. One of my case study companies, Konkola Copper Mines (owned by India's Vedanta Resources), was at the time of writing the country's largest private sector employer.

Third, the agents that comprise the mining industry are a discrete community of relatively large foreign investors, distinguishing it from a monopoly (e.g. preprivatisation) as well as from perfect competition (price-taking). I would therefore expect that this is an environment where 'norming' is taking place because of diversity across mining companies.

Fourth, the privatisation that took place between 1997 and 2002 set a useful benchmark against which more recent entrants into the mining sector can be judged. I was keen on incorporating this element of time in exploring how company behaviour and policy responses had evolved since their arrival in Zambia.³⁶

³⁵ For instance NGOs may target firms through naming-and-shaming campaigns, labour unions may instruct members to down tools, or suppliers may corrupt procurement systems by offering bribes to procurement personnel.

³⁶ Meyer (2004) argues that negative spillovers are greater, and positive ones fewer, in the early years post-entry. He attributes this to learning and adaptation on the part of the firm as well as its new-found local stakeholders.

Finally, the Zambian experience may hold relevance for other commoditydependent developing countries. Among African countries, Zambia is close to the median in terms of its institutional development, according to the World Bank's 'Governance matters' indicators (see section 4.3). It is neither a failed state nor one of Africa's economic success stories, but a place where somewhat functioning institutions complement and compete with deep informal and neopatrimonial social structures. A study of Zambia can thus cast light on how weak commodity dependent states negotiate with international capital more generally. I discuss the institutional structure and governance features of Zambia in chapter four.

1.4.3 Contributions

This study, pursued through an applied political economy framework, contributes to current debates among scholars and practitioners surrounding the potentials and pitfalls of resource-led development. It also contributes to the literature on the role of international capital in economic and political globalisation. Its findings should inform debates on regulatory policy making and institutional convergence, and the prospects for globalisation to promote harmonisation of environmental and social standards of governance.

It offers a critique of the liberal regulatory ideology that has the promotion of an enabling environment for business at its core, the source of thinking underpinning the discourse of FDI as a driver of economic development. This study illustrates the pitfalls in taking such an approach to business regulation in the context of increasing diversity of business practices and a severely capacity-constrained state.

A specific contribution of this thesis is to add to the literature on China's fastgrowing engagement with Africa. To date such accounts have drawn heavily on the idea that there is something uniquely distinct about large-scale Chinese engagement with Africa (what Large 2008 calls 'Chinese exceptionalism') and focused on rhetorical rather than substantive elements. Chinese companies have now operated in Zambia's copper mining sector for over a decade wherefore this study can address questions of convergence or divergence between Chinese and 'traditional' western investors. My study also elucidates how this particular case of state-sponsored Chinese economic engagement fits within the political economy of Zambia.

One limitation in scope is that I do not investigate directly the role of local (district and municipal) government. Nor do I look at the role played by local and international consultants in mediating state-firm interaction, or the role of traditional rulers. I elaborate on these and other limitations in scope further in section 3.1.1.

1.4.4 Outline of thesis

This introductory chapter has set the scene for a study of policy evolution in weak, commodity-dependent states. I first highlighted the trend of greater reliance on FDI and private capital as agents of development, yet noted the need for regulation to ensure development benefits materialise. I observed that failure to capture rents from resource extraction and inability to internalise environmental and social externalities easily lead to political pressures in the form of resource nationalism.

Subsequently, I examined the trend of growing south-south FDI, with companies from China, India and other emerging markets playing an increasing role in Africa's development. I observed there were a host of reasons, many relating to the

'institutional background' of an investor, why business practices (and consequential impacts on host countries) might vary across foreign investors.

Chapter two reviews the academic literature of relevance to answering my two research questions. It first reviews the literature on the African state and different conceptualisations of the regulatory policy process, followed by a review of how institutional theory can be used to analyse regulations. Based largely on evolutionary economics, it develops and defines the concept of organisational learning that I use to address the second research question in particular.

The third chapter presents the methodology of the study. It reflects on the choice of research methods and my approach for executing the study, based on indepth interviews carried out in Zambia and secondary documentary data. This chapter also elaborates on the study's limitations in scope.

Chapters four to seven are mainly empirical. Chapter four presents the Zambian context by placing the country's copper extraction in historical perspective and discussing the context of privatisation that began in the late 1990s. It elaborates on my view of the state as provider the institutional framework within which actions by government, firms as well as various non-state actors are interpreted and legitimated. The chapter seeks to paint a comprehensive picture of the Zambian political economy of copper mining by identifying key policy actors and features of the country's political culture.

Chapter five discusses fiscal policy and practice, including issues of regulatory capacity to collect taxes and royalties. It explores the role of state-firm contracts and stability clauses in preventing the state from reforming the fiscal framework, and how these contracts have emerged and changed through state-firm bargaining.

Chapter six covers institutions and practices surrounding environmental, health and safety and labour practices. These are important issues given significant social and environmental externalities in the sector, in particular during the rapid expansion associated with the boom in copper prices. This chapter elaborates on the features of environmental and safety regulation, assessing the relative merits of command-and-control versus incentives-based regulation.

In chapter seven I discuss the extent and impact of forward and backward linkages through mining companies' supply chains. I look at issues such as whether inputs are procured locally or internationally, and how firms' relationships with local economic actors develop over time.

Chapter eight synthesises the findings of chapters five through seven by bringing out themes that cut across my three policy spheres of interest. It discusses implications for host-country sustainable development in the context of the two research questions. The final chapter concludes by summarising the core arguments and providing recommendations for policy makers, as well as suggestions for future research.

2 Literature review and theoretical framework

2.1 Introduction

The objective of this study is to explore how policy evolves in weak commodity dependent states, in particular in a context of institutionally diverse foreign mining investors. The research questions developed in the preceding chapter are designed with this objective in mind. The first section of this chapter reviews the literature on the African state, followed by a review of the literature on policy making. I develop the argument that the process of regulation can usefully be understood as constituted through dynamic interaction between regulators and regulated.

The second section reviews the literature on institutional emergence and change. In explores how institutional theories can help us understand the evolution of regulatory policy. Here I review theories of institutional emergence and change within both the social and management sciences, to identify points of common interest and contention.

In the third section I present the case for analysing foreign investors' interaction with policy makers and the policy environment through a framework of evolutionary economics. This approach, based on the notion of corporate behaviour as guided by relatively stable organisational routines and aims, forms the foundation of the theory of the firm I use to explain company behaviour.

In the fourth section I develop the concept of organisational learning to explain how firm-stakeholder relations evolve over time. This section emphasises the path dependent nature of organisational routines and objectives, as well as the role of both external and internal influences in shaping organisational behaviour. The fifth section concludes.

2.2 Policy making in the African state

This section discusses the structures and features of the state and how they matter for the process of government regulation of private sector activity.³⁷ It is based on the premise that an understanding of the state is crucial to any analysis of policy making. I first review the literature on the African state, highlighting various features brought out in the dominant perspectives, including the concept of the neo-patrimonial state. I argue that the African state can best be described as a hybrid state, where formal and informal, individual and collective forms of governance co-exist and simultaneously shape state-firm relations.

I then turn to theories of policy making to explore, more specifically, the role played by interest groups in shaping state behaviour. I discuss both society centred approaches, where the state is seen as a neutral arbitrator, as well as perspectives on the 'developmental state' as an active agent for development. I then propose to understand the policy process in weak commodity dependent states as one of *evolutionary policy making* that takes place over time through repeated interactions.

Before proceeding it is worthwhile to distinguish between the terms 'law', 'regulation' and 'policy'. I see *laws* as the formal rules and objectives through which states attempt to govern economic, political and social life. They prescribe rights and responsibilities, including sanctions for non-adherence. I see *regulation* as more of a

³⁷ Vogel (1998) shows how the same pressures and processes of government deregulation in the UK and in Japan in the 1970s led to very different regulatory and social outcomes.

process-orientated construct, including the activities that state actors and others undertake in implementing the law. It is a concept that highlights interaction between the regulator and the regulated and will be a key analytical concept in much of the analysis in subsequent chapters. *Policy*, meanwhile, is taken to mean 'what the government does': it includes the processes of developing laws, as well as bureaucratic practices and norms whereby they are applied in ongoing regulation. Government's policy pronouncements, or statements, serve as a vehicle for the government to signal to other actors what its objectives are.

2.2.1 Perspectives on the African state

Despite vast endowments of fertile land, oil, minerals and waterways, the African continent remains plagued by development challenges.³⁸ The dominant literature to explain the politics behind Africa's persistent economic underdevelopment is based around notions of African states as *neopatrimonial states*: states that retain features of both of Weber's (1968) two ideal-type states, the 'rational-legal' and the 'patrimonial' state.

According to Weber, the former is a bureaucracy where institutions routinise the (largely impersonal) exercise of authority, where this authority is constrained and enabled by written laws, and where the public and private sphere are clearly separated. A patrimonial system of governance, on the other hand, tends to apply – in its pure form – to the smallest and most traditional polities. It largely removes the distinction between public and private, and citizens are treated as extensions of the household of a leader who exercises authority by decree.³⁹

Africanist scholars argue that African states exhibit enduring features of patrimonial governance despite a rational-legal formal appearance. Bratton & van de Walle (1997) define African 'neopatrimonial' states based on three key characteristics: systematic concentration of power in the presidency (presidentialism), the award of personal favours (clientelism), and the misuse of state resources for political legitimation (blurring the line between private and public). Van de Walle observes that with limited Parliamentary oversight and ministries often filled with loyalists, "the Presidency emerges as the dominant arena for decision-making, to the point that regular ministerial structures are relegated to an executant's role" (2003: 310). This 'presidential' system engenders an interventionist political culture where political leadership emerges as a dominant force for change (Grindle 2001).

Indeed, centralised control over the affairs of the state remains a hallmark of African countries. Among 45 African countries with multi-party systems in 2003, 40 had presidential rather than parliamentary constitutions (van de Walle 2003).⁴⁰ Bratton & van de Walle further note that "whereas personal relations occur on the margins of all bureaucratic systems ... it is the *core* feature of politics in Africa" (1997: 62, italics in original).

³⁸ About half of Africa's population is living in countries with significant oil, gas, or hard mineral resources (World Bank 2008c).

³⁹ In drawing this distinction Weber argued that the modern state must be classified according to is means, not to its ends, defining the state as a "human community that claims a monopoly over the legitimate use of physical force within a given territory" (1948: 78).

⁴⁰ This in part reflecting the highly centralised administrative structures inherited at independence (Wunsch & Olowu 1990: 4-5).

The neopatrimonial view of the state remains contested and contains divergent interpretations and explanations.⁴¹ At one end of the spectrum, some see development challenges as rooted in social and political life that is distinctly 'African' and homogenous across countries (see Chabal & Daloz 1999). Scholars writing from this perspective emphasise informal and cultural traits: Chabal (2002) has argued that in Sub-Saharan Africa informal rules and norms appear to explain social behaviour better than countries' formal (but poorly enforced) legal frameworks. This perspective presents the state largely as a façade, a stage, where actions have little real bearing on the political and conditioned by donor demands. This results in a largely a dichotomous view of institutions and personal rule: it implies that institutions do not matter, or that institutions and strong leaders are mutually exclusive (see Jackson & Rosberg 1982).

Other Africanist scholars challenge this perspective, arguing that it fails to account for diversity in culture, institutions, as well as actual divergent economic fortunes across countries. Some authors (e.g. Englebert 1997, 2002) see this diversity across African states as significantly influenced by exogenous impacts, arguing that development outcomes are a function of the tension between pre- and post-colonial institutions. In doing so Englebert develops the argument that the neopatrimonial African state lacks legitimacy because "its structures have [not] evolved endogenously to its own society and [without] some level of historical continuity to its institutions" (2002: 4). In doing so he takes a stance against culturally deterministic approaches to understanding the African state, arguing that "[p]atterns of predation, neo-patrimonialism, rent seeking, urban bias, and administrative decay can be thought of as deriving from the administrative deficit of the African state." (Englebert 1997: 768).

Chabal's idea of the state as nothing more than a façade is eschewed by Bratton & van de Walle (1997) who insist that formal features of the state (though weakened by the clientelist networks and limited accountability of rulers) do have a role to play. They favour a view of the African state as a hybrid of pre- and post colonial institutions where "those hybrid political systems in which the customs and patterns of patrimonisalism co-exist with, and suffuse, rational-legal institutions" (Bratton & van de Walle 1997: 62). Similarly, but through a rational-choice framework, World Bank economist Dia (1996) has argued that African government can be understood as formally framed around Western democratic institutions that have been superimposed on informal traditional institutions and norms.⁴²

Over time, Bayart argues, the institutional frameworks imposed by colonialism (and subsequently by donor conditionalities) become endogenised through interaction with local informal systems of governance.⁴³ The imported institutions are "hybridised with local strategies of power, re-appropriated by local groups" (Bayart 1996: 14; 1991). He views political and social institutions – which he

⁴¹ A general critique of neopatrimonial accounts is that they tend to compare the African state to either a Weberian ideal bureaucracy, to contemporary western capitalist states, or to pre-modern western states (Willott 2009).

⁴² Bangura argues that formal institutions have been ineffective in poor African countries in part because of contradictions "between the interests of bureaucratic actors and the goals they are supposed to uphold" (1994: 785).

⁴³ This is similar to Hodgson's concept of 'downward causation', whereby values percolate downwards from formal institutions into individuals' habits (see Hodgson 2000b).

sees as "structures or social forces"⁴⁴ – as arenas for "intense struggles" between actors representing different interests (Ibid., p.41). These struggles reduce state autonomy, suggesting that one way for the state to stay autonomous is to isolate itself from these struggles by centralising power in the President.

Some hybridity of the state exists everywhere, reflected in its different roles as author of the rules, enforcer of these rules, as well as "provider of institutional infrastructure" (Scott 1995: 95), i.e. hosting the arenas in which conflict mediation takes place.⁴⁵ In the African state this is taken one step further, due to the overlap of formal and informal institutions. In a hybrid African state the government may be able to simultaneously accommodate formal as well as informal relations with foreign investors. This can lead to a policy environment that is less predictable from the perspective of these actors.

2.2.2 Perspectives on policy making

This section presents three theoretical and practical perspectives on the policy process. I first discuss society-centric (pluralist) accounts of policy making, followed by state-centric accounts (associated with the idea of the developmental state). Lastly I explore perspectives of policy making as an evolutionary and dynamic process.

2.2.2.1 Pluralism: policy making as society-centric

Pluralist theories, in essence, present a view of the state "as a neutral arbitrator among competing organised interests in society where its principal role is to respond to societal pressures and changes in the balance of these pressures" (Healey & Robinson 1994: 51). These perspectives emphasise (sometimes exclusively) the role of interest groups in shaping policy. Where the influence of interest groups is strong, this easily leads to regulatory capture by non-state interests. Within political science, the theory of public choice constitutes one such 'pluralist' perspective, in which the state is seen as an aggregator of group interests. It is based on a rationalist interpretation of competition for state resources – thus corruption and rent-seeking ⁴⁶ Simply put, bureaucrats will create artificial scarcities e.g. through licensing procedures. to facilitate such regulatory capture – are seen as rational responses to the incentive structure of prevailing institutions (Olson 1971).⁴⁷ I present three critiques of this perspective, highlighting the danger that pluralist theories result in functionalist accounts of social life; that they strip agents of power to articulate their interests; and that they fail to account for fast-changing external circumstances.

⁴⁴ These institutions include "structures or other social forces, such as bureaucracies, local authorities, chiefdoms, trade unions, employers' organizations and even Christian Churches, Islamic brotherhoods, so called 'independent' religious movements or sects." (Bayart 1991: 41).

 $^{^{45}}$ As Fligstein & Freeland observe, the state has a broad role to play in "defin[ing] and regulat[ing] the conditions that make transactions possible, including the limits of contract and property rights" (1995: 22).

⁴⁷ Following Nye I define corruption broadly, as the "behaviour which deviates from the formal duties of a public role because of private-regarding (personal, close family, private clique) pecuniary or status gains, or violates rules against the exercise of certain types of private-regarding influence." (1967). Corruption thus defined includes behaviour classified as *bribery* or "use of a reward to pervert the judgment of a person in a position of trust"; *nepotism*, i.e. "bestowal of patronage by reason of ascriptive relationship rather than merit"; and *misappropriation*, or "illegal appropriation of public resources for private-regarding uses" (Nye 1967).

First, theories based on pluralism in the political sciences can be critiqued for their propensity for so-called functionalism, whereby *ex-post* institutional outcomes are explained with reference to the interests promoted by these very same institutions.⁴⁸ Functionalism sits uneasily with Bates & Krueger's observation that "[o]ne of the most surprising findings in our case studies is the degree to which the intervention of interest groups fails to account for the initiation or lack of initiations of policy reforms" (1993: 14). Mkandawire similarly argues that African business classes have often failed to capture state policies, and that "[m]uch of the evidence of 'capture' is deduced from the fact that gains accrue to identifiable groups or sectors" (2001: 300). A further problem of functionalism is its failure to accept the possibility of reverse causation: that rather than policy change being due to successful lobbying, the congruence of interests and institutions may be due to the fact that these policies preceded – and actually created – the very interest groups that subsequently extracted rents from the policies in question.

A second problem with rational-choice pluralism is the lack of autonomy accorded to the bureaucracy, regulators, and other political actors within the state (Almond 1988). The state appears to be largely reactive. This perspective thereby ignores the politics of redistribution: Knight (1992) is critical of functionalist pluralism and argues that conflict and unequal power distributions mean that institutional outcomes in general, in fact, *do not* reflect efficient outcomes.⁴⁹

Yet I have argued above that in many African states the central government and ultimately the Presidency is intimately (and actively) involved in many facets of policy, and is anything but reactive. Rational-choice pluralism also assumes that actors shape institutional change by the sum of their interests/preferences. However, when information asymmetries are high and organisational capacity constrained (common features of many developing countries) the researcher must make explicit the relative capabilities and constraints of actors.

Not all groups will have access to the negotiating table; some may lack organisational capacity to formulate their positions and overcome collective action dilemmas.

A third critique of pluralism and public choice theory comes from the Africanist literature, which repeatedly suggests that local political leaders have significant power to bargain amongst themselves, as well as between competing national and international interests. Bayart (2000) has argued forcefully that African states tend to be highly influenced by external powers with whom local political elites must negotiate (and often do so very successfully), thus developing the concept of the extraverted state (see also Clapham 1996: 139). Political elites in control of extraverted states secure financial or other support through the provision of protection for external capital interests. This perspective lends itself to a view of the state as 'broker' between international capital and local communities, underwriting a 'social license to operate' in return for taxes and political gains (for instance through jobcreation for locals).

⁴⁸ Theoretically, such a view can only be valid if we assume that all efforts at institutional change are purposeful *as well as* successful.

 $^{^{49}}$ Knight's arguments pose the question: are institutions that promote stability but that are unequalising better than not having these institutions at all?

2.2.2.2 Policy making as state-centric and autonomous

An alternative take on government policy making ascribes the state with powers to actively promote development through participation in social and economic life. Such state-centric views see policy development as endogenous to the state, determined by interaction between central government, street-level bureaucrats and economic interests. Within this literature, some see 'public policy' as largely determined by the (internal) institutional structure of the state (Weir & Skocpol 1985: 126). Others emphasise the role of individuals, ideology, and learning process (Heclo 1974: 308).

Mkandawire (2001) defines a state that is based on such an ideology of economic and social development as a 'developmental state'. It reflects a view that was a popular across developing countries in the aftermath of independence, when many African leaders legitimised themselves around a primary objective of economic development. They set out to replace anti-developmental colonial policies that had paid scant attention to education and capacity building. Across Africa, authoritarian regimes were thus legitimated with reference to the need to *control economic activity in order to foster development*. Rakner (2003) argues that Zambia under the leadership of Kaunda and United National Independence Party could be classified as a development state, in particular following the nationalisation of private enterprises through the Mulungushi reforms of 1968-1971.

Rapidly industrialising east-Asian economies, led by South Korea, provided support for the idea that developmental states could be associated with policy effectiveness. Authors such as Amsden (1989) and Wade (1990) pointed to the successes of these countries in fostering economic development. They argued that for developmental states to exist, state autonomy was needed to engage widely without being 'captured' by narrow interest groups. Evans (1995) interjected that state autonomy was not sufficient for successful government-led development. Rather, the state must also exhibit a degree of embeddedness of the state, through direct or indirect participation in the business-networks and economic and social interest groups.⁵⁰

Indeed many African countries appear state-centric due to the high degree of centralisation around the Executive, reflected in wide-ranging interventions in the economy (Bates & Collier 1995). However the extent to which this consists of autonomous action is questionable. Developing countries often suffer from significant interference by donors and other external actors, complicated ethnic politics, high levels of inequalities, dependence on international commodity prices and macroeconomic instability – all of which constrain policy autonomy. Weak institutions with limited enforcement capacity often constrain government's ability to effectuate policy, even where independently formulated.⁵¹

2.2.2.3 An evolutionary perspective on policy making

A third view of policy making sees it as an evolutionary process. This approach emphasises the continuous but non-linear interaction between government and nongovernment actors. Regulatory policy is thereby constituted by mutual actions of state

 $^{^{50}}$ Evans (1995) thus proposed that successful industrial policy-making requires embedded autonomy: if the state is totally embedded (aligned with interest groups) it will not be able to enforce policies, and if it is totally autonomous it will not have sufficient information about economic sectors to devise appropriate policies.

⁵¹ Rodrik (1996) has argued that one reason behind the East Asian economies' success was the high level of education and low levels of inequalities.

and private actors.⁵² Within this literature one can locate different value-based positions – or regulatory ideologies – on what constitutes the optimal allocation of roles and responsibilities across government and non-government actors.

Dominant regulatory ideologies have shifted over time, toward approaches that rely to a greater extent on market institutions to regulate economic activity. As Majone (1997) has argued, regulatory frameworks in developed countries have, over time, moved away from top-down, 'dirigiste' or interventionist state-regulation to various forms of self-regulation.⁵³

As Nayyar argues: "[t]he original solution the [the problem of externalities] was appropriate taxes and subsidies [but] this went out of fashion with the Coase Theorem, which returned the market to its pedestal" (2006: 10).⁵⁴ The greater involvement of business in activities of regulation reflects what Harris-White has called an "inherent tension in modern capitalism" (2003) where the state is increasingly charged with providing an enabling environment for business, in addition to its role as enforcer of standards chosen by society.

The fall in the role of formal (government) regulation has been matched by a rise in the role played by non-state actors in shaping regulatory agendas and monitoring their implementation, including through cooperative approaches (Newell 2001: 908; UNCTAD 2003). In developing countries this discourse is supported by the idea that – given the empirical reality of many institutionally weak states – it is in a company's enlightened self-interest to take proactive responsibility for wider impacts on stakeholders.

A key feature of this perspective is that policy making and institutional development are best understood as two-way processes. In contrast to pluralist accounts, it ascribes significant agency to actors and recognises internal competition within and between groups of actors. The importance of individual and group agency is of particular significance in a small country like Zambia. As Harberger has observed, "[t]he smaller the economy, the more unique the pressures and forces working to influence the policy structure are likely to be ... The smaller the leadership elite, the more characteristics peculiar to it – including its own cliques, factions and rivalries – are likely to play a dominant role in defining pressures and points of resistance" (1988: 255).

A small political leadership with centralised decision-making power suggests that ideas and ideology become more influential in shaping policy. Hall (1993) critiques pluralist approaches for failing to explain the role of ideas in the policy process. He proposes a "concept of policy making as social learning" (1993: 275) that recognises that policy develops in response to ideas evolving within the state as well as in response to local context.⁵⁵ Hall calls for a more explicit treatment of how ideas

⁵² Under an evolutionary policy approach government agents provide information regarding regulatory objectives and mechanisms, and takes firms' responses and feedback into account in the development of regulations. Motivations behind a consultative process include the notion that industry has private information (e.g. about the costs of environmental pollution abatement).

⁵³ Giandomenico Majone describes how "rule-making is replacing taxing and spending" in European regulatory policy (1997: 139). He cautions that failure to change the underlying structures and regulatory norms (which, as Williamson 2000 reminds us, change slowly) undermines the effectiveness, credibility and legitimacy of the 'official' version of state-firm relations.

⁵⁴ According to Coase (1937), the father of neoclassical institutional economics, if you change relative prices, firms will respond by internalising or externalising costs.

³⁵ Thus, rather than choosing state autonomy over pluralism, social learning in the policy-making process "may well be a process that is intimately affected by societal developments rather than one that takes place largely inside the state itself" (1993: 276).

change, and the mechanisms whereby ideas get translated into policy action (see also Campbell 1998: 377).

An evolutionary perspective on policy making is also multi-faceted in the sense that the state as well as the private sector are disaggregated. The policy process can – for instance – be conceived of as consisting of three stages: agenda-setting, design and implementation (Healey & Robinson 1994: 48-49). However Grindle & Thomas (1991) argue that these are often not empirically discrete (sets of) actions, but can rather be seen as processes that are all inter-connected through feedback loops.⁵⁶ Firms may 'target' different government counter-parties depending on their objectives, their relative bargaining strength in different fora, and the stage of policy development and implementation.

An evolutionary concept of regulation sees it as mutually constituted by the regulator and the regulated. One of Grindle & Thomas' (1991) significant contributions is the insight that regulated entities are themselves agents for implementation of policy.⁵⁷ The intellectual roots of this view can be traced to Hirschman's work on institutional development, which sees actors as shaping the trajectory of development simply by participating in it (Hirschman 1971, see Santiso 2000 for a review).

In practice, many developing countries are highly capacity-constrained, with limited resources for enforcement, and with poorly paid public servants that are easily corrupted (for those that wish to do so). This means that levels of compliance observed among firms will, so some extent, depend on firms' willingness to comply. The latter, in turn, will depend on whether compliance is costly, i.e. if attaining some given standard represents different ways of doing things from what the company is already doing.

2.2.3 Section conclusion

In this section I first looked at the African state and its characteristics, in particular in relation to political culture and policy making. I argued for viewing the state as a hybrid that simultaneously exhibits formal and informal features. I highlighted the centralisation of power in leaders who have been skilful both at selectively deploying economic policy (towards certain actors) and playing off competing external influences against each other.

I then reviewed different approaches to understanding policy making. I critiqued rational choice pluralism for neglecting that collective action dilemmas often arise, preventing individuals and groups from pooling their interests and competing around them. I also argued that pluralism assumes all actors have the same access to the policy process, yet in the African state such access critically depends on the ability of the firm to cultivate informal channels of exchange with the government in power.

An evolutionary view of policy making allows multinational companies to play a more nuanced role in the evolution of policy. This includes through consultations,

⁵⁶ Jackson & Rosberg (1982: 18) argued that such a feedback loop (between policy-maker and policysubject) could serve to discipline policy makers and 'steer' the government in the 'right' direction. However this argument is undermined in contexts where democratic institutions that underpin accountability are lacking and where there is limited transparency and freedom of information.

⁵⁷ The de facto state-firm contract (defined as the allocation of costs and benefits of resource extraction) may thus evolve in the absence of changes to formal (legal, government-sanctioned) policy, for instance where compliance increases e.g. due to technological or process innovation, due to greater reputational sensitivity or risk aversion.

direct lobbying of ministries, or through interaction with enforcing agencies and compliance (or non-compliance) with existing rules and norms. Over time policy evolves. Given my research questions, I am particularly interested in how firms from different institutional backgrounds might influence policy, but also – as highlighted in my second research questions – how this process results in convergence or divergence in practices across a diverse foreign mining companies.

The evolutionary view of regulation can explain the shift in ideology towards a view of the state as enabler of private sector driven economic growth. In this context the relationship between states and regulated actors becomes more interactive, predictable and could be termed a partnership. Regulators become more prone to engaging – through formal or informal means – with private business.

Note however that this type of partnership is no panacea for solving regulatory issues, for two reasons. First, as my critique of rational choice pluralism above suggests, collective action dilemmas will persist as long as diversity persists, leading to difficulties in reaching agreements. The Zambian mining sector is, in this sense, diverse, including large western as well as Chinese and Indian companies. These companies have different institutional backgrounds that lead to different business practices. Second, in an interventionist African (or other) state, political discretion between how to treat different investors may allow for organisational differences to persist over time. Crucially, then, the hybrid nature of African state appears able to both encourage diversity (through discretionary and centralised exercise of power) as well as accommodate it (in the interest of seeking private sector-led growth).

2.3 Regulations, institutions and state-firm bargaining

The preceding discussion has suggested that both theories of the African state and theoretical perspectives on policy making can be grounded in institutional accounts of social life. This section now looks in more detail at how regulations affecting the mining sector can be understood through the lens of institutional theory.

It begins with some observations on the increasing attention paid to local political and social institutions within the development policy literature. It then elaborates on why regulations and regulatory policy can be seen as institutional structures in their own right, and what lessons institutional theory may hold for the analysis of regulatory policy evolution. The third sub-section explores in more detail the theoretical link between institutional theory and organisational behaviour, by reviewing the new institutionalist literature within political science and organisational theory. The fourth sub-sections shifts the disciplinary focus to review how institutions and institutional change are conceptualised within the management literature. The fifth section then elaborates on how the evolution of state-firm relations has been conceptualised within the management literature. The final section concludes.

2.3.1 Increasing attention to local context: the 'institutional turn'

The confidence in the capacity of the state to direct development around the time of independence was not supported by experiences in the 1960s and 1970s. To move away from inefficiencies attributed to government's involvement in the economy, market liberalisation became the norm. It included removal of capital controls and trade barriers, as well as large-scale privatisation programmes during the 1980s and 1990s.

Many reforms were designed and implemented by the World Bank and the IMF through structural adjustment programmes (Meier & Stiglitz 2001). These reforms reflected an ideology of economic development as more sensitive to state-failure than to market-failure (Chang 2003), resulting in increased marketisation of economic and social life and an effective 'retreat of the state' (Strange 1996).⁵⁸

However the highly liberal policies associated with so-called structural adjustment typically failed to generate positive development outcomes. The dominant perspective thus shifted in the 1990s, away from getting policy objectives right to 'getting institutions right' (Dollar & Easterly 1999).⁵⁹ Success in policy making came to be seen as dependent on host-country institutions and politics. As part of this 'institutional turn' development practitioners increasingly emphasised the role of public and private institutions in shaping development trajectories (Landell-Mills 2003: 360). Notions of governance – defined as "the capacity of the government to effectively formulate and implement sound policies ... [through] the traditions and institutions by which authority in a country is exercised" (Kaufman et al. 1999: 1) – moved to the top of the (western) donor agenda.⁶⁰

The growing focus on actors' interests and influences – and the sources of their (potentially overlapping) incentives – opened up space for political and social context in policy analysis (Rodrik 2006; see also Hausmann et al. 2008). As Grindle has argued, since "political behaviour is always deeply rooted in [both] context and specificity ... to be useful, theory must [therefore] be able to evoke, explore, and explain this complexity and specificity" (2001: 348).

2.3.2 Why look at regulations as institutions?

I highlight, below, five reasons why state-firm relations (manifested through government regulation and firm responses) can be understood using institutional theory. First, the idea of overlapping formal rules and informal norms as shaping governance in African states (introduced above) resonates strongly with institutional theory. To illustrate, Greif has argued that "a society's institutions are a complex in which informal, implicit institutional features interrelate with formal, explicit features in creating a coherent whole" (1998: 82). Both government policy and market institutions operate through formal as well as informal (normative) dimensions: laws dictate procedures and expectations, but there is usually some element of discretion or tacit understanding between regulators and regulated, or common practices that are not codified (what North 1990 refers to as "mental models", see also McBarnet & Whelan 1991). In addition, over time the informal and social institutions become reflected in formal and state-sanctioned institutions (laws), as well as vice versa (Helmke & Levitsky 2004).

Second, the idea of policy evolving through continuous state-firm interaction resonates with North's (1990, 2005) explanation of how institutions evolve through

⁵⁸ The confidence in the capacity of the state to direct development that prevailed following and second world war and around the time of decolonialisation was not supported by experiences in the 1960s and 1970s. Instead liberalisation became the norm, designed and implemented by the World Bank and the IMF through structural adjustment programmes (Meier & Stiglitz 2001).

 ⁵⁹ It appears the role of institutions was first introduced into the development discourse with the 1983 World Development Report, which highlighted the institutional constraints on the policy-making process (World Bank 1983: 41).
 ⁶⁰ This included the related but fuzzier concept of 'good governance' – understood as "a process

⁶⁰ This included the related but fuzzier concept of 'good governance' – understood as "a process characterised by communication and consultation, through which disputes are resolved, consensus is built and performance is reviewed on a continual basis" (Nayyar 2006: 17; see also DFID 2006).

feedback loops (one of his main contributions to institutional theory). North argues that institutions first decide which organisations can come into existence and under what terms. Organisations, when faced with changes to their incentive structure, will attempt to change these institutions to suit their interests.⁶¹ Because institutions – including regulations – are costly to change, this process is slow, incremental and path-dependent.⁶² Yet institutions do evolve, albeit slowly, in response to "continuous interaction between institutions and organisations in the economic setting of scarcity ... hence competition is the key to institutional change" (North 2005: 59; see also Scharpf 2000).⁶³ North argues that as firms learn from these exchanges, and alter their internal resource allocations, they become more successful at (intentionally) changing the institutions in question. This suggests that learning by individuals and organisations can constitute a major influence on the evolution of institutions.

Third, North's distinction between the content of institutions and their enforcement characteristics resonates with the issue of lacking enforcement that undermines sustainable private sector development in many countries (see table 2). Whilst formal government regulations dictate one form of behaviour (e.g. public officials should inspect and report environmental non-compliance), normative rules enshrined in kinship ties may dictate another (e.g. the individual should support the extended family, even if this means supplementing income by taking bribes).⁶⁴ The co-existence of institutions with conflicting incentive structures is at the root of the principal-agent problem that often undermines enforcement by street-level bureaucrats (see Besanko et al. 2008).

Institutional form	Examples of enforcement	Examples of sanctions in event of non-compliance			
Formal: legal and regulatory policy	 Rule of law, courts Reg. agencies Inspectors Reporting 	 Legal action Revoked licenses Fines or other costs in event of non-compliance 			
Informal: regulatory norms and established values, including social networks	CompetitionSocial capitalRepeat transactionsReputation	Political oppositionMarket accessInefficiency			

Table 2. Examples of formal and informal regulatory institutions

Fourth, regulatory policy and wider market institutions allocate development costs and benefits of FDI and are therefore contested. Bates (1997) argues that institutional change is always contentious, because by definition social rules are relational and about allocations: never does institutional change affect one party alone. As Grindle (2004) similarly observes, policy changes always entail winners and losers, thus explaining resistance to change within and across organisations. This contestation is

⁶¹ As North puts it, "institutions … determine the opportunities in society. Organisations are created to take advantage of those opportunities, and, as the organisations evolve, they alter the institutions." (1990: 7). Institutional change is driven by "the feedback process by which human beings perceive and

^{(1990: 7).} Institutional change is driven by "the feedback process by which human beings perceive and react to changes in the opportunity set" (Ibid.).

⁶² As North argues: "[t]he economies of scope, complementarities and network externalities of an institutional matrix make institutional change incremental and path dependent" (2005: 59).

⁶³ Despite this, Dahan et al. note that evidence of the active shaping of institutions by organisations is "often overlooked by mainstream institutionalist literature" (2006: 1575).

⁶⁴ Olivier de Sardan (1999) explains high degrees of corruption in Africa with reference to social institutions, although he fails to incorporate the notion of information asymmetries.

evident in the conflicting objectives of policy makers charged with constraining as well as enabling the private sector. They must ensure licensing procedures are not overly onerous (thereby disincentivising investment) whilst at the same time ensuring that these licensing procedures are rigorous enough to vet companies unlikely to uphold environmental and operating standards. Appreciating the tensions and dilemmas that confound policy makers leads to a view of capitalism as conflictual and contrary, in which institutions are necessary to regulate capitalist development (Harris-White 2003).

Fifth, institutions guide behaviour, also the explicit aim of government regulation. The idea of institutions as (behavioural) incentives is prominent among writers in the intellectual traditions of the New Institutional Economics spear-headed by Douglas North and Oliver Williamson. As North observes, "[t]he institutional framework provides the incentives that dictate the kinds of skills and knowledge perceived to have the maximum pay-off" (2005: 59). Williamson (1998: 76) notes that the need for institutions to govern transactions arises in situations characterised by bilateral dependency (resulting from sunk costs and asset specificity); where contracts are incomplete (because of cognitive limitations, see Shleifer & Vishny 1997); and where the other party cannot make credible commitments (due to opportunism). This suggests that institutions should play a large role in the governance of the mining sector, which features sunk costs as well as incomplete contracts (due to forward-looking nature of mining activity).

2.3.3 How institutions shape behaviour

This sub-section contains two parts. Having looked at the general characteristics of institutions above, I now review the political science literature on institutions, distinguishing and drawing parallels between rational-choice, sociological and historical institutionalisms. I argue that these perspectives all rely, directly or indirectly, on an ontology of the external environment as something that can be easily understood and interpreted by the firm. I then review the literature that portrays an organisation's external environment as socially constructed. I discuss what this means for our understanding of the relationship between an organisation and its external environment.

2.3.3.1 The new institutionalisms within political science

Rational choice theorists responded to the 'institutional turn' in the social sciences (see 2.3.1) by expanding their agency-orientated framework to account for rule-following that is normative and less reliant on perfect information. March & Olsen (1998), for example, attempt to explain how institutions shape behaviour through an expanded rational-choice framework. They distinguish between action as guided by a logic of consequence (rational actors calculate and chose actions consistent with their preferences) and action guided by a logic of appropriateness (emphasising social expectations and norming), the latter kind being more stable over time.

In the framework of March & Olsen, the role of institutions and norms includes structuring the exchange between a firm and society through the allocation of rents (more tangible incentives; a logic of consequence) and expressing normative expectations of how organisations should behave (less tangible incentives; a logic of appropriateness). This points to the importance of looking at forms of structural exchange (e.g. for government services) as well as expectations of stakeholders when seeking to understand the evolution of state-firm relationships. One critique of March

& Olsen's view is that they – whilst acknowledging that the agents are norm-seeking as well as profit-seeking – assume that cues from the external environment are *always correctly interpreted* by largely rational agents. In doing so they imply that responses to changes in the external environment are unambiguous, thereby neglecting the role of information asymmetries as well as constraints on individual cognitive capabilities.

March & Olsen's work represents a rational-choice institutionalism that sees actors as calculating and choosing among the choice sets provided by incentives embedded in the institutional environment. Hay & Wincott (1998) critique this literature by arguing that rational-choice institutionalism is in fact also structuralist: although it espouses to capture individual choice it tends to "replac[e] political subjects with calculating automatons," thus resulting in "a deep structuralism, deriving action from context" (Hay & Wincott 1998: 952).

A second strand of institutionalist literature is sociological institutionalism (see Hall & Taylor 1996 for a review). This literature retains the focus on institutions as the key unit of analysis, but emphasises the role of institutional structures in shaping individual behaviour. In other words, institutions precede individual action. However, whilst attempting to introduce social structure to account for unintended consequences, Hay & Wincott (1998: 952) argue this analysis often becomes *overly structuralist*, thereby failing to account for the role of individual and collective action.⁶⁵

A third strand of this institutionalist literature is historical institutionalism (see Hall & Taylor 1996 for a review). It is concerned with unintended consequences of social action and emphasises the path dependent nature of institutional change. Hay & Wincott (1998) argue that although adherents of historical institutionalism promote it as middle way between rational-choice and sociological institutionalisms, in terms of the link between institutions and behaviour it offers nothing new: it simply acknowledges that agents may be both rational optimisers and cultural norm-seekers (seeking to fit into social 'structures').

Scharpf (1997, 2000) locates the dominant approaches to institutional analysis into categories that are predominantly either 'genetic' (institution-centred) or 'consequential' (actor-centred, see table 3). He offers a similar argument to that of Hay & Wincott, arguing that both sociological institutionalism and historical institutionalism are too deterministic, or 'genetic'. Instead he opts for a view where individual self-interest and agency explains some of firm behaviour and wider rules and norms account for the remainder. This represents a view of individuals' objectives and the institutional environment as *mutually constituted through social interaction*, which resonates with the notion of "cumulative causation" first developed by Thorstein Veblen (see Hodgson 2002: 217).

⁶⁵ However Hay & Wincott note that some sociological institutionalists, such as Fligstein (1997), acknowledge agency in the form of social skill.

	'Genetic' view of institutions	'Consequential' view of institutions			
	(institution-centred)	(actor-centred)			
	 Institutions precede and generate individual action 	 Actors create institutions through their actions 			
Outcome-orientated analysis	 Policy outcome is understood as a distribution of interests across actors, aim of research is to explain which institutions have generated this outcome (functionalist) Public choice – the state as a neutral arena which balances out competing interests 	• Policy outcome is understood as an institutional matrix, aim of research is to explain the characteristics and influence of actors that have generated this outcome			
Process-orientated analysis	 Political economy analysis with multiple and overlapping institutions that influence the policy process through feedback loops 	• Reflexive policy analysis where incentives are embodied in actors, where history is path-dependent			

Table 3. Genetic and consequential views of institutions

Source: Scharpf (2000).

In practice empirical research is often not easily placed into theoretical categories such as those identified by Scharpf (2000). First, whilst institutions often do precede and incentivise particular behaviour (genetic view), they are also frequently subject to incremental change by individuals and organisations (consequential view).⁶⁶ A similar tension exists between outcome-orientated and process-orientated institutional analysis. Institutional *outcomes* have important consequences worthy of study (redistribution, wealth accumulation, collective action), yet a *process*-orientated approach is necessary if one wants to avoid a functionalist or structuralist analysis that overlooks the social nature of bargaining. This suggests that empirical work on institutions (including regulatory frameworks) should not be overly constrained by theoretical distinctions such as those proposed by Scharpf.⁶⁷

My approach in this thesis is more process-orientated than outcome-orientated. Like Grindle & Thomas (1991) I take the view that different stages of policy development and implementation are not always readily identifiable, but rather intertwined through feedback loops. Thus, in operationalising the concept of institutional and policy change, I focus on regulatory agendas *as well as* regulations themselves, and include as units of analysis policy proposals at varying stages of formalisation and implementation.

2.3.3.2 Organisational environments as socially constructed

An alternative perspective holds that the external institutional environment of an organisation (and the incentives it contains) is socially constructed. This view developed as a challenge to early sociological accounts of organisational behaviour that often saw firms' responses to strategic contingencies (or 'environmental shifts') as guided by a form of rational adaptation (Thompson 1967, Lawrence & Lorsch

⁶⁶ As North points out, where the institutional incentive structure does not match actors' own behavioural tendencies, they will seek to change the institutional environment.

⁶⁷ Aoki (2005) offers a theoretical take on the debate of the origin of institutions, arguing that institutions which appear as exogenous constraints are in fact endogenously determined.

1967, both cited in Fligstein & Freeland 1995: 28). Within management theory a similar shift took place, which I elaborate on below (see 2.3.4).

Scholars writing from this perspective have argued that a firm's adaptation to the external environment is anything but unproblematic, putting forward two claims. The first is that rational adaptation is not a straight-forward process: the environment may exhibit significant information asymmetries wherefore the information that reaches the firm has to be *interpreted* by the agents within that firm (Hay & Wincott 1998: 956). This points to the need to account for actor preferences and how these are formed, for instance through shared understandings of the world that can be used as guides for collective action (Hannan & Freeman 1977, 1984; Salanacik & Pfeffer 1978).⁶⁸

Organisational theorists contend that in addition to identifying and interpreting the surrounding environment, the firm must also have the *power* to act. Pfeffer (1981) defines power as access to resources required to materialise an action in response to a changing environment). Pfeffer & Salancik (1978) see organisational resources as dependent on this socially constructed external environment. They argue that when environmental conditions change the distribution of power, it ultimately produces organisational change and stability. Fligstein & Freeland share this view and argue that political theories of the firm must acknowledge "resource dependence as socially constructed" (1995: 31).⁶⁹

This view holds that the processes whereby these environments are constructed are themselves an object of study (Fligstein 1990; DiMaggio 1985, 1989; Pfeffer 1981).

Resource interdependencies imply both constraints and opportunities, dealt with by the firm in one of two ways: by changing own activities in order to adapt to new constraints, or by seeking to change the institutional environment itself (Stern 1979). The external environment thus becomes a product of the ongoing interaction between organisations and the institutions that embed them, in effect endogenising an environment that is itself socially and politically constructed. Fligstein (1990) therefore argues that formal and informal relationships across and between firms and their stakeholders (in particular capital providers) become central to understanding corporate behaviour (see also Fligstein & Brantley 1992). This resonates strongly with North's view of institutions discussed in section 2.3.2.

2.3.4 The resource-based view of the firm and dynamic capabilities

Partly to reflect my firm-centred approach to understanding regulatory policy making, I now review the insights of management theory concerning state-firm relations. I begin by reviewing theories around the resource-based view of the firm, followed in the next sub-section by a review of the state-firm bargaining literature.

As Stopford & Strange (1991) argued, you cannot understand international politics without understanding international business and management, nor can you understand business without paying attention to international and domestic politics. In doing so they brought to the fore the exercise of authority outside of the state and the view of the firm as politically embedded (see also Desbordes & Vicard 2007 and

⁶⁸ Within management theory Hoskisson et al. (2000) take the view that management systems of rich world TNCs are indeed different from those of developing-country TNCs, such that "enterprises [that are] likely to interpret the same objective environment differently, process information differently, and therefore make different strategic responses" (2000: 255).

⁶⁹ Doing so would supplement a focus on technical environments with a focus on institutional environments such that "states [become] implicated in all features of organisational life" (Ibid.).

Yeung & Liu 2008: 58).⁷⁰ As Meyer (2004) puts it, TNCs' strategies and the institutional environment in host developing economies are thus mutually interdependent.

Within the management literature there has been a shift away from simple assumptions about how the firm responds to environmental factors (see the previous sub-section). This shift is partly a reaction to Michael Porter's influential analyses of sustained competitive advantage (Barney 1991). Porter's approach held that the primary determinants of competitive advantage were environmental factors, rather than a company's internal resources. It assumed that any heterogeneity among firms' resources would be temporary because of the assumption that value-enhancing resources can be bought and sold on factor markets.

In contrast, the resource-based view of the firm places emphasis on the internal characteristics of the firm. It conceptualises firms as bundles of imperfectly mobile resources, including tangible and intangible assets as well as organisational routines (both explicit and tacit).⁷¹ The firm is seen as "an evolving collection" of resources (Rugman & Verbeke 2002: 769). These resources are imperfectly mobile, wherefore differences in endowments of resources between companies may persist over time and across space.

This resource-based view of the firm was pioneered by Edith Penrose (1959) who emphasised how managers' intimate knowledge of their operating environments aid in "the discovery of productive opportunities through a dynamic learning process but guided by path dependencies" (see review by Rugman & Verbeke 2002: 771). Through this process of organisational learning companies can develop new ways of leveraging assets and existing routines, and thereby achieve sustained competitive advantage. The ability to develop new ways of combining existing resources is now – within the management literature – referred to as the 'dynamic capabilities' of a firm. Eisenhardt & Martin define dynamic capabilities as "the organisational and strategic routines by which firms achieve new resource configurations" as markets emerge and evolve (2000: 1107).

Dynamic capabilities – and sustained competitive advantage – are awarded to firms that are able to apply their routines in 'new' ways on 'old' resources (this view resonates with the evolutionary economics approach, which provides further theoretical grounding for a routines-based theory of the firm and which I review in section 2.4). However the merits of dynamic capabilities in casting light on corporate behaviour in institutionally weak and commodity-dependent developing countries may be limited. As Eisenhardt & Martin (2000) point out, dynamic capabilities are only likely to have "predictable outcomes" in *relatively stable markets*.⁷² When the environment is poorly predictable a firm's capabilities may not explain organisational performance very well. In such situations, the need for paying attention to the environmental context is greater.

⁷⁰ Reflecting on the state's role in the emergence of powerful international capital, Strange argues that states were instrumental in granting this power to TNCs, that "[i]t was not that TNC's stole or purloined power from the government of states. It was handed to them on a plate – and, moreover, for 'reasons of state'" (1996: 44-45).

⁷¹ The resources in question can be grouped into physical assets (e.g. location, technology, access to raw materials), human capital (e.g. past experience, skills/training and technical know-how,

relationships), and organisational capital (e.g. reporting systems, formal/informal operating practices, informal relationships between groups within the firm as well as with external stakeholders) (Barney 1991: 101).

⁷² In contrast, "in high-velocity markets, they are simple, highly experiential and fragile processes with unpredictable outcomes" (Eisenhardt & Martin 2000: 1105).

The resource-based view of the firm assumes that access to scarce (tangible or intangible, material or discursive) resources confers power on those with such access (Child & Tsai 2005: 98). The literature, however, fails to explain to what extent the firm's exercise of power to control resources is contingent on existing processes of policy and political agenda-setting (Boddewyn & Brewer 1994: 120). To get around this, I argue that in developing countries with informal and centralised political governance, firms' ability to establish links with policy makers constitutes a resource in its own right, enabling greater visibility for the firm (see 2.2.1).

Importantly, the resource-based view of the firm also shows us that differences across firm behaviour can persist over time, as companies respond to the external environment by combining their resources and routines in new ways. This suggests that foreign investors from China, India and other emerging markets may exhibit variation vis-à-vis 'western' capital that persist over time. Moreover, governments may differentiate between TNCs within a sector depending on the resources (e.g. future investment) on offer by the TNC.

2.3.5 The obsolescing bargaining model

Given my primary research question on how policy evolves, and my argument thus far that this takes place through a two-way process of interaction, I now review the management literature on state-firm bargaining. This area of inquiry arose from the 'obsolescing bargaining' literature pioneered by Vernon (1971, 1979), which originated from observations of state-firm relations in the 1970s as often adversarial and with frequent nationalisations. This led to research on how companies bargain with host-states over a range of issues, including foreign exchange controls, investment controls, repatriation controls, the right to refer disputes to international arbitration, stability clauses, and performance requirements relating to labour and local procurement (UNCTAD 1999: 96). This body of literature holds relevance for this study because it emphasises an active role for individual TNCs in shaping the institutional environment.

The obsolescing bargaining model (OBM) first developed by Vernon (1971) hypothesises that, in initial stages where a multinational firm is contemplating an investment, bargaining advantages will rest with the firm.⁷³ Given that the regulatory framework is an important determinant of investment location (in particular for resource-seeking FDI), it posits that governments may tailor regulations (legislation, incentives) with a view to attracting investors. Vernon's original bargaining theory held that, over time, bargaining power would shift away from the foreign investor and obsolesce towards the state: as the firm sinks its costs and develops location-specific routines, including in relation to local value-chains, it becomes economically and politically embedded and thus loses the threat of an easy exit (Haslam 2007 offers a more contemporary treatment; see also Poynter 1985).⁷⁴

In theory this is (just like the processes of institutional evolution discussed earlier) an ongoing process. Firms continuously seek to improve the terms of explicit or implicit state-firm 'contracts', including through direct negotiations or lobbying

⁷³ Dolowitz & Marsh (1996: 348) similarly emphasise the mobility of firms as conferring bargaining advantages on TNCs vis-à-vis states.

⁷⁴ Mining is associated with significant capital expenditure, which may be considered a sunk cost once invested (this depends on how easy/difficult it is for another operator to take over, i.e. the degree of asset specificity). Sunk costs also include investment in time and non-monetary resources, e.g. internal resources used to develop management systems.

(Meyer 2004: 271; Eden et al. 2004). The regulatory environment facing a firm can thus be seen as a reflection of how state-firm bargaining has evolved over time.⁷⁵

In addition to access to resources, Eden et al. (2005) suggest that an account of firms' objectives and interests is central to understanding state-firm bargaining. They argue that the extent of active bargaining will depend on the complementarity of private and public actors' goals. In a context of high central government intervention in the private sector in many African states (discussed in section 2.2), the roles (and goals) of political elites will be significant and must be explicitly problematised. Complementary objectives may lead to constructive state-firm relations with little political interference. Conversely, the profit motive of a firm may lead to social tensions, thereby undermining government's political objective of stability. In this case host states could move to sanction firms by enacting stricter regulation and/or increasing enforcement efforts, or penalise the firm in other ways.

Empirical case study research on state-firm bargaining within the management literature has been criticised for focusing too much on overly simplistic relationships between one firm and one state (Schepers 2006). One critique of this approach is that a context of rapid globalisation renders the two-sector bargaining model incapable of explaining the development of industrial policies. Ramamurti (2001: 24) argues that bargaining has been transplanted towards bilateral or multilateral settings: many of the issues over which bargaining would traditionally occur are now addressed through the international investment regime (UN WIR 1999). He observes that TNCs are "particularly adept at working through home governments and international institutions to rewrite global rules to suit their own interests", for instance through Bilateral Investment Treaties (2004: 279, see also Chowla 2005).

A second critique holds that collective action, epistemic communities and the growing complexity of state-firm relations must be more closely accounted for (Eden et al. 2005). For instance, the proliferation and growing influence of civil society and other non-state actors – at national and international levels – all point to an increasingly complex 'bargaining' environment. Haslam (2007) shows evidence of multinational firms becoming more powerful due to globalisation, but argues that bargaining still relies on alliances between the firm and political and interest group leaders (at multiple levels of government).

Like Haslam, I argue that the international dimension becomes embedded in the local bargaining process. The sources of host states' bargaining power are those characteristics of a policy environment that are attractive to a would-be investor, and as such differ across investors depending on the investor's own circumstances. These in turn depend on companies' relationships with external stakeholders, in particular capital providers. ⁷⁶ With greater diversity in company's goals and resources, bargaining becomes more complex (because there are many different resource dependencies that need to be considered by the host government). Effective collective action becomes a more daunting task, in particular for a capacity constrained and institutionally weak developing country.

⁷⁵ Ramamurti (2001: 26) argues that TNCs' sources of bargaining power include: technology, product differentiation, access to capital, exports (and ability to generate foreign exchange), size (as a proxy for non-financial resources, e.g. access to top legal advice) and ability to "play countries against one another". Host states' sources of bargaining power include: control over access to markets, natural resources, and local labour; ability to provide incentives, and ability to "play TNCs against one another".

⁷⁶ Hall & Soskice (2001) argue that stability in the external environment matters less if a firm has more financial leeway from lenders.

2.3.6 Section conclusion

This section first discussed the institutional turn in the social sciences and the growing attention to local context within development theory. It highlighted the emergence of notions of governance on donor and development policy agendas. It then made the case that the regulatory policy at the centre of my inquiry can be understood using institutional theory. Here I first argued that formal and informal institutions often coexist and exert overlapping influences on social actors. I then explored how institutional change could be seen as taking place through feedback loops of interaction – a slow process due to path dependencies. I also made the point (argued by North and others) that in understanding what impact institutions will have on individual's behaviour, both the rules themselves as well as their enforcement matter. This is of key importance in understanding institutions in weak, capacity constrained states. When institutional change takes place it is always contested, in part because of transaction costs, but also because of the aforementioned overlaps of multiple institutions. Finally, I introduced the idea of institutions as guiding human and organisational behaviour.

The third sub-section reviewed variations across the 'new institutionalisms' in the political sciences, and how they account for the relationships between institutions and individual behaviour. I noted how much of this writing could be critiqued for assuming that an organisation's external competitive as well as policy environment are unproblematically interpreted by the firm. This is a particularly stark assumption in African states with high levels of political intervention and low levels of transparency. I subsequently presented an alternative approach where external environments are seen as socially constructed, depending on the particular norms and practices preferred by the state and non-state actors. I argued that this approach is more valid when seeking to understand a diverse set of investors from different institutional backgrounds (see 1.3.2).

Turning my focus to the management literature, I noted how the resourcebased view of the firm stresses the role of internal routines, objectives, systems, and processes that enable the firm to create new resources configurations out of existing resources and routines (dynamic capabilities). Yet these will differ among firms depending on their institutional backgrounds. I emphasised how operating in an environment of extensive resource-dependencies results in uncertainty for firms (Pfeffer & Salancik 1978). In institutionally weak commodity-dependent states these resource dependencies are difficult to identify, thereby discounting the idea of predicting firm successes or failures as a straightforward function of dynamic capabilities.

I then reviewed the literature on state-firm bargaining within the management literature, noting how the more recent bargaining literature highlights the need to look at external influences, some of which are direct (e.g. Chinese state influence) and some of which are indirect and structural (e.g. international commodity prices). I also argued that networks of actors, to the extent they share financial, political or other resources, must be made explicit in order to understand state-firm bargaining. The following section develops a theory of firm behaviour that emphasises how organisational routines and objectives evolve over time in response to a changing external environment.

2.4 Evolutionary economics and the theory of the firm

This section examines the theory of the firm from the perspective of evolutionary economics. This body of literature views organisational behaviour as shaped by processes, routines, and templates for behaviour, that are relatively stable over time (jointly referred to as organisational 'routines'). I begin by looking at three foundational principles for understanding organisational behaviour: that company behaviour is driven by routines, that firms are goal-orientated, and that these routines and aims change slowly over time (I henceforth use the terms 'objective' and 'aim' interchangeably). This is followed by a critique of how neo-classical economics treats organisational behaviour and change. Finally, the section concludes.

2.4.1 An evolutionary theory of the firm

This sub-section looks at the theory of the firm from the perspective of three observations drawn from behavioural studies of organisations. First I discuss the idea that organisational behaviour is based on routines (Nelson & Winter 1982; Cyert & March 1963). Second, organisations are guided by explicit (and implicit) aims and objectives (Levitt & March 1988: 320). Third, organisational routines are history (path) dependent, such that "routines are based on interpretations of the past more than anticipation of the future" (Ibid.).

2.4.1.1 Organisational routines as drivers of firm behaviour

It is a common view among organisational theorists that a firm – in order to overcome cognitive limitations on information-processing and facilitate the pursuit of organisational objectives – creates standard operating procedures, or 'routines' (Simon 1964). Evolutionary economics places such routines at the centre of explaining social and economic behaviour (see Nelson & Winter 1982, 2002; also Hodgson 2000b). According to this view individuals do not so much *deliberate* between different courses of action as they *select* (mostly automatically) a course of action depending on what has worked for the organisation in the past. The implication is that organisational behaviour is guided by hierarchies of routines, or rules, a perspective shared with the early management theorists such as Cyert & March (1963).

Organisational routines include a broad range of practices, of varying degrees of formalisation and codification. Formal routines include reporting systems, company codes of conduct, accounting systems, certifications, the division of labour between groups of people within the organisation, as well as technologies (Fligstein & Freeland 1995). Informal routines are what Polanyi (1964) calls tacit knowledge and what North (1990) calls shared mental models.⁷⁷ Routines can further be distinguished between those that are directed towards engagement with external actors (customers, suppliers, auditors, environmental inspectors) and those that deal primarily with the internal workings of the firm. The latter include internal accounting methods and investment approval processes, as well as procurement practices.⁷⁸ Burgelman (1991) thus suggests that organisations can be understood as ecologies of routines, echoing

⁷⁷ Squire (1987) develops a similar concept that he calls "skill memory".

⁷⁸ As the 'old institutional economist' John Commons noted, "[s]ometimes an institution seems analogous to a building, a sort of framework of laws and regulations, within which individuals act like inmates. Sometimes it seems to mean the 'behavior' of the inmates themselves." (1934: 69).

the view of overlapping institutions within organisations as well as within the African state.

Organisations vary in the extent to which they can be described as routinesbased. Generally, larger firms with more specialised inputs, products and more complex organisational forms will tend to place a greater emphasis on routines (Levitt & March 1988: 327; Nelson & Winter 1982: 96-97). These are key characteristics of the companies studied in this thesis.

Nelson & Winter see organisational routines as the 'genes' that constitute an organisation: routines are heritable, selectable, and overall determinant of behavioural processes (1982: 14). Cohen et al. (1996) see routines as creating pre-dispositions for behaviour that evolve over time. They define a routine as "an executable capability for repeated performance in some context that [has] been learned by an organisation in response to a selective process" (Ibid., p.683). Hodgson & Knudsen (2006: 357) similarly view routines as preferences when they argue that habits, routines, and management systems together constitute organisational genotypes that increase the propensity for particular behaviour.

Organisational routines are functional in enabling the firm to respond effectively to complex business issues, enabling behavioural continuity in spite of highly limited cognitive capabilities of individual managers (Nelson & Winter 2002).⁷⁹ They are the organisational analogue of individual skills: just as new skills are not instantly learned overnight when needed, organisational routines take time to develop. Learning of new routines/skills is necessary to materialise a rational or optimal response to changes in the external environment, yet constitutes a process over time.

One reason for this is that organisational routines routinise particular patterns of interaction. Different patterns of interaction will pick up different information about the external environment (routines thereby acting as a set of 'filters', see Hay & Wincott 1998).⁸⁰ Thus the historical experiences of the firm (its 'inferences from history') – which function as guide towards further routines-development – are interpreted through the lens of existing routines, thereby endogenising learning. The process of filtering leads to a modified set of behavioural options, among which agents more or less automatically choose a course of action (North 2006: 59; see also Aoki 2005: 26; Dosi & Marengo 2000). This implies that a change in the external environment will never exactly correspond to a completely 'rational' response from the firm.

2.4.1.2 Organisational objectives as drivers of firm behaviour

An evolutionary theory of the firm must also account for organisational objectives, or aims (Levitt & March 1988). For example, the firm may pursue a high-quality or lowprice strategy; it may prioritise (in negotiations with government) a regulatory environment that is flexible or one that is stable.

These aims depend on the institutional framework affecting the firm, including relationships with capital providers and home country regulations, which vary across firms from different institutional backgrounds. For example, hierarchies of organisational aims can shape behaviour by altering the time preferences of a firm. If

⁷⁹ This resonates with the oft-cited finding by Tversky & Kahneman (1974) that agents follow relatively simple rules of decision.

⁸⁰ Recall, too, that because of transaction costs involved in changing organisational routines, even where a company interprets it experience 'accurately' it will not instantly adapt its routines in response.

a firm crucially relies on funding from the international debt markets a key organisational goal will be to ensure the firm does not prejudice future funding by non-payment of interest or in other ways breaching debt covenants (including environmental and social safeguards dictated by the Equator Principles, see section 6.3.1).

Organisational aims may be held independently of routines, for instance when an external CEO candidate is recruited, or may be embedded in routines (I take the view that most routine procedures were designed, initially, with some specific objective in mind). The notion of 'corporate strategy' can best be understood as a combination of organisational objectives and routines, i.e. what to achieve and how.

2.4.1.3 The path dependent nature of organisational routines and objectives

Following the work of Nelson & Winter (2002: 30) the ontological position adopted here is that a routine is defined as a decision-making rule that is relatively stable over time. Nelson & Winter (1982: 99) argue that firms 'remember by doing', and that organisational routines function as repositories of organisational memory. If the experience of an individual does not somehow affect the way things are done, the lessons of this experience will be forgotten. Like routines, organisational aims are path-dependent and unlikely to change rapidly in the absence of external (e.g. changes to the regulatory regime) or internal (new senior management) shifts.

It is worth highlighting that evolutionary economists' view of routines underlying social behaviour (Nelson & Winter 1982) is analogous to the perspective of Africanist scholars of how patrimonial logics and codes are reproduced over time in African states. Bratton & van de Walle thus argue that "when patrimonial logic is internalised in the formal institutions of neopatrimonial regimes, it provides essential operating codes for politics that are valued, recurring, and reproduced over time." (1997: 63, see also Bayart).⁸¹

From the perspective of the firm, routines can 'reside' with management and shareholders, local and expatriate employees, as well as in historical choices of production technologies. Thus, when a new investor takes over a going concern, for instance through a privatisation process, the new company is likely to adopt some existing legacies of processes, systems and 'culture'. When FDI targets a 'going-concern' firm (as opposed to a 'greenfield' operation) the routines espoused by the new shareholder will therefore compete – through a constructive tension (cf. 2.3.2) – with routines that were already in place before the arrival of new management.⁸² Nelson & Winter's framework allows for such internal tensions, which they argue are always present within an organisation: a routines-based firm in no way should be taken to represent one that consistently upholds its nominal standards. Employees' shirking, pilfering and general principal-agent problems are all consistent with a routines-based organisation, to the extent they occur *routinely* (Nelson & Winter 1982: 108).⁸³

Nelson & Winter (1982: 134) offer a perspective of organisational routines as the genes of a firm, stressing the role of routines in increasing behavioural continuity.

⁸¹ Bayart's notion of how patrimonial logics and codes are reproduced over time is analogous to the routines underlying social behaviour according to theories of evolutionary economists (Nelson & Winter 1982), discussed below.

⁸² I discuss this tension, and the mix between home-country and host-country institutional legacies in shaping firm's routines, in more detail in chapter four.

⁸³ Nelson & Winter stress that "[i]n short, routine operation is consistent with routinely occurring laxity, slippage, rule-breaking, defiance, and even sabotage" (1982: 108).

Even where the surrounding environment changes, managers will exhibit pathdependent behaviour (Fligstein & Freeland 1995) by continuing with procedures that have worked for them in the past (Nelson & Winter 1982). This resonates with North's argument that "path dependence is not 'inertia' ... rather it is the constraints on the choice-set in the present that are derived from historical experiences" (2005: 52).

Routines change slowly because they are costly to change: mechanisms and processes for internal reporting are costly to set up, and address specific operational and strategic concerns. Routines are also difficult to change by decree because over time they become internalised (taken for granted) by management. Over time previously explicit and questionable guidelines become taken-for-granted cognitive frames of reference (Helmke & Levitsky 2004). Therefore, routines and aims will not, and cannot, be thoroughly re-evaluated every time the economic and political environment changes.

2.4.2 The evolutionary critique of orthodox (neoclassical) economics

In critiquing orthodox (neoclassical) economics and the methodological individualism it represents, Herbert Simon argued that "the rational individual is, and must be, an organised and institutionalised individual" (Simon [1945]1997: 111). According to Simon, individual self-interest-seeking could never be the full explanation of behavioural differences among organisations. Rather, any kind of rational behaviour could only be possible within a framework of value assumptions, cognitive frames, routines and rules.

Unlike orthodox economic theory, Nelson & Winter's framework incorporates organisational routines and objectives into the conceptualisation of decision rules and production technology. In neoclassical economics the choice of production technology is a simple cost-benefit decision without regard for a firm's proficiency in deploying this technology. In evolutionary theory, by contrast, both are conceptualised as routines, based on the observation that operating technology always involves human interactions (1982: 15). Nelson & Winter (1982: 94) also critique orthodox economics for allowing for 'skill' by identifying it with maximising behaviour. They argue this is unrealistic and that people do things because they (already) know *how* to do it (e.g. drive a car), and that individuals' choices of which skills to acquire generally proceed their usage of these skills.

In comparison to other institutional 'schools', evolutionary economics appears closer to the 'old' institutional economics (see e.g. Commons 1934 and the work of Thorstein Veblen) than to the 'new' institutional economics.⁸⁴ First, authors within the latter tradition appear closer to neoclassical economics in their methodological individualism (taking the self-interested, maximising individual as given). This ontology of the individual was rejected by the old institutional economists (see Rutherford 1996; Hodgson 2000b) as well as evolutionary economists. Second, the 'old' institutional economics sees markets as instantiations of institutions, emphasising processes of interaction over individual choice. This latter view

⁸⁴ Ghoshal & Moran (1996) critique Williamson's transaction cost theory for its methodological individualism in conceiving of intra-organisational and market institutions as identical, both being 'instruments' appropriated by individuals driven by self-interest and opportunism. They argue that for transaction cost theory to be grounded in a real and balanced account of human nature, it must take into account the role of confidence and trust.

resonates strongly with the view of evolutionary policy making developed in section 2.2.2.3.

Finally, evolutionary theory has – unlike neoclassical economic theory – a distinctly empirical relevance, where "the ultimate discipline on the representation of firm behaviour is considered to be empirical" (Nelson & Winter 1982: 410). This implies that assumptions that firms pursue profits, minimise costs, that they expand when profitable, and that they satisfice, are only dealt with to the extent they carry empirical relevance.⁸⁵ A real-world context of rapid change is unaccounted for by orthodox theory that does not recognise management decision-making as skilful. By recognising management behaviour as skilful, evolutionary economics recognises that questions of change in the external environment matter.

2.4.3 Section conclusion

This section has reviewed the evolutionary economics literature to develop the concept of organisational routines and objectives as a basis for understanding organisational behaviour. I first argued that organisational routines could be seen as a basis for understanding firm behaviour. Such routines enable behavioural continuity in cognitively complex environments, by routinising action. Similarly, organisational objectives serve as a basis of behavioural 'rules of thumb' by acting as a normative benchmark against which historical action is judged. Jointly they determine an organisation's patterns of interaction with the external environment. Both reflect the rules and expectations that arise from various stakeholders, including the parent company, shareholders and other capital providers, as well as the international experience of managers. Routines and aims also act as filters, determining what information will be picked up on by the firm.

I argued that routines and aims are path dependent and change slowly (much like regulatory institutions, see 2.3.2). This means that there will always be some mismatch between what is going on in the policy environment and the internal routines, aims and practices of firms. In the context of this study it implies that the routines that managers bring with them from abroad continue to shape the behaviour of foreign investors once in Zambia.

The evolutionary approach in economics is able to explain seemingly rational behaviour (efficient firm responses) with reference to routines rather than often unrealistic assumptions of rational optimisation by the individual. Neoclassical economics, by contrast, is based on comparison of conditions of two or more equilibria. Furthermore it is silent on the economic and political processes whereby a firm's behaviour changes from one equilibrium to another (Nelson & Winter 1982: 163; Mahoney & Rueschemeyer 2003: 213).⁸⁶ By emphasising both the role of routines in guiding firm behaviour and the view that path-dependent routines will always be in a 'mis-match' with the external environment, the evolutionary approach eschews a focus on equilibrium.

⁸⁵ In this sense, my approach to explain economic activity through an evolutionary framework that emphasises learning constitutes an effort to maintain empirical grounding.

⁸⁶ Mahoney & Rueschemeyer (2003: 213) reflect on how theories of path dependence and institutional evolution present a departure from (punctuated) equilibrium theory. Both Williamson's and North's strands of institutionalism emphasise "the multiplicity of equilibria" (Bardhan 2001: 270). However they do not adequately explain how the economy moves from one equilibria to another.

2.5 Organisational learning

This section puts forward three perspectives on organisational learning. I first define organisational learning as a social activity that results in changes to organisational routines and aims. Second, I discuss how learning can take place at the individual as well as collective level, but always being a path dependent process. Third, I point to different levels of learning, with different outcomes for the organisations involved. Fourth, I look at how learning can be seen as a collective activity, and how routines and aims are disseminated across wider groups of organisations. Fifth, I discuss the role of organisational learning in evolutionary policy making. This is where I bring the state back into my framework for analysing firm behaviour.

2.5.1 Perspectives on organisational learning

Different definitions of organisational learning exist within the social science literature. Organisational theorist Herbert Simon defined learning as growing insights and restructurings of organisational systems by individuals, that over time come to be reflected in structural elements of the organisation itself (Simon 1969). This means that – to the extent these structural elements are path-dependent and costly to change (as argued in the previous section) – the corollary of learning from past experience is path dependence. In other words, learning today results in path-dependence tomorrow.

Hodgson & Knudsen view learning as the replication of habits, arguing that "this replication process cannot be completed without the existence of a common language. The ability to refer to common mental models through language enables communication and thereby replication of mental models" (2006: 359). Nelson & Winter see organisational competences as based on organisational learning, which they define (loosely) as the cumulative development of "skills and routines" through practice (2002: 29).

Levitt & March similarly define organisational learning as the "encoding [of] inferences from history into [organisational] routines that guide behaviour" (1988: 320).⁸⁷ They argue that this focus on routines and "ecologies of learning" places their approach closer to "the traditions of behavioural theories of organisational decision-making" (Ibid.) of evolutionary economics (see, for instance, Winter 1986 and Carroll 1984).⁸⁸ Other scholars have adopted a less "ecological" approach to learning, defining learning as instances of new insights or knowledge within single organisations (Argyris & Schön 1978, Hedberg 1981), and as the emergence of new structures (Chandler 1962) or systems (Jelinek 1979, Miles 1982).

2.5.2 Individual vs. organisational learning

At one level, the idea of organisational learning is a metaphor, given that organisations are made up by individuals and do not exist in the absence of these individuals. Argyris & Schön (1978: 190) therefore insist on the importance of the individual in their organisational learning framework. They suggest that the process of

⁸⁷ Like Nelson & Winter (1982) they define routines broadly as encompassing "the forms, rules, procedures, conventions, strategies, and technologies" through which the firm operates, including "the structure of beliefs, frameworks, paradigm, codes, cultures" that support, elaborate or contradict the formal routines (Levitt & March 1988: 320).

⁸⁸ However, unlike my approach in this thesis, Levitt & March conceptualise organisational learning as a largely one-way process and neglect the role of feedback loops in explaining organisational change.

learning is driven by conflict between (groups of) individuals within an organisation, arising out of a mismatch between expectations and outcomes. These conflicts may generate processes of inquiry, which in turn lead to revisions of routines and behavioural standards (learning).

The ontological position adopted here is that organisational learning is more than a collection of individuals' learning. This is partly because the organisation functions as a depository of individuals' experiences that can be drawn on and shared amongst individuals constituting the organisation. I adapt the view (central to evolutionary economics) that the firm is not merely a nexus of formal contracts, determining the rights and responsibilities of actors (as suggested by Fama 1980). Rather, much of the intra-organisational agreements are informal, normative, and implicit (i.e. behaviour does not always represent 'conscious' routine-following).

The view that part of what constitutes the firm is 'invisible' is at the core of the argument (see section 2.3.4) that what management theorists call 'dynamic capabilities' can provide sustained competitive advantage to the firm: because much of the agreements among individuals within a firm is normative or implicit, it cannot be possible (as observed by Teece et al. 1997) for an entrepreneur to arrive one day and overnight piece together a set of organisational capabilities to replicate a leading firm.

2.5.3 Learning as search and learning-by-doing

This sub-section highlights two theoretical perspectives on how organisational learning takes place. The first is based on Nelson & Winter's perspective on organisational learning which emphasises "the joint action of search and selection" through which "firms evolve over time, with the condition of the industry in each period bearing the seeds of its condition in the following period." (1982: 19).

The actions of search and selection are defined as the purposeful acquisition of information or technologies by the firm, with the aim of changing the organisation's current way of doing business (i.e. to alter existing routines and aims). It is based on the idea that organisations are continuously asking themselves 'what are we doing that is appropriate or inappropriate?'. This self-reflection feature of organisations is based on internal routines that support the search for better ways of capturing, controlling and reflecting on business issues (corporate governance and reporting, meetings of the board and its committees). Routines that facilitate self-reflection combined with routines that facilitate information capture can be jointly seen as the firm's capability for 'learning-to-learn' (Levitt & March 1988).

Nelson & Winter's search and selection resonates with the argument of sociological institutionalists that firms 'search' for ways to copy routines of other organisations because convergence of organisational features grants legitimacy (and power) to organisations (see section 2.5.5 below). Over time, this search function may drive convergence within the sector, as firms actively seek legitimacy by imitating the organisational routines and aims of market leaders (Meyer & Rowan 1977; Zucker 1977). Doing so enables rule-followers to more easily mobilise resources from society.

An alternative view of learning is that it is more of an evolutionary, passive activity, which takes place largely from the firm constantly assessing its performance and making incremental changes to its practices (i.e. passive 'search' rather than active 'search'). Over time, repeated transactions reveal the preferences of stakeholders and counterparties, and a firm may modify its practices accordingly in order to economise on transaction costs (judging outcomes – albeit imperfectly – against organisational aims). Change results from reflection of what has worked in the past, the assessment of which is made possible through repeated interactions (Greif 1998: 81).⁸⁹ This process is more likely to yield greater alignment – and more efficient routines – in transparent and non-monopolistic markets where repeat transactions will promote specialisation and therefore learning.

2.5.4 Different depths of learning

In distinguishing between different 'depths' of organisational learning, Argyris & Schön (1978) develop the concepts of 'single-loop' and 'double-loop' learning.⁹⁰ 'Single-loop' learning is understood as unreflexive adaptation, resulting in a form of learning that "restricts itself to detecting and correcting errors within [a] given system of rules" (Argyris & Schön 1978: 20-28). Single-loop learning includes changes to company policies but without any change to strategies or funding for implementation.

'Double-loop' learning, on the other hand, is associated with changes to managers' existing preferences and underlying norms held by managers that reflect formal and informal organisational routines and aims (what Argyris & Schön refer to as managers' 'theories-in-use'). ⁹¹ Double-loop learning includes changes in the routines and policy instruments used, including a re-allocation of enforcement mandates – including changes to the *means* whereby a particular organisational objective is implemented.

To illustrate, if a firm when faced with media pressure over its safety record decides to institute a new role as head of safety, this change constitutes in-and-ofitself an instance of single-loop learning. However if the new head of safety is given a clear mandate, reporting responsibilities and resources needed to pursue this mandate – thus resulting in a materially different approach to addressing health and safety concerns – this constitutes double-loop organisational learning.

The concept of double-loop learning is associated with *greater reflection* over what one is seeking to achieve and how: "it is through double-loop learning alone that individuals or organisations can address the desirability of the values and norms that govern their theories-in-use" (Argyris & Schön 1996: 22). A "double feedback loop ... connects the detection of error not only to strategies and assumptions of effective performance but to the values and norms that define effective performance" (1996: 23).⁹² The distinction between different levels of learning is analytically useful and applied in my analysis of empirical findings in chapter eight.

⁸⁹ This argument resonates with concepts of forward and backward economic linkages: firms may integrate backward in order to obtain better information about prices and quality of inputs (see Arrow 1975).

⁹⁰ An analogy between organisational learning and policy-making is made by Hall (1993: 278) through a similar distinction between first-, second-, and third-order learning. He illustrates with the example of government policy, which can be seen as comprising three components: the parameters of these instruments (e.g. pollution standards, minimum wage levels); the policy instruments and techniques used to achieve these objectives (institutions); and the overarching *idea* that constitutes the social objective of policy (Hall 1993: 278).

⁹¹ Theories-in-use are defined as the formal and informal routines and worldviews through which individuals' construct their responses to outside interest groups. Double-loop learning may take place at two levels: that which changes theories-in-use, and that which changes processes of inquiry (the way in which these theories-in-use are developed, i.e. learning about learning).

⁹² This illustrates the evolutionary character of learning: the benchmark against which performance is measured is itself evolving over time.

2.5.5 Learning as a collective activity: diffusion of rules and norms

As argued above, evolutionary economics seeks to explain economic change through an understanding of how routines are spread to actors in wider society (Nelson & Winter 2002: 25). It shares this aim with organisational sociologists that attempt to explain how norms and practices become diffused across a wider "organisational field". ⁹³ The literature on organisational sociology is, however, generally more concerned with organisational learning as a collective activity.

DiMaggio and Powell argue that rules and norms are diffused across the organisational field through a process of institutional isomorphism (DiMaggio & Powell 1983: 148, 1991; March & Levitt 1988). They point to three forms of information diffusion. First, *coercive diffusion* is where information is broadcasted, e.g. through regulatory requirements. Second, *mimetic diffusion* refers to where information is spread from one adoptee to another, sometimes through intermediary organisations, e.g. staff turnover, consultants, and trade associations (see Biggart 1977). Third, *normative diffusion* is where rules spread by certification boards, higher education institutions, political sentiment, as well as through self-reflection over what constitutes appropriate norms and behaviour.

Granovetter (1985) provides an more longitudinal take on how routines and institutions get transplanted between actors. He argues that economic relationships over time become embedded in social structures through processes akin to Grindle & Thomas' feedback loops (see 2.2.2.3). Granovetter's form of institutional embedding is a two-way process of mutual adaptation: one might expect host-country stakeholders (including regulatory agencies) voluntarily adopt some of the foreign investors' preferred approaches to interaction.⁹⁴

Diffusion of organisational routines and aims may take place through organisations coming together around particular interests (i.e. interest groups). To the extent that companies within an industry have common interests they can cooperate and exert greater influence over other (groups of) stakeholders. For instance, companies may wish to present a common political position vis-à-vis government or through associations such as chambers of commerce. Over time, these cooperative practices can lead to convergence by disseminating routines across the organisational field. However cooperation cannot be taken for granted, and Ostrom (2000: 475) argues that 'social dilemmas' often present themselves for actors seeking collective action. Such dilemmas arise from a range of structural variables including actors' general heterogeneity, different discount rates, and information asymmetries.

2.5.6 Organisational learning and evolutionary policy making

Policy changes often come about as part of the political process, e.g. in response to electorate demands, to placate donors, or to transfer resources to different constituents (see discussion in chapter four). Within the evolutionary framework developed in this chapter, state-firm negotiations around proposed policies become complex processes. The routines that are best suited to one set of policies may not be suited to another, so

⁹³ DiMaggio & Powell define an organisational field as a group of organisations that share a set of institutions. In addition to the firm and its direct competitors, an institutional field includes "key suppliers, resources and product consumers, regulatory agencies and other organisations that produce similar services or products" (1983: 148).

⁹⁴ This may be the case particularly where TNCs have significant influence on local stakeholders (e.g. making significant contributions to government revenues, providing scarce employment opportunities, procuring a large amount of production inputs etc.).

that firms from different institutional backgrounds (with different sets of routines, aims and resources) will see different benefits and cost associated with a particular government policy. Added to this complexity is the impact of an endogenously changing external environment (which means the *result* of a given set of routines and interactions are not constant over time). As Levitt & March put it, "[b]ecause of the simultaneous adapting behaviour of other organisations, a routine may produce different outcomes at different times, or different routines may produce the same outcome at different times." (1988: 331).

Firms sometimes obtain information about proposed policies because governments wish to brief them ahead of making binding changes to the regulatory framework. This reduces transaction costs of future enforcement and giving firms time to adjust to the new rules of the game (coercive diffusion). The firm also gleans new information about the external environment through contact with enforcement agencies, for instance through inspections and efforts to collect compliance-related data (coercive diffusion). Finally, information about what is expected of firms may also reach managers through the media (in particular in countries with state-controlled media) and advocacy groups (normative diffusion).

Firms may also actively seek information about government's policy agenda by engaging with external actors (mimetic diffusion): firms will expend resources to engage with government to obtain new information about the direction of planned policy, enabling them to make more predictable business plans. Information may be sought through formal or informal channels (e.g. personal visits to senior government officials), and directly or through mediating organisations. Lastly, this may take place through participating in stakeholder consultations over new policy. This is a mix of coercive and mimetic diffusion of rules, more commonly found in developing countries that are heavily reliant on foreign capital and therefore need to accommodate investors.

An evolutionary view of policy making acknowledges that firms have different options in responding to such emerging policy proposals (see 2.2.2). First, firms may take on board whatever policy changes the government is proposing, go hat-in-hand to shareholders to explain the costs implications (e.g. for cleaner technology or higher tax rates), and get on with business. Alternatively, firms may try to fight their corner by, for instance, threatening cut-backs in investment or employment. This latter approach requires three things. First, information on which to base action (e.g. firms could argue their case with reference to their superior knowledge of the technicalities of their industries). Second, firms would need resources with which to effectuate action (Pfeffer 1981), and mechanisms through which to make their position known (e.g. access to senior policy makers). The mechanisms whereby the private sector expresses these interests will sometimes be formal, as when government approaches companies to consult over new regulation, or informally expressed through personal networks (see 2.2.1). A third option is available to firms, in particular in less transparent environments. Firms may simply 'do nothing' and stall, in the hope that limited regulatory capacity (and easily corrupted inspectors) will allow it to proceed without internalising higher costs associated with proposed policy changes.⁹⁵ In fact, in a fast-changing regulatory, political, and social context, expending resources on trying to adapt to local (weakly

⁹⁵ Mining companies with low levels of transparency and accountability (e.g. limited reporting) will have fewer reasons to comply. For example, some organisational impacts (e.g. environmental) are inherently non-transparent, i.e. people may know that they are affected until (for example) they or their livestock get taken ill due to water pollution.

enforced) regulatory demands may not be in the firm's interest. I therefore hypothesise that in a context of the co-existing, overlapping, unclear and sometimes competing institutions of African countries, firms' existing routines-in-place will play a significant role in determining the course of action chosen by the firm.

2.5.7 Section conclusion

In this section I introduced the concept of organisational learning and defined it as changes to organisational routines and aims (defined, in turn, in the preceding section). I examined how routines change as a result of ongoing social interaction through which firms acquire new information about the external environment. The literature review focused on processes of learning that result from social interaction between the organisation and its external environment. ⁹⁶ I also noted how organisational learning must always be a metaphor, as any organisational learning in essence constitutes patterns of learning among individuals.

The third sub-section then explored how learning can take place through proactive *search* within the external environment and *learning-by-doing* through the accumulation of experience. I then introduced the two concepts of *single-loop* and *double-loop* learning to distinguish between more superficial learning and that which is associated with changes in underlying norms, values and resources. Having looked at perspectives largely concerned with what goes on inside the firm, the fifth sub-section reviewed perspectives on how routines and rules spread through collective action.

Finally I argued that organisational learning must be understood as a function of the politics as well as political culture shaping a country's policy process. When new regulations emerge firms are able to respond in different ways, e.g. by accommodating it, lobbying against it, or in some cases simply by ignoring it. This will result in different learning outcomes for the firm (i.e. different degrees of change and adaptation in organisational routines) depending on the nature of its engagement as well as its institutional background.

2.6 Chapter conclusion

In this cross-disciplinary review of the literature I have argued that a holistic view of state-firm relations and policy evolution must take into account how internal firmbased routines as well as wider institutions shape organisational behaviour. On the one hand, the incentive structures embodied in the institutional environment are constantly changing, through new industrial policies and regulations or political pressures (in particular in economically strategic sectors). On the other hand, firm-specific organisational routines themselves change over time, through processes of organisational learning. In these processes the foreign investor aligns its practices with demands and expectations of local as well as external stakeholders.⁹⁷ These

⁹⁶ Hall argues that "competition for power can itself be a vehicle for social learning" (1993: 289). Hirschman's notion of social learning within an organisation is similarly based on interaction, and understood as externalities from knowledge that arises from forward and backward linkages (Hirschman 1958). ⁹⁷ Learner to fold

⁹⁷ In support of this argument is the fact that organisations, most evidently in the private sector with its profit motive, have an incentive to learn from own experiences even in the absence of new information about their institutional environment. By reducing transactions costs, such organisational learning can

demands and expectations are themselves in a constant state of flux, and are likely to shift significantly when a company enters a new and unfamiliar market. Both institutions and organisational routines are thus path-dependent and develop through social interaction. I thus see the path of state-firm interaction and policy evolution as a combination of what the firm can do (its dynamic capabilities) and what the external environment rewards (as determined by policies and institutions).

This chapter comprised four sections, beginning with an examination of policy making in the African state. I first reviewed the literature on the African state, followed by a review of perspectives on the relative roles of the state and interest groups in policy making. I noted the overlapping formal and informal features, as well as often highly centralised governance, of the neopatrimonial state. Moreover, I observed how the current dependence of many developing countries on private investment to generate economic growth predisposes the state to take on a role of enabler, as well as regulator, of foreign investment.

An evolutionary perspective of policy making best captures these features, enabling us to understand regulatory policy as mutually constituted through a process of continuous interaction and feedback loops. Thus, although policy may be mandated by ministries, *de facto* policy is often set by street-level (implementing) bureaucrats in conjunction with regulated entities themselves.

In the second section of this chapter I argued that regulatory policy could be understood using institutional theory. Indeed, all state-firm interaction is mediated by the state's institutional infrastructure, through which actions (including those of the state itself) are legitimated. I explored various perspectives from the new institutional economics, as well as the 'new institutionalisms' in political science. Here I sought to show that key categories from institutional theory could be applied to policy process described in the previous section. I subsequently noted how the idea of socially constructed environments had risen to prominence as a critique of more rationalist explanations for how organisations respond to changes in their external environments.

Given my focus in this study on large multinational companies, I then examined perspectives on organisational behaviour in the management literature, in particular the popular resource-based view of the firm. This body of theory holds that firms can generate competitive advantage by combining existing resources, including intangible managerial skills (routines), in new ways. It argues that a firm's abilities to do so – its 'dynamic capabilities' – are key to explaining firm behaviour (see 2.3.4).

In critiquing this perspective I argued that the notion of a firm's dynamic capabilities must be expanded to include, for instance, the ability to reach and engage (informally of formally) with stakeholders (the power to be heard). Indeed, access to the political leadership is likely to be a key resource in its own right for anyone seeking to influence the direction of policy, given Africanist scholars' accounts of the role of centralised and personalised power. I also noted that theories of dynamic capabilities assume a relatively stable external environment. In practice in many developing countries – where the external operating environment is subject to rapid change due to volatile commodity markets, privatisation, and various unsettled aspects of governance – a firm's (dynamic) capabilities are unlikely to provide companies with and sustainable competitive advantage (see section 2.3.4).

To conclude the second section of this chapter I reviewed the management literature on state-firm bargaining, including more recent accounts that see state-firm

increase a firm's profitability (Williamson 1985). Note however that while learning can reduce transaction costs, learning itself is associated with costly change.

bargaining as having been transplanted to the multilateral fora. I critiqued this literature for not accounting for variations in bargaining dynamics across companies with different preferences, in turn depending on their institutional background, including operational routines and norms of business.

The third section of this chapter developed an evolutionary theory of the firm that conceptualises firm behaviour as guided by path-dependent routines (the embodiment of managerial skill) and the unintended consequences of action. It was based on the evolutionary economics literature, which seeks to explain the paths by which organisations (and the wider economy) develop over time. Unlike neoclassical economics, it eschews a focus on particular equilibrium characteristics.

Evolutionary economics resonates strongly with features of the neopatrimonial African state. For instance, Bayart's (1991) notion of how patrimonial logics and codes are reproduced over time is analogous to the routines underlying social behaviour according to theories of evolutionary economists (Nelson & Winter 1982). I also found the focus on routines within evolutionary economics to resonate with the resource-based view of the firm as driven by dynamic capabilities.

Within the work of Nelson & Winter and other evolutionary economists I found support for the notion, developed in section two, that an organisation's environment is socially constructed. Because of the path dependence of routines as well as institutions, there will always be tension in state-firm relationships, and to some degree a mis-match between exiting routines and the external environment. This mis-match is likely to be greater in a context of rapid change, e.g. volatile commodity markets, varying demands form capital markets for different firms, different norms and variations across institutional backgrounds more generally.

In the fourth and final section of this chapter I developed the concept of organisational learning. Over time, through ongoing interaction, organisational routines and aims evolve in tandem with government policy. This section highlighted how organisational learning can – over time – result in convergence in practices through various mechanisms (e.g. learning as search, learning-by-doing, and institutional isomorphism).

However the process of convergence is by no means automatic. As Levitt & March put it: "[o]ne organisation's action is another organisation's outcome" (1988: 332). This leads to a view of organisational behaviour that is – like the institutions discussed in section 2.3.2 – always contested. The idea of a socially constructed external environment seems particularly applicable in developing countries such as Zambia with limited state accountability and transparency. Such operating environments will reduce the ability of firms to validate and confirm their interpretations of what other stakeholders are doing.

I highlighted how firms can respond in different ways, and that a socially constructed external environment (see 2.3.3.2) makes convergence less likely (as different actors, *de facto*, interpret things differently). In this process of organisational learning, organisational routines and aims play a dual role of governing patterns of interaction (influencing *what* information will reach the firm) and acting as filters (influencing *how* this information will be interpreted). Thus, since learning depends on information capture through interaction, and interaction is conditioned by routines, the firm's ability to learn is endogenous to its already-in-place routines.

In conclusion, this chapter has argued that an evolutionary approach to policy making is well-suited to explaining institutional developments in Zambia's mining sector. Within this framework, external shocks are not required for institutions to change, rather institutions evolve continuously through social interaction. In this approach the concept of organisational learning is an organising principle: it is defined in relation to the organisation (my key unit of analysis) yet is a central concept in theories of institutional evolution as occurring through feedback loops between actors and institutions.

Effective policy making implies that the state is able to devise and implement policies that apply equally across regulated firms. If growing south-south FDI is now leading to greater diversity among investors into institutionally weak developing states, how is it affecting the host-country regulatory policy framework? Is there evidence of convergence across investors (as well as between investors and the state)? These questions are of importance to academics and policy makers interested in implications of the growing investment from China, India and other emerging markets, and will be explored empirically in chapter four through seven. Before doing so, the next chapter presents and discusses the methodology adopted for this thesis.

3 Methodology

3.1 Introduction

The aim of this thesis is to understand how policy evolves in weak commodity dependent states, in a context of high organisational diversity. To pursue this aim, chapter one developed the following two research questions:

- *How do state-firm relations and regulatory policy making evolve in weak resource-dependent countries?*
- What shapes processes of convergence or divergence around regulatory standards in the Zambian mining sector?

To answer the research questions I conducted case study research on four foreign mining companies (representing roughly half of the total Zambian production of copper in 2006), through five months fieldwork between July and December 2007. Zambia's copper mining sector was chosen as an appropriate location for conducting this research given the significant (and increasing) presence of emerging-country investors (Chinese and Indian firms). I examine four case study companies including an Indian company, a Chinese company, as well as two more 'western' multinationals.

The case study method was chosen in part because I wanted to situate these companies in their Zambian context: the strength of the case study method rests in its ability to provide a holistic and 'deep' account of the research subject in its natural setting (Gerring 2004). As Gerring observes, "[o]ne may think of depth as referring to the detail, richness, completeness, wholeness, or degree of variance that is accounted for by an explanation" (2004: 348). The process of triangulation between different sources of data offers the potential for reliable and valid research results.

This chapter presents the methodology adopted for this thesis, including reflections over data collection and analysis. The methods themselves as well as attending reflections are usually presented jointly, rather than having a self-contained section on research relfexivity.⁹⁸ First I discuss the research design (instruments, sample selection) and my motivations for adopting this design. I then give an overview of how the study was operationalised, including reflections on how the approach evolved whilst in the field. A section that discusses data analysis and presentation then follows. Finally I address questions of validity and potential bias, before the chapter concludes.

3.1.1 Limitations in scope

A methodological limitation is that I was unable to conduct primary research in the home countries of each case study firm, to learn more about autonomy of the firm in relation to head-office or shareholder influences. This would have been useful in light of the discussion in chapter one about how the institutional background matters for the firm (see 1.3.2). Instead, I tried to illuminate the 'mix' between companies' locally and externally driven decision-making routines through my interviews with

⁹⁸ Given that my approach evolved (in part through my own reflections) whilst in the field, my reflections on method, case selection etc. should be discussed in the context of these methods themselves.

company representatives and others. Further theme-specific limitations in scope arose from a combination of general time and resource constraints.

3.2 Research design: case study as method

The term 'case study' has been used to refer to many different approaches to designing and implementing research in the social sciences. A case study may connote, *inter alia*, a study that is focused on in-depth fieldwork, that focuses on one or a few instances of a phenomenon (small-N analysis) or that uses qualitative methods (Gerring 2004: 342). It is also associated with identifying and explicating causal mechanisms (Ibid. p.348). Braithwaite & Drahos argue that explanations to social phenomena should focus on mechanisms (i.e. means, rather than ends) because "[r]arely will social scientists be able to state necessary and sufficient conditions under which the various mechanisms are 'switched on'" (2000: 15; see also Elster 1989: 9).⁹⁹ This relates to the general difficulty in the social science research of establishing a counter-factual, a problem that is compounded when researching complex and evolutionary phenomena.

The case study method is also considered appropriate for generating and testing theory about previously understudied topics (Yin 1994; George & Bennett 2004). Case studies can be conducted and analysed within a positivist as well as a constructivist/interpretivist epistemology, as the case study method does not, *per se*, carry implications for research philosophy (Gerring 2004: 345). The focus on policy evolution within a context of high organisational diversity resulting from south-south FDI is a novel topic, lacking established theory. I therefore adopted the case study method as a research approach that would allow me to move between inductive and deductive reasoning.

In this section I first discuss the research instrument, followed by the sample selection process and the appropriateness of this sample for answering my research questions.

3.2.1 The research instrument: qualitative interviews

3.2.1.1 Semi-structured interviews

I collected data mainly through interviews with representatives of four case-study firms, as well as government agencies and non-state stakeholders. These interviews were generally semi-structured: I asked questions of varying open-endedness and used prompts to ensure that the desired topics were covered.

I followed Gillham's advise that elite interviews be "loosely structured at best" (2005: 54). I expected government decision makers and organisational representatives to be sensitive regarding what information they provided, and did not want to jeopardise their trust by appearing to inquisitive (at least upon first contact). Although less structured interviews with fewer 'prompts' are more likely to contain 'gaps' (where one theme is not fully explored before the interview moves on to the next theme), they will also contain a greater element of discovery (Gillham 2005: 132). Given my focus on the nascent phenomenon of large-scale south-south FDI, I saw this process of discovery as key to my research.

⁹⁹ Whilst social science can identify causal mechanisms that lead to an event (and thus shed light on why something happened), the reasons why that particular mechanisms rather than another was triggered is likely to remain veiled.

The interview approach varied slightly between different organisational groups: interviews with mining companies and government representatives were more focused, seeking to illuminate certain issues and relationships suggested by theory or prior data collection, with an aim to facilitate intra-group comparison of responses. Interviews with other stakeholders were less structured and more interviewee-led. This was the case in particular during early stages of fieldwork, when my objective was to map out the issues, the mechanisms of influence, as well as identification of further key informants to contact (resonating with the approach of grounded theory, see Charmaz 2000).¹⁰⁰

Interview data was complemented by documentary reviews, including financial reports and regulatory instruments (laws, statutory instruments), as well as informal conversations.¹⁰¹

I had overall descent success in obtaining legal documents, although firmspecific reports on regulatory compliance were accessible mainly in the area of environmental regulation. As I was also interested in understanding the financial conditions of companies, I tried to and was able to source the annual reports of some of the privatised mines.¹⁰²

3.2.1.2 Questions asked

I operationalised the key theoretical concepts identified in chapter two and asked a range of questions about managers' (and other interviewees) relationships with other firms, state or non-state actors. I found that many respondents did not distinguish in their accounts between organisational routines and aims. Consequently, I began asking about companies' 'practices', a concept I defined as the manifestation of routines and aims.

Before leaving for Zambia I developed a 'master' interview schedule that included questions grouped by the firm-stakeholder relationships that I wanted to explore. Although I envisaged that this list of questions would change once in the field, I wanted to have base-line set of questions before leaving for the field (given constraints on time once there, see Arksey & Knight 1999: 7). The interview schedule was purposely developed to go from more open to more closed questions, to allow for further discovery during initial stages of interview (particularly important during early stages of the project, when I was still seeking to uncover relationships and issues of interest).

I was keen to ensure that interview questions were salient to my respondents. Daniels & Cannice (2004) note that business executives appear more at ease with interviews if questions are seen as salient and if they can expect to learn something about other companies in their industry. Upon arrival in Zambia my interview schedule was reviewed in a focus group consisting of 16 MBA students at the Copperbelt University on 3 August 2007. Throughout fieldwork I also endeavoured to

¹⁰⁰ Note that this will not 'pure' grounded theory in the form advocated by Glaser and Strauss (1967) in the sense of constant interaction between data and theory (see also Bryman & Burgess 1994: 5-6). Rather I am suggesting that I systematically revisited theory in light of additional data gathering.

¹⁰¹ Informal conversations in the field often help to "uncover complexities" (Arksey & Knight 1999: 26).

^{26). &}lt;sup>102</sup> My hypothesis was that financial accounts could illuminate some resource interdependencies and the role of institutional constraints in shaping firm behaviour. For example, data on financial strength, cash flow, and indebtedness, as well as breakdowns of revenue and cost types can demonstrate who a company's main economic stakeholders are. It proved, however, difficult to extract detailed data from these accounts.

review relevant secondary data before meeting interviewees and adjusting my choice of questions accordingly, to prevent interview-time being spent on superfluous description.

In interviewing mining companies my initial plan was, in broad terms, to first ask respondents to *themselves* identify who their most important counterparties (policy and economic stakeholders) were, how they viewed these actors, the modalities of their interaction (cooperation vs. conflict; formal vs. informal) and how this relationship had evolved over time. However, this linear model was rarely applicable.

3.2.1.3 Snow-balling within the research instrument

While in the field I introduced a certain element of dynamism to the research instrument, allowing each subsequent interview schedule to be influenced by prior and relevant interviews. As Steier argues, reflexive research should recognise that "research structures are themselves researchable and not immutable, and by examining how we are part of our own data, our research becomes a reciprocal process" (1991: 7). This approach (for non-mining and to a lesser extent mining organisations) enabled me to gather more information, to build a better overall picture of the policy and business dynamics I was studying. Given my inductive approach I saw this as a research priority, acknowledging the implied trade-off with the ability to establish internal validity (via direct comparison across respondents' answers).

This approach, what I call 'internal snowballing' within the research instrument, implied building on previous respondents' accounts as I moved from one interviewee to the next. As I was progressing through the interviews, I also let the inquiry proceed by triangulating interview data with information from documentary sources, and rigorously followed the local press. Throughout this process, I maintained the research objectives and research questions as overarching guides to my inquiry.

This approach resonates with ethnographic methods, which hold that the 'appropriate' questions are always contextually situated (Bloomberg et al. 1993). This requires the researcher to ask questions that can 'locate' the issue of interest in its natural context. To the extent that different interviewees are situated in, and thus constitute, different 'parts' of the local context (in different roles, representing different interests, taking different views), it becomes meaningful to ask them different questions.

The validity implications of this approach were that I was able to obtain richer detail about certain themes, but at the expense of closing myself off to other 'new' avenues of inquiry. In trying to avoid introduction of bias I was careful not to identify how my questions had been shaped by prior respondents' answers, or who had said what. Moreover, referring to people that I had previously met often gave me credibility (as a serious/productive researcher), put the respondent at ease and improved my access to information. To avoid introducing bias my general approach was to avoid making organisation- or people-specific references when formulating my questions.

3.2.1.4 Interviews vs. surveys?

Survey techniques are an alternative way of collecting data that I considered inappropriate for this study for practical and methodological reasons. Practical reasons included, first, the need to establish trust (Daniels & Cannice 2004: 189). By

meeting face-to-face and giving assurances I could increase this trust by giving a professional appearance and stressing my research ethics. The choice of data collection method was thus partly a reflection of the need to gain further access via social referrals. Studying something with somewhat unclear benefits for participating companies raised the importance of being able to explain the purposes of my study in person.¹⁰³ Third, people may find it easy to reject or delay a survey. My experience in Zambia indicated that a survey would not have been feasible, because people operate rather informally and generally make limited use of email.¹⁰⁴ On the other hand, a face-to-face meeting was considered a socially acceptable, or even necessary, obligation (in cases where I approached somebody through a personal referral).

Methodological reasons included, first, the fact that the study was limited to such a small possible sample (seven privatised mining companies). In such cases, semi-structured interviews can be an appropriate data collection technique (Daniels & Cannice 2004: 186). Second, a central aim of data collection was to capture issues of significant complexity but low transparency that I could not sufficiently foresee before setting off for the field. I thus ruled out using a pre-developed questionnaire or highly structured interview, since I could not know beforehand exactly who I would be interviewing or what they would be able to contribute. Interviews are more useful than surveys in uncovering complexity because they enable the researcher to develop a deeper rapport with research subjects (see e.g. Daniels & Cannice 2004).¹⁰⁵

3.2.2 Sample selection

3.2.2.1 Choice of organisations

At the time of fieldwork there were seven large-scale foreign investors in Zambia's copper sector. These investors operated nine large-scale copper production companies, each with one or more mines or refining facilities. The four firms that constitute my 'case-study firms' are highlighted in the table below. My case study units are not conceived of as mere reflections of their parent (foreign) companies but rather the Zambian operations of a certain international mining companies.¹⁰⁶ The case study units comprise individuals and their collective mining-related activities within a geographically delineated space on Zambia's Copperbelt Province.

 ¹⁰³ Being able to do so appeared particularly important given the negative attention the mines had been getting (in the press and from NGOs) around the period of fieldwork.
 ¹⁰⁴ In my experience many respondents had what I would call a 'short-term' outlook and people tended

¹⁰⁴ In my experience many respondents had what I would call a 'short-term' outlook and people tended to leave things to the last minute. I often called on people to arrange a meeting 1-2 weeks in advance, only to have them reply that I call closer to the date. This meant that, oftentimes, what could be delayed would be delayed.

¹⁰⁵ Daniels & Cannice (2004) suggest this is necessary when theory indicates that there are overlapping formal and informal structures, and where perceptions and attitudes matter.

¹⁰⁶ The main exception to this is the case of FQML, where some of my respondents were based at the group headquarters (for all Zambian and DRC operations) located outside Ndola, and thus spoke with the experience of wider issues beyond the Copperbelt.

Mine	Owner / Listing Year of		Former owner	Refined copper prod'n (kilotonnes)				
	"Nationality"		acq'n		2004	2005	2006	2007
Kansanshi	First Quantum (Canadian)	FTSE, TSX	2001	Phelps Dodge (Canadian)	-	78	127	164
Konkola Copper Mines	Vedanta (Indian)	FTSE	2004	Anglo American (UK/SA)	192	164	142	154
Mopani Copper Mines	Glencore (Swiss-reg'd)	Private equity	2000	ZCCM (Zambian)	160	133	131	122
Chamb. Metals	Enya Holdings (Netherl. reg'd)	Private equity	2003	Avmin (South African)	16	22	22	58
Bwana Mkubwa	First Quantum (Canadian)	FTSE, TSX	1997	N/A (greenfield)	42	48	51	25
NFC Africa	CNMC (Chinese)	Gov't owned	1998	ZCCM (Zambian)	15	19	23	24
Chibuluma	Metorex (South African)	JSX	1997	ZCCM (Zambian) (Zambian)	-	-	3	13
Total Zambian production				425	464	498	561	

Table 4. Overview of Zambia's copper mining sector

Source: Bank of Zambia. Notes: Shading indicates case study units. Table excludes small and medium-size companies, as well as companies at various stages of prospecting and development.

Because of distance and costs, I first excluded Kansanshi (First Quantum) mainly because of its location in NorthWestern Province, some five hours drive away from where I was based on the Copperbelt.¹⁰⁷ Of the seven mining operations on the Copperbelt as at mid-2007, two (Chambishi Metals and Luanshya Copper Mines) were owned by the same company (Enya Holdings), implying a possible organisational sample size of six. Of these companies I initially targeted four: KCM (Vedanta), MCM (Glencore), NFCA (CNMC) and Chibuluma South (Metorex). During my third week in Zambia I sent letters to the Chief Executive Officers (CEOs) of my initial selection of case study firms. The letters were printed on Copperbelt University letter-headed paper, outlining aims, logistical requirements, and how the research could benefit the companies

KCM responded promptly and positively through the Company Secretary, offering to set up an introductory meeting. At the end of the fieldwork, I had met formally with six people within KCM management. The CEO of MCM responded via email saying that they were busy with a due diligence process, and that I could contact him again in late September. In early October 2007 I wrote to the firm again but got no response.¹⁰⁸ After following up with a fax and another email, the MCM CEO politely declined noting that "we are too busy with a due diligence and some acquisitions at present to be able to look at your requests".

At the time of sending out these letters I had already established contact with NFCA.¹⁰⁹ After an initially welcoming reception and two official interviews, access

¹⁰⁷ Fuel is expensive in Zambia, due to a combination of infrastructure (high transportation costs) and policy (all crude is refined by a state-owned monopoly, Indeni, which has long suffered from underinvestment). At the time I left the cost of fuel was approximately \$1.50/ltr, and whilst on the Copperbelt I refueled my car for about \$65-70 every three days or so. In addition, with Lumwana being a new greenfield site with production commencing in 2007 I expected this company to constitute a less comparable case.

¹⁰⁸ To lower my demands on management time I suggested that I could meet with perhaps an environmental manager, a human-resources manager and a procurement manager.

¹⁰⁹ This contact took place via repeatedly cold calling the Association of Chinese Corporations in Zambia (a small business promotion organisation), who put me in touch with the Chinese Economic and Commercial Consulate (ECC), who in turn put me in touch with a deputy CEO at NFCA. The ECC is an arm of the Chinese government, affiliated but not directly under the Chinese Embassy, which promotes trade and investment ties and whose objective it is to supervise Chinese companies operating

was cut off, politely citing the "framing" of NFCA by journalists. This reflected the criticisms levied against the company in western and local media, focusing on labour and safety standards. The company had responded to these criticisms by deciding to not entertain inquiries, even by people calling themselves researchers.¹¹⁰ Subsequent interviews came from informal sources, i.e. through meetings with company informants outside of the plant area. In total I held seven interviews with four people at NFCA. The CEO of Chibuluma South called me a week after receiving my letter, to say that although he would have liked to be able to help, he did not think that my study would "make sense" given the volatility and "state of flux" in the regulatory environment at the time of my field work. Later, in mid-November, I tried again to establish access through another formal email but got no response.

Given that two of my four intended case-study companies had declined to participate, I began looking at other mining companies on the Copperbelt, namely Chambishi Metals and First Quantum Mineral Resources ('Bwana Mkubwa'). To contact Chambishi Metals I cold-called the Company Secretary who pointed out that people would be reluctant to see me without knowing what questions I would ask, prompting me to prepare and send her outlines of interview questions for distribution to her colleagues. I subsequently met with six people within the management of Chambishi Metals. I contacted First Quantum through a personal contact who had accommodated me in Ndola, and who knew some staff at the company personally. He put me in touch with the Technical Manager and the Commercial Manager (who is also Company Secretary). At the end of the fieldwork I had met with five people in managerial roles at First Quantum. I present overviews of each case-study firm in more detail in chapter four.

3.2.2.2 Choice of non-mining organisations: snowball sampling

In terms of non-mining organisations, I began my inquiry by speaking to donors. The cultural affinity to Swedish and Norwegian embassy personnel, as well as their attentive usage of email, meant that I could prepare some meetings before my arrival in Zambia. In approaching government I tried to explore the evolution of mining sector policy using the Ministry of Finance as an entry point (at the suggestion of Lundstol, 16.7.07, given the ministry's role in leading government efforts on planned re-negotiation of state-firm contracts, through 'Renegotiation Technical Committee'). However this proved difficult and the official I contacted was reluctant to speak to me about these renegotiations, and with regards to other regulation pointed me towards the Ministry of Mines. I was more successful there, as well as with regulatory (implementing) agencies in the area of environmental, health and safety.

The choice of which government and non-government organisations to speak to was determined in part by review of secondary literature (including news articles) and partly by snowballing techniques whereby interviewees would refer me to other organisations and individuals. For civil society I initially cold-called some NGOs I had come across in reading up on mining in Zambia. Getting further contacts through snowballing proved easy with civil society organisations, which often draw

abroad. See Gill & Reilly 2007 for an overview of how the ECC relates to Chinese ministries and the local embassy.

¹¹⁰ When NGOs, activists as well as journalists falsely present themselves as serious (academic) researchers this poses a problem for the legitimate academic researcher in obtaining access. I tried to strengthen my legitimacy by presenting formal invitation letters with the University of Bath letter-head, stressing my independence from any organisation other than the university, but this seems to have had a limited effect.

legitimacy and resources from maintaining links with similar-minded bodies. Snowballing also constituted my main way of expanding my sample size among suppliers.

Snowball sampling proved important for several practical reasons. First, it was often difficult locating individuals from organisational websites, and a lack of 'email culture' meant that it was difficult to establish contact before arriving in Zambia. Second, snowballing can facilitate access by allowing a researcher who is 'vetted' by a gate keeper to gain greater access to future interviewees. In doing so this approach leverages the trust and credibility that the researcher has developed with prior research subjects, something that other data collection techniques cannot.¹¹¹ Over time, I could see how my credibility as a serious researcher increased. The table below shows the distribution of interviews across different respondent groups over the period of fieldwork.

	17 Jun -	17 Aug -	17 Sep -	17 Oct -	17 Nov -
	16 Aug	16 Sep	16 Oct	16 Nov	12 Dec
Government / regulators	5	5	1	2	6
Mining	1	7	8	6	9
Donors	5	4	0	2	2
Civil society	7	1	2	3	1
Suppliers / business associations	3	8	6	6	5
Other	6	2	0	5	1
Total	27	27	17	24	24
%-age of interviews on the Copperbelt	26%	71%	100%	71%	64%

Table 5. Distribution of interviews over time

3.2.2.3 Is this an appropriate sample?

I set out two criteria in asking whether my four case-study companies (KCM, NFCA, CM, FQML) constituted an appropriate sample. The first was that the sample exhibit a potential for mapping institutional and cultural diversity. The sample appears to satisfy this condition due to the inclusion of case study firms of Chinese (NFCA) and Indian (KCM) origin, as well as 'western' investors (in the case of FQML, publicly listed) with international experience. I expected there to be significant diversity across these companies given the arguments about path-dependent organisational routines and aims that derive from an investor's institutional background (see chapter one).

The second criteria in sample selection was that the sample be large and 'deep' enough to allow the identification of patterns regarding how firms vary in their approaches to dealing with political and economic stakeholders. The objective of identifying patterns relates less to the number of case study units in my sample, and more to my degree of insight into each case: my choice of sample is only defensible to the extent I have enough insight into each case to identify patterns of stakeholder relationships. This necessitates 'deep' accounts from respondents familiar with each case.

My overall objective was thus to ensure that I had a sufficient number and sufficient depth of interviewees within each case study firm to construct a broad enough picture to illuminate the research questions. I therefore sought to speak to a

¹¹¹ Trust is particularly important in a research setting such as Zambia, with a small policy elite, often with personal connections. Small elite networks create accountability pressures on individuals within organisations (if somebody badmouths a colleague, they are more likely to be found out).

range of individuals within each case study firm, in order to get a *broader* understanding of which issues matter, to get a *deeper* understanding of particular issues, and thirdly to *increase validity* through the corroboration of responses between respondents. I believe my total sample of mining-company respondent satisfies the abovementioned criteria for sample appropriateness (see section 3.4.1).

Given the nature of the research (constraints on managers' time, varying access, variation across firms' organisational practices etc.) it was, however, not possible to ensure that individuals with consistent roles were chosen in each of the four case study companies.¹¹²

3.2.3 Further notes on motivating the research design

3.2.3.1 The importance of context

The richness in context provided by the case study method appears appropriate for analysing the evolution of mining sector policy in Zambia. As Nayyar observes, "[i]nstitutions are local and cannot be transplanted out of context" (2006: 14). This is so because of, first, the difficulty in observing informal rules and, second, because enforcement characteristics are likely to be shaped by a multiplicity of local factors and power relations. This points to the need for a holistic and contextual approach.

The need for mapping context was one reason behind the choice of qualitative interview methods. Westwood (2004) argues that a high degree of context-sensitivity is essential for research on international business in order to move away from a 'colonialist' approach.¹¹³ Given my aim of making claims to knowledge of relevance beyond the units under study, it becomes essential when defining case studies to be specific about the context surrounding each unit. For qualitative analysis to be seen as credible and trustworthy by the reader, the researcher has to set out in significant detail the background conditions under which the phenomena is being studied. To make scientific (falsifiable) claims about a theoretical relationship, one must in the first instance be able to state when and how a particular relationship holds (Bacharach 1989).

3.2.3.2 The importance of interdisciplinarity

Susan Strange takes the view that social science research needs to be interdisciplinary, arguing that "our times no longer allow us the comfort of separatist specialisation in the social sciences, and that however difficult, the attempt has to be made at synthesis and blending" (1996: xvi). Thus, whilst the theoretical core of this thesis rests with the literatures on policy analysis, institutional change and evolutionary economics, I incorporate theories about the firm and its bargaining with the state (from the international business literature). This reflects my firm-centred approach to political economy and policy analysis. I deemed an appreciation of management discourse to be of particular importance given my qualitative research design, which emphasises detailed accounts given by firm representatives, in their own words.

¹¹² This cross-case variation in terms of the roles of interviewees prevents direct comparisons of findings across firms, although this was largely foreseen.

¹¹³ Henley et al. observe that in survey research on international investment, establishing a firm's nationality is hard, but "ascribing causality is even more difficult, not least because of the learning over time involved in undertaking FDI in a specific country" (2008: 11).

3.3 Operationalising the study

3.3.1 Reflecting on the process: accessing companies

During my time in Zambia I was affiliated with the School of Management at the Copperbelt University, organised through Professor John Lungu, a long-term expert on the Zambian mining sector. Upon arrival I had several fact-finding meetings with Dr Lungu, who also helped me distribute letters inviting the mining companies to participate in the study.

Regarding access it proved easier than expected to get access to non-state stakeholders, more or less as expected with state stakeholders, and more difficult than expected with firms. As noted in the introductory chapter, copper mining in Zambia enjoys a strong historical political, social and economic legacy, with more recent attention given to the perceived misallocation of mining-benefits between private investors and the state. Professor Lungu described the mines as having grown "more cautious these days," following the increased attention and scrutiny given to the mining sector in the media, through civil society reports, and due to some high profile regulatory 'failures' (see section 6.4).¹¹⁴ This increased the need for me to present the research as neutral and non-threatening, whilst not diverging from a truthful representation of my research.

My introductory letter stated that: "The objective of the study is to explore the Zambian environment for investment in mining, including relationships between firms and other interested groups ... Emphasis will be on systematically gathering perspectives from different individuals and stakeholders in a balanced and neutral way. In doing so the research seeks to contextualise the roles that foreign mining companies play in Zambia, with the aim of promoting fruitful dialogue and cooperation between all parties".

In interviews I stressed that I was an independent researcher, affiliated with Bath and Copperbelt universities, and provided interviewees with information and consent forms offering anonymity.¹¹⁵ I also tried to highlight how my research could help them with stakeholder management by casting light on industry dynamics.¹¹⁶ However, many potential respondents appeared unclear as to what the direct benefits for them might be: indeed, whereas my findings could cast light on wider organisational dynamics, benefits to individuals were understandably less clear.

During interviews people often wanted to speak a bit about the overall context, privatisation, and the perceived unfairness of current state-firm contracts etc. Often some part of the interview would be spent discussing things that were already known to me. I tended to accept this as it functioned as a useful icebreaker. Fortunately, for the most part it did not seem to result in less 'data': people were usually generous with their time and I would typically still be able to cover what I wanted to during interviews.

3.3.2 What data can be generated from semi-structured interviews?

There were limitations to gaining knowledge from interviews once access had been granted. A general culture of secrecy (Fraser & Lungu 2007), coupled with the

¹¹⁴ Fraser & Lungu (2007), Christian Aid (2007).

¹¹⁵ I also offered to provide a summary of the thesis in electronic form.

¹¹⁶ I stressed how my unbiased account of the priorities and experiences of stakeholders as well as companies themselves might help them avoid mismatches of expectations.

Zambian policy-elite constituting a very 'small world', meant that people often seemed reluctant to divulge information. Although the theoretical framework developed in chapter two distinguishes between different levels of government, in practice my respondents often saw the government as an entity. The quality of interview data also depended on organisational capacity issues (e.g. respondent not being able to locate hard-copy data), low proximity to decision making among some respondents, and confidentiality agreements with third parties.

Some respondents may have felt concerned about the anonymity I would provide. Regulators, in particular, were often unwilling to distinguish between companies. It is possible that asking outright about variations across companies – that in theory are meant to be subject to a uniform regulatory pressure – left respondents feeling that to acknowledge such variation would be tantamount to admitting that they were not doing their job. I had limited success with soliciting quantitative data (e.g. regarding investment, employment, breakdowns of costs etc.).¹¹⁷

The timeliness of my research topic had significant implications for data collection, with 'pros' (salience) as well as 'cons' (sensitivity). On the one hand, the high interest in mining sector issues at the time meant it was often easy to get people interested, and I had little difficulty getting access to non-mining organisation. However, having such a salient topic was also a hindrance: people were more concerned with providing information lest they be seen as taking sides in what was a politically sensitive debate. Respondents might have felt more free to talk to me if my research questions had concerned *historical* policy evolution (e.g. privatisation or major policy reform) that had already been discussed and agreed upon. However, as I was interested in studying ongoing processes through which policy evolves and is articulated, I accepted this as a limitation inherent to my research design.

3.3.3 How the study evolved (to focus more on change than outcomes)

My initial approach when arriving in Zambia did not emphasise organisational learning but rather I focused on understanding variation across mines. I initially explained my research objective as "to understand how different mining companies approach and deal with stakeholders over environmental and social issues". In my early interviews I tended to ask explicit as well as implicit questions about state-firm relations and policy evolution.

However as I found respondents to be quite cautious when asked explicitly about the firm's relationships with external actors, I increasingly shifted to focusing on rules and objectives internal to the organisation in question, and how these had evolved over time. As argued in chapter two, such internal 'drivers' of firm behaviour constitute a link between the firm and its external environment, allowing the researcher to *infer* external relationships.¹¹⁸ However, given the difficulty of identifying routines and processes, I often sought to identify different organisational practices. My research also evolved in the sense that I initially focused a lot on the

¹¹⁷ In general people would be generous with their time and their views, but were not so keen on sharing 'hard' information, e.g. documents, correspondence.

¹¹⁸ Internal organisational routines will reflect the wider international environment, for instance, to the extent they are shaped by demands of external stakeholders such as project finance providers, stock market regulators, the home government and export markets (Vogel 1997: 563).

role of civil society, until discovering that this was more of a 'background issue' for the policy processes under study.¹¹⁹

Reflecting on my sample selection process I should perhaps have targeted Company Secretaries first, rather than CEOs of companies. I had hoped to target people as close as possible to decision-making, but it quickly became apparent that they would not entertain me. A further reflection is that I could have provided one or more interview schedules already during the initial contact, something I did later on when establishing contact with my fourth company, at the suggestion of the Company Secretary at Chambishi Metals.

I found that being able to make audio recordings (in around three quarters of my interviews) facilitated relationship management. This enabled me to establish a familiarity with interviewees (e.g. how open or closed they were on particular subjects, or what issues they considered to be most salient) which came in handy when I went for follow-up interviews (just under 30% of my interviews were follow-up interviews).

Issues of access and openness of interviews may have been reduced if I had been able to provide a more convincing confidentiality proposition, i.e a formal (but short) confidentiality agreement. Given the small world of the Copperbelt and the political pressures on the mining sector at the time, respondents may have viewed the questions as contentious.

3.4 Data and analysis

3.4.1 Overview of data collected

During field work I conducted 120 interviews with 95 individuals. Of these, 25 respondents were individuals in varying (mainly managerial) roles at four foreign mining companies as well as the state investment company through which the Zambian government holds shares in the privatised firms. I also interviewed 14 individuals in varying capacities at government agencies, as well as a broad range of donor respondents, private sector suppliers and representatives of civil society organizations. Table 6 shows the distribution of responses across my case-study firms as well as ZCCM-IH (the government's holding company for minority stakes in the privatised mines).

	Konkola Copper Mines	NFCA / Chambishi	First Quantum	Chambishi Metals	ZCCM-IH	
		Copper		1.200000		
Environment	1 resp. (1 int.)		1 resp. (2 int.)	1 resp. (1 int.)	1 resp. (1 int.)	
Finance / marketing / operations	2 resp. (2 int.)	2 resp. (3 int.)	2 resp. (5 int.)	1 resp. (2 int.)	1 resp. (1 int.)	
Human resources	1 resp. (1 int.)			1 resp. (1 int.)		
Company secretary	1 resp. (1 int.)	1 resp. (1 int.)		1 resp. (1 int.)	1 resp. (1 int.)	
Procurement / security	1 resp. (2 int.)	1 resp. (2 int.)	1 resp. (1 int.)	1 resp. (1 int.)		
Administration		1 resp. (2 int.)				
Number of individuals	6	5	4	5	3	
Number of interviews	7	8	8	6	3	

Table 6. Mining company respondents by company and occupation

¹¹⁹ Whilst in the field I discovered that civil society in Zambia appears to be important politically (e.g. over constitutional issues), but weak in terms of regulatory (or 'micro') oversight roles.

3.4.2 Transcription and coding

Transcription and coding of interviews (some 75% of which were audio recorded) was a mammoth task, amounting to around 400,000 words of material. The process of coding consisted of applying a construct (understood as theoretically informed categories and concepts developed in chapter two) to sections of text whose meaning I identified with a particular construct.¹²⁰ By drawing on constructs used in existing literature I sought to leverage meaningful insights from previous research, thereby increasing the generalisability of my knowledge claims.¹²¹

I began transcribing whilst in the field. This formed part of my method of 'snowballing' *within* the research instrument (see 3.2.1.3) and enabled me to develop further and more locally appropriate constructs. At this stage the coding was preliminary, and time constraints meant that transcriptions were often incomplete (i.e. I might have transcribed only the first half of an interview) when moving on to the next interview. The purpose here was to develop the inquiry whilst still in the field, to make sure I asked the right questions in upcoming interviews. Upon return from the field, I went through each interview again to capture detail and further develop the coding framework.¹²² I wanted this process to be grounded in the data by letting constructs – to some extent – *emerge* from the data. Over time, some constructs were collapsed, expanded, or dropped.¹²³

As with most social science research this study involved the combination of inductive and deductive analysis (Stinchcombe 1968). It included initial coding where data was allocated into constructs based on existing theory, and axial coding where data and relationships is put back together in new ways.¹²⁴ Incorporating elements of deductive logic was particularly important given my theoretical position (developed in chapter two) that organisational and policy change are largely endogenous processes. Being able to move between induction and deduction in this way also facilitates theory development.¹²⁵

Once all interviews were transcribed and coded, I used Nvivo to 'auto-code' my interviews according to my coded transcripts, enabling me to search and bring out coded data in easily accessible form.¹²⁶ These printouts then provided the basis for which I drafted my three main empirical chapters (chapters five through seven).

¹²⁰ This distinguishes my research from pure grounded theory, where emphasis is based on links between constructs that are themselves entirely derived from the data (Turner 1994, cited in Gough & Scott 2000: 342).
¹²¹ The use of such constructs is, however, by no means a prerequisite for generating generalisable

¹²¹ The use of such constructs is, however, by no means a prerequisite for generating generalisable knowledge, to the extent that the analysis of the research problem "links with more abstract theoretical knowledge and principles, known to be applicable across a wider range of similar situations" (Robinson 1993: 133).

⁽Robinson 1993: 133). ¹²² I kept a database of constructs in an Excel document, to record new constructs and to keep track of constructs used. I also reviewed some of my interview transcripts to ensure coding consistency. ¹²³ For instance, [head office] was initially a main code for overseas organisational influence, later

¹²³ For instance, [head office] was initially a main code for overseas organisational influence, later changed to [shareholders] in light of an interview with Chambishi Metals managers who reflected on their company as not having an overseas head office in the traditional sense.

¹²⁴ In other words, concepts brought out in one interview would be applied to data gathered in a different interview.

¹²⁵ Rudner defines theory as "a systematically related set of statements, including some law-like generalisations, that is empirically testable" (1966: 10). He distinguishes between a model (the "related set of statements") and the theoretical propositions (the "law-like generalisations").

¹²⁶ 'Auto-coding' means letting Nvivo search through all transcripts and index all paragraphs that contain a particular text (say, "[Transparency]") and index paragraphs (by applying some Nvivo 'code'). Thereafter the user can easily produce a printout summary of, for instance, all the cases where civil society groups mentioned government "[Transparency]".

3.4.3 Data analysis and display

The process of analysing qualitative data is about grouping mainly textual data into meaningful categories and establishing conceptual links between these categories. In analysing my data I aimed to identify patterns regarding how companies engage with policy makers, regulatory agencies, and other external stakeholders, and how they interpret their surroundings. By doing so I sought to explicate the role of diversity, learning and convergence in the evolution of regulatory policies and standards.

Miles & Huberman (1994: 10) identify three stages of qualitative data analysis: data reduction, data display, and conclusion drawing/verification. Data reduction consists of "extracting the essence" (Gillham 2005: 127) of what has been communicated by "selecting, focusing, simplifying, abstracting and transforming the data that appears in written-up field notes or transcriptions" (Miles & Huberman 1994: 10). In qualitative research this process of 'data reduction' begins during data collection wherefore, as Miles & Huberman (1994) point out, data collection forms an integral part of data analysis. Data reduction thus inevitably requires interpretation of the data, thereby opening up – to some extent – qualitative research to challenges of bias and validity (Gillham 2005: 127).

My principal empirical data display (chapters four through seven) was developed through a two-stage process. The first stage was to group the data on the basis of the three spheres of describing state-mining sector relations (fiscal, regulatory, economic linkages) identified in chapter one. Here, rather than having a *count* of how many people supported a particular point, data is presented as an *account* of the themes and their constructs that result from data reduction.

The idea of capturing an comprehensive account of these phenomena was enabled by my choice of research instrument: by allowing questions to evolve to capture additional nuances uncovered as the field work proceeded I ensured there was a 'red thread' running from one interview to the next. This approach is reflected in heterogeneous structures of chapters five through seven. The second stage consisted of analysis across different groups of interviewees, 'attaching' evidence to organisations (i.e. firm, state, non-state actors) and to theoretical concepts (e.g. routines, aims, interaction, institutional change, learning) within my chosen 'spheres' of interest.

Through this process of data display I attempted to construct *analytic narratives*, based on a case study tradition within political economy that incorporate elements of deductive as well as inductive reasoning (Bates et al. 2000). Such narratives are constructed through a rich account that provides the reader with "the sense of time and place that brings a narrative to life" (Bates et al. 2000: 689).¹²⁷ I see this study as fitting into the methodological tradition of analytic narratives.¹²⁸

¹²⁷ Mahoney (2000) further argues that the analytic narrative approach is useful for moving between the aggregate (cross-unit) and disaggregated (within-unit) levels of analysis.

¹²⁸ Bates et al. (2000) emphasises the identification of a parsimonious set of exogenous variables and the grounding of these in the analytic narrative. By contrast, I base my narrative on largely endogenous concepts (see chapter two) of organisational and institutional change, hypothesised to illuminate the process of policy evolution.

3.4.4 Triangulation

When inquiring about politically sensitive issues one cannot assume that interviewees always provide unbalanced accounts. In particular where interviews are less structured, with respondents thus having greater control, it becomes important to triangulate between sources of data in order to strengthen its validity (Gillham 2005: 58). Triangulation constitutes the process cross-verification, and rests on systematic collection of data about the same phenomenon from different sources and/or using different data collection methods (Miles & Huberman 1984: 234).¹²⁹

Throughout the process of data analysis, I attempted to triangulate between the views expressed by different actors in order to establish the validity of claims. I looked for instances of several interviewees within the firm corroborating an account of actions or perceptions, or for cases where external stakeholders (e.g. government or suppliers) would support or dismiss such accounts.¹³⁰ Triangulation is crucial in this type of research design that relies on otherwise non-verifiable personal accounts. In the four mostly empirical chapters that follow I frequently use footnotes to validate or disprove specific points in my findings.

To strengthen and increase the falsifiability of the research, Arksey & Knight (1999: 22) advise the researcher to specify whether the purpose of triangulation is to confirm (validate) or to seek completeness.¹³¹ In my case I emphasise triangulation as a way of gathering complementary and contrasting perspectives, rather than triangulation of data for confirmation (validation). This reflects the Zambian context of limited transparency, where institutional arrangements and processes can easily be understood differently by different stakeholders.

It should be stressed that the confirmation of evidence/accounts gathered from one source with that of another source does not necessarily indicate that this account is an accurate and balanced view of reality. Rather, a common view presented by two (or more) sources may constitute a discourse, reflecting an established way for a group of individuals to represent and frame the social world. Recognising the role of discourses I tried to err on the side of caution when drawing conclusions from data analysis, seeking to probe further even when triangulation pointed to mutually supporting evidence from multiple sources.

3.4.5 Research ethics

Ethics are paramount in interview-based field research. The researcher mediates between the supply side (respondents) and demand side (readers) of research and has an obligation to address ethical concerns towards each group (Tellis 1997).

Protection of respondents was the overarching ethical principle with which I conducted this study. This meant ensuring that any information that may harm the interviewee (by positioning them in an unfavourable light vis-à-vis employers, co-workers, or others) not be associated with that person in displaying the data. Where respondents opted to remain anonymous, or when they clearly stated they did not

¹²⁹ In the words of Miles & Huberman, "the meanings emerging from the data have to be tested for their plausibility, their sturdiness ... their validity. Otherwise we are left with interesting stories about what happened, of unknown truth and utility" (1984: 11).

¹³⁰ The technique of corroboration of data is a form of triangulation, understood here as the validation of evidence from one source through a second source, using the same method (Sayer 1992: 246).

¹³¹ The reason is that the unearthing of certain data will lead to confirmation claims, but that *different* (and often more) data will lead to completeness claims. For a critical assessment of triangulation techniques, see Mason (1994).

mind being mentioned by name, this proved easy. In some cases, however, I had to use my judgement and in these cases I tended to err on the side of caution: pseudonyms have been used for respondents who presented critical views of their own organisations or other entities on which they rely for support.

I judged it unlikely that I would through my involvement with respondents significantly alter their practices, or put them in any danger, as long I protected their anonymity. This reflects a research strategy where I was interviewing individuals, but mostly asking about organisations. A second ethical responsibility towards respondents is to give a truthful and unbiased overview of the project, something I addressed by always providing interviewees with a standard introduction letter and offering to explain the research.

Qualitative researchers also have a high degree of responsibility toward their readers, in confronting questions of validity: the researcher has to be honest towards the reader in judging the data obtained. In other words, if a particular respondent consistently makes exaggerated claims around a particular point known to the researcher, the 'truth value' of other statements in that interview must also be taken with a greater 'pinch of salt'.

3.4.6 A note on style

To convey the sentiment of this specific period in Zambia's history, and to be consistent with the voices in my interviews, the narrative in the following chapters makes use of the present tense. I use the past tense when statements are specifically related to events in the past, or when providing historical context for the analysis. Moreover, I wanted to group voices around thematic accounts: this makes the narrative 'jumpy' at times, as I move between voices from disparate groups (mining companies, government, donors, civil society, and private sector suppliers to the mines).

In order to anonymise respondents I use the term 'manager' to refer to individuals in positions ranging from operational management within a particular business area (e.g. commercial, environment, procurement) to vice presidents within companies who are closer to strategic decision making and implementation.

I use three full stops within interview quotes to represent some part of the respondents' speech that I cut out, usually for the sake of brevity. To preserve the integrity of my data I refrained from re-ordering any parts of a transcript. All italics are in original unless otherwise stated.

3.5 Research validity

There are many pitfalls and considerations that must be taken into account when conducting case study research. As Robert Yin notes, "the 'softer' a research technique, the harder it is to do" (2002: 26). Miles & Huberman note that that challenges of qualitative research include the time consuming nature of both data collection and coding, the risk of data overload, as well as "a distinct possibility of interviewer bias" (1994: 4; see also Arksey & Knight 1999: 30). This section discusses sources of bias and challenges of validity faced in this thesis.

3.5.1 Research bias

3.5.1.1 Researcher-induced bias

Whenever the respondent looks to the researcher for prompts to guide the interview, or whenever the researcher interferes with the account of the respondent, there is a risk of introduction of bias. Hammersley & Gomm (1997) define bias as systematic and culpable error on the part of the researcher. Case study research may suffer from three forms of researcher-induced bias (Darke et. al. 1998: 285).

One form of bias is that which results from interaction with the research subject (affecting *which* information is provided). Examples include where questions are not formulated and delivered in a clear and consistent way, or where the research instrument suffers from omitted variable bias (the interviewer does not ask the 'right' questions), often due to poor operationalisation of constructs.¹³² Second, researcher-induced bias may result from the beliefs, values and prior assumptions of the researcher (affecting *how* information provided is interpreted). Lastly, qualitative research can be criticised for relying heavily on interpretation by the researcher. However judgements/statements (what we collect during an interview) are a function of human intelligence, and could not be anything but subjective. As Gillham observes, "[t]he 'objectivity' lies in making explicit the criteria for the judgement" (2005: 134).

To increase the validity of the research, the researcher should strive to be neutral, for instance by being reflexive over her/his position, the underlying assumptions, and the influence the researcher expects to have on data collection. This point recognises that in qualitative research, the researcher is herself the instrument (Gillham, 2005: 7, Patton 1990). The direct contact between researcher and research subjects (without intermediating 'tools', such as surveys) implies that claims to objectivity are more difficult to make. In my own study reflexivity was particularly important given my focus on a heterogeneous set of actors, including representatives of local stakeholders, civil society and international business (Douglas 1985: 42).

3.5.1.2 Other sources of bias

Issues of validity may also arise in ways that are not researcher-induced. This includes where respondents misinterpret questions due to their different cultural background, or where they exaggerate or understate things out of a desire to make their responses seem 'socially appropriate' (what Arksey & Knight 1999 call social desirability bias, a particular risk when researching advocacy-orientated organisations). The only way of countering these sources of bias is for the researcher to be sensitive towards the broader context of the interviewee.¹³³

Bias may also result from uneven access to the organisations being researched. In the case of this study I had, in some respects, better access to FQML that the other firms. This means that I can present more detailed accounts for this firm, meaning in turn that it more easily 'stands out' (in positive or negative ways). However, given that my questions often focused on the mining sector and mining sector policy more generally, this additional access at some companies also gave me more information with which to illuminate wider state-firm relationships.

¹³² Failure to include all significant relevant explanatory variables may lead to bias: the observation of co-variation among two variables may be due to the influence of a third variable which is not accounted for. This concern applies to research strategies based on nominal as well as ordinal levels of measurement (Mahoney 2003: 395).

¹³³ Westwood argues that "reflexivity has become an imperative in vanguard social science research and increasingly in organisation studies" (2004: 75).

Finally, bias can result from responses being shaped by social norms. For instance, bias might result from respondents reporting unsubstantiated variation across mines (e.g. criticising the Chinese because it is the popular thing to do). Throughout data collection I therefore had to be conscious of the fact that Indian and (more recently) Chinese nationalities are associated with particular stereotypes in Zambia.¹³⁴

3.5.2 Research validity

Yin (2003) presents four types of validity for case study research. First, challenges to *construct validity* arise where researchers use instruments that do not accurately capture the concepts they are trying to measure.¹³⁵ During the data collection phase the researcher can strengthen this form of validity in several ways, e.g. by using multiple sources of evidence, establishing a chain of evidence and allowing key informants to review draft reports of research findings. In this study I tried to validate my constructs using secondary data, and also asked about the sequencing of events in order to create a 'chain' of evidence. My focus group of MBA students at the Copperbelt University was also useful in this regard. I contemplated going back to Zambia to do follow-up interviews and disseminate preliminary findings with key informants, but in the end time and financial constraints prevented me from going.

Second, the notion of *internal validity* relates to the consistency of findings on which we base our claims to knowledge. Challenges to internal validity arise mainly during analysis in seeking to compare findings across cases. One issue relates to the sampling of interviewees at the Chinese mining company: as later interviews were conducted 'off-the-record', there was naturally more scope for these respondents to appear open and critical of their employer. This gave more detail on issues associated with their company's internal management than I was able to get from other mining companies, but also complicated direct cross-case comparisons. I also experienced difficulties in establishing counterfactuals. For example, the industry-leading environmental, health & safety policies at Chambishi Metals have been in place since the time of the former shareholders (according to respondents), but it was difficult to ascertain whether the new shareholders would otherwise have implemented their own equivalent procedures.¹³⁶

Third, considerations of *reliability* must be addressed, ensuring that the research can (in theory) be replicated with the same results.¹³⁷ I had to be particularly sensitive to reliability concerns in this type of study, given that "[k]nowledge in qualitative interviewing is situational and conditional" (Rubin & Rubin 1995: 38). My approach of snowballing within the research instrument (see section 3.2.1.3) implies that the sequencing of interviews matters more. The implications for replicability are that if the study had begun with different respondents, it might have supported different findings towards the end. To some extent this was an unavoidable feature of my methodology. I tried to minimise this risk by choosing to interview more 'generalist' organisations during the first months of fieldwork (e.g. donors and civil

¹³⁴ For example, one respondent from a long-standing supplier firm talks about the "Indians at KCM" and claims that KCM "is just like the Chinese, that's how they are. They look after each other."

¹³⁵ For instance, in Zambia the concept of information as being public or not is not associated with the type of 'binary' idea e.g. in the UK (i.e. either a document is public or it is not), but rather appears to be a relative concept.

¹³⁶ In other words, are the path-dependent routines from previous operations or those of incoming managers dominant in shaping organisational behaviour?

¹³⁷ Note that complete reliability is – in practice – unattainable (Arksey & Knight 1999: 32, see also Brenner et al. 1985).

society). I also sought to increase the reliability of the study by emphasising, systematically, the *themes* of inquiry and keeping detailed records during the course of the fieldwork. Moreover, the high detail of context I provide gives information about a wide range of 'variables'.

Finally, the *external validity* of the study's findings (whether the study has utility and relevance) rests on these findings being generalisable outside of the particular Zambian context. A commonly voiced concern is that inferences from small-sample analysis are unlikely to be useful for broader generalisations. However Collier & Mahoney (1996) caution against interpreting generalisability too rigidly in 'small-N' analyses with few cases. In such studies there are no hard and fast criteria for judging representativeness. Here, the responsibility of generalising findings rests – to a greater extent – on the reader rather than the researcher. In qualitative research the researcher therefore has a responsibility to provide a rich account of findings as well as assumptions and practical approaches, such that the reader can make an informed decision (Arksey & Knight 1999: 56).

3.5.3 Epistemological and ontological tensions

One epistemological challenge – inherent in the use of interviews – is to infer action from individuals' *accounts* of action. There will always be some disconnect here, because "the interviewee works with a memory that remembers some aspects and not others" (Arksey & Knight 1999: 16). Thus, in researching policy change and state-firm relations, I was really observing people's knowledge, attitudes and subjective values about these things. This points to the need for an interpretivistic ontology: research subjects will report their own understanding of a phenomenon, influenced by their position within organisational hierarchies, their own agendas, and their subjective values of how things should be done.

A second challenge was how to infer organisational behaviour through a research design that focuses on interviews with individuals. Throughout the data collection process I tried to reflect on how close the individual was to organisational decision-making and issues of interest (e.g. environmental, procurement, planning and finance). I did this through the actual interview as well as by looking at the formal position of an individual within the organisation. I also tried to establish the generalisability 'within' the organisation by triangulating between data provided by different respondents in the same organisation.

3.6 Chapter conclusion

To avoid common criticisms of qualitative research as lacking systematic rigour (see Miles & Huberman 1994: 4) I have endeavoured, principally through this chapter, to state clearly and comprehensibly how data was collected and analysed. To reduce bias I have strived to be reflexive about my role as a researcher, the environment, and what was (by choice or by necessity) left out of the analysis.

The following four chapters (chapters four to seven) present the empirical findings of this study. Chapter four introduces the Zambian context, including information about mining companies under study. Chapter five to seven present the thematic findings of the three spheres of study introduced in chapter one.

4 Governance of Zambia's mining sector

4.1 Introduction

As noted in chapter one, my intention for this study is to explore state-firm relations with reference to three areas (or institutional 'spheres') of fiscal policy, environmental and labour regulation, and supplier practices. The initial idea was that these would then constitute three relatively self-contained empirical findings chapters. However, during fieldwork I quickly realised that there were many features that cut across these three lines of inquiry. As I began to organise my data after leaving Zambia it became clear that an additional chapter would be necessary. With this in mind, the present chapter outlines important background context and the relevant policy environment more generally.

This chapter is structured into three sections that draw on interview data (i.e. reflecting views of the respondents) as well as relevant secondary literature. The first section presents the historical context of Zambia, including the move to multi-party democracy in 1991 and the wide-scale liberalisation of the economy that followed. It discusses the privatisation of the mining sector, including the historical roles of donors and local civil society in Zambia.

The second section begins to elucidate the political economy and governance of copper mining in Zambia, by highlighting various mechanisms of state-firm interaction. The governance mechanisms discussed here are broad and not issue-specific – the regulatory agencies that focus on specific issues (environment, labour etc.) are introduced in more detail in subsequent chapters. This section focuses on four areas: the investment climate and its recent nationalistic expressions; political culture and interventionism in the mining sector; the public discourse which frames state-firm relations;¹³⁸ and the formal role of the state in the corporate governance of foreign mining companies.

The aim of the third section is to introduce the case study firms and begin to identify their strategies, structures and norms. It first introduces the mining companies one-by-one, followed by a cross-sectional account of these firms' mechanisms of copper marketing, as well as the nature of competition and cooperation in the sector. Finally I then discuss the mix of external and internal influences on these firms, highlighting the tensions between routines and aims held by local employees and those introduced by expatriate management (see 2.4.1).

4.1.1 Limitations in scope

At this stage I specify in some detail the limitations in scope of the thesis, both to guide and manage the expectations of the reader. First, I am not specifically analysing the role of traditional rulers in mining. Although the approval of local chiefs is paramount to recently-arrived mineral exploration companies, the issue is of lesser

¹³⁸ Discourse is defined here as a set of statements about the social world, reflecting the information available to social actors as well as how these actors interpret this information (through mental models and other routines in place).

relevance on the Copperbelt compared to more recent developments in North-Western Province.¹³⁹

Second, I do not go into detail about the role of local government. This limitation in scope is guided by my choice of institutional areas on which to focus, that exclude municipal and district services. It also reflects my chief concern with state-firm relations and the highly centralised nature of the Zambian government (discussed below).

Third, I will not be discussing international investment treaties, as I did not find any evidence of such agreements shaping investment into the mining operations under study.¹⁴⁰ Nor do I analyse the state-firm bargaining and policy positions relating to energy security, although this was an issue of growing significance at the time of fieldwork (mining companies consume around two-thirds of Zambia's energy).¹⁴¹

Finally, I do not analyse the role and influence of consultants. Technical assistance consultants can play a big role in regulatory development through their coordination of consultations, thereby indirectly influencing the reform agenda. However, I wanted to focus on stakeholders with a permanent presence in Zambia, whereas many consultants are international firms that appeared difficult to access for this study. I also wanted to focus as closely as possible on actors that originated (rather than mediated) pressures on the policy process.

4.2 Historical background and privatisation

4.2.1 Independence and single-party rule

Zambia gained its independence from British colonial rule on 24 October 1964. The country was, in the period following independence, considered a development success story and by 1969 classified as a middle-income country. The country's GDP/capita was then one of the highest in Africa, and higher than that of Brazil, Malaysia, Turkey or South Korea (Ferguson 1999: 6). At this time Zambia was also the largest producer of copper in the developing world and the third largest producer overall (after the United States and the Soviet Union), producing 12.2% of total world production (Bostock & Harvey 1972).

The copper industry was nationalised through the 1968 Mulungushi reforms, whereby all mining assets were grouped together under the state-owned Zambia Consolidated Copper Mines (ZCCM). However the nationalisation was ill-timed, as the gulf wars of the 1970s led to a sharp increase in the price of oil. The negative impact of falling copper prices were magnified by the increase in oil prices, which led to inflationary pressures on imported goods – including many capital intensive goods used as inputs to the mines – raising costs for the sector and reducing reinvestment.

¹³⁹ There was even a provision in the draft new mining act (in development in 2007) to make license granting conditional on chiefs' 'letters of approval', but this provision was dropped in the law that was enacted in April 2008.

¹⁴⁰ According to UNCTAD, by 2009 Zambia had bilateral investment treaties with 13 states, of which five are developing countries (China, Egypt, Ghana, Croatia, Cuba). The most recent was with Finland, signed in 2005, with the most recent BIT with a developing country being that with Ghana, signed in 2001. See <u>www.unctad.org/iia</u> (accessed 2 March 2009).

¹⁴¹ Mines are very energy intensive. To illustrate KCM's Konkola Deep Mining Project in Chililabombwe can flood within 15 minutes if the pumps stop working (Chaila, 29.8.07). New investment into power-generating capacity has been limited due to the caps on energy tariffs as well as rises in costs of inputs (such as fuels and metals, including copper).

This led to a sharp fall in the terms of trade between copper and imported goods (Jamal & Weeks 1993: 84). During the 1970s some 90% of Zambia's foreign exchange came from copper exports. When the value of these exports plummeted, it led to shortages of foreign currency needed to import capital products and inputs not produced locally.

Faced with these challenges, the government of the republic of Zambia (GRZ) under Kenneth Kaunda (president from independence to 1991) set its hopes on increases in copper prices and borrowed heavily to spend on social services, food and industrial subsidies. Copper prices, however, remained stagnant and the government continued borrowing. By 1984 Zambia had the world's highest external debt (measured as debt/GDP; Fraser and Lungu 2007: 60).

Zambia's economic struggles continued into the 1980s and 1990s, due to low copper prices, economic mismanagement and severe droughts. In 1983 Zambia entered its first World Bank structural adjustment programme (SAP) (Fraser & Lungu 2007: 9), heralding cuts in subsidies and increased competitive pressures. Structural adjustment policies included the liberalisation of exchange rates and reductions in public spending, and resulted in widespread protests. To contain political pressures, the Kaunda government declared a New Economic Recovery Programme in July 1987, whereby interest repayments to the IFIs were limited to 10% of export earnings (Ferguson 1999). Donors responded by freezing aid disbursements. Development assistance only resumed assistance once Zambia eventually conceded to a second SAP in 1989, including policies to cut food subsidies, de-control prices and devalue the currency (Fraser & Lungu 2007: 9).

4.2.2 Return of multi-party democracy and economic liberalisation

By the late 1980s support for Kaunda's United National Independence Party (UNIP) was waning, and the influential trade unions – led by the Zambian Congress of Trade Unions under Frederick Chiluba – were increasingly backing a new political party called the Movement for Multi-party Democracy (MMD). This party campaigned on a political reform agenda and won (by a landslide) the 1991 elections. Once in government the MMD undertook extensive liberal macroeconomic and market reforms. Donors responded positively by increasing aid, to the extent that Zambian budget became over 40% donor-dependent (Bauer & Taylor 2005: 70).

However the process of liberalisation contained few attempts at mitigating the negative social consequences of reform. Rakner (2003) provides evidence that these reforms were associated with reduced living standards and a failure to promote economic growth.¹⁴² For instance, exchange rate liberalisation proved detrimental to the competitiveness of local manufacturers. Thus, whilst Zambia's annual "merchandise" imports doubled between 1995 and 2003, the country's exports fell by 12.5% (World Bank 2005: 9).

As part of this liberal reform package, the MMD embarked on an ambitious privatisation programme, seen as a way for Chiluba to dismantle UNIP's previous power base (Fraser & Lungu 2007: 9). By 1997, 224 state-owned enterprises (SOEs) had been privatised, out of a portfolio of 275 companies (Bigsten 2000; Larmer 2005). The government, however, faced difficulties in privatising the mining parastatal ZCCM due to international copper prices being at historic lows and

¹⁴² Collier & Gunning (1999) have argued that Zambia undertook financial liberalisation when it in fact should have focused on fiscal stabilisation.

competition from other countries that were privatising their copper mining sectors at the same time (including Peru, Kyrgyzstan and Uzbekistan; see Feeney 2002). A German firm was contracted to assess privatisation options for the copper mines, and reported in 1994 with a proposal that ZCCM be broken into five units. In 1995 both the World Bank and IMF extended loans conditional on the adoption by the Zambian government of this proposal (World Bank 1996).

The government lifted the responsibility of privatising the mines out of the general privatisation programme within the Zambia Privatisation Agency (ZPA) and charged a former ZCCM executive, Francis Kaunda, with leading the process. The agreement gave Mr Kaunda significant discretion with regard to negotiating the terms of state-firm contracts used to allocate the long-term benefits of mining (see chapter five).¹⁴³ Although the Minister of Finance was involved in signing off on these agreements, negotiation of their terms and concessions was largely the purview of people close to Francis Kaunda, mainly within the Ministry of Mines (J.Lungu, 21.8.07).¹⁴⁴

The process surrounding the privatisation of the mining sector was widely seen by external parties as lacking in transparency and accountability (van Donge 2009).¹⁴⁵ Fingers were pointed at donors, in particular the international financial institutions (World Bank/IMF), for making development assistance directly contingent on privatisation of state-owned enterprises (RAID 2000).

4.2.3 2001 and 2006 elections, growing resource nationalism

In the 2001 elections Levy Mwanawasa from the MMD was elected president on an anti-corruption platform. In the post-election period, the opposition party Patriotic Front (PF) was formed, led by Michael Sata. The PF broke away from the MMD after it emerged that Chiluba had chosen Mwanawasa as his successor over Sata (who had thought himself the designate heir).¹⁴⁶

The elections of 2006 – for president, parliament and local government – yielded a voter turnout of 71% and were hailed by international monitors as generally free and fair (Gould 2006), with fewer allegations of corruption compared to the 2001 elections (G.Lungu, 22.10.7).¹⁴⁷ Voters on the Copperbelt roundly rejected MMD policies by electing the opposition (mainly PF) Members of Parliament to every urban seat in the region (Fraser & Lungu 2007: 1). Gould observes that following the election "[t]he Patriotic Front ha[d] hegemonic control of local government institutions in Lusaka, in the influential Copperbelt towns and in Kasama in the populous Northern province" (2006).¹⁴⁸ The MMD only retained control of the

¹⁴³ Jones & Sakong describe the use of such discretion by policy makers as a high-risk/high-return strategy, "feasible only in the Myrdalian hard state [of effective enforcement]" (1980: 139).

 ¹⁴⁴ As one respondent recalls, "the ZPA was involved, the Ministry of Mines was involved, but I'm not sure there was much involvement from the Ministry of Finance at all." (MSDP techn. ass't, 1.10.07).
 ¹⁴⁵ One high-profile example of possible corruption was in relation to the bid by First Quantum

Minerals Ltd for Luanshya Copper Mines. Hours before the stated deadline the government received a bid from the Binani Group, which was chosen over FQML. Lawyers representing FQML challenged the bid with three pieces of evidence but were not heard (Chanda 2003).

¹⁴⁶ Michael Sata was Minister without portfolio in Chiluba's administration and has been in politics since Kaunda's times.

 ¹⁴⁷ This was partly due to a strengthened electoral code (through a new Electoral Act 2006), although my respondent adds that "one remarkable challenge that remained was in terms of enforcement of those pieces of legislation." (Ibid.).
 ¹⁴⁸ Of the presidential vote, Levy Mwanawasa (MMD) got 43%, Michael Sata (PF) got 29%, and

¹⁴⁸ Of the presidential vote, Levy Mwanawasa (MMD) got 43%, Michael Sata (PF) got 29%, and Hakainde Hichilema (UPND) got 25% (Gould 2006). The big surprise was the turnout for Hakainde

legislature by virtue of the eight 'deputies' appointed by the President under the constitution, bringing 51% of votes under MMD control.¹⁴⁹

The mining sector played a significant role in the 2006 elections, with the PF campaigning successfully on an anti-Chinese (and anti-foreign investment more generally) platform, and Sata vowing to re-establish ties with Taiwan. Recognising the challenges to its mandate the government subsequently edged toward the centre, by addressing some issues raised and championed by the PF during the election campaign (including mining sector policy, labour standards, and reductions in personal taxes, see Larmer & Fraser 2007).¹⁵⁰ In the mining sector the MMD government tried to defuse criticisms by portraying the new mine owners as good 'corporate citizens' (Ministry of Mines 2007).

Charles Husband, mining specialist at the World Bank, observes that "part of" the reason "why the MMD lost the election on the Copperbelt, was that the population around the mines [were] not seeing any benefits. So there has been a backlash, tremendous pressures." (11.12.07).¹⁵¹ There was wide-spread conviction that mining companies were reaping huge rewards, which resulted in sustained debate (in the local and international media) and pressures for reform.¹⁵² These voices drew legitimacy from the fact that several other resource-dependent countries had already undertaken similar reforms.¹⁵³ The 'outing' of Development Agreements in 2007 – through a Christian Aid-funded report (Fraser & Lungu 2007) – amplified these pressures for change by mobilising local and international civil society groups.

To be certain, a paternalistic ZCCM set a high 'benchmark' for terms and conditions for workers as well as social investment by the mines (Larmer 2007). Michael Soko, governance specialist at UNDP, notes that salaries and working conditions in the copper mines were seen as a standard toward which other sectors aspired.¹⁵⁴ There were also high expectations of economic development for Zambians more broadly following privatisation in the late 1990s. Many remembered and longed for a return to the former splendour and opportunities offered on the Copperbelt and the privatisation gave grounds for renewed expectations of modernity (Ferguson

Hichilema, leader of the United Party for National Development (UPND) and a business-minded technocrat, who got 25% of the vote after only a couple of months of campaigning (following the death of predecessor Anderson Mazoka). ¹⁴⁹ MMD won 73 of 150 parliamentary seats that were filled (via simple majority) by the 2006 ballot.

¹⁴⁹ MMD won 73 of 150 parliamentary seats that were filled (via simple majority) by the 2006 ballot. After allowing for the eight Presidentially appointed deputies, MMD control came to 81/158=51%.

¹⁵⁰ These challenges to MMD popular legitimacy also constrain government in implementing unpopular policy reforms long requested by donors, such as expanding the tax base to tax individuals more heavily (World Bank/IMF 2007: 10).

¹⁵¹ An MUZ official explains how ZCCM "used to own houses, municipal facilities, football clubs, all of these new mining companies have divested from some of those responsibilities that ZCCM used to do. So, for example supply of water is now the responsibility of local councils, and workers have to bear the costs of such services." (Muchimba, 3.8.07).

¹⁵² The debate over DAs and their renegotiations had however lost some momentum by late 2007, in part due to issues regarding a new constitution taking centre stage.
¹⁵³ In these processes, there appears to be a trend for royalty-related policies to 'trickle down' from

¹⁵³ In these processes, there appears to be a trend for royalty-related policies to 'trickle down' from richer to poorer countries. For instance, when Chile in 2005 was debating the introduction of a 3% royalty, some politicians made references to more developed countries, saying "this Bill is similar to legislation found in Australia, Canada, South Africa and Peru", see

http://findarticles.com/p/articles/mi_m0BEK/is_6_13/ai_n14791758. In Zambia in 2007 and 2008 politicians would refer to Chile and say 'if they can do it, so can we'. ¹⁵⁴ Soko notes that "in the past, that is what happened. ZCCM paid its workers well, they had good

¹⁵⁴ Soko notes that "in the past, that is what happened. ZCCM paid its workers well, they had good conditions for their workers, and so everybody was gravitating towards similar conditions to the mines. Now the mines are the largest employers, but now the conditions are pretty bad, and nobody gravitates towards them." (Soko, 14.9.07).

1999). One respondent who grew up in Chingola in the 1980s explains how "everything was on the Copperbelt, and everybody wanted to be on the Copperbelt" (Mususa, 5.8.07). As copper prices began rising rapidly in 2004 and people failed to notice improvements in standards of living, these expectations turned into disappointment, and later indignation, thus fuelling the political opposition.

4.2.4 The economy of Zambia

Zambia's economy is highly dependent on the vagaries of international markets. At the time of writing the mining sector provided c.70% of Zambia's foreign exchange, on which the country relies to upgrade other industries to more capital-intensive production. The mining industry has significant impacts on for exchange rate stability to the extent that high inflows of foreign exchange from mining is expended domestically, thus putting upward pressure on the exchange rate and making exports less competitive (Weeks 2008).¹⁵⁵ Inflation has come under control and was 8.2% at the end of 2006, the lowest annual inflation of over 30 years (Bank of Zambia 2007). However this inflation rate masks the fact that food inflation has been close to zero, but inflation in other commodities has been high. In the first half of 2008 inflation increased to 12.1%, up from 11.1% a year earlier, driven by higher production costs due to power cuts and higher transportation costs (due to rising petroleum costs).

In recent years the Zambian economy has benefited hugely from debt relief. In 2005 Zambia received debt relief of \$3.9bn under the Highly-Indebted Poor Countries (HIPC) initiative, as well as a further \$2.7bn under the Multilateral Debt Relief Initiative (MDRI) (IMF 2007: 86). This helped bring external debt down from \$7bn to \$700m in 2005. It was, however, associated with a strengthening of the Kwacha in mid-2005 (from K4,800/\$ to around K3,400/\$) that impacted negatively on public revenues, mainly through lower local-currency equivalent donor funds and a reduction in trade taxes (Weeks 2008: 1).¹⁵⁶

Zambia today operates a very open trade regime, with imports subject to tariffs of 0% to 25% depending on the degree of processing the product has undergone (raw materials attract no tariffs and finished goods have a 25% tariff) (CSTNZ 2007: 24). However the country has struggled to diversify away from the 'traditional' copper sector and develop its manufacturing base (see table 7). Copper remains dominant in Zambia's national development, in particular in the local economy of mining regions.¹⁵⁷ In 2006, copper exports contributed to 40% of (nominal) GDP (Lundstol, 10.9.07).

In addition to copper Zambia is a large producer of cobalt, used primarily for batteries (accounting for 35% of all cobalt production) and superalloys for the aerospace industry. In 2006 Zambia was the world's second largest producer of cobalt, with output of 9,000 tonnes/year, after the Democratic Republic of Congo (DRC) with output of 11,000 tonnes/year. However much of Zambia's mineral wealth

 155 Despite appreciation of the Kwacha during the mid-2000s, prices of many imported goods did not fall, what a respondent at the Dutch Embassy suggests was due to price-fixing (Gerner, 19.7.07).

¹⁵⁶ In 2007 the exchange rate was stable but strengthened gradually from around K4,500/\$ to around K3,800/\$. In this study I will use a Kwacha-USD exchange rate of \$1=K4,000.

¹⁵⁷ A respondent at the Norwegian Embassy argues that this "is a general concern, that it is too copper dominated, the growth accelerations are often very much driven by the copper price, and the slumps you have as well, in the other direction." (Lundstol, 16.7.07).

remains untapped, with 44% of the country not fully geologically mapped (MSDP techn. ass't, 22.8.07).¹⁵⁸

Sector	Exports 2000-2003	Imports 2000-2003		
Manufacturing	13.5%	81.0%		
Ores and metals	62.3%	0.9%		
Agricultural material	9.3%	0.9%		
Agric. (foods and feeds)	11.8%	9.1%		
Fuels	0.1%	7.1%		
Other	3.0%	1.0%		

Table 7. Zambian exports and imports by sector

Source: World Bank (2005: 10).

4.2.5 The role of donors in Zambia

At the time of writing Zambia was on its second World Bank Poverty Reduction Strategy Paper (PRSP), known locally as the Fifth National Development Plan (FNDP), covering the period 2006-10.¹⁵⁹ Under the FNDP donor funds contribute approximately 28% of Zambia's budget (World Bank/IMF 2007: 4). The FNDP sets the framework for budgeting by "guid[ing] to a large extent the allocation and use of resources using the 'Medium-Term Expenditure Framework'-process and the annual budget" (World Bank/IMF 2007: 5). With regards to risk factors "[t]he FNDP identifies the failure of scaling up of aid as a particular risk to the Zambian economy, but is less specific on other important potential risks, such as a sharp fall in copper prices and drought." (World Bank/IMF 2007: 4). Regarding governance of regulatory frameworks, the IFIs acknowledge that institutional strengthening is required. They emphasise reform within the bureaucracy and in coordination across government institutions, but without any consideration of regulatory enforcement (World Bank/IMF 2007: 10).

In Zambia the harmonisation of donor activities, as envisaged in the Paris Declaration of 2005, has gone quite far. Donor activity in Zambia is guided by the Joint Assistance Strategy for Zambia (JASZ), completed in April 2006 and signed by 12 bilateral donors, the European Commission (EC), the IFIs, and the United Nations (UN). It aims to support donor objectives of making aid more effective, more locally 'owned', and to increase the share of aid given as direct budget support (JASZ 2007: 3).

Under the JASZ framework there are three types of donors: 'lead', 'active' and 'silent/background'.¹⁶⁰ The largest donors are the World Bank, the UK's Department for International Development (DFID), and the UN, with six, five and four sectoral lead responsibilities, respectively (JASZ 2007). The private sector is led by the World Bank and the Netherlands with a sub-sector created for mining, initially led by the EC and later with significant involvement of Norway (see chapter five). There is some variation across these 'traditional' donors, with the US and the Japanese bilateral agencies generally opting for more visible project-based support.¹⁶¹

¹⁵⁸ Oil was discovered in North-Western Province in 2007 and diamonds have been found in Western Province.

¹⁵⁹ The first PRSP covered 2002-4 and was later extended to include 2005 (World Bank/IMF 2007: 2).

¹⁶⁰ The latter refers to, for instance, where the EC has some money to spend on governance, but does not have the local staffing capacity to follow and analyse government policies and processes, and will give the money to one of the lead donors on governance.

give the money to one of the lead donors on governance.¹⁶¹ As some respondents put it, desiring to "put a flag" on their projects.

There is limited dialogue between 'traditional' donors and emerging powers like China, India, and South-Africa. Among the latter, China's presence is the fastestgrowing, yet the Head of the European Commission in Zambia notes that "[w]e have no contact [with them]. It is kind of a black box, even diplomatically it is a black box. They attend cocktails, but as far as discussing in donor groups ... they never show. Sometimes they show, sit there, never say a word. That is it, it's one way traffic." (Fee, 20.11.07).

One characteristic of Chinese aid projects is – as one Ministry of Finance official puts it – that "there is a lot of publicity when the Chinese do something. It is part of the political economy of China-Zambia relations. For instance that [Chinasponsored Ndola] stadium, it is something like \$60m, constructed over 3-4 years, and it's a big issue! But it is only \$60m – there are donors who give us \$60m in a single year ... With other donors it would not be the subject of continuous talk. But with the Chinese, they are our friends, in our hour of need, and so on." (Mubanga, 21.11.07).

The perspectives of 'traditional' donors on the mining sector were summarised in a joint "issues paper" from June 2007. In it donors welcome changes to the fiscal framework, encouraging the GRZ to seek – while avoiding unilateral action – "a revision of the current mining Development Agreements such that the *principle of predictability* rather than fiscal stabilisation will guide the sector" (Cooperating Partners 2007, emphasis added). In doing so they imply that policy predictability in the regulatory framework can substitute for fiscal stability. The report emphasises the need to couple any changes to the legal framework with efforts to strengthen fiscal institutions, including through support of the Extractive Industries Transparency Initiative (EITI) as a complement to legal reforms (see chapter five).

4.3 The political economy of copper mining in Zambia

This section discusses overarching characteristics of Zambia's institutional framework that cut across various facets of state-firm relationships, and covers four areas. I first discuss the investment climate, and how recent policy developments simultaneously reflect the ruling party's private sector-led national development strategy as well as growing popular disillusionment with foreign investors. I then discuss the role of political culture in policy making, and its expression through centralised and personalised modes of governance, and the discourse surrounding foreign investment. This sub-section also looks at the potential for civil society, including the media, to hold government or mining companies to account. Third I examine the corporate governance of the mines, including formal mechanisms for direct state-firm interaction such as the Board-level insight granted by government's retained stake in the privatised mines. Finally I conclude by elaborating on how Zambia's institutional framework facilitates a 'brokering' role of the state.

4.3.1 Legal framework and investment climate

Zambia, on the face of it, appears to have a relatively strong legal framework, largely based on that of the United Kingdom (Chulu, 7.11.07).¹⁶² However donors are quick to highlight that long-standing problems of governance remain (JASZ 2007: 5). Zambia was ranked 19 out of 48 African countries in the 2007 Mo Ibrahim

¹⁶² My respondent argues that legislators will "change a few things here and there, but generally we just transplant regulations and bring it to Zambia." (Ibid).

Governance Index and ranks 123 out of 179 countries on Transparency International's 'Corruption perceptions index' in the same year. Based on 2006 data, the World Bank's Governance Matters index ranks Zambia as per the figure below (where Zambia's ranking is represented by the line).

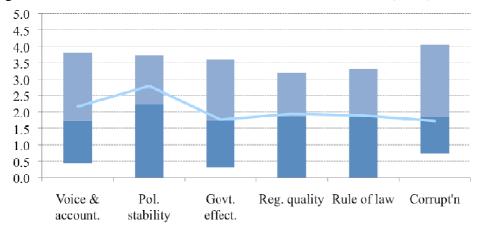


Figure 2. Zambia and the World Bank Governance Indicators (2006)

Note: The lightly-shaded areas represent the range between median-ranking country and highest-ranking country in the sample (all African countries). Darker-shaded areas represent the range between median- and bottom-ranking countries. Zambia's ranking is represented by the line.

The World Bank's Doing Business survey consistently highlights Zambia's labour laws and reports a largely unchanged overall ranking of Zambia's 'ease of doing business' since this survey began in 2005 (in 2008 ranked at 100 out of 181 countries; see World Bank 2009). Issues highlighted by respondents in my sample include labour laws, cumbersome licensing and registration processes, and a "tricky" framework for cross-border trade (Riby, 15.8.07).¹⁶³ Corruption also remains a problem, and my interviewees suggest that corruption at the lower levels of bureaucracy is commonplace. The MMD has placed the fight against corruption high on the party agenda, however its anti-corruption credentials are largely based on fighting corruption on a few high-profile cases and in government (G.Lungu, 22.10.07), in particular the pursuit of former president Chiluba in the national and international courts.¹⁶⁴

Businesses often complain that the government introduces broad-brush regulation with heavy licensing requirements that raise the costs of business. Grant Gatchell, a young veteran of business on the Copperbelt, argues that such policies are forcing small firms into informality "because it just gets too hard" (26.11.07). The country has also experienced increasing energy shortages, as supply has failed to keep pace with growing demand from the mining sector (which accounts for about two-thirds of Zambia's total energy consumption). I now discuss two pieces of legislation, both of which were enacted ahead of elections in 2006.

Source: World Bank (2006c).

¹⁶³ Two of the FQML managers I interviewed considered Zambia's tariffs to be significant, citing Botswana's investment climate as much more "business friendly" (FQML mgr 1, 11.10.07).

¹⁶⁴ Transparency International has shown cases of misappropriation and loss of public revenue to the sum of K6tr (\$1.25bn) (Djokotoe & Chama 2007).

4.3.1.1 The Zambian Development Agency Act

The Zambian Development Agency Act (ZDAA) is a cornerstone of the government's strategy to promote economic growth through private sector investment. The ZDAA merged five former investment-related government agencies (including the Zambia Investment Centre, ZIC) and established the Zambia Development Agency (ZDA). It was passed in 2006 and described by one donor representative as "rushed through" in advance of that year's election (Hasle, 24.7.07).

This investor-centred framework provides for the establishment of 'multifacility economic zones' (MFEZ). These constitute geographically delimited areas where investors enjoy various benefits (e.g. tax breaks and expedited licensing) and are increasingly referred to in national development strategies (GRZ 2009b). In 2007 the first MFEZ was established as the Chambishi Special Economic Zone (CSEZ), managed by the Chinese minerals company CNMC and its subsidiary in Zambia, NFCA. An initial investment of \$800m was targeted for the zone, the lion's share of which was to fund the construction of the Chambishi Copper Smelter (Reuters 3.2.2007).

In the first nine months of 2007 Zambia attracted around \$1bn of investment, attributed by government to 'early successes' of the ZDA. Donors however were quick to note that this influx of investment reflected, in part, high commodity prices and expected growth rather than a sudden emergence of investor-friendly policies. Indeed, the act soon came under review.¹⁶⁵ Juan-Jose Villa-Chacon, private sector specialist at the European Commission (EC) in Lusaka, explains that the ZDA came under revision because "they realised it was restrictive … with regards to nationality, the number of work permits you could have, these conditionalities if you will, they were putting conditions for investing in Zambia, instead of making the environment more attractive to investors." (20.11.07).

Villa-Chacon sees the prescriptive nature of the ZDA Act as representative of a growing emphasis on command-and-control regulation within the GRZ (Ibid.). Dr Derek Fee, Head of the EC delegation in Zambia, echoes this view. He observes that "the ethos for the moment seems to be command-and-control ... the post-election period shouldn't be like this, the post-election period should be one of calm, setting the strategy for the next four years [however] you see a lot these things coming up, like the NGO Bill, and the Hospitality Act" (Fee, 20.11.07).¹⁶⁶ This is a view he shares with some private sector suppliers: "with Mwanawasa I would say there has been more prescriptive laws", opines Grant Gatchell on the Copperbelt, although he questions "whether there is any greater ability to implement" (26.11.07).

¹⁶⁵ Henny Gerner at the Dutch Embassy explains that issues addressed by the review (carried out by consultants in 2007) included a lack of clarity; overly onerous conditions on self-employment permits (previously an investor could put up \$50k to get one self-employment permit, under the ZDAA it became \$250k for five such permits, a change to the disadvantage of smaller investors); insufficient attention to SMEs; insufficient incorporation of CEEA in the ZDAA; and the constitution of the ZDAA board, which stakeholders argued gave too much discretionary power to the President and Minister of Commerce (19.7.07).

¹⁶⁶ Dr Fee describes the Hospitality Act (governing investment and regulation of the tourism sector) as "a disaster ... If this passes, it is terrible, with all the approvals you need, all these requirements to be given by all sorts of ministries. Nothing will happen!" My respondent explains how the EIB has an interest this due to a new EUR50m credit line, mainly for tourism and agriculture. The credit line has been committed to, "[b]ut of course the take-up will depend on such laws ... [and] there is no point having the credit line if people don't want the money." (Ibid.).

4.3.1.2 The Citizens Economic Empowerment Act

Even as government promoted greater participation of private foreign capital in the economy, concerns over limited participation in this growth by Zambians were on the rise (see 4.2.3). In response to these pressures, the Citizens Economic Empowerment Act (CEEA) was passed in 2006. This Act provides for the establishment of a CEE Commission that will provide incentives – including preferential access to government supply contracts – to companies with demonstrable Zambian shareholdings. Michael Soko, governance specialist at the UNDP, sees it as representing an ideological move towards 'economic empowerment' for Zambian citizens by "borrow[ing] a leaf from South Africa" (Soko, 14.9.07). This policy, originally proposed by former Minister of Commerce Deepak Patel, has ideological roots in Kaunda's 'Zambianisation' policies 1970s.

Larmer (2005) argues that the idea of locally empowered development in Zambia is intimately tied to claims of sovereignty, commonly discussed with reference to neo-liberalism and structural adjustment programmes (see also The Post 14.8.2007). The current move towards economic empowerment and investment rather than aid can thus be seen as a backlash against prior World Bank/IMF policies. Engagement with China on the other hand, with its hands-off approach and limited impositions relating to good governance, fits more readily within the discourse of local economic empowerment.

The CEEA represents demands for economic empowerment that are grounded in the experiences of Zambians following a decade of privatisation, where enterprises representing 85% of the country's economy were sold off to foreign investors.¹⁶⁷ However Zambian business associations such as the Zambia Business Forum were sceptical towards the CEEA, asking whether this legislation really addresses the key issues around limited private sector development (Masumbu, 25.7.07).

The CEEA did not 'take off' during the period under study, and few respondents saw it as having much practical significance at the time. It nevertheless represents a degree of policy uncertainty for private sector investors. One respondent notes how the CEEA provides for the Minister of Commerce to designate any land as 'for Zambians only' and that "this is what people should be worrying about when they talk about investor climate" (MSDP techn. ass't, 22.8.07).

4.3.2 Political culture, discourse, and civil society

In this sub-section I focus on three features of the institutional environment that are less easily observed but nevertheless of great importance to understanding how statefirm relations evolve over time. I first discuss the political culture that shapes policy decision making, and how this enables government intervention in the mining sector. I then discuss the very investor-friendly public discourse I encountered whilst in Zambia, and finally I explore how civil society can help to hold government and mining companies to account.

4.3.2.1 Political culture

In line with the literature review in chapter two (see section 2.2), I found the Zambian political culture to be characterised by highly centralised policy making and informal

¹⁶⁷ Thus, although the CEEA was enacted shortly before the 2006 election, Soko says he "[does] not think MMD were rushing it for the purposes of just winning the vote". Rather, he argues, "there was a genuine cause, because this was an emerging source of conflict." (14.9.07).

links between government and mining companies. These two characteristics engender an interventionist approach to private sector regulatory policy, as will be shown in subsequent chapters.

A senior technical assistant at the donor-funded Mining Sector Development Programme (MSDP, housed within the Ministry of Mines) observes that the President makes appointments to most constitutional offices, as well as senior-level ministerial appointments. The Permanent Secretaries of ministries, who in the UK are meant to be the 'institutional memory' that carries on from one administration to the next, are in Zambia political appointments and periodically reshuffled by the President (MSDP techn. ass't, 1.10.07).¹⁶⁸ The Executive Director of Transparency International Zambia (TIZ), argues that in some cases, such as the Anti-Corruption Commission, "the President actually does the appointments" without Parliamentary ratification (G.Lungu, 22.10.07).¹⁶⁹

A World Bank staff member reflects that "[t]he office of the President has significant powers under the constitution, but even the constitution aside, I think in effect it has even more far-ranging powers that what the constitution says. All decisions are highly centralised, you will not find Permanent Secretaries (PS) or ministers making any decisions when they are not sure what the President thinks." (WB staff member, 22.10.07). The ruling MMD has access to significant funding resources, including through remaining state-owned (and other) enterprises, as well as state-owned media. Guy Scott, Vice-President of the opposition Patriotic Front, argues that "[i]n practice, this is still a one-party state" (24.10.07).

The direct involvement of the Presidency in much of political life reduces policy predictability for firms and other economic actors. The aforementioned respondent at the World Bank argues that policy 'visibility' was lower under Mwanawasa than under Kaunda, despite the former's highly centralised rule: "[e]ven someone as powerful and feared as Kaunda was at that time, he would make a statement, go to a rally and say this is what is going to happen, then the technocrats [at the National Commission for Development Planning] would have to go through and see how can they make Kaunda's statement into a policy that fit into the development plan, and more often than not they could not, so they would revert to the President." She explains "Kaunda could say I'll cut the price of bread in half, but the private sector knew that until a policy paper came out and it was signed by the President, [government] would not implement it. That is different now [under Mwanawasa]." (22.10.07).

Centralised, top-down political mandates engender an interventionist approach to the private sector. Yusuf Dodia (Director of the Private Sector Development Association, a lobby and research group) claims that there is a lot of "government intervention" that undermines the predictability for business in Zambia. He argues that the practice whereby ministers or politicians (with little experience of business) take tours of companies and make pronouncements – in the media often referred to as

¹⁶⁸ This contrasts with the UK, for example, where Permanent Secretaries are career civil servants who represent the 'institutional memory' of a ministry, that carries over from one administration to another. In Zambia, the PS plays a big role as "the connection between the technocrats and the political animals ... he is supposed to understand the political imperatives of the Zambian context, as well as the technical imperatives, so he is supposed to build the bridge between the two" (MSDP techn. ass't,

^{1.10.07).}

¹⁶⁹ Some civil society representatives have expressed concerns that such offices (e.g. the Public Services Commission, Teaching Commission, and Judicial Commission) should send the names directly to Parliament for ratification rather than first sending them to President for approval (Ibid.).

"courtesy calls" – results in "de facto" policy, and is in fact "the biggest hindrance to private sector development" (13.9.07).¹⁷⁰

Such informal meetings are a common occurrence according to several of my respondents, and tend to focus on larger and more 'visible' firms (Fox, 20.9.07).¹⁷¹ Personal and informal interactions also provide a channel for mining companies to seek private information or lobby the government. Mining companies from time to time send representatives to visit the Ministry of Mines to seek clarification or otherwise follow up on issues in person. Such visits can play a dual role of increasing companies understanding of policy, as well provide government with feedback on proposed policy changes.¹⁷²

Box 3: Intervention and organisational efficiency

The political culture of intervention is evident inside government bureaucracies. Reflecting on the workings of the Ministry of Mines, a donor representative with an office inside the ministry argues that such intervention is always efficiency-reducing, but not necessarily corrupt. "From my point of view, I simply say that it is inefficient ... other urgent critical matters are simply sidelined, because it is the President's wish ... It is not corrupt I don't think, it is just inefficient." (14.11.07). There is clearly a *demand* for such intervention to exist, because if you manage to "get the ear of the President", your issue is addressed "at the speed of light". Such behaviour sets a *precedent* and leads to MPs and ministers behaving the same way: they expect to be listened to and may see themselves as organisational 'facilitators'. Finally, this behaviour becomes *path-dependent*: people would frequently go to my respondent rather than his staff, because they believe that going top-down is much faster than going bottom-up, "and regarding most government bodies they are right" (Ibid.). These observations resonate very strongly with my own experience, where people would first point me to somebody quite senior who, upon making contact, would proceed to direct me 'downwards'.

4.3.2.2 A public discourse based on morals and faith (in FDI)

The public discourse is an integral part of the external environment that foreign mining companies need to negotiate, thereby shaping the articulation of state-firm relations (Pfeffer 1981; Fligstein & Freeland 1995: 29). I use the word discourse loosely to denote patterns in how social action is motivated and legitimated in the public sphere (e.g. in the media, in press-statements etc.).

During the time of fieldwork, the discourse in the media and in representations by government and other local stakeholders featured frequent references to moral concepts. The view from the political opposition and civil society that the Zambian government must capture a greater share of resource rents, and benefits from foreign investment more generally, was often framed in language of *fairness*. News reports and other media, in particular from the political opposition, often emphasised that the

¹⁷⁰ From the perspective of smaller businesses, it may be more of a nuisance than a real threat: "[y]es, you do see that, but whereas it is a big impediment to business as a whole I would say there are just not enough senior ministers to hit every business." (Gatchell, 26.11.07).

¹⁷¹ For instance, when the Minister of Labour and Social Security, Ronald Mukuma visited NFCA on 10 April 2008 (Daily Mail 11.4.2007).

¹⁷² The approaches chosen by the mines vary. "When the Chinese come to the Ministry of Mines they have various contact points, but they are all pretty senior, Director, Minister, PS. And some of them are acting pretty shrewdly these days, they have good English speakers, often a young lady with good English skills. Not a Zambian person, always Chinese. That's the way the linkages are done. The other foreign investors have a different approach where they will usually have a prominent Zambian as the bridge. These Zambians will come with their expat colleagues." (MSDP techn. ass't, 1.10.07).

current setup was "unfair" to Zambians (rather than the dubious conditions under which Development Agreements were awarded, see RAID 2000).

This idea of fairness can be traced to what Larmer describes as "Kaunda's essentially moral world view [which] cast a long shadow across the Zambian polity" (2005: 43). He observes that "Chiluba's corruption is commonly explained by judgements about his personality, rather than in the context of the vast unaccountable power of the Zambian Presidency" (Ibid., see also van Donge 2009). Larmer (2005: 41) argues that Mwanawasa's style of governance appears as a continuation of approaches taken under Kaunda's leadership, exemplified by Mwanawasa's moral exhortation in calling for Zambians to grow more food, and his criticisms of political plurality as a hindrance to achieving development (largely presented as "an unproblematic technical issue" in much the way it was under UNIP).¹⁷³ According to Larmer, "[o]ne of the most notable features of Mwanawasa's administration has been an increasing tendency to reflect Kaunda's nationalist mode of governance, stylistically and in more substantive ways" (2005: 41).¹⁷⁴.

If the *tone* of the discourse was heavily reliant on moral claims, the *content* of the discourse was characterised by government support for foreign capital, seen as holding straight-forward benefits for national development. Professor Chigunta at UNZA argues that Mwanawasa "ha[d] a very narrow definition of progress and development. So for him, as long as you have posted positive GDP growth figures, and having investment pledges, then Zambia is making progress." (15.8.07).¹⁷⁵

This 'faith in FDI' discourse was illustrated when Minister of Commerce Felix Mutati led a Zambian delegation to China in September 2007, where he said "regarding the investment laws ... it would be stupid to reverse the developments [policies] which have reduced poverty in Zambia, from 80-90%" (The Post 10.9.07), implying a direct link between higher FDI and poverty reduction.¹⁷⁶ Larmer alludes to such 'faith in FDI' as being linked to a moral worldview when he observes how "corruption is understood as a problem that can be solved by the election of politicians who have the nation's interest at heart, and by the identification and attraction of 'good investors'" (Larmer 2005: 43).

As discussed in chapter one, the relationship between FDI and sustainable development is contested and likely to vary across sectors and institutional conditions of the host country, in particular where governments provide investor-specific incentives (as discussed in chapter one, see for instance Nunnenkamp 2004 and Blomström & Kokko 2003). The role of FDI in reducing poverty levels in Zambia is far from ascertained, calling for caution in drawing a link between FDI and broad-based development.

At one level, support for the MMD's pro-foreign investment discourse draws on Zambia's long history of donor involvement. Stephen Muyakwa, Chairman of

¹⁷³ In a recent example, Minister of Mines Mr Mwansa described the objective of building revenue collection capacity as "to create mutual understanding between us and tax payers so that we create a level were tax payers feel guilty when they fail to comply". He did not emphasise that mines should simply pay what is *due* to the government (LusakaTimes 20.4.09).

¹⁷⁴ Partly this is to distance himself from Chiluba: whereas Chiluba harassed Kaunda, Mwanawasa hailed him as an elder statesman.

¹⁷⁵ Competing explanations for President Mwanawasa's uncritical stance to FDI include that he, without a background in economics, has struggled to understand the mining sector's economic dynamics.

 $^{^{176}}$ An editorial by The Post notes, in contrast, that although "foreign investment is not bad ... [w]hat is bad is the blind belief that foreign investment equals development. That is what we see in most of our leaders. They are sloganeering and parroting this song as an immutable dogma." (The Post 10.6.2007).

NGO Civil Society Trade Network of Zambia, suggests that the ease with which the president's support for FDI is accepted among the wider population reflects "an African psyche, or mindset. We don't imagine that somebody would come from America, set up a business here, that would not benefit us. We think that when investors come here, they genuinely want to come and help us develop. That is a very basic understanding." (Muyakwa, 17.7.07).¹⁷⁷ However these attitudes appear to be changing, as reflected in the rise of resource nationalism and anti-mining company sentiments. Rueben Lifuka at Transparency International notes that people, at privatisation, thought that "jobs were jobs", but are now "realising that we need to look not just at employment but at the *quality* of employment" (Lifuka, 20.7.07; see also Bufuku, 25.8.07).

The shift towards emphasising international investment as a driver of development is also consistent with the liberal market reforms of the 1990s, which put in place the institutions through which private sector investment can be attracted. Guy Scott, Vice-President of the Patriotic Front, observes that the emphasis on FDI is also a way to challenge post-colonial power structures manifested through development assistance and structural adjustment. He suggest regarding the pro-investment (as well as pro-China) stances of government, that "part of it is snotting the old colonial powers ... You know how the discussions go 'these whites, these Europeans, telling us what to do ... we don't want aid, we want investment'" (24.10.07).

Goodwell Lungu at Transparency International offers an alternative take on the Mwanawasa administration's focus on facilitating investment. He thinks it may reflect a preference for quick wins, arising from Mwanawasa's desire to leave a legacy in place: "[y]ou see, he has been in power for five-six years ... He wants to leave a record where people will be able to appreciate. So he can emphasise of course ... long-term goals and so on, but his preoccupation is to ensure that there are a number of quick wins that he leaves in place when he leaves." (G.Lungu, 22.10.07).¹⁷⁸

4.3.2.3 Media and civil society

Media and civil society perform an important role in their attempt to disseminate information and hold private and state actors accountable. Newspapers and television stations broadcast information regarding what behaviour is expected from the private sector, and as Hall (1993) observes is highly influential in shaping mental models through which actors interpret the social world (see chapter two).

Zambia has three daily news papers, two of which are government-owned (the Times of Zambia, the Daily Mail) and one which is independent (The Post). The latter is generally outspoken and influential as an advocate and opinion-builder. Reporting, however, is heavily constrained by the availability of information with the result that

¹⁷⁷ Muyakwa reflects how "when you read the speeches, such-and-such investors has brought in \$5m to invest, so we are moving forward. But they don't ask how many jobs are being created, what is the quality of jobs created ... So the thinking is that when investors come, they are not coming for their own sake, they are coming to help us because they have seen that we are in a deplorable state of poverty and they want to help us come out of that poverty." (17.7.07). ¹⁷⁸ Dr Francis Chigunta at the University of Zambia makes a similar point regarding the interest that

¹⁷⁸ Dr Francis Chigunta at the University of Zambia makes a similar point regarding the interest that Mwanawasa takes in the Copperbelt: "[when] Mwanawasa became President, there was a very serious economic depression on the Copperbelt ... and he wants to be seen as someone who is leaving a legacy, as someone who revived the Copperbelt, and he thinks the people there will appreciate him for that." (15.8.07).

there is little facts-based or principled debate.¹⁷⁹ Frederick Bantubonse, General Manager at the Chamber of Mines, stresses that one "ha[s] to appreciate that not all you read in the paper is correct, they are based on perceptions. People perceive something and they go hard." (7.8.07).

It remains easy to classify information as 'confidential' and efforts to introduce a Freedom of Information Act have met with little progress (Soko, 14.9.07). Being unable to rely on fact-based reporting, news and debates end up being heavy on moral exhortations and light on balanced analysis. This means that many ministerial claims – such as over the "tremendous" benefits of the Chambishi Special Economic Zone (ToZ 10.7.2007) – can only be taken at face value.

The media can be used to legitimate state action and to mobilise public sentiment in favour of the government. The failures of neoliberalism legitimated the blaming of donors in general, and the World Bank/IMF in particular, for domestic development failures. A World Bank official in Zambia argues that her organisation has got used to "taking the heat" (Palale, 22.10.07) as the government tries to avoid political costs by associating tax hikes with donor conditionalities.¹⁸⁰ The practice of 'blaming' the World Bank/IMF in the media is widespread, and is in the view of Larmer (2005: 41) an expression of a growing populism among the MMD: "Mwanawasa's populist attempt to shift the blame for their consequences from his administration to external agencies reflects a rising level of popular discontent with the enduring dominance of Zambia's economy by foreign capital" (Larmer 2005: 41).¹⁸¹

Pervasive information asymmetries present challenges for third-party actors such as NGOs or donors in holding the mining sector (and government) accountable.¹⁸² They are reinforced by a 'culture of secrecy' (Fraser & Lungu 2007: 17): until the DAs were made public, not even regulators and bureaucrats charged with policing the mines knew the details of what they were supposed to be enforcing. This reflects the opacity of the process whereby the mines were privatised, and contributes to the muddling of public debates concerning the mining sector. Professor Lungu reflects that "[t]his is a problem with all the authorities here, they leave people to speculate" (J.Lungu 31.10.07).

Civil society is further constrained by government mistrust of civil society and intolerance of criticism; a long-standing feature of MMD presidencies (Rakner et al. 1999: 35). A governance specialist at the Norwegian Embassy reflects that "NGOs [still] operate to some extent in a fragile environment, the government [does not] like criticism, they have difficulty distinguishing between positive, constructive and

¹⁷⁹ In addition to the media dialogue between state and non-state actors, this applies to the political dialogue between the government and opposition parties. Derek Fee reflects on the latter point with reference to political institutions: "You have a peculiar situation here, that if a guy runs for President, he cannot run at the same time for Parliament. So if he loses the presidency, as the PF did this time, then he does not have a platform any more. So he has to *create* a platform, which is what you find in the newspapers, this phony war that goes on in the newspapers. Because the guy is denied the platform that he should have, which is the Parliament." (Fee, 20.11.07).

¹⁸⁰ In the case of constructing the Chingola-Solwezi road (to link the Copperbelt with the 'new' copper mining regions), public media included criticisms of the World Bank and JICA, "insinuating that WB/Japan would like GRZ to tax private sector even more" (WB staff member, 22.10.07).

¹⁸¹ Larmer (2005) argues that IFI's were widely blamed by trade unions for the disruptive social impacts of privatisation and liberalisation, and that ruling party has actively leveraged this.

¹⁸² Even 'serious' non-state actors such as the EAZ can be associated with inaccurate media statements. For instance the national secretary of EAZ, a well-respected non-government research and lobby organisation, argued that mining companies had brought the January 2008 unilateral tax increases upon themselves by declining to voluntarily renegotiate Development Agreements (The Post 22.1.2008).

legitimate criticism from what they feel is political opposition." (Hasle, 24.7.07). A recent example of repeated attempts by government at controlling the NGO sector was the Non-Governmental Organisation Bill, introduced in 2007. The Bill aimed to provide for the coordination and registration of NGOs by establishing a regulatory board comprised of eight government representatives and two civil society representatives (The Post 19.7.2007).¹⁸³

Although Stephen Muyakwa at the CSTNZ argues that "we are having a more vigilant civil society coming up in Zambia" (17.7.07), the ability of Zambian civil society to engage with the mining sector remains limited (with the notable exception of HIV/AIDS where there are many NGO-company partnerships in place). Local NGOs tend to focus on research (e.g. Muneku & Koyi 2007) or advocacy, and few civil society organisations have the technical skills needed to take on a monitoring role, e.g. in support of government regulatory reporting requirements.

Moreover, mining companies may not trust NGOs to be impartial arbiters: a manager with FQML refers to an NGO newsletter (covering a case of forced resettlement by MCM) to illustrate how NGOs often misrepresent the mining industry. He notes that "FQML is mentioned here, as the first company, yet we have only 17% [ownership of MCM], we have no control over their environmental and social policies, yet we get criticised like this. It is very frustrating ... So we become very sceptical of these NGOs, so most of the time we'll have nothing to do with them." (FQML mgr 2, 7.11.07). Limited facts-based analysis in outputs of media and civil society enables the ruling party to perpetuate a discourse that uncritically links FDI to development.

4.3.3 Formal corporate governance of the mines

The Presidency and the government retain a formal influence over companies through corporate governance agreements (including shareholder agreements, clauses on board membership, voting rights etc.). This influence is rooted in government's retained minority stakes in the privatised mines through ZCCM-IH, an investment holding company formed at privatisation.¹⁸⁴

These minority shareholdings confer ZCCM-IH with two Board seats at firms where government retains a 20% shareholding, and one seat where shareholding is less than 20%. ¹⁸⁵ The government also holds a 'special share' in the mining companies, giving 'rights' to an additional seat on privatised mining companies' boards. This share provides the government with a veto over resolutions such as change in majority share ownership, sale of major assets, and appointment of

¹⁸³ As the President of Transparency International Zambia notes, "it doesn't make sense to have two out of ten representatives on the Board coming from NGOs. So the Board will coordinate and provide guidance on the work of NGOs ... the Board can easily create an environment which makes NGOs less independent." (Lifuka, 20.7.07).

¹⁸⁴ These shareholdings are held by ZCCM-IH at carrying cost, meaning that ZCCM-IH (and the Zambian government) does not have to contribute additional capital in the event of equity raisings (Musama, 19.11.07). However, the upturn in copper prices from 2004 onwards has meant that companies have been able to self-finance operations to a greater extent, reducing the importance of this provision.

provision. ¹⁸⁵ ZCCM-IH holds 20% in KCM and Kansanshi, and 10-15% in the remaining privatised mines. The Board seat(s) for ZCCM-IH is provided under Development Agreements as well as the Shareholders Agreement (Bwalya, 22.8.07). ZCCM-IH memberships on companies' boards are shared between its five managers (Katoto, 29.8.07).

Managing Director (Chaila 30.8.07; Bwalya, 22.8.07).¹⁸⁶ The special share facilitates monitoring because although it carries limited voting rights, it is required for a quorum – i.e. the government representative(s) need(s) to be present for the Board to be able to pass resolutions.

These formal corporate governance mechanisms constitute a two-way linkage between state and foreign capital. Government representatives that attend Board meetings can express official concerns to mining company directors, as well as report back to GRZ officials on the positions and views held by the mining companies. ZCCM-IH reports to the Ministry of Finance, which is the majority shareholder in ZCCM-IH, with the Secretary of the Treasury sitting on the ZCCM-IH Board (Katoto, 29.8.07).

With regard to the special share it is often Ministry of Mines officials, either Permanent Secretary (Leonard Nkhata) or the Director of Mines (Gerhard Kangamba), who attend Board meetings in this capacity (MSDP techn. ass't, 1.10.07). That the Ministry of Mines rather than the Ministry of Finance is represented on these Boards is explained by "[t]he assumption with mining [which is] that a lot of what is talked about in Board meetings is technical stuff, so therefore you need a miner, a mining engineer to attend, to understand what is going on." (Ibid.).

ZCCM-IH's Company Secretary, William Musama, stresses his organisation's role in monitoring the mining sector: "[f]or some things we would ask the companies in passing, where they said they would invest so much, GRZ is not there, we are there. If they don't invest what they said, we would know how much they are spending. That is part of the [monthly] management accounts [distributed to directors], we would be able to see that and comment on it." (19.11.07).

The Board presence also enables ZCCM-IH to bring various other issues at the privatised mines to the attention of government, including "safety, and other regulated issues ... that is very important in view of the high incidence of accidents." (Musama, 19.11.07). Musama points out that it "is not just the Board we are represented on, we are also represented on the committees of the Board." Any issues raised at the mines can be shared and discussed at the ZCCM-IH's own Board of Directors (where the Ministry of Finance is represented), thereby facilitating government insight into the strategies of the mining sector. My respondent is keen to stress the strategic, discontinuous nature of this form of state-firm relations, noting that ZCCM-IH "interventions" are not "there all the time, it is [at] certain times those interventions may be required. Or it could be from the new companies to government, or from government to the new companies."¹⁸⁷

ZCCM-IH can also play a role in promoting greater transparency in the mining sector. The consultant who was commissioned by the World Bank to undertake the scoping report for the EITI said she could see that ZCCM-IH CEO Mr Chikolwa "was really fired up for [the EITI]" (Chulu, 7.11.07). She explains this with reference to Mr Chikolwa being the former General Manager of the Lusaka Stock Exchange, "where he spearheaded the corporate governance movement" and oversaw the introduction of a corporate governance code. She observes that "[h]is leadership really seems to

¹⁸⁶ At the time of field work, the veto right of the special share had been used twice, regarding the change in ownership in CM and CEC, whereby "the Ministry of Mines Permanent Secretary gives his view" (Katoto, 29.8.07).

¹⁸⁷ Musama elaborates on how ZCCM-IH functions as a channel of communication between the government and the Chamber of Mines: "[we are] basically there to listen to what CoM's concerns are and bring those, if they have merit, to GRZ. In fact if we know something, or we find that they are trying to misinterpret existing regulations, we move in to make those corrections." (Ibid.).

thrive a lot on transparency, good governance, and all that." (Ibid.) (see also section 5.4.4).¹⁸⁸

Most companies appear to see the presence of ZCCM-IH as having some influence. Deputy CEO Gao Xiang at NFCA suggests that the presence of GRZ on the company Boards offers some control over mining companies. He describes government representatives on the NFCA Board as "ha[ving] priority, they have final decision, any decision if they do not agree. They have the veto. The veto is a really important thing." (21.8.07).¹⁸⁹ The company secretary at Chambishi Metals (CM) similarly sees the ZCCM-IH Director as being active on the Board, taking the company "to account" (Mwenya, 4.10.07).¹⁹⁰ Vinod Bhandawat, Vice-President of Finance at KCM, sees ZCCM-IH as an arm of government which "helps manage relationships with GRZ", and that this corporate governance mechanism provides a good sense of "direction" for KCM (Bhandawat, 6.12.07).

In contrast, a commercial manager at FQML is more sceptical: "to be quite honest, I don't think they bring anything to the party... Whether there are that many negatives about, I don't know ... I think as a general principle the government should not be holding shares in private companies." (5.9.07).¹⁹¹ Donors, on their part, feel that ZCCM-IH is adding little value and take the view that ZCCM-IH should be listed. This was the original intention at privatisation, and Lundstol puts it, "[m]any donors don't think there is a need for a new assessment, the GRZ just need to deliver on their plan to float all the shares." (Lundstol, 10.9.07).

4.3.4 The state as broker to the mining companies

The direct influence of the Presidency enables government to offer support to the mining sector in dealing with other stakeholders. This idea of the state as 'broker' to mining companies is legitimated through a moralising and heavily pro-investor discourse (see 4.3.2), and resonates strongly with the idea of the extraverted African state (see 2.2.2).

Professor Lungu recalls how "Mwanawasa arrived in Kansanshi, to find that workers were on strike, and almost immediately started blaming the workers, saying that 'these are matters on which you can negotiate'." (31.10.07). News reports commented how "Mr. Mwanawasa noted that ... the same workers on strike had no employment and wondered what will happen to them and their families if Kansanshi mine closes down. He said resorting to strike action would not solve anything but distortion of the mining company." (See Lusaka Times 14.7.07).¹⁹²

¹⁸⁸ Charles Husband of the World Bank similarly talks of Chikolwa in favourable terms. "He is very good … [he] comes from the Lusaka Stock Exchange. So he has a market approach." (Husband, 11.12.07). These views also resonate with Anne-Marie Mwenya's reflection over the CM Board representation by ZCCM-IH, whose appointed director Wilfred Katoto "is very active and puts the company under a lot of pressure … The man gives us no rest, he takes everybody to account, and is not afraid of anybody." (4.10.07).

¹⁸⁹ When asked if the GRZ has used it, he says "I don't think so, they are very good in [their] cooperation with us." (Ibid.).

¹⁹⁰ Bantubonse at the CoM observes: "the people like you and I, you could say that we don't have access to information. But the people that sit on the Boards, no information will be withheld from a Board member." (10.10.07).

¹⁹¹ Misgivings about the Zambian government's industrial policy at FQML may reflect the fact that the company has been operating in Zambia since 1996. Being the first private company to enter the market, it has had first-hand experience of the tumultuous privatisation process in the late 1990s.

¹⁹² Another respondent recalls how "the President came out strongly in support of the investors, telling the workers that 'you are scaring away the investors, you don't appreciate'" (Chigunta 15.8.07).

When workers at NFCA rioted following an industrial accident that killed over 50 people, Mwanawasa was quoted as saying "[y]ou people of Chambishi should know better. This mine here was run by a South African company which failed. The Chinese came and you have seen what is happening. Don't be cheated to lose your employment because your children will suffer." (ToZ 10.7.2007). Many of these threats exploit the dependence of workers' livelihoods on the mining companies, and can generate resentment against the mines.

In another example the Deputy Minister of Mines (in reference to possible layoffs at MCM's Mufulira division) said "there was no need for employees to be jittery over a matter that government was not aware of [because] government enjoyed a good communication channel with the mine" (Mining Mirror, 1-15 Oct 2007).¹⁹³

What does this mean to investors? Professor Lungu argues that the close links between the political leadership and mining companies may promote stability for the mines: "[T]he government is offering that protection, which is necessary for the mining companies ... if government disappears, then all these issues can be blown out of proportion ... if 8,000 get laid off it would be chaos" (31.10.07). Indeed, the wider information asymmetries discussed above complicate an analysis of the political environment, and increases the value to firms of being supported by the President.

NFCA, in particular, appears to expect the GRZ to 'broker' its social relations, rather than engaging directly with affected parties. For example, Chinese Deputy Minister of Commerce Gao Hucheng, on a visit to Zambia in February 2008, called on Zambia's government to ensure that meetings were held with stakeholders to brief them on projects and their impacts (ToZ 28.2.2008). Mwanawasa visited NFCA on 7 July 2007 and was quoted as saying that "[t]he purpose of coming here is to show support of what the Chinese are doing for Zambia. I wanted to see their responsibility and how they are paying back to the community and I am excited." (ToZ, 10.7.2007). When NFCA's 'west ore body'-project was launched in October later that year, Vice-President Rupiah Banda visited the firm to inaugurate the project (China Daily, 28.10.2007).

4.4 Case-study firms and mining sector dynamics

The boom in the copper sector has motivated rapidly expanding mining investments into new as well as existing assets. The Zambia Development Agency, in statistics that do not capture investment by Zambian-registered companies, reports that from 2000 to the end of 2006 over \$2bn has been invested in the mining (mostly but not exclusively copper) industry (The Post 29.10.2007). By the end of 2007 – and accounting for ongoing construction of several large-scale refinery plants – I estimated that foreign mining companies had invested close to \$4bn. Production of finished copper during 2007 was 561 kilotonnes, twice the amount produced in 2000 (see table in section 3.2.2). The Ministry of Finance reported that the "sectoral GDP growth" of the copper industry was 11.8% in 2006 (Ministry of Finance 2007).

This section first introduces the four case-study firms and highlights their key characteristics. It then discusses the extent of competition and cooperation in the sector, including the role of the Chamber of Mines. Finally it elaborates on the role of institutional legacies in shaping firm behaviour. Here I highlight the role of routines and objectives 'imported' into Zambia (cf. the concept of 'institutional background'

¹⁹³ Larmer presents evidence that Binani (RAMCOZ) made regular payments to MMD, "in de facto exchange for evading its responsibilities" (2005: 36).

developed in section 1.3) and how they mesh with pre-existing norms and ways of doing business.

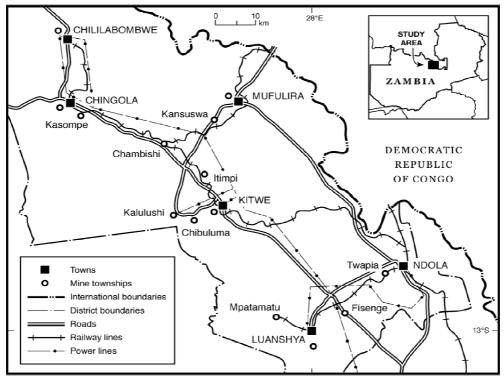


Figure 3. Map of Zambia's Copperbelt Province

Source: Potts (2005).

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Copper prod. (th. tonnes)	266	260	301	342	356	420	459	498	561
Growth		(2.4%)	16.1%	13.4%	4.1%	17.9%	9.5%	8.5%	12.6%
Price (US\$/tonne)	1,551	1,816	1,714	1,561	1,707	2,616	3,386	6,171	6,951
Price (US\$/ pound)	0.70	0.82	0.78	0.71	0.77	1.19	1.54	2.80	3.15
Price change		17.1%	(5.6%)	(8.9%)	9.4%	53.3%	29.5%	82.3%	12.6%
Cobalt prod. (th. tonnes)	3.8	4.4	5.1	6.9	10.4	6.1	5.5	4.7	4.7
Growth		16.3%	15.7%	35.9%	51.3%	(41.6%)	(8.9%)	(15.9%)	0.9%
Price (US\$/tonne)	25,859	21,064	16,378	13,798	17,688	46,620	29,124	31,327	55,602
Price (US\$/ pound)	11.73	9.55	7.43	6.26	8.02	21.15	13.21	14.21	25.22
Price change		(18.5%)	(22.2%)	(15.8%)	28.2%	163.6%	(37.5%)	7.6%	77.5%

Source: Bank of Zambia.

Box 4: Mining and international project financing

Mining companies typically raise debt finance for mining projects at the parent-company level, usually their 'home' country, and then channel the funds to the project level. Companies are thereby able to lower their borrowing costs through the diversification of risk to the lender across several mining projects (Gannon, 25.1.08). By 'locating' this financing at the parent-company level, for instance in the UK, US, Netherlands etc., companies are subject to the reporting requirements and regulations of these countries, and therefore to some extent influenced by international capital.

The four main stock exchanges where international mining companies raise equity capital are, in order of significance: TSX (Toronto, accounting for around 40%), AIM/LSE (United Kingdom), ASX (Australia) and JSX (Johannesburg). International mining companies are distinguished between larger companies and so-called 'juniors' (by international mining industry standards). Many of the larger mining companies in base metals are members of the International Council of Mining and Minerals (ICMM), which promotes codes of conduct and best practices among its 17 members. In 2006 ICMM launched an assurance procedure to validate members' compliance with the ICMM Principles. They also publish guidelines to inform members on sustainable best practices, e.g. materials stewardship and biodiversity conservation (ICMM Annual Review 2006: 4).

In 2006 seven of the ten largest non-fuel mining companies were members of ICMM.¹⁹⁴ However the mining operations in Zambia were all owned by relatively 'junior' companies (with the exception of the Chinese company NFC Africa, owned by a large Chinese state-owned enterprise), and none were members of ICMM.

4.4.1 Konkola Copper Mines plc

The mining operations that AngloAmerican acquired in 2000 in the form of Konkola Copper Mines (KCM) were considered among the 'jewels in ZCCM's crown'. Yet faced with a continued weak outlook for copper prices, and more profitable investment opportunities elsewhere, AngloAmerican decided in 2002 to divest its holding in KCM. In 2004 the Indian company Vedanta Resources, majority-controlled by the Agarwal family but listed on the London Stock Exchange (LSE), acquired KCM. The acquisition has been highly profitable: Vedanta acquired KCM for \$50m, a price reflecting low international copper prices at the time. The subsequent boom in copper prices enabled the company to report operating profits of \$52m in 2005 and \$206m in 2006, thereby allowing it to self-finance further expansion (Chitambala, 17.9.07).

KCM comprises some of Zambia's oldest mines (dating back to the 1930s) and has long been a high-cost producer of copper. Although the company has expanded by adding mining and refinery capacity – including a cutting-edge 'ISASMELT' smelter at the Nchanga mine site (near Chingola) – much of the infrastructure is old. This increases costs, as does the fact that most of the more easily accessible reserves have been exhausted. As a result, a Financial Controller describes the firm as "very sensitive" to changes in prices set by the London Metals Exchange (LME).¹⁹⁵

¹⁹⁴ See ICMM website (<u>http://www.icmm.com/members/member-companies</u>) and Reuters (1.2.2008), 'The world's biggest mining companies',

http://uk.reuters.com/article/idUKL0132041220080201?sp=true.

¹⁹⁵ He illustrates it thus: "If we don't do these projects, the smelter, and Konkola Deep Mining Project, then there is no life here". (Chitambala, 17.9.07).

The company appears to operate within quite a formalised governance and management structure, including various Board sub-committees dealing with specific issues such as 'safety, health and environment' (Musama, 19.11.07). Reflecting on the role of head office in KCM's management, Financial Controller Joel Chitambala considers that "it is a fairly independent operation. Vedanta's philosophy is really decentralisation, so each operation is run as a separate unit, with a CEO and several general managers. All decisions are made here, we don't really consult them as such. They do provide general guidelines, policy of this and that." (17.9.07).

The Company Secretary, on the other hand, reckons that head office of Vedanta does influence the adoption and implementation of broader policies in Zambia, including issues of financial management. "I think policies are set by Vedanta in a lot of respects … But there is, both in culture, and some of the financial policies, and I'm sure that a lot of the auditing and risk management, the policies are really set by Vedanta, and there is always this feeling 'that is how Vedanta would like us to do it', and that is how it's done." (Bwalya, 22.8.07). I asked Vice-President of Finance whether KCM was influenced by corporate governance standards emanating from Vedanta's listing on the LSE; he answered that good corporate governance was not about being listed or not, but about a company's "business, priorities and philosophy" (Bhandawat, 6.12.07).¹⁹⁶

Reflecting on company culture and its evolution since the acquisition by Vedanta, one respondent notes that Vedanta "rewards hard work, and the difference that I've seen between AngloAmerican days, at the time when it was fairly local management, to the time Vedanta came in ... You find from the top guys, every influential position is held by relatively young people ... You can be anything you want, as long as you are goal driven ... Whereas the previous AngloAmerican setup had more older people, rewarding experience." (Chitambala, 17.9.07).

However the new owners were initially unpopular. A senior KCM manager recounts how, during the days of AngloAmerican, drivers would stay at the same hotels as managers when "going to Lusaka on business … When Vedanta came, they were like 'how can you be in the same hotel?', 'No, no, no, we'll find a cheaper hotel'. So issues like that didn't go down well, it was like 'you see, white people treated us with respect, not discrimination, they appreciated who we were, now look at these guys'" (12.10.07).

4.4.2 First Quantum Minerals ltd.

First Quantum Minerals Itd. (FQML) has operations in Zambia, Mali and the Democratic Republic of Congo (DRC), with over 80% of its 2007 copper output produced within Zambia. The primary listing of FQML's shares is on the Toronto Stock Exchange, with a secondary listing in London, and official headquarters in Vancouver. Whilst often referred to as "Canadian" in the media, the company was founded by two white South Rhodesians, and management includes expatriates from Canada, Australia, South Africa and the UK. As such, the company defies a national label. At the time of fieldwork in 2007, First Quantum operated two mine sites in Zambia: Bwana Mkubwa and Kansanshi Mine.¹⁹⁷

¹⁹⁶ "Listed or not, we have to follow good corporate governance ... Corporate governance is about being fair and honest to stakeholders. It is about striking a balance." (Bhandawat, 6.12.07).

¹⁹⁷ Kansanshi was one of ZCCM's mines, sold to Cyprus Amax at privatisation in 1997 and subsequently acquired by Kansanshi in 2001.

My study of FQML in Zambia focused on Bwana Mkubwa, a set of facilities commissioned in 1996 to re-process old ZCCM slag dumps and thereafter to process ore from FQML's Lonshi mine in the DRC. At the time of study Bwana Mkubwa employed about 400 full-time equivalent workers. My choice of Bwana Mkubwa was driven in part by convenience. Kansanshi Mine (FQML's only other Zambian mining operation at the time of writing) is located near Solwezi in North-Western Province, some 260km away from Ndola where I was based. An additional factor influencing this choice was the fact FQML's group headquarters (for all the firm's operations in the Zambian and DRC 'copper belts') are also located near Ndola.

The company appeared very transparent in its corporate governance, with policies and reporting structures clearly described in annual reports and other publications available on its website. Among my case study firms, FQML had the most transparent public commitments to being a good corporate citizen. In its 2007 annual report the company set as its top objective for 2008 to "continue to promote the health, safety and development of our employees and to enrich the environment and communities in which we operate." (FQML 2007). In Zambia FQML generally enjoys a good reputation for treating workers fairly, providing training programmes, and paying above-average wages. The company struck me as professional and appeared – like CM but unlike KCM and NFCA – quite readily willing to criticise government policies. My access to this company was good and the company was very forthcoming in supporting my study.

4.4.3 Non-ferrous Metals Corporation Africa

Non-ferrous Metals Corporation Africa (NFCA) is the largest of eight Chinese mining companies that operated in Zambia in 2007. It is a subsidiary of the state-owned China Non-ferrous Metal and Mining Group (CNMC), China's 29th largest outward investor in 2006 (Morck et al 2008: 341). NFCA was established when CNMC acquired the former ZCCM-operations known as Chambishi Mines in 1997, in one of the earliest cases of privatisation. Here CNMC did not take over 'going concerns', i.e. up-and-running operations, but rather a flooded and disused mine that had been closed under GRZ ownership. NFCA rehabilitated the mine and began production of copper in 2003.

As noted in chapter one, early research findings have shown that that Chinese businesses tend to follow strategies of vertical integration across the value chain, resulting in organisational structures that are geographically concentrated (Broadman 2006; Alden 2007: 39). In this study I too found the Chinese mining companies to operate within a network structure with a high degree of vertical integration.

Further inspection, however, leads to a more nuanced picture, and it is clear that the organisational structure has evolved since the firm entered Zambia. A Deputy CEO at NFCA explains that – in the beginning – the firm's view was that "[e]verything can be done by ourselves. But right now when we operate the mine, it is not necessary to manage all of this, it is not our strong point." (21.8.07).¹⁹⁸ Following the completion of mine rehabilitation and commencement of production, there have been tentative moves toward greater inclusion of Zambian suppliers. As Steven Banda notes, "as of late they have come to recognise our local suppliers … In the past

¹⁹⁸ Gao elaborates: "Actually at the beginning the management was thinking that we can produce or provide everything ourselves: foundry, explosives ... mechanical, manufactures, just like in China you know, one big company has everything, they even have schools, hospitals, everything, it is a small society." (21.8.07).

everything came from China, even this pen would come all the way from China in a container." (S.Banda, 8.9.07).

Even excavation activities are conducted through a semi-autonomous longterm contractor referred to as the 'Mining Department', or 'Mining One'. It represents a commercial relationship which is neither based on vertical integration nor on armslength relationships. One respondent at NFCA stresses the independence of this contractor: "That one is on continuous basis, and it is dealing with direct mining development. That one is on contract. We pay them and they operate completely independently, they have their own management, they have got everything on their own, we just pay them." (Chirwa, 30.11.07).

Compared to the other mining companies in my sample, non-core activities at NFCA did not fall neatly into categories of 'arms-length' contracts nor vertical integration. Separate entities have been set up around Chambishi to form a self-contained chain, supervised and supported by NFCA, but still operating formally as independent entities. As one employee explains, "NFCA department is the mother body, then has these subsidiaries, we have Exploration Department, we have Mining Department, we have Sino-Metals, Sino-Acid leach plant ... They have their own managers but they report to the management of NFCA ... the overall boss of Sino-Metals will report to NFCA management. What is surprising is that the NFCA management will put pressure on all of these here." (S.Banda, 8.9.07).¹⁹⁹ The Deputy CEO explains that this networked structure (with many 'sister companies') reflects the strategy adopted when NFCA entered Zambia.

NFCA plays an active role in China's foreign policy towards Africa through the function it plays in establishing the Zambia-China Cooperation Zone (ZCCZ, the first of China's five African 'economic zones', announced at FOCAC in 2006, see Haglund 2009).²⁰⁰ The area of the ZCCZ corresponds to NFCA's 42km² mining surface right, and hosts NFCA as well as additional companies providing mining-ancillary services (to NFCA and third parties) (Mineweb 4.4.2008).

The commercial ties between NFCA and other investments in the ZCCZ are mirrored in organisational governance structures. The ZCCZ was to be managed by a 'Zone Development Company', headed by former NFCA CEO Tao Xinghu, which will select what companies are to invest (Sun, 1.11.07). The network structure allows financial flexibility for the group's operations, and short-term loans to the Chambishi Copper Smelter (the flagship investment into the ZCCZ) have in the past been arranged through NFCA (Chirwa, 21.8.07).²⁰¹

NFCA employed about 3,000 employees and Chinese 'sister companies' employed some 500. Estimates provided by my respondents indicate that about 200,

¹⁹⁹ My respondent is unsure as to the motivations behind this structure: "We don't know why they are saying that these are different companies, we don't know what they are trying to avoid, if they are trying to avoid taxes..." (S.Banda, 8.9.07). He adds that NFCA "is a very big mine in Zambia, but they don't want it to be called NFCA, this one to be called this, this one to be called this ... When it comes to reporting ... I understand that all these companies we have in Chambishi they report to one CEO which is the former head of NFCA. All these, foundry what, what, they all report to this one guy at CNMC, former head of NFCA." Maboshe, separately, corroborates this point.

²⁰⁰ The Memorandum of Understanding for this project (earlier referred to as the Chambishi Special Economic Zone) was signed by President Mwanawasa at the Forum on China-Africa Cooperation in Beijing in 2006 (see Xinhua 8.11.06).

²⁰¹ Asked whether this enables sister companies to "help each other out", my respondent, an accounting professional, responds that "[y]es in fact they do, very much. Even funding for smaller projects, they can do it." He adds that "in fact the CEO which was here, he is now the overall [boss] of all the companies that are establishing here, so that means that the working relationship with the people, I think it is ok." (Chirwa, 21.8.07).

or 7% of the workforce, are Chinese expatriates (S.Banda, 8.9.07). Senior management at NFCA were all Chinese and this appeared to be the case at the sister companies as well (Mwamulima, 30.10.07).

There is a lot of employee turnover with Chinese managers typically staying for three years in Zambia. Anonymous Zambian respondents at NFCA perceive the rapid turnover of Chinese managers to be a problem: "it is the trade with NFCA, they always bring new people, phasing out those that are becoming conversant with the system. So they bring in somebody straight from China and he has to start from scratch again. And it is us who are teaching them, even the managers they are very blank, you think you are the manager, I believe you are supposed to know." (S.Banda, 2.12.07).

With respect to links with head office, a Zambian accountant at NFCA explains that he reports to the (Chinese) Finance Manager who, in turn, will speak to head office. He thinks that this top-down structure reflects language problems, that "those people cannot directly communicate with us so they will go through the finance manager, if not, the CEO, or deputy CEO, and ... they will transmit what is required." (Chirwa, 21.8.07). Language, in this case, appears to entrench Chinese expatriate managers by concentrating administrative power in a few individuals at the top of operating entities in Zambia, perhaps one motivation behind what I found to be frequent replacements of Chinese managers.²⁰²

Immediately following the establishment of NFCA in 1997, when the company focused on rehabilitating the Chambishi mines, the project was funded by China's Export-Import Bank, with terms negotiated by CNMC.²⁰³ The finance specialist I interviewed acknowledged that parent CNMC does get involved, but less and less over time: "[I]et me say they have been given more responsibility to do what is needed on the ground, since the time when they were just arriving. Initially that autonomy was a bit restricted." (Chirwa, 30.11.07). One explanation for what appears to be local management's increasing autonomy over business decisions is the fact that high copper prices allowed NFCA – like KCM – to be sufficiently profitable to self-finance investment activities (Gao, 21.8.07).

The Chinese investments on the Copperbelt have been plagued by accusations of poor working conditions, and weaknesses in health and safety. NFCA's explosivesmanufacturing plant BGRIMM was levelled to the ground in a huge explosion in 2005 that killed all 54 people working in the plant (BBC News 21.4.2005). The incident highlighted breaches in health and safety practices. Three months later, in February 2007, the spectre of protests prevented President Hu Jintao from travelling to Chambishi on the Zambian Copperbelt to inaugurate the SEZ. In March 2008, Zambian workers protested against stalling wage negotiations, leading to stone-throwing, damaged property, and violence that injured two Zambians and one Chinese worker (LusakaTimes 4.3.2008).

²⁰² Asked about whether home country managers would understand the predicament of Zambian operations, Gao at NFCA claims that "they understand. We exchange employees, after 3-5 years here I go back to China, and I know what has happened here." (21.8.07). Regarding whether this turnover is likely to undermine policy continuity at Chinese firms, China-Africa scholar C. K. Lee has argued that this need not be the case, pointing to frequent day-to-day communication between managers at home and overseas (Lee, personal communication, 19.9.08).

²⁰³ Note however that Chinese-government funding was not a foregone conclusion. NFCA first researched its options in the local Zambian financial markets, but soon found the c.20% interest rate to be highly disadvantageous, opting instead to seek a loan form China ExIm Bank (Chirwa, 30.11.07).

Box 5: Dynamics of learning and among Chinese investors on the Copperbelt

As discussed in section 4.4.3 NFCA plays a key role in supporting Chinese firms coming into the ZCCZ, often facilitated by its networked organisational structure. Steven Banda claims that "[w]hichever company that comes from China, it falls under NFCA, until it matures, then it becomes independent." He reflects on the Chambishi Copper Smelter, that "when they came, we were doing the imports, the purchasing on their behalf, but we only did it for three-four months, then everything was shifted, and now they are doing everything from their own end. Unlike these other companies who've taken long to mature." (8.9.07).

Support for new entrants takes place through NFCA's coordination of procurement as well as policies. A respondent working in administration notes that "everything arrives at PO Box 22592 [Kitwe], I'm the one who sorts it" (Maboshe, 2.12.07). She claims that for the Chinese companies operating in the area (Chambishi Foundry, Sino-Acid, Sino-Metals) "[i]t is the same thing. The same conditions, they come and get them from NFCA ... They just copy the same things. And change the names."

This suggests that the practices and performance of Chinese investment into this area is 'geared' toward the experiences of NFCA (as a form of gatekeeper for these smaller Chinese businesses). Anything the firm learns, in dealing with Zambian stakeholders, it is likely to project onto the strategies and systems of more recent Chinese investors into the area.

4.4.4 Chambishi Metals plc

The operations of Chambishi Metals (CM) consist of copper and cobalt processing facilities that were part of the privatisation package, sold in 1998 to Avmin (a South African mining company). CM's assets at privatisation included the Wusakile Black Mountain, a large waste dump from earlier generations of mining at Nkana in Kitwe. This waste, or 'slag', contains significant amounts of copper and cobalt, owing to the less efficient production technologies used in the past. It was intended for use as inputs into cobalt production, using a new refinery plant commissioned by Avmin. After privatisation, Avmin invested \$250-300m in setting up these facilities but experienced technical difficulties and failed to make it profitable: "they were losing money heavily and decided to sell" (Bangur, 29.11.07).

In 2003 CM was taken over by new shareholders, a Dutch-registered holding company called Enya, through a 50-50 a joint venture between Swiss-based International Mineral Resources and Bein Stein Group of Israel.²⁰⁴ Company Secretary Anne-Marie Mwenya (who was with the company during the days of Avmin) cites three reasons for Avmin's sale: low cobalt prices (cobalt at the time constituting the majority of the firm's output); difficulties with the refinery technology; and finally that Avmin had some issues concerning elements of the "Development Agreements [that] were not honoured by the government" (Mwenya, 4.10.07). Shortly thereafter Enya acquired Luanshya Copper Mines (LCM) in order to use ore concentrates extracted from LCM mining properties as input into their processing facilities at Chambishi.²⁰⁵ LCM included recently developed mines at Baluba near Luanshya, which have provided a greater stream of copper, resulting in CM's sales at the time of study being split equally between copper and cobalt.

²⁰⁴ IMR is part of the Eurasian National Resources Corporation, one of the world's largest private mining and metals group controlled by three Kazakh businessmen (Wikipedia, http://en.wikipedia.org/wiki/Alferon Management)

²⁰⁵ At the time of Enya's acquisition LCM had been put in receivership by Binani, the firm that bought LCM's assets at privatisation and proceeded almost immediately to sell them off (see Larmer 2005).

CM employed about 1,000 employees, and its sister company LCM employed around 1,700. In terms of the corporate governance of the two operating entities, the same directors sat on the Board of CM and LCM, and company secretary services were all done from CM (Mwenya, 4.10.07). The company gave me, overall, a professional impression, based on how staff responded to my queries, and how they emphasised the formal systems of their operations: the Company Secretary noted that "the human resources policies are there, the right to be heard, the committee hearings, all those are there and are followed very well."²⁰⁶ This professional appearance was corroborated in interviews with Environmental Council of Zambia (ECZ) officials who cited CM as a "good example" of environmental reporting. CM also appeared to be proactively engaging with regulators: environmental, health & safety Superintendent Daniel Chihili says "[s]ometimes we invite ECZ and the Mines Safety Department (MSD) to come and look at our plant, if we have done something new or are suggesting something new. So we have no problems." (1.11.07).

Among people I spoke to, including employees, regulators and business partners, CM enjoyed a fairly good reputation. Mwenya confirms this: "I don't think we get a lot of negative press, when there are labour issues, of course the press will pick that up, but generally I think we have a good image." (4.10.07). Several people I spoke to referred to CM as "Indian", however as noted above the company's origins are not linked to India. The CFO, Anil Bangur, argues that CM does not have a nationality, but that they "take professional people based on their merits." (29.11.07). CM management did appear to include several people of Indian origin, in contrast to e.g. FQML, but also many Zambians and expatriates of other nationalities. Company secretary Mwenya notes that there used to be a lot of expatriates within management, but that "there's been a lot of Zambianisation, especially during the time of Avmin, up to 2004." (4.10.07).²⁰⁷

4.4.5 Industry coordination and competition

This sub-section discusses competition amongst foreign mining companies operating in Zambia. It also examines the Chamber of Mines industry association, which functions as a key mechanism for the coordination of the sector on government policy issues.

4.4.5.1 Mining sector competition

International copper mining firms generally sell their produce on terms dictated by the London Metals Exchange (LME), wherefore head-to-head competition is largely restricted to supply-side inputs into the production process.²⁰⁸ This takes three forms:

²⁰⁶ This does not mean that access was trivial: the Superintendent of Environment would not share softcopies of company policies with me (recommending that I request them from the COO), although he did show me – during our meeting – a comprehensive set of policies and guidelines. He said these policies have been there since Avmin, but that they are periodically updated by current management. ²⁰⁷ This resonates with the view of Steven Banda, an NFCA employee and resident in nearby Chambishi Township, who emphasises CM as trying "infuse" some higher-educated Zambians (S Danda, 20,07)

⁽S.Banda, 8.9.07). ²⁰⁸ As one of my respondents at FQML notes, "we are not locking heads with MCM, KCM or whatever, and we have a pretty friendly relationship in general, if somebody has a breakdown and has run out of spare parts, they'll call another mines and say 'can you lend this to me, or sell this to me?' So we are not rivals, we are not at each others throat, because we are not really competing in the sales market. We are priced at the LME, there is really not much we can do about it." (FQML mgr 1, 6.11.07).

first, mining companies compete for the skills offered by engineering consultants (e.g. in designing and developing new mines). However, the market for such consultancy services is global and mining companies are generally price-takers, so head-to-head competition amongst the firms over the services of consultants is likely to be limited. In the booming market environment of 2007, shortages of design engineers meant that in many companies resorting to proprietary designs when planning an expansion (FQML mgr 2, 7.11.07).

Second, mining companies compete to some extent over skilled labour (FQML mgr 2, 7.11.07; G.Gatchell, 26.11.07; Walgaard, 5.10.07). Michael Soko at the UNDP notes "the thing with mines is that the more qualified in particular can move between the mines. For example the guys who set explosives, they are 'trade tested' as a guy that sets explosives." (14.9.07). ²⁰⁹ The ability of skilled operators to get certified further increases mobility within the mining sector.

Third, mining firms compete over certain goods and services. One of my key informants notes, "the one area where mines are competing and really fighting tooth and nail, that is big capital equipment, in particular tires ... there is still a shortage. They would have a lot machines, brand new machines, standing on some blocks." However, he adds that "capacity is [now] increasing, a lot of the Chinese manufacturers are coming online, so you see Chinese representatives of these companies around." (G.Gatchell, 26.11.07).

4.4.5.2 Mining sector coordination

The Chamber of Mines (CoM) is the mining sector's main policy coordination forum, established in its present form in 2001. The limited direct competition among mining companies (discussed above) facilitates this kind of coordination across the mines. One mining manager notes that "when we are talking about issues with the GRZ we are usually all on the same side. Because we don't have any conflict between [mine] sites, all sites have their own operations. We don't really have issues with each other, unless there is a massive pollution event or something." (FQML mgr 2, 7.11.07).

General Manager Frederick Bantubonse, who has been with the CoM since mid-2001, argues that the CoM exists to help mining companies identify common policy positions vis-à-vis government as well as other opinion-forming entities. He explains: "we do talk to the IMF, we do talk to the World Bank. You'll appreciate that the World Bank and IMF have a fairly good influence on government, in themselves. So if the WB/IMF go to the government with the wrong idea, it affects our members." (10.10.07). The CoM can be seen as a tactical response from the mining sector to increased bargaining power of the state following the fragmentation of the industry that resulted from privatisation.

My interview data suggests that the CoM plays an important role in intraindustry as well as state-mining sector interaction. The Chamber's meetings typically include senior mining company executives.²¹⁰ Its Chairman in 2007 was Passmore Hamukoma, the Chief Operating Officer of MCM. A respondent at FQML argues

²⁰⁹ Soko further argues that "[b]ecause they can move between the mines, the differences [in terms and conditions] are not that great."

²¹⁰ A manager at FQML explains that "it is normally the General Managers or CEO who goes... It is normally somebody quite senior. [The current GM] is quite keen on going, our previous GM wasn't so keen on going so I would go in his stead. The council meets every two months. But the CoM also has special meetings, where there are issues that perhaps would not involve the CEO/GMs, but maybe the finance managers, or the commercial managers. So they'll call a special meeting" (FQML mgr 1, 11.10.07).

that, over time, "more and more the industry is taking a coordinated approach through the CoM. You have to remember that the CoM was re-formed just after privatisation, and it has taken a while to get going. So the CoM is in its infancy. But it is becoming bigger [and] getting more funding from the mining companies. And it is being recognised I think by the government as the main voice [of the sector]." (FQML mgr 1, 5.9.07).²¹¹

Personal relationships play a role in how the CoM coordinates mining sector policy positions. A manager at FQML explains that "the Chairman ... usually goes to the Ministry of Mines, or liaises with and contacts them, he says this is the view of the mines on this issue, we want to raise objections, we put it in a letter. So this comes from the CoM so it is from all the mines." (FQML mgr 1, 11.10.07).

The importance of the CoM appeared to be on the rise – by 2007 all large mining companies were members – and in future may extend to more inclusive bargaining over labour standards: Bantubonse explains that "when there is a tripartite [labour] negotiation, you have the government, labour, and employers. And for the mines, being one of the largest private employers, to miss out on that is a shame at the moment." Currently, only the largest mines play a role, i.e. "the likes of KCM and MCM are involved." (10.10.07).

²¹¹ Julia Chaila, Legal Counsel at the Copperbelt Energy Corporation (CEC) and herself ex-ZCCM, confirms that the CoM has become increasingly relevant. She argues that the CoM was "very strong" during the ZCCM days, but "seemed to fizzle out" immediately following privatisation. She argues that "what we've seen in the last three-four years is I think they realised they needed to get together and work together" (30.8.07).

Box 6: Copper marketing

Most mining companies in Zambia market their finished product to copper traders. Producers sell their copper "at mine-gate" to copper traders like Republic House, Trafigura, Glencore, Gerald Metals and others, with whom they agree sale and purchase contracts (often on an annual basis). These contracts are priced based on the London Metals Exchange, which serves as a benchmark throughout the copper production value chain. Many of these traders are based in Switzerland, explaining why UNCTAD statistics show 56% of the Zambia's 2007 copper exports going as to Switzerland (COMTRADE statistics). Copper traders will then resell the product *en route* to consumers across the world.

I found two exceptions to these practices, in relation to KCM and NFCA. KCM has a policy of marketing most of its finished copper directly to end-consumers. The policy has origins in KCM's caretaker period (between AngloAmerican's exit and the arrival of Vedanta) and the objective of increasing cost efficiencies (by cutting out the 'middle-man'). It has remained in place under the ownership of Vedanta.

NFCA has historically – since production of copper concentrates began in 2003 – exported most of its output directly to South Africa through off-take agreements. When asked about direct supplies of copper to China, NFCA Deputy CEO Gao said transaction costs in getting the copper to China were high and that "I would much rather sell the copper and deliver the profit" (21.8.07). This points to the need for nuancing the view (often presented in the media) that Chinese investment in resource extraction is closely linked to considerations of resource security. Indeed, NFCA makes use of international copper traders like most other mines: the Managing Director of NFCA's main clearing agent explains that NFCA "looked at selling it direct," the way KCM does, "but they didn't like the risk … For selling it directly, you need insurance. Which we have, and NFCA doesn't have." (Walgaard, 1.12.07).

However, off-the-record interviews with NFCA staff working in finance and exports/imports suggest that direct sales to China have been increasing, and that by the end of 2007 a third of the final product was going to China (Chirwa, 30.11.07). The Chief Accountant reported that all produce had initially gone to South Africa because NFCA "wanted to test the market".²¹² During the time of fieldwork, the Chambishi Copper Smelter had not yet come online and it was not clear from interviews whether future marketing of that smelter's finished copper would be to copper traders or directly to end-users, in China or elsewhere.

4.4.6 Institutional background and administrative heritage of firms

When describing my case study firms it became clear that although external influences were important, as hypothesised in chapter one and two, already-in-place routines, aim and practices also played a big role. Much like the institutional legacies of home countries and capital markets (see 1.3.2), local norms and previously established ways of doing business are path-dependent as well. This section highlights examples of areas where external influences are significant in shaping divergent practices in the sector, and others where the legacy of already-in-place practices and norms remain influential despite a change in ownership.

Developments of new organisational routines are associated with significant transaction costs, in particular in the case of normative values held by local staff. Thus, two setups of routines and aims and norms connect, and both are path-dependent: the existing operations will have its own 'administrative heritage' (Dixon et al. 2009), and new expatriate management will have their own ideas – shaped by their previous experience and directives from head office – on how to do things.

²¹² He believes that in addition to financial objectives (profit, cash flows, dividends), NFCA "wanted this to be a source of copper", what he sees as "their ultimate intention" (30.11.07).

My initial findings were indeed that foreign investors, as suggested by Nelson & Winter, could be "expected to behave in the future according to the routines they have employed in the past." (1982: 134). Thus a new set of owners would in the first instance 'import' into Zambia what they knew from before, including their own mining standards and technologies. Several respondents made this point in relation to NFCA, given China's infamously poor safety track record in mining (BBC, 8.10.2009). Prior international experience will also shape the initial expectations of expatriate managers regarding what constitutes 'appropriate' behaviour vis-à-vis stakeholders.²¹³ When entering a new market, the expectations that underpinned a 'logic of appropriateness' (March & Olsen 1998: 951) in the home or other established markets may be mismatched to local conditions in the new host-country.

Variations exist, for example, in attitudes to the CoM and the value of collective action in the mining industry. The Chamber's General Manager notes that "the interests of the members are obviously different, some members have a greater interest in the CoM" (7.8.07). My respondent argues that the main reason for divergent interest in the CoM relates to "the background [and] the history of the CEO of a particular country. If the CEO was recruited from a country where a chamber of mines plays a very prominent role, they will continue to be active here. If the CEO was recruited from a country where the CoM is either lukewarm or does not exist, they tend to keep their distance from the CoM." (Ibid.).

Within the realm of labour relations, Charles Muchimba at the Mineworkers Union of Zambia (MUZ) thinks that different backgrounds of investors do significantly shape their approaches and management styles: "obviously they have different management styles, different shareholders, they hail from different backgrounds, so their approaches, while standardised, they do have their unique approaches." (Muchimba, 3.8.07).

At the same time, the administrative heritage of business operations is significant in shaping behaviour. Such firm-level institutionalised 'legacies' include practices of the former owners that have become institutionalised and adopted as taken-for-granted by local staff (which are rarely completely replaced). They thereby moderate the routines and aims that newcomer expatriate managers may wish to introduce.

Several respondents at KCM stressed the continuity of formal internal structures and processes in place when KCM was acquired from AngloAmerican (in 2004, by Vedanta Resources).²¹⁴ In this instance of ownership transfer the new owners appropriated the KCM Development Agreement, as well as the Environmental Management Plan (EMP) and Social Management Plan (SMP) developed by AngloAmerican (J.Lungu, 21.8.07).²¹⁵ The Vice-President of HR, who has been at KCM since before privatisation, notes that "AngloAmerican is coming from a well-

²¹³ In reflecting on how "so many examples where Chinese companies have been found a little bit wanting", Ernest Mwape at the Economics Association of Zambia, a think-tank, believes that "[h]ere in Zambia ... expectations about how to pay and treat workers are slightly different. And how you look at environmental issues. So those are things that maybe Chinese investors have had to scale up ... even if this is a poor country, the expectations on certain things are stronger than they anticipated." (16.8.07).

 ²¹⁴ This was also the case for Chambishi Metals, the Copperbelt Energy Corporation (CEC) and Kansanshi mine. The latter was acquired by FQML from Cyprus Amax in 2001. CEC was initially privatised to a consortium comprising National Grid (UK) and Synergy (US).
 ²¹⁵ Ndalama at the Ministry of Mines confirms that in DAs "you will find clauses to that the next

²¹⁵ Ndalama at the Ministry of Mines confirms that in DAs "you will find clauses to that the next person who takes of a mining permit shall inherit the DA. For example Kansanshi was done with Cyprus Amax, and when First Quantum got the property at a later stage they more or less inherited the benefits, in fact the whole DA." (Ndalama, 27.7.07).

entrenched and established system. They have been in mining for many many years ... they did bring a lot of improvements when they came in 2000. Especially in the area of procurement." (Masupha, 12.10.07).²¹⁶

The strong legacy of AngloAmerican can explain comments by Environmental Manager Yotham Phiri that "[i]n terms of standards, we are much better than the parent companies. We tend to have people coming from that side to see how we are doing things here." He attributes this to the legacy of AngloAmerican and the "systems here that Vedanta found when they came."²¹⁷ (Phiri, 12.10.07). At CEC there has been a similar effect, and current internal systems and processes are heavily influenced by those implemented by former shareholders. Julia Chaila, Legal Counsel, argues that "this was the biggest credit we saw from National Grid [UK] and Synergy [US]. Procedures, standards, documenting things. They left a very solid base of this."²¹⁸ (Chaila, 30.8.07).

A firm's administrative heritage also includes historical choices of technology. As Joseph Makumba (Environmental Manager at ZCCM-IH) points out, "most of our infrastructure, like in mining, was developed way before environmental issues became ... an issue." (23.7.07). He stresses that the Environmental Council of Zambia was only set up in 1990, with the passing of the EPPCA, "[s]o it's quite new, but when you look at the industry itself, it is going back to [the] 1920s." This makes environmental management more costly for firms.

Over time, the 'unique' characteristics of investors are diffused: the incremental engagement that often characterises FDI (Johanson & Vahlne 1977) results in firms becoming increasingly embedded in local political, economic, and social environments. Most visibly, this may take place e.g. through the recruitment of locals as managers, or entering into longer-term contracts with local suppliers. A manager at CEC (himself ex-ZCCM) notes that although these mining companies come from all over the world, they "appoint a couple of Zambians in senior position, and that brings the thinking. Those senior Zambians would have worked for ZCCM. In each mine you will find that there is a group of key Zambians who will probably be advisors to the investors of how business is done." (Lwiindi, 31.8.07).

However, the clash of new approaches and old habits can be disruptive. When Vedanta acquired KCM in 2004 Masupha notes that there was a lot of mistrust, "people have only seen Indians as traders and shop keepers ... can they really do mining operations?" (12.10.07). The failure of Binani clearly set a bad example, and Masupha notes that "the strike we had in 2004, when you look at it, it was because there was so much mistrust, so much mistrust ... And also maybe their communication at AngloAmerican was very good ... it helped a lot of issues." (Ibid.).²¹⁹

²¹⁶ Masupha adds that "also the conditions in some respects it got better", though acknowledging that the paternalistic approach of ZCCM was abandoned: "you could hear people complaining, this and that, but then they understand that it is better if you look at those areas yourselves." (12.10.07).

²¹⁷ Phiri elaborates: "They found the safety management system around; at the time they were coming KCM was getting accredited to OHSAS (Occupation Health and Safety Assessment Systems) 18001." (12.10.07).

²¹⁸ She reflects; "I don't know whether they were told to transfer skills from there, but they got some. In the environment that was very strong as well. They were very particular because of all these claims you have in Europe in terms of damages to the environment, damage to the soils, oil spillages. We had it all over the garages, the workshops, but now you find they're spotless."

²¹⁹ She elaborates that "[t]he CEO would, every month without fail, put out a news letter, to the employees, and also in terms of having meetings, we would have executive meetings, which we still have, but with a more fixed agenda. Then he had an operations meeting separately, just to discuss

CM Company Secretary Mwenya reflects that "[i]n the Avmin days we had a lot of paper work, a lot of policies, a lot of adherences to those things. I think in the Enya days there is not so much emphasis on written policies." (Mwenya, 4.10.07).²²⁰ The change in approach to formal routines can be explained by the moving of people with an 'old' set of mental models. My respondent notes that "most if not nearly all the people that came with Avmin are no longer here. Enya brought its own people, in particular in the finance and smelter sections" (Ibid.). She observes that "[t]he place where we are struggling with image is LCM, where it is an uphill battle to divorce ourselves from the Indians that were previously there [Binani]. We have to make the distinction that we are a different kind of Indian. And no matter what you do, people align you with those who came before you." (4.10.07).

4.5 Chapter conclusion

This chapter has introduced the historical background of the Zambian economy and its mining sector, and discussed the governance and political culture of how the state engages with the mining sector. In doing so it has highlighted how a weak state makes use of informal mechanisms to achieve dual objectives of enabling as well as controlling foreign capital. It does this directly, e.g. through brokering foreign firms' relationships with labour unions and stakeholders, as well as through mediating organisations such as the CoM or the ZCCM-IH.

The rising resource nationalism during the boom years, pressures from donors, and an uncritical pro-FDI development discourse all legitimated continued discretionary involvement by central government in the mining sector.²²¹ These direct informal links enable government to accommodate, but also seek political favours from large private sector firms, for instance around renegotiation of the Development Agreements (see chapter five). At the same time, the lack of transparency and quality of reporting in the media means that there is little distinction made between firms of varying compliance records.

Having the Presidency involved in what would otherwise be bureaucratic regulatory relationships reduces the policy predictability from the perspective of the mines and was raised as a key issue among many of my respondents.²²² Yet at the same time, the growing political pressures during the boom years increased the 'usefulness' to firms of having the President and other government officials to act as brokers of their economic interests. When informal direct relationships co-exist with the formal regulatory bureaucracy (that I describe and discuss in subsequent chapters) they open up space for different articulations of state-firm relations.

This chapter then presented my four-case study companies and general mining sector dynamics, including competition as well as collective action. In describing my

operations, they met every week. And then issued a follow-up. Those are some of the things people miss."

²²⁰ She adds that "[t]he policies are still there, because they are inherited from Avmin. But I think they are not followed with the same passion as we did in the Avmin days." (Ibid.).

²²¹ Some stakeholders question what the GRZ gets in return for its support to the mining sector. Peter Sinkamba, Director of NGO Citizens for a Better Environment, asks "what motivates the President to protect or speak on behalf of the mining companies, to make it sound like such meaningful investment, we are wondering, those of us with an understanding of the contribution that mining makes." (Sinkamba, 1.8.07).
²²² Thus, while this may enhance one form of operational stability for firms, it may come at the expense

²²² Thus, while this may enhance one form of operational stability for firms, it may come at the expense of reduced regulatory 'clarity' (e.g. around which regulatory infringements will be strictly enforced and which are open to negotiation).

case study firms it is evident that external influences do play a role in shaping company behaviour, but that they compete with pre-existing 'administrative heritage' of norms and practice in the workplace. Such legacies from 'administrative heritage' are not, however, present at NFCA and FQML/Bwana Mkubwa since neither took over ongoing 'going concern' operations – as such their practices and management structures are more clearly linked to the practices, ideas and ideals of current shareholders. In my following three thematic chapters on state-firm relations I thus I expect a messy mixture of internal (domestic) and external (international) influences on the firms under study.

5 Taxation and fiscal governance

5.1 Introduction

The commodities boom that followed the privatisation of Zambia's mining sector coincided with growing criticisms against government, which was perceived as having failed to capture sufficient benefits from the mining sector. This chapter discusses the resulting pressures for fiscal policy reform, mining companies' responses, and the evolution of government fiscal policy that culminated in unilateral action against the mines.

The chapter begins by introducing the context and relevance of taxation and fiscal policy in the Zambian mining sector. In doing so it highlights the twin issues of fiscal concessions (including low tax and royalty rates) and lack of capacity to calculate and collect whatever taxes are due. The second section turns to the organisational routines and objectives that shape the stance of foreign mining companies on issues of fiscal policy. It sets the scene for a third section, which discusses at length the interaction between mining companies and state and non-state actors over fiscal reform. This includes an examination of how policy agendas have evolved and the role of foreign investors within this process. The fourth section summarises and concludes.

5.2 Context and relevance

As discussed in chapter four, the failure of the mining sector to make meaningful contributions to Zambia's economic development resulted in growing political pressures on government to address the perceived imbalances. By late 2007 copper prices were close to historical highs,²²³ however the mining companies had been contributing little to fiscal revenues: in 2007 the government of Zambia (GRZ) collected \$142m in royalties and corporate tax based on \$4.7bn in copper and cobalt exports.²²⁴ According to Transparency International Zambia, individuals at this time contributed some 26% of Zambia's tax base, while mining companies contributed 1%.²²⁵ I now introduce two main reasons why the tax take has been so low, namely the fiscal concessions contained in state-firm contracts (Development Agreements) and other legislation, as well as limited capacity for tax collection.²²⁶

²²³ Prices at the time of study were around \$3.00/pound [\$6,600/tonne], a five-fold increase over prices of \$0.61/pound [\$1,342/tonne] at the time of privatisation.

²²⁴ President Mwanawasa, opening of 10th National Assembly speech, Jan 2008, http://www.mibs.gov.zm/index.php?option=com_content&task=view&id=285&Itemid=142

²²⁵ These taxes arise from the 10% of the work force that are employed in the formal sector (Lundstol, 16.7.07).

²²⁶ These two areas are clearly interlinked: when announcing (in June 2007) the GRZ intention to conduct tax audits of the firms, Finance Minister Magande suggested that increasing collection efficiency would be easier than renegotiating Development Agreements (Mineweb 11.7.2007).

5.2.1 Development Agreements and the fiscal framework

State-investor contracts, or Development Agreements (henceforth DAs), are provided for in Section 9 of the Mines and Minerals Act of 1995.²²⁷ They represent a way for government to satisfy the interlinked but disparate investor objectives of a stable operating environment and high financial returns.

To assure incoming investors of a stable regulatory environment the DAs incorporated stability clauses on existing legislation (fiscal, environmental, labour), varying from 15-20 years, thus constraining GRZ's ability to change such legislation. To make investment appear more profitable DAs also included various financial incentives, including 100% capital allowances and duty exemptions for the two largest mines (KCM and MCM).²²⁸

DAs granted to incoming mining investors were not identical but rather depended on the bargaining powers of firms. Significant discretionary power was given to the Minister of Mines (through the Mines and Minerals Act), allowing him to vary fiscal terms of DAs with little if any involvement from the Ministry of Finance (MSDP techn. ass't, 22.8.07) and without Parliamentary approval. Over time, as evidence emerged of corruption in this process of discretionary bargaining (World Bank 2006a), it undermined democratic support for the DAs.²²⁹

Mining companies, on their part, argued through the Chamber of Mines that the DAs were created not only to protect investors, but also to protect the people of Zambia from failing to bring in "much needed FDI for revitalising the mining industry" (CoM 2007b). By many measures, however, the DAs were unequal treaties. First, although they committed the GRZ to reimburse the company if government failed to provide stability (e.g. under Cl.16 for MCM's DA), there was no corresponding commitment for the firm to reimburse the GRZ if the firm failed to provide on its own obligations contained in a DA (e.g. planned investments, support for local business etc.). Moreover, although the CoM argues that DAs were "given in return for future commitments by the companies to invest", such commitments appear tenuous given evidence of several companies (e.g. Anglo American, Cyprus Amax, Avmin and Binani Group) exiting Zambia in the years immediately following privatisation.

Faced with growing political pressures to reform, the government enacted the Mines and Minerals (Amendment) Act, henceforth MM(A)A, in early 2007. It included changes to corporate tax rates (from 25% to 30%), limits on capital allowances, imposition of a windfall tax and increased royalty rates. The MM(A)A also transferred the authority to grant tax incentives from the Ministry of Mines to the

²²⁷ Development of the mining and mineral sector was one objective of Zambia's Mines and Minerals Act (No. 31) passed in 1995 (see USGS 2003: 1). Most of the Development Agreements for privatised mines are available at <u>http://www.minewatchzambia.com/</u>.

²²⁸ Capital allowances are accounting provisions. They allow companies to write off the cost of capital equipment against profits the year it is acquired, rather than depreciating the cost over the life of the equipment. Capital allowances effectively enable companies to postpone tax payments, what Otto (2000: 17) has called a "time-sensitive tax incentive". This was perhaps the most significant financial incentive for privatised mines, in particular during the heavy expansionary investment of the copper boom.

²²⁹ The report's number one reform agenda item was that "if government wants to design a progressive and more certain fiscal regime for future mining projects the scope of ministerial discretion needs to be sharply curtailed" (World Bank 2006a: 52).

Ministry of Finance, ostensibly to reduce ministerial discretion in awarding DA fiscal concessions.²³⁰

However, the act only applied to *future* investors in the mining industry. Civil society protested that this was too little too late. Donors were similarly concerned that incumbent mining companies, after all, represented the vast majority of Zambia's proven copper reserves. I elaborate in section 5.4 below on the evolving position of donors in supporting across-the-board fiscal reform, and government's eventual approach to companies seeking renegotiation of existing DA contracts.

5.2.2 State capacity for tax collection

A lack of mining sector specialist capacity at the Zambia Revenue Authority (ZRA) and various reporting 'grey areas' (Chungu, 21.11.07) enable mining companies to externalise resource rents through practices such as management fees, transfer pricing and inaccurate reporting to customs officials.²³¹

The World Bank highlighted these issues in a 2006 report, arguing that "[g]iven the nature of the mining and processing industry in Zambia, without further attention, it can be expected that transfer pricing is occurring and will increase as the number of processing plants increases over the next few years" (World Bank 2006: 41). During fieldwork I found many indications that firms were externalising resources beyond the obvious channels of declaring dividends or repaying loans. This included evidence that large firms were selling their copper for below-market value prices, thereby reducing royalty payments to government.²³²

Second, management contracts between head office and subsidiaries enable firms to externalise resources and minimise their domestic tax bill. The Company Secretary of ZCCM-IH explains that "the majority shareholders in these companies, in some cases they have actually got management contracts, which means they are getting money out of the operations ... it is their companies providing those quality services to the industry. So, if they do not declare a dividend, they don't care, they are making money indirectly." (19.11.07).

Finally, tax evasion may take place through over-reporting the value of imported goods. Anonymous respondents at NFCA claim there are always two invoices for all orders from China: one with a lower value that is attached to the container (and used to calculate duties at the border) and another that is used for paying the seller (S.Banda, 2.12.07).

Of late the government has recognised weaknesses in the regulatory framework, although challenges remain. Chisanga Chungu, Partner at Deloitte in

 ²³⁰ This reflected the trend of the Ministry of Finance wanting to be the only ministry involved in fiscal matters of the mining sector, and is consistent with IMF recommendations that granting of fiscal provisions be removed from Ministry of Mines (IMF 2006: 9).
 ²³¹ NFCA for example, appeared to evade taxes by failing to report mineral content of the concentrates

²³¹ NFCA for example, appeared to evade taxes by failing to report mineral content of the concentrates they export. As one respondent puts it, "when I was working with the export department I was able to see the report that came from the independent [mineral analysis] ... there was certain percent of silver, certain percentage of copper, certain percent of gold." (S.Banda, 8.9.07).

²³² Bank of Zambia data suggests that mining companies – in particular MCM with who sells to Glencore, a trader within the same group of companies – sold its copper for significantly less than the LME price (Bank of Zambia). Michael Soko at the UNDP notes that Zambia's "anti-trust laws are not as tight as they are in US or Europe, and the investigations are not as thorough. So it is really easy in this part of the world to demonstrate that you are not related. Again, we don't have as much information on which to base these decisions. And we don't use the information when we should." (14.9.07).

Lusaka, explains that ZRA used to accept management fees without further questioning. Increasingly, however, the agency is asking for motivations behind such transfers, e.g. "why one percentage rate over another", who the on-the-ground managers are, and how long the managers spent in Zambia (Chungu, 21.11.07).

5.3 Organisational routines and objectives

I argued in chapter two that a firm's routines and objectives constitute key drivers of organisational behaviour. This section highlights how some of these organisational routines and objectives vary across my case study firms, and their origins in a mixture of internal (domestic) and external influences.

These routines and objectives are relevant to understanding the evolution of policy making because they shape how firms respond to policy proposals (see 2.5.6. By extension they have a bearing on the ability of states to formulate, coordinate and effectuate industrial (in this case, fiscal) policy.

I first discuss the organisational aim of minimising costs, and how it varies across firms with different cost structures. I then discuss routines relating to organisational structure, and the implications for transparency around fiscal reporting. Lastly I briefly examine the organisational aim of stability, embodied in the stability clauses contained in the DAs signed by foreign investors at privatisation.

5.3.1 The objective of minimising costs

Many mining companies in Zambia have a high cost base, reflecting the old infrastructure of many mining operations and the fact that much of the "easy" copper has been taken out (Makumba, 23.7.07). This results in strong incentives to manage and reduce non-production-related costs where possible. As one respondent explains, "with a mine it is all about development and extraction. And the extraction is probably the easy part. So anyone who is watching their pennies is going to find it hard to justify putting a new drive [shaft] in, when they can spend money taking out existing ore." (G.Gatchell, 8.10.07).

The dependence on old (and costly) infrastructure is greater among the older mining operations (notably KCM and MCM), but differences in cost structures across mines also depend on strategic and structural characteristics. For instance, underground mines are more costly to operate than open pit mines, and low-grade deposits are more expensive to exploit than high-grade deposits.

Varying cost structures across mines can explain some of the variation in companies' willingness to accommodate proposed changes to the fiscal regime. As one manager at FQML notes, "everybody has different view points and different amounts available ... at e.g. KCM and MCM, they are still throwing huge amounts of money at their projects, as they are gearing up ... Now if you increase the royalties it hurts them in a way that is unavoidable, because it is not like a tax where you write it off against capital expenditure. Whereas FQML is a bit different. Kansanshi and Bwana Mkubwa are already paying tax, full stop." (FQML mgr 3, 28.8.07).

5.3.2 The aim of stability

The recent experience of Nigeria illustrates that fiscal incentives alone are no panacea for attracting investors in situations where fundamental stability is lacking (see Mthembu-Salter 2009). Once capital needed for initial investment has been arranged and committed to, i.e. once the operations in a country are up and running, a firm's strategic priorities may shift away from fiscal concessions and towards stability. A Deputy CEO at NFCA notes that between stability and financial incentives, "[n]ormally, I think the stability is more key, so that we can plan into the future".²³³

Organisational theorists have long argued that the pursuit of stability in the external environment is central organisational objective of firms (see chapter two, e.g. Pfeffer & Salancik 1978). Mining is by its very nature a long-term endeavour, and is therefore particularly exposed to the risks of political and policy volatility. My own interviews with company managers suggest that a stable and predictable environment is important to the mines under study. As one manager at FQML puts it, "the whole point [of DAs] was to guarantee stability, because obviously Zambia had not been an attractive investment destination for many many years, and was considered very high risk" (FQML mgr 1, 11.10.07).

Yet despite promises made at privatisation, some firms felt that the GRZ had failed in stabilising regulatory 'costs' for the mines. At CM I encountered a strong sense that the Zambian government had been dishonest about the DAs, failing to 'stabilise', *inter alia*, fees, land taxes etc. Mwenya argues that government breached the spirit of the DAs: "we've have been arguing this and it has fallen on deaf ears ... you said 15 years of no changes in taxes, Kalulushi City Council [local government] wants to change the land rates every year." (4.10.07).²³⁴ My respondent recalls that "during the Avmin days, there were a lot of fights, there was even talk of going to court" and her colleagues corroborate this view. A manager at FQML argues that FQML had a similar experience to that of CM, that the list of issues on which he felt government had breached agreement was "long" and included land taxes, VAT on imported goods, changes of duties, and work permits (FQML mgr 1, 13.5.09).

5.3.3 Organisational structures and financial reporting

The internal routines through which the company organises its activities determine the scope for minimising tax payments through more or less legal methods. This subsection focuses on the case of NFCA to illustrate the link between organisational structure, international capital markets, and tax avoidance. As noted in the previous chapter, NFCA appears quite distinct in its organisational structure compared to other mines on the Copperbelt, with several 'sister companies' under its control.²³⁵

NFCA's networked organisational structure seems to result in coordination challenges for its management, as reflected in a lack of well-implemented formal reporting routines. As one respondent points out, "for financial management, it has basically created problems, and the recommendation [from auditors] has been that we do away with it." (Chirwa, 30.11.07). My respondent adds that "[w]here you have

²³³ The mines – representing over 60% of Zambia's energy consumption – were during 2007 under pressure to pay higher energy tariffs, being criticised for paying lower energy tariffs (agreed and 'locked in' with the private provider CEC at privatisation) compared to the national electricity provider ZESCO. However the Legal Counsel at the CEC notes that "the [energy] tariff they agreed at privatisation was twice the level that ZESCO was using [at the time]", suggesting that the mines preferred stability as opposed to more 'direct' financial incentives.
²³⁴ My respondent adds that "government says that this is a different kind of tax. But it is a cost to the

 $^{^{234}}$ My respondent adds that "government says that this is a different kind of tax. But it is a cost to the company, and they all go together" (Mwenya, 4.10.07). This view is supported by another CM respondent who is concerned that "after a period of time the government turns things around ... If you have a DA, it has to be credible, it has to stick" (Nordoff, 10.10.07; FQML mgr 1, 13.5.09).

²³⁵ I was unable to determine whether the proliferation of smaller 'sister companies' to NFCA was part of a strategy to minimise taxes, e.g. by benefiting from tax thresholds.

insufficient documents, but [have] to make that payment, that is where it becomes extremely, I would say a risk ... Contracts, the authorisation papers, those are not there, but there is pressure to make that payment" (Chirwa, 30.11.07).

In addition, he claims the limited use of English among top management and close commercial links to other Chinese companies lead to difficulties in ensuring the adherence to international accounting standards: "where you have documents which are in Chinese, then when requests are made you have to ask the Chinese manager to retranslate into English to be understood. There are sometimes problems with auditors, because they will find some transactions, when the papers are all in Chinese, so it becomes difficult for them to understand that payment." (Chirwa, 30.11.07).

However, NFCA appeared less concerned with the opinions of international auditors (compared to my other case study firms), perhaps due to its limited exposure to international capital markets. These auditors (e.g Deloitte, PwC, Ernst&Young etc.) are required to audit and sign off on the annual financial statements of privatised mining companies – which the ZRA uses to calculate taxes due – as giving a "true and fair view of the company's affairs".²³⁶ Failure to get this sign-off results in so called 'auditor qualifications', which may compromise relationships with lenders and reduce future access to capital markets.

Among the five international mining companies operating in Zambia for which annual financial statements were available for the last three years, only NFCA's accounts had received any auditor qualifications (and did so in every year). NFCA's auditors Deloitte cite unavailability of information that makes them "unable to determine whether proper accounting records have been maintained" (NFC Africa Annual Accounts 2005).

The networked organisational structure of NFCA, with many inter-company transactions, clearly facilitates transfer pricing. But why would NFCA be indifferent to whether or not it gets a clean slate from auditors? As noted in section 4.4.3, NFCA is a subsidiary of state-owned company CNMC and gets its funding principally from China's Export-Import Bank. To the extent that NFCA therefore relies less on impersonal international (mainly 'western') capital markets, where scrutiny of company accounts is key to accessing finance, the firm will be less sensitive to a negative report from their auditors.

5.4 Interaction and policy evolution

This section aims to elaborate on the interaction between firms and the Zambian state and to explicate the evolution of fiscal mining sector policy. I first examine the origins of fiscal concessionary policies as outcomes of bargaining between the state and large, influential investors. I then look at the role of donors in the emergence of the fiscal reform agenda around 2005 and how the attitudes and involvement of donors evolved over time.

The third sub-section discusses the consultative approach initially adopted by government, and how incumbent mining companies responded. I highlight the expectations among mining companies of a 'quid pro quo' whereby government would give something 'in return' for DA renegotiation, and how these claims centred on increasing stability in the external environment.

²³⁶ According to the DAs, firms are also committed to produce quarterly reports on operations (copper produced, status of investment expansions etc.). However these were not publicly available (Ndalama, 27.7.07).

The fourth sub-section highlights some other areas in which the strategy of consultations was evident. It discusses various - in some sense overlapping - consultations that were taking place at this time (on mining sector policy more broadly as well as the EITI).

The fifth sub-section discusses how the GRZ, despite commitments to approach DA renegotiations in an inclusive and cooperative fashion, in early 2008 imposed a sweeping unilateral tax reform package. I argue that this change in tactics of the government, and responses of companies, can be explained with reference to, *inter alia*, the difficulties of bargaining with a diverse sector and external influences (including high international copper prises).

5.4.1 Evolution of DAs and the legislative framework

Although the public debate made frequent references to tax holidays and concessional tax and royalty rates, the true extent of financial incentives in DAs is more limited than might appear. In fact, there are no explicit tax holiday provisions in these documents, except for deferrals of tax payments through the use of capital allowances and loss-carry forwards.

The main concessions granting reduced tax and royalty rates were in fact outcomes of bargaining by individual companies, rather than by the sector as a whole. At the onset of privatisation, the corporate tax and royalty rates for the mining sector were set by the MMA, at 35% and 3%, respectively. Peter Sinkamba of NGO Citizens for a Better Environment (CBE) explains how these rates were gradually eroded, beginning with the acquisition by Cyprus Amax of Kansanshi mine in 1997.²³⁷ The company negotiated with government to reduce royalties to 2% through a legal Statutory Instrument (SI), the first time a company-specific legal instrument of this kind was issued in Zambia (Sinkamba, 1.8.07).

A couple of years later in 2000, KCM and MCM were being privatised to AngloAmerican and Glencore, respectively. Both companies signed DAs on 31 March 2000. Sinkamba claims that MCM actually completed its negotiations over the acquisition's broad terms before KCM, but MCM stalled over signing until KCM had done so – knowing that KCM was a higher-cost mine and that KCM therefore was more likely to negotiate advantageous terms.

Government thus offered these two companies a royalty rate of 0.6%, enshrined in law through the issuance of another company-specific SI. In 2002 Metorex (who acquired Chibuluma Mines in late 1997) began putting pressure on the Zambian government by arguing that they, after all, were in the same business as KCM and MCM and should enjoy the conditions of other privatised mines. In response the GRZ issued an amendment to the MMA, under which 'all ex-ZCCM' companies were to pay a royalty rate of 0.6%.²³⁸

My respondent goes on to explain how in 2003 new mining companies were investing in greenfield projects, such as Lumwana, and were asking government "why have you exempted these others?" They successfully lobbied government to change the law so that exemptions applied to all copper and cobalt investments, rather than

 ²³⁷ Cyprus Amax was acquired by Phelps Dodge, which in turn was acquired by Freeport-McMoran.
 ²³⁸ To put this figure in context, the world average was around 3%, and mineral royalty rates ranged

from 2-5% in 'developed' mining jurisdictions in Australia and Canada (Public Policy and Management 29.3.2005).

being restricted to ex-ZCCM assets.²³⁹ My respondent continues: "in 2006 others were coming in, the Albidon guys [mining nickel in Mazabuka], they said hey us guys are also into mining, us we are in nickel, so why should you just exempt copper and cobalt ... So also nickel is included, and aluminium and others ... So what I'm saying is that the rules have been changing to suit circumstances." (Sinkamba, 1.8.07).

The low corporate tax and royalty rates in the sector thus stem from the individual bargaining efforts of large mining companies (KCM and MCM). These larger investors, taking over established but dilapidated mines with a high cost base, were able to negotiate advantageous terms. Once this had taken place, companies that had entered earlier (e.g. Metorex acquiring Chibuluma Mines in 1997) were able to successfully make their cases for a level playing field.²⁴⁰ Metorex in particular lobbied to amend legislation such that KCM's and MCM's tax and royalty rates also applied to other investors. Therefore, although my case study companies NFCA and CM – among the first to acquire privatised mines – did not get these fiscal benefits with their DAs, they benefitted from the state-firm bargaining of other mining companies.²⁴¹

5.4.2 Role of donors in negotiating fiscal reform

The renegotiation of Zambia's mining sector fiscal framework came onto the donor agenda with a report on Zambia's effective tax burden in 2004 by the Foreign Investment Advisory Service (FIAS).²⁴² The report aimed to "understand better whether policy [was] growth-promoting or growth-inhibiting" and locate Zambia relative to its "competitor countries" in the region (FIAS 2004: 3). It was followed by another IMF report in 2005 (not made public). A third report came out in 2006 following a two-week mission to Zambia in "response to a request from Mr. Ng'andu Magande, Minister of Finance and National Planning, for further technical assistance on the fiscal regime for mining" (IMF 2006: 5).

However the World Bank and IMF remained cautious on the prospects for Development Agreements reform. A World Bank 'Minerals Sector Fiscal Review Mission' – in Zambia for ten days in early December 2006 – recommended that the GRZ "potentially pursue improvements in existing development agreements" (World Bank 2006). In the mean time other parts of the donor community began pushing for fiscal issues to take a more prominent role in the country's policy dialogue.

From mid-2006 onwards, as the public profile of the mining sector grew, the Norwegian Embassy became more involved in donors' engagement with the GRZ over DA renegotiation (Riby, 15.8.07). As Lundstol at the Norwegian Embassy notes, "we tried to lobby the [other] donors quite hard, because many donors were not that keen initially to be honest, they said 'why are you bothering about this now, Zambia were lucky that they managed to not close the mines, production is increasing and new investment is coming in.' More and more, over time, people have realised the importance of this and that it is reasonable." (Lundstol, 16.7.07).

 ²³⁹ The MM(A) Bill (No.5 of 2003, section 6) amends the MMA such that the 0.6% royalty rate shall apply "in the case of the former ZCCM Ltd or any other company involved in copper and cobalt production".
 ²⁴⁰ Interviews (Chirwa, 30.11.07) and analysis of annual financial reports confirm that all mining

 ²⁴⁰ Interviews (Chirwa, 30.11.07) and analysis of annual financial reports confirm that all mining companies in this study was, at the time of study, paying 25% corporate tax and 0.6% royalties.
 ²⁴¹ The bargaining power of larger firms thus became a positive externality for smaller ones.

²⁴² FIAS is a joint venture between the International Finance Corporation (IFC) and the World Bank.

By the end of 2007 the World Bank's position had evolved. A mining sector specialist at the World Bank explains that "I think generally we would respect contracts, but having said that ... certainly mining contracts which are entered into for the long term, should be built and constructed to adapt for change ... if the benefits of breaking a contract exceeds the costs, then you should do it" (Husband, 11.12.07). My respondent referred to a growing realisation among "both sides of mining contracts ... that for contracts to be sustainable in the long run, they have to be fair" (Ibid.). Stephen Muyakwa, Chairperson of the Civil Society Trade Network of Zambia, feels that "[t]his is a powerful statement from the World Bank, in the past they would have said 'this is a valid contract, these are private companies, let them go ahead on what they agreed'." (17.7.07).

Several donors, under the Memorandum of Understanding (MoU) for donors' assistance to the mining sector, thus committed themselves to supporting the government in mining sector reform. Their commonly articulated position was that a holistic approach was needed, and that DA renegotiations had to be coupled with broader institutional strengthening. Donor support in this area was organised around three pillars (Lundstol, 16.7.07). First, donors would support DA renegotiations through technical assistance as well as funding for consultants to advice on the renegotiation process. Second, they would support the Zambia Revenue Authority through technical assistance and capacity building, including assistance with implementation of the EITI (a multi-stakeholder initiative to improve revenue transparency of payments, taxes, and royalties from mining firms to the government).²⁴³ Third, they would promote the establishment of a copper fund – as Lundstol explains – "so that you have some restraints, such that you don't have all of the surplus spent in one go, or [it] just goes into boosting salaries or consumption in the public sector." (Lundstol, 16.6.07).²⁴⁴

Donors who committed to funding the DA renegotiation consultants were initially Norway, DFID and EC.²⁴⁵ However the EC appeared to be "dragging its feet", what one donor respondent suggests could be due to the fact that the EIB had financed several of the mines.²⁴⁶ In the end only Norway and DFID committed funds. The appointed consultants were in Zambia in mid-October and left the country to return a month later, to hold meetings with Ministry of Finance representatives in Livingstone 13-17 November 2007 (Mubanga, 21.11.07). My respondent at the Norwegian Embassy explained how it was decided during the first meeting that audits

²⁴³ As part of its mining sector support, donors funded a trip by a delegation of Zambian government officials to visit Norway on 23-27 April 2007 to meet with Norwegian officials and legal experts to discuss resource revenue management. The 13-strong delegation was split into two, comprising a mining-focused group, as well as a group focused on oil and gas resource management, reflecting the recent discovery of likely oil reserves in Luapula Province in [2006] (Lundstol, 16.7.07). Among seven officials in the mining-focused group, five were ministerial representatives, of which four were from the Ministry of Finance. No representatives from the Ministry of Mines formed part of this group.

²⁴⁴ Lundstol notes that such a fund should include rules on how these receipts are spent in the local economy to mitigate against Dutch disease impacts, which given the small foreign exchange market in Zambia he considered significant.

²⁴⁵ The government put out a tender and three consultants were appointed: Arntzen de Besche (Norwegian, legal analysis), Econ (Norwegian, financial and tax analysis) and Windham Resources (US, strategy and negotiations).
²⁴⁶ Mines who had received loans from the EIB included Lumwana, Bwana Mkubwa, Kansanshi,

²⁴⁶ Mines who had received loans from the EIB included Lumwana, Bwana Mkubwa, Kansanshi, MCM and Munali Nickel Mine. However, among these mines Bwana Mkubwa was the only one included in my case-study companies, and their EIB debt had been repaid by the time of fieldwork. I was thus not able to determine the relevance of international standards launched in 2006 by the EIB in the form of the Economic and Social Impact Assessment Framework.

be undertaken in the areas of taxation as well as mine safety, environment, investment and production commitments, reporting, local business development, and human resource development (Lundstol, 30.10.07).

5.4.3 Consultations, renegotiation and firm responses

A consultative approach was envisaged as the preferred approach to renegotiating DAs. Throughout discussions with government, donors advocated that the GRZ should not move ahead unilaterally. This view was shared by government: "that was their take from the beginning also, that they would not do it unilaterally ... So they would engage in a dialogue, try to get the mining companies to sit down voluntarily at the negotiating table." (Lundstol, 16.7.07).

In the first half of 2007 the GRZ set up a Renegotiation Technical Committee (RTC), chaired by Evans Chibuliti (Secretary of the Treasury, Ministry of Finance) and involving government officials with experience of working within the Ministry of Mines (and with knowledge of 'mining issues'). The GRZ initially set itself ambitious targets for completing the renegotiation process. Villa-Chacon at the EC notes that "when they approached us to ask for financial support for consultants, I think it was in April 2007, and at this point they wanted to finalise the DA renegotiations by end of June." (17.8.07).

It was also around April 2007 that government first approached mining companies. The initial response from the CoM was that renegotiating DAs would raise costs, and that FDI into Zambia was sensitive to this due to the "stiff" competition for FDI into mining (see CoM 2007a). However, in recognition of the hardening political climate, mining companies came around to accepting the imperative of DA renegotiation. In reference to growing criticisms of the mining sector during and after the 2006 elections, KCM Company Secretary speculates that "maybe ... the mining companies have started seeing that DA renegotiations might mean lower profits but greater stability" (Bwalya, 22.8.07).

Yet mining companies were expecting something in return. One respondent at FQML recalls how "[t]hey came to us in April and asked to renegotiate, we said yes, subject to certain things." (FQML mgr 1, 1.2.08). My respondent at the World Bank echoes this point: "We certainly alerted them to the fact that if you will renegotiate DAs, they must expect mining companies to come back for [a] quid pro quo, because then everything is on the table." (Husband, 11.12.07).

One possible concession that government could offer the mines was a greater allocation of taxes raised towards local development, thus improving mining companies' relationships with communities. Some donors argued that the government's bargaining position could be improved by "guarantee[ing] that some of it is fed back into the Copperbelt, infrastructure, electricity. The region needs a lot of facilitating investments." (Lundstol, 10.9.07).²⁴⁷

That greater local and community development constituted a central goal of several mining companies was brought out in the EITI scoping report (discussed below) as well as the CoM submission on the 2007 budget (CoM 2007a), drafted by one of my respondents at FQML's Bwana Mkubwa.²⁴⁸ However mining companies

²⁴⁷ With reference to the 'cradle-to-the-grave' social protection policies in place at ZCCM before privatisation, my respondent cautions that "companies may feel that citizens are still demanding too much from the firms, with the old mentality." (Lundstol, 10.9.07).

²⁴⁸ This document states that the mining industry is "in principle ... in favour of communities benefiting from royalties, a split of 60% central government, 20% local government, 20% to local

stressed that they "would however like to see that local component was spent in transparent manner, and with an emphasis on infrastructure and not recurring costs such as staff costs'." (FQML mgr, 11.10.07).

Another form of 'quid pro quo' was mentioned by some respondents who noted that GRZ could relinquish the minority shareholdings held by ZCCM-IH. This however, seemed unlikely given the role of ZCCM-IH in providing government with insight into, and influence over, the mines (see sections 4.3.3 and 4.3.4). Professor Lungu thinks that, first, GRZ would not want to relinquish the ability of signalling its intentions through votes at the Board. Second, he thinks that mining companies recognise that ZCCM-IH divestment might not be in their long-term interest, arguing that it provides some kind of "social assurance" (Lungu, 31.10.07).I

Interestingly, some mining companies I spoke to emphasised the need for GRZ to receive strong legal advice. A manager at FQML explains that "the mining industry was concerned that we wanted people that had international experience and good legal experience, because there are few good corporate lawyers in Zambia ... And the Ministry of Legal Affairs, I wouldn't rate them that highly in terms of their ability to draft good laws." (FQML mgr 1, 11.10.07; also Lundstol 10.9.07).

It remained unclear whether the government would seek to negotiate with the mining sector as a group or with individual companies. One mining manager put it thus: "I think they have to be interdependent to a large extent. Because we are not going to agree 'ok, no problem, we'll do this and we'll pay some more tax here, and KCM gets away without it – it is not going to happen." (FQML mgr 1, 2.12.07).

5.4.4 Coincidental consultations: mining sector reform and the EITI

The mining companies' preparations for renegotiation of DAs coincided with their involvement in formal state-firm consultations over a new mining policy. The General Manager of the CoM observes: "[i]t is the trend now, for example the Mines and Minerals Act is being revised [see section 5.2.1] and we have been consulted together with other stakeholders, and we hope the GRZ will do the same for environmental regulation." (Bantubonse, 7.8.07).

The Ministry of Mines set up several working groups that included representation from the mining sector in the form of the CoM. These consultations were not explicitly about changing the DAs – although this remained a latent issue – but rather concerned a new broader mining policy.²⁴⁹ Its agenda points ranged from reforms of licensing procedures and the mining cadastre to the relative (financial and procedural) autonomy of the Mines Safety Department (see chapter six).

An additional area of proposed fiscal reform came in the guise of the EITI. Following a request from government, the World Bank commissioned a 'scoping report' in mid-2007. It drew on research by World Bank staff and interviews by Mwaka Chulu, a lecturer and lawyer at Copperbelt University, with the mines and their stakeholders. Chulu recalls how "[t]he impression I got was that the mining companies were being put under extreme pressure, especially by NGOs and the

communities, we would have no objection to such a split." (FQML mgr, 11.10.07). The document also included tax payment forecasts (\$500m in 2009) and a statement that the mining sector will support EITI.

²⁴⁹ As one of my respondents notes, "there are discussions going on [regarding] changes in the mining legislation and fiscal regime, overall, regardless of DAs." These included meetings in early August 2007 when my respondent explains "we were all down in Lusaka for a consultation exercise with the Ministry of Mines, for a revision of the mining legislation." (FQML mgr 1, 11.10.07).

various other stakeholders." (7.11.07). She describes most mining companies as "keen" but highlights a limited understanding of how they could benefit from the EITI. She notes, meanwhile, that ZCCM-IH, were "very proactive and provided information over and above what she was asking for." (Ibid.).

My respondent cautions that the potential for the EITI to improve revenue transparency may be limited because of difficulties in coordinating across so many players "in a country like [Zambia]" (7.11.07). She also points to how the EITI requires a certain amount of civil society coordination and organisational/analytical capacity (see discussion in section 4.3.2.3).²⁵⁰

Among the companies I spoke to, FQML was the most proactive investor with regard to adopting the EITI and its principles. The Group Environmental Manager explains how "[w]e're working on the EITI at the moment, so in the new year we will disclose our taxes ... this is working internally, we want to do it ... we're already paying so much, pay-as-you-earn, duties, all these sort of thing ... [we would] like to have a big page in the news paper, to inform everybody ... but nobody knows, only the government knows." (FQML mgr 2, 7.11.07).

5.4.5 Unilateral action and mining company reactions

In his speech to open the 10th National Assembly in January 2008, President Mwanawasa announced the introduction of a new mining sector fiscal regime, to the apparent surprise of mining companies (AFX News 11.1.2008). The unilateral reform introduced a windfall tax, removed capital allowances, increased corporate tax rates from 25% to 30%, and changed royalty rates from 0.6% to 3.0% (frequently referred to in the media as the "world average") for all large investors in the copper sector.

The Economics Association of Zambia (EAZ) noted in its '2008 budget analysis submission' that the new mining fiscal framework "[o]n the face of it ... is in line with best practice, specifically the application of both a variable profit tax and a windfall tax related to prices, and the use of a reference price instead of average revenues declared by the mining companies" (EAZ 2008: 4). However, the EAZ also lamented that "detailed proposals have not yet been made available", recommending they be presented to Parliament and to the Zambian public (Ibid.). Many companies initially either waited for clarification or were unsure whether the new regulations applied to them (in particular the case with Lumwana mine in Nortwestern Province).

Mining companies protested, claiming they had accepted a formal invitation from government to sit down and renegotiate. In appearing before the Parliamentary Committee on Estimates, the CoM stated that the mines had letters dated April 2007, signed by the President, stating that the government would not unilaterally change the fiscal regime (The Post 12.2.2008; corroborated by FQML mgr 1, 1.2.08).²⁵¹

The GRZ may also have expected little short-term opposition (e.g. mining companies 'picking up' and leaving) given companies' sunk costs. As Chris Adams at Macquarie Bank noted: "[i]n the near term the Zambians probably have some leverage as capital has already been committed and cannot easily be redeployed to other countries." (16.3.08). The long-term credibility of Zambia as an investment

²⁵⁰ For instance, questions exist regarding the coordination across civil society organisations in a context where these organisations (e.g. EAZ and CBE in the Zambian case) have fundamentally different agendas.

²⁵¹ Haslam (2004: 4) notes that companies may lower taxable profits through accelerated depreciation. In the case of Zambia, firms could not respond to unilateral action in this way because the initial bargain (at entry) maximised capital allowances (i.e. 100% depreciation in the first year).

destination, however, may have been dented. My respondent thinks "[i]nvestors will remember these broken promises when the balance of power shifts back to the investor" (Ibid.).

Thus, while short-term implications for the sector's output may have been limited, the unforeseen increases in fiscal costs could affect future investment into Zambia. This is particularly so with regard to this older and less profitable projects with higher costs. One mining manager explained that companies were reviewing capital expenditure plans in response to new legislation, in particular the older mines with high operating costs. My respondent cites MCM as having an average operating cost of \$2.20/pound (\$4,840/tonne) and notes, off the record, that "they have already cancelled huge amounts of capital expenditures." (FQML mgr 1, 9.4.08).²⁵²

This unilateral action appeared to signal a shift in GRZ bargaining strategy, away from the consultative approach to mining sector policy reform that government had taken to date.²⁵³ It contrasts sharply with the careful approach taken when renegotiation was just entering the policy agenda, and reflects a gradual erosion of popular support for the old fiscal framework (illustrated in the 2006 elections, see chapter four).

Some observers noted government may have attempted to secure a first mover advantage, hoping that mining companies would want to settle the issue quickly in order to not detract from other concerns facing the sector – mainly the issue of future power supply (Liebenthal, 15.3.08). The government confronted the mines in the knowledge that it retained a bargaining advantage only as long as international copper prices remained high. Its stance also drew legitimacy from the increasing support from donors. By emphasising how its move resonated with the position of NGOs that had advocated for DA reform, the government was also able to draw on a larger basis of support, thereby making it harder for firms to argue against the tax increases.²⁵⁴

5.5 Chapter conclusion

This chapter has examined the fiscal policy issues surrounding the mining sector, in particular fiscal concessions given to the mines and weak revenue collection capacity. After describing the key policy issues and legislative framework, it explored the organisational routines and aims of relevance to explaining company positions toward fiscal reform.

I subsequently discussed how, at the time of privatisation, future capital commitments significantly increased the bargaining power of investors into assets that had long suffered from underinvestment.²⁵⁵ This gave larger companies (e.g. KCM and MCM who could raise the resources required for such commitments) greater

²⁵² Regarding whether such reviews had to be coupled with new feasibility studies, my respondent notes that it depends on the changes you will make, "for example if you have four shafts of \$1.70, \$1.90, \$2.10 and \$2.40, you might simply can the fourth one." (FQML mgr 1).
²⁵³ There were rumours of closed discussions between government and the firms, however interview

²⁵³ There were rumours of closed discussions between government and the firms, however interview data (e.g. Bhandawat, 5.12.07) corroborated with public statements suggest these changes were announced without wider consultations.

²⁵⁴ In an example of the limited transparency and accountability of the political elite, statements in the state-owned media included misinformation [to] reduce the legitimacy of the mining sectors' rights to appeal. These included statements by Dr Mwansa (then Finance Minister) that the mines had not responded to the government's invitation to renegotiate.

²⁵⁵ For example, MCM acquired Mufulira and Nkana mines from ZCCM in April 2000 for \$43m, including commitments to spend \$84m and \$75m, respectively, to upgrade these two mines (see ref in Zambian timeline).

bargaining power when entering Zambia. Smaller companies could then piggy-back on larger firms by claiming unfair treatment and petitioning the government that claimed it was committed to private sector-led national development.

Achieving stability in the policy environment constituted a central objective of firms under study. However the government did not appear capable of delivering on its promises of stability. This is evidenced, for example, in interviews with FQML and CM (e.g. allegations that local land taxes progressively increased). One explanation is the shift in political landscape following the 2006 elections, after which local and central government increasingly came to represent different interests (e.g. Copperbelt district councils controlled by opposition party PF after 2006 elections).

Donors generally supported this view, arguing that central government had failed to provide a transparent and predictable investment climate (see chapter four). Villa-Chacon, private sector specialist at the EC, argues that "GRZ needs to offer a more predictable environment of how things will be done in the future. But not stability [in its current form] because it is not practical ... Predictability for me is that things are more clear for the companies e.g. licensing, compliance procedures, to make a clearer business environment." (14.9.07).

The adoption of a consultative approach to dealing with mining sector interests provided a platform from which to pursue reform without violating the statefirm contract embodied in the DAs. This engagement strategy based on consultation and accommodation is also consistent with government's private investment-driven development strategy (see chapter four). It reflects a recognition within the Zambian government that a stable and predictable policy environment constitutes a key organisational aim of the firms.

However the strategy of accommodation through orderly renegotiation failed for several reasons. First, government could not accept any outcome that did not apply across the board. This would have undermined the 'level playing field', seen as a corner stone of an investor-friendly policy regime. At the same time obtaining consensus among these heterogeneous investors, all with somewhat differing routines and aims, proved difficult. Second, mining companies' individually negotiated DAs, coupled with the intervention-prone 'presidential' governance of the mining sector, meant it proved more difficult to reach a negotiated settlement. Third, several reform initiatives were simultaneously ongoing: consultations and negotiations were taking place around varying facets of mining sector policy, with implications for companies that depended on firm-specific characteristics and routines in place. This reduced the ability of firms to agree on one sector-wide approach to DA renegotiation. Finally, the high international copper prices put increasing political pressures on government to act.

Within this context (of organisational diversity in the mining sector, informal and discretionary governance, various overlapping consultations around reform and volatile international commodity markets) the post-privatisation DA 'bargain' – although ostensibly providing guarantees of stability – appears to have been destabilising for the mining companies. It resulted in increased policy uncertainty for the firms, despite the government's stated support of private sector-led development.

Donors played a significant role in providing technical support for the government in preparation for DA renegotiation. This seems to have strengthened government's case for unilateral action, even though donors' support was initially intended to aid a negotiated settlement. In hindsight it is not surprising that the donors' preferred approach to renegotiation failed, as it failed to take into account the difficulties in reaching consensus among highly diverse actors in the mining sector.

Firms thus appear short-sighted. They were willing to enter into DAs if they could negotiate an attractive deal, but were at the same time agents of their own unpredictability. In the case of Zambia these state-firm contracts lacked democratic support and failed to align the distribution of benefits with the commodities cycle. This resulted in political pressures for reform all served to undermine the sustainability of the state-firm 'bargain' struck at privatisation.

6 Environmental, health, safety and labour regulation

6.1 Introduction

This chapter examines environmental, health and safety regulations as well as labour relations in Zambia's mining sector. I collectively refer to these issues as the 'regulatory sphere' of state-firm relations. Although they are in many ways analytically distinct, they are interdependent and respondents would often discuss two or more of these issues in a single interview.

Many of the policies and regulations discussed in this chapter were, by the time I left the field in late 2007, in the process of being revised. My primary focus in this empirical chapter is therefore on the *processes* whereby the agenda for reform evolved, at the height of the commodities boom, rather than institutional and regulatory *outcomes*. A secondary aim of this chapter is to understand the limits and constraints of Zambia's existing regulatory framework. I attempt to go beyond the obvious explanations for lacking bureaucratic capacity in order to problematise the issue of enforcement further, by drawing on the literature reviewed in chapter two.²⁵⁶

This chapter is organised as follows. I first set the scene by introducing the context and relevance of this 'regulatory sphere' of state-firm relations. The second section introduces the main organisational routines and objectives that shape firms' practices in the areas of environmental management, health and safety, and labour relations. Here I try to identify relevant influences on routines and aims that are both internal and external to the Zambian context. The third section examines state-firm interactions in the area of environmental management, health and safety. It goes into some detail discussing the regulatory framework, regulatory failures, and the nature of persistent enforcement challenges. It looks at why existing mechanisms of enforcement in Zambia have been ineffective and how this has shaped the emerging policy reform agenda. The fourth section briefly looks at labour relations in the sector, highlighting a similar range of institutional capacity deficits, issues of contractors to the mines, and the role of labour in affecting change. The fourth section summarises and concludes.

6.2 Context and relevance

As discussed in chapter one, extractive industries are often associated with significant environmental and social externalities. In the case of Zambia's mining sector these issues are significant, owing to historical legacies of old mining operations as well as the practices of current mine owners. This section highlights some of the regulatory failures in the mining sector, before proceeding to introduce the legislative frameworks governing environmental, safety and labour relations.

²⁵⁶ The Chairperson of CSTNZ (one of Zambia's largest NGOs) argues that it is misleading to simply blame weak regulatory enforcement on a lack of resources: "[i]f today I set up a political party and I try to undermine the GRZ, there will be systems set up to monitor my movements, who is he talking to, what is he doing, this gentleman from the UK, did they bring him, is he getting money etc... Where are those resources coming from all of a sudden, if we are so capacity constrained? ... [R]eally, I think it is the political will which makes resources not available to do certain things. Because those issues are not a priority for those with the power to make decisions" (Muyakwa, 17.7.07).

6.2.1 Regulatory failures in the post-privatisation mining sector

It was often difficult to discern the true extent of health-and-safety incidents at the mines in my study. The capacity of independent Zambian media to proactively scrutinise is limited, and workers lack incentives to report malpractice.²⁵⁷ Ascertaining isolated instances of non-compliance was challenging, as respondents representing regulatory agencies were often wary of 'pointing fingers' at specific companies. To illustrate, my respondents at the ECZ were keen to present a picture of harmonious state-firm relations in the mining sector and to stress how "generally the trend is more on the upwards" (ECZ official 4, 19.11.07). Joseph Makumba at ZCCM-IH was similarly eager to paint a positive picture of relationships between government and new investors: "we have never had any problems ... we asked them to cooperate with the [CEMP] consultants, so far we have never had any difficulties, they have always cooperated" (23.7.07).

Yet significant environmental incidents have taken place since privatisation, including an incident at KCM in 2006 when a pipeline transporting waste-material (tailings) burst. This resulted in the pollution of the Kafue river, one of Zambia's main water arteries and the major source of consumable water for the majority of Copperbelt residents. Frequent but smaller-scale discharges into the Kafue constitutes an ongoing issue of water pollution (CEMP II Summary Report 2005: 7).

Issues of workers' health and safety are also significant in Zambia's mining industry. A manager at FQML describes health-and-safety as "a huge undertaking" and considers "the government's safety rules [to be] very minimal" (FQML mgr 22.11.07). The most significant health-and-safety incident since privatisation occurred at explosives manufacturer BGRIMM, one of NFCA's 'sister companies', which was levelled to the ground in April 2005.²⁵⁸ The aftermath of the accident – which took the lives of over fifty Zambian workers – highlighted breaches in safety and other regulations and served to galvanise anti-Chinese sentiment ahead of general elections in October 2006.

6.2.2 Environmental, health and safety legal framework

There are two sets of legislation of relevance to environmental, health and safety regulation affecting the Zambian mining sector. The first is the Environmental Protection and Pollution Control Act (EPPCA) from 1990 (no.12), which covers environmental management in all industrial sectors. It provides for the establishment of the Environmental Council of Zambia (ECZ), set up in 1992 under the Ministry of Environment and Natural Resources. The ECZ is a semi-autonomous body partially funded by fees charged for licenses and reviews of environmental impact assessments. Its mandate is to regulate environmental issues when they occur outside of the plant area.²⁵⁹ The EPPCA (ECZ's "enabling act") was strengthened in 1999 to address the question of how liability attaches "when you are dealing with a corporation, e.g. a mining facilities which is run by a Board. So that was addressed, that liability will attach to the managers, to every Board member." (ECZ official 3, 24.7.07). I found the ECZ to be relatively open and well-organised.

²⁵⁷ At NFCA, one respondent notes that if "some guy wants to complain, they'll just give him money. If they see that they are going to get into trouble they will bribe that person." (Maboshe, 25.8.07).

²⁵⁸ BGRIMM stands for "Beijing General Research Institute of Mining & Metallurgy". See BBC News (21.4.2005).

^{(21.4.2005).} ²⁵⁹ The Environmental Manager of ZCCM-IH explains that "as soon as the effluent touches the natural environment, then they are regulated under the EPPCA" (23.7.07).

The second piece of legislation of relevance is the Mines and Minerals (Environmental) Act (No. 41, 1996), which provides for the establishment of the regulatory agency Mines Safety Department (MSD) under the Ministry of Mines. The MSD covers environmental, health and safety issues *within* the plant area of mining companies, specifically. The MSD does not charge user fees for its work and was considered heavily underfunded by several respondents.

The Ministry of Mines also oversees the sector in a less hands-on fashion through statutory reporting requirements (several of which are specified in the DAs).²⁶⁰ The Mines and Minerals Act (No. 31) of 1995 also provides for the Environmental Protection Fund (EPF) (section 82: 1), to ensure that mines set aside funds for de-commissioning once mineral deposits are depleted. The MSD is the regulatory agency in charge of implementing the EPF.

The ECZ and the MSD overlap somewhat in their mandates to address environmental and social issues. First, both address environmental issues, an overlap that reflects the historical context of mining regulations in Zambia. An ECZ official explains how "in the past [before the passing of EPPCA] everything that had to do with mining, including environmental issues, had to be put in the [Mines and Minerals Act], since this was the only piece of legislation. Now with the enactment of the EPPCA ... we now had authority in two separate pieces of legislation, to basically do the same work ... So to avoid putting too much pressure on mine owners, we had to find a way to address that, because it would mean that they had to submit two different EIAs to two different regulators." (ECZ official 1, 11.9.07). To address this issue, a memorandum of understanding (MoU) was drawn up to allocate responsibilities across the ECZ and the MSD (ECZ official 5, 14.8.07).

Second, both address health and safety and wider social issues. For the MSD this is a direct remit, for the ECZ it is indirect (through the Social Management Plan, SMP, described to me by several respondents as a component of the EMP). DAs provide a foundation for companies to develop SMPs by including clauses on the management of "social assets" by the mines.²⁶¹ Despite such clauses, companies were not seen as contributing much in the way of social services. Limited enforcement capacity and little knowledge of the DAs (and their "social assets" clauses) reduced accountability of firms to any such commitments.²⁶² Among the mines I studied, by July 2007 only KCM had an SMP, inherited from AngloAmerican, while MCM was in the final stages of developing one.

²⁶⁰ Reporting requirements include, *inter alia*, quarterly reports on mined ore and average grades, finished copper produced, amount of copper ore refined by third-parties, and general progress on investment plans set out at privatisation. These were not accessible to me and I got the impression that companies had often failed to comply with this requirement. This could be a function of the lacking enforcement of these requirements, which I discus later in this chapter.

²⁶¹ The DAs make explicit references to "social assets" (relating to education, healthcare, recreation, and municipal services). Companies are generally given options whether to provide services themselves or ensure that employees are given additional benefits to ensure their ability to access e.g. schooling and health services. With regard to municipal services, KCM and MCM have explicit clauses that the companies do not have to pay for such services, whereas in the case of NFCA it appears that the company is responsible for providing these services to employees (the municipality provides services "at cost" to NFCA who provides them free of charge to employees, NFCA DA p.83).

²⁶² This lack of transparency shifted the discourse away from the actual state-firm agreements to moral notions of what companies 'should' or 'should not' be doing in the area of community investment (see chapter four).

6.2.3 Labour relations in the mining sector

Employment in the post-privatisation mining sector has fallen short of expectations. Charles Muchimba, director of Research at the Mineworkers Union of Zambia (MUZ), claims the union had about 60,000 members in 1995. The number of jobs in the mines fell sharply in the immediate aftermath of privatisation, but has since rebounded to a level where the mining industry by 2007 employed "around 30,000 permanent workers." (Muchimba, 3.8.07).

There are several reasons why the supply of employment opportunities has not kept pace with the expanding sector. In part this is due to the trend of mining operations becoming increasingly capital intensive, in tandem with a growing demand for more skilled workers (of which the supply in Zambia is limited). There are also structural shifts in the sector towards greater outsourcing of non-core activities. As at year-end 2006 approximately half of the 18,820 employees engaged across MCM's mine sites were not on the payroll of the mining company, but rather on those of contractors, contracted to do specific and mainly shorter-term jobs, such as civil engineering. These contractors are typically not unionised and receive limited health insurance and other benefits.²⁶³

Unions in Zambia have historically been powerful, providing the base for Frederick Chiluba to emerge as the leader of the Movement for Multi-party Democracy in the late 1980s.²⁶⁴ I found that all the mining companies had union agreements with either MUZ or the more recently established National Union of Mining and Allied Workers (NUMAUW), or both. The bargaining of collective agreements with the unions takes place through a sequenced process where the first agreements struck set the benchmark for others to follow.²⁶⁵ However the order of negotiations does not appear to encompass a strategic element but rather historical path dependencies.²⁶⁶

Labour relations are governed by the Industrial Relations Act, and the rights to collective bargaining and freedom of association are enshrined in the law. However several institutional weaknesses and weak government capacity to inspect (in particular smaller companies) – undermine labour rights and result in tensions with mining companies.

6.3 Organisational routines and objectives

This section discusses various routines and objectives of case-study companies with respect of relevance to environmental, health and safety, and labour practices. These routines and objectives shape how a firm engages with regulators and other stakeholders. They are determined by a mix of influences that may be internal as well as external to the Zambian operating context. My aim here is to discuss key organisational features that emerged during fieldwork, and how they varied across

²⁶³ As Lungu at the CBU notes, "short-term contracts is the trend the world over, and it would not be a problem if there were social safety nets in place" (31.10.07).

²⁶⁴ Whilst powerful, unions have also been disorganised with union decision-making fragmented between three levels: central, branch, and the workers themselves (Larmer 2006).

²⁶⁵ "Like at Chibuluma ... [t]hey made reference to NFCA and KCM. Because when you demand for example 30%, then they 'say how come at CM the union is accepting 8%?' When you compare the salaries at CM and Chibuluma, the former is much better, so even 8% is a lot." (Lengwe, 4.12.07).

²⁶⁶ Lengwe argues that "[w]e just compare with the previous years negotiations in the same mine. But we don't work towards it being a role model or something, no. It is the conditions that dictate." (4.12.07).

companies, rather than offer a complete taxonomy of all relevant organisational routines and aims.

I first look at approaches to *environmental management and reporting*, followed by the role of *technology* in shaping regulatory compliance. I proceed to discuss how the organisational *objective of minimising costs* shapes behaviour within the regulatory sphere. This is followed by an overview of mining companies' *safety practices* and reporting. I then look at the organisational *aim of stability* and how mining companies pursue stable relations with communities through various community development activities. I then turn to labour relations, and discuss, first, variations in practices around *industrial relations* between expatriate management and mineworkers. Next I focus on *labour relations within management* of companies, in particular at the role of training and retention of local Zambian managers. Finally I offer some thoughts with respect to the role of *language and culture* in shaping labour relations as well as safety practices within the mines.

6.3.1 Environmental management systems and reporting

The environmental management systems and standards through which companies assess and manage their environmental impacts are clearly shaped by what is required under host-country legal frameworks. However companies are also influenced by their international institutional context. I discuss here, first, the evidence that environmental management varies across companies depending on their institutional background. I then look specifically at two sources of influences external to Zambia, namely voluntary standards and requirements arising from international capital markets.

A senior official at the ECZ claims there is "very good evidence" that mining companies are influenced by international environmental standards. He suggests that standards are relatively higher among "companies that are coming from countries with strong environmental regulations, I'm talking about the western world generally, Canada, Australia and so on. They bring those standards with them, and there is very good evidence that they want to follow the standards to the letter ... In many cases ... they want to use the international best practices. Meaning that they are even going beyond what we have put as national standards" (ECZ official 4, 19.11.07).

Environmental standards and procedures include voluntary international standards as well as initiatives mandated by international capital markets. Voluntary international standards, such as ISO14001 standard for environmental management systems, appear to play some role in the regulatory sphere of Zambia's mining sector. At the time of fieldwork two out of KCM's four mines sites were ISO14001 certified: the Environmental Manager of KCM explains how "soon after [Vedanta took over] we embarked on ISO14000 ... And earlier this year we got certification for Konkola [KDMP] and Nampundwe". The company is also accredited to OHSAS (Occupation Health and Safety Assessment Systems) 18001. FQML was in the process of implementing the ISO14001 environmental management standards, however the company had not yet decided to seek certification.²⁶⁷ At CM, the Superintendent of Environment, Health & Safety (EHS) states that management's "aim or target is by 2009 we must meet the ISO14001 and the OHSAS18001 – the international standard in safety. So by that certification we would have met international standards, which is

²⁶⁷ My respondent explains: "there is an element of continuous improvement to the certification scheme ... the yearly independent audit will look for such improvement ... and it may not always make business sense ... but failure to improve can be associated with bad publicity." (FQML mgr 2, 17.9.07).

what the Board wants. So we have to come up with targets and activities that will be in line with the expectations of the Board." (Chihili, 1.11.07). I found no evidence of any such international standards in place at NFCA.

International capital markets play an important role in setting out requirements for environmental management at international mining companies. A donor representative I spoke to claimed that "[a] lot of people that I have spoken to in the [mining] industry would argue that the standards of environmental care, social responsibility, supplier practices and so on are dictated not by the regulatory environment within the country, but their global policy on such an issue, and they will argue that the global policy is set for them by the stock market" (MSDP techn. ass't, 22.8.07).²⁶⁸

The group environmental manager of FQML highlights two governance initiatives that emanate from the firm's stock exchange listings: one mandatory requirement is the 'Closure Fund' required under Toronto Stock Exchange rules, to which allocations must be set aside for plant de-commissioning. Another – voluntary) – initiative is the Carbon Disclosure Commission, linked to the London Stock Exchange, under which firms commit to calculate, disclose and then audit (through third-party consultants) their carbon footprint. My respondent recalls how he "tried to ask other mines in Zambia, to compare against our peers, but nobody had done this exercise." (FQML mgr 2, 17.9.07).²⁶⁹

The Equator Principles (EPs) play a significant and growing role in debt as well as equity capital markets (Amalric 2005) and bear on the internal environmental and social management routines of CM as well as FQML. CM has made its processes EP-compliant in preparation for a listing on the London Stock Exchange. CFO Anil Bangur explains that the long-term nature of mining means that equity investors "like to see these costs taken out at an early stage" (29.11.07), i.e. incorporated into financial forecasts. The potential for EPs to complement local regulations in Zambia is illustrated by comments from an environmental manager at FQML. He observes, rather wryly, that "the only difference" between the EPs and the Environmental Impact Assessment legislation in Zambia is fact that "the former is enforced" (FQML mgr 2, 7.11.07).

²⁶⁸ My respondent thinks that western companies "would argue that ... the standards set by the stock market ultimately, or shareholders ultimately, are always more demanding ... the big pension funds, retail investors, insurances companies, all of us, in the North if you like, have become much more sensitive of what people are doing with our investment dollar." He claims western companies "are arguing and using this as a debating tool, and very strongly, saying you want us, much more than you want the ones from the east, because they don't have the same standards." (MSDP techn. ass't, 22.8.07).

²⁶⁹ He explains that the need to compare against local peers arises from the fact that companies in Zambia use mainly hydro-generated power, and are thus quite 'green' to begin with.

Box 7: The Equator Principles at First Quantum

Andrew Spivey, FQML Group Environmental Manager, explains that the EPs require quarterly reporting on the implementation of the 'Equator Principles action plan'. This document functions like an EMP, stating what the company will do to address environmental and social issues over a future time frame. EP reporting requirements include third-party auditing by independent engineering companies who audit ("read and criticise") the "quarterly progress reports" that FQML submits to report against the EP action plan. Once a year these consultants also do a site visit to inspect, for example if "a hydro-geological structure has to be redone they come and look that it was done properly". My respondent estimates this cost at about \$50k per year in professional fees, noting that "you also have to pay plane tickets for these guys". However, he does not see this figure directly, as it is deducted by the bank (or rather added to the loan outstanding) – the consultants (SRK in their case) do their work and then invoice the bank.

6.3.2 Technology

The technology adopted by companies is a significant determinant of environmental and safety performance. The choices of technologies appear to reflect the routines and aims espoused by current management, as well as the technological legacies of old operations acquired at privatisation (see section 4.4.6).

At privatisation Zambia's environmental standards were seen as excessively stringent in relation to the old infrastructure that the mines had been using under ZCCM management. During consultations in 1995-96 to develop stricter standards, "ZCCM said 'look you're asking for miracles from us'. The technology they were using was obsolete. So they said we have to strike a balance, so we introduced what we call the long-term emissions limits arrangement: present, intermediate and long-term' (ECZ official 2, 28.8.07).

Incoming companies were thus given exemptions from performance standards (e.g. concentration of sulphur in tailings) required under the legal framework. The Environmental Manager at KCM explains that when Anglo-American took majority-ownership of KCM in 2000, "they found the plant in a deplorable state. They were given some concessions ... that there would be an interim period for refurbishing the plant, and during that interim period we will not prosecute for polluting the water for instance." (Phiri, 12.10.07).²⁷⁰

A respondent at the ECZ argues that many companies taking over old mines were reluctant to invest in rehabilitation and maintenance: "you find that some companies ... especially those that have taken up pre-existing companies, with a lot of inherent environmental problems, you find actually down grading, when they start operating that company they want to operate it the way it was always operated ... There are a couple of examples, of course I can't mention them specifically, but you see this." (ECZ official, 19.11.07).

Another ECZ official notes that the ECZ has "faced real challenges with the Chinese investors, because their technology is so dirty". She suggests this may be either due to a desire to minimise costs, or because they are "experimenting" with technology. In contrast she observes that "[t]he Australians [operating Lumwana mine], on the other hand, they are ready to comply. They are proactive, they approach ECZ and say 'what should we do?'" (ECZ official 1, 11.9.07).

²⁷⁰ Such arrangements may go on for a long time, see for example the case of La Oroya mine in Peru (MiningWeekly 29.6.2009). In the case of KCM my respondent claims that "that window has passed. They were allowed two-three years after investing." (12.10.07).

6.3.3 The objective of minimising costs

The objective of minimising costs not directly linked to production appeared to be a general feature of the mining companies under study. The aim of minimising costs is clearly seen in some discussions around technology choices (see previous subsection), as well as in concerns over Zambia's investment climate as being cumbersome and 'high-cost' relative to other countries in the region (e.g. Botswana).

Concerns over high costs of doing business also manifest themselves in relation to procedural compliance costs. Several companies felt that fees charged by the ECZ (e.g. for reviewing environmental impact assessments or issuing licences) were expensive.²⁷¹ The General Manager of the Chamber of Mines (CoM) explains that "the mining companies have been concerned about the high fees for EMPs, and the answer [from government] has been the regulations are being reviewed, and when they are through the fees will be different." (Bantubonse, 10.10.07). Different attitudes concerning the benefits to business of minimising labour-related costs help explain the variation in salaries for mineworkers (see figure 4).²⁷²

A strategy of minimising labour costs can affect company performance negatively in the longer term. As one informant at NFCA notes: "I think a happy employee works better, so it is good for the company in the long run. What you find is that at NFCA, people are always resigning, there is always a vacancy ... That is the first clue they should get that something is wrong ... That is a company where you always find a vacancy, they are always interviewing." (Maboshe, 25.8.07).²⁷³

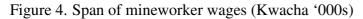
Among companies studied KCM and NFCA appeared to be particularly associated with cost-minimisation objectives (including in the area of supplier practices, see chapter seven). Both operate high-cost mines (Gao, 21.8.07; Chitambala, 17.9.07). In the context of booming copper prices a cost-minimisation strategy appeared to be associated with reluctance to invest in (unproductive) maintenance, putting greater pressures on the use of existing infrastructure. For instance KCM's corporate strategy emphasises cost reduction through the use of existing infrastructure, a potentially hazardous approach when the infrastructure on the Copperbelt suffers from decades of under-investment.²⁷⁴

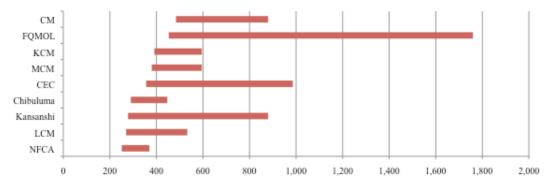
²⁷¹ For instance, the Company Secretary at CM argues that ECZ's "charges are exorbitant for everything" (4.10.07).

²⁷² One respondent comments on NFCA management's reluctance to spend money on non-productive activities, observing that "the whole time I've been there they have never held a function, which can bring together ... like a family day, like the other mines do, nothing like that" (Maboshe, 25.8.07).
²⁷³ A BBC report quotes another miner as saying "[a]s soon as I find employment somewhere I will

leave the Chinese" (BBC News 4.6.07).

²⁷⁴ Vedanta Resources plc., shareholder presentation of preliminary results to 30 June 2005 (available online).





Source: Mineworkers Union of Zambia.

6.3.4 Safety practices and reporting

Providing a safe working environment appeared to be high on the agenda for all the mines. This observation is based on my experience of visiting the different mine sites, and corroborated by the impressions of donor representatives. A group of donor representatives visited some of the mines on 13-16 May 2007, and two of my donor respondents subsequently, and separately, stressed their impressions of mining companies as safety-conscious (Riby, 16.8.07; Gerner, 19.7.07)²⁷⁵ Mining companies the donors met with included KCM, FQML/Bwana Mkubwa and Enya/LCM but not NFCA (and as such these impressions do not reflect upon NFCA).²⁷⁶

Deputy CEO Gao at NFCA separately stressed that safety was a key concern and that "[e]veryone must follow the safety rules" (21.8.07). He notes, however, that the company has evolved in its approach: "I can understand before, when we come in, in China these regulations were not always strictly followed. But after one or two years, of practice, we also learn by ourselves. Here must be following the law, we follow it strictly." (Ibid.).

Where Zambia's regulations are considered insufficient companies may put in place their own systems to uphold health-and-safety standards, based on their experiences elsewhere. A safety specialist at FQML observes that in Canada a mining company must (as a condition of its licenses) have insurance as well as a government representative located on-site. He notes that this may seem arbitrary, but if something does go awry it becomes easy to allocate responsibility: "We don't have that here, as soon as anyone falls or dies, all of a sudden we have all these people creeping out of places, saying 'you didn't follow the procedures'. What procedures? We put in our own procedures ... based on the experience that we have on other mine sites." (FQML mgr 4, 22.11.07). Reasons why companies see the need to uphold strict safety practices include the insurance policies that companies take out. One donor representative recalls in reference to KCM that "[t]hey told us, we have life insurance for our workers ... if we don't allow foreign inspectors, we pay a huge premium." (Gerner, 19.7.07).

²⁷⁵ The group included representatives from seven bilateral and multilateral donors.

²⁷⁶ In addition, the delegation met with the Copperbelt Energy Corporation, the Chamber of Mines, the Kitwe City Council, and Professor John Lungu of the CBU.

6.3.5 Stability and corporate social responsibility

Companies generally appeared concerned with maintaining stable relationships with all stakeholders, including employees and labour unions as well as local communities. At the height of the boom, various regulatory incidents, as well as renewed focus on the sector in the media (including debates around the DAs), meant greater criticisms against the mines in the media, with negative reputational impacts on the mines. When mining companies' reputations gets tarnished, it plays into the hands of the political opposition, which in Zambia had explicitly sought to constrain the activities foreign investors (as discussed in chapter four).

One way in which a company can deal with reputational issues is through community development projects (including health, education, and economic development). Such projects, to the extent they deliver benefits to satisfy the expectations of local communities, can promote stability in stakeholder relations. The Zambian government has a similar interest in seeing foreign mining companies 'giving back' to communities, and tried – following the 2006 election – to present a picture of the mining sector as contributing to local development and community welfare. A press statement from mid-2007 states that "government is doing everything possible to encourage mining companies to plough back part of their profits into communities", attempting to show that the mining companies are engaging with social and community issues.

My estimates suggest that mining companies were spending a mere \$1-4m each on social and community investment projects annually (see box below).²⁷⁷ In an expanding sector the potential for CSR to significantly contribute to local development is particularly limited: as a manager at FQML observes, it is difficult to motivate spending on CSR and community projects during a ramp-up phase, because "you are not making any income, and yet you are expected to contribute." (FQML mgr 2, 17.9.07).

Companies may pursue a positive reputation and stable stakeholder relations through a commitment to operate in accordance with international best practices (implementing rigorous routines and processes in the fields of environmental, health and safety, and labour relations). One respondent at FQML argues that doing so promotes his firm's objective of stability, but also makes good business sense for his firm: "We strive to have zero accidents, because that is all part of good management. If you are having fatalities or Lost Time Injuries (LTI), it is not only indicative of you having accidents, you will be damaging equipment as well, and you will lower your productivity." (FQML mgr 1, 11.10.07)

International capital markets have a range of routine reporting requirements that play a key role in disseminating any negative news from environmental or safety infringements. Over time these routines become embedded in values and norms of what the organisation *should* be and do. My respondents thus portray it as more than a simple cost-benefit calculation: "[w]e don't really see it as we don't want to report fatalities or lost-time injuries to the stock exchange, so that is why we have a good

²⁷⁷ Health-related examples include malaria, HIV/AIDS and general subsidisation of community health services; infrastructure-related examples include road rehabilitation, drilling of boreholes (wells), as well as construction and rehabilitation of education facilities. The companies mentioned in the press statement (in order of appearance) were Chibuluma, MCM, KCM, Kansanshi (FQML) and Enya (operating both CM and LCM). This statement claims that "each company will," in order "to keep the public informed … continue to submit to the Ministry of Mines … a quarterly report on its corporate social responsibility activities." However, when I asked about this report, neither my two interviewees from the Ministry of Mines nor respondents at the mines themselves said that such a report existed.

safety policy. I wouldn't necessarily say that is the case, you have a good safety policy because you want to run your mine efficiently. And because it is the right way to do it." (FQML mgr 1, 11.10.07).

Above-average environmental and labour governance and a reputation for social investment can also provide intangible benefits to a company. One of my respondents at FQML notes that "if you talk to the Copperbelt Permanent Secretary, and Copperbelt Ministers, which company is doing most CSR ... FQML will always come up. And that does open doors. However it is one of economic benefits that you cannot quantify." (11.10.07). He suggests that cultivating a 'good reputation' by engaging with local actors can promote stability for the firm. This can be contrasted with the alternative strategy of seeking a close GRZ relationships and relying on GRZ protection (see section 4.3.4).

Box 8: CSR among the case study companies

There are clear variations in how much mining companies contribute to, and how they approach, local community development. In Zambia I found CSR to be firmly on the agenda, but still very much reactionary to public sentiment, and limited in scope.

There are three modalities of CSR spending evident among firms surveyed for this study: discretionary, 'memoranda of understanding' (MOUs) with local government, and foundations. At KCM community investment is carried out in partnership with local councils, using MOUs. At FQML the company policy is to provide 1% of overall group profit to CSR, which is thus formalised in the organisations budgetary processes. However, the company varies across its mining operations in terms of how this is implemented: at Bwana Mkubwa c.\$650,000 per annum is spent at the discretion of one manager (FQML mgr 3, 28.8.07), whereas at Kansanshi the process is more participatory: FQML contributes to a foundation (\$1.4m in 2008) whose management committee includes representatives of local communities.

These differences reflect the more urban location and larger scope of Kansanshi's operations, although the process has been criticised as not having proper guidelines, with Sinkamba at CBE pointing to "wrangling in that foundation, over who should decide what" (Sinkamba, 14.10.07).

Elsewhere CM created a microfinance provider called Bakakomba, "their vehicle into doing something for the community" (Muchimba, 3.8.07). NFCA has historically not been visible in this area of CSR according to Muchimba at MUZ. He notes that "[i]t is only now that they are embellishing their investment with 'we'll do this, we'll do that'." Initiatives at NFCA include, according to the government newspaper, \$400,000 on infrastructure rehabilitation and education and empowerment plans, with a further \$200,000 earmarked for upgrading equipment at the Sino-Zam Friendship Hospital (announced during a visit by Presidential Mwanawasa in July 2007, see ToZ, 7.7.2007).

6.3.6 Labour practices and industrial relations

The directly employed staff among the case study firms (i.e. employees on the mining company's payroll) are all either permanent employees or on fixed-term contracts, typically for one-to-three years. There is evidence of convergence in the sector, and at NFCA some employees have recently moved from being on fixed-term contracts to being permanent employees.²⁷⁸ All directly employed staff are generally members of

²⁷⁸ However this is not all beneficial according to my respondent: "if you decide to leave, you lose you accrued benefits" (S.Banda, 8.9.07). This may well serve the interests of NFCA management, and may be an explicit strategy to the extent that managers know they have sub-standard employment conditions: employees become 'locked in', unable to *afford* move to better-paying competitors.

either MUZ or NUMAW, and the variations among companies in their relations with unions appear limited. The exception is NFCA, who in Muchimba's (MUZ) experience "appear[s] not familiar to the practices of trade unionism, and we have had to induct them to play the ball. They have played along, but there is a lot of push and pull and pull." (Muchimba, 3.8.07).²⁷⁹

My respondent attributes the slow process of negotiations around collective agreements to what he calls "delaying tactics" of NFCA and other Chinese firms: "[1]et's take the BGRIMM as a case. Those unfortunate souls that perished, they had expressed their desire to join this union. Almost a year and a half before they met their death. During that period, management had stood their ground, and used delaying tactics. And they never came to have a voice." (Ibid.). He adds that the union has had a similar experience with NFCA's sister companies on the Copperbelt, that "from the time that you give them a simple draft (resolution) agreement, it will take a whole bureaucratic way of doing things, where they would send it to China, have it translated in Chinese, get it back. And it is taking a year now, again. And workers become frustrated, they don't have a voice." (Muchimba, 3.8.07).

I was unable to conclude whether NFCA was deliberately using "delaying tactics" or whether their slow response reflected internal inefficiencies of a company that appeared heavily reliant on 'sign-off' from the parent company in China (see section 4.4.3). Muchimba at MUZ alludes to this when he describes it as "a slippery type of investment" that "ha[s] got a unique different management style, which is rather bureaucratic, with a lot of government-to-government involvement." (3.8.07).

Difficulties in reaching agreement with unions can also be attributed to the relative segregation of Chinese companies from the wider local economy and society (Mohan & Kale 2007). Muchimba observes that "[t]hey are secluded, kind of, and difficult to mingle and associate with ... Hasn't endeared them well, and they have not really integrated themselves into the mining community." (3.8.07).

6.3.7 Expatriate and local management relations

This section looks at relationships between expatriate managers and local managerial employees within companies. Understanding the particularities of recruitment and retention of managers is important, for two reasons. First, these individuals are often the flag-bearers of an organisation's administrative legacy, i.e. the routines and aims that have served the organisation in the past. Second, more senior-level Zambian employees, even when they are new recruits, will be familiar with local business practices and stakeholder expectations (see section 2.5.5).

I found that most companies surveyed tended to retain managerial staff, even following changes in ownership (e.g. at KCM in 2004 and at Chambishi Metals in 2003) (Masupha, 12.11.07; Mwenya 4.10.07). First Quantum similarly retained many managers and staff who had been with the firm since the late 1990s (FQML mgr 1, 2.12.07). However at NFCA the typical time Chinese managers spent in Zambia was three years. As expatriate managers spend more time in the host country, their understanding of social norms governing labour relations – and what constitutes 'acceptable' behaviour – evolves: Banda at NFCA thus reflects that Chinese managers

²⁷⁹ Muchimba observes that industrial relations at NFCA remain "lethargic" due to the legacies of the BGRIMM disaster (3.8.07).

who have stayed longer in Zambia are more likely to let Zambian staff take leave to attend funerals (a highly important socio-cultural practice in Zambia).²⁸⁰

An example of inefficient internal management controls at NFCA (see previous sub-section) was the widespread practice whereby more senior Zambians "create vacancies" and fill them by hiring relatives (Maboshe, 2.12.07). My respondent sees it as very demotivating for workers, as it reduces job security.²⁸¹ This nepotism among the lower ranks of management makes the company less efficient, since the most highly qualified people are not chosen for the job. It also has direct cost implications: when people get unfair dismissals, they often go to a lawyer and file a lawsuit. Banda explains that "that's why we have so many lawsuits … And the company ends up paying!" (2.12.07).

Most of the mining companies stress the value of training and development of Zambian staff. KCM, for instance, operates a 'global leadership' programme whereby Zambians go to India and vice versa for between six months and two years (Chitambala, 17.9.07). At NFCA, however, there are no similar programmes to promote long-term development of labour. This may reflect the objective of minimising costs not related to production: a Zambian employee at NFCA notes that "[r]ight now they don't even have an HIV/AIDS policy [in contrast to other foreign mining companies] ... We are having a very hard time to launch it, and we have invited GRZ officials to come and launch it, but they are refusing to give us any money ... NFCA [was] saying 'that is not what we came here for, we came here to mine copper'." (Maboshe, 25.8.07).

Gao at NFCA nevertheless argues that the firm takes a long-term view and that this investment must be for mutual benefit. He says "[w]e have a slogan, this is our common home" – whereas Chinese expatriates "exchange" and go back to China, for "our [c.3,000] employees, this is their home. We educate them and tell them 'this is your mine, not our mine'. As for us Chinese, we don't have to come here, we can stay in China, but our company sent us here to make this mine working smoothly. So we do a lot of education, or communication with our local employees, so they understand..." (21.8.07).²⁸² However this "education" does not appear to include the type of training and skills development that is offered to workers at some other mines, according to my respondent (S.Banda, 2.12.07).

²⁸⁰ "He said you can go, but something clicked in my mind, probably because [inaudible] this guy has stayed longer in Zambia…" (S.Banda, 2.12.07). An important observation is that it is socially unacceptable for a Zambian to not go. NFCA is hereby creating an externality of social exclusion: the firm's practices of not letting employees attend funerals can lead to the social exclusion of the individual, reducing her future social 'safety net' – not letting the employees attend funerals is thus an example of corporate social *irresponsibility* in the Zambian context.

²⁸¹ She explains that "[h]alf of the time they are employing their relatives, who haven't done anything ... You are working, they bring their relative, say 'show them around', and you are teaching them what to do, tomorrow you get non-renewal and that person is in your position." (Maboshe, 2.12.07).

²⁸² The notion that Chinese managers do not see Zambia as their home is shared by Shyam Vasant, an Indian entrepreneur. He suggests that the poor standards he has seen and heard about among Chinese business partners actually derives from their failure to see Zambia as "their home" (7.11.07).

6.3.8 Language and culture as drivers of organisational behaviour

A guard at the gates to the Chambishi Copper Smelter explains how the Chinese came and "started clearing the bush in November last year [2006], but the foundations they were starting January, February. In the beginning they were slow slow, because of the rain, but then, they went fast fast! They will start at 06:00, at 11:30 they will go for lunch to 13:30 then they will go to 17:30, eat supper, then at 19:00 hours back, up to 22:00 hours, every day ... They stay here" he says, pointing to an area next to the main gate, "[t]hey have a dining hall here – everything is here. Even the CEO stays here! But us [Zambians] we can't sleep here, not here in the bush, but they can!"

In the case of Chinese investors in particular, language divisions appear to constrain communication between expatriate management, Zambian employees and local stakeholders. Mr Gao argues that NFCA "tr[ies] to be good at communication … But we have the language problem, sometimes the equipment is manufactured in China, so the manual will be in Chinese … So we have to train people to have key operating points done by Chinese." (21.8.07).²⁸³

Language issues can explain why the secluded nature of Chinese investment discussed above extends to intra-organisational relations (between Chinese and Zambian managerial employees). At NFCA Zambian employees have very little insight into the ongoings at their company: the vast majority of internal memos appear in Mandarin only, and Zambians are wary of being seen as "asking too many questions" (Maboshe, 25.8.07).²⁸⁴

Language determines how information that reaches company decision makers will be interpreted and acted upon, and therefore how companies respond to government policies.²⁸⁵ To the extent language problems hamper the flow of information within a large-scale mine, there can be serious health, safety and environmental implications. One respondent alleges that NFCA's "Mining Department [which is] directly linked to the mining underground and the production ... have people that do not even know how to speak English." (S.Banda, 8.9.07). He is clear that this situation puts at risk the safety of the working environment: "It is very dangerous, that is why we used to experience a lot of accidents. You know NFCA was the company with most fatalities, excluding BGRIMM, underground, because of lack of communications." (Ibid.).²⁸⁶

The Company Secretary of the Chambishi Copper Smelter argues that there is less need for strict labour regulations and inspections in China because of the way in which conflicts are resolved *internally* within the firm. He claims this is made

²⁸³ My respondent claims there are "50 Chinese managers" but that "all operations [are] done by local people." This contrasts with information provided by two Zambian employees, who put the figure of Chinese expatriates at closer to 200, including foremen of teams of workers that go underground (S.Banda, 2.12.07).
²⁸⁴ My respondent reflects that "even when they are talking, or when they are holding meetings, they

²⁸⁴ My respondent reflects that "even when they are talking, or when they are holding meetings, they hold it themselves and they speak Chinese. So even if you put a Zambian, he won't understand anything. Because they speak in Chinese, they won't speak English, they always [speak] Chinese to each other ... You feel useless, how can you contribute?" (25.8.07).

²⁸⁵ As North notes, individuals and organisations only exert pressures on institutions after incorporating new information into their "belief systems", wherefore "getting it right through time requires that we perceive correctly changes in the human environment." (2005: 116).
²⁸⁶ Banda confirms that there used to be frequent beatings underground. "The problem was with the

²⁸⁶ Banda confirms that there used to be frequent beatings underground. "The problem was with the language" he explains, "he'll say 'can you drill there'. But instead of correcting you, maybe he will push you, and because you are tired, you get upset and push him back." (S.Banda, 8.9.07).

possible due to shared culture: "I think it is like this, the management and the employee in China, you can communicate very well, and it is also easy for both parties to understand each other, because we are from the same culture." (Sun, 1.11.07).

6.4 Interaction and bargaining (environmental and safety)

I now turn to the policy environment and how mining companies engage (or not) with government agents in Zambia. This section comprises four parts and begins by reviewing the institutional mechanisms of environmental, health and safety regulation in the mining sector. It then critiques the regulatory framework by pointing to several high-profile instances of regulatory failure, including environmental and safety incidents. The third part discusses in some detail the challenges of monitoring and enforcing regulations. Finally I examine the emergent pressures for policy reform, and mining companies role in articulating these pressures.

6.4.1 Regulatory institutions and their enforcement

This sub-section discusses the main regulatory instruments and enforcement mechanisms used by the government of Zambia in regulating the mining sector's environmental, health and safety performance.

6.4.1.1 Regulatory institutions, standards and requirements

New large-scale mining projects must first complete an Environmental Impact Assessment (EIA), which serves as an entry point for firms into the regulatory process and provides the basis for licensing.²⁸⁷ In the EIA the firm conducts a broad assessment of environmental impacts within the plant area as well as the link between the plant area and the external environment (ECZ official 3, 24.7.07). As part of this process the firm prepares an Environmental Impact Statement (EIS) as required under (SI 28, 1997) (the "EIA regulations"), which then – upon consultation with the ECZ – forms the basis of an Environmental Management Plan (EMP).²⁸⁸

If a company wishes to expand its operations (a common occurrence during a commodity boom) the company must prepare an Environmental Project Brief (EPB), which an ECZ official describes as "actually an EIS but on a smaller scale." (8.7.07). As an outcome of this EIA process, the ECZ issues licenses. A senior inspector explains that "[t]he idea is that if you pollute more, you will pay more, because the EPPCA is based on the polluter pays principle. If you are polluting more, your license class goes higher, and the license fees go higher." (ECZ official 3, 24.7.07). The outcomes and findings of these EIS/EPBs should then be incorporated into the EMP, explaining why managers at FQML refer to the EMP as a "live document".²⁸⁹

The EMPs thus vary from company to company and are often more relevant in setting pollution limits than industry-specific (sector-wide) legislation. The way in which companies were able to re-negotiate extensions to limits on effluents originally agreed at privatisation undermines the potential for the EMP to be used as a frame of

²⁸⁷ This requirement is provided for in the Environmental Impact Assessment SI (no. 28 of 1997).

²⁸⁸ As an ECZ official puts it, the objective of the EMP is "to set out responsibilities, who is responsible for what" (ECZ official 3, 17.8.07).

²⁸⁹ One respondent explains how "whenever you change something ... you got to update the EMP, all the time" (28.8.07; also FQML mgr 2 mentions this).

reference or benchmark.²⁹⁰ NFCA, for instance, only submitted an EMP in 2006, nine years after arriving in Zambia (ECZ official 4, 8.8.07). Lifuka at Transparency International (who has a background in environmental management) also criticises ECZ for overemphasising the EMPs whilst neglecting internal management processes. He argues there is insufficient attention paid to firms' internal routines that are supposed to guide activities towards addressing issues identified in the EMP.²⁹¹

Environmental regulations are stabilised by, and subsidiary to, companies' DAs. The Mines and Minerals (Amendment) Act makes reference to privatised companies' "environmental plan[s] ... made pursuant to any Development Agreement[s]". It indemnifies companies from "environmental liabilities" and "mine safety liabilities" as long as the purchaser of a ZCCM asset is in compliance with the EMP, except for liabilities arising "after the last date provided in the Development Agreement ... by which the purchaser's operations are due to achieve full compliance with the environmental requirements applicable under the environmental plan and with any environmental law" (MM(A)A No.2 of 2000, Sect. 4-4-c).²⁹²

The Ministry of Mines requires companies to submit a 'Plan of Operations' (PO) that details commitments in terms of quantities of ore to be mined, employment levels, and other operational data.²⁹³ The PO resembles the EMP in that it is meant to be a 'live' document, such that "if there are changes in circumstances, [the mining companies] are supposed to update it with our involvement and approval ... e.g. [they] want to build a concentrator and put up a leach plant ... It is a fundamental document forming part of their license." (Ndalama, 1.10.07). My respondent at the Ministry of Mines adds that lacking organisational capacity, which he attributes to "the inability to retain technical staff," has meant that inspections and follow-up verifications of the PO are often lacking (Ndalama, 1.10.07).

6.4.1.2 Regulatory enforcement

The main modes of enforcing regulatory standards in the area of environment, health and safety are company inspections, self-reporting and audits of the EMP. First, ECZ retains the right to inspect any company it suspects of non-compliance with the conditions contained in the licences it provides. In practice ECZ usually comes once a year to the visit companies when licenses are due for renewal. The MSD is also mandated to inspect firms' health-and-safety as well as environmental management, but inspections are not always forthcoming due to capacity constraints: a manager at FQML observes that "we generally don't get many visits from the MSD, they might visit us once or twice per year as a general rule. They don't seem to come here very often." (2.12.07).

²⁹⁰ For instance, in a letter to the ECZ dated 10 July 2006, KCM applied "for an extension to deadlines for specific commitments agreed in KCM's final EMP." This is despite the KCM EMP at privatisation stating that "KCM is committed to meeting GRZ and IFC/World Bank requirements for their facilities within three years of investing, i.e. by 31 March 2003." (AMEC 2001: 2-14)

 ²⁹¹ My respondent stresses that "management of a company ... should have a clearly articulated environmental policy, and they should have a budget as well to go along-side the implementation of the policy." (Lifuka, 20.7.07).
 ²⁹² To illustrate, KCM's DA notes that "KCM shall achieve the objectives of the KCM Final

²⁹² To illustrate, KCM's DA notes that "KCM shall achieve the objectives of the KCM Final Environmental Plan no later than the last day of the Stability Period" (KCM DA p.34), i.e. 20 years after the signing of the development agreement.

²⁹³ The PO does make some reference to environmental management, although as Senior Mining Engineer Gideon Ndalama notes "the bulk of environmental conditions is contained in the EMP, which forms part of the PO." (1.10.07).

A second enforcement mechanism is the extensive self-reporting required by companies.²⁹⁴ In the area of environmental management companies are meant to submit reports semi-annually, failing which certain actions can be taken by the regulator: an official at the ECZ explains that "when a company does not submit, that is something that is punishable by law. And if they submit a non-compliant report, that is also something that attracts certain actions." (ECZ official 4, 8.8.07). However, there appears to be a degree of leniency in this. ECZ officials review this six-monthly data, using their judgement, and if values are 'off' in one month but not others, no action might be taken (ECZ official 3, 23.7.07). This resonates with concern among stakeholders was that the regulatory framework was over-reliant on self-reporting was highlighted in the World Bank EITI scoping report (see section 5.4.4). The report argued that too much self-reporting complicates the assessment of not so much what has been paid, but what should be paid (World Bank 2008d: 18).

A third form of enforcement is through the requirement that the EMP be audited every three years.²⁹⁵ At FQML one respondent confirms that ECZ does conduct audits "by law", and that they "come every now and again, I think they came to us about two years ago, they went through our environmental systems and EMPs, to see how we're progressing" (28.8.07).

6.4.2 Environmental and safety incidents

Despite the institutional mechanisms discussed above, enforcement is imperfect and regulatory failures in the areas of environment, health and safety have been frequent. The most significant breaches of environmental and safety standards since privatisation involved KCM and NFCA, respectively. KCM was behind the largest environmental incident since privatisation in November 2006, when the company discharged highly acidic tailings (waste material) into the Kafue river, one of Zambia's main water arteries. According to the investigations by the ECZ the incident occurred because KCM had continued discharging acidic tailings despite having run out of the lime required for neutralisation. The acidic material burned through a pipeline and entered the natural environment.

Rueben Lifuka at Transparency International argued that the ECZ had been visiting KCM's Chingola sites, "indicat[ing] the weakness that they had in the way they were discharging waste water ... but still that accident did occur, because there was nothing compelling the company to ensure that they put in place new measures. I mean they took note of what ECZ were saying, but they didn't investigate further and ensure that appropriate measures were taken into consideration." (20.7.07). A manager at FQML adds to this, noting that "the Kafue stream was blue from copper content" and that "it wasn't a surprise ... it had been happening for years, small spills and small spills" (FQML mgr 2, 17.9.07).

At NFCA a much-publicised incident took place in April 2005 when the explosives-manufacturing plant BGRIMM, a subsidiary of NFCA, was levelled to the ground in an explosion that killed all fifty-four people working in the plant (BBC News 21.4.2005). Accountability over the incident was limited: a report was presented to Parliament but never made public. It highlighted lack of safety standards

²⁹⁴ Livernois & McKenna (1999) review the economic rationale for regulatory self-reporting.

²⁹⁵ My respondents at the ECZ confirms that this is an appropriate time frame, given the costliness and labour-intensity of such audits (various). Daniel Chihili, Superintendent of Environment, Health and Safety at CM, explains how "the [CM] EMP was done in 2001, and 2004, the law requires us to update it every three years. I just updated it in April 2007" (1.11.07).

and lack of training in the handling of detonator devices (ECZ official 1, 11.9.07).²⁹⁶ It also emerged that the company had breached labour regulations by not keeping adequate records of workers: one employee recounts how identification of those perished required company representatives going into the nearby township to search for weeping families (S.Banda, 8.9.07).²⁹⁷

Other incidents took place at CM, where the new owners – like their predecessors – continued to experience technical problems with their copper and cobalt smelter. The smelter was ordered to be shut down by the MSD following an explosion on 23 April 2007 that injured four workers. This was the third accident at CM in 2007, following two accidents earlier in the year that injured a total of eight miners (Metals Place 25.4.2007). At NFCA a waste-transportation pipeline failed on 8 December 2006, causing waste material (tailings) to be discharged into the environment (ECZ correspondence 11.12.06).

At MCM there were, according to a Senior Inspector at the ECZ (who worked on MCM's smelter in Mufulira around the time of privatisation), "a lot of fugitive gases" (ECZ official 2, 28.8.07). Asked whether he thought this related more to technological efficiency or conscious cost-cutting, he surmises that "[i]t is a combination, but more on the side of cutting corners" (Ibid.).

Pin-pointing company-specific trends more generally proved difficult. A senior inspector at the MSD was one of few government respondents willing to speak openly about how practices varied across the mines. He observes that "it does vary to a certain degree. But except for the Chinese the rest are more or less the same. The Chinese are quite apprehensive when they hear that there is an inspector around. They get worried. But the others, they are quite confident, they don't get bothered so much, most of the time they have their house in order ... our colleagues the Chinese are still adjusting to certain impositions of the law, so they get worried that you will find them wanting in this or that area." (MSD inspector, 27.8.07).

6.4.3 Enforcement challenges

This sub-section examines in some detail why the regulatory framework in place has failed to prevent the regulatory failures discussed in the previous section. I found constraints and challenges to regulatory enforcement to be multifaceted, including: outdated legislation, lack of resources, competition over skills, political intervention, and limited regulatory clarity.

6.4.3.1 Outdated legislation

Two mining company respondents highlighted the outdated or inappropriate nature of existing mining regulation. The Superindendent of EHS at CM felt that the enforcement of environmental, health and safety regulation across the mines was consistent, but argued that reform was needed "because the mining methods have changed, and the regulations have not been revised for a while." (Chihili, 1.11.07). The Environmental Manager at KCM echoed this point when he argued that regulations are often out of touch with "modern mining methods" in ways that

²⁹⁶ I went to the National Assembly (Parliament) to inquire about this, but the rather helpful official I spoke claimed he was not aware of any reports following BGRIMM.

²⁹⁷ Peter Sinkamba and his NGO Citizens for a Better Environment made a petition to the Minister in July 2007 requesting regarding greater disclosure surrounding the BGRIMM incident. He said he could share this correspondence with me, but these documents were not accessible at the time of our meeting.

counteract best-practice environmental management (Phiri, 12.10.07).²⁹⁸ Another issue raised by several respondents was the limited deterrent of fines, given statutory fines set in a historical context of a much stronger Kwacha, which become very small in today's terms.²⁹⁹

6.4.3.2 Resource constraints

Regulatory agencies faced financial as well as human resources constraints. Chihili at CM noted that MSD and ECZ needed to "boost their capacity and manpower so that they can regularly visit the mines." (1.11.07). A lack of funding appears to result in limited follow-ups on compliance (Ndalama, 1.10.07), creating demand for rent-seeking among inspectors (ECZ official 4, 19.11.07).³⁰⁰ Capacity constraints may also explain the CM Company Secretary's view that ECZ's processes seem slow: "[t]hey issue many licenses but it always takes a long time. [CM's] environmental people always have to remind them and remind them." (4.10.07).

Shortfalls in the government's organisational capacity may also limit firms' ability to plan ahead and follow a pre-agreed investment path. As the Company Secretary of CCS notes, "the only problem sometimes is that the GRZ is not quite efficient. Sometimes you apply for something, you don't know when they will approve it" (1.11.07). Mining companies thus often have to spend resources following up with the GRZ on regulatory matters.

6.4.3.3 Competition over skills

Competition over mining-related skills increases when the sector is expanding and is, as noted in section 4.4.5, one of the few areas in which large mining companies in Zambia compete. The shortage of certain skills in Zambia meant that engineers and managers would often move from the Ministry of Mines to better-paying mining firms. A senior mining engineer at the Ministry of Mines recalls how he attempted to recruit eighteen geologists in early 2007 but was unable to recruit a single one (Ndalama, 1.10.07). Engineers at the ECZ and the MSD were also routinely poached by foreign mining companies, leading one inspector at the MSD referring to his organisation as a "training ground" (MSD inspector, 27.8.07).

The inability of the state to retain experienced staff undermines the efficacy of regulatory agencies: an inexperienced regulator is less likely to spot breaches in compliance. Moreover, lack of technical skills is a particular problem for regulatory activities in high-technology industries. As one respondent notes, "environmental

²⁹⁸ Phiri gives a technical example based on the statutory limit of sulphites in some tailings dams being 1500mg/l. KCM would like to remove these sulphites (i.e. clean up) by precipitating (solidifying) this material, and did a study together with engineers from the University of Zambia which concluded that a concentration of 1750mg/l was required in order for the necessary precipitation to take place.
²⁹⁹ As Lungu at the CBU notes, "the government of Zambia has never put an economic price on things

²⁹⁹ As Lungu at the CBU notes, "the government of Zambia has never put an economic price on things – if you run over a person, it is K2m [\$500]" (31.10.07). This is also mentioned by an official at the ECZ (8.8.07).

³⁰⁰ My respondent explains how "there is always this constant battle, when inspectors go out there" and that "this is at every level, in fact I was recently with the Director and the Board Chairman of ECZ on the Copperbelt, and we were trying to see this smelter that was popping up from nowhere, and we went there to tell them it was in the wrong place for this and that reason, and as we are leaving, this person actually takes some money out of his pocket, a wad of cash and says this is for your drink. Obviously you cannot call it a bribe, but it was meant to be a bribe. So the Director says just give it to the workers. I can assure you that the intention of that gesture, was obviously to get a favourable treatment. So those things are quite real, whenever you have officers that go out there, there is always going to be that kind of thing." (ECZ official 4, 19.11.07).

management [in mining] is a dynamic phenomenon. It changes and you need to keep constantly developing your skills" (ECZ official 3, 24.7.07).

6.4.3.4 Political intervention

The political intervention discussed in chapter four appeared to be pervasive in the areas of environmental, health and safety regulations, thereby constraining the work of agencies such as the ECZ and MSD. According to one of my respondents at FQML, "the ECZ has a lot of discretion ... but they are also under pressure ... Sometimes you see them flexing their muscles only to be smacked over their fingers." (FQML mgr 2, 17.9.07).³⁰¹

I found evidence of political intervention in relation to both the BGRIMM (NFCA) and the Kafue (KCM) incidents. An official at the ECZ explains how it was seeking an investigation into BGRIMM because of NFCA's application for licenses to rebuild the factory. She explains that the President himself gave the go-ahead for reconstruction, making "a public pronouncement to that effect during a visit NFCA in early 2007" (ECZ official 1, 26.2.08), despite the fact that impact assessments and standard procedures had yet to be concluded. My respondent acknowledges that "obviously when a head of state makes such pronouncements, it has an effect on regulators, because in the mind of regulators they will be sort of influenced by that."³⁰²

In the case of KCM's pollution of the Kafue river the ECZ would have been within the law if they arrested the CEO of KCM, given powers provided to the ECZ in 1999 amendments to the EPPCA.³⁰³ Lifuka at Transparency International claims "they had prepared all the documentation to do [just] that ... but they got instructions, from what we hear, from the President to not do that. And in any case, KCM had created a lot of jobs, and it was going to send the wrong signals about Zambia as an investment destination etc." (Lifuka, 20.7.07; see also Sinkamba, 1.8.07).³⁰⁴

Importantly, this intervention was also within the law, as it were. There are provisions in the Environmental Impact Assessment regulations (clause 24) that allow Minister of Environment to overrule ECZ decisions. To illustrate, in May 2007, the Zambian Parliament questioned ECZ Director Edward Zulu about two projects that were going ahead despite ECZ opinion that project plans were environmentally unsound. Zulu referred to the clause in the EPPCA giving firms the right of appeal to the Ministry of Environment if unhappy with ECZ decisions, noting that "we rejected

³⁰¹ He speculates that there is a strategic element to the application of ECZ enforcement efforts, based on his view that Ndola Lime seems to be getting away with more (FQML mgr 2, 17.9.07), perhaps explained by the latter being state-owned or the strategic nature of its product as an input into the production of copper. However this is not supported by Joseph Makumba's (ZCCM-IH) comments of how Ndola Lime was temporarily closed by ECZ in the first half of 2007 (23.7.07).

³⁰² From the ECZ perspective the application from NFCA to reconstruct BGRIMM should not have been controversial, given that "the initial accident had nothing to do with environmental management and standards, but rather with failure to follow safety standards." (ECZ official 1, 26.2.08). However, My respondent adds that the ECZ "had a hard time convincing people that the ECZ was not complicit in this regulatory failure" (Ibid.) which can be explained by muddled – from the point of view of stakeholders – perceptions of the allocation of roles between ECZ, MSD, and other regulatory agencies such as the factories and labour inspectorates.

³⁰³ Environmental Protection and Pollution Control Act (Amendment) 1999.

³⁰⁴ As a result of this intervention, KCM was instead required (by the ECZ) to implement and regularly report on (first weekly, then monthly) a series of mitigating measures.

them but the Minister has powers to overrule ECZ and direct otherwise. Our hands are tied" (Times of Zambia 15.5.2007).³⁰⁵

6.4.3.5 Lacking regulatory clarity

An overlap across institutional frameworks limits regulatory clarity and increases compliance costs for firms in two ways. First, there is some lack of clarity surrounding the allocation of environmental liabilities between the GRZ and new investors. This can be traced to the process of privatisation and the donor-supported Consolidated Environmental Management Plan (CEMP). The aim of the CEMP was to allocate responsibilities for addressing the long list of environmental liabilities from decades of often sub-standard environmental management.

In this process the government's share of historical liabilities was then implicitly defined through new mine-owners' EMPs. Those environmental liabilities not taken on by new investors were, through the CEMP, to be managed by ZCCM-IH.³⁰⁶ One respondent at the ECZ explains how "sometimes there are grey areas, for example the company may claim 'this facility is not part of our own operations', yet they are using it to dispose of waste. And according to the DA, it means it is strategic to their operations, and should be part of their liabilities. So there were some grey areas..." (ECZ official 4, 8.8.07).

Second, overlapping mandates between MSD and ECZ lead to duplication of work and may explain the view of some respondents at FQML that reporting requirements are high and that "the best thing to do is just to report everything to everybody" (FQML mgr 3, 28.8.07). My respondent claims that "[o]n environmental management sometimes there is a bit of confusion, because you also have MSD, and within that you have the environmental department. And sometimes one party does not always know what the other party is doing." (Ibid.).³⁰⁷

The role of ZCCM-IH as monitoring the mining sector (as discussed in chapter four) is relevant in the context of environmental reporting. This is illustrated by the observations from one ECZ official that large mining companies in effect do "dual reporting ... they would report to ZCCM-IH and also to us." (ECZ official 4, 19.11.07). He adds that the information ECZ obtains from ZCCM-IH is "almost like ... some intelligence [laughs]" (Ibid.).

6.4.4 The policy reform agenda

In this section I first discuss the emergence of a reform agenda for each of these regulatory agencies, and how it evolved through interaction with stakeholders. I also discuss the Environmental Protection Fund as an example of legislation that appeared to take the mining sector somewhat by surprise, and where there appeared to be some overlap between ECZ and MSD capabilities. Regulations governing the work of both

³⁰⁵ Other instances of such ministerial intervention include Vic Falls hotel, Kafue Steel Project, and National Milling Corporation in centre of Lusaka.

³⁰⁶ As the project manager at the ECZ notes, to "come up with the CEMP, the new owners … had to produce EMPs for their mining units. And the areas not taken up by the new owners, ZCCM-IH on behalf of GRZ had to produce an EMP" (ECZ official 5, 14.8.07). ³⁰⁷ Chihili at CM concurs, saying that "[t]he problem that we have is that we have two GRZ institutions

³⁰⁷ Chihili at CM concurs, saying that "[t]he problem that we have is that we have two GRZ institutions performing almost a similar task." (1.11.07). One way in which environmental regulations lack clarity is in regard to the auditing of the EMP: one respondent at FQML claims that there is "there is a conflict in the regulations" which contain references to first audit having to take place 36 months after commencement of operations, as well as after 18 months (FQML mgr 2, 17.9.07).

ECZ and MSD were still being reviewed by the time I wrote up this thesis, wherefore I focus on the processes surrounding policy evolution, rather than policy outcomes.

6.4.4.1 Proposed reforms at the Environmental Council of Zambia

The agenda for reform of the ECZ can be traced to the donor-funded Copperbelt Environment Project (CEP). To address the historical environmental liabilities that new mine-owners did not adopt at privatisation, the GRZ obtained funding from the World Bank and the Nordic Development Fund to undertake the 'Copperbelt Environment Project' (CEP). The CEP consisted of two components: the CEMP (see previous section) and a programme for 'institutional strengthening' through regulatory reform (ECZ official 5, 14.8.07; Lifuka, 20.7.07).³⁰⁸

These recommendations were developed within a highly consultative process. An official at the ECZ explains that the agency "had various meetings on the Copperbelt, in Lusaka, in Livingstone, to consult the stakeholders on what is coming." (ECZ official 3, 24.7.07).³⁰⁹ My respondent confirms that the CoM, the MSD, water utilities, and academics all attended, as well as several big mining companies, of whom he mentioned KCM, MCM and Kansanshi (Ibid.).

The aim was that new environmental regulations would be applicable to mining companies despite stability clauses contained in DAs (ECZ official 4, 8.8.07). The Environmental Manager at KCM noted that "[t]he revision of the act is not in bad faith, if you like. That's why we have been invited as stakeholders. It is not a brand new legislation, it is just amendments. The basics are there." (Phiri, 12.10.07).

This consultative process generated several proposals for regulatory reform. These included, first, several amendments aimed at simplifying how the ECZ works. One proposed amendment was to simplify ECZ's work by establishing an 'integrated client system', whereby a company would have one key contact point at the ECZ (handling air, waste, water, chemicals). This would address concerns that "if you have three-to-four people dealing with one mine, the inspectors may give conflicting views." (ECZ official 4, 19.11.07). Proposed reforms also included an 'integrated licensing system' to simplify the agency's current system of licensing mines' emission points and address some of the capacity issues mentioned above.³¹⁰ This appeared to be consistent with mining companies' own interests: the current licensing system was described as "very tedious" by KCM's Environmental Manager, who

³⁰⁸ An early non-legislative outcome of this project of 'institutional strengthening' was the establishment of an Inter-Agency Coordination Committee (IACC) to support capacity strengthening at the ECZ. The IACC consists of representatives from ministries of environment, mines, and health, as well as representatives of academic institutions (University of Zambia and the Copperbelt University) whose activities include visits to the mines (Makumba; ECZ official 5; ECZ official 4).

³⁰⁹ These consultations were organised by Scanagri, the Finnish consultancy managing this exercise, with several non-government stakeholders invited to comment on draft revisions, including Lifuka at TIZ (20.7.07). I asked my most senior ECZ respondent for the report on these consultations, but he was unwilling to share it with me.

³¹⁰ ECZ official 4 stresses the mutual benefits of proposed reforms to the mines and ECZ, noting that for ECZ "it is supposed to reduce a lot of paper work and also make things easier, and even from the side of the mines, it will be easier." (19.11.07). In addition, proposed changes included making environmental regulation more 'equitable' by the introduction of load factors, where a company would not only be judged by emissions at the point of measurement, but where the size of the area into which emissions are released is also taken into account. This conforms with international best practice and a Senior Inspector notes that "the mines are happy with the load factor", but stresses that the ECZ will need more people to manage the new rules (28.8.07).

explained that "KCM has 57 licenses, you need to renew every year, at a cost [of] K120m [c.\$30k]." (12.10.07).

A second characteristic of the reform agenda was the attempt to address issues of outdated legislation, including increases in fines. A senior ECZ official noted "one problem we have had is that fines are not deterrent enough, and that is one of the things we are trying to change with the new EPPCA, to make sure it becomes cheaper for you to comply than not comply." (ECZ official 4, 8.8.07). According to one respondent "some of the compliant companies have been saying is that it is easier for people to break the law than to comply with it ... e.g. if MCM complies with regulations, some other company X may want to do things the other way around, and they get away with it." (ECZ official 4, 8.8.07).³¹¹ This again suggests consistency between the regulator's interests and those of – at minimum some subset of – the mining sector.³¹²

However simply raising fines to address the issue of 'cheapness' of noncompliance is not straightforward in a context where ECZ user fees are seen as conflicting with mining companies' cost-minimisation objectives: ECZ official 4 reflects that "[o]f course even these fines we have to ask how punitive are they, because you find that the clients out there they will think that this becomes a fundraising thing." (19.11.07).

A third agenda point was to strengthen the ECZ by changing the provision in the EPPCA that allows ECZ decisions to be overruled by the Minister of Environment. One recommendation arising out of the Scanagri report was to remove the political connection by establishing an independent tribunal, at the level of a high court, to which companies could appeal, rather than appealing directly to the minister (ECZ official 2, 28.8.07).

6.4.4.2 Proposed reforms at the Mines Safety Department

At the MSD reform has long been considered an imperative, with discussions centred on how the agency should be funded. Reforms of the MSD, as an agency controlled by the Ministry of Mines, are integral to the broader agenda to revise Zambia's mining policy (which includes fiscal provisions as discussed in chapter five). Proposals included making the MSD more autonomous from the Ministry of Mines by allowing it to be funded through user fees (à la the ECZ), most obviously to enhance capacity.

Once more, this agenda appears consistent with the interests of a sub-set of the mining companies. Stakeholder consultations have often found a desire for a stronger and more independent MSD, even if this means charging economic fees for the work they do (MSD inspector, 27.8.07). One respondent at CM notes that "[t]he MSD is pushing for it, and they want the support of the mines." (Chihili, 1.11.07).³¹³ He claims there is, at his firm, "a lot of management support" for this (Ibid.).³¹⁴ This

³¹¹ According to ECZ official 4 "there have been loop holes somewhere, where it makes it easy for you to disobey the law first, because you know that it will be cheaper for you, in the long run, than if you comply" (8.8.07).

³¹² Unfortunately my respondent would not elaborate further on *which* mining companies had expressed these views. ³¹³ A Serier Legenster at MSD ill and the series of the series of

³¹³ A Senior Inspector at MSD illustrates this view, when he says it "would "improve the way we do our work … If you are a bit independent, you can make certain decisions without frequent interference from GRZ … Less interference and better results." (MSD inspector, 27.8.07).

³¹⁴ My respondent recalls how he "was in the meeting when Derek Webbstock said 'CM and LCM have no problem contributing to that, we fully support it', those were his words." (Ibid.).

initiative is supported by the political opposition, as Guy Scott notes "we keep raising it in Parliament, if a mine is set up, it needs to pay for a EIA, [so] why is safety a responsibility of us tax payers? ... Why don't you just make the mines pay for safety? Then you won't have problems with your damn budget all the time." (Scott, 24.10.07).

However not all mining companies appeared equally supportive of these reforms. My respondent at CM notes that other mining companies were more "apprehensive," attributing this to concerns that "[w]hen you give discretion to inspectors, who have to come up with fines and charges because they need money, so it can be abused." When prompted about neighbouring NFCA, a couple of kilometres down the road, he says "[e]xactly, those are the people who would have apprehensions, but for us we have nothing to hide, we do everything in a transparent manner." (1.11.07).

The agenda for reform at the MSD involves changes to the agency's governance structure, to make it less susceptible to political intervention, including the establishment of a Board of directors with reporting duties. However the objective of MSD reforms may draw more support internally within the agency than from its 'parent' the Ministry of Mines.³¹⁵ My respondent at MSD argues that his organisation badly needs this, noting that "a Board is a very efficient institution … where people have to be accountable … they must earn their money. There are a few people that feel that they won't meet that challenge, and they will fear for their job security." (MSD inspector, 27.8.07)

6.4.4.3 Policy uncertainty and the Environmental Protection Fund

The Mines and Minerals Act (1997) mandates the MSD to administer an Environmental Protection Fund to assure government that companies allocate enough funds for decommissioning (Sinkamba, 14.10.07). Contributions to the EPF were to be determined by an environmental audit – to be completed by end-2007 – against firms' "Environmental Impact Statement in accordance with the requirements of the Mines and Mineral (Environmental) Regulations SI 29 (of 1997)." (see also FQML mgr 2, 7.11.07).³¹⁶ The implementation of an EPF had not, however, been pursued until it was announced on 3 September 2007 (in a letter from the Director of the MSD) that all mining companies must contribute to an EPF.³¹⁷

The EPF serves as an example of a policy that appeared to take mining companies somewhat by surprise, and show cases the overlapping mandates of the MSD and the ECZ. The ECZ was not invited to attend EPF consultations, nor partake in the abovementioned audits, to the dismay of ECZ officials (ECZ official 4, 19.11.07). Such audits of environmental processes are normally the domain of ECZ, which at the time was actually conducting its own audits of the mines (in line with requirements to audit EMPs every three years). This example of regulatory overlap thus contributed to additional costs of compliance for the mining companies.

³¹⁵ One possible explanation for the limited progress of these reforms is that Ministry of Mines is seeking to retain control over resources in the face of and continued shift of power to the Ministry of Finance (see chapter five).

³¹⁶ One respondent within the Ministry of Mines believes the EPF has come on the Ministry of Mines agenda following a realisation through CEP analysis that "the environmental legacy of the big mines … is enormous, just scary, really, the level of environmental problems that are there. Now the question is who is going to pay for it." (MSDP techn. ass't, 1.10.07).

³¹⁷ Depending on audit outcomes, mining companies' annual cash contributions to the fund would range from 5-20% of final closure costs.

The mines varied in their perceptions of the EPF: respondents at FQML saw it as adding little, possibly because FQML already operated under the Equator Principles. The CFO at CM did not see it as problematic, arguing that "all mines should have been aware of it" (Bangur, 4.10.07) and that only poor performers had cause for concern. At a consultative meeting with MSD in mid-October 2007 the mining sector as a group agreed that "instead of individual mines trying to battle it out, they [would] use the CoM to address all the concerns of the mines and to have a dialogue with GRZ to come up with an acceptable form of implementation." (Chihili, 1.11.07).

6.5 Interaction and bargaining (labour relations)

The aim of this section is to explicate the institutional framework within which labour relations are articulated. It proceeds to discuss some key labour-related issues, including the use of contractors and the role of labour in affecting change. In doing so I try to identify the differences across companies from varying institutional backgrounds.

6.5.1 Institutional capacity to regulate labour

The formal labour legislation suffers from two weaknesses. First, because of various procedural requirements, it becomes virtually impossible to strike legally and there have been no legal strikes since privatisation (Muchimba, 3.8.07).³¹⁸ Thus although industrial action can be "very costly" (Sinkamba, 1.8.07) to firms, by disrupting and undermining firms' stability, the fact that strikes in practice cannot be done legally reduces their legitimacy and the power of unions to enact change.

Second, the outdated labour law makes an ambiguous distinction between temporary and permanent employees. This makes it easy for employers to 'casualise' labour whereby workers are hired for short periods of time, often with no benefits, only to be dismissed and then re-hired once their probation period expires (Petrauskis 2006). This was a persistent problem in Zambia's post-privatisation economy, extending to all industrial sectors.

Third, although it is stipulated in the Employment Act that the Factories Inspectorate is responsible for monitoring and enforcement of firms' labour standards (Chansa, 25.10.07), this monitoring is weak. Chansa attributes this to a lack of resources as well as a proliferation of actors following privatisation. The latter is due to new mining companies as well as the increasingly common practice of outsourcing of projects to smaller contractor companies (Chansa, 25.10.07).³¹⁹

³¹⁸ Muchimba describes how, first, the union must "indicat[e] a dispute, you have to 'agree with employer' (to disagree). You then have to agree on what course to take (to court or arbitration). Then, suppose you want to go to strike, you are supposed to ballot for your members, and 2/3 must vote, and supervised by principal labour officers, whose staff complement is small, they don' have mobility. Then, once you have voted to go to strike, you have to wait for 10 days. And how can you get annoyed today and wait 10 days to throw the branch!? And within those 10 days, the minister has power to go to court and get an application to declare your intention to go to strike not in the public interest ... So in terms of MUZ flexing its muscle, it has virtually been impossible." (3.8.07).

³¹⁹ To illustrate, in 2000 census there were 68,000 employment companies, and in 2006 a total of 98 labour inspectors visited 1,500 companies. In contrast, the District Labour Commissioner is very often directly involved with KCM HR, however in a non-supervisory role, as the former needs to sign off "on all new contracts" (Masupha, 12.10.07).

6.5.2 Problems with contractor employees

Casualisation appeared limited among the foreign mining companies since the government made policy pronouncements to limit the use of outplacement, or 'labour hire', firms in 2006.³²⁰ James Chansa at the Ministry of Labour argues that – in fact – casualisation was never a major issue among the big mining companies on the Copperbelt (25.10.07). However in the case of contractors, whose employees constitute a significant share of the workers on a typical mine site, it appears that casualisation in the employment of unskilled workers remains the norm (Malema, 30.11.07).³²¹

Terms and conditions among contractor employees are generally worse than for those directly employed by the mining companies. There is, for instance, a lack of effective enforcement of the legal requirement that contractors insure workers.³²² According to Vincent Lengwe at MUZ, the main problem regarding contractor-employees' conditions of service relates to compensation. Difficulties in making claims against the Workers Compensation Board, under the Workers Compensation Act (Chp 271) arise "because the law makes reference to insurance in reference to *long-term* work." (Lengwe, 18.9.07).

Asked whether there has been, over time, any improvement of labour practices among contractors, Sophie Masupha at KCM says "[s]lightly, but they are slippery. It is something that needs to be monitored [by the Ministry of Labour] all the time in my view ... Because here we can sit and I can paint a very positive picture, but what is out there is different. And they really need to do onsite inspections, not just talking to people like ourselves all the time." (12.10.07).

In the absence of government enforcement, mining companies may have an interest in demanding certain labour conditions from contractors. Masupha at KCM explains that "in the days of ZCCM – as a committee we would say if we want artisans they have to be paid such-and-such number. Because what we have found is that we have a lot of thefts on the premises, and a lot of them will be committed by contractors because their employers are not paying them enough." (12.10.07).

However, the enforcement of salary-related standards appears to be limited, perhaps unsurprisingly since the contractor might pass on higher salaries to the mining company through increased service charges. Thus, Masupha is unsure of whether contractors actually follow such policies in paying their employees. She confirms that KCM "ha[s] also had situations in the past where we have paid the contractors but the contractors have not paid the employees."³²³

MCM was rumoured to have a company policy in place demanding that subcontractors be paid 85% of the average MCM wage for an equivalent position (Fraser & Lungu 2007). Also here implementation is questionable: Trust Mushota, an acquaintance who at the time of study was providing several contract services to

³²⁰ There was talk in the Ministry of Labour about issuing a SI about casualisation in 2005 but in the end it was only ever a policy (Chansa 25.10.07).

³²¹ Sophie Masupha notes that although KCM does not employ any casualised labour, this is an area where KCM "ha[s] found some contractors wanting" (12.10.07).

³²² A MUZ official gives the example of how "you find that KCM has insured these people, and they can easily be compensated, but if these contractor employees are found in the same accident, they cannot be compensated because the contractors do not insure their employees." (Lengwe, 18.9.07). Chansa also notes the issues of how such companies, without own assets, would be able to pay obligations to workers if they lost their contracts (25.10.07).

³²³ The company's position now is "that if we come across a contractor where we know they do not intend to pay the employees, then we will cancel the contracts." (Masupha, 12.10.07).

MCM including small excavation projects (with 10-15 employees), said they had not heard about this policy.³²⁴

Low wages and limited benefits among labour employed by contractors intermittently result in 'wildcat' strikes.³²⁵ Might these strikes among contractoremployees present a risk for companies, thereby incentivising them to place higher demands on operating standards of contractors? The CM CFO does not think so, referring to how these contractors operate mainly during the development stages of a mine, where operational disruptions do not equate to disruptions in output (Bangur, 29.11.07).³²⁶

According to one manager at FQML, mining companies (including FQML) usually include a standard clause that "Zambian labour regulations must be met" by contractors (FQML mgr 1, 11.10.07). However because strikes among contractor employees do not constitute a serious threat, mining companies have little incentive to voluntarily *monitor* whether labour regulation (including wages and benefits) are in fact met.

On safety it is another matter. An FQML manager elaborates that "[a]gain, it is a part of our contracts that any contractor operating on site has to adhere to all our safety regulations. And before any contractor is allowed to bring employees on site, they have to go through our one-day induction, which is obviously mainly safety orientated. So they have to adhere to all our on-site safety regulations, which are pretty stringent, probably more stringent than MSD regulations." (FQML mgr 1, 2.12.07). KCM, under AngloAmerican, was the first company to demand labour-related conditions of contractors, in this instance due to a "lack of protective clothing" (Lengwe, 18.9.07). Both CM and FQML do health and safety induction (Chihili, 1.11.07; FQML mgr 1, 2.12.07). Interaction also takes place through meetings, such as the monthly meetings to discuss safety, health and environment issues at CM. Chihili notes that "even in the contract it is specified that they must comply with CM safety and environmental regulations. So we don't discriminate. And if [it is] a big organisation, with a big contract, we insist that they employ a safety officer, to act as liaison between their company and CM." (1.11.07).³²⁷

6.5.3 The role of labour in affecting change

The conditions of service enjoyed by employees at NFCA appear to have improved following the BGRIMM incident. First, NFCA increased salaries across the board for Zambian employees (Maboshe, 25.8.07). Second, NFCA is now signing longer contracts, 2-3 years instead of 6m-1 year (S.Banda, 8.9.07). Third, workers' claims that health benefits should cover not only spouse but also children were met with less resistance. NFCA has since moved to having the same coverage of health benefits as

³²⁴ Professor Lungu similarly notes that he "know[s] some people working for contractors, even at MCM, at Mufulira. They get some quite miserable salaries, about K400,000 per month, and that is less than half of what a MCM worker gets." (Lungu, 31.10.07).

³²⁵ In one case, there were 600 workers contracted by Prosec, to provide services to Grinaker LTA, who in turn was contracted by KCM for the Konkola Deep project, who threatened to go to strike over the lack of insurance benefits, given the dangerous nature of their work (Daily Mail 6.10.2007).

 ³²⁶ Bangur explains that if there are disruptions during the development phase, there are ways in which a company can accelerate development in order to make up for 'lost time' and still achieve planned production start-dates.
 ³²⁷ In this account there is a case of selection bias. The companies that are mentioned are also those that

³²⁷ In this account there is a case of selection bias. The companies that are mentioned are also those that were more positively disposed to talking about these issues. For example, because of access-issues, I do not know whether NFCA offers such an induction for contractors.

the other mines (i.e. including all dependents, understood as people living under your roof).

However it appears workers rather than the Zambian government have played key roles in pushing Chinese management to address safety and other issues. Reflecting on the improved safety performance at NFCA, Banda notes that "[y]esterday when we received two containers, of course from China. I saw some equipment related to safety and the environment … But I wouldn't say the government has done much. We the workers have put pressure on management to address some of the issues." (8.9.07).

In the area of social programmes, the HIV/AIDS programme at NFCA was also made possible through the initiative of workers, reflecting a realisation by Chinese management of the need to improve social relations: "right now they feel they have to start looking good, so we said you have to start putting these things in place, but they don't really care, they have just come here to mine mine mine and take the profit out. So reluctantly they started to implement some [of these] things." (Maboshe, 2.12.07). These accounts suggest that the company was, over time, becoming increasingly conscious of its reputation among stakeholders.

6.6 Chapter conclusion

This chapter began by introducing the context and relevance of the regulatory sphere of state-firm relations. It then reviewed the organisational routines and objectives of relevance to understanding environmental, safety and labour practices in the Zambian mining sector. These organisational features help explain variation across companies, including choices of technology and organisational structure, as well as objectives of minimising costs and pursuing stability in external relations.

The organisational routines and aims discussed all have a bearing on the firm's environmental and safety compliance as well as its stance on proposed regulatory reforms.³²⁸ For example, routines that result in excessive cost minimisation can also be seen as contributing to *de facto* regulatory failure, due to reduced compliance (e.g. unwillingness to invest in maintenance). On the other hand, a focus on cost minimisation also means that companies will not want to be found non-compliant in any case where significant fines are effectively levied. I found that standards emanating from international capital markets play a big role, as indicated by respondents from FQML referring to internal safety standards (aligned with the Equator Principles) as being more stringent than what is required by the MSD.

This chapter then identified some environmental and labour-related instances of regulatory failure, including KCM's pollution of the Kafue river and NFCA's industrial accident in the company's explosives factory. It sought to explicate the significant enforcement challenges that remain in the areas of environmental, health and safety, and labour practices. I found that many of these challenges become particularly acute when high international commodities prices are driving rapid growth and expansion.

In discussing the emergence of proposals to strengthen the regulatory framework I showed how Zambian mining sector policy evolves through consultation and accommodation (consistent with my findings in chapter five). Stability clauses of DAs implied that regulators could not force costly amendments upon companies. The

³²⁸ One MUZ official highlighted the fragmentation of Chinese companies, where many of NFCA's 'sister companies' appear to be "below the radar" for regulators (Lengwe, 18.9.07).

GRZ and its regulatory agencies thus needed to get big companies to 'come on board' in order to conduct any legislative reform.³²⁹ Just as in the fiscal policy sphere, government had to accommodate investors if it wanted to pursue reform without breaking the promises of stability embedded in the DAs.

This consultative nature of regulatory reform requires ongoing and mutual adaptation by government as well as firms. As one ECZ official observes, "[w]e have to do so much adaptation. Some [mines] are more easy to work with, some are more compliant that others. We have learned that the hard way in some cases, but we've definitely had to change our approach to how we regulate them. When it comes to compliance, some investors would do everything they can to avoid compliance unless they have to". (ECZ official 1, 11.9.07).

However progress of these policy reforms has been slow despite a highly consultative process that seeks to bring mining companies on board as stakeholders. An ECZ official explained (in a follow-up interview conducted in April 2009) that there had been no revisions to the environmental regulatory framework as envisaged in consultations during 2007. Similarly, by mid-2009 the MSD remained underfunded and weak (ECZ official 4, 13.4.09; corroborated by J.Lungu 13.4.09).

I point to two possible reasons why reform has been limited. First, not all mining companies were equally supportive of reforms to strengthen enforcement. Rather a company's support appeared to depend on its *routines-in-place*: to illustrate, a company with advanced environmental management and reporting systems in place is unlikely to incur much additional costs were the MSD a tougher regulator. Therefore firms that already exhibit above-average regulatory performance are likely to be the ones most supportive of policy reform, in particular given concerns that poor enforcement allows worse performers leeway. This leeway, if it results in environmental or safety incidents, comes to reflects badly on the mining sector as a whole. The divergence in interests – between firms that can easily meet higher compliance requirements and firms for which reform is associated with significant costs – becomes a barrier to reform.

Second, there is a question about how much can be achieved through consultations between mining companies and regulatory agencies given certain features of Zambia's institutional framework. These include capacity constraints, political intervention and overlapping mandates of the ECZ and MSD that increase the burden of reporting for companies and complicates regulatory relations (see discussion of the Environmental Protection Fund above). Moreover, the fact that regulatory standards are non-uniform (as shaped by firm-specific negotiated standards) and to some degree stabilised by DAs makes it more difficult to reach consensus around reform proposals.

Within the area of labour relations formal practices do not appear to vary much across firms, but informal practices do. Chinese expatriates in Zambia have remained relatively segregated from local communities as well as in relation to Zambian staff: a prominent organisational feature of NFCA was the limited interaction between Chinese and Zambian administrative staff (see section 6.3.6).

I found that a labour-related concern that cut across the sector was the use of contractors in firms' many non-core activities. My interview data suggests that between a third and half of employees on a typical mine site will not be employed directly by the mine, but rather by contractor firms. Terms and conditions are

³²⁹ Sinkamba at Citizens for a Better Environment argues that stability clauses in DAs hamper environmental regulatory reform: "[e]ven if we made those regulations, look at the DAs ... no new regulations can be applied if they will have negative impacts on the mines" (1.8.07).

generally lower for these workers and mining companies' influence on wages and benefits of these workers is limited.

The formal requirement common to all mines – through a standard contractual clause that "Zambian labour regulations must be met" (FQML mgr 1, 11.10.07) – holds limited significance in the context of weak enforcement of labour laws. However, there is some evidence that firms' already-in-place routines and practices, in the area of safety in particular, do 'trickle down' to the contractors and become *de facto* 'regulations' for these contractor companies.

7 The mining sector and local economic linkages

7.1 Introduction

The fiscal and regulatory policy frameworks discussed in preceding chapters present a range of public policy issues that must be placed in the context of mining companies' value chains. This chapter aims to do so by exploring the role of local small-to-medium size traders and manufacturers that provide goods and services to the Zambian mining sector. It is to some degree subsidiary to other empirical chapters, and included to illustrate how these issues are interlinked. For instance, there are particular environmental, health and safety issues associated with sub-contractors (as indicated in the previous chapter) as well as ore procurement from small-scale informal mines. Moreover, understanding companies' value chains and supplier practices is important because the regulatory frameworks discussed in preceding chapters can be subverted through sub-contracting.

This chapter comprises four parts. It first presents the context and relevance of economic linkages between the mining sector and the local economy, and why this is an important topic of study. It then explores the organisational routines and aims of companies in an attempt to identify and explain how supplier practices vary across firms. In doing so I pay special attention to the ways in which a firm's institutional background and external relations (with home-country parent companies etc.) affect their supplier practices. I proceed to look at how these markets develop over time and how firms bargain with suppliers, as well as the role of social networks in this process. The final section summarises and concludes the chapter.

Some disclaimers are in order. This chapter does not explicitly treat the role of employment and economic multiplier effects of mineworkers' salaries. It does not discuss trade policy and the impacts of varying tariff rates on the inputs procured by mining companies. Nor does it cover the way in which organisational routines and aims shape labour standards of contractors (firms supplying the mines with labourintensive services), given the treatment of this issue in the preceding chapter.

7.2 Context and relevance

During the 1970s and 1980s Zambia followed import-substitution policies with heavy protection for the manufacturing sector. In this period Ndola on the Copperbelt became Zambia's manufacturing hub and included operations by multinationals such as Dunlop, Johnson & Johnson and Colgate-Palmolive (H.Gatchell, 8.10.07). However, the sector failed to remain competitive after liberalisation in the 1990s, and many industries closed down.³³⁰

Hopes for a revival were set with the privatisation of the mines in the late 1990s. Large-scale mining has the potential to have a positive impact on local economic development because of the demand it generates for a wide variety of goods

³³⁰ One respondent, a veteran of business in Zambia, reflects that "[i]ndustries were highly protected, there was no competition, the only way to survive was to get foreign exchange to buy the raw materials for your inputs, and once you had that you could actually demand whatever price you wanted … And a lot of industries were set up that quite frankly should never have been set up. We used to assemble motor cars, we'd assemble 10-12 cars per month, huge overheads but no economies of scale, so their demise was inevitable … You've got a false selling price, a captive market, no competition." (H.Gatchell, 8.10.07).

and services. This effect could be significant on the Copperbelt, where the economy is highly dependent on the mining sector as providing a market for goods and services (Ahmad & Walker 2005) and where alternative livelihoods are limited (CEMP 2005: 61).³³¹

However the impact of new mine owners on local private sector development has fallen below expectations. Low competitiveness of local suppliers (in terms of cost, quality and reliability) has played a part in this, leading mining companies to look abroad for their inputs. However, as I argue in this chapter, there are *significant variations* across the foreign mining companies in how they engage with local suppliers: mining companies have varying organisational routines and objectives that shape their interaction with local economic actors. This chapter discusses linkages between foreign mining companies and three types of local economic actors: 'general' suppliers of goods and services, contractors providing specific services such as civil works, excavation etc., and suppliers of copper ore.

The 'general' supplier sector is highly fragmented, including suppliers of big and small, standardised and non-standardised, high- and low-tech inputs to mining operations. KCM and MCM, the largest mines on the Copperbelt, had about 3,000 registered suppliers each. The smaller mines, including Bwana Mkubwa (FQML's operations outside Ndola), NFCA and CM have around 500, 300, and 1,000 registered suppliers, respectively. Salim Mirza, an established supplier based in Ndola, reckons he has "several hundred" competitors "supplying spares and engineering" (Mirza, 8.10.07).

Contractors are a second type of actor, providing services within the mine plant area such as installations, light engineering works etc. The mines outsource a growing share of their non-core activities to such contractors, in particular during development phases of new mining operations. Contractor firms and their employees are thus prominent features on mine sites, and may comprise between half (e.g. MCM) and a third (e.g. KCM) of the employees working within plant areas. Many small local businesses migrate from being general suppliers to being contractors. One veteran supplier estimates that "75% of the people doing contractor work are former general suppliers", i.e. people who used to supply "stationary and nuts and bolts" (Malema, 13.11.07).

Suppliers of ore are a third type of actor. High copper prices have resulted in a surge in unlicensed and small-scale mining, with many people involved in sourcing and trading copper ore. Most of the copper ore that is extracted by small-scale and artisanal miners is treated within Zambia, mainly at the foreign mining companies with excess refinery capacity.³³² In 2007 these were KCM (with it's Nkana smelter), MCM (Mufulira smelter) and Bwana Mkubwa/FQML (with its refinery outside Ndola).³³³ These companies all have an interest in running their refinery operations at maximum capacity, and procure so-called "third-party ore" to 'top up' the supply of ore from own sources (Dudhia, 15.8.07). The procurement of third-party ore is often through traders, consolidators etc., and sources include small-scale mines as well as old waste dumps at disused mine-sites. The livelihoods of those engaged in this business are highly sensitive to fluctuations in the London Metals Exchange (LME)

³³¹ This concern led the CEMP report to identify "creation of economic opportunities" as a key socioeconomic concern on the Copperbelt following privatisation (CEMP 2005: 61).

 ³³² Low-grade ore (constituting most of that which is found in Zambia) is always processed inside the country (Mwamulima, 30.10.07).
 ³³³ At the time of fieldwork the CCS was under construction and upon commissioning in 2008 was

³³³ At the time of fieldwork the CCS was under construction and upon commissioning in 2008 was poised to expand the domestic market for copper ore.

price of copper that serves as a benchmark throughout the copper value chain, from ore to finished cathodes (Ibid.).

To give an idea of the potential significance of mining companies' procurement on the local economy, of \$219m worth of contracts awarded to suppliers by KCM in the first quarter of 2007, \$146m (67%) was given to locally registered suppliers (Ministry of Mines 2007). At an annualised rate, this is c.\$600m. Gerry Nordoff at CM explains that production inputs procured from locally registered suppliers in the year to June 2006 were \$125m.³³⁴ Based on these figures, I estimated the total value of contracts given to local suppliers by mines on the Copperbelt as being \$1.5-2.0bn in 2006. However these are transfers to locally *registered* suppliers, many of which will be representatives of international firms that generate little-to-no value addition within Zambia's borders. I discuss this issue in further detail below.

7.3 Organisational routines and objectives

This section discusses the organisational routines and objectives that I found useful in explaining variations across mining companies' supplier practices, including: costminimisation, predictability-seeking, the choice between local and international procurement, organisational structure, security systems, ore procurement, and norms of business practice. I try to bring out the importance of these organisational features for a firm's relationships with policy makers and wider stakeholders

The issues discussed in these sub-sections are interdependent. For instance, firms that prioritise cost-minimisation were also likely to procure a greater share of inputs from abroad. At times objectives (e.g. of increasing reliability) are clearly reflected in routines (e.g. automated procurement systems), at other times they are not.

7.3.1 The objective of minimising costs

Operating inputs constitute a large share of the costs of operating a modern mine. Old infrastructure (as discussed in chapters five and six) adds to the cost of mines in Zambia, as does the inflation in input costs (due to, for instance, higher oil prices – see FQML mgr 1, 6.11.07; Bangur 29.11.07).³³⁵ Among the mines surveyed, the organisational objective of minimising costs was particularly evident at KCM and NFCA, yet manifested itself in different ways at these two mining companies. I begin with discussing the case of KCM at some length, followed by a briefer account of NFCA before commenting on other companies in my sample.

Many of the suppliers I spoke to viewed KCM as very cost-sensitive, and often saw these practices as having come with the new Indian owners. This was one marked change compared to when KCM was owned by AngloAmerican: the Vice-President of HR explains how after years of underinvestment by ZCCM, AngloAmerican "came in and they were well capitalised, and the guys loved it, they

 ³³⁴ This figures excludes energy (\$25m) and concentrates sourced from sister company LCM (\$40m).
 ³³⁵ At the time of field work in 2007, operating costs had gone up significantly since 2005. One of my

At the time of field work in 2007, operating costs had gone up significantly since 2005. One of my respondents notes that "[b]ecause of energy prices, steel prices, there is actually quite a significantly inflation for the mining industry" (FQML mgr 1, 6.11.07). He adds that high oil-prices have had knock-on effects on many inputs, including lubricants (a "significant" cost for many mines). The CFO of CM agrees that costs have gone up significantly, that "[i]t used to be \$90c [per pound], now it is \$2, ask any company except Kansanshi which only have an open pit ... the prices drops to \$4500/tonne, you're in trouble" (Bangur, 29.11.07).

said look at these guys, we ask for something, and they buy it. Now when our colleagues [Vedanta] came in, always negotiations tough, tough, tough" (12.10.07).

Grant Gatchell, an entrepreneur with many years of business experience on the Copperbelt, reflects on how KCM has changed since Vedanta's takeover, arguing that they have become "super cash sensitive ... there is not very much an assessment as to the quality of the good or the service" (G.Gatchell, 8.10.07). Malema confirms this view: "[t]he only problem that KCM has is its price control ... In AngloAmerican's days, when they give an inquiry, they wouldn't only do an adjudication on the price, but they would also look at the establishment. AngloAmerican used to be interested in knowing why I was expensive, [e.g.] do you have an engineer who will do things, they were interested in knowing what makes you cost so much, unlike KCM today. These guys KCM today, what they do, when you're cheap you're their friend." (Malema, 11.10.07).

The Vice-President of HR at KCM reflects on the new management style after the arrival of Vedanta, corroborating claims of KCM's high cost-sensitivity made by suppliers. She notes that "[t]hese guys, after you strike a deal, they still want you to go and negotiate. And in the process the guy who is needing that equipment is not getting it" (12.10.07). One supplier argues that "[w]ith Vedanta, their bottom line was always cost. So if anybody came in and said we can do this cheaper, they would switch." (Mwamulima, 30.10.07). He notes that now "KCM has a big problem, production is very bad ... underground in Chililabombwe, they tried to cut down on costs, so they changed the contractor ... he was learning the ropes as well, so they fell back on development."³³⁶ According to my respondent KCM subsequently went back to some of the old contractors, realising that "it was a question of reliability not only cost" (Ibid.).

NFCA appeared similarly cost-conscious, with one respondent describing the company as "want[ing] something for nothing" (Malema, 11.10.07). The objective of minimising costs may be linked to NFCA managers' familiarity with Chinese product markets: "[n]ormally they prefer Chinese products. I think it is because of most of the Chinese guys cannot read English, so they prefer Chinese products. And initially Chinese products are cheaper than anything you can think of." (Malema, 11.10.07).

As noted in chapter six, high international copper prices may lead to a preference of spending on activities that are directly linked to production. This production focus, though to some extent present at all the mines, was particularly apparent at NFCA and its sister companies.³³⁷ As one respondent puts it, the "Chinese have a funny thing, they believe they have to spend directly on production. They calculate it on production, on their core business." (11.10.07).³³⁸ He speculates that "[m]aybe it is just the policy they have on spending money… spend it on something that benefits production, don't spend it until you need to." (Ibid.).

As with KCM, a short-term focus on minimising costs can lead to longer-term inefficiencies. A mid-tier supplier thus notes regarding NFCA that "[t]hey don't want to prioritise value, quality, they don't do that, that's the biggest problem they have.

³³⁶ Mwamulima elaborates how "[d]evelopment is supposed to be like three weeks ahead of production, but now production and development are happening at once. So what they'll do is do some

development, then do some mining, do some development, then do some mining." (30.10.07).

³³⁷ The company secretary at the CCS cites high copper prices as a motivation for halving the normal construction time from four to two years (Sun, 1.11.07).

³³⁸ Malema illustrates with an example: "If they know that if they build a house, [and] they won't get anything from it, they wont build it. But if they know that in that house there will 20 more Chinese in that house, and they can work in the mine, they will build that house."

Everything must be cheap. And in the long run they have paid four times what they are looking for." (Malema, 11.10.07).

FQML and CM were less frequently mentioned in suppliers' accounts of the mines' cost-sensitivity. The only evidence of cost-cutting I found at CM stemmed from the change in ownership in 2003. Company Secretary Mwenya, notes that "[m]aybe if you talk to the production people, what they say was good with [previous shareholders Avmin] was that when the company was doing well, there were bonuses, which they don't see now, and people don't like that, because now production is high, prices are high, but workers are not seeing this." (4.10.07).

7.3.2 Procurement systems and predictability of supply

Predictability of supply can be a big issue for the mines, and some mining professionals see timeliness of access to goods and services as a key objective in their companies' procurement practices.³³⁹ The routines whereby companies manage timely procurement, stocking and consumption of supplies also varied between the mines.

For instance, NFCA does not appear to be prioritising predictable stocking of supplies and spares: Malema observes that NFCA has "a funny way of working, they somehow live hand-to-mouth ... They don't have a stocking [system], you know warehousing system like KCM and MCM, where if something breaks down they have something to follow. To make sure you stock something of the product. The Chinese don't do that. They say how many boxes do we need today? 10? Ok we'll buy again when it finishes. They are very careful with their costs." (Malema, 11.10.07). He speculates that NFCA may be unwilling to tie up working capital by keeping many supplies in stock, because of inexperience with storing (Ibid., 13.11.07). ³⁴⁰ Alternatively, he suggests it could be a conscious policy of control, to reduce pilfering.

At CM, on the other hand, managers stress the importance of reliability of supply. Reflecting on the choice between direct imports and sourcing through Zambian agents, the CM Procurement and Materials Manager argues that "[t]he advantage of dealing with somebody locally is that they would hold inventory ... and therefore the lead time would be less." (10.10.07).³⁴¹ He claims that Zambian agents (for international manufacturers) typically hold some inventory and have some technical expertise "so if there is a problem in the plant, those guys will come and fix it." (Ibid.).

 ³³⁹ The Company Secretary at the CCS notes: "The problem we have is with the power, in negotiations with ZESCO, it should take three weeks and we got it after five months, so we had to use diesel generators," adding that "[a]nother problem is shortage of cement." (Sun, 1.11.07).
 ³⁴⁰ Malema speculates that "[t]hese are government companies, maybe that is why they are not so

³⁴⁰ Malema speculates that "[t]hese are government companies, maybe that is why they are not so professional." Similar comments were made regarding NFCA's 'sister companies': Edward Mwamulima, a supplier to Sino Metals, argues that "[i]t is a very simple operation. One Chinese who used to work for Bolo, he says the management [at Sino Metals] are not that scientific ... [that] the Deputy CEO of Sino Metals ... doesn't know anything, but he has been a very loyal person, with the party and everything, and as a reward they send him to Africa." He further observes that management practices regarding supplies seem inefficient: "I'll give you an example: at Sino Metals, the crusher, the bore mill, broke down. They had to fly in a bore mill from China, they didn't have spares for the bore mill. That is how disorganised they are." (30.10.07).

³⁴¹ KCM's "business support programme" is specifically designed to lower inventory costs for suppliers (Kharkar, 27.11.07).

In contrast to NFCA's procurement systems, those of CM seem highly formalised. They include an automatised IT system that assesses and generates orders for spare parts, as dictated by consumption (Nordoff, 10.10.7).³⁴² The company also routinely visits suppliers: "Before we register a supplier, obviously he has to make submissions based on documentary criteria which we lay down. Then we visit ... more often than not my senior buyer, or one of the buyers, who visits and does an assessment. We found that the assessments in the past were not done as well as they should have been, we were dealing with a lot of what we would call briefcase companies ... He would wait for the order to come through and then order from South Africa, which has no value whatsoever." (Nordoff, 10.10.07).

7.3.3 The choice between international and local procurement

Mining companies' choices of international vs. local suppliers have clear implications for local economic development. However as the Director of the Kitwe Chamber of Commerce observes, the mix between local manufactures and imports through Zambian-registered agents is difficult to ascertain (Kapungulya, 17.10.07). A procurement manager at CM confirms that "a lot of" the manufactured inputs "[come] from Zambia, but through agents, who are importing from South Africa ... So on paper you can say we are buying from Zambian companies, but the manufacturing source is outside of Zambia." (Nordoff, 10.10.07).³⁴³ He estimates that 40% of the manufactures bought by CM are direct imports, 50% come in through agents or traders, and that 10% is manufactured locally.

There is a general lack of transparency around the true impact of mining companies' procurement. Kapungulya explains that "normally MCM says that 75% is given to Zambian companies, and doesn't give more information." (17.10.07). He acknowledges that nobody really knows this mix except the mines themselves, and speculates that "[t]he percentage which is Zambia-manufactured is maybe 10-15%." (Ibid.). Malema similarly estimates that around 10-20% of the value of mines' supply procurement is captured by Zambian nationals: "[W]hat we supply is the one-off, the small things. It is things that they are feeling too lazy to get from South Africa." (Malema, 13.11.07).

Given high expectations that mining companies contribute to local development, several mines came to realise the importance of the local supplier sector. Grant Gatchell thinks that, after privatisation, "[s]ome mine owners ... some faster than others, realised that it wasn't good from a long term point of view, and that they needed to try to embrace local suppliers, or at least accommodate them." (G.Gatchell, 8.10.07).

However, Zambian suppliers appear to have been less successful with KCM and NFCA because of these companies' supply chain linkages with home countries. In the case of NFCA, the parent company procures on their behalf (Steven Banda says "we pay a lot to CNMC, I tell you ... [supplies] are coordinated to CNMC, then CNMC does the buying for NFCA" (S.Banda, 2.10.07). One veteran supplier argues

 $^{^{342}}$ My respondent explains that "whenever consumption takes place, our inventory reduces in the system, and once our coverage – which is combination of inventory and what is on order – falls below a pre-defined level, the system generates a requisition for our stores." (Nordoff, 10.10.07).

³⁴³ Grant Gatchell confirms that most suppliers to the mines are traders, not manufacturers: "Things provided by guys purporting to be 'local suppliers' are usually things that have been imported and held in stock for a couple of weeks. There is very little that we manufacture ... Zambia doesn't manufacture compressors, we don't manufacture valve-heads." (26.11.07).

that new mining companies come in with supply chains already in place, so that "when they come here ... they bring them in. They ask can you do this, can you do that. Because they know those companies. The only problem is that they just import it, they don't bring that idea so that the Zambians can learn to do the job" (Malema, 11.10.07).

In the case of KCM, home market supply linkages influence local procurement in a less overt way: respondents noted that when buying locally KCM will benchmark procurement rates against equivalent costs in the Indian market, which they know well (Kharkar, 27.11.07).³⁴⁴ Grant Gatchell also relates the greater use of international suppliers at KCM to a strategy of minimising costs: "I think KCM is basically looking for price, for people who are doing that it means looking to either China or India. And for people who are of that origin, it may be easier for them to get a hold of someone in India who can supply what they need for the mines" (Gatchell, 26.11.07). He adds that Indian and Chinese companies therefore may have an inherent advantage since "for a European or a Zambia-based business, that has historically looked to South Africa, which is a naturally more expensive market, it may be more difficult to create the linkage with India or China" (Ibid.).³⁴⁵

There is evidence that KCM's procurement practices of prioritising homecountry markets may reduce financial flexibility. "I was talking to someone yesterday," Malema notes, "he is [a] very senior person in procurement in KCM. He said it is very bad what these Indian's are doing. He said he might get a quote from SA, \$218 to buy a relay. And the Indians, the bosses, the Vedanta officials, they say it is two much, it is better you phone India, where it turned out to be \$180. So they say, because of the transport costs, buy 10, so you can compensate. They want to make a profit buying from India." (Malema, 13.11.07). My respondent argues that this results in tying up of working capital through over-stocking of spares, thus reducing the financial flexibility of the company.³⁴⁶

The Director of the Mines Supplier and Contractor Association of Zambia (MSCAZ) complains that NFCA still procures very little of its inputs locally and is not responding to the "instrument of dialogue" (F.Banda, 2.11.07). He explains that NFCA has two supplier registries, "one shows all the business they are doing with local Zambians, which is very good … But they also have another registry of items that they import directly, they won't show you that." (Ibid.).³⁴⁷ The possibility of dual supplier registries at NFCA is corroborated by evidence of parallel accounting systems at the company (see section 5.3.3).

³⁴⁴ Some respondents indicated that they may accept a bid by a Zambian supplier, and then – once the supplier has acquired and stocked the items – turn around and introduce an India-derived benchmark.

³⁴⁵ Moreover, linkages with Indian suppliers may be leveraged through *local* Indian networks: Grant Gatchell argues that "suddenly you see a lot of Indian companies are now really taking off before they wouldn't get looked at before". He thinks this is "because they act as intermediaries, they know somebody who knows somebody who can get two tonnes of welding rods from Hyderabad". Malema confirms this, saying that "[i]n the AngloAmerican days we never used to have Indians that were doing supplies, except from the ones based in Chingola. You know Indians are usually known to be shop keepers. All the big guys that are owning shops in town, they are now supplying, you find them having hiring companies, trucks … Because it is just like the Chinese, that's how they are. They look after each other." (Malema, 11.10.07).

³⁴⁶ During times of high copper prices and expansion such inefficiencies are likely to matter less, and it may be easier to prioritise procurement through own social networks.

³⁴⁷ He asks, "what can I do when I go there and they tell me they are buying from Zambia and they show me figures? But they don't show me everything. What we do is we have our own ways of finding out, and we know that they have two registries there, at the Chinese company." (F.Banda, 2.11.07).

Limited international experience and language problems of expatriate managers were also raised by Steven Banda at NFCA as issues shaping the firms procurement practices, including the choice between Chinese and other suppliers. He argues that "[m]ost of the Chinese I can tell you the truth, they are not educated, they are not ... You'll find they say 'this one is a buyer', he is heading the Buying Department, he cannot even make an international order. They only can do it if the order is from China, because they can write in Chinese. Zambians have to come in, always we have to come in, the only thing that is done by Chinese management is the signature." (S.Banda, 8.9.07).

7.3.4 Security systems

Mining companies have to routinely deal with a range of challenges to the integrity of their procurement systems. The procurement manager at CM argues that the potential for corruption in procurement systems is particularly great "where it is an emergency, where the plant could be shut down … and we need this or that part within a couple of hours. [T]hose things can be manipulated between the user, the person who actually needs the item, and the buyer … being in this business for many many years, I'm aware of some of the tricks that people get up to." (10.10.07). All mining companies appear to be subject to such risks: the Director of a medium-sized minerals trader tells med he "know[s] for a fact that KCM was stung … I know CM has lost money on that, and MCM has been in a big fix." (Chakera, 8.11.07).³⁴⁸

Mining companies have developed routines and practices in response to these challenges. They include improvements to internal systems, for instance the installation of systems such as MCM's Quadrem (a third-party web-based industrial procurement system), widely seen as an attempt to improve security in procurement practices. Sector-wide collaborations include a group of mines (KCM, MCM, Chambishi Metals and First Quantum) coordinating their efforts to improve security systems and reduce theft and corruption (FQML mgr 4, 22.11.07). The CM group procurement manager observes that "in terms of our supplier registration we are now a lot more rigid than we used to be" (10.10.07).

The Chinese are not involved in this form of intra-industry learning, increasing the exposure of NFCA to corruption and efficiency-reducing informality in its procurement practices. However, NFCA may be somewhat insulated from such impacts to the extent that it procures a smaller share of inputs locally, and holds less stock compared to other mines (see 7.3.2). Indeed, Malema thinks that NFCA's just-in-time procurement strategy of not keeping much stock may be a good system from a security point of view, because it reduces the risk of pilfering: "you cannot get rid of it, you can only reduce it. So NFCA noticed that a good way to reduce pilfering is to not have high stock supplies ... an employee won't steal from the bank, but he can steal from the storage." (Malema, 13.11.07).

Finally, I found indications that the copper boom was leading to some complacency among managers, resulting in less control over corruption. A manager at FQML acknowledges that when prices are high, there is less pressure to address security issues among all stakeholders. This applies "as much for the GRZ as well as expats, locals, and what not, nobody wants to participate in it ... it is a bit touchy, it is like talking about religion and politics." (FQML mgr 3, 22.11.07).

³⁴⁸ A compromised procurement system is rumoured to have led to a loss at MCM of around \$20m in 2005, in a case of 'supplying air': capital equipment was delivered, paid for, and subsequently clandestinely removed for the firm to buy back a second time.

7.3.5 Ore procurement

This sub-section discusses the routines associated with procurement of third-party ore. It first points to the organisational objective of running refinery operations at full capacity, thus creating demand for third-party ore. It then comments on the high level of supply at the height of the copper boom, driven by high international copper prices. Finally, I show that although mining companies do have routines in place to avoid sourcing illegally mined ore, these routines are easily circumvented.

A veteran supplier, who has worked with all the large mines on the Copperbelt, describes ore trading as "the most crooked business ... it is [the] one business which is not genuine." (Malema, 11.10.07).³⁴⁹ At FQML one manager states that "[w]e get a lot of ore stolen" (11.10.07) and at Sharma Brothers, Director Mohsin Chakera (who practiced law in Australia as well as Tanzania) laments that "[w]e find it very difficult to rely on the integrity of the artisanal miners, and also other suppliers. The whole work environment is defensive you work on the basis that the supplier is out there to cheat you." (8.11.07). A security manager at FQML in Ndola thinks that the GRZ is unaware of the scale of security issues surrounding trade in ore, and how much revenue the Zambian authorities are losing (FQML mgr 4, 26.11.07).³⁵⁰

Mining company respondents generally argued that they avoided buying ore from unlicensed mines in as far as possible, given the criminal and health-and-safety issues associated with illegal mining. At FQML, one of my respondents explains, "before we buy from one of the small scale miners, we want to see the mining license, we normally go to inspect the site, we do everything we can to ensure that they are genuine." (FQML mgr 1, 11.10.07). However non-mining company respondents suggest that this kind of verification can be easily circumvented, enabling people who obtain low-grade ore – legally or illegally – to market it to the companies that have leach-plants (MCM, KCM and Bwana Mkubwa).³⁵¹

It appears that a significant share of firms' purchases of so-called "foreign ore" comes from informal sources, and informal ore easily takes on an "aura of formality" (Chakera, 26.11.07; also Mwamulima, 30.10.07).³⁵² There are several

³⁴⁹ My respondent exemplifies: "The guys will bring [ore with] 1% [copper content], they tell the guy at the lab just write 10%, I'll give you 2%. For ore, and also concentrates. They go to the weighbridge, I've only got 20 tonnes I want you to write 40 tonnes, or to say I have brought four trucks. They go and dump next to the person who's dumped a lot." (Malema, 11.10.07).

³⁵⁰ FQML was in the process of building an internal database for use as an advocacy tool, "so we can tell [government] 'this year you have lost \$100m in revenue' ... if we can tap into important sources of information, such as the Office of the President, or the Auditor General's Office, or the Ministry of Mines, and the Minister himself – because I don't think anybody has ever told them the scale of it all" (FQML mgr 4, 26.11.07). My respondent recognises the capacity constraints on government agencies: "I'm not saying they are not serious, they just don't have time. There is just too much of it." (Ibid.). ³⁵¹ At the time of research, there were many small-scale Chinese smelters popping up across the

Copperbelt, however according to several respondents these operate using simpler 'blister' technology, which cannot take low-grade ore (Mwamulima, 30.10.07). Rather, these companies – most of which exited in the second half of 2008 following sharp falls in copper prices (Walgaard, 7.3.09) – tended to rely on higher-grade ore originating in the DRC.

³⁵² Mwamulima says "I can tell you one thing, everyone that supplies to these guys doesn't have a mine. One, it is too expensive. They probably get all the material from old ZCCM dumps. That is where all the material comes from. They may have their own license, but they don't have a mine ... I'll give you an example, the biggest supplier to KCM, he's a friend of mine, and he supplies something like 2,000 [tonnes] per month. But he also gets from others." (30.10.07).

reasons for this. First, there is ample supply due to many old disused mine sites around the area. The efficiency of copper extraction technologies has improved significantly, and many of the old waste dumps contain sufficient copper to make 're'-processing economically attractive (Mwamulima, 30.10.07).

Second, overlapping licenses promotes illegal mining (see Times of Zambia 15.6.2007). The GRZ is complicit in this, as the Ministry of Mines giving out overlapping licenses promotes illegal mining. As an environmental manager explains "GRZ calls KCM saying 'what is it you are doing, you are causing political instability!' We have started a serious dialogue with GRZ, because one of the things Ministry of Mines was doing was issuing licenses on existing property." (12.10.07). My respondent believes this is due to corruption rather than disorganisation at the Ministry of Mines.

Third, it is relatively easy to obtain the necessary documentation, and mining company respondents indicated that it was not possible to thoroughly investigate ("all we can do is go to visit").³⁵³ There are also people who act as consolidators, what Chakera refers to as "sponges", who acquire smaller supplies of ore from artisanal miners until they reach the 30 tonnes or so needed for a delivery to the big mines.

7.4 Market development and interaction

This section discusses the environment in which suppliers to the mines operate, including market structure, processes of firm-supplier bargaining, and the role of social networks. It then assesses the institutional environment in which this interaction takes place, including transaction costs, property rights and relevant government policy.

7.4.1 Market structure and bargaining

Most local suppliers in Zambia's copper sector are small and fragmented. The mines, on the other hand, are few and large, with purchasing decisions traditionally concentrated in the hands of a few 'buyers' within each company.³⁵⁴ Large mining companies may have thousands of registered suppliers, often with weakly differentiated products, who are always afraid to be 'cut off' (see figures in section 7.2). The monopsonistic market structure means that mining companies can bargain 'hard' with suppliers in their efforts to minimise costs (see 7.3.1).

I found KCM to be (in)famous for 'asking for a discount on the discount', i.e. agreeing payment terms and then seeking to pressure suppliers for further reductions in price. Small-scale entrepreneur Kamoto shrugs: "[y]ou resign yourself to the fact that your profit margins will be less. You cannot just write them off, because if you're supplying to the mining industry, they are basically the largest company." (27.8.07). He recognises that "[s]ome of these pressures is because in the beginning, some of the profits being made were abnormal, it wasn't strange seeing people make 4-500% profit on a deal." (Ibid.).

³⁵³ It remains to be seen whether CCS will indeed provide such a ready market for ore, as several respondents suspected.

³⁵⁴ "The buying department is the most prestigious department in any of the mines. You can go to any department, but when you go to buying, you feel it... They don't even bother much, when you come, they are not even friendly, service minded, when you go there. The guy just sits there and looks at you ... He knows he is in the right place" (Malema, 11.10.07).

Interviewees' describe supplier bargaining as taking place through a two-stage process, where a *formal* tender is followed by *informal* negotiation. The first (formal) stage is the selection of companies from whom to solicit tenders. For larger items or contracts, the mines solicit tenders through advertisements in the daily newspapers. For many of the smaller items with less asset-specificity – where local suppliers may have a greater relative advantage – the process is different, and highly path-dependent: companies usually send solicitations to between four and six of companies that have successfully supplied in the past.

Respondents suggest that the above process is often followed by a second (informal) stage of bargaining, where the buyer at the mining company tells less uncompetitive bidders 'how to win'. This may include improving one's price (and bidding just under the previously most competitive bidder) or improving contractual terms in other ways (e.g. delivery times). The buyer expects something in return for this information, and for many contracts the way to win includes offering a bribe to the buyer (and possibly their boss). These bribes raise costs for the firm and take the form of "kick-backs" or "marketing fees", whereby 10-20% of the value of the contract is paid (in cash or in kind) to the buyer in return for the award of the contract.³⁵⁵

This overlap of formal and informal institutions resonates with the literature reviewed in chapter two regarding African institutional environments as systems of formal rules superimposed over highly resilient social norms and practices (Bangura 1994; Bratton & van de Walle 1997; Dia 1996). Competition among suppliers thus takes two forms: by fulfilling *formal* requirements (providing a timely good or service, holding stock, having agency-ships, having a low-cost advantage), and by satisfying *informal* demands (i.e. having personal relationships, willingness to pay 'marketing fees'). The latter assures that the supplier is included in the solicitation of bids, and that he/she stays informed of 'how to win'.

The organisational objective of minimising costs is clearly evident in KCM's bargaining with suppliers. Masupha describes how Vedanta, after taking over KCM, "fell out of favour with suppliers, who were complaining, AngloAmerican gave us so much business, you strike a deal, and that was it." (Masupha, 12.10.07). This experience was common among independent suppliers to KCM. ³⁵⁶ One supplier recalls how "we wanted to supply them mining services … and we tendered for it and they asked for a huge discount of the tender." (Dudhia, 15.8.07). Walgaard at clearing agent CML had a similar experience in negotiating with KCM, "their tender last year was the same thing, they closed it. We won it, they said you won the tender, these are the rates … We looked and said 'those are not our rates'" (Walgaard, 30.8.07).

³⁵⁵ As one supplier notes, "even if you are the best supplier, if there is not enough in it for the buyer, they will simply lose your quotation, tear it up" (Ngolwe, 14.9.07).

³⁵⁶ For instance, Grant Gatchell tells of how "[w]hen Vedanta came in, they were watching the money very tightly, even on occasion penny wise pound foolish. One anecdote was KCM telling someone to bring in some pipes, some deep-hole, high pressure pipes, and the guy said this is my price 100. The KCM buyers took them down to 70. When they were delivered to site, KCM said 'we don't need them anymore'. This was a significant order, the guy took them back, then KCM said we need them, please deliver, but we can only pay x [less than 70] because this is what we can get them for in India. The guy said "stuff you" ... a month later the guy was sitting on the stock, and they had a major pipe burst underground, suddenly they had flooding and all sorts of very serious problems. KCM said please deliver at your original price. And he said, you can have them at 150, and we're taking cash before you can take them off our premises." (Gatchell, 26.11.07). He adds that he "meet[s] people and ask[s] them who are you here to see, they say 'everybody except KCM'." (Ibid.).

7.4.2 Social networks

Informal social networks are prominent on the Copperbelt and contribute significantly to difficulties in stamping out corruption in supplier practices. Sergio Bettega, proprietor of a medium-sized engineering company in Zambia since the early 1970s, thinks that many miners laid off during privatisation moved into supplies: "[a]ll the old miners, this is what I think, they know the systems with the mine. They are all middlemen, they are all trying to get something out of it. So they can supply. They know, if we need that machine part, me I know where I can get that." (20.8.07; also Nordoff, 4.10.07).³⁵⁷

These social networks exert a lasting impact on the integrity of procurement systems (see 7.3.2 and 7.3.4). People often figure out the new systems, largely because of buyers spreading such news to somebody they know, who may spread this information further (Malema, 11.10.07). Chakera says he "know[s] MCM is going through an exercise to plug the hole ... [but] you plug the hole for three months, then it starts again you see..." (8.11.07). Poor conditions of service also play a role: my respondent reports that a senior chemist earns K3m, or \$8-900 per month, "[a]nd if he suddenly is offered K1m, around \$300, it is not a lot of money, but it is tempting." (Chakera, 8.11.07).

In response, mining company procurement departments generally move people around once in a while, but networks are so persistent that it sometimes requires more forceful action. Nordoff recalls how he in 2004 "basically decimated the LCM purchasing department, I got rid of the whole lot, 197 people … LCM had just been taken over by J&W … Small town, lots of suppliers, it was a situation that was very unhealthy, let me put it that way. So this was the only way one could be reasonably satisfied that things in the future would go well". (Nordoff, 10.10.07).³⁵⁸

The social networks on the Copperbelt can also explain why KCM's strategy of minimising costs by asking for "a discount on the discount" does not confer any sustainable benefits for the company. As the Operations Manager at the Copperbelt Energy Corporation puts it, "because everybody gets to know that [with KCM] you have a second chance ... other mines, like MCM, will say ... we'll keep the integrity of our tender system by sending a strong signal out there that if your price is low, you have very good chance of supplying. So there is a difference in culture." (Lwiindi, 31.8.07).

7.4.3 Institutional environment

This sub-section discusses the institutional features of the environment in which small Zambian businesses find themselves. These features include transaction costs, property rights, and the role of Zambian government policy.

³⁵⁷ This is not to say that corruption and rent-seeking are new phenomena: Grant Gatchell believes that many suppliers to the former ZCCM became "very wealthy … whether it was done at arms length or not we really don't know, but there was certainly a big shift [following privatisation], and I think it caused quite a lot of frustration." (8.10.07). He believes this frustration was the basis of the formation of MSCAZ.

³⁵⁸ Interestingly, Kapungulya at the Kitwe Chamber of Commerce reports that the practice of moving staff around (to increase procurement security) has negative externalities for suppliers, resulting in difficulties of marketing to these companies. "we are having problems to sort of interact with them. They'll either change their personnel, the people you deal with today are not the ones you deal with next week, and the new guy doesn't know what the other guy left off." (17.10.07).

7.4.3.1 Transaction costs

Underinvestment in Zambia's roads and other infrastructure increases transaction costs for suppliers and reduces their relative competitiveness. As Grant Gatchell notes, "[i]f you want to move something from Livingstone [in the south of Zambia] to Ndola, it is cheaper to fly to Johannesburg [in South Africa] and then Ndola, rather than flying direct." (26.11.07).

The institutionalisation at some mines of third-party procurement systems also effects transactions costs for suppliers. For instance, the adoption of Quadrem – an electronic procurement system to link the mines with suppliers – was met with antagonism among Zambian suppliers, given the \$600 fee required to register. As Gatchell notes, "[s]uddenly the system was put upon everyone, and everybody is expected to contribute and pay for it. But nobody got a say in which system is going to work for everyone. So the suppliers are also paying for the same thing, but had no say in which system was selected." (26.11.07).

Finally, falling transaction costs, partly due to advancements in international logistics, means local would-be suppliers are subject to greater competition than before (G.Gatchell, 26.11.07). Moreover, as international competition has increased, so has domestic competition: reduced international transaction costs also translate to more Zambians being able to procure products from abroad. This results in reduced margins on regular supplies. As one supplier notes, "the big money now is in ore supplies, more than in normal regular supplying of spares, partly because margins in this business have come down. So some former 'regular' suppliers have now moved into ore" (Kamoto, 27.8.07).

7.4.3.2 Property rights protection

Weak property rights undermine the growth of the supplier sector by disincentivising investment. Intellectual property rights protection appears to be weak, leading to temporary and 'lumpy' rents for suppliers. One respondent tells of how he obtained the product specifications of Atlas Copco compressors used by NFCA, such that he was able to recycle these, despite recommendations from Atlas to NFCA that recycling was not advisable. This cut the cost for NFCA from \$7000 to \$3500 per compressor, and "was really good, because they had a lot of them and they were just about to throw them in the junk. They really loved it." (11.10.07) – see section 7.3.1. Soon enough, however, "another guy came from nowhere" and started doing the same thing so my respondent left the market. Grant Gatchell offers a similar story of how Vedanta, after acquiring KCM, did "things like ask people for specifications on how to do something, and this submission includes a significantly degree of intellectual property. And KCM would send the specifications out to 50 people and ask 'how do you do this?' And your intellectual property has been handed out to everyone." (8.10.07).

7.4.3.3 Government and the supplier sector

The role of the GRZ in the supplier sector appears to be limited. The state-firm contracts (Development Agreements) with incoming investors included provisions for firms to promote local business development (see chapter four). Companies were required to provide a "local business development plan" and in some cases monitor and provide updates on this plan, but these reporting requirements appear to have

gone largely unenforced (Ndalama, 1.10.07).³⁵⁹ Regarding ore supplies, a FQML manager mentioned that the firm "ask[s] for customs papers [to] make sure that everything is stamped properly" when procuring third-party ore, "because we need to show that to government to prove that we bought legitimate ore." (22.11.07). However this reporting requirement was not mentioned by other respondents, suggesting that it is largely unenforced.

The many policy pronouncements regarding the need to improve the 'ease of doing business' (e.g. through institutional strengthening or tax incentives for small business) have corresponded to little actual change for small-scale entrepreneurs. There is much tax evasion in the sector with companies choosing to not expand and/or formalise their operations in order to remain "under the radar" of the ZRA (Mirza, 8.10.07).³⁶⁰

Weaknesses in government's processes of awarding mine licenses have contributed to the surge in informal mining during the copper boom. The Ministry of Mines' licensing system has been lacking in transparency and efficiency, resulting in two effects: granting of overlapping licenses as well as politically motivated granting of licenses (FQML mgr 1, 5.9.07; Phiri, 12.10.07). The benefits of improving the cadastre system through which licenses are granted was recognised by donors who funded a project to digitalise the cadastre (MSDP techn. ass't, 14.11.07; Villa-Chacon, 14.9.07), a key component in the new mining policy developed during 2007 (see chapter five).

7.5 Constraints on development of the supplier sector

The previous sections in this chapter have looked at the organisational routines and aims that shape company supplier practices, as well as the market and institutional environments in which firm-supplier relations are articulated. I now ask what this tells us about the constraints on further development of the supplier sector, followed by a discussion of what mining companies' are doing in response to these issues.

7.5.1 Barriers and constraints for small-scale investors

Barriers to entry for would-be suppliers include getting registered with the mines, access to financing, personal networks, and skills. The first step for would-be suppliers is to register with the mines. Over time this has become more difficult, with one supplier noting that "[b]ecause they have so many, MCM now has 3,000 suppliers registered ... they sort of closed it off ... I don't think it's a formal policy, but they just made it more difficult. Now there has to be more justification, you have to offer something no one else is offering ... I think that is the largest barrier." (Kamoto, 27.8.07).

Access to financing is limited. Many suppliers are unable to access domestic financial markets and resort to borrowing from friends and family. Significant funds

³⁵⁹ Regarding non-ore supplies, one respondent noted that he provided figures of CM's procurement of inputs in a report prepared for the Ministry of Commerce. However I was not able to ascertain whether this was part of statutory (i.e. obligatory) reporting or provided voluntarily (i.e. in lobbying efforts). However two junior Ministry of Commerce officials I later spoke to, as my time in the field was drawing to a close, were unable to confirm or deny this.

³⁶⁰ Part of the reason relates to Zambia Revenue Authority rules where companies with less than K200m (approx. \$50,000) per year in revenue are not required to provide data to ZRA for tax calculation purposes, but rather pay a fixed tax contribution.

are tied up in this, even if the mines pay within 30 days as per the formal contractual terms: "so I borrowed the money, then logistics, getting it shipped over here, I will have borrowed the money for 8-10 weeks before I get paid." (Kamoto, 27.8.07). Financing constraints reduce the ability of suppliers to hold stock and thereby satisfy mining companies' demand for predictable supplies (see 7.3.2).

Recently domestic financial markets are becoming more favourable to Zambian businesses who were previously regarded as too "high-risk" (F.Banda, 2.11.07; corroborated by Mirza, 8.10.07). However, they target mainly upper-tier and larger suppliers, and requirements to provide a history of accounts and invoices remain onerous for most. Access to funding is a key constraint for many suppliers who are traders rather than manufacturers: "[o]ur business ... is actually measured by our pockets. So, if you have \$2,000, and you get a \$20,000 order, you won't do it. Even if you know where to buy the pump..." (Malema, 13.11.07).

Personal connections are needed to succeed in this monopolistic market, where suppliers compete by offering kick-backs in the form of cash, alcohol, cars and even houses.³⁶¹ These connections persist through the social networks on the Copperbelt, but depend also, to some extent, on top-management support for such activities: some senior managers seem to be against it (see Nordoff, 10.10.07), others may not care, whilst some possibly encourage it (as argued by Malema, 11.10.07). Gatchell argues that such practices may actually benefit local Zambian entrepreneurs who would otherwise not be considered due to lacking competitiveness (G.Gatchell, 26.11.07), a view corroborated by Nordoff (10.10.07).

A major constraint on market development for smaller firms on the Copperbelt is the limited availability of human capital. Grant Gatchell observes that "many of these businesses, like the engineering firms, were operating in the 1970s, and consequently have a level of infrastructure which is close to what they had then. So there is still room for increases in capacity in the machine shops ... ample capacity to expand, whole banks of machines, but five operators ... The shortage is in the human capital" (G.Gatchell, 26.11.07). Mohsin Chakera at Sharma Brothers explains his plans to invest in a small refinery operation, using state-of-the-art smelting technology, and that his firm "need[s] experienced engineers to take it from A-Z. We'll have to import those people on permits. There are a few very good Zambian engineers, but their technique is perhaps 10-20 years old." (8.11.07). The existing skill base of Zambian engineers is of limited practical relevance given the rapid technological evolution of the sector.

Borensztein et al. (1998) find evidence that positive spillovers of FDI (discussed in chapter one) are conditional on the availability of skills for the local manufacturing sector to draw on. In Zambia such 'higher-tech' engineering, administrative as well as artisanal skills are all in short supply, due to increased competition and expansion in the mining sector (see section 4.4.5). Gatchell notes that this skills competition undermines local business development: "because of this poaching of human capital, some of the supplier companies are struggling to provide the services they used to be able provide." (26.11.07). Many companies are thus unable to meet the mining companies' formal aims of quality standards.³⁶²

³⁶¹ Interviews with various suppliers, Kitwe, Zambia.

³⁶² Grant Gatchell describes "the whole *raison d'etre* for [the] MSCAZ, to buy locally, it is like 'buy through me and make me a little bit of a margin', rather than importing direct. A lot of suppliers talk a lot about this, but to justify getting a margin you actually have to provide a service. And that service is the issue." (26.11.07).

Finally, the increased technological sophistication of mining engineering equipment means that it requires specific spares, and agency-ships for such parts are exclusive, thus benefitting only a few individuals. As Nordoff notes, "if it is engineering-type spares, you are basically tied to the manufacturers agents." (10.10.07).

7.5.2 Mining company responses to supplier development issues

Given limited access to capital, liquidity and payment practices become key factors in considering local suppliers' ability to meet demand from the mines. The President of Kitwe Chamber of Commerce argues that the mines' payment practices "used to be a problem, but it has improved. We've had meetings with the mines and they've explained the problems." (Kapungulya, 17.10.07).³⁶³ One supplier confirms that the companies are paying on time, but that "[t]his didn't use to be the case." (Mirza, 8.10.07). He attributes this to the boom in copper prices, because with "high prices, they need our services. So they need us and we need them." (Ibid.). In particular NFCA and its sister companies were seen as generally paying on time for regular supplies, with one respondent noting that "the Chinese" appeared "more prepared on the business side ... they know that when you have spot cash it is easier to negotiate." (Malema, 13.11.07).³⁶⁴

In 2007, the Copperbelt Small Supplier Development Programme (CSSDP) was being set up as a partnership between mining companies and the IFC, with the aim of supporting local business development. The founding members include Kansanshi, Bwana Mkubwa, MCM, and CM, who each contribute \$50k which the IFC then matches (Mwanza, 31.10.07). These funds go towards a debt facility that can be drawn on by local businesses. It is governed by a steering committee whose Chairman is Frederick Bantubonse, General Manager of the CoM. Other committee members include the IFC, the Ministry of Commerce and ZCCM-IH.

I did not find evidence of any similar programmes at NFCA. Vedanta, however, appears to increasingly recognise the socio-political significance of maintaining good relations with the supplier sector, following the initial criticisms after its takeover of KCM in 2004. KCM's Head of Business Development, who deals with supplier relations development, explains that his understanding of Zambian business culture (after 20 years in the country) was the main reason he was brought in to KCM (Kharkar, 6.12.07). He explains the reason for KCM's non-involvement in the CSSDP as a concern that the latter is too bureaucratic and too much of a "talking shop". He claims that KCM's own small manufacturing promotion programme as "far ahead" of the CSSDP. My respondent does nevertheless participate in regular CSSDP meetings and acknowledges the value of CSSDP as a forum, noting that "whatever is

³⁶³ Kapungulya reminds us that limited organisational capacity also plays a role, in that "[s]ome of the problems arise from the suppliers themselves, like they give wrong descriptions, or deliver things to wrong places. Like yesterday, I was at the mines myself trying to sort out a problem, because my workers ... instead of taking the goods to the stores, to be stamped and cleared, they just took them straight to the end-user instead. Now I haven't been paid for two months, until I discovered yesterday that this was a problem." (17.10.07).

³⁶⁴ Interestingly, it appears that this aversion to incurring debts (payables) appears for NFCA as well as smaller Chinese traders that procure ore for export or refinery in small 'back-yard' smelters. Chakera comments that these small companies appear to be highly liquid, with an ability to pay cash that he cannot match (26.11.07). Malema notes that he "rarely see[s] the Chinese in the banks" (13.11.07). He speculates that the Chinese perhaps withdraw dollars even when they are not doing business, or that they somehow do bring in dollars from abroad (also suggested by Chakera).

good for the industry should be shared" (6.12.07). NFCA was, at the time of study, not involved in any similar initiatives.

Fanuel Banda, Director of the MSCAZ, argues that the prominence of KCM on the Copperbelt means it has little choice but to adapt its practices: "[w]ith KCM being the largest mine, and the biggest employer at the moment, with a very big infrastructure, with a lot of influence on the economy on the Copperbelt, their decisions are more conspicuous, and they haven't much gone into hide-and-seek procurement." (2.11.07). This indicates a link between reputational concerns and the extent of KCM's local procurement.

Box 9: Chinese private investors on the Copperbelt

Chinese small-scale investors became a prominent facet of the ore market during the copper boom, and served to provide a ready market for any high-grade ore (generally obtained from disused mine sites or the DRC). In an interview in November 2007, Mohsin Chakera, Director of Sharma Brothers International, noted that the competition from the Chinese had "become more pronounced over the last 15 months". He argued that this competition was now "[1]evelling off because Zambians [were] waking up to their dishonesty" – Chakera says his Chinese competitors "give even higher prices than me, which cannot be sustained when you look at the LME, cannot be sustained by any purchaser." He explains how an ore supplier might get their material tested, e.g. at 28%, but then at the Chinese traders' own "backyard laboratories" they would get it tested to 23%-24%, "[s]o even if they are giving higher prices on paper, they will in affect pay less!" (Chakera, 8.11.07).

Another respondent was involved in sourcing ore from disused slag dumps. He explained that behind the Wusakile 'black mountain' (on the left as you drive into Kitwe from Ndola), there is a vast area were people illegally collect so-called chrome, essentially waste from old (and inefficient) copper processing that retains a high degree of copper content. He notes this is "very very lucrative. Those guys steal the copper ... And that is what the Chinese buy, and they export directly, they don't even put it into the furnaces. They say the Chinese buy it for K8m (\$2,000), for a tonne of this Chrome here in Zambia. This translates to \$4-5,000 for a tonne of copper, much lower than the LME [accounting for refinery costs to get the copper out]. They sell not less than 100 tonnes per week to the Chinese. A lot of people live on this." (Mwamulima, 30.10.07).³⁶⁵

According to this respondent, "[o]ne thing you realise with the Chinese, is that it is a lot about personal relationships. The owner of the company I supply to is the son of the Deputy CEO of the main group [CNMC] in China ... The company I supply to is Bolo Mining, and then they supply to Sino Metals [one of NFCA's sister companies] ... So that is why he has very favourable prices, and payment terms with the company – because of his father."³⁶⁶ He adds that they do not appear very professional – for instance the bore will at times break down, something he describes as "unthinkable" elsewhere.

³⁶⁵ He adds: "[t]here is a compound Kandabo (on the left heading to Kalulushi from Kitwe), that was built on a former dump. These guys have refused to move. So families, cooperatives of women, they actually sell the copper to the Chinese."

³⁶⁶ Mwamulima elaborates: "Bolo Mining is only registered here. His father came here to set up NFCA, and when he left he told his son to come here and set up something. But unfortunately he couldn't stay because he couldn't speak English. He couldn't interact with anyone."

7.6 Conclusion

The procurement decisions of large foreign mining companies have potentially significant impacts on local economic development on the Copperbelt. In part because of a lack of alternative livelihoods, many people are involved in supplying the mines with a range of goods and services, or as engineering contractors, or as suppliers of ore.

Organisational routines and objectives play a big role in explaining variations across firms' supplier practices. These routines and objectives highlight variations in how firms prioritise characteristics such as price, quality and predictability of supplies, and how their attitudes towards the local private sector vary. Some companies focus on minimising costs, others emphasise the potential benefits of lower lead-times, or the importance of reliability and quality. Organisational routines and objectives thereby shape interaction with suppliers, how orders are generated and handled, and by extension enabling or constraining local private sector development.

With regard to international vs. local procurement, I found KCM and NFCA to have the strongest links with home-country markets. It indicates that companies that have internationalised more recently, and which retain significant operations in their home countries (and/or business contacts in these markets), are more likely to bias procurement towards home markets. This can provide companies from China and India with a lower cost base, but also makes their position in the host country (Zambia) more contested.

Organisational routines and aims are often complementary, and jointly explain why some managers prioritise quality and predictability over cost, or vice versa. To illustrate, the preference for international procurement at the Chinese and Indian case study firms is explained by two complementary factors: existing routines (including language and familiarity with low-cost home-country product markets) as well as an organisational objective of minimising costs.

At the same time there are processes of evolution and organisational learning taking place, for instance in collaboration on security as well as attempts to build capacity in the local manufacturing sector (e.g. the IFC-sponsored CSSDP). This is partly a function of the high political profile of the large mining companies, as evidenced by Fanuel Banda's assertion that KCM has had no choice but to improve its supplier practices.

The bargaining between mining companies and private sector suppliers can be described as a predominantly formal institution governing the short-listing of bidders to supply. This process is path dependent in the sense that requests for bids are typically sent out to only a handful of companies that have been successful in bidding for supply contracts in the past. This process if followed by an informal process where the buyer at the mining company feeds back to the bidders on 'how to win', in return for a 'kick-back' in some form.

Social networks on the Copperbelt both enable and constrain development of the local supplier sector. For many smaller Zambian suppliers, the fact that business is obtained on the basis of personal connections may be a good thing – if local suppliers would otherwise not be competitive, they would not get any business at all. The social networks on the Copperbelt also mean that suppliers learn quickly the negotiating strategies of the firms. In this context any benefits of tough bargaining practices (e.g. KCM asking for 'a discount on the discount') may be short-lived and only serve to create resentment. On the other hand, the evidence that choices of suppliers are highly path-dependent (where the suppliers that are successful today are likely to get invited to tender again tomorrow) means that these practices are highly exclusionary and inequitable. It also shows how it may be worthwhile for suppliers to invest considerable resources into establishing good personal relationships with buyers in the mines, rather than invest in their own productivity, quality etc.

Local suppliers are subject to a range of institutional constraints that undermine their competitiveness (skills competition, property rights, transaction costs, access to funding, access to social networks). Non-government organisations have tried to address these issues, with organisations such as chambers of commerce and the MSCAZ attempting to lobby the mines to support the local supplier sector. However these actors appear weak in achieving their objective. The attempts of these actors to promote local procurement are limited to provision of market information (e.g. listing suppliers in different product groups) and calling for greater involvement of the mines in local capacity development. Lack of trust also undermines collective action: the MSCAZ – despite being very vocal on these issues – is alleged to be mainly focused on securing contracts for a select group of local businessmen (Malema, 11.10.07). ³⁶⁷ Many suppliers are thus wary of putting their (albeit individually small) weight behind the organisation.

Central government does not appear to be very involved in the supplier sector (despite provisions in DAs relating to local business development). Regulatory agencies such as the ZRA and the Factories Inspectorate lack the capacity to influence these smaller and 'below-the-radar' companies. In this institutional environment – including limited government capacity to enforce a 'level playing field' – suppliers become highly dependent on the strategies and routines in place at mining companies. In particular, the monopsonistic buying power of mines (coupled with boom effects) means they can squeeze local suppliers of goods and services, limiting profitability, reinvestment, and growth in the supplier sector.

Because of this structural dependence, suppliers' ability to influence the large mining companies by exercising voice or by exiting the sector (Hirschman 1970) is limited. First, it is difficult for suppliers to coordinate and speak with one voice, due to a lack of trust in organisations such as the MSCAZ that undermines collective action (e.g. the MSCAZ seen as having vested interests). Second, the calls of suppliers can easily be ignored by mining companies with access to an ever-growing range of international product markets. Third, suppliers cannot easily exit the market because of limited alternative livelihoods.

³⁶⁷ The organisation was founded following a conflict between KCM and a group of local suppliers soon after privatisation, and due to this historical relationship it continues targeting KCM. It is often visible in the media, e.g. expressing its "outrage" at KCM's extension of payment terms in response to the financial crisis in 2009, claiming "[c]ontractors are now going up to six months without being paid. This means contractors and suppliers will not be in business." The Post (15.4.2009).

8 Analysis and discussion

8.1 Introduction

The preceding four chapters have explored a series of regulatory and market relationships involving foreign mining companies and the Zambian state. I grouped these relationships into three 'spheres' of tax-related policy and practice (the fiscal sphere), environmental, social and labour governance (the regulatory sphere), and economic linkages to the local supplier sector (the market). These empirical chapters have highlighted weaknesses in raising and collecting tax revenue, regulatory failures resulting from limited institutional capacity, and constraints on the mining sector's potential to catalyse local private sector development. The aim of the present chapter is to analyse these findings, in order to identify and synthesise cross-cutting themes, and inform the research questions posited at the outset of this thesis. In doing so it draws on the literature and theoretical framework developed in chapters one and two.

I first develop the argument that state-firm bargaining takes place through bidirectional processes of interaction between the firm and the state, shaping both policy formulation as well as implementation. I emphasise the need to look at political, economic and social factors within the host country, as well as influences external to the host country (e.g. international commodity markets, capital markets, and inter-state relations).

Second, I develop a critique of Zambia's mining sector regulatory regime, focusing on policy in the areas of environmental, health and safety. I argue that Zambia's current regulatory framework is based on notions and norms of 'partnership', where the regulator is mainly charged with providing an enabling environment. Such a 'partnership' approach to regulation is ill-suited to a volatile policy environment (where many issues are on the negotiation 'table', simultaneously) and where the mining sector is becoming increasingly fragmented and diverse. Although this regulatory approach brings enforcement agencies and firms closer to each other, it risks alienating civil society and wider stakeholders.

Third, I discuss the various features of organisational diversity, learning and convergence that I found in the Zambian mining sector. I argue that much of the variation in organisational behaviour identified in chapters five to seven can be explained with reference to firm-specific routines and aims. I provide examples of how organisational learning – understood as changes to these routines and aims – shapes regulatory (non-)compliance and what it means for the evolution of regulatory policy.

Fourth, I highlight how this thesis contributes to an understanding of fastgrowing Chinese economic engagement with Africa. I begin by identifying those characteristics of my Chinese case study firm that I believe to be transferrable to Chinese overseas investment more generally. This is followed by an attempt to answer the question of whether China will be a good development partner to African states. Fifth I conclude the chapter with some methodological reflections.

8.2 State-firm bargaining and policy evolution

This section comprises three parts. It first discusses the processes of state-firm bargaining, focusing on the fiscal sphere. The second part then argues that an interventionist political culture enables the state to sustain, simultaneously, multiple

articulations of state-firm relations. Lastly I discuss market and policy influences on regulatory policy that are external to the host country.

8.2.1 The processes of state-firm bargaining

Zambia was, at the time of privatisation, facing a crisis. The country was saddled with external debt and suffering from a protracted slump in commodity prices. Contracts were given to foreign mining companies that included many incentives to ensure a sale, thus conditioning the state-firm 'bargain' at privatisation in favour of the newly arrived foreign investors.

The obsolescing bargaining theory discussed in chapter two suggests that over time, as companies sink their costs, bargaining power shifts to the state. However contrary to theory, the mines in Zambia did not become 'hostage' to government policy in the post-privatisation period. Rather, they retained significant influence over policy, and were able to improve the regulatory terms of their investments further (see 5.4.1). This took place through formal government-firm consultation processes as well as informal mechanisms. The latter included direct contact between the President and representatives of the mining investors, motivated through a pro-investment political discourse.

The Zambian economy's dependence on copper mining helps explain why the MMD, in power since 1991, in its post-liberalisation economic policy has prioritised providing an 'enabling' environment for international investment. Contractual stability provisions contained in the initial state-firm Development Agreements that greeted investors at privatisation also help explain the reluctance of the Zambian government to 'clamp down' on firms.

Another reason why bargaining power did not shift to the state is that many so-called 'sunk' costs are in fact recoverable, as long as international capital markets are liquid (as was the case during the commodities boom that preceded the 2008 financial crisis).³⁶⁸ The fact that companies have made significant investments does therefore not automatically imply that companies rescind the threat of exit (their chief bargaining chip with the state). If the price is right – even in a context of depressed copper prices – a buyer can be matched to a seller and companies will divest (as evidenced by frequent changes in ownership since privatisation, e.g. at CM, LCM, KCM, Kansanshi and the Copperbelt Energy Corporation.

The commodity dependence of a host country might, ironically, actually make it *easier* for firms to exit. With the local economy of mining areas dominated by foreign-owned mines, the government would much rather take on the task of finding a new buyer than allowing a current owner to simply close down shop (and run the immediate risks of mass redundancies and social unrest).³⁶⁹ In this scenario the Zambian government's 'special share' granting veto rights in the event of change in

³⁶⁸ Although expended resources that are non-recoverable (e.g. infrastructure) have no value to the seller, they will typically have value to the buyer, and this value will be reflected in the price paid (in fact, most bargaining is likely to take place around this price).

³⁶⁹ In fact, a key role of ZCCM-IH (which as argued in chapter four sees itself as the eyes of the government) appears to be to help government step in during interim periods when mining companies pull out. For instance, ZCCM-IH took over KCM when AngloAmerican pulled out, using government resources to keep the company running while looking around for another investor. According to Lungu, "the World Bank, [the] Commonwealth Development Fund, and [the] IFC, they just left, they didn't think it was profitable to stay in KCM, so ZCCM-IH remained alone and called on state resources while they looked for another partner. So GRZ injected money into ZCCM-IH, if ZCCM-IH had not been there, I think it would have been total chaos." (J.Lungu, 31.10.07).

majority shareholders (see section 4.3.3) does not constitute a credible threat facing companies that contemplate leaving the country.

Government's Board-level insight provided by minority shareholdings retained in privatised mines does, however, allow government a degree of informal insight and influence. I found some evidence that these shareholdings, held by ZCCM-IH, can provide informal support for government's regulatory efforts: I argued in chapter five that ZCCM-IH can drive transparency (using the example of consultations around EITI) and in chapter six that their reporting to the ECZ supplements that agency's own monitoring efforts (as a Director of the ECZ argued, the environmental reports lodged by ZCCM-IH covering its investments into the privatised mines were almost like "some intelligence"). Evidence of such state-firm links as well as the finding that government provides a degree of protection for firms (helping to broker wider state-firm relations (see next sub-section) suggest that government retains some (more subtle) bargaining power, concentrated in the Presidency.

Whilst government was pursing its investor friendly policy programme, political pressures mounted – as made evident during the 2006 election – on the government to re-assert itself vs. the sector and seek a redistribution of benefits from mining. It had become clear that the Development Agreements given to investors at privatisation were not designed with the ups and down of commodity markets in mind. At the same time, donor support for changes to the fiscal regime grew, putting pressures on mining companies to accept changes to the fiscal regimes stabilised under these agreements. Finally, an emerging political agenda in support of local economic empowerment also emboldened the state to assert itself vs. the mining sector (see chapter four). This agenda, which can partly be seen as a backlash against prior World Bank/IMF policies, legitimated the state as getting involved in economic affairs with the aim of securing economic benefits for its people.

The Zambian government perhaps recognised that it retained a bargaining advantage only as long as copper prices remained high. It seized this opportunity by pushing for renegotiation. When faced with the complexities of negotiating with a diverse sector with divergent interests, it ultimately resorted to unilaterally imposing a new fiscal framework.³⁷⁰ Sudden policy reversals can, however, have negative longer-term consequences on a country's attractiveness as an investment destination, and Zambia's medium-sized mining companies may be particularly sensitive to this kind of policy volatility.³⁷¹

8.2.2 Implications of political interventionism

I found evidence of a tendency toward political intervention, what I described as 'presidentialism' in chapter two, in the fiscal as well as regulatory spheres. It took the form of involvement of political agents in bureaucratic (regulatory) issues, or through direct (usually informal) engagement with companies. Such mechanisms of influence

³⁷⁰ There was a concern on the part of donors "that government was making some mistakes, as they were rushing to amend legislation" (Lundstol, 3.3.08). My respondent observed that there was a significant amount of legislation that needed to be redrafted. This behaviour of the government resonates with what one respondent referred to as Mwanawasa's "preference for quick wins" (G.Lungu, 22.10.07).
³⁷¹ As a project finance specialist at Macquarie Bank explained, more diversified and larger mining

³⁷¹ As a project finance specialist at Macquarie Bank explained, more diversified and larger mining companies may be more resilient in the face of political and economic shocks (Adams, 16.3.08).

constitute a key way in which an institutionally weak, resource-dependent state can retain control over economic activity within a liberal policy framework.

From the perspective of firms, political interference undermines the organisational aim of stability that I showed in my empirical chapters to be prevalent among firms. It means that enforcement activities – and expected costs of non-compliance – are less easily predictable for the firm. This is because a particular organisational behaviour, or lack thereof, does not correspond to a given government response, consistently across firms and over time.³⁷² As noted in section 5.4.1 government also applies significant discretion to how it engages with the mining sector. For instance, the low tax and royalty rates that applied to the sector as a whole at the time of fieldwork actually originated in discretionary bargaining with new owners of the two largest mines at privatisation (KCM and MCM).

I also found that political intervention in the activities of regulatory agencies undermined the integrity and effectiveness of these agencies. Bureaucrats lose influence and public credibility when seen as lacking in authority, for instance when the ECZ is criticised in Parliament (AllAfrica 15.5.07). The problem – recognised within the ECZ – is that once the Minister has made a decision, the agency still has to provide ongoing regulation of facilities that are not operating in accordance with its own standards (ECZ official 1, 26.2.08). The persistence of this culture of interventions is illustrated by the fact that even the ECZ – the regulatory agency which is to the greatest extent being funded through user fees – is still not fully autonomous from political considerations of the ministries.

The political culture also *enables* certain behaviour that firms may value. The ability to cultivate personal relationships can speed up the policy process. As one respondent noted, if you manage to "get the ear of the President" your issue moves "at the speed of light" (MSDP techn. ass't, 14.11.07).³⁷³ However some companies may be more inclined than others to make use of informal, more personal connections with policy makers. For those companies that cannot (or do not wish) to access policy makers through such means, the bureaucratic inefficiencies and lack of institutional clarity (see chapter six) imply particular constraints.³⁷⁴ Evidence included the finding that the two 'western' firms FQML and CM were more likely to report that regulatory non-transparency and institutional overlap were key issues of concern for their businesses. Further examples of how practices varied between companies of different institutional and cultural backgrounds are discussed in section 8.4 below.

The close ties between senior government officials and foreign mining companies enable the government and the Presidency to take on a 'brokering' role (see chapter four). The extent to which mining companies make use of this avenue for state-firm interaction will, again, vary depending on the routines and aims in place at a particular organisation. For example, firms may pursue stability either through engaging directly with top government officials or by improving their reputations within a wider group of stakeholders. NFCA, for example, appeared to seek stability by letting the GRZ 'broker' their social contract. On a visit to Zambia in February 2008, Chinese Deputy Minister of Commerce Gao Hucheng called on the Zambian

³⁷² Theory suggests that firms will comply with pollution laws only when costs of

compliance are lower than the expected penalty for non-compliance (Livernois & McKenna 1999). ³⁷³ Because "nobody wants to be known as the person who did not do what the President wished" (Ibid.).

³⁷⁴ Dr Derek Fee, head of the European Commission in Zambia, argues that donors' attempts to build relationships with ministers and policy makers are frustrated by an overly bureaucratic system of following "protocol" (Fee, 20.11.07).

government to ensure that meetings were held to brief stakeholders on projects and their impacts (ToZ 28.2.2008).

NFCA's view of what role central government should play stands in contrast to that of FQML. Whilst NFCA prefers to engage with wider stakeholders through government, FQML sees it as a problem if "only the government" knows (see section 5.4). FQML thus pursues stability by cultivating relationships with local stakeholders: "if you talk to the Copperbelt Permanent Secretary, and Copperbelt Ministers, which company is doing most CSR, and FQML will always come up. And that does open doors. However it is one of economic benefits that you cannot quantify." (FQML mgr 1, 11.10.07). Different approaches to pursuing the objective of stability thus lead to different articulations of state-firm relations.

8.2.3 Commodities cycles, capital markets and regulatory capacity

This section discusses the external influences that I found to shape the evolution of regulatory policy in Zambia. I first argue that the boom in commodity prices had a range of adverse impacts on the state's ability to formulate and implement regulatory policy. I then look at the role of international capital markets and foreign policy in shaping state-firm relations in the Zambian mining sector

It was clear that the volatility of international commodity markets played a key role in shaping the political economy of copper mining in Zambia. First, I found the rapid expansion of the mining sector during the boom to be associated with increased competition for skilled labour. This led to low-paid public sector mining engineers, geologists etc. frequently being 'poached' from government agencies by the private sector.³⁷⁵ This negative spillover effect undermined capacity of state agencies to regulate effectively.³⁷⁶ It was exacerbated by government policies that prevented companies from importing skilled labour. The finding that the Ministry of Mines continued to play a key role partly because of the technological sophistication of mining (see chapter four) underlines the significant constraint posed by technical skills shortages within government bodies.

Second, the proliferation and fragmentation of mining and supply companies undermined the coordinating role of unions (reducing capacity to address member issues) as well as regulatory oversight by ECZ, MSD and the labour inspectorate.³⁷⁷ This finding runs counter to what theories of public choice reviewed in chapter two would indicate, namely that increasing fragmentation within interest groups would *strengthen* government's ability to push through policy changes. My finding is explained by reference to the Zambian government's strategy of promoting inward investment by accommodating investors in the policy making process. This strategy works less well in a fragmented mining sector with widely varying organisational

³⁷⁵ Evidence from Ndalama, MSD inspector, Walgaard, MSDP techn. ass't, and G.Gatchell.

³⁷⁶ The movement of people further undermines enforcement by increasing possibilities for rentseeking. These processes were also apparent in the supplier sector, where mining companies' attempts at making procurement routines more resistant to corruption are undermined by the permanence of social networks on the Copperbelt.

³⁷⁷ As Vincent Lengwe of the MUZ notes, "[t]his structure was designed at a time when you were negotiating [with ZCCM] at one and the same table. There are now different companies, different employers, and you look at the number of full-time employees, one needs to go to Southern Province, one needs to go to Solwezi... the number of companies in the Copperbelt is high, so that is the biggest challenge, so you find that where you are supposed to go, you fail to go and even show up, and then members feel that you are failing them." (Lengwe,18.9.07).

practices, and reduces the ability of government agencies to advance and implement policy.

Third, I found non-government and international standards such as the Equator Principles to be a significant influence on practices of some foreign mining companies in Zambia. However, I found that the relevance of such external influences decreased during the commodities boom. High prices provided companies with windfall profits that could be used to fund expansion without the added scrutiny of outside lenders (this was the case for both KCM and NFCA; Gao, 21.8.07; Chitambala, 17.9.07). In addition, the rapid expansion of the global mining sector resulted in shortages of consultants to conduct the 'bankable' feasibility studies needed to access international capital markets.³⁷⁸ Companies therefore resorted to doing more of their expansion planning 'in-house'.

Fourth, from the perspective of companies, the boom promoted organisational routines and objectives to minimise costs not directly linked to production. High international copper prices increased the opportunity cost for any delays to firms' expansion plans, thereby focusing managers' attention on production (short-termism).³⁷⁹ This influence of international commodities markets on producer behaviour – visible at all mines but particularly prominent at NFCA and KCM – shapes how the firm understands relative costs. For instance maintenance expenditures become more expensive, in relative terms, when the payback time on new (productive) mine shafts is reduced due to higher prices.

As soon as commodity markets fall, however, access to international capital markets plays a big role in determining the ability of companies to sustain their investments. When the global financial crisis was traumatising the sector in 2008, many western mining companies with large exposures to single commodities found access to capital markets severely constrained. Many responded by selling off assets. Chinese investors, in contrast, did not face these pressures to such an extent. Chinese state-owned banks kept up their financing of overseas projects: they had limited exposure to the exotic and ultimately toxic financial instruments that brought down Lehman Brothers and other large lenders. The continued investment from China at a time when 'traditional' sources of funding were drying up drove home to African governments the importance of accommodating Chinese capital. I discuss political and firm responses to the global financial crisis of 2008 in more detail in Haglund (2010; 2011).

Other external influences on mining sector policy evolution include foreign policy, most evidently in relation to Chinese foreign direct investment. As I have argued in Haglund (2009) the special economic zone in Chambishi (now dubbed the Chambishi Zambia-China Cooperation Zone) plays a prominent role in China's Africa policy. Managed by a former boss of NFCA, it is seen as a test case for accessing raw materials as well as markets in central Africa. The stakes for the Zambian government in facilitating Chinese investment into and around the zone are thus significant. Government sees itself as benefiting from further investment as well as other forms of

³⁷⁸ As a FQML manager explains, "these days you find that because engineering is so scarce, people do it in house, but then their feasibility study is not approved by the banks, so you go on without financing from the bank. However now the copper sector is so rich itself, so it can afford to also finance projects using retained earnings. So you don't have to do the feasibility study, if there is a problem you go around it. So times have changed." (FQML mgr 2, 7.11.07).

³⁷⁹ One might expect that firms during boom times can carry larger costs and thus be less cost-sensitive. A topic for further research is the extent to which mining company managers are actually incentivised in relation to costs rather than revenues, given the inherent volatility of commodity markets.

international cooperation as long as it adequately accommodates and supports this investment.

Lastly, I found donors to play a significant role in enabling the government to proceed with unilateral fiscal reform, through their funding of consultants to support the GRZ. These consultants provided government with evidence that mining companies had expatriated resources well beyond that indicated in their publicly disclosed accounting profits (Lundstol, 3.3.08). Such evidence provided ammunition supporters of unilateral action by undermining the legitimacy of any company counter-claims or threats of arbitration on the basis of government not sticking to *its* side of the bargain.

8.2.4 Section conclusion

I have argued in this section, first, that mining companies in Zambia have retained their bargaining power vis-à-vis the state, despite sinking their costs and becoming economically and politically embedded. Mining companies retained the right of exit (sale to another investor) because the alternative – closure and redundancies – was politically unacceptable to the ruling government. Government nevertheless retained some influence over the sector, albeit through less formal means including Board-level insight provided by minority stakes in the privatised mines. Evidence government retaining bargaining power includes the finding that government provides crucial support to companies by acting as broker between the investor and labour unions.

I argued that Zambia's political culture of state intervention in the private sector provides space for sustaining separate articulations of state firm relations. However this is associated with the risk – which I elaborate on in the next section – that it muddles state-firm bargaining over policy: information asymmetries prevent mining companies from readily distinguishing where different government interests lie.

Lastly I looked at the role of various external influences arising outside of the host country context, including international copper prices, capital markets and foreign policy. I argued that the boom exacerbated skills shortages as companies poached highly skilled individuals from government agencies charged with monitoring the sector. I also noted how the role of the Equator Principles and other international standards diminished during the boom, because companies could afford to self-finance their expansion. In considering that the copper markets are cyclical in nature, I observed how the recent global economic crisis represented a shift in financing power away from 'western' capital markets toward emerging markets, in particular China. This, coupled with the ever-closer inter-state relations between China and Zambia, help explain Zambia's accommodating approach to Chinese investors.

8.3 The partnership approach to regulation

As argued in the previous section, the political and economic importance of the mines makes the government want to be closely involved with the mining sector. In seeking to ensure Zambia remains a competitive destination for international investment, policy makers involve the mining companies in the development of new legislation. In doing so government aligns its interests with those of the mining sector. Thus, although the government bargains with the firm in seeking to capture a politically acceptable share of resource rents (as adversary), it is also functions in a role as 'guardian' of firms (as partner) (e.g. when firms get embroiled in labour disputes).

This section focuses on three areas of regulatory failure identified in chapter six in relation to: environmental, health and safety-related incidents; failure to progress on reform; and predictability-reducing institutional overlaps. These failures call into question the circumstances under which mining sector regulation can successfully be formulated and implemented.

This section comprises five parts. I first sketch the key features of regulatory relations in Zambia, highlighting the heavy emphasis on self-reporting, consultation and consensus, and mutual accountability. The second section elaborates on the defining features of this 'partnership approach' to regulation, tracing regulatory features to roots in orthodox economics and liberal conceptualisations of the state. The third sub-section discusses what I refer to as the fungibility of power in state-firm relations. It highlights how multiple and simultaneous policy negotiations reduce the ability to reach consensus. The fourth sub-section then critiques in some detail the current approach to regulation in the Zambian context. It draws on previous accounts of Zambia's institutional environment and political culture and highlights issues relating to regulatory capacity as well as the exclusion of civil society. Finally, the fifth sub-section discusses Zambia's 'partnership approach' to regulation in the context of high organisational diversity.

8.3.1 Features of regulatory relations in Zambia

As pointed out in chapter two, a tension exists in modern capitalism between the views of government as (largely economic) *enabler* and (largely social) *enforcer* of society's chosen standards (Harriss-White 2003). This tension is reflected in contrasting views of how government should regulate business: at one end of the spectrum is 'command-and-control' regulation, at the other is complete self-regulation. No regulatory regime is a pure case of either but will – in practice –contain elements of both. In Zambia I found that government places high emphasis on providing an enabling environment for business, formally through incentives and informally through a strongly pro-investment political discourse.

I found relations between the regulatory agencies and the mining sector to exhibit three characteristics. First, regulation was *heavily reliant on self-reporting* with companies expected to self-report their performance, semi-annually (to ECZ) and quarterly (to the Ministry of Mines).³⁸⁰ Regulatory features such as self-reporting of course serve a very practical purpose of reducing costs for the regulator in ensuring the compliance of firms. In Zambia there appears to be a degree in terms of actions taken on the basis of these reports: ECZ officials review this six-monthly data using their judgement and if values are 'off' in one month but not others, no action may be taken (ECZ senior inspector, 23.7.07). My examination of such 'statutory reports' highlighted the variation in internal standards and procedures among companies (see chapter six).

It would appear that companies have considerable freedom to choose what they report, as this reporting varies widely. Companies with operating practices aligned with international standards seemed to submit statutory reports with much higher levels of detail. I was shown a report from NFCA, comprising a single sheet

³⁸⁰ Livernois & McKenna (1999: 420) present a model of environmental policy with self-reporting with the following variables: accepted pollution levels, probability of inspection, fines for non-compliance (if fails inspection), fines for non-compliance (if voluntarily reported).

with a 10x10 table of figures, to be compared to reports from CM that provided a broad range of data, including narrative explanations (thus partially off-loading the ECZ of the burden of analysis).

A second feature of Zambia's mining sector regime was the highly *consultative nature of regulatory relations* (see chapters five and six). This appeared to reflect the foreign investment-driven growth strategy of Zambia's recent governments (see chapter four). A consultative approach has benefits because it helps firms from different institutional backgrounds adapt to a new external (policy) environment (see chapter two). In Zambia the need for consultation is partly a function of the stability provisions given to mining companies at privatisation: under these provisions government cannot force costly amendments and must get big companies 'on board' in order to implement legislative reform.

Third, accounts from representatives of regulatory agencies overseeing the mining sector point to a sense of *mutual accountability* between agencies and firms. Under existing regulation mining companies can challenge and even sue the ECZ for non-adherence to its mandate and statute, e.g. in relation to non-disclosure of sensitive information.³⁸¹ The effect of regulatory agencies being accountable to business is most significant at the ECZ, since it is partly funded by the mining sector through licensing and user fees. The agency is thereby easily subject to charges of conflicts of interests. Top MSD officials' reluctance to reform that agency (by making it semi-autonomous and allowing it to charge 'user fees' like the ECZ) can also be explained by an aversion to the heightened scrutiny that comes from such a setup (MSD inspector, 27.8.07).

8.3.2 Zambia's 'partnership approach' to regulation

I refer to the collection of regulatory characteristics above – that ascribe a large role to the preferences of regulated agents – as a 'partnership approach' to regulatory policy making. It is fundamentally based on the common goal of the Zambian state and the foreign mining companies: private-sector led development. Key features are that *consultations* (in various forms) are a key tool for the state to develop regulatory reform agendas, and that consensus is seen as a tipping point when reform proposals acquire legitimacy. This concept of regulatory policy making has its roots in the liberal conceptions of the state as primarily concerned with providing an enabling environment for business (see 2.2.2). A drawback is that the pursuit of a regulatory settlement that minimises conflicts between state and heterogeneous firm interests requires very complex negotiations to take place.

This 'partnership' between states and firms is based on formal arrangements that are contractual, formalised, and based on mutual and well-defined rights and obligations (such as when a government and an infrastructure firm come together in a 'public-private partnership'). It is also based on shared cultural values, such as norms of reciprocity or common aims (e.g. independence or national development). Such shared cultural values can enable parties to transcend collective action problems by reducing transaction costs and enable institutions to evolve (Greif 1998; North 1990).

In Zambia the regulator thus presents itself as a partner to the companies, that is there to enforce but also to enable: "the idea is that we need to come up with a winwin situation, so that when we regulate, we regulate such that they are more than

 $^{^{381}}$ As a top ECZ official explains, "also ECZ can be sued, we are liable to being sued. We can be sued actually for maybe divulging information that we are not supposed to share." (8.8.07).

willing and glad to comply with whatever has been put before them" (ECZ official 4, 8.8.07). Companies are in the first instance asked to rectify situations where they are found to be non-compliant.³⁸² Regulatory relations also resemble a partnership in the sense that mining companies are given the benefit of the doubt, and that mining companies and regulators are expected to *work together* to achieve a socially optimal outcome. The partnership approach to regulation thus facilitates the accommodate of firms with varying environmental, safety, and economic practices.

8.3.3 The fungibility of power in state-firm relations

This sub-section introduces the concept of *fungible power in state-firm relations*, to describe how the exercise of power in negotiations over a particular policy can be used to influence outcomes in parallel state-firm negotiations. My notion of fungible power reflects the idea of competing and/or complementary interests being experienced as a totality by a social actor.³⁸³ The implications is that a mining company's policy positions in one area become contingent on policy positions in other areas.

For example, the Development Agreement renegotiations were not only about fiscal incentives and stability clauses. Although compliance has been patchy, DAs also committed firms to various environmental, social and private sector development objectives, including submissions of proposals for training of Zambians and local business development.³⁸⁴ The concept of fungible power in state-firm relations also helps explain why, as I argued in chapter four, government largely failed to deliver on its promises of stability (cf. the view held among CM management that hikes in local government taxes and ECZ fees constituted a breach of DAs).

It becomes difficult for government agents to 'partner' and reach consensus when there are so many proposals on the table at the same time. The mines saw the Development Agreement renegotiation agenda in 2007 as part of a complex 'grand bargain' that included inter-related reform proposals concerning environmental regulation, health and safety governance, and energy security.³⁸⁵ The CEO of Metorex (the South African firm operating Chibuluma mine), in declining to participate in my study, went so far as to say that a study of policy evolution did not "make sense" because the regulatory environment for mining was in such a "state of flux" (Mounsey, 12.9.07).³⁸⁶

³⁸² If non-compliant practices are identified, ECZ will first issue an "enforcement notice" stating remedial actions to be taken. According to the law ECZ then returns 7-14 days later to inspect against the enforcement notice, although this follow up inspection is often lacking (ECZ official 3, 23.7.07).

³⁸³ Interests are understood here in relation to sectoral or issue-specific reforms, including environmental, and other regulations. The concept of fungibility has previously been examined to some length in the literature on foreign aid (see Feizioglu et al. 1998).

³⁸⁴ A decade after privatisation, the unilaterally implemented Mines and Minerals Development Bill (enacted on 1 April 2008) similarly requires that applications for all large-scale mining licenses include the submission of an Environmental Management Plan (GRZ 2008: 24). This represents a 'step up' from DAs granted at privatisation, which only required companies to submit such plans within three years.

years. ³⁸⁵ Given the evidence of transfer pricing presented above, proposed stricter rules on management contracts by the Zambia Revenue Authority (Chungu, 21.11.07) further added to the sense of a grand negotiation taking place.

³⁸⁶ Various aspects of mining companies' operations were similarly under scrutiny at once through the project to audit the mines (using donor-funded consultants, in preparation for DA negotiations) on environmental, health and safety, training, as well as local business development (Lundstol, 30.10.07).

The range of overlapping negotiations taking place had varying impacts on mining companies depending on their cost-structures, routines-in-place and management objectives. With an absence of known outcomes in some policy spheres, firms could not easily commit to a particular position in other policy spheres. This complicated and slowed down state-firm bargaining around policy reform. Overlapping aims *within* the government may also have reduced policy visibility for the mines. For example, whereas the Ministry of Finance was leading the new tax policy, the Ministry of Mines led the country's World Bank-sponsored EITI initiative (Mubanga, 21.11.07).³⁸⁷ This is despite the fact that the EITI seeks primarily to improve transparency regarding tax payments, and as such has aims (and implications for firms) that overlap with government's broader tax policy.

The commodities cycle with its rapidly expanding and contracting prices undermine the ability of 'partnership regulations' to deliver reform. Indeed, government's unilateral action on taxes and royalties – a breach of the partnership promise – was likely triggered by the a sense that the end of the boom, and falling copper prices, would quickly undermine government's bargaining position (see 8.2.3).

International relations and donor policies also play a big role in determining the overall investment into the mining sector, through lending (e.g. the IFC) and donor financing for institutional reform to 'level the playing field'. In the case of state-owned enterprises – including most of the large Chinese companies active in Africa's extractive sectors – the congruence of interests is even more clear-cut.

To sum up, fungibility of power in state-firm relations promotes flexibility and open-endedness at the expense of stability and predictability, thereby making statefirm relationships more like incomplete contracts (Williamson 1998). The openendedness of the state-firm contract was also evident with regard to economic linkages discussed in chapter seven: the lack of knowledge among individuals interviewed for this study of the appropriate multiplier effect between mining sector jobs and indirect jobs (e.g. local manufacturing) is itself a finding. When policy makers do not know with any precision the development impacts of mining investments, state-firm 'contracts' must be seen as incomplete i.e. imperfectly specified.

8.3.4 The politics of partnership

This section discusses the politics of partnership regulation in the Zambian context, with reference to three discrete but interrelated themes. I first discuss what Zambia's interventionist political culture means for effective partnership regulation. I then discuss how partnership does not absolve regulators of the need to be well-staffed, and how agencies funded through contributions from the mining sector can lead to allegations of conflicts of interest. Lastly I highlight some implications for the role played by civil society in the mining sector.

8.3.4.1 Political culture

The mandates given to regulatory agencies to provide an enabling environment for investors often contrast with central government's own attempts to retain control over the economy (and minimise commodity dependence). Although there is much

 $^{^{387}}$ The objective of the EITI – to increase transparency and thereby improve tax collection – is institutionally aligned with changes to the fiscal regime announced in January 2008, which includes the establishment of an easily audited copper 'reference price'.

consultation between firms and regulatory agencies such as the ECZ and MSD, these consultations have little to say about the how reforms are passed into law, implemented and financed. Rather, the executive decision of whether to move ahead with proposed reforms rest singularly with the government and ultimately the Presidency. As Peter Sinkamba at the CBE puts it, industry can really "only judge if it is adequate or not ... [government] issues an Act of Parliament and that is it." (14.10.07).

In passing new legislation and in its general approach to business, the government was repeatedly described as following a prescriptive *command-and-control* approach (see 4.3). This can be traced to concerns with sovereignty (see 4.3.2) and a culture of de facto centralised decision making (see 2.2). It contrasts with the ideology of partnership that was apparent at the level of regulatory agencies. Thus, whilst Young (1981) saw policies but not outcomes as influenced by ideology, this study suggests that different ideologies of regulation appear to exist somewhat independently at different levels of the state. Central government and regulatory bureaucrats thus operate according to slightly different logics in their attempts to control the mining sector (c.f. the African 'hybrid state', see 2.2.1). Mining companies in Zambia must deal with both.

The close influence of government in the mining sectors, through informal and often personal relationships, can explain the reluctance of regulatory agencies to be forthcoming with information to researchers and NGOs. Agencies are afraid to share information with third parties if they run a risk of upsetting political state-firm relationships that (due to high information asymmetries) they are unlikely to have full information about. For example, mining companies can appeal to the Minister, above the heads of the regulatory officials at the ECZ if unhappy with the latter's chosen course of action. This limits real mutual accountability and may weaken inspectors' job security, i.e. their 'internal' property rights (consider how the ECZ was rebuffed over its decision to prosecute KCM management over their pollution of the Kafue river, see chapter six). This may lead to even greater caution among implementing agencies in their handling of the firms.³⁸⁸

8.3.4.2 Regulatory capacity, taxation, and the democratic system

Importantly, partnership regulation does not eliminate the need for regulators to be well-staffed and well-resourced. Somebody needs to analyse and draw conclusions from company reports. In fact, partnership regulation necessitates ongoing interaction, which in a context of firms from different institutional backgrounds (that operate according to different standards) requires significant organisational capacity.³⁸⁹ This is a particular concern, as I argued in section 8.2.3, since the copper boom that followed privatisation led to increased competition for skills (thus constraining regulatory capacity).

In theory, taxation presents a way to raise funds to ensure regulatory agencies are sufficiently well-resourced. Yet in the post-privatisation period the Zambian government was largely unable to levy taxation on the mining sector. In lieu of this, the government attempted (as noted above) to strengthen funding for agencies such as

³⁸⁸ This notion of 'internal' property rights resonates with findings by van Donge & Liviga (1986) that 'presidentialism' in African states is less about top-down coercion, and rather about government officials not wanting to 'rock the boat' because of overriding concerns about stability.

³⁸⁹ Because of lacking capacity, Zambian regulators currently exhibit a post-hoc approach to

enforcement (illustrated by one respondent's comments that people approach the company only after an accident has occurred).

the ECZ by letting it charge user fees, thereby making it "semi-autonomous" from government.

However funding regulatory activities directly through user fees (rather than through taxation and public spending) is problematic because it removes these regulatory activities from the democratic system. It subjects regulators to allegations of conflicts of interests, e.g. whereby levying user fees can lead to charges of rent-seeking and concerns that ECZ's regulatory activities become a "fund-raising mechanisms" (ECZ official 4, 19.11.07). Such suspicion hampered the ability of Zambian regulatory agencies to strengthen their enforcement by levying fines.

8.3.4.3 Informational context and civil society

A further feature of partnership regulation I found in Zambia was that it put, within the discourse of regulation, state actors 'on par' with regulated entities. I argue here that whilst this opens up space for more direct and continuous two-way communication between these groups, it risks excluding wider civil society. First, the significant information asymmetries in Zambia limit the capacity for bottom-up enforcement by civil society: it results in limited public information around which non-state actors can advocate and mobilise the public interest (see chapter four). For example, the donor-funded CEMP report described the current EPPCA as instituted through a government-focused process with limited awareness from citizens and local communities, thus hampering its effective implementation (see 6.4.3.5).

Second, the mutual accountability (in the case of environmental regulation institutionalised in the EPPCA) results in disincentives for regulators to divulge information to other stakeholders.³⁹⁰ This is institutionalised in the EPPCA. I quote one ECZ official at length: "usually … we don't want to release this information [on non-compliance] neither to the press or to the wrong hands. In the past there have been cases where a company is taken to court by some residents … so the company could also say how did this information get to these people? The only place where we share this information is ECZ, so ECZ you have broken the confidentiality agreement [in] the EPPCA that obliges us not to divulge certain information that, once in the wrong hands it may actually put the company in the wrong light" (ECZ official 4, 19.11.07).

Third, the exclusion of civil society under the partnership approach to regulation conditions civil society approaches for engaging with the mining sector. When environmental and labour rights NGOs are excluded from public reporting of company (environmental, financial etc.) performance, their only means of engagement is through legal and adversarial confrontation – the approach chosen by NGOs Citizens for a Better Environment – rather than more constructive dialogue (ToZ 9.2.2009). Such an 'adversarial' strategy for engaging with the mines is resource-intensive for NGOs. Moreover this type of engagement risks being misinformed, given the low-transparency environment of Zambia, such that advocacy messages are met with little serious response.³⁹¹

³⁹⁰ In the context of a close-knit mining community, the effect of mutual accountability is amplified. ECZ 'unfairness' with one mine is likely to be shared with others, including the CoM, who can then challenge government (and perhaps – by extension – the jobs of ECZ officials).

³⁹¹ For instance, despite skill shortages described above, civil society often takes a critical stance against the use of expatriate engineers in the mining sector. This is exemplified by the claim by Father Kaunda of NGO Caritas Zambia that "Zambia already has experienced engineers, so why do mining companies need to import such skills?" (9.10.07).

8.3.5 Partnership in a context of diversity

Although the government portrays itself as a 'partner' to the mining sector, not all companies are given equal access to the policy process. I found some evidence that despite much consultation, the inclusion or exclusion of stakeholders remains at the *discretion of government policy agents*. This raises questions of whether the government views some mines as preferred constituents (for instance, only the largest mines were invited to consultations over environmental regulations; ECZ official 3, 24.7.07). Elsewhere, tripartite labour negotiations between government, labour unions and employees only included – at the time of fieldwork – the largest mines ("the likes of KCM and MCM"; Bantubonse, 10.10.07).³⁹²

It is understandable that not all firms are invited to all negotiations given the transaction costs involved. As noted above, 'partnering' with different companies with substantially different interests (as defined by their routines and objectives) puts pressure on already capacity-constrained state agencies. Nevertheless, such selective bargaining undermines the partnership approach and risks alienating smaller actors.³⁹³ As Braithwaite has argued, for self-regulation to work, companies must "internalise the values in the law" (1989: 59). Discretionary consultation with only a select group of firms prevents non-participating companies from learning and adapting to emerging policy agendas. It slows down the process whereby Indian, Chinese and western mining managers adjust to Zambia's espoused values and norms of doing business (leading to stagnation in policy reform, see 6.4.4).

A regulatory policy with prominent use of self-reporting can work well to alleviate regulatory capacity constraints in a context of low diversity (i.e. it helps if you have just one format of report to analyse and follow up on). It is more problematic in a context of high organisational diversity. For example, the ECZ in Zambia lacks standardised self-reporting protocols owing to the asset-specific exemptions given to companies at privatisation.

Government can more easily 'partner' with the sector if the sector itself can reach internal consensus.

Given the varied aims and routines of the mines this remains difficult, even though the Chamber of Mines is taking steps to promote more unified policy positions. For example, the government had intended to renegotiate the fiscal framework with the sector as a whole, as evidenced by formal invitations to companies to enter into renegotiations (which companies accepted, see chapter five). However it failed to do so, given the difficulties to reach consensus. Sensing that it had a window of opportunity as long as copper prices were high, the government opted for the more adversarial route of unilateral action.

Finally, negative reputational externalities undermine the ability of mining companies to produce a coordinated approach to policy reform. If certain companies in the sector do not ascribe to their responsibilities, as laid down by the state, they create political pressures on the sector as a whole (e.g. those drummed up against

³⁹² In future the CoM is hoping to become involved in order to represent the whole mining sector.

³⁹³ Clearly the fact that consultations over new regulations are not all-inclusive does not imply that the GRZ is intentionally and strategically *selecting* which companies to invite. As my respondent at the MSDP suggests, it may also reflect a lack of organisational capacity within state bureaucracies: "I think people suddenly wake up in the Ministry of Mines to the fact that a certain decision has to be made, and its quite quick, they might simply send out an invitation can you come tomorrow to a consultative workshop ... then decisions are made without that person." He elaborates that "the Ministry of Mines will probably feel two things, first we have to drop everything, and second, that's the way we do things in Zambia, if you can't adapt to that then tough. Actually they don't even rationalise like that, it's just how it is done." (MSDP techn. ass't, 1.10.07).

foreign investors by Michael Sata ahead of the 2006 election). In discussing the mining sector more generally, stakeholders repeatedly highlighted KCM's and NFCA's incidents as causing reputational damage to the sector as a whole.

8.3.6 Section conclusion

This section first defined Zambia's regulatory approach to the mining sector as based around a set of characteristics and norms that together engage states and firms in a partnership with the common purpose of private sector led development. I noted how this 'partnership approach' to regulation was based on regulatory relations exhibiting features of self-reporting, consultations and mutual accountability. It appears that this partnership 'ideology' is shaped by a combination of 'hard' donor demands for market-based solutions and 'soft' FDI-friendly liberal discourse. The concept of partnership regulation is analytically useful as a benchmark from which to distinguish between different articulations of state-firm relations. It is also inductively useful because it helps us understand how largely western or neoliberal ideologies of governance become applied and embedded in weak resource-dependent states. It helps illustrate how such an approach, based on assumptions of stability and homogeneity, fails to deliver reform in a context of rapid change (volatilise commodity and financial markets, and growing economic and political power of countries such as China and India).

This section then discussed how power in state-firm relations becomes fungible when there are unusually policy reforms on the table at once. In an interventionist African state, regulatory enforcement becomes political and not merely technocratic: non-compliance in one 'arena' carries not only direct costs but may have repercussions in other areas of state-firm relations. External influences serve to complicate this 'game' further, as regulatory relations become an inseparable sub-set of broader inter-state relations.

Turning to the question of how Zambia's political culture influences partnership regulation, I argued that mining companies find themselves having to sustain relationships with two levels of the state, and that these two levels have different logics of how to regulate the mining sector. Regulatory agencies are thus charged with implementing policy in partnership with firms, yet constrained by more centralised and 'command-and-control' relationships between the executive and mining companies.

A partnership approach to regulation also fails to account for the wider political economy of foreign investment, and the fact that regulatory capacity is always needed, no matter how much you emphasise self-regulation. I also highlighted how the partnership approach, due to its emphasis on mutual accountability between regulator and regulated, can make regulatory agencies reluctant to share information. This limits the policy space in which civil society can participate.

Finally I linked a partnership approach to regulation with particular challenges in a context of organisational diversity: the emphasis on self-reporting, in the context of capacity deficits and Zambia's political culture implies that companies can continue operating the way they have operated in the past: companies are likely to submit reports to regulators that are limited to information that can easily be produced by *already-in-place routines*. I found tentative evidence that companies with more sophisticated reporting systems, which routinely produce detailed and relevant data, are likely to provide the regulators with more information on the basis of which to make decisions. The sense of one big complex renegotiation taking place (see 8.3.3) would be less of a problem if mining companies were good enough at agreeing amongst themselves. However I argued that non-compliance among some companies carries negative externalities for others, leading the latter to bargain for stricter controls, thereby splitting the mining sector into pro- and anti-reform groups (see 6.4.4). Given that learning and convergence among mining companies can improve the efficacy of partnership regulation, the next section now turns to this topic.

8.4 Organisational diversity, learning and convergence

This section seeks to map out and establish the diversity of business practices among foreign mining companies from different institutional backgrounds, and identify processes of organisational learning that are taking place. In doing so it aims to illuminate the research question of whether and under what conditions organisational learning is resulting in convergence across regulatory standards and practices.

I begin by exploring diversity across the mining companies' business practices, based on organisational routines and aims highlighted in the three empirical chapters. The second sub-section discusses the processes whereby convergence or divergence takes place among diverse actors. The third sub-section highlights some examples of organisational learning, with particular reference to NFCA as a case study. In the last sub-section I argue that policy making must take into account the diversity of business practices, in particular in the context of a partnership approach to regulation. The risk otherwise is that companies have to learn 'the hard way', i.e. always addressing significant negative impacts post-hoc, clearly associated with significant social costs.

8.4.1 Establishing diversity across the mines

The framework for understanding organisational behaviour developed in chapter two emphasises the role of organisational routines and objectives. These routines and objectives govern a firm's interactions with its external environment, including engagement with policy-makers, safety and environmental standards and management, as well as supplier practices. My empirical chapters subsequently made use of these constructs to illustrate particular and at times divergent patterns of behaviour across foreign investors.

Some of the diversity in my sample of foreign mining companies in Zambia is captured in the in the uniqueness of Development Agreements, including different environmental rules depending on the mining infrastructure inherited. However the institutional background of firms, including their varying reliance on international capital markets, also plays a big role in explaining the variation in standards and attitudes across companies (see section 6.3.1).

KCM, FQML and CM all include elements of international environmental and safety standards in designing their internal processes (I found no evidence of equivalent standards present at NFCA). Such international standards matter in the context of Zambia's partnership approach to regulation, where it appears that a company with sophisticated reporting systems that 'routinely' produces detailed data – and which thereby faces no transaction costs in doing so – will provide the regulator with this information. The reader should thus bear in mind that worse-reporting firms are not necessarily looking – actively and intentionally – for opportunities to cut corners or confuse inspectors. Rather, reporting may be poor because routines-in-

place are weak or because conflicting objectives (e.g. cost-minimisation) prevent investment into development of more detailed reporting routines.³⁹⁴

Chapter seven discussed the practices among some mines, in particular at NFCA and KCM, to bargain very 'hard' with suppliers. These two companies used their connections with Chinese and Indian markets, respectively, to obtain inputs at prices with which local suppliers could not compete. One finding of this thesis is that organisational routines and aims often overlap, and in doing so reconstitute one another. For example, at KCM the apparent aim of cost-minimisation is associated with practices of dealing with suppliers by routinely asking for a "discount on the discount" (Mirza, 8.10.07). In other cases, organisational aims may conflict with routines: for instance, KCM's aim for flexibility – linked by respondents to its new Indian owner's "hurry to see results" – is a poor 'fit' with more formal but less flexible routines inherited from AngloAmerican.³⁹⁵

In support of existing theory I found these routines and aims to be relatively stable over time, reflecting path-dependencies and an implicit discounting problem (whereby managers must make a trade-off between shorter-term and longer-term benefits, see 2.4.1).

Organisational routines persist even in the presence of inefficiencies. I found that the aim of minimising costs, for instance, can easily lead to operational disruption without much in the way of sustainable advantages. The cost-minimisation objective may bias business decisions towards lower-quality goods and services, thereby hampering the longer-term performance of the firm. Cost minimisation may also be bad for the longer-term performance of companies if it reduces the ability to retain human capital. Thus a desire to minimise labour-related costs at NFCA leads to a fickle labour force that only remain with the firm in the absence of other opportunities (see 6.3.7).

8.4.2 How diversity persists: mechanisms of convergence

Having looked at diversity, I now turn to the question of how diversity evolves, and what might drive convergence or divergence around regulatory standards. I focus on changes to organisational routines and aims through processes that I defined in chapter two as organisational learning.

As argued in chapter two, organisational learning is in part a collective activity. In social settings where historical experiences are easily shared, knowledge can be seen a public good. In Zambia there are many close personal relationships between key individuals at the mining companies. Through these individuals the mining companies become engaged in a loose network, which facilitates learning from others. The emphasis on consultation embedded in the partnership approach to regulation can therefore, over time, support greater convergence around standards.

Processes of convergence are facilitated by organisations that mediate between the state and the mining companies. As discussed in chapter four, ZCCM-IH and the

³⁹⁴ It is, for instance, difficult to ascertain whether the auditor qualifications given to NFCA's financial reporting are due to poor quality of internal reporting more generally (lack of appropriate routines), lack of benefits of getting a clean approval (because the firm does not rely on international 'western' capital markets), or the existence of something to hide (transfer pricing, corner-cutting) – or some combination of the above. Similarly, the 'delaying tactics' mentioned by unions in relation to NFCA could reflect bureaucracy (existing routines) *or* an intentional strategy of obfuscation.

³⁹⁵ One respondent explained that "AngloAmerican [was] a structured and well-laid out system. To anyone coming in, AngloAmerican said 'this is how we do this, and you have to stick to the rules'." (Masupha, 12.10.07).

Chamber of Mines play significant roles in mediating between government and the mining sector. The presence of ZCCM-IH on privatised companies' Boards seems to promote stability by enabling government to obtain intelligence regarding the private sector (thereby reducing transaction costs associated with effective – i.e. more fully informed – policy making).³⁹⁶

Processes of organisational learning and change also take place through embedding and normative diffusion of routines. As Biggart (1977) observes, contact between firms through movement of personnel constitutes a form of mimetic diffusion of norms and rules, driving convergence within an organisational field (see 2.5.5). Such personal networks also involve state regulators. The aforementioned evidence of skills shortages meant mining companies would 'poach' inspectors from government (and to a lesser extent from each other). Through this process of socially embedding the firm, convergence of norms and practices take place.

However these processes of convergence are not automatic. First, the hybrid nature of the African state (see 2.2.1) enables it to simultaneously entertain formal as well as informal expressions of state-firm relations, reducing pressures on convergence. Second, within an institutional context where freedom of press is limited, reporting standards are non-uniform, and civil society is weak, the difficulty of observing 'true' conduct rises. As a consequence, stakeholders may not discriminate between companies, which poses a problem for better-performing companies that end up being judged in light of the lowest-performing firm.³⁹⁷

Lastly, when interaction between a firm and external stakeholders is mediated by an opaque institutional environment (see chapter four) the potential for such interaction to convey information about others' preferences is limited. In this case the information that reaches the firm – which forms the basis of organisational learning – is unlikely to reflect accurately the demands and expectations of stakeholders in the firm's external environment. In other words, routines become less effective as 'filters' (see 2.4.1). The result may either be less organisational change, or change that is poorly aligned with the economic, social and political environment.³⁹⁸

8.4.3 Evidence of organisational learning

Organisational learning was defined in chapter two as the processes of change whereby a firm evolves its routines and aims, due to internal or external impetus. Normally, organisational routines and aims change slowly in response to a changing environment. However over time they change in response to social interaction as firms seek to improve routines (e.g. environmental management) or re-focus aims in order to align their interests with its state- and non-state stakeholders.

In Zambia's mining sector I found evidence of convergence of standards and practices in areas of policy positions, security cooperation, as well as in the growing role of the Chamber of Mines as spokesperson for the mining sector. Representatives

³⁹⁶ This is Peter Evans' (1995) embedded autonomy argument: a state that was only embedded would be totally captured by interests groups, whilst a state that was only autonomous would lack sources of intelligence and the ability to rely on decentralised private implementation. In Zambia the government's embeddedness becomes crucial given evidence that firms retain the right to exit in the

government's embeddedness becomes crucial given evidence that firms retain the right to exit in the event of adverse external market conditions.

³⁹⁷ This is particularly the case because 'negatives' – i.e. poor performance, strikes, riots, environmental incidents etc. – are more likely to cause a media uproar than company 'positives' such as community investment and timely reporting.

³⁹⁸ Recall that transaction costs exist at the stage of information acquisition, as well as when changing organisational routines, systems and norms.

of regulatory agencies I spoke to argued that companies were also converging towards the same standard of regulatory compliance. NFCA in particular was seen as having 'improved' its practices, albeit from a 'low' starting point. In late 2007 the situation at Chinese-owned mines was improving according to respondents at both ECZ and MSD.³⁹⁹ This also applied to the area of labour standards.⁴⁰⁰

Yet some elements of business practice appeared more resistant to change than others. At NFCA organisational objectives of cost-minimisation continued to shape labour practices and limit trust between expatriate and local managers and workers. With limited interaction between Chinese expatriate managers and Zambian employees, there is little flow of information to facilitate organisational learning and diffusion of norms regarding doing business in Zambia (and with Zambians).⁴⁰¹ In addition, I found no learning in the area of financial accounting and reporting. As the head accountant at NFCA reflects, "every year there are the same things that could not be comprehended last time [by the auditors]" (Chirwa, 30.11.07).

To illustrate where the impetus for effective learning arises, and why NFCA has changed in some areas but not others, I draw on theories of evolutionary economics developed in chapter two. First, direct experience, or learning-by-doing, may account for some of the changes in the company's labour practices (see 2.5.3). Stephen Banda at NFCA observed how in the past workers used to go underground without protective clothing: "[t]hey never knew the dangers of doing that. Until when three-four Chinese were killed, then they realised 'oh, we have to be serious about safety'. I would say that at least of late they are trying to improve on safety." (8.9.07). Another example of learning-by-doing relates to pressures from within the organisation: my respondent at NFCA argues (regarding continued improvements in conditions of service) that "it is because of the pressure of the workers themselves that have made those guys to change." (Banda, 8.9.07). ⁴⁰² Judging from follow-up interviews after field work, these changes to practices have been sustained, indicating examples of double-loop learning (see section 2.5.4).

Alternatively, learning may arise from purposeful search and engagement with outside actors. This includes attempts to accommodate or in other ways defuse an increasingly adversarial political environment (such as that reflected in the 2006 election and in debates following the publication of Development Agreements in early 2007). One respondent at NFCA suggests that greater sensitivity to reputational risks (post-election, post-BGRIMM, post-DA publication) means that mining companies can no longer ride roughshod over communities in their vicinities (Maboshe, 25.8.07).⁴⁰³

³⁹⁹ "I must say that in the last two-three years they are catching up ... they are learning quickly." (MSD inspector, 27.8.07).

⁴⁰⁰ "I'm telling you at first it was very difficult to interact with the Chinese ... but of late they are trying, I would say some are good, some are not good." (S.Banda, 8.9.07).
⁴⁰¹ Maboshe recounted how a new (Zambian) public relations officer at NFCA retorted "we don't

⁴⁰¹ Maboshe recounted how a new (Zambian) public relations officer at NFCA retorted "we don't interface with journalists" when called from the press, lamenting that "our own Zambians" are supporting NFCA's poor accountability (2.12.07). Banda jokingly explains that "we have what we call Zambian Chinese, or 'black Chinese'" (2.12.07), referring to workers who adopt the practices and norms of management. My respondents are pessimistic about reform at NFCA, suspecting that because of such a tendency among Zambian employees it "will never change".
⁴⁰² Other examples of labour-led progress include the new HIV/AIDS policy, see chapter six.

⁴⁰³ Regarding a case where there were seasonal farmers occupying NFCA land, Maboshe thinks NFCA recognises they will get into trouble if they remove the farmers by force. "The fact is that they will have a problem with human rights NGOs if they just push them out… And that will also make them look bad. So they need to be sensitive, they have to do it nicely." (Maboshe, 2.12.07)

NFCA appeared wary of becoming more of an embarrassment to government, sensing that the ruling MMD would be unlikely to stake their political future on Chinese investment alone. Retaining control over the legislature and with direct influence in the economy, the President could easily act against these investors if political sentiment against these mines grew strong enough (for the opposition) to challenge the MMD Presidency. The importance to NFCA of relying on GRZ as a broker – and evidence of official visits to NFCA and otherwise close links with the central government – provides a mechanisms for the communication of such concerns.⁴⁰⁴

However, installing a Zambian human resource manager – one of the changes at NFCA in response to post-BGRIMM criticisms – appears to not have been associated with more fundamental changes in company practices (one respondent sees him "more like remote control"; Banda, 8.9.07).⁴⁰⁵ The response to this learning-by-search appears to be associated with single-loop learning, in particular where 'hard' enforcement is rarely exercised.

My findings also indicate that under Zambia's partnership approach to regulations, learning-by-doing ('low interaction') is likely to constitute double-loop learning at NFCA (Argyris & Schön 1978). Outside pressures ('high interaction') on the other hand, unless coupled with real threats of enforcement, are likely to be limited to more superficial single-loop learning (i.e. small changes to accommodate regulatory demands, satisficing health and safety inspectors with the bare minimum etc.).

Another finding is that within this regulatory framework, firms that emphasise cost-minimisation (KCM and NFCA) appear more prone to single-loop learning. They thereby fail to address the internal systems in a way that reduces future risks of environmental, health and safety incidents: small incremental changes that are associated with lower costs are prioritised over the more fundamental (and costly) change associated with double loop learning (cf. how KCM's large scale pollution of the Kafue had long been preceded by "small spills and small spills", see 6.4.2). Table 9 displays an indicative tabulation of examples of organisational learning in the Zambian mining sector.

	Single-loop learning	Double-loop learning
High-interaction (incl. with different parts of the state, identifiable external pressures)	 Human resources policy (NFCA) Accounting systems (NFCA) Ongoing env. non- compliance (KCM) 	 Env. incident (KCM) Security (KCM, CM, FQML, MCM)
Low-interaction (learning-by-doing, no identifiable external pressures)	• Labour conditions of service (NFCA)	 Safety practices (NFCA) Health, HIV/AIDS (NFCA)

Table 9. Classification of examples of organisational learning

⁴⁰⁴ Stephen Muyakwa, Chairman of CSTNZ, thinks that the GRZ has grown more assertive towards NFCA, "taking advantage" of these political pressures and "saying 'you almost cost us the [2006] election'." (17.7.07).

 $^{^{405}}$ Banda explains that "the problem is that whatever that he thinks, he also takes it to this man, and if he says it is not good, that will be the end of it." (8.9.07).

8.4.4 Organisational diversity, learning and policy evolution

Organisational diversity matters for policy makers pursuing an enabling 'partnership' framework for international investment. I found western companies to be more used to the idea of regulatory relations as a constructive partnership, for instance CM often proactively invited regulators to come to its plants. FQML, similarly, pursues wide and open engagement with stakeholders, while NFCA preferred to let the Zambian government broker its relations with communities and labour unions.

I found evidence of variation in positions and attitudes toward proposed reform of environmental and health and safety regulations. Some companies (for instance FQML, MCM and CM) actively supported regulatory reform. They included the firms where I found most evidence of high standards (FQML and CM), i.e. the companies that could more easily (with less cost) deal with stricter standards. NFCA, in contrast, was described as "apprehensive" when safety inspectors were around. These differences highlight how organisational diversity makes some companies more supportive of reform than others: companies that already have high standards and reporting routines in place will have an easier job of implementing more stringent government policies.

Another example: the additional cost to FQML in publishing what it pays to government is a small effort with transparent and 'straight' reporting, as mandated by FQML's participation in international capital markets (listings in London and Toronto). The marginal cost to this company in pre-emptively aligning its reporting with the EITI is very small, and helps guard against negative reputational effects (see chapter five). At NFCA, on the other hand, aligning routines with new regulations promoting fiscal transparency will be more costly (given evidence of transfer pricing, see chapter five). NFCA management is thus likely to be more resistant to change, and simply evade these measures if they can.

Over time the processes of organisational learning can, to the extent it drives convergence around standards and policy positions, be seen as an input into the policy process (see 2.2.2). First, if firms are more of a homogenous lot, this makes it simpler for the state to enforce regulations. This is particularly the case with a regulatory framework that emphasises consultation and accommodation to each investor. As I argued above, it is resource-intensive to be a partner to a range of different actors. Second, learning is an intrinsic feature of a theoretical perspective of policy evolution, which emphasises mutual adaptation (as in the policy analysis of Grindle & Thomas 1991). This appears to be the case in Zambia, as argued by several respondents at the ECZ.⁴⁰⁶

To sum up, Zambia's regulatory context features an interventionist political culture, an emphasis on accommodating investors (partnership regulation), and high information asymmetries. In such a context firms must learn from their mistakes and only *then* do routines and aims (and standards) change. An ECZ official recalls how when Vedanta arrived in 2004 they were saying they had no money to implement the AngloAmerican EMP. However in the aftermath of Kafue, "overnight money was widely available ... So Kafue turned out to be a blessing in disguise, now we have [had] no problems getting KCM to comply." (ECZ official 1, 11.9.07).

⁴⁰⁶ "We have learned that the hard way in some cases, but we've definitely had to change our approach to how we regulate them" (ECZ official 1, 11.9.07).

8.4.5 Section conclusion

In this section I first established the diversity in organisational routines across investors from different institutional backgrounds. I reported on the oft-overlapping different channels of policy in the Zambian state: a state that can and does sustain, simultaneously, multiple (formal and informal) articulations of state-firm relations (for example NFCA vs. FQML). I argued that diversity across firms presents a problem when trying to reform mining sector policies. In the context of Zambia's partnership approach to regulation, where each investor is promised consideration, support, and with rights of consultation on new policy, *diversity equates to policy stagnation*.

I then discussed why convergence might take place over time. I argued that given transaction costs associated with changing routines (and given scarce managerial resources), managers must have sufficient incentives to expend resources on upgrading reporting systems. If regulation were more effectively enforced, this would increase the opportunity cost of non-compliance (thereby creating incentives for investing in compliance). In its absence companies' self-reporting will likely continue to reflect its routines-in-place.

In presenting some examples of organisational learning, the third sub-section provided some indications that worse-performing companies – if enforcement capacity is lacking – will respond to regulators through single-loop learning (Argyris & Schön 1978, see section 2.5.4). KCM's engagement with ECZ in the lead-up to the Kafue incident constitutes an example of single-loop learning. ECZ had been visiting KCM's sites, following several small spills, but the company had taken little forceful action to remedy the problem. This suggests that lacking enforcement is associated with more superficial changes to environmental management systems.

Finally, I looked at how organisational diversity and learning shaped policy evolution. I found that the partnership approach to regulation and policy making did not appear to resonate equally strongly will all the mines. I also found that companies in the absence of effective enforcement are most likely to change their practices at a fundamental level when exposed to processes of learning-by-doing rather than external shocks in the policy environment (a somewhat counterintuitive result). The problem is that in high-externality industries where a (potentially significant) proportion of costs are not borne by the company, learning-by-doing (i.e. by incurring costs through trial and error) carries high social costs. In these situations, an effective regulatory framework is needed to ensure that companies change reform their routines and practices before such incidents occur.

8.5 *Chinese exceptionalism?*

Much of the rapidly growing academic literature on China-Africa relations has tended to isolate and explore Chinese engagement with little attention to historical and local context (see literature reviews by Large 2008 and Mohan 2008). This often results in a rather static view of Chinese engagement as somehow exceptional, separate from the western donor-driven international aid architecture, and even de-coupled from other influences on African economies and polities. A similar danger oversimplification is present in the literature on south-south trade and investment (see chapter one), with its grouping of countries into broad 'northern' and 'southern' categories.

In response to this deficiency I developed the concept of 'institutional background' as a basis of categorisation. It allows us to look at the political economy

of policy making through a multi-coloured lens of corporate governance, administrative heritage legacies (see 4.4.6), inter-state relations, and international markets (for capital as well as commodities). A central aim of this study was therefore to place one small part of China-Africa economic engagement in such a holistic framework.

In this section I attempt to elaborate on two inter-related questions concerning Chinese investment into the Zambian copper mining sector. First I ask how large Chinese companies are different from their western counterparts. I then ask whether China is likely to be a good development party to African states. I focus on features I believe to be generalisable beyond the single case of NFCA.

8.5.1 Distinguishing characteristics of Chinese multinationals

In this sub-section I make five selected points concerning what appear to be distinguishing features of Chinese state-owned mining multinationals. I first I argue that large-scale Chinese investment into Africa's extractive industries represents a form of *state-influenced capitalism* that includes exposure to markets as well as state politics. As a second distinguishing feature, I highlight the *network structure* of organising different mining functions that I found at NFCA. I then point to the fact that Chinese companies are unlikely to be *familiar with the partnership approach* to regulation employed in institutionally weak African states. Fourth, I note some tentative evidence of what I found to be *de facto* short-term strategies in place at NFCA, and finally the segregated nature of employee relations.

Chinese companies are often characterised by a nuanced mix of state influence coupled with partial exposure to markets.⁴⁰⁷ While the state-owned enterprises that dominate Chinese investment into the extractive resources often rely on international markets to buy and sell inputs and outputs, Chinese government plays a facilitating role: Chinese firms often enter through political channels and pursue articulations of state-firm relations that concentrate on executive-level relations with the Presidency. As the Minister of Commerce, Felix Mutati, remarked, "[i]t's because of the president going to China that we have been able to secure a loan of US\$1 billion" (Lusaka Times 11.3.10). African states with highly centralised and neo-patrimonial rule, including Zambia, can readily accommodate such relationships (see 2.2.1).

Unlike the other mines I looked at, NFCA operated in a network structure with a range of 'sister companies' (e.g. the Chambishi Foundry) primarily producing inputs to NFCA but simultaneously supplying (their surpluses) to other mining companies. This allows NFCA to retain control over its supply chain without relinquishing neither flexibility nor the discipline of the market. An interesting feature of this networked organisational structure is that it enables future entrants to leverage the experiences of already-established organisations (e.g. NFCA facilitating for new entrants into the Chambishi Special Economic Zone). In addition to financial support, NFCA disseminates internal policies and administrative processes. This network structure thereby drives convergence of standards among Chinese actors in the mining sector by allowing new entrants to leverage the experiences already internalised by NFCA.

One distinguishing characteristic at NFCA was what appeared to be limited familiarity of Chinese managers with norms of behaviour embodied in Zambia's regulatory framework. As discussed in some detail above, the partnership approach to

⁴⁰⁷ See The Economist (15.4.10). I elaborate on this point in Haglund (2010).

regulation requires companies to engage with regulatory bureaucrats, and relies on self-reporting supported by inspections and proactive exchange of information. Mr Sun, Company Secretary of the Chambishi Copper Smelter and previously at NFCA, suggests that companies in China do not have experience with the closer relationships with regulators. "I think that the labour laws in China will not interfere in the production of the company … here you must pay more attention to the labour laws, because it is easy for an investor to be taken to court." (1.11.07).

NFCA often appeared to tend toward *de facto* short-term strategies, including a focus on minimising costs, a focus on maximising short-term production, and rapid (institutionalised) turnover of Chinese managers. The focus on production among managers may be explained as follows: with NFCA expected (by its parent CNMC) to support other companies in and around Chambishi, including through loans, CNMC is likely to measure NFCA management's performance based on more 'operational' (non-financial) indicators (such as production and sales). This is because the latter production indicators are – unlike the financial bottom line – within NFCA management's control.

However short-term objectives lead to organisational learning that is superficial and reactive, and that fails to address underlying issues. It thereby undermines companies' long-term political legitimacy and drives nationalist politics in the host country (as I have argued in Haglund 2009).⁴⁰⁸ This is a particular concern in the context of Zambia's partnership approach to regulating the sector, where companies appear to be learning 'the hard way' (meaning that sustainable changes only occur *after* costly incidents).

In a related point, I also found clear evidence of managerial segregation at NFCA that did not exist at the other mines I studied (see, for instance, 6.3.6). As one of my respondents at NFCA notes, "[n]o matter how educated I will be, if a Chinese comes, I will teach him what to do, then they will say this one is your boss." (Banda, 8.9.07). This form of organising labour, with historical antecedents in the way British mining companies operated during the colonial era,⁴⁰⁹ limits organisational learning by the firm: an individual's experience is not transferred to others within the organisation, and "the lessons of history are likely to be lost through turnover of personnel" (Levitt & March 1988: 328).

8.5.2 Will China be a good development partner to African states?

Chinese development cooperation is still low relative to that of 'traditional' donors (Manning 2006) but it is expanding rapidly. China has pioneered the resource-backed loans that are funding roads and other infrastructure in many African countries, in return for natural resource concessions (see Foster et al. 2009). Importantly for many commodity-dependent African countries, the state-directed capitalism of the PRC has thus far been able to display itself as a more stable partner to African governments. In Africa's resource sectors Chinese investment exhibited particularly 'counter-cyclical' behaviour during the financial crisis that rocked the world economy in 2008 and 2009. This trend was apparent in Zambia, where Chinese firms acquired assets at low prices from their credit-constrained western owners (see Haglund 2009b, Brautigam 2009).

⁴⁰⁸ Chan (2008) reflects that Chinese companies' limited reflection over underlying systems, processes and values, and reduced exposure to competing views leads to risk analysis that can only be "generalised and one-dimensional".

[&]quot;generalised and one-dimensional". ⁴⁰⁹ David Leonard, Institute of Development Studies, personal communication (27.9.08).

In this particular crisis western capital markets rebounded pretty fast, however the lesson of who is a reliable partner was not lost on Zambian policy makers (Haglund 2011). Unlike most other states, China can make a credible commitment to maintain investment into key sectors, since it controls the companies that invest as well as the banks that finance them.

However there are causes for measured concern. Some features of how Chinese capital currently operates may limit its contribution to Africa's development. For example the networked structure reduces external accountability to the Zambia Revenue Authority, an important issue given evidence of transfer pricing in the sector (see chapter five).

Another issue is that Chinese companies that do not depend on international capital markets may be unencumbered by disclosure requirements and reporting based on international accounting standards, thus facilitating transfer pricing and tax evasion (see box below). Chinese investment may also have a particularly low catalysing effect on the local manufacturing sector, given the tendency among Chinese companies to procure from low-cost home-country input markets (which they are intimately familiar with).

In answering the question of whether China will be a good development partner to African governments, one must be careful to distinguish between state and government. China's generally un-transparent means of engaging and arranging overseas projects may hold benefits for ruling African political elites. At the same time, this form of engagement may actually – by virtue of excluding wider consultation and analysis of projects – reduce overall development impacts of this investment.

From a policy perspective, there is a risk that the preferred approach of Chinese companies to negotiate and invest in African markets leads to stagnation in policy reform. Africa has vast untapped natural resources but lacks domestic sources of capital to transform these into economic growth. In order to attract, retain and benefit from foreign investment effective policy must be in place. However Chinese companies are unlikely to be familiar with the type of 'partnership approach' to regulatory relations evident in Zambia, where consultations and consensus are required to legitimate policy reform in the mining sector. Rather, my Chinese case study firm shows a tendency towards approaches to engaging with, and seeking stability in, the external policy environment through engagement with political elites. These characteristics can become a hindrance to progress in reforming regulatory policies.

However any failure to proceed with reform cannot be traced solely to Chinese (or any other 'subversive') investors. Rather, both sides of the coin matter: it is the ability/willingness of the Zambian government to entertain both informal and formal relations that sustain differences within the sector (Haglund 2008). As Alden (2007) observes, Chinese investors' regulatory compliance varies across jurisdictions. Chinese firms thereby show themselves as quite capable, despite having internationalised relatively recently, of adhering to higher corporate standards in countries with stronger regulatory frameworks.

Importantly this thesis has also showed that the way in which my Chinese case study company does business, and negotiates the local political economy, has evolved over time. I found various examples of organisational learning taking place at NFCA, including how the company was seen as having improved both environmental and safety standards (albeit from a low base, relative to other companies studied). This points to the need for more detailed and empirically grounded studies of Chinese investment into Africa, ideally of a comparative nature.

Box 10: Managerial compensation and international capital markets

The role of routines and practices related to managers' compensation and financial incentives may be significant in shaping firm behaviour, but has not been discussed in this thesis due to data limitations. Managers' financial incentives include salaries and performance-linked bonuses, typically set by a Board-level remuneration committee. For companies listed on international stock markets, bonuses normally include some form of deferred consideration linked to the firm's market value, often in the form of stock options. As managers rise in seniority, the overall remuneration package tends to become increasingly correlated to the stock price, thereby aligning managers' incentives with the factors driving the stock price.

According to financial theory, the stock market price should capture both short-term and long-term expected performance (Brealey & Myers 1996).⁴¹⁰ Thus, at stock-market listed companies, managers' fortunes will to some degree be linked to long-term performance. However, at unlisted and state-owned companies, constituting the majority of Chinese multinationals in the extractive industries, individuals cannot be rewarded on this basis of a market (and long-term) indicator such as a share price. In this case it is likely that a higher weighting will be attributed to shorter-term and more easily observed indicators, such as production, sales, and profit.

8.6 Reflections on methodology

I found that my methodology of looking for detailed markers of behaviour among companies as well as within government was challenging at times, when these organisations and individuals did not engage with me. Mining companies too were also often reluctant to share information, partly explained by what I found to be a contested notion of what constitutes public and non-public information. To illustrate, in negotiating access with the mining companies, I initially attributed NFCA's granting of a long interview with a deputy CEO (and apparent readiness for me to meet more people) to a gradual 'opening up' of NFCA following recent criticisms. Their subsequent and sustained refusal to grant further meetings therefore took me by surprise. In private, an employee in NFCA's administration explained how NFCA "ha[d] gone back into their shell" following a radio programme on Chinese investment conducted for the BBC World Service (Maboshe, 2.12.07).⁴¹¹

It was often difficult to obtain detailed or quantitative information because regulatory agencies took care not to highlight variations among firms and single out 'worse' performers.⁴¹² It seemed that doing so might serve to acknowledge that regulators were having 'problems', thereby opening up space for external criticism. In an environment of high information asymmetries, with few checks on the factuality of

⁴¹⁰ A firm's stock price is defined as the risk-adjusted present value of all future cash flow to the firm (derived by the markets collective assumptions on things such remaining years of mine life, output growth, de-commissioning costs etc.). It therefore takes into account an element of longer-term prospects – consider how stock prices fall when a firm becomes embroiled in a conflict, even before any actual payments or costs have been incurred.

⁴¹¹ She explains that "[t]he BBC came, they were talking about Chinese investment around the world, and it was Mr Xu, he said there are no problems here etc. etc. Lying to his teeth, we are very happy, our workers are happy. And then they got a casual worker as well, and it was the opposite, so that is what Xu [Company Secretary] was complaining about. So then they banned foreign interviewees." (Maboshe, 2.12.07). ⁴¹² To illustrate, this only happened on a couple of occasions in over ten interviews with ECZ officials.

information in the media, and where bureaucrats are often political appointments, admitting to any form of difficulties becomes risky.

It was clear to me that some caution was required in interpreting mining managers' views regarding the merit of particular policy proposals. In discussing increases in tax and royalty rates, for example, mining company respondents had an obvious incentive to exaggerate the impact of this policy change on the country's attractiveness as an investment destination. However evidence that investors not only care about fiscal incentives and stability clauses is provided by Peru, which has climbed rapidly in the Fraser Institute's mining-sector competitiveness rankings, despite the Peruvian government's move to increase royalties in 2005.⁴¹³

Another example of such mining sector bias is how some mining company representatives described the 100% capital allowances granted to firms as "very common" (FQML mgr 1, 5.9.07). In fact the changes (through the 2008 fiscal reform) from 100% to 25% capital allowances – such that capital expenditure is depreciated over four years – remains highly competitive internationally (Lundstol 2009).

This study has illustrated the danger of functionalist explanations to institutional outcomes (see chapter two). First, it showed how fiscal and environmental concessions and discretionary standards were given to firms that were not themselves involved in lobbying for such concessions (see Sinkamba, 1.8.07). Second, I found evidence that the concessions of environmental standards, including limits on effluents that were to rise gradually over time, were initially devised by state mining conglomerate ZCCM-IH rather than an outcome of bargaining with incoming foreign firms (see 6.3.2).

In exploring the role that large foreign mining companies play in policy evolution I was interested in whether companies might bargain with different government actors during the policy 'design' phase and during a subsequent policy 'implementation' phase. I found such 'stages' of policy making to not be easily distinguishable, reflecting the multi-faceted role that central government plays in policy formulation as well as enforcement.

Moreover, where regulatory policy makers are actively involved with mining companies in a consultative 'partnership' framework, these essentially enforcing agencies become involved in policy formulation. For instance, the ECZ is mainly seen as an implementing agency, with direct contact with the mines. Yet under a regulatory framework based on the principle of accommodating foreign investment, this ECZ as a *company-facing* technocratic regulatory agency also becomes actively involved in setting the agenda for reform.⁴¹⁴ The ECZ thus operates in a dual role as both enforcer and originator of rules but relies on Parliament – controlled by the Presidency, with a different set of incentives from the ECZ – for incorporating policy proposals into binding legal frameworks.

⁴¹³ The Fraser Institute is a well-respected research firm that produces rankings of countries' mining policy frameworks (based on surveys of mining managers). See <u>http://www.fraserinstitute.org</u>.

⁴¹⁴ Section 96 of the EPPCA states that the Statutory Instruments, which specify conditions for granting licenses, are to be developed by the Ministry of Environment "in conjunction with" the ECZ. The role of the ECZ in policy-making is thus enshrined in law.

9 Conclusions

My thesis has analysed a range of issues that prevent Zambia's mining sector from delivering on its great potential to drive national development. I ave focused on issues relating to fiscal transparency, environmental, health and safety practices and the nature of mining companies' economic links with their suppliers. This final chapter is structured as follows. I first summarise the main findings and analysis as presented in the previous chapter. I then offer some recommendations for future research, as well as some suggestions for policy makers.

9.1 Summary of findings

This section summarises the findings of my pursuit of two research questions posed at the outset of this thesis:

- *How do state-firm relations and regulatory policy making evolve in weak resource-dependent countries?*
- What shapes processes of convergence or divergence around regulatory standards in the Zambian mining sector?

9.1.1 State-firm bargaining and policy evolution

Relations between the Zambian state and foreign mining companies are characterised by ongoing bargaining over the allocation of costs and benefits of FDI, including fiscal terms. I found no evidence of a unidirectional shift of bargaining power towards or away from the state. Rather, in this process firms retain some forms of power (e.g. the right to exit, as evidenced by early investors leaving whilst copper prices remained depressed), whilst the state retains other forms of power (such as control through brokering relationships and providing operational stability).

At the time of privatisation in the late 1990s the government sought to accommodate incoming investors by providing a range of incentives, including fiscal terms and commitments to regulatory stability. These were provided initially through individual bargaining, at the government's discretion. However subsequent pleas by companies for a level playing field resulted in mainstreaming of best-negotiated terms (of e.g. royalty and tax rates) into the legal framework applicable to all mines.

This reduced further the already low economic 'take' accruing to Zambians from extraction of their mineral resources. Although motivated at privatisation as incentives that would ensure investment and therefore stability in the mining sector (guarantees of jobs etc.), these concessions reduced the longer term stability and attractiveness of the country as an investment location. In the case of Zambia the sentiment that local citizens were not benefitting from rapid expansion of foreign investment fuelled political pressures. It led to growing demands that government renegotiate the fiscal framework in the mining sector.

Government tried to engage in orderly negotiation, wary of reneging on stability commitments given at privatisation. Yet when faced with the complexities of negotiating with a group of mines each with different agendas, government eventually took unilateral action. This policy reversal will be remembered by international investors and is likely to have contributed to the sharp reductions in investment that took place during the subsequent economic crisis. Institutionally weak states are often subject to high policy volatility: policy changes quickly, because governments need to attract capital but at the same time can be eliminated at the polls if they do not address pressing economic and social development concerns. In the case of Zambia limited policy predictability was exacerbated by political intervention in the mining sector by the President and central government. Such interventionism was legitimated by a pro-development discourse directly linking "investment" with "development" (see discussion around the 'faith in FDI' discourse in section 4.3.2.2).

Importantly the Zambian government also intervened to provide support for large foreign mining companies, e.g. by 'brokering' companies' relations with unions. I found that companies varied in their predisposition toward making use of such 'services' from government, depending on their institutional background. Companies that were used to leverage personal networks and state-level political support before arriving in Zambia are more likely to retain this way of doing business. For example, whilst NFCA's state-centric approach means it relies heavily on government to brief communities and stakeholders on the implications of its projects. FQML, on the other hand, engages actively and directly with local actors and has a more 'western' multi-stakeholder approach to community relations. The combination of formal and informal channels of policy making and access to firms enables African governments to sustain – simultaneously – these alternative articulations of regulatory relations.

The trajectory of policy evolution is also shaped by a range of external influences including international commodity markets, capital markets and inter-state relations (for instance relations with western donors or the Chinese state). I argued in chapter eight that the commodities boom had adverse impacts on Zambia's regulatory capacity: already capacity-constrained regulatory agencies found themselves having to deal with an ever-growing number of fragmented actors, while shortages of skills led higher-paying mining companies to poach engineers, geologists etc. from the government agencies supposed to oversee the mining sector.

The boom also served to make many companies more short-sighted in their investment decisions. High copper prices reduce the payback time on new projects, leading companies to prioritise expansion of production over investment in maintenance. This constitutes a particular risk in a context of enforcement capacity constraints. Interestingly, the boom also reduced the impact of international standards on the mining companies: with windfall profits companies could self-finance expansion rather than going through international capital markets that increasingly demand adherence to the Equator Principles.

At the time of field work, when copper prices were high and capital markets buoyant, there was little difference among the companies under study in terms of their ability to raise investment capital. The subsequent global financial crisis of 2008-09, however, drove home to many developing countries that investors purporting to develop their mineral resources depend hugely on access to capital markets. As western firms saw their credit turned off by banks that quickly sought to minimise their risk exposures, China's state-owned banks could (and did) keep lending. Many western firms pulled out, and China stepped in (Haglund 2010).

Given evidence of the fickleness of western international capital, it is small wonder that African governments have been increasingly looking east. Whilst the policy focus remains one of providing an enabling and attractive environment for foreign investment, policy makers are seeing more value in accommodating Chinese investment. In the case of Zambia China's decision to locate its first African special economic zone in the country comes with a promise: additional future investment and cooperation can be had if the business practices of these investors (see 8.5) can be accommodated (within limits of what is politically acceptable to the ruling party).

9.1.2 The partnership approach to regulation

In section 8.3 I argued that regulatory policy in Zambia's mining sector is developed within a framework that emphasises partnership between mining companies and regulatory agencies. This framework places companies close to their regulators through institutionalised consultative processes, a reliance on self-reporting and notions of mutual accountability.

Making use of self-regulation and emphasising a degree of partnership in regulatory frameworks can be a beneficial strategy for institutionally weak states. It can serve the dual purposes of increasing the attractiveness of an investment destination (companies have a say in how they are regulated) and alleviating government capacity constraints (having companies self-report their conduct takes some pressure off regulatory bodies). However I found several issues with a partnership approach to regulation within the Zambian context, many of which will apply to commodity-dependent developing countries elsewhere.

First, for policy reform to move ahead the partnership approach to regulation necessitates some level of consensus among the participating parties. This consensus is difficult to obtain when there are many such proposals 'on the table' simultaneously and where companies have different objectives and routines for achieving them. The overall bargaining 'game' was further complicated by the multiple and at times overlapping consultations around new mining policy, environmental policy, health and safety policy, and energy policy – each with significant bottom-line impacts of firms. One effect of this complex negotiation agenda is that it makes the overall policy environment more difficult to interpret for firms, thereby reducing organisational learning and processes of convergence in the sector.⁴¹⁵

Second, I elaborated on the point that partnership regulation sits rather uneasily with the highly centralised and '*Presidential' nature of Zambian politics*. The President and senior government officials retain the right to intervene in the decisions of regulatory agencies as well as the private sector, which accounts for some of the perceived policy volatility referred to above. Companies, however, may be reluctant to participate fully in the process if they fear that a tough bargaining stance in one policy realm might lead to retaliation from the government in another. With much of state power concentrated in the Presidency, and with the ruling party exercising majority control over the Parliament, the latter is relegated to the role of formalising and rubber-stamping policy. This situation reduces the real policy relevance of ostensibly important consultations between firms and regulatory (implementing) agencies.

Third, the emphasis on mutual accountability contained in the partnership regulatory discourse makes regulatory agencies wary of divulging information that may be used to increase the accountability of firms. Thus, while the partnership approach puts regulators and regulated on par, it excludes participation and consultations with wider stakeholders such as NGOs, community groups etc.

Fourth, the Zambian mining sector has been transformed over the last decade from a homogenous and uniform sector to one with significant diversity in

⁴¹⁵ As Teece et al. observe, "if many aspects of a firm's learning environment change simultaneously, the ability to ascertain cause-effect relationships is confounded because cognitive structures will not be formed" in time. They add that "rates of learning will diminish as a result" (1997: 523).

organisational practices and interests. The mining companies studied all have different cost structures, operate under slightly different Development Agreements, and have different preferences for how to achieve a stable operating environment. Diversity across companies has implications for a regulatory framework that relies heavily on self-reporting. When discretionary and varying standards applied to mining companies, and with limited requirements on what should be included in these reports, self-reporting becomes reflective of firms' routines in place when they arrived in Zambia.

Importantly, diversity makes some mining companies more supportive of policy reform than others. The better-performing companies suffer negative reputational externalities when worse-performing companies get involved in environmental, safety or other incidents.⁴¹⁶ Better-performing companies end up more supportive of stricter regulations, whereas worse-performing companies oppose them. It becomes difficult to reach consensus. The result is stagnation in policy reform (see 6.4.4).

9.1.3 Diversity and learning in volatile and complex environments

In this thesis I have argued strongly that differences across companies' organisational routines and objectives (see chapters five through seven) are significant determinants of companies' relationships with state and non-state actors. These routines and objectives evolve over time through processes of organisational learning, as firms respond to an ever-changing external environment. They derive from a combination of investors' institutional background and legacies of its acquired host-country operations (see section 4.4.6).

In section 8.4 I first highlighted some examples of variation in company practices in relation to international standards, supplier bargaining practices, and in the relative importance ascribed to objectives of cost-minimisation and stability. In support of existing theory I found these routines and objectives to be relatively stable over time, even in the presence of inefficiencies.

I then asked what might drive processes of learning, and ultimately convergence or divergence of standards in the mining sector. I found that the consultative approach to policy reform embodied in Zambia's regulatory framework can promote convergence. Moreover, processes of convergence among firms make future consultation and bargaining easier. A partnership approach to regulation therefore reinforces itself over time and can be a driver of organisational learning.

Learning is a collective activity, and organisations such as the Chamber of Mines as well as ZCCM-IH can play significant roles in facilitating the sharing of best practices as well as coordinating policy positions among investors. I found some evidence of the Chamber of Mines becoming increasingly influential in this regard. Less formally, the movement of people between the mining sector and the government or non-state actors leads to a form of mimetic diffusion of routines, aims and norms.

My findings show, however, that these processes of convergence are far from automatic. This is particularly the case in 'hybrid' African states (see section 2.2.1) with capability to sustain, simultaneously, two different articulations of regulation: the *less formal* variant Chinese companies aspire to and are accustomed to, as well as the

⁴¹⁶ I found that the companies that already had standards in place that sometimes went beyond the Zambian requirements were more likely to support reform.

more formal variant preferred by western foreign investors. Convergence is also held back by the opacity of institutions, which makes it more difficult for firms to correctly interpret signals in their external environment.

I identified cases where organisational learning is taking place and asked whether these processes were promoting convergence in firms' stances on fiscal, environmental, safety and supplier practices. My findings highlight cases where routines and aims have changed at the mining companies, in response to varying internal and external pressures. These instances of learning can be distinguished between superficial 'single-loop' learning and more deep-seated, or transformational, 'double-loop' learning. In the context of weak enforcement under a partnership approach to regulation, single-loop learning seems to be a more likely *initial* path for companies faced with external pressures. However, if faced with greater pressures, and the removal of the option to bargain over outcomes with government (e.g. in the case of severe environmental incidents), I found companies to exhibit more fundamental double-loop learning.

The fact that many initial pressures (e.g. ECZ reprimanding KCM over its small spills into the Kafue river) did not immediately result in more deep-seated organisational changes would not be an issue in the absence of externalities. However in pollution-intensive heavy industries, failures to comply with regulations can have serious consequences. The problem is that under a partnership approach to regulation, with limited enforcement capacity, firms need to 'learn the hard way' with significant negative development implications.

My findings also suggest that double-loop learning may be more likely when there are actors within the organisation that are championing organisational change. For instance, slow but steady improvements to labour standards at NFCA appear to have resulted from sustained pressure by workers themselves (with a limited influence of unions).

Finally, these processes of convergence are important to policy makers operating within a partnership regulatory framework. I noted that it is resource intensive for regulatory agencies to be a partner to a diverse set of actors. To the extent it results in convergence around some set standards, organisational learning can therefore act as an input into the policy process that facilitates future rounds of policy negotiations.

9.1.4 Chinese exceptionalism

This study has found that Chinese state-influenced enterprises presents a special case of investment worthy of further study. In section 8.5 I defined Chinese foreign investment as state-influenced where the company operates largely on market terms (e.g. with respect to marketing its copper), but where the parent state-owned company (and, by extension, the PRC government) retains ultimate control. I showed how the Chinese case-study firm engages with the executive rather than local stakeholders. I discussed how exercise of control through personal and informal relationships enables the firm to avoid scrutiny associated with more formal channels of state-firm relations.

I highlighted features that can be generalised to wider Chinese investment beyond NFCA. These features include the network structure employed by NFCA and its operations on the Copperbelt (implications for fiscal transparency), and the lack of familiarity with norms underpinning Zambia's partnership approach to regulation. Other characteristics included the relative segregation between Chinese expatriates and local employees at these companies and the aggressive practices of minimising costs and prioritising production expansion. These characteristics have implications for regulatory compliance at the company, as well as the likely pace at which convergence around regulatory standards can take place.

In asking the question of whether China will be a good development partner for African states, I highlighted how China's promise of being a more reliable and stable partners in Africa's economic development gained credibility after the recent global financial. African governments may thus be particularly prone to accommodate large Chinese investment that form part of broader China-Africa development cooperation.

Foreign investment is an activity that does not attract much case-by-case scrutiny in Zambia. It is *de facto* legitimated by the shift in discourse from aid to investment, and from external dependence to local economic empowerment (see chapter four). However, if non-transparency surrounding Chinese projects continues (a hallmark of Chinese overseas investment to date), the result may be stagnation in reforms aimed at removing discretionary treatment of investors (see chapter five). The risk is that growing dominance of Chinese and other 'southern' economic interests in Africa's extractive industries will polarise the sector, thereby posing challenges for reform.

9.1.5 Concluding remarks

Understanding policy making as an evolutionary process reveals how Zambia's current partnership approach fails to address the government's official policy objectives of providing an enabling environment for business. The partnership approach fails because it is poorly suited to a context of rapidly changing policy, an interventionist political culture, and high diversity among the regulated firms.

The policy environment I have studied is one where mining companies have room for manoeuvre, but within limits. On the face of it firms in Zambia's copper sector have significant bargaining power (including the *de facto* right to exit). However government retains influence through informal mechanisms and reliance by companies on government to 'broker' labour relations (both discussed in chapter five). The government's power to shape the policy environment is volatile, as it is directly linked to international copper prices (illustrated by the unilateral action to raise taxes and royalties in January 2008.

Zambia's presidential political culture enables the government to sustain, simultaneously, formal as well as informal articulations of state-firm relations, including through brokering wider stakeholder relations of firms. The imperfectly specified nature of this 'game' results in uncertainty for investors. When regulatory failures occur, the opaque informational context means that one company's malpractice readily reflects on other firms in the sector. This divides the sector into better and worse performers. A regulatory framework based on notions of accommodation and 'partnership' with investors fails to move ahead with reform when different parts of the mining sector hold different views for how this reform should take place.

Outward investment from China and other emerging markets has expanded dramatically over the past decade, and followed a counter-cyclical pattern during the recent global financial crisis. Chinese firms differ from western firms in their tendency to focus on relationships with political leadership, rather than engage more broadly with a range of local actors. Over time companies from different institutional backgrounds may harmonise around some new standard, and my findings show some indicative signs of convergence. Yet in the short-term disequilibrium is likely to persist given rapid change of the external policy and market environments.

Different articulations of state-firm relations are easily accommodated in countries with presidential political cultures, that allow for informal (if not formal) discretion in industrial policy. In such environments, personal relationships with political leaders have real value to companies. The key point is not that the government is offering protection to e.g. the Chinese, for instance, but rather that the Chinese are more likely (currently at least) to take them up on this offer. If increased south-south FDI leads to a greater share of firms that seek to cultivate and make use of such relationships, this may perpetuate informal, un-transparent and centralised mechanisms of governance, thus entrenching the challenges of regulatory policy evolution highlighted in this thesis.

9.2 Recommendations for research

A key finding of this thesis is that institutional analysis of a specific policy instrument cannot be undertaken in isolation from other, conflicting or complementary, policies. This points to the need for a political economy approach to understanding regulatory relations in which the researcher must be open to both state-centred and interest group-centred (pluralist) policy analysis (see 2.2.2). This finding carries epistemological implications: data collected on the basis of isolated observations of policy positions and state-firm interaction is unlikely to provide a comprehensive picture of how policy evolves. This thesis should be read as a call for more interdisciplinary and context-sensitive methods in researching mining sector policy making.

A second finding is that institutions affect firm behaviour in different ways depending on firm-specific characteristics in the form of organisational routines and objectives. Because of divergent routines and objectives across firms, getting institutions and policies 'right' is only part of the answer: we must pay more attention to the responsiveness of the regulated to proposed market and policy reform (Braithwaite 2006).

The arguments and findings of this thesis provide fertile ground for greater formalisation of extractive industries policy in least-developed countries. Such studies could include taking constructs and relationships developed here into existing formalised schema for explaining institutional change (cf. the emphasis of Ostrom 2005 on exogenous factors, the arena for social interaction, and outcomes). Ostrom's emphasis on understanding the informational context as one where stable and pre-existing institutions cannot be pre-assumed, is very much in line with the evolutionary perspective adopted in this study.

Finally, this thesis locates regulation of the extractive industries at the intersection of two global trends of greater diversity at the micro level and greater convergence at the macro level.⁴¹⁷ The challenges faced by mining companies

⁴¹⁷ In March 2009 the Global Environmental Institute of China (GEI) announced guidelines for environmental conduct of Chinese overseas companies overseas. Under new rules all such projects would have to undertake environmental impact assessments before projects are commissioned. See China Daily (29.5.2009). Similarly, China is not alone in supporting its overseas investors, and this model has been copied in Japanese government policy instructing the country's Bank for International Cooperation (that normally does not lend to private TNCs) to make capital available to Japanese TNCs investing abroad (UNCTAD 2009: 20).

resonate with developments in the field of overseas development aid, where the question associated with donors' move to direct budget support becomes one of 'who is adapting to whom?' Donors are supposed to 'align' themselves with the state, but cannot adapt too much because of need to keep their international operations streamlined.

A second parallel can be drawn with developments in the human rights agenda: a transition is taking place away from homogeneous interests among donors (over e.g. human rights and the conflict in Darfur, Sudan), to a new composition of external influences, where recent 'entrants' (e.g. China) show a disregard for previously established norms. These examples point to the need for a political economy approach that is sensitive to the divergent and convergent forces that exist amongst the external actors themselves, be they multinational enterprises, state actors, or both.

9.3 Policy implications

What can commodity-dependent developing states do to maximise development impacts from mining investment, whilst minimising social and environmental ills? It is beyond the scope of this thesis to provide a comprehensive list of policy prescriptions to address all the issues I raise regarding regulation of the mining sector. Below I consider a selection of policy responses that countries like Zambia should consider.

9.3.1 Policies to overcome regulatory constraints

A central issue highlighted in this thesis is the need to match an expanding private sector with increased regulatory capacity. Government's option of letting the ECZ be semi-autonomous and funded by user fees seems like a good policy to boost capacity at the agency, in particular when companies have not yet started paying tax. However policy makers need to account for the conflicts of interest this introduces, which undermine the legitimacy of the ECZ (and its ability to levy fines). Donors, on their part, need to be seeking assurances of funding for regulatory implementation in their private sector support programmes.

The mutual accountability institutionalised in environmental legislation (whereby the ECZ can be sued for divulging the wrong information) may limit the sharing of information with civil society. However I found evidence that it promotes formalisation of regulatory processes, thereby subjecting the ECZ to a form of discipline.⁴¹⁸ For this policy to work it may require that state-firm relations are more precisely specified, such that non-compliance with regulatory requirements becomes a binding constraint (rather than something that can be reversed via well-managed relationships with the Presidency).

⁴¹⁸ One ECZ respondent claims that the need for his organisation to maintain formal environmental management records is partly due to networks of mining company managers, indicating that the mining companies *do* exchange information regarding their experiences with regulators (ECZ official 4, 19.11.07). The ECZ director describes how a company will ring with an EIS-related question, noting that "[o]bviously there is no harm in having some informal consultations" but adds that ECZ officials then "then put it in writing for the sake of records and also for consistency. That becomes very crucial. We don't want to do some action with [some company] and then say something else to another company, they'll tell us 'why are you applying double standards?'. So we are quite wary about that." (ECZ official 4, 19.11.07).

Promoting convergence in foreign mining companies' standards and practices should be a key policy objective, as it facilitates agreement around future reform proposals. This could be achieved by increasing reputational competition among firms, for instance by government mandating and enforcing common and standardised environmental and social reporting requirements. More accessible information would enable stakeholders to make comparisons across firms' operating standards and hold the worst-performers to account (thereby leading to upward pressure on 'laggards'). This recommendation holds particular relevance in the presence of multinationals that are exposed to standards emanating from international capital markets (e.g. Equator Principles) which I have argued constitute significant influence on organisational behaviour in the host country.

At the time of study external reporting was rising on the agenda of government, courtesy of the EITI. Civil society should leverage the increased public support for greater fiscal transparency by calling for timely reporting of business performance also in the fields of environmental and labour practices. At a minimum they should advocate for the inclusion of 'community-investment'-type expenditures in EITI reporting, to promote an element of 'social competition' across the mines. Calls for more transparent reporting may, however, be met with to opposition from industry associations: in particular below-average firms are unlikely to support such reforms.⁴¹⁹

Greater transparency and regulatory 'teeth' are, in fact, mainly in the interests of companies that have complementary routines and aims that make them compliance-seeking to begin with. The Zambian case illustrates how it can be in the interests of leading firms to disclose intentions and activities (despite potential shortterm costs of engaging and/or refuting criticisms). This sub-set of the industry could – if willing to bear the costs relating to management time, increased stakeholder expectations etc. – join forces with regulators and voluntarily offer a higher level of external (financial and social) reporting. While this might polarise the sector in the short term (thus hampering collective action), it may promote long-term convergence and upgrading of standards. This can protect better-performing firms from reputational fallout from incidents associated with worse-performing companies, and help the former guard against future political mobilisation against the sector as a whole.

However, firms are unlikely to entertain civil society calls for transparency unless non-government organisations have some backing of the government – not necessarily because firms have something to hide, but because explaining oneself takes time and resources, and therefore carries transaction costs.⁴²⁰ Therefore, the government should seek to overcome its mistrust of non-government organisations and support those NGOs that are most concerned with environmental and labour issues. This must be combined with reforms to streamline reporting requirements that currently – because of the institutional overlap between the MSD and the ECZ – are seen as onerous by mining companies. Civil society, on its part, must take a measured

⁴¹⁹ A strong reason for improving transparency and auditing capabilities is that the government currently appears to be losing a significant share of its royalties. To illustrate, a respondent working in exports at NFCA notes shipments of copper concentrates include unreported (and untaxed) amounts of several other valuable minerals (S.Banda, 8.9.07). Anecdotal evidence suggests this underreporting is prevalent also at the other mines.
⁴²⁰ Although the aim of institutions is often seen as the reduction of transaction costs (North 1990), the

⁴²⁰ Although the aim of institutions is often seen as the reduction of transaction costs (North 1990), the act of abiding to institutional demands also carries transaction costs. In part because institutions are never perfectly specified, there are transaction costs involved in interpreting as well as adapting to these rules.

view and refrain from benchmarking current mining practices against the comprehensive cradle-to-the-grave social protection offered by state-owned ZCCM in the pre-privatisation era.

9.3.2 Policies to promote private sector development

Early research on south-south FDI commented on its potential to drive private sector development by introducing more 'locally appropriate' technology, thereby increasing technological spillovers (see chapter one). Yet this study found that practices of Chinese and Indian companies in sourcing from low-cost home-country markets actually *limited* the potential for technology transfer. Such findings call into question appropriate policies for promoting local private sector development.

Changes in the composition of the mining sector undermine the potential for mining-generated demand to catalyse the supplier sector. The supplier market has become increasingly fragmented as new owners have come in and upgraded infrastructure and technologies, in different ways at different mines depending on who the new owners are. One veteran supplier reflects that "[t]he operations of the mines [was] almost the same, because it was the same mine. [So] they had to buy the same product." (Malema, 11.10.07) However this is increasingly no longer the case, resulting in smaller markets for asset-specific inputs that reduce incentives for suppliers to make the necessary investments to reach economies of scale. It thus becomes a tall order for local Zambian suppliers to stay competitive, in particular in competition with Asian product markets.

To promote private sector development what is needed might be not so much tax breaks to the multinational mining companies, but a more favourable policy environment (tax-wise and otherwise) for local small- and medium-sized businesses.

Fortunately, Zambia already has institutions in place for providing costeffective business environments, through a model of economic development based on largely tax-free export processing zones (Ministry of Commerce 2009a, 2009b). In order to promote local economic development, policies should be put in place that make Zambia's tax-free or low-tax 'economic zones' more inclusive for local firms. These zones – the path for which is being blazed by the NFCA-managed zone in Chambishi – could potentially offer an attractive environment also for local businesses and thereby promote local economic development.

Private sector incentives should be directed towards higher value-added activities rather than towards external capital. Third-party contractors are involved in a significant share of the work conducted on mine sites, yet enforcement of environmental and safety standards at these firms is particularly weak. Mining companies currently exercise little influence over the conditions of service that contractors provide, except for demanding commitment to company health-and-safety rules (often required for insurance purposes). The broadening of existing tax-carrots to include local companies, coupled with stronger sticks in the form of environmental and labour enforcement, should be considered in order to improve standards in the large contractor and supplier sector.

Finally, government and donors could leverage existing private sector initiatives that involve the mines, for instance the IFC-funded Copperbelt Small-Scale Development Programme (CSSDP, see 7.5.2). Given capacity deficits at the Ministry of Labour, one way of formalising the activity (and payment practices) of the supplier sector would be to integrate inspection and compliance support into the CSSDP.

10 Bibliography

Ahmad, L. & M. Walker (2005) Zambian Copperbelt supply chain management. Report prepared for the International Finance Corporation, 11 May 2005.

Alden, C. (2007) China in Africa London: Zed Books.

Alden, C. & Davies, M. (2006) A Profile of the Operations of Chinese Multinationals in Africa. South African Journal of International Affairs, 13, 83-96.

Alden, C. & M. Vieira (2005) The new diplomacy of the South: South Africa, Brazil, India and trilateralism. Third World Quarterly 26(7): 1077-1095.

Almond, G. (1988) The return to the state. The American Political Science Review, 853-74.

Amalric, F. (2005) The Equator Principles: A Step Towards Sustainability. Center for Corporate Responsibility and Sustainability, Working Paper Series.

AMEC Earth and Environmental (2001) KCM Environmental Assessment, Vol 1: Overview and corporate management plans.

Amsden, A. (1989) Asia's next giant: South Korea and late industrialization, Oxford University Press, USA.

Argyris, C. & Schön, D. A. (1978) Organizational Learning: A Theory of Action Perspective, Addison-Wesley Reading, MA.

Arksey, H. & P. Knight (1999). Interviewing for social scientists: An introductory resource with examples, SAGE Publications Ltd.

Autio, E. (2005) Creative tension: the significance of Ben Oviatt's and Patricia McDougall's article 'toward a theory of international new ventures'. Journal of International Business Studies, 36, 9-19.

Auty, R. (1993) Sustaining development in mineral economies: the resource curse thesis, Routledge.

Auty, R. (2001) Resource abundance and economic development, Oxford University Press, USA.

IIED (2005) Lifting the Lid on Foreign Investment Contracts: The Real Deal for Sustainable Development.

Aykut, D. & Ratha, D. (2004) South-South FDI Flows: How Big Are They? Transnational Corporations, 13, 149-76.

Bacharach, S. (1989) Organizational theories: Some criteria for evaluation. Academy of Management Review, 496-515.

Bangura, Y. (1994) Economic restructuring, coping strategies and social change: Implications for institutional development in Africa. Development and Change 25: 785-827.

Bank of Zambia (2007) Central Banker of the Year 2007 – Governor's Acceptance Speech at State House, 18 Jan 2007. Available at http://www.boz.zm/%5CPublishing%5CSpeeches%5CGovernorAcceptanceSpeech-StateHouse.pdf. Accessed 13 Feb 2007.

Barney, J. (1991) Firm Resources and Sustained Competitive Advantage. Journal of Management, 17, 99.

Bates, R. (1997) Social dilemmas and rational individuals, in J. Harriss, J. Hunter and C. M. Lewis (eds) The new institutional economics and Third World development, Routledge, 27.

Bates, R. & P. Collier (1995). The politics and economics of policy reform in Zambia. Journal of African Economies 4(1): 115.

Bates, R. & Krueger, A. (1993) Political and Economic Interactions in Economic Policy Reform: Evidence from Eight Countries. Oxford: Basil Blackwell.

Bates, R., Greif, A., Levi, M., Rosenthal, J. & Weingast, B. (2000) Analytic Narratives Revisited. Social Science History, 24, 685-96.

Bauer, G. & Taylor, S. D. (2005) Politics in Southern Africa: State and Society in Transition, Lynne Rienner Publishers.

Bauer, G.; Taylor, S. D. (2005), Politics in Southern Africa: State and Society in Transition, Lynne Rienner Publishers.

Bayart, J-F., 1991. L'Etat. In C. Coulon and D-C. Martin, eds., Les Afriques Politiques. Paris: Découvertes. In T. Young, ed., Readings in African Politics. Oxford: James Currey, 2003.

Bayart, J. (1996) The State in Africa: The Politics of the Belly, London & New York: London.

Bayart, J. (2000) Africa in the world: a history of extraversion. African Affairs, 99, 217-67.

Besanko, D., Dranove, D., Shanley, M. & Schaefer, S. (2008) Economics of strategy, Wiley India Pvt. Ltd.

Biggart, N. (1977) The creative-destructive process of organizational change: The case of the post office. Administrative Science Quarterly, 410-26.

Bigsten, A. & Kayizzi-Mugerwa, S. (2000) The Political Economy of Policy Failure in Zambia. Working Papers in Economics no 23.

Blomström, M. & Kokko, A. (2003) The Economics of Foreign Direct Investment Incentives. Foreign Direct Investment in the Real and Financial Sector of Industrial Countries.

Bloomberg, J., Giacomi, J., Mosher, A. & Swenton-Wall, P. (1993) Ethnographic field methods and their relation to design. Participatory design: Principles and practices, 123-55.

Blowfield, M. & Frynas, J. G. (2005) Setting new agendas: critical perspectives on corporate social responsibility in the developing world International Affairs, 81.

Boddewyn, J. J. & Brewer, T. L. (1994) International-Business Political Behavior: New Theoretical Directions. The Academy of Management review, 19, 119-43.

Bostock, Mark & Charles Harvey (1972) Zambian Copper: A Case Study of Foreign Investment. Praeger Publishers, New York, 1972.

Braithwaite, J. & Drahos, P. (2000) Global business regulation, Cambridge University Press.

Bratton, M. & Van De Walle, N. (1997) Democratic Experiments in Africa: Regime Transitions in Comparative Perspective, Cambridge University Press.

Brautigam, D. (2009) China: Steaming Forward in Africa. China Monitor (June 2009).

Brealey, R. & Myers, S. (1996) Principles of Corporate Finance McGraw-Hill. New York.

Broadman, H. G. (2007) Africa's Silk Road: China and India's New Economic Frontier, World Bank Publications.

Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H. & Zheng, P. (2007) The determinants of Chinese outward foreign direct investment. Journal of International Business Studies, 38, 499.

Burgelman, R. (1991) Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. Organization Science, 239-62.

Campbell, J. (1998) Institutional analysis and the role of ideas in political economy. Theory and Society, 27, 377-409.

Carroll, G. (1984) Organizational ecology. Annual Review of Sociology, 10, 71-93.

CEMP (2005) Copperbelt Environmental Management Project (Summary).

Chabal, P. (2002) The quest for good government and development in Africa: is NEPAD the answer? International Affairs (Royal Institute of International Affairs 1944-), 78, 447-62.

Chabal, P. & Daloz, J. (1999) Africa works: disorder as political instrument, James Currey.

Chamber of Mines (2007a) Submission to 2007 budget.

Chamber of Mines (2007b) Submission to the renegotiation committee.

Chan, S. (2008) Ten caveats and one sunrise in our contemplation of China in Africa, in Alden, C., Large, D. & De Oliveira, R. S. China Returns to Africa. London: Christopher Hurst.

Chanda, A. (2003) National Integrity Systems. Transparency International Study Report, Zambia.

Chang, H. J. (2003) Globalisation, Economic Development and the Role of the State, Zed Books.

Chowla, P. (2005) Comparing Naughty BITS: Assessing the development impact of variation in Bilateral Investment Treaties. LSE Development Studies Institute, Working paper series No. 05-67.

Christensen, J. & Murphy, R. (2004) The Social Irresponsibility of Corporate Tax Avoidance: Taking CSR to the bottom line. Development, 47, 37-44.

Christian Aid (2007) A Rich Seam: Who Benefits from Rising Commodity Prices (Christian Aid).

Clapham, C. (1996) Africa and the International System: The Politics of State Survival, Cambridge University Press.

Coase, R. (1937) The nature of the firm. Economica, 386-405.

Cohen, M., R. Burkhart, et al. (1996). "Routines and other recurring action patterns of organizations: contemporary research issues." Industrial and Corporate Change 5(3): 653.

Collier, D. & J. Mahoney (1996). "Insights and pitfalls: Selection bias in qualitative research." World Politics 49(1): 56-91.

Commons, J. (1934) Institutional economics: Its place in political economy, New York, Macmillan.

Cooperating Partners (2007), Issues paper for the mining sector, internal memo.

Cyert, R. & March, J. (1963) A behavioral theory of the firm. PrenticeHall, EnglewoodCliffs, NJ.

Desbordes, R. & V. Vicard (2007) Foreign direct investment and bilateral investment treaties, an international political perspective. Sorbonne Working Paper 2007: 45. Available online.

DFID (2006) Eliminating world poverty – Making governance work for the poor. IN 2006. White Paper, awailable online.

Dia, M. (1996) Africa's Management in the 1990s and Beyond: Reconciling Indigenous and Transplanted Institutions, World Bank Publications.

DiMaggio, P. J. & Powell, W. W. (1983) The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality. American sociological review, 48, 147-60.

Djokotoe, E. & P. K. Chama (2007), Show me the money! How government spends and accounts for public money in Zambia. Transparency International Zambia. Published by Primus Media.

Doh, J. P. & Guay, T. R. (2006) Corporate Social Responsibility, Public Policy, and NGO Activism in Europe and the United States: An Institutional-Stakeholder Perspective. Journal of Management Studies, 43, 0022-2380.

Dollar, D. & Easterly, W. (1999) The Search for the Key: Aid, Investment and Policies in Africa. Journal of African Economies, 8(4), 546-77.

Dolowitz, D. & Marsh, D. (1996) Who learns what from whom: a review of the policy transfer literature. Political Studies, 44, 343-57.

Dosi, G. & L. Marengo (2000). "Some elements of an evolutionary theory of organizational competences." In G. Dosi (ed.), Innovation, Organization and Economic Dynamics: Selected Essays.

Dosi, G., Nelson, R. & Winter, S. (2000) The nature and dynamics of organizational capabilities, Oxford University Press.

Dunning, J. (2001) The eclectic (OLI) paradigm of international production: past, present and future. International Journal of the Economics of Business, 8, 173-90.

Eden, L. & Miller, S. R. (2004) Distance Matters: Liability of Foreignness, Institutional Distance and Ownership Strategy. The Evolving Theory of the Multinational Firm. Advances in International Management, 16.

Eden, L., Lenway, S. & Schuler, D. A. (2005) From the obsolescing bargain to the political bargaining model. International Business and Government Relations in the 21st Century, R. Grosse (ed).

Elster, J. (1989) Nuts and bolts for the social sciences, Cambridge University Press.

Englebert, P. (1997) The contemporary African state: neither African nor state, Third World Quarterly: 767-775.

Englebert, P. (2002) State legitimacy and development in Africa, Lynne Rienner Pub.

Evans, P. (1995) Embedded Autonomy: States and Industrial Transformation. Princeton, NJ: Princeton University.

Fama, E. (1980) Agency Problems and the Theory of the Firm. The Journal of Political Economy, 88, 288.

Feeney, P. (2002), The relevance of the OECD Guidelines for Multinational Enterprises to the mining sector and the promotion of sustainable development. Available online.

Ferguson, J. (1999) Expectations of modernity: Myths and meanings of urban life on the Zambian Copperbelt, University of California Press.

Feyzioglu, T., V. Swaroop, et al. (1998). "A panel data analysis of the fungibility of foreign aid." The World Bank Economic Review 12(1): 29.

FIAS (2004), Zambia – Sectoral study of the effective tax burden. Report by Foreign Investment Advisory Service. Washington: World Bank.

Filatotchev, I., Strange, R., Piesse, J. & Lien, Y. C. (2007) FDI by firms from newly industrialised economies in emerging markets: corporate governance, entry mode and location. Journal of International Business Studies, 38, 556-72.

Fligstein, N. (1990) The transformation of corporate control, Harvard Univ Pr.

Fligstein, N. (1997) Social skill and institutional theory. American Behavioral Scientist, 40, 397.

Fligstein, N. & Brantley, P. (1992) Bank control, owner control, or organizational dynamics: who controls the large modern corporation? American Journal of Sociology, 280-307.

Fligstein, N. & Freeland, R. (1995) Theoretical and Comparative Perspectives on Corporate Organization. Annual Review of Sociology, 21, 21-43.

Fortanier, F. & Van Tulder, R. (2008) Internationalization trajectories - A crosscountry comparison: Are large Chinese and Indian companies different? UNU-MERIT Working Papers 2008-054.

Foster, V., W. Butterfield, et al. (2009) Building bridges: China's growing role as infrastructure financier for sub-Saharan Africa, World Bank Publications.

Fraser, A. & Lungu, J. (2006) For whom the windfalls. Winners and Losers in the Privatisation of Zambia's Copper Mines.

Garriga, E. & Melé, D. (2004) Corporate Social Responsibility Theories: Mapping the Territory. Journal of Business Ethics, 53, 51-71.

Gelb, S. (2005) South-South Investment: The Case of Africa. Africa in the World Economy, FONDAD, The Hague.

Gerring, J. (2004) What is a Case Study and What is it Good for? American Political Science Review, 98(02): 341-354.

Görg, H. & Greenaway, D. (2004) Much Ado about Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment? The World Bank Research Observer, 19.

Gough, S. & Scott, W. (2000) Exploring the Purposes of Qualitative Data Coding in Educational Enquiry: insights from recent research. Educational Studies, 26, 339-54.

Graham, D. & Woods, N. (2006) Making corporate self-regulation effective in developing countries. World Development, 34, 868-83.

Granovetter, M. (1985) Economic Action and Social Structure: The Problem of Embeddedness. American Journal of Sociology, 91, 481.

Gray, K. R. (2002) Foreign Direct Investment and Environmental Impacts Is the Debate Over? Review of European Community and International Environmental Law (RECIEL), 11, 306-13.

Greif, A. (1998) Historical and Comparative Institutional Analysis. American Economic Review 88, 80-84.

Grindle, M. & Thomas, J. (1989) Policy makers, policy choices, and policy outcomes: The political economy of reform in developing countries. Policy Sciences, 22, 213-48.

Grindle, M. S. (2001) 1n Quest of the Political: The Political Economy of Development Policymaking. Frontiers of development economics: The future in perspective.

Grindle, M. S. (2004) Good Enough Governance: Poverty Reduction and Reform in Developing Countries. Governance, 17, 525-48.

Grindle, M. S. & Thomas, J. W. (1991) Public Choices and Policy Change: The Political Economy of Reform in Developing Countries, Johns Hopkins University Press.

GRZ (1997), NFC Africa Development Agreement.

GRZ (2001), Konkola Copper Mines Development Agreement.

GRZ (2001), Mopani Copper Mines Development Agreement.

GRZ (1998), Chambishi Metals Development Agreement.

GRZ (2004), FQML Bwana Mkubwa Development Agreement.

GRZ (2006), Zambia Development Agency Act, No. 11 of 2006.

GRZ (2007), Annual Economic Report, Ministry of Finance.

GRZ (2008), Mines and Minerals Amendment Bill.

GRZ (2009a) 'Multi-Facility Economic Zones! What are they?' (DRAFT). Ministry of Commerce, Trade and Industry. Available at http://www.mcti.gov.zm/index2.php?option=com_content&do_pdf=1&id=50.

GRZ (2009b) 'Triangle of hope (multi facility economic zones)' (DRAFT), Ministry of Commerce, Trade and Industry. Available at http://www.mcti.gov.zm/index2.php?option=com_content&do_pdf=1&id=96.

Haglund, D. (2011) From boom to bust: Diversity and regulation in Zambia's privatised copper sector', in M. Larmer & A. Fraser (eds.) Zambia, Mining and Neo-Liberalism, Palgrave (forthcoming).

Haglund, D. (2010) Policy effectiveness in the Zambian Mining Sector'. SAIIA Policy Briefing, No 19, July 2010.

Haglund, D. (2009a) It for the Long Term? Governance and Learning among Chinese Investors in Zambia's Copper Sector, China Quarterly 199.

Haglund, D. (2009b) Regulating diversity: China and the changing composition of Zambia's mining sector, China Monitor (September 2009).

Haglund, D. (2008) Regulating FDI in weak African states: a case study of Chinese copper mining in Zambia. The Journal of Modern African Studies, 46, 547-75.

Hall, P. A. (1993) Policy paradigms, social learning, and the state: the case of economic policymaking in Britain. Comparative politics, 25, 275-96.

Hall, P. A. & Soskice, D. (2001) Varieties of capitalism: the institutional foundations of comparative advantage, Oxford: Oxford University Press.

Hannan, M. & Freeman, J. (1977) The population ecology of organizations. American Journal of Sociology, 82, 929.

Hannan, M. & Freeman, J. (1984) Structural inertia and organizational change. American sociological review, 149-64.

Harberger, A. (1988) Policy Making and Economic Policy in Small Developing Countries. In R. D. Helmers (Ed.) The Open Economy. New York and Oxford, Oxford University Press.

Harriss-White, B. (2003) On Understanding Markets as Social and Political Institutions in Developing Economies. IN CHANG, H.-J. (Ed.) Rethinking Development Economics. Anthem. Haslam, P. A. (2007) The firm rules: Multinational corporations, policy space and neoliberalism. Third World Quarterly, 28, 1167-83.

Hausmann, R., Rodrik, D. & Velasco, A. (2008) Growth diagnostics. The Washington Consensus Reconsidered: Towards a New Global Governance.

Hay, C. & Wincott, D. (1998) Structure, agency and historical institutionalism. Political Studies, 46, 951-57.

Heal, G. (2005) Corporate Social Responsibility: An Economic and Financial Framework. The Geneva Papers, 30, 387-409.

Heclo, H. (1974), Modern social politics in Britain and Sweden, New Haven: Yale University Press.

Helmke, G. & Levitsky, S. (2004) Informal Institutions and Comparative Politics: A Research Agenda. Perspectives on Politics, 2, 725-40.

Henley, J., Kratzsch, S., Külür, M. & Tandogan, T. (2008) Foreign Direct Investment from China, India and South Africa in sub-Saharan Africa: A New or Old Phenomenon? UNU Wider Research Paper No. 2008/24.

Hillman, A. J. & Hitt, M. A. (1999) Corporate Political Strategy Formulation: A Model of Approach, Participation, and Strategy Decisions. The Academy of Management review, 24, 825-42.

Hirschman, A. (1958) The strategy of economic development. London: Yale University.

Hirschman, A. (1970) Exit, voice, and loyalty: Responses to decline in firms, organizations, and states, Harvard University Press.

Hirschman, A. (1971) Introduction: Political economics and possibilism, in A Bias for Hope: Essays on Development in Latin America, New Haven, Yale University Press. (1994): The on-and-off connection between political and economic progress, The American Economic Review 84(2).

Hodgson, G. (2000a) What is the essence of institutional economics? Journal of Economic Issues, 317-29.

Hodgson, G. (2000b) Evolution and institutions: on evolutionary economics and the evolution of economics, Edward Elgar Pub.

Hodgson, G. & Knudsen, T. (2006) Dismantling Lamarckism: why descriptions of socio-economic evolution as Lamarckian are misleading. Journal of Evolutionary Economics, 16, 343-66.

Hoff, K. & Stiglitz, J. (2001) Modern economic theory and development. Frontiers of development economics: The future in perspective, 389.

Hoskisson, R. E., Eden, L., Lau, C. M. & Wright, M. (2000) Strategy in emerging economies. Academy of Management Journal, 43, 249-67. www.icsg.org/conferences/Sep_06_meeting_CNMC_Mining_in_Africa.pdf

IDASA (2006), Technical Assessment: Zambia – The Zambian legal context for public participation. Available at www.idasa.org.za.

IMF (2007), HIPC Initiative and MDRI - Status of implementation, 28 Aug 2007. Available online. http://www.imf.org/external/np/pp/2007/eng/082807.pdf

Jackson, R. & Rosberg, C. (1982) Personal rule in black Africa: prince, autocrat, prophet, tyrant, University of California Press.

Jamal, V. & Weeks, J. (1993) Africa misunderstood or whatever happened to the rural-urban gap?, Macmillan.

Jenkins, R. & Edwards, C. (2006) The economic impacts of China and India on sub-Saharan Africa: Trends and prospects. Journal of Asian Economics, 17, 207-25.

Johanson, J. & Vahlne, J. E. (1977) The internationalization process of the firm–a model of knowledge development and increasing foreign market commitments. Journal of International Business Studies, 8, 23-32.

Jones, L. & Sakong, I. (1980) Government, Business and Entrepreneurship in Economic Development: The Korean Case Studies in the Modernization of the Republic of Korea: 1945–1975. Cambridge, MA: Harvard University Press.

Kaplinsky, R. (2008) What Does the Rise of China Do for Industrialisation in Sub-Saharan Africa? Review of African Political Economy, 35, 7-22.

Kaplow, L. & Shavell, S. (1994) Optimal law enforcement with self-reporting of behavior. Journal of Political Economy, 583-606.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2007) Governance Matters VI: Governance Indicators for 1996-2006. World, Available at: http://info.worldbank.org/governance/kkz2005/tables.asp. .

Killick, T. (1989), Principles of policy for the adaptive economy. Working paper 32, Overseas Development Institute.

Kosack, S. & Tobin, J. (2006) Funding Self-Sustaining Development: The Role of Aid, FDI and Government in Economic Success. International Organization, 60, 205-43.

Kostova, T. & Zaheer, S. (1999) Organisational legitimacy under conditions of complexity: The case of the multinational enterprise. The Academy of Management review, 24, 64-81.

Krugman, P. (1994) The fall and rise of development economics (in Rethinking the Development Experience: Essays provoked by the work of Albert O. Hirschman, L Rodwin, DA Schön eds) Brookings Inst Pr.

Landell-Mills, P. (2003) Coming to Grips with Governance: the lessons of experience. Journal of Contemporary China, 12, 357-71.

Large, D. (2008) Beyond 'Dragon in the Bush': The Study of China Africa Relations. African Affairs, 107, 45.

Larmer, M. (2005) Reaction & Resistance to Neo-liberalism in Zambia. Review of African Political Economy, 29-45.

Larmer, M. (2007) Mineworkers in Zambia: labour and political change in postcolonial Africa, IB Tauris & Company.

Larmer, M. & Fraser, A. (2007) Of cabbages and King Cobra: Populist politics and Zambia's 2006 election. African Affairs, 106, 611.

Lee, C. K. (2009), Raw encounters: Chinese managers, African workers, and the politics of casualisation in Africa's Chinese enclaves. China Quarterly Sep. 2009.

Levitt, B. & March, J. (1988) Organizational learning. Annual Review of Sociology, 14, 319-38.

Mahoney, J. & Rueschemeyer, D. (2003) Comparative historical analysis in the social sciences, Cambridge Univ Pr.

Majone, G. (1997) From the Positive to the Regulatory State: Causes and Consequences of Changes in the Mode of Governance. Journal of Public Policy, 17, 139-67.

Mani, M. & Wheeler, D. (1998) In Search of Pollution Havens? Dirty Industry in the World Economy, 1960 to 1995. The Journal of Environment & Development, 7, 215.

Manning, R. (2006) Will'Emerging Donors' Change the Face of International Cooperation? Development Policy Review, 24, 371-85.

March, J. & Olsen, J. (1975) The Uncertainty of the Past: Organisational Learning Under Ambiguity. European Journal of Political Research, 3, 147-71.

March, J. & Olsen, J. (1989) Rediscovering institutions: The organizational basis of politics, Free Press.

Mthembu-Salter, G. (2009) Chinese Investment in African Free Trade Zones: Lessons from Nigeria's Experience. SAIIA Policy Briefing 10, available online.

Meier, G. M. & Stiglitz, J. E. (2001) Frontiers of Development Economics: The Future in Perspective, A World Bank Publication.

Meyer, K. E. (2004) Perspectives on multinational enterprises in emerging economies. Journal of International Business Studies, 35, 259-76.

Miles, M. B. & Huberman, A. M. (1994) Qualitative Data Analysis: An Expanded Sourcebook, Sage Publications.

Mkandawire, T. (2001) Thinking about developmental states in Africa. Cambridge Journal of Economics, 25, 289-314.

Mohan, G. (2008) China in Africa: A Review Essay. Review of African Political Economy, 35, 155-73.

Mohan, G. & D. Kale, "The invisible hand of South-South globalisation: Chinese migrants in Africa", (Unpublished report for the Rockefeller Foundation, 2007), pp. 14-15. Available online.

Ghoshal, S. & P. Moran (1996) Theories of Economic Organization: The Case for Realism and Balance. The Academy of Management review, 21, 58-72.

Morck, R., Yeung, B. & Zhao, M. (2008) Perspectives on China's outward foreign direct investment. Journal of International Business Studies, 39, 337.

Nayyar, D. (2006) Development through globalisation? UNU-WIDER Research Paper No. 2006/29.

Nelson, R. & Winter, S. (1982) An evolutionary theory of economic change, Harvard University Press.

Nelson, R. & Winter, S. (2002) Evolutionary theorizing in economics. Journal of Economic Perspectives, 16, 23-46.

Newell, P. (2001) Managing multinationals: the governance of investment for the environment. Journal of International Development, 13, 907-19.

North, D. C. (1990) Institutions, Institutional Change and Economic Performance, Cambridge University Press.

North, D. C. & Foundation, W. (2005) Understanding the process of economic change, Princeton University Press.

Nunnenkamp, P. (2004) To What Extent Can Foreign Direct Investment Help Achieve International Development Goals? The World Economy, 27, 657-77.

Nye, J. (1967) Corruption and political development: a cost-benefit analysis. The American Political Science Review, 417-27.

OECD (2002) The Relevance of the OECD Guidelines for Multinational Enterprises to the Mining Sector and the Promotion of Sustainable Development, Available online.

Olson, M. (1971) The logic of collective action: Public goods and the theory of groups, Harvard University Press.

Ostrom, E. (2000) A behavioral approach to the rational choice theory of collective action. Univ of Michigan Pr.

Ostrom, E. (2005). Understanding institutional diversity, Princeton Univ Pr.

Otto, J. (2000) "Mining taxation in developing countries." Study prepared for UNCTAD, November. New York, NY: United Nations.

Otto, J. (1998) Global changes in mining laws, agreements and tax systems. Resources policy, 24, 79-86.

Patey, L. A. (2007) State rules: Oil companies and armed conflict in Sudan. Third World Quarterly, 28, 997-1016.

Penrose, E. & Slater, M. (1959) The Theory of the Growth of the Firm, Blackwell Oxford.

Petrauskis, C. (2006). Employee vulnerability in Zambia: A policy guide to casualisation, minimum wage and the dignity of work, Jesuit Centre for Theological Reflection Policy Brief. Available online.

Pfeffer, J. (1981) Power in organizations, Marshfield, MA, Pittman.

Potts, D. (2005) Counter-urbanisation on the Zambian copperbelt? Interpretations and implications. Urban Studies, 42, 583-609.

Poynter, T. A. (1985) Multinational enterprises and government intervention. New York, NY: St. Martins Press.

Rakner, L. (2003) Political and economic liberalisation in Zambia 1991-2001, Nordiska Afrikainstitutet.

Rakner, L., van de Walle, N., Mulaisho, D. (1999), Aid and reform in Zambia: Country case study, World Bank programme on aid and reform in Africa, WB website.

Ramamurti, R. (2001) The Obsolescing'Bargaining Model'? MNC-Host Developing Country Relations Revisited. Journal of International Business Studies, 32.

Reilly, J. & Na, W. (2008) China's Corporate Engagement in Africa. IN KITISSOU, M. (Ed.) Africa in China's Global Strategy.

Rights & Accountability in Development (RAID) (2000), Deregulation and the denial of human rights, Queen Elizabeth House, Oxford University.

Robinson, V. (1993) Problem-based methodology: Research for the improvement of practice, Pergamon Press.

Rodrik, D. (1996) Understanding economic policy reform. Journal of Economic Literature, 9-41.

Rugman, A. & Verbeke, A. (2002) Edith Penrose's contribution to the resource-based view of strategic management. Strategic management journal, 769-80.

Rugman, A. M. & Li, J. (2007) Will China's Multinationals Succeed Globally or Regionally? European Management Journal, 25, 333-43.

Rutherford, M. (1996). Institutions in economics: The old and the new institutionalism, Cambridge Univ Pr.

Sachs, J. & Warner, A. (1995) Natural resource abundance and economic growth. NBER.

Salancik, G. & Pfeffer, J. (1978) A social information processing approach to job attitudes and task design. Administrative Science Quarterly, 224-53.

Santiso, J. (2000) Hirschman's view of development, or the art of trespassing and self-subversion, CEPAL Review 70.

Scharpf, F. W. (1997) Games Real Actors Play: Actor-Centered Institutionalism in Policy Research, Westview Press.

Scharpf, F. W. (2000) Institutions in Comparative Policy Research. Comparative Political Studies, 33, 762-90.

Schepers, D. H. (2006) The Impact of NGO Network Conflict on the Corporate Social Responsibility Strategies of Multinational Corporations. Business & Society, 45, 282.

Schumpeter, J. (1994) Capitalism, socialism, and democracy, Routledge.

Scott, W. R. (2001) Institutions and Organizations, 2nd edn, Sage.

Shleifer, A. & Vishny, R. (1997) A survey of corporate governance. Journal of Finance, 737-83.

Simon, H. (1964) On the concept of organizational goal. Administrative Science Quarterly, 1-22.

Simon, H. (1997) Administrative behavior: A study of decision-making processes in administrative organizations, Free Press.

Squire, L. (1987) Memory and brain, Oxford University Press, USA.

Steier, F. (1991) Research and Reflexivity, Sage Publications.

Stinchcombe, A. (1968) Constructing social theories, New York: Harcourt, Brace, Jovanovich.

Stopford, J. M., Strange, S. & Henley, J. S. (1991) Rival States, Rival Firms: Competition for World Market Shares, Cambridge University Press.

Strange, S. (1996) The Retreat of the State: The Diffusion of Power in the World Economy, Cambridge University Press.

Taylor, I. (2006) China's oil diplomacy in Africa. International Affairs, 82, 937-59.

Teece, D., Pisano, G. & Shuen, A. (1997) Dynamic capabilities and strategic management. Strategic management journal, 509-33.

Tellis, W. (1997) Application of a case study methodology. The qualitative report, 3, 1-17.

Thelen, K. (1999) Historical Institutionalism in Comparative Perspective. Annual Reviews in Political Science, 2, 369-404.

Tull, D. M. (2006) China's engagement in Africa: scope, significance and consequences. The Journal of Modern African Studies, 44, 459-79.

Tversky, A. & Kahneman, D. (1974) Judgment under uncertainty: Heuristics and biases. Science, 185, 1124-31.

UNCTAD (1999) World Investment Report. United Nations.

UNCTAD (2001) World Investment Report. United Nations.

UNCTAD (2005) World Investment Report: Transnational Corporations and the Internationalization of R&D. United Nations.

UNCTAD (2006) World Investment Report. United Nations.

UNCTAD (2007) World Investment Report. United Nations.

UNCTAD (2009) World Investment Report. United Nations.

Utting, P. (2005) Rethinking Business Regulation: From Self-Regulation to Social Control, UNRISD Technology, Business and Society Programme Paper No. 15. Available at http://www.unrisd.org/.

Van De Walle, N. (2003) Presidentialism and clientelism in Africa's emerging party systems. The Journal of Modern African Studies, 41, 297-321.

Van Donge, J. (2009) The plundering of Zambian resources by Frederick Chiluba and his friends: A case study of the interaction between national politics and the international drive towards good governance. African Affairs, 108, 69.

Van Donge, J. & Liviga, A. (1986) Tanzanian political culture and the Cabinet. Journal of Modern African Studies, 619-39.

Vernon, R. (1971) Sovereignty at Bay; the Multinational Spread of US Enterprises, Basic Books.

Vernon, R. (1979) STORM OVER THE MULTINATIONALS, Harvard Univ. Press.

Vogel, S. (1998) Freer markets, more rules: regulatory reform in advanced industrial countries, Cornell Univ Pr.

Wade, R. (1990) Governing the market: economic theory and the role of government in east Asian industrialization.

Walker, R. (1985) Applied Qualitative Research. Aldershot.

Weber, M. (1948) From Max Weber: Essays in Sociology, London, RPK.

Weber, M. (1968) Economy and Society, vol. 1. New York: Bedminster.

Weeks, J. (2008), The reduction of fiscal space in Zambia – Dutch disease and tightmoney conditionalities, International Poverty Centre, Country study 14, Jan 2008.

Weir, M. & T. Skocpol (1985), 'State structures and the possibilities for Keynesian responses to the great depression in Sweden, Britain and the United States', in Evans, P. et al. (eds) Bringing the state back in, New York: Cambridge University Press), pp. 107-168.

Westwood, R. (2004) 3. Towards a Postcolonial Research Paradigm in International Business and Comparative Management. Handbook of Qualitative Research Methods for International Business.

Williamson, O. (1998) The institutions of governance. AMERICAN ECONOMIC REVIEW, 75-79.

Williamson, O. E. (1985) The economic institutions of capitalism, Free Press New York.

Williamson, O. E. (2000) The New Institutional Economics: Taking Stock and Looking Ahead. Journal of Economic Literature, September 2000, pp. 695-613.

Willott, C. (2009) Refashioning Neopatrimonialism in an Interface Bureaucracy: Nigerian Higher Education. Ph.D. thesis at the University of Bath, United Kingdom.

Windsor, D. (2007) Toward a Global Theory of Cross-Border and Multilevel Corporate Political Activity. Business & Society, 46, 253.

Winter, S. (1986) The research program of the behavioral theory of the firm: orthodox critique and evolutionary perspective. Handbook of behavioral economics, 1, 151-88.

World Bank (1996), Zambia – Prospects for sustainable growth 1995-2005, Report number 15477 – ZA.

World Bank 2000, 'Greening industry: new roles for communities, markets, and governments', World Bank policy research report.

World Bank (2005), Zambia Diagnostic Integrated Trade Study. Trade Component of Private Sector Development Program for Zambia. Available online.

World Bank (2006a), Aide Memoire - World Bank Minerals Sector Fiscal Review Mission Nov 28 – Dec 7, 2006. Draft

World Bank (2006b), Summary of Recommendations and Next Steps, Aide Memoire - World Bank Minerals Sector Review Mission, unpublished note.

World Bank (2006c), Governance Matters: World Bank Governance Indicators 2006.

World Bank (2008a), Extractive Industries Transparency Initiative Plus Plus – Fact Sheet. Available at http://go.worldbank.org/XYLUR236T0.

World Bank (2008b), Fact Sheet: Extractive Industries Transparency Initiative Plus Plus: EITI++. http://go.worldbank.org/LFMARP2TN0

World Bank (2008c), Global Development Finance. Washington: World Bank.

World Bank (2008d), EITI Zambia Scoping Report. Published by Government of Zambia.

World Bank (2009), Doing Business Survey. Washington: World Bank.

Wright, C. (2007), European Investment Bank – Promoting sustainable development 'where appropriate', report commissioned by CEE Bankwatch Network. Available at http://bankwatch.org/documents/EIB_where_appropriate.pdf.

Wright, M., Filatotchev, I., Hoskisson, R. E. & Peng, M. W. (2005) Strategy Research in Emerging Economies: Challenging the Conventional Wisdom*. Journal of Management Studies, 42, 1-33.

Wunsch, J. S. & Olowu, D. (1990) The failure of the centralized state: institutions and self-governance in Africa, Westview Press.

Yeung, H. & Liu, W. (2008) Globalizing China: the Rise of Mainland Chinese Firms in the Global Economy. Eurasian Geography and Economics, 49, 57–86.

News references

ABCNews (27 Jun 2007), 'Venezuela forces US oil giants out'. http://www.abc.net.au/news/stories/2007/06/27/1963092.htm.

AFX News (11 Jan 2008), 'Zambia president axes copper mine tax breaks'. http://www.forbes.com/feeds/afx/2008/01/11/afx4520855.html

AllAfrica (15 May 2007), 'Zambia: Parley Committee Takes ECZ to Task'. http://allafrica.com/stories/200705150531.html.

BBC News (19 Apr 2007), 'China criticises mine cover-ups', http://news.bbc.co.uk/1/hi/world/asia-pacific/6570625.stm.

BBC News (21 Apr 2005), 'Dozens killed in Zambia explosion'. http://news.bbc.co.uk/1/hi/world/africa/4466321.stm.

BBC News (4 Jul 2007), Zambia miners 'see little reward'. Available at http://news.bbc.co.uk/1/hi/world/africa/6267754.stm.

BBC News (8 Oct 2009), 'China mine lift collapse kills 26'. http://news.bbc.co.uk/1/hi/world/asia-pacific/8298226.stm

BBC News, (25 Nov 2006), 'China's ambitions in Africa'. Available at http://news.bbc.co.uk/1/hi/programmes/from_our_own_correspondent/6180310.stm.

China Daily (28 Oct 2007), 'China opens another copper mine in Zambia'. http://www.chinadaily.com.cn/bizchina/2007-10/28/content_6211525.htm.

China Daily (29 May 2009), Green rules eye Chinese firms abroad. www.chinadaily.com.cn/bizchina/2009-05/29/content_7952605.htm.

Daily Mail (11.4.2007), (no title). http://www.dailymail.co.zm/media/news/viewnews.cgi?category=2&id=1207906314.

Daily Mail (6 Oct 2007), 'Grinaker employees down tools'

Domain-B (14 Sep 2006), India-Brazil-South Africa summit forges links in energy, trade and transportation news'. <u>http://www.domain-b.com/economy/trade/20060914_summit.html</u>.

Earth Times (17 Oct 2007), 'Ministerial meeting kicks off India-Brazil-South Africa summit. http://www.earthtimes.org/articles/show/125684.html.

Economic Times (17 Jul 2008), 'India, Ecuador explore cooperation in mining sector'.

http://economictimes.indiatimes.com/News/Economy/Foreign_Trade/India_Ecuador_explore_cooperation_in_mining_sector/articleshow/3245977.cms.

Engineering and Mining Journal (2004), 'Around the world: Latin America'. http://findarticles.com/p/articles/mi_qa5382/is_200409/ai_n21357330.

LusakaTimes (11 Mar 2010), 'Chinese visit pays off for Zambia'. http://www.lusakatimes.com/?p=24649.

LusakaTimes (20 Apr 2009), 'ZRA directs mining firms in Luapula to pay tax'. http://www.lusakatimes.com/?p=11386

LusakaTimes (4 Mar 2008), 'Chinese-Zambians in "fists of fury"'. http://www.lusakatimes.com/?p=2260.

Lusaka Times (14 Jul 2007), 'Kansanshi miners' strike saddens Levy'. http://www.lusakatimes.com/?p=951.

MarketWatch (16 Sep 2009), 'First Quantum Minerals Suspends Construction at Kolwezi Project. http://www.marketwatch.com/story/first-quantum-minerals-suspends-construction-at-kolwezi-project-2009-09-16.

MercoPress (22 Mar 2005), 'Bolivian Democracy On The Verge Of Crumbling'. http://en.mercopress.com/2005/03/22/bolivian-democracy-on-the-verge-of-crumbling.

Metals Place (25 April 2007), Zambia's Chambishi copper/cobalt smelter ordered to shut down after explosion. Available at http://metalsplace.com/news/articles/11582/zambias-chambishi-coppercobalt-smelter-ordered-to-shut-down-after-explosion/

Mineweb (11 Jun 07), 'Second thoughts on Zambian mine development agreement renegotiation'. http://www.mineweb.com/mineweb/view/mineweb/en/page66?oid=22052&sn=Detail

Mineweb (4 Apr 2008), 'Chinese companies to invest over \$800 million in Chambishi, Zambia'. www.mineweb.com/mineweb/view/mineweb/en/page504?oid=48636&sn=Detail.516

Mining Mirror (1-15 Oct 2007), (no title).

MiningReview.com (20 Apr 2009), 'DRC mining contracts – government decision soon'.

http://beta.miningreview.com/DRC/mining/contracts/government/decision/soon.

MiningWeekly (29 Jun 2009), 'Creditors reject plan to reopen Doe Run Peru smelter'. http://www.miningweekly.com/article/creditors-reject-plan-to-reopen-doe-run-peru-smelter-2009-06-29

NewNations.com (no date), 'Briefing: South Africa'. http://www.newnations.com/archive/2004/April/za.html

Public Policy & Management (29.3.2005), 'Chilean Mining at the Crossroads: The 3% Factor'.

http://wharton.universia.net/index.cfm?fa=viewArticle&id=755&language=english&s pecialId=.

Reuters (3 Feb 2007), 'Zambia wins Chinese investment, opposition snubbed'. http://www.alertnet.org/thenews/newsdesk/L03330799.htm.

The Economist (15 Apr 2010), 'Here be dragons'.

The Age (15 Jul 2005), 'Chilean President defends mining royalty', http://www.theage.com.au/news/business/chilean-president-defends-mining-royalty/2005/07/14/1120934360966.html.

The Post (15 Apr 2009), 'Suppliers give KCM final demand for unpaid dues'. http://www.postzambia.com/content/view/8204/40/.

The Post (12 Feb 2008), 'Mines resist tax'.

The Post (13 Jan 2008), 'Ask no failures, difficulties' (Editorial).

The Post (19 Jul 2007), 'NGO Bill is dictatorial, says Habasonda'.

The Post (22 Jan 2008), 'Windfall profit tax on mines will cause anxiety'.

The Post (29 Oct 2007), 'Investors have brought funds into mining, says Dr Mwansa'.

The Post, (10 Jun 2007), Editorial.

The Post, (10 Sep 2007), Mutati leads delegation to China.

The Post, (14 Aug 2007), Editorial.

Times of Zambia (10 Jul 2007), 'Chambishi mines launches social responsibility plan'.

Times of Zambia (15 Jun 2007), 'ZCCM-LH Grappling to Contain Pollution'.

Times of Zambia (9 Feb 2009), 'CBE sues mines'. http://www.minesandcommunities.org/article.php?a=9088.

Times of Zambia (28 Feb 2008), 'Chambishi jobs for Citizens – China'. http://allafrica.com/stories/200802280057.html.

Xinhua (8 Nov 2006), 'Zambian president says China's assistance to Africa not a second-colonialism'. http://english.people.com.cn/200611/08/eng20061108_319412.html.

Xinhua (9 Apr 2008), 'India-Africa summit concluded in New Delhi'. http://news.xinhuanet.com/english/2008-04/09/content_7947657.htm

11 List of interviewees

Table 10. Interviewees mentioned in empirical chapters

Yable 10. Interviewees mentioned in empirical c Name and title	Organisation	Location
	UI gambation	Location
Mining Sun Chuanqi, Company Secretary (1 int.)	CCS	Connorhalt
Anil Bangur, Chief Fin. Officer (Africa) (2 int.)	CM	Copperbelt Copperbelt
-	CM	
Anne-Marie Mwenya, Company Secretary (1 int.)		Copperbelt
Daniel Chihili, Super. (Safety, Health and Env't) (1 int.)	CM	Copperbelt
Gerry Nordoff, Procurement Manager (1 int.)	CM	Copperbelt
Sylvester Kasonde, Manager HR (1 int.)	CM	Copperbelt
Andrew Hickman, Commercial Manager (4 int.)	FQML Bwana Mkubwa	Copperbelt
Andrew Spivey, Group Env't Manager (2 int.)	FQML Bwana Mkubwa	Copperbelt
Andries Scott, Technical Manager (1 int.)	FQML Bwana Mkubwa	Copperbelt
Robert Chenier, Group Investigations Manager (1 int.)	FQML Bwana Mkubwa	Copperbelt
Deborah Bwalya, Company Secretary (1 int.)	KCM	Copperbelt
oel Chitambala, Business Controller (1 int.)	KCM	Copperbelt
Rahul Kharkar, Head of Business Development (2 int.)	KCM	Copperbelt
Sophie Masupha, VP Human Resources (1 int.)	KCM	Copperbelt
Vinod Bhandawat, VP Finance (1 int.)	KCM	Copperbelt
Yotham Phiri, Manager Environment (1 int.)	KCM	Copperbelt
Stephen Banda, Import/Export Agent (2 int.)	NFCA	Copperbelt
Gao Xiang, Deputy CEO (1 int.)	NFCA	Copperbelt
Alec Chirwa, Finance professional (2 int.)	NFCA	Copperbelt
losephine Maboshe, Administration (2 int.)	NFCA	Copperbelt
loseph Makumba, Manager (Environment) (1 int.)	ZCCM-IH	Lusaka
Wilfred Katoto, Technical Manager (1 int.)	ZCCM-IH	Copperbelt
William Musama, Company Secretary (1 int.)	ZCCM-IH	Lusaka
Government and regulatory agencies		
Chibesa Chibesakunda, Manager (Legal Services) (1 int.)	ECZ	Lusaka
Cliff Ngwata, Senior Inspector (1 int.)	ECZ	Copperbelt
Humphrey Mwale, Senior Inspector (2 int.)	ECZ	Lusaka
Joseph Sakala, Manager (Northern Region) (2 int.)	ECZ	Copperbelt
Iulius Daka, Manager (Planning & Information) (1 int.)	ECZ	Lusaka
Gideon Ndalama, Senior Mining Engineer (2 int.)	Ministry of Mines	Lusaka
ustin Mubanga, Ass't to the Secr. of the Treasury (1 int.)	Ministry of Finance	Lusaka
James Chansa, Senior Labour Officer (1 int.)	Ministry of Labour	Copperbelt
MSD Senior Inspector (1 int.)	MSD	Copperbelt
MSDP Senior Technical Assistant (4 int.)	MSDP	Copperbelt
Donors	FC	Lusaka
	EC	
Derek Fee, Head of Delegation (1 int.)	EC	Lusaka
Derek Fee, Head of Delegation (1 int.) Juan-Jose Villa-Chacon, Private sector development (2 int.)		Lusaka Lusaka
Derek Fee, Head of Delegation (1 int.) Juan-Jose Villa-Chacon, Private sector development (2 int.) Henny Gerner, First Secretary, PSD (1 int.)	EC	
Donors Derek Fee, Head of Delegation (1 int.) Juan-Jose Villa-Chacon, Private sector development (2 int.) Henny Gerner, First Secretary, PSD (1 int.) Lena Hasle, First Secretary, Political Governance (1 int.) Olav Lundstol, First Secretary, Country Economist (2 int.)	EC Netherl. Embassy	Lusaka

Michael Soko, Governance specialist (1 int.)	UNDP	Lusaka
Tom Fox, Broker (Global Sustainable Bus. Initiative) (1. int)	UNDP	Lusaka
Charles Husband, Lead Mining Specialist (1 int.)	World Bank	Lusaka
WB staff member, Public Sector Mgmt (1 int.)	World Bank	Lusaka
Academia		
John Lungu, Vice-Chancellor (4 int.)	Copperbelt University	Copperbelt
Mwaka Chulu, Lecturer (1 int.)	Copperbelt University	Copperbelt
Francis Chigunta, Professor (1 int.)	Univ. of Zambia	Lusaka
Civil society		
Father Misheck Kaunda	Caritas Zambia	Copperbelt
Peter Sinkamba, Executive Director (2 int.)	CBE	Copperbelt
Stephen Muyakwa, Chairman (1 int.)	CSTNZ	Lusaka
Muyatwa Sitali, Project Officer (1 int.)	JCTR	Lusaka
Peter Henriot, Director (1 int.)	JCTR	Lusaka
Charles Muchimba, Dir. of Information & Research (2 int.)	MUZ	Copperbelt
Vincent Lengwe, Dep. Director (Information & Res.) (2 int.)	MUZ	Copperbelt
Goodwell Lungu, Executive Director (1 int.)	Transparency Int'l (Z)	Lusaka
Rueben Lifuka, President (1 int.)	Transparency Int'l (Z)	Lusaka
Private sector (incl. suppliers)		
Manyanyato Kamoto, entrepreneur (1 int.)	Small-scale supplier	Copperbelt
Julia Chaila, Legal Councel / Company Secretary (1 int.)	CEC	Copperbelt
Roland Lwiindi, Operations Manager (1 int.)	CEC	Copperbelt
Ruud Walgaard, Managing Director (3 int.)	CML	Copperbelt
Lameck Malema, Proprietor (2 int.)	Loma Ltd.	Copperbelt
Salim Mirza, Director (1 int.)	Mirza Auto Spares	Copperbelt
Sergio Bettega, Director/Proprietor (1 int.)	Ndola Engineering	Copperbelt
Chisanga Chungu, Partner (1 int.)	PWC	Lusaka
George Ngolwe, Sales and Marketing Agent (1 int.)	Spectra Oil (Shell in Z.)	Copperbelt
Grant Gatchell, Operations Manager (2 int.)	Voyagers Travel Agent	Copperbelt
Howard Gatchell, Chairman (1 int.)	Voyagers Travel Agent	Copperbelt
Shyam Vasant, Entrepreneur (1 int.)		Copperbelt
Industry associations		
Eddie Kapungulya, President (1 int.)	Kitwe and District CCI	Copperbelt
Frederick Bantubonse, General Manager (2 int.)	CoM	Copperbelt
Fanuel Banda, Director (1 int.)	MSA	Copperbelt
Yusuf Dodia, Chairperson (1 int.)	PSDA	Lusaka
`		
Traders		
Edward Mwamulima, Entrepreneur (1 int.)	Entrepreneur	Copperbelt
Suhayl Dudhia, Director (1 int.)	Pii Investments	Lusaka
Mohsin Chakera, Director (2 int.)	Sharma Brothers Int'l	Copperbelt
Other		
Ernest Mwape, Vice President (1 int.)	EAZ	Lusaka
Peter Mwanza, Director (1 int.)	CSSDP	Copperbelt

Guy Scott,	Vice-President (1 int.)	

Patriotic Front Lusaka

Name and title	Organisation	Location
Mr Yang, Third Secretary (1 int.)	ECC	Lusaka
Anthony Harrison, Operations Manager (1 int.)	CHAMP	Lusaka
Webster Malido, Editor (1 int.)	The Post	Lusaka
Birgitte Poulsen, Chief Technical Advisor (1 int.)	ILO	Lusaka
Emmanuel Pamu, Acting Ass't Director (1 int.)	BoZ	Lusaka
Justin Mukosa, Senior Communications Officer (1 int.)	ECZ	Lusaka
Healey Mwemba, Senior Economist (1 int.)	Ministry of Commerce	Lusaka
Mwiche Mudala, Senior Clerk (1 int.)	Ndola City Council	Copperbelt
Hira Singh, COO (1 int.)	СМ	Copperbelt
Manuela Niccolai, [Social management] (1 int.)	FQML Frontier	Copperbelt
David Makepeace, Director of Technical Svcs (1 int.)	ICS Copper Systems	Copperbelt
William Wang, Entrepreneur (1 int.)	Entrepreneur	Lusaka
Neo Simutanyi, Political & Dev't Consultant (1 int.)	Pangolin Consulting	Lusaka
Francis Kasongo, Environmental Officer (1 int.)	CEC	Copperbelt
Butch Shone, Director (1 int.)	Kasempo Transport	Copperbelt
Larry Phiri, Managing Partner (1 int.)	KPMG	Copperbelt
Cao Peng, Manager (1 int.)	Chinese private company	Copperbelt
Ian Mkandawire, Deputy Secretary General (1 int.)	ZCTU	Copperbelt

Table 11. Interviewees not mentioned in empirical chapters