FREIE UNIVERSITÄT BERLIN

Fachbereich Politik- und Sozialwissenschaften Otto-Suhr-Institut für Politikwissenschaft Ihnestr. 21, 14195 Berlin

Artisanal mining and conflict financing in eastern Democratic Republic of Congo (DRC); coping, conflict and shadow economy actors and the impact of the 'conflict minerals' campaign.



Author: Nicholas Garrett (4104915)

Supervisors: Prof. Dr. Peter Eigen and Prof. Dr. Klaus Segbers

Date of disputation: 4 November 2013

Completed with funding from:

Heinrich-Böll-Stiftung e.V.

Vodafone Stiftung Deutschland

Title picture credit:

Mark Craemer, Bisie, 2007 – the photo is copyrighted.

With special thanks to:

My family, my supervisors, my work colleagues, all interviewees and everyone who has done their bit to help me complete this piece.

Acronyms

ASM Artisanal and Small-Scale Mining

AU African Union

BGR German Federal Institute for Geo-Science and Natural Resources

CAMI Cadastre Minier

CASM Communities and Small-Scale Mining Secretariat (World Bank)

CEEC Centre d'Evaluation, d'Expertise et Certification des Substances Minérales

Précieuses et Semi-Précieuses

CFS Conflict-free Smelter (Program)

CNDP Congrès National pour la Défense du Peuple

COMESA Common Market for Eastern and Southern Africa

COMIMPA Coopérative Minière Mpama Bisiye

CSO Civil Society Organization
CTC Certified Trading Chain

DD Due Diligence

DDR Disarmament, Demobilisation and Reintegration

DF 1502 Dodd Frank (The US Dodd Frank Wall Street Reform Act, Section 1502 on

Conflict Minerals)

DFID United Kingdom Department for International Development

DRC Democratic Republic of the Congo

EICC Electronic Industry Citizenship Coalition

EITI Extractive Industries Transparency Initiative

FAPC People's Armed Forces of Congo

FARDC Forces Armées de la République Démocratiquedu Congo (Congolese

National Army)

FDLR Forces Démocratiques de Liberation du Rwanda

FEC Federation of Congolese Enterprises

GeSI Global e-Sustainability Initiative

GMB Bangandula Mining Group

GMC Global Mining Company

GPS Global Positioning System

IAO International Advocacy Organisation

ICGLR International Conference on the Great Lakes region

IDO International Development Organisation

iTSCi ITRI Tin Supply Chain Initiative

ITRI International Tin Research Institute

KPCS The Kimberley Process Certification Scheme for Rough Diamonds

LME London Metal Exchange

LSM Large-Scale Industrial Mining

MONUC United Nations Organisation Mission in the Democratic Republic of Congo

MONUSCO United Nations Organisation Stabilisations Mission in the Democratic

Republic of the Congo

MPA Metal Processing Association

MPC Mining Processing Congo

NGO Non-Governmental Organization

OECD Organisation for Economic Co-operation and Development

OECD DD OECD Due Diligence Guidance for Responsible Supply Chains of Minerals

from Conflict-Affected and High-Risk Areas

OCC Office Congolais de Contrôle

OFIDA L'Office des Douanes et Accises

OKIMO Office des Mines d'or de Kilo-Moto

PPE Personal Protective Equipment

RCD Rally for Congolese Democracy

ROHS Restrictions of Hazardous Substances Directive

SAESSCAM Service d'Assistance et d'Encadrement du Small-Scale Mining

SAKIMA Societé Aurifière du Kivu et du Maniema

SME Small and Medium sized Enterprise

SOMINKI Societé Minière et Industrielle du Kivu

UN United Nations

UN GoE United Nations Group of Experts

USAID United States Agency for International Development

WEEE Waste Electrical and Electronics Directive

Content

1 – Introduction	8
Formal ASM Governance Structure	20
Legal Framework	23
State Administrative Structure	24
Illustrative Challenges within the administrative structure	27
-	
2 – The research gap: 'coping' 'war'- and 'shadow'- economies and exter	nalities of
The ASM sector of eastern DRC. Formal ASM Governance Structure Legal Framework State Administrative Structure Illustrative Challenges within the administrative structure Conflict 2 – The research gap: 'coping'-, 'war'- and 'shadow'- economies and externalit IANGO driven measures to curb 'conflict financing' in eastern DRC. Introduction 'Conflict financing': a governance challenge Governance arrangements in weak state Role of IANGO's in addressing governance challenges Historical perspective on the role of IANGOs and 'conflict financing' Current IANGO 'conflict minerals' campaign on eastern DRC. Reasons for IANGO' conflict minerals' campaign 'success' The research gap 3 - 'Conflict minerals' production in North Kivu and Orientale Province – The 'coping economy' Introduction The primary ASM economy Earnings. Legal status Lack of Access to Credit Debt Economic Predation. Cost of ASM Livelihood – Socio-Economic Externalities. Influx. Child Labour Gender Issues Sex Work The secondary ASM economy and alternative livelihoods. Agriculture Conclusion. 4 - 'Conflict minerals' production in North Kivu and Orientale Province – 'war' economy realities. Introduction Walikale's Conflict Economy The non-integrated 85" FARDC brigade Security governance by the 85" brigade Security governance by the 85" brigade The 85th brigade's predation on the mining and trade of cassiterite	
3 - 'Conflict minerals' production in North Kivu and Orientale Province – T	he
•	
The ASM sector of eastern DRC	
-	
Lack of Access to Credit	87
Debt	88
Economic Predation	89
Cost of ASM Livelihood – Socio-Economic Externalities	91
Conclusion	106
4 - 'Conflict minerals' production in North Kivu and Orientale Province – 'V	var'
economy realities	109
Introduction	109
The FDLR's and CNDP's predation on economic activity	122

	The FDLR's and CNDP's predation on economic activity: Type of Economic activity	122
	The FDLR's and CNDP's predation on economic activity: Type of mineral or metal	125
	Conclusion	129
5	- 'Conflict minerals' production in North Kivu and Orientale Province – the	
	hadow economy'	.132
	Introduction	
	The trade in 'conflict minerals' in North Kivu and Orientale Province - the	
	'shadow economy'	.134
	The trade in cassiterite in North Kivu – the Walikale Goma Route	135
	The gold trade in Orientale Province – the Watsa–Ariwara RouteRoute	146
	Formalisation as the answer?	.155
	Conclusion	.158
6	- IANGO advocacy-driven measures to curb conflict financing in eastern DRC	and
tł	neir consequences	.160
	Measures to Curb Conflict Financing	. 163
	Chain-of-custody schemes	164
	The RCM for the ICGLR RINR	165
	Certified Trading Chains (CTC)	
	iTSCi	
	Extraterritorial Legislation on mandatory due diligence	
	Consequences of DF 1502 and chain-of-custody schemes	
	Conclusion	.194
7	- Conclusion: Conflict minerals, coping, conflict and shadow economy actors	and
Æ	ANGO accountability	.195
	Introduction	. 195
	The research gap	.196
	Coping economy actors analysis	199
	Conflict economy actors analysis	201
	Shadow economy actors analysis	204
	'Conflict Minerals' Trade Control Measures	.207
	Externalities of 'conflict minerals' control measures for the 'coping' economy actor	s211
	Externalities of 'conflict minerals' control measures for the 'conflict' economy acto	rs
		211
	Externalities of 'conflict minerals' control measures for the 'shadow' economy actor	rs
		213
	Conclusion and way forward	.213
В	ibliography	.217
	Books, Articles, Reports and Websites	
	Laws and decrees	.247
	Interviews	
A	nnex 1: List of Pre-Publications	.250
Λ	nnex 2: Methodology and Research Constraints	251
~	Stage 1: Preparation and Methodology Development	
	stage In Freparation and Methodology Developinetit	403

Annex 5: CV	270
Annex 4: Zusammenfassung der wichtigsten Punkte	268
Annex 3: English Summary of Key Points	266
Inferences	265
Evolution of Events	
Multiple truths and accuracy of secondary sources	
Time limitations	263
Informant perceptions and translation	
Access to key informants and information	260
Survival in the Bisie mine	
Access to key mining areas	258
Financing	258
Methodological challenges and resolution or mitigation strategies	258
Stage 3: Contextual analysis and finalisation	257
Stage 2: Field Work	253

1 – Introduction

The Democratic Republic of the Congo (DRC) is suffering from an intriguing history of state unravelling, an on-going conflict and a remarkable process of economic informalisation. These processes, combined with a whole range of other factors, have perpetuated a long-running crisis in this natural resource-rich country in the heart of Africa, yet particularly the conflict that continues to grip the eastern DRC's Kivu provinces remains an underreported humanitarian story (MSF, 2009, p. 1). One explanation for this is that "policy makers, and the general public, usually perceive the conflict [...] as extremely complex and intractable" (Autesserre, 2012, p. 7). The larger research puzzle this thesis will contribute is to address is why does conflict persist natural resource rich countries, and why in this critical case in particular.

The perceived complexity and intractability of the conflict provides a conundrum for international advocacy non-governmental organisations (IANGOs – defined further below) and other observers on how to report on the on-going conflict, particularly with respect to how to make the dynamics on the ground accessible and relevant to policy makers and the global public. One solution to this conundrum was for IANGOs to break the conflict down into bite-size, cause and effect relationships that could be more easily conveyed and understood. The most prominent example is that of a 'conflict minerals' campaign (explained further below), driven by IANGOs, like the US-based Enough Project and UK-based Global Witness (Enough Project, 2012; Global Witness, 2013). The 'conflict minerals' campaign explains armed actors' access to – and competition for access to – lucrative tantalum, tin and tungsten ('3T' minerals) and gold mining and trading opportunities as fuelling the on-going conflict in eastern DRC. These IANGOs' advocacy efforts have led to the artisanally mined 3Ts and gold now widely being referred to as 'conflict minerals' in both the media and public policy documents.

While the consequences of the conflict are manifold and include human rights violations committed by all parties involved, the principal consequence of conflict underlined in the 'conflict minerals' campaign is that of sexual violence against women (Enough Project, 2012; Global Witness, 2012). The logic, according to the 'conflict minerals' campaign, is that conflict fuelled by the mining and trade of 'conflict minerals', results in sexual violence against women and children, which, in turn, places the responsibility for sexual violence

firmly at the doorstep of those involved in the mining and trade of 'conflict minerals', in addition to those companies, which utilise 'conflict minerals' further down the value chains. These are, for example, consumer electronics companies and the global automotive industry (Enough Project, 2012). News sources suggest the information and communication technology (ICT) industry alone consumes "50 to 60 per cent of the world's tantalum, close to 26 per cent of its tin, and 9 per cent of the gold mined each year" (ITU, 2012, p. 1).

Initial advocacy efforts, pointing at the competition for natural resources in the DRC as fuel for conflict often focussed on small, lower profile operators (Global Witness, 2007a). The rise to prominence of the 'conflict minerals' campaign significantly increased when a shift occurred, focussing on higher profile downstream companies. An independent tin trading chain investigation published in the Financial Times in March 2008, for example, not only directly linked a rogue Congolese army, the *Forces Armées de la République Démocratique du Congo* (FARDC) brigade to the control of North Kivu's largest active tin ore mine, Bisie, and highlighted the predation on the mining and trade of tin ore from that mine. It also produced evidence, rather than assumptions, that linked this particular trading chain to international smelters, intermediate component manufacturers and the international electronics industry (Garrett and Mitchell, 2008a). With further research findings produced by the United Nations Group of Experts, tasked with monitoring an arms embargo and other sanctions against armed groups in the DRC, several organisations put forward arguments that placed the economic dimensions of conflict at the heart of explanations of the on-going conflict in eastern DRC:

Global Witness suggested, "in their broader struggle to seize economic, political and military power, all the main warring parties have carried out the most horrific human rights abuses, including widespread killings of unarmed civilians, rape, torture and looting, recruitment of child soldiers to fight in their ranks, and forced displacement of hundreds of thousands of people. The lure of eastern Congo's mineral riches is one of the factors spurring them on" (Global Witness, 2008, p. 4).

An editorial published in the Financial Times on August 26, 2010 suggested, "Eastern DRC is today the stage for an orgy of looting. Swarms of armed groups – affiliated with the national army, neighbouring countries, or neither – compete for the country's mining riches. They feed on and feed a lawlessness that makes civilians the prey of any roving bandit. They

finance their violence by mining, or extorting those who mine, ores such as tin ore [cassiterite], coltan [tantalum], wolframite [tungsten] and gold" (Financial Times, 2010, p. 1 of 2).

A co-founder of the Enough Project suggested in an op-ed "the time has come to expose a sinister reality: our insatiable demand for electronics products [that contain 'conflict minerals'], such as cell phones and laptops is helping fuel waves of sexual violence in a place that most of us will never go, affecting people, most of us will never meet" (Prendergast, 2009, p. 1 of 6).

The Congolese Government too jumped on the bandwagon, and several conversations I had with Congolese Government representatives in Kinshasa, London, and Brussels over the past 5 years mirror the point that Autesserre (2012) is making when she highlights that "[...] large parts of the Congolese elite and diaspora [...] contend that their country is victim of a global conspiracy in which Western powers support neighbouring states and foreign armed groups and fuel conflict on the ground in order to ease their access to Congolese natural resources" (Ibid., p. 11).

Whether as a rational choice born out of the need for a digestible explanation of conflict dynamics on the ground, or because different stakeholders actually believed in its validity, the 'conflict minerals' campaign – reinforced by media and IANGO communications – has strongly influenced the international policy agenda for eastern DRC. Millions of dollars have been spent in donor money to research conflict financing patterns, to develop interventions to curb conflict financing and even to extraterritorially legislate to prevent conflict financing (see further below). All in all, this dynamic environment presented a rich PhD research environment for me and became also a professional challenge and springboard.

Early academic work on the 'resource curse', along with IANGO writings on 'conflict minerals' piqued my interest in the broader research area of 'conflict financing', the theory of which I am elaborating in greater detail in chapter 2 of this thesis. This interest was reinforced by a course I took in *Complex Emergencies*, taught by Dr David Keen at the London School of Economics, who emphasised that there may well be other motivations at play in conflict scenarios than purely winning a war. He said, for example, "when the expressed goals in a war are not being achieved a number of unexpressed goals are

nevertheless being fulfilled" (Keen, 2012, p. 7). Understanding those unexpressed goals may well be the key to conflict resolution.

Many of the interpretations of the conflict in eastern DRC that merely emphasised the profit-seeking motivations of combatants as fuelling conflict (like the 'conflict minerals' campaign does), struck me as overly simplistic when I initially decided to focus on the DRC in my research. I agreed with Vlassenroot and Perks, who in a later publication stated, "although the involvement of armed actors (and their proxies) in mining activities both during the war and the post-conflict period cannot be neglected, the prevailing perception of this issue lacks a nuanced understanding of the complex interaction between resources and conflict" 2010, p. 65).

That said, however, it was also clear to me that whether profit seeking, justice seeking, or altogether differently motivated the on-going conflict in eastern DRC requires financing. 'Conflict financing' can be achieved through economic activities that can — whether deliberate or not — also generate surplus profit for private gain, after financial requirements for war making are met (Collier, 2006). This led me to take a closer look at the 'conflict minerals'-specific micro-dynamics of 'conflict financing' (through the predation on the mining and trade of 'conflict minerals'), as the core research theme of my thesis. Not least, because "it is not possible to adequately unravel the role of the mineral trade in armed actors' strategies and power positions in eastern Congo without more systematic documentation of local conditions and trading mechanisms in the mining centres" (Vlassenroot and Perks, 2010, p. 66).

The 'conflict minerals' campaign highlights that a number of armed groups, including the FARDC, are preying on the mining and trade of 'conflict minerals' (Global Witness, 2008; Enough Project, 2012). At the time of my research, the principal responses put forward by the 'conflict minerals' campaign – next to diplomacy and a less high profile development agenda – were measures that were aimed at curbing 'conflict financing', principally through changes in the 'conflict minerals' trading chains, such as requiring companies to ensure their products would be DRC conflict-free (Prendergast, 2009; Global Witness, 2008). Interventions in the 'conflict minerals' trade, were thus seen as conflict resolution mechanisms, which is evident from such statements, as "there will be little chance for peace in Congo until the world figures out a way to purchase that country's minerals without

fuelling horrific violence" (Prendergast and Atama, 2009, p. 1 of 1). In other words, the independent variable of conflict minerals control measures was portrayed resulting in the dependent variable or the result of the resolution of conflict. Initially, in my view this was a highly questionable assumption, principally due to high value and low volume physical attributes of gold, which makes it easy to smuggle and impossible to control, as well as the perfectly competitive nature of the artisanal and small-scale gold miners, who at the time of my research faced perfectly elastic demand at the market price. This means they would be able to sell any quantity of gold, as long as they did not surpass the market rate, with the notable exception of pure money laundering, where on occasion a higher than market price could be achieved.

While the fact that armed groups are preying on the mining and trade of 'conflict minerals' in selected parts of eastern DRC is correct (see chapter 4), what I perceived as a gap in the 'conflict minerals' campaign was that it provided little reflection in its recommendations of an understanding of the incentives of the different sets of actors to actually undertake and facilitate the mining and trade of 'conflict minerals'. It also appeared to pay little attention to the physical attributes of the minerals and metals at hand, i.e. high volume and low value tin, tantalum and tungsten, as well as high value and low volume gold. My suspicion was that the physical attributes of the minerals and metals would play a significant role on determining how effectively 'conflict minerals' control measures could be implemented.

Furthermore, many persons are required to undertake and facilitate the mining and trade of 'conflict minerals', including, but not limited to miners, mine support workers and traders, and I thought in all likelihood not all of these people are members of armed groups or otherwise benefiting from conflict. In fact, I assumed that greater number of these people most likely to be trying to survive ('coping economy' actors – explained in chapter 3), or to be motivated by profit, without necessarily being motivated by 'conflict to profit' ('shadow economy' actors – explained in chapter 5). Based on these assumptions, it appeared to me that multiple incentive structures could be influencing the behaviour of the different sets of actors undertaking and facilitating the mining and trade of 'conflict minerals'. I thought that if this is in fact the case, then policy measures that seek to curb 'conflict financing', which target only the profit-seeking motivations of combatants and others, whose motivation is to profit from conflict, might in fact be inadequate conflict resolution mechanisms and at worst, compromised the livelihood opportunities of non-members of armed groups. This is a

train of though that will provide an additional perspective on the broader academic question of why conflict persists and the practical challenge of how to end conflict. With these basic thoughts in mind, I set out to undertake my research and analysis, which I present in the following 7 chapters.

This introductory chapter presents the artisanal mining sector in eastern DRC and the sector-specific *formal* governance structure, which is beset by a plethora of challenges; it provides a discussion of the on-going conflict in DRC, which is occurring in a context of weak formal governance and the existence of parallel governance structures. This discussion provides the reader with the context within which my research and analysis is set. Readers with great familiarity with the DRC may wish to skip this scene setting part. This chapter also elaborates my research methodology, including the challenges I had to mitigate or overcome when I undertook my research. It also highlights the practical limitations of my research.

Chapter 2 presents a literature review and the analytical gap that my research and analysis sets out to fill. It presents and discusses 'conflict financing' as a governance challenge in the context of governance arrangements in weak states. It discusses governance arrangements in weak states, including the existence of parallel governance structures. Considering the focus in this thesis on the IANGO driven 'conflict minerals' campaign, it discusses the theoretical deliberations around the role of IANGOs in addressing governance challenges and particularly transnational governance challenges, such as 'conflict financing'. Chapter 2 also provides a historical perspective of the 'conflict minerals' campaign in the context of eastern DRC and introduces the reader to the current efforts of the 'conflict minerals' campaign, as well as the perceived 'successes' of the 'conflict minerals' campaign in influencing policy action. Chapter 2 closes with the presentation of the analytical gap that my research and analysis sets out to fill and to which I frequently refer. As alluded to in these introductory paragraphs, my analytical framework distinguishes the incentive structures of 'coping', 'shadow' and 'conflict' economy actors, which is a terminology and classification Goodhand (2004) originally developed in the context of his research on the regional war economy in Afghanistan. I apply this terminology and classification to my mineral specific case studies in eastern DRC i.e. cassiterite (tin ore) and gold, which differ significantly from better-known cases, particularly diamonds.

Chapter 3 discusses the incentive structures of the 'coping' economy actors in Walikale

territory in North Kivu and Watsa territory in Orientale Province, limited to the ASM cassiterite and gold sectors. This chapter analyses similarities between post-conflict economic activities (case: Watsa territory) and economic activities in conflict-affected areas (case: Walikale territory), and probe whether there is a dependence of 'coping economy' actors on the mining and trade of 'conflict minerals'. The chapter distinguishes between primary and secondary ASM economy actors; it discusses the livelihood choices of the 'coping' economy actors and the threats to the sustainability of chosen livelihoods; and it highlights some of the coping and mitigation strategies, 'coping' economy actors deploy to mitigate such threats.

Chapter 4 discusses the incentives of the 'conflict' economy actors in Walikale territory, with a specific emphasis on the FARDC's 85th brigade and its predation on the mining and trade in cassiterite. The FARC's 85th brigade was at the time of my research in charge of the Bisie cassiterite mine, North Kivu's principal active cassiterite mine. While I focus on the 85th brigade's activities in Bisie, as I was able to observe and research them first hand, I also enrich and balance the analysis in this chapter by drawing on research data on 'conflict financing' patterns of other armed groups in other 'conflict minerals' trading chains, so not to fall into the trap of inferring general lessons from a limited case study. The analysis in this chapter probes in the critical cases whether mineral resources necessarily "act as a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8).

Chapter 5 discusses the incentives of the 'shadow' economy actors facilitating the mining and trade of 'conflict minerals'. The chapter discusses the largely informal artisanal gold trade from Watsa in Orientale Province and the cassiterite trade from Walikale territory, which formalises to a significant degree at the point of export. The chapter provides an analysis of the business activities of the 'shadow' economy actors and their business environment. While 'shadow economy' business activities interrelate with the 'war economy', I probe whether 'shadow' economy actors are in fact 'conflict entrepreneurs', whose motivation is to 'profit from conflict', or whether 'shadow' economy actors are predominantly interested in only 'profit'. The research of conflict-affected area (Walikale) and post-conflict area (Watsa) was critical to this analysis. The chapter also presents a discussion of the relative merits and constraints to operating informally so to obtain an understanding why so many 'shadow' economy actors to remain in the shadows of

economic informality.

Having dissected the incentive structures of the 'coping', 'war' and 'shadow' economy actors, chapter 6 discusses IANGO 'conflict minerals' campaign-driven measures to curb 'conflict financing' (through the predation on the mining and trade of 'conflict minerals') in eastern DRC, which various donor agencies, international development organisations (IDOs) as well as governments and industry associations have started to put into place in eastern DRC. The principal policy action in the form of a) chain-of-custody schemes to keep 'dirty' minerals out of the market; and b) extraterritorial legislation in the from of DF1502 requiring companies sourcing 'conflict minerals' to conduct due diligence on their supply chains to ensure these are 'conflict free' (Levin, 2010; OECD 2012; SEC 2012). The chapter analyses the impacts and likely impacts these have on conflict financing in eastern DRC, focusing on the impacts they have or are likely to have on the 'coping', 'conflict' and 'shadow' economy actors. The analysis in this chapter is based upon the analysis and findings from my analysis in chapters 3, 4 and 5, but it is also supplemented with secondary literature and field reports describing the impacts of the measures to curb conflict financing on the different sets of actors.

The conclusion to this thesis summarises the findings from the analysis undertaken in chapters 3, 4, 5 and 6 and it responds directly to the research question of why conflict persists in the critical case of eastern DRC. This discussion in turn allows me to draw out conclusions regarding the economic dimensions of conflict in eastern DRC, covering all aspects, I discussed in the theoretical discussion in chapter 2 (see paragraph further above).

The remainder of this introductory chapter is structured in the following way: The first section introduces the history of the ASM sector in eastern DRC, which provides the reader with a contextual understanding of why 'conflict minerals' mining and trading chains are structured the way they are and it also introduces the current formal ASM sector governance structure. The second section provides an analysis of the on-going conflict in eastern DRC, which provides the reader with a contextual understanding of the complexities of the conflict and the dynamics on the ground, which to a large degree remain concealed in the communications of the 'conflict minerals' campaign. The final section of this chapter used to present the research methodology I applied, including the challenges I had to mitigate or overcome when I undertook my research. It also highlighted the limitations of

my research. This part of the chapter has been moved to Annex 2 in this public version.

The ASM sector of eastern DRC

The DRC, situated in central Africa is just over half the size of the European Union. There is no comprehensive road or rail network in the country; the only feasible ground transport option to cross from the western half of the country into the eastern half of the country is the Congo River. This geographical disconnection is reinforced through a linguistic division between the largely Lingala-speaking Western part of the country and the largely Kiswahili-speaking Eastern part of the country. The capital, Kinshasa, is situated 1,570 kilometres away from the Eastern city of Goma, which borders Rwanda. In other words, there are geographical challenges to effective formal state governance in the DRC, which are significant and therefore important to introduce prior to my sector specific analysis.

Since 2006, following an eventful history since its independence from Belgium in 1960, which included dictatorship and war (see below), a democratically elected government has ruled the country, headed by President Kabila. Despite a transition to democracy, the country remains famous not only for its natural resources endowments (see below), but also for its governance deficiencies. Transparency International listed the DRC as 168th out of 182 countries in the Corruption Perceptions Index in 2011 (Transparency International, 2011) and the IFC ranked it as 178th out of 183 in its 'Doing Business' rankings in 2012 (DoingBusiness, 2012). Under past regimes (see below) the Congolese state has long been described as 'predatory' (Young and Turner, 1985). Following the latest rounds of elections in 2011, analysts have not changed this characterisation significantly. Autesserre, for example, describes how "throughout eastern Congo, people often experience the state as an oppressive, exploitative, and threatening machine, instead of seeing it as a structure set up for their benefit" (2012, p. 18). She explains this by drawing on findings of studies, which suggest "governmental officials are often preoccupied with using public offices as a means to accumulate personal wealth, even when it conflicts with the pursuit of the public good. State officials, including members of the army, the police, and the administration, continue to be responsible for the largest part of all human right violations" (Ibid.).

The population meanwhile remains poor and largely sidelined into survival livelihood strategies, which, in parts of eastern DRC, are threatened on a daily basis by a long-running and on-going conflict. Conflict and insecurity, as I will explain in this thesis, have contributed

to the destruction of a significant proportion of formal economic activities, forced subsistence farmers to pursue alternative livelihoods and increased the economic dependency on revenues earned from the artisanal mining and trade of minerals, metals and other natural resources (Johnson, 2009a). These activities have become "a safety net to support people and economies even under adverse circumstances" (Brunnschweiler and Bulte, 2009, p. 617). It is thus a continuation of a historic trend in the past research and analysed in Janet MacGaffey's seminal work on the informal economy in Zaire underlines, which is a sector of ever growing importance to people's livelihood strategies (MacGaffey, 1991). In the early 1990s informal transactions were estimated as three times the size of official GDP (Ibid.). While, "from official statistics [...] it is necessary to conclude that most of the (Congo's) population died of starvation some time ago" (MacGaffey, 1982, p. 103, quoted in Putzel et al, 2008).

It is hard to quantify how many persons are working on the different artisanal mining sites across the DRC, as census data is unavailable, access is limited, and their numbers fluctuate with global commodity prices and perceived employment opportunities. For example rumours of impending construction of industrial mines in particular areas can spark rapid population influxes (Cuvelier, 2010). I analyse and discuss the significance of the ASM sector to rural livelihoods in chapter 3. Here I would therefore like to highlight only that the ASM and trade of minerals and metals by no means links an 'anonymous productive activity' to the global economy. It links rural livelihoods to the global economy.

In 1972, UNDESA organised one of the first conferences on small-scale mining. Although the UNDESA conference - Small Scale Mining in Developing Countries - tried to assess the technical, financial, social and environmental challenges of ASM, much of the discussions centred around devising a definition for ASM. Yet, four decades later, ASM still has no globally accepted definition (Hollaway, 1997; D'Souza, 2002). It is a very diverse economic activity globally and several countries make definitional distinctions with respect to artisanal mining and small-scale mining, drawing on a range of indicators, such as the level of mechanisation, depth of working, capital requirements, employment levels, productivity, and others (Centre for Development Studies, 2004). In the DRC, the current mining legislation, the Mining Code distinguishes between artisanal mining and small-scale mining (Présidence de la République, 2002). However these definitions are not sufficiently clear to

allow for a practicable distinction between artisanal mining and small-scale mining on the ground.

Small-scale mining is defined as: "Any activity by means of which a person carries out permanent small-scale exploitation, requiring a minimum amount of fixed installations, by using semi- industrial or industrial processes, after a deposit has been found (ibid, p. 3)."

Artisanal mining is defined as: "Any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes, within an artisanal exploitation area limited in terms of surface area and depth up to a maximum of thirty meters (Ibid.)."

As a result of the definitional uncertainty, for convenience and because a clear-cut distinction is not always possible in practice, both artisanal mining and small-scale mining activities are internationally often referred to as ASM. For the purpose of this thesis *only*, I refer to all non-industrialised mining activities when I use the term ASM. The ASM sector also includes, "the entire life cycles of artisanal and small-scale mines, from exploration, to development, mining, closure and rehabilitation; a value chain that encompasses mining, processing, trading and everything in between; and forward, backward and lateral linkages to secondary economic support activities, such as, for example, transportation (forward), mining equipment trades (backward) and food supply (lateral)" (Garrett and Paget, 2013, p. 1).

The growth of the ASM sector in the DRC is a by-product of three interlinked processes:

First, informal economic activity, as tolerated and promoted by the state, became a patronage implementation strategy for the Mobutu regime with the ultimate objective to retain power. In 1983, then President Mobutu liberalised the mining sector officially in an attempt to "combat clandestine operations" (Présidence de la République, 1982). According to the decree, ASM was allowed under certain conditions and "this measure was apparently successful in, for example, reducing diamond smuggling, given that official diamond exports increased considerably, tripling from 1983 to 1987" (Putzel et al., 2008, p. 16). In reality, it mainly provided a level of reprieve for the regime, as the policy provided the population with a means for survival in adverse conditions. As Jourdan puts it, "the famous 'Article

Quinze' – named after the virtual fifteenth article of Zaire's constitution – or 'Système D' – from Mobutu's famous expression 'Débrouillez-vous!' – that emerged as a reaction to the rapid official economic decline, therefore, could be interpreted as an alternative 'social pact', which largely reflected the downfall of the state in defining the framework for political and economic competition" (Jourdan, 2004, cited in Raeyemaekers, 2006-2007, p. 77). In the context of the mining sector, government policy became turning a regulatory blind eye to informal economic activity, whilst giving scope for government and state officials to profit privately from such informal activity, where possible.

Second, in the context of broader economic informalisation in the country the ASM sector provided a livelihood opportunity for a large and often unskilled labour force. ASM, depending on the specific mineral or metal mined, today continues to provide a degree of income security to segments of the population. These segments would otherwise be economically more marginalised as a result of a lack of point of entry into the formal economy and the scarcity of competitive economic opportunities in the wider informal economy.

Third, the conflicts of the 1990s and early 2000s (analysed further below) further reinforced the process of economic informalisation and increased the population's need to adopt more flexible livelihood strategies (Vlassenroot and Romkema, 2002). Eastern DRC and North Kivu in particular historically depended predominantly on agriculture and regional trade. Rich coffee and tea plantations, if they had not fallen victim to endemic corruption and economic mismanagement, were unable to operate in the context of widespread insecurity (Johnson, 2009). Subsistence agriculture was equally affected, as farmers could not be sure whether they would be able to reap the benefits of their harvest. More than 1.7 million people were internally displaced in North Kivu by 2012 (UNHCR, 2012), which highlights the sheer dimension of population movements in the country.

Bearing these factors in mind, the population needed a livelihood-sustaining activity that would generate benefits quickly and flexibly (Tegera et al, 2002). The ASM sector met these two criteria very well, particularly considering the availability of rich mineral surface deposits in certain areas, which provided for what was perceived as 'easy money' and led to urban legends developing in population centres about the riches easily accessible in rural mine

sites. The result of those two crucial factors is that ASM continues to be largely a *chosen* livelihood strategy, a discussion of which I provide in chapter 3.

Formal ASM Governance Structure¹

There has been significant research conducted into the ASM sector since the 1970s and it has highlighted some common global patterns (D'Souza, 2007). In order to familiarise the reader with the most important aspects of the ASM sector in the DRC at the time of my research, I have listed a number of common characteristics I observed in the following table:

Table 1: Characteristics of the ASM sector in the DRC

Diversity	While the formal governance structure of the ASM sector is detailed in	
	statutory law, on the sub-national level there are significant diversities,	
	both in terms of the structure of activities in the ASM sector and the way	
	the sector is governed.	
Dynamism	The sector is dynamic in its proliferation, with new ASM sites emerging	
	regularly. It is also dynamic with respect to frequent power shifts and	
	mineral-specific reconfigurations of actors and local informal governance	
	regimes.	
Income	After agriculture, the ASM sector is the largest sector in terms of income	
Earning	earning opportunities. It is often an option of last resort or the preferred	
Opportunities	livelihood choice for both the educated and the unskilled, as well as	
	marginalised social groups, in an adverse physical, socio-economic and	
	security environment.	
Informality	The ASM sector is mostly informal; while significant revenues pass through	
	the sector, they often bypass the state's fiscal apparatus. The sector's	
	contribution to formal GDP is negligible and to a large extent limited to the	
	tax contributions made by actors, who formally export artisanally	
	produced minerals and metals.	
Inefficiencies	Mineral recovery in ASM is comparatively small and often undertaken with	
in production	inefficient production methods. However, it can be effective enough to	

¹ Part of the analysis in this passage was pre-published in Garrett, 2007; Garrett 2008; and Garrett and Lintzer, 2010. It has been refined for this thesis.

and the ability	degrade deposits, which would be suitable for industrial exploitation.
to degrade ore	
bodies	
suitable for	
industrial	
mining	
Corruption	The sector sustains a corrupt system, transcending modern and customary
and predation	structures. The miners are subject to illegal taxation, theft and other forms
	of rent seeking by traditional, statutory and — in parts of eastern DRC —
	armed groups.
Lack of	While the sector is often meticulously organised on the local level, its
awareness,	governance is often informal and based on customary rules. There is a lack
application	of awareness, application and enforcement of statutory law. Provisions
and	made for the sector in the DRC Mining Code, elaborated below, are often
enforcement	unrealistic and contribute to the marginalisation of the sector.
of statutory	
law	
Competing	Industrial mining or exploration permits are often awarded in areas
claims to	irrespective of ASM activities already taking place, pitting artisanal miners
resources	against mining companies, which can lead to conflict.
Poverty and	The income earning potential of miners ranges between US\$ 0 to US\$ 30
relative	per day. Many are indebted to those financing mining activities and
income	vulnerable to rent seeking. However, the income earning potential in the
earning	ASM sector is significantly higher than in other rural economic sectors, and
potential	income can be generated relatively more quickly than in other activities.
Limited	The Congolese institutions involved in the governance of the ASM sector
capacity	are caught in a cycle of decline. They are under-resourced and salaries are
	often not paid or severely delayed. Their limited institutional capacity
	compromises their organisational efficiency and leaves them vulnerable to
	corruption, further eroding institutional capacity.
No	There is currently no accountable representative body that truly advocates
accountable	and furthers the rights of miners at the local level. Existing bodies, such as
representation	cooperatives, are often part of exploitative structures.
Child labour	Child labour exists in the ASM sector, with children being particularly

	active in support activities.
Socio-	ASM is associated with a multitude of socio-economic challenges, many of
economic	which are rooted in the migratory nature and marginalisation of actors in
challenges	the ASM sector. They include conflicts with local populations, localised
	inflation, increased demand on infrastructure and public services (if these
	exist), gender discrimination and violence.
Safety hazards	The working conditions in most mines are often in breach of commonly
	acceptable labour standards. Injuries and accidents occur regularly and are
	sometimes fatal.
Health hazards	Health hazards result from occupational hazards, poor sanitation and a
	lack of access to measures for protection and treatment. Examples are a
	high prevalence of HIV/Aids, TB, malaria, cholera, verminosis, dysentery,
	diarrhoea, et cetera.
Environmental	ASM activities are often associated with negative environmental impacts,
impacts	which include mercury and cyanide usage, erosion, deforestation and
	poaching amongst others.

In light of these challenges, one might be tempted to describe the sector as "chaotic" (D'Souza, 2007, p. 4). In reality, however, ASM is an economic sector that is often meticulously organised on the local level, governed by multiple rule systems transcending martial (in some provinces), statutory and customary spheres. These structures are based on more realistic, albeit inequitable configurations of production and trading relations, including the regulation of property rights. The 'chaotic' label unhelpfully promotes disregard for the customary organisational and institutional structures that govern the ASM sector in many parts of the DRC. It also confounds a deeper understanding of how customary entities interact with elements of modern organisational and institutional structures of the formal economy. Importantly, this interaction may hold the key to a better understanding and more constructive engagement with the sector, and should therefore be the focus of further research beyond this PhD. The following paragraphs explore the ASM sector's formal governance structure in more detail. This discussion primarily serves to set the scene for the reader to understand how the ASM 'should' be governed, according to national law, which will help the reader to appreciate some of the deviations from this governance structure, which I touch upon in the different chapters of this PhD.

Legal Framework

The DRC's *Mining Code*, adopted in July 2002, and its accompanying Mining Regulations, including the *Code de Conduite de l'Exploitant Artisanal* adopted in 2003, provide today's domestic statutory legal basis for both ASM and LSM. Written with the help of the World Bank by the then DRC Ministry of Mines and Hydrocarbons, the Mining Code aims to ensure the development of the DRC's mineral resources largely through the private sector, by providing a stable investment climate, including tenure security and certainty of process (Présidence de La République, 2002). Dating back to the mining legislation of 1973 and enshrined in the *Mining Code*, soil and subsoil in the DRC – and therefore any mineralisation – is property of the state. This is in contrast to customary law, which grants first right of occupation and includes user rights for customary chiefs (interview with traditional authorities, Bisie, 2007). These conflicting definitions are a pertinent conflict area in the DRC's ASM sector today. Customary law definitions are incompatible with the *Mining Code* that predominantly seeks to provide a level playing field for industrial mining.

Under the Mining Code an exploitation permit is granted on the basis of an application that tests eligibility, financial capacities and mine development plans (World Bank, 2008, p. 17). The Mining Code facilitates the registration of property rights of investors with significant financial resources, while its current regulatory requirements are practically inapplicable in the ASM sector and render it impossible for individual operators, such as artisanal miners, to obtain property rights. "This conflicting rights definition is made more politically complicated by being, in many respects, a reflection of the deep-rooted and historical dichotomy in Congolese society between a centralised Kinshasa-based national identity and a provincial one claiming local, community and customary-based rights and ownerships" (Sunman and Bates, 2007, p. 61). This dichotomy often manifests itself in conflicts between industrial mining companies and ASM operators where these two groups of operators come into direct contact, and it has been particularly evident in Katanga (Liakounakou, 2012). In its current format the DRC's Mining Code therefore impedes a macro-economically more balanced and productive continuum of mining activities from artisanal to industrial mining. Prime examples of this are that the Mining Code makes no provisions for ASM to take place in defined parameters on permit areas held by either private industrial mining companies, or parastatal enterprises. In reality, however, both of these sets of actors control a significant amount of land that also often contains key ASM sites or deposits not amenable to industrial mining. This means the mining legislation is in essence partly responsible for the informality

and marginalisation of the ASM sector.

In the ASM sector, the Mining Code has only provided regulatory certainty where statutory law is enforced, which affects predominantly the companies that export artisanally produced minerals (comptoirs), who straddle the formal economy and statutory law on the one side, and the informal ASM production and customary law on the other. As conveyed below, where the Mining Code does produce legal requirements, such as the licensing or training of artisanal miners, for example, these often stand in contrast to today's realities of the ASM sector, where, for example, licenses (or miners' cards) are often unobtainable and training is not provided. In many areas where the state is not fulfilling its regulatory role "it is thus often village chiefs, a management committee made up of chiefs, or local landowners, who designate dig sites" or, in the case of a new and valuable find, allocate plots within the new ASM areas (Blore, 2008, quoted in Garrett, Mitchell and Levin, 2008, p. 35). Under customary law, local chiefs often get a significant amount of money or other benefits for enforcing customary law, and thus have an incentive to regulate the sector in line with their own priorities (interview with traditional authorities, Bisie, 2007). This is an inefficient model and provides uncertainties for actors in the ASM sector, which in turn, impede a rationalisation of the sector with a view to increasing the sector's contribution to socio-economic development.

State Administrative Structure

The following sections present the statutory administrative structure responsible for the governance of the ASM sector. The different legal texts, i.e. the *Mining Code* and the *Mining Regulations* thereby foresee the following roles and responsibilities:

Table 2: Roles and responsibilities for the mining sector administration (Présidence de La République, 2002, quoted in Pact, 2010, p. 36):

Organisation	Role and responsibility
President of the DRC	Sole authority to declare minerals as 'reserved substances',
	notably uranium, thorium and all radioactive ores.
Provincial Governor	Responsible for issuing traders' cards for artisanally
	produced products.
National Minister of	Creation of artisanal exploitation zones;

Mines	Granting and withdrawal of approval for authorized traders
	for the purchase of artisanal exploitation products;
	Issuing of authorizations for the processing of artisanally
	mined products.
Provincial Authority of	Issuing of artisanal miners' cards
Mines	
The Mining Registry	Registration of artisanal mining zones in the national
	database;
	Assuring that mining titles granted to mining companies do
	not overlap with artisanal mining zones.
The Geology Directorate	Opening and closing down of an artisanal exploitation area
Directorate of Mines	Compiling and publishing statistics and information about
	the production and trade of products from mines and
	quarries;
	Controlling and inspecting small-scale mining exploitation
	and the artisanal mining exploitation;
	Receipt and processing the applications for approval of
	authorised traders;
	Issuing its opinion in the event of the opening of an artisanal
	mining exploitation area;
	• Issuing its opinion on the applications for approval of
	authorized traders for gold, diamonds and other artisanal
	mining mineral substances.
Department in Charge of	Definition and the implementation of the mining regulations
the Protection of the	concerning environmental protection with regard to the
Mining Environment	rules governing artisanal miners.

Next to the administrative structure defined in the *Mining Code*, which is replicated above, the accompanying Mining Regulations define further roles and responsibilities for technical services operational under the auspice of the Ministry of Mines. They are:

Table 3: Technical mining sector services (Présidence de la République, 2003, quoted in Pact, 2010, p. 36):

Role	Responsibility
The Service for Assistance	Organising and supervising the artisanal mining sector.
and Organisation of	Objectives:
Artisanal and Small-scale	Promoting the emergence of a middle class in the ASM
Mining (SAESSCAM)	sector, ensuring the training and technical assistance need
	to reinforce the capacity of those engaged in the sector;
	Monitoring the flow of materials produced by ASM from the
	mine to the point of trade, assuring that these minerals pass
	through the official chain of commercialisation;
	Ensuring that the correct taxes from artisanal mining are
	collected for the state;
	Supporting the creation of artisanal mining cooperatives;
	Encouraging artisanal and small-scale miners to operate
	according to the Mining Code and Regulations;
	Contributing to the wellbeing of local communities impacted
	by ASM;
	Working in collaboration with the public administration and
	other services of the Mining Ministry in the design,
	production and acquisition of appropriate equipment for
	artisanal and small-scale miners to improve the quality and
	quantity of their production;
	Disseminating guidance on security at artisanal mining sites
	and to ensure this is observed;
	Assuring the integration of women in the ASM sector;
	Encouraging artisanal and small-scale miners to invest in
	other economic sectors; and
	Participating in the creation of credit sources and funds to
	promote artisanal and small-scale mining.
The Technical Unit for	Developing and adapting new techniques to improve
Coordination and Planning	artisanal mining;
of Mining (CTCPM)	Collating all statistics on artisanal mining production;
	Collating and publishing legal and regulatory texts that are
	issued concerning the artisanal mining sector.

The Centre for Evaluation,

Expertise and Certification

(CEEC)

- Evaluating diamonds, gold, coltan and other precious and semi precious minerals;
- Technically supporting comptoirs, négociants and foundries through monitoring and control of mineral and financial flows;
- Certifying and ensuring payment of mineral export taxes;
- Training Congolese mineral evaluators;
- Promoting the exploitation of diamonds, gold, and coltan and other precious and semi-precious substances;
- Improving the price commanded by Congolese precious and semi-precious minerals;
- · Fighting fraud.

Illustrative Challenges within the administrative structure

While the state administrative structure for the mining sector is detailed and defined on paper, it faces significant challenges with the execution of its mandate. An assessment by the World Bank (in which I had no part), for example, suggests (2008, p. 6):

"The government institutions responsible for the mining sector are weak and ineffectual. Significant investments are required to improve skills, provide adequate logistical support, and improve internal procedures and mandates of key sector institutions. Particular attention should be paid to SAESSCAM which plays a key role with artisanal miners, the mines inspection functions which are at present non-existent in many mining areas in the country, and the performance and transparency of the diamond evaluation office (CEEC)."

In the same vein, people I interviewed during my research, particularly in Kinshasa, often alluded to challenges in the effective administration or management of the sector. There appeared to be a divide in opinions over the root causes of such challenges, with interviewees working in the mining sector administration pointing predominantly to a lack of capacity and resources to administer the sector effectively (interview with representative of Ministry of Mines, Kinshasa, 2009; interview with representative of provincial division of mines, Goma, 2007; interview with representative of CEEC, Kinshasa, 2009). Interviewees from the donor community appeared to point at a mix of a lack of capacity, resources, but

also misaligned incentive structures, which promote corrupt behaviour over good practice as key challenges the administration faces in the context of sector management (interview with World Bank representative, Kinshasa, 2007; interview with DFID representative, Kinshasa, 20007; interview with World Bank representative, Kinshasa 2009; interview with GTZ representative, Kinshasa, 2009). Interviewees from technical and advocacy NGOs tended to emphasise lack of capacity and corruption, respectively, which mirrors to a degree their own mandates and sets of priorities (interview with technical NGO representatives, Goma, 2007; interview with advocacy NGO, Washington, 2008; interview with advocacy NGO, London, 2008). Taking my own observations into account, I would suggest that to varying degrees there is an element of truth in the accounts of all three stakeholder groups. I found that an assessment of SAESSCAM in a World Bank study (in which I had no part) illustrated several challenges in a practical example (2008, p. 40):

"Reviews of the performance of SAESSCAM are inconclusive. On the one hand, the organization has been given relatively high marks for helping organize artisans in some diamond producing areas and to provide them with technical advice. On the other hand, many of the SAESSCAM personnel lack the specific technical training and skills to advise the artisans. Also, it is alleged in some instances that SAESSCAM is yet another state service demanding extra-legal payments from the artisans. It is clear the SAESSCAM could play a key role to help organize the artisans into effective cooperatives and also to serve as a means to properly record production from this sector. Yet, funding constraints and, more importantly, human capacity constraints have prevented it from being completely effective."

Considering the historical perspective of the DRC's ASM sector discussed above, and the informality of the ASM sector in particular, it is perhaps unsurprising to hear of significant challenges in the effective administration of the mining sector. That said, the management of public goods generally requires that a legal and institutional framework is designed, established, and enforced. This is particularly the case in regards to the DRC, considering the potential of the mining sector to contribute to poverty reduction and socio-economic development. The discussion of the statutory ASM governance structure thus suggests that the socio-economic underperformance of the mining sector and the marginalisation of the ASM sector are at least partly rooted in design flaws within formal institutional framework and perpetuated by the lack of enforcement of formal institutional framework. Having

discussed the ASM sector to the degree required to set the scene for the main part of the analysis in this thesis, the focus on 'conflict financing' (through the predation on the mining and trade of 'conflict minerals') requires an introduction to the on-going conflict, which I present in the following paragraphs. This is important, as I can then focus the remainder of the thesis on how 'conflict' and the 'artisanal mining and trade of 'conflict minerals' interrelate.

Conflict

The Congolese wars (1996–1997, 1998–2003) were among the most severe humanitarian disasters since World War II. They involved over six African nations and more than a dozen rebel groups. The International Rescue Committee said that between August 1998 and April 2004 (when a bulk of the fighting occurred), "some 3.8 million people died in the DRC. Most of these deaths were due to starvation or disease that resulted from the war, not from actual fighting. Millions more had become internally displaced or had sought asylum in neighbouring countries" (Global Security, 2012, p. 3 of 5). The following paragraphs take the reader through the key developments of the conflict. The paragraphs reference a number of secondary sources, but the discussion particularly draws on a conflict analysis by Hoebeke, Boshoff and Vlassenroot (2008), three researchers I rate highly, who have examined the conflict in the Great Lakes region in detail and from the outset. The discussion suggests a combination of local, national, and regional dynamics was at the root of the protracted crisis that continues.

In order to understand the conflict dynamics in eastern DRC it is important to adopt a historical perspective. While several acts of violence precede the genocide in Rwanda, which claimed the lives of 800,000 people in 1994, it is the key event that sparked a regional conflict. Most of the dead in Rwanda were Tutsis and most of those who committed the slaughter were Hutus. When it became evident that the Tutsi-led rebel group, the Rwandan Patriotic Front (RPF), would be victorious, more than one million Rwandan Hutu refugees fled to – and settled in – eastern DRC. Some of these included not just moderate Hutus, who feared retribution in Rwanda, but also included members of the *Interahamwe* militia, which played a key role in the mass slaughtering of Tutsis and moderate Hutus during the genocide. Many of these refugees were housed in refugee camps, which Rwandan Hutu militias then used as bases from which to attack local Tutsis; the militias also became a serious threat to the Rwandan regime (Hoebeke et al, 2008).

In 1996, a regional military coalition was established to help protect Rwanda from the threat posed by the Hutu militias. The coalition consisted of Congolese communities of Rwandan descent, political opponents of Mobutu, who saw an opportunity in ousting the ailing dictator, and the governments of three neighbouring states: Rwanda, Burundi, and Uganda. The coalition soon received military support from Angola and diplomatic support from Zimbabwe (MONUSCO, 2012). The Rwandan government blamed Mobutu for allowing incursions by the Zaïre-based Hutu militias; similarly, the other countries in the coalition acted chiefly out of internal political concerns—notably, the fact that Mobutu had granted refuge and right of passage to foreign rebel groups in Zaïre, including Angola's National Union for the Total Independence of Angola and several Ugandan rebel forces (Likoti, 2006). The coalition had little difficulty cutting through Mobutu's weakened defences; in May 1997, it took power in Kinshasa, installing Laurent-Désiré Kabila as the new president; soon afterward, Zaïre was renamed the Democratic Republic of the Congo (Hoebeke et al, 2008). Later in 1997, Mobutu died in exile in Morocco from illness (BBC, 1997).

Far from being the end of a national and regional crisis, Mobutu's death resulted in fragmentation of the political landscape. During the summer of 1998, disagreements surfaced and the Kabila government expelled the Rwandan and Ugandan forces, which had been the military backbone of its army (Hoebeke et al, 2008). In response, Rwanda and Uganda paved the way for the creation of a new rebel movement, the *Rally for Congolese Democracy* (RCD), which took up arms against the Kabila regime (MONUSCO, 2012). Recruiting mainly among Tutsi and Hutu communities in North Kivu and South Kivu, the RCD triggered the formation of a long-standing regional conflict and the proliferation of local militias in the eastern parts of the country; ultimately, the politico-military landscape fragmented entirely, and broader political or military motives dissolved into local and individual interests (Vlassenroot, 2008).

Efforts on the part of the international community to end the conflict resulted, in 1999, in the Lusaka Peace Agreement, which included two elements: the Inter-Congolese Dialogue² and the deployment of the United Nations Organization Mission in the Democratic Republic

² The Inter-Congolese Dialogue (ICD) was a round of negotiations "between the government, the political opposition and the armed groups. Scheduled in 2001 to last forty-five days, the talks collapsed seven days later, following President Kabila's decision to withdraw his delegation for what was described as lack of 'quorum'" (Kramer, 2001, p. 1 of 1).

of the Congo (MONUC) as a monitoring force. The Global and All-Inclusive Agreement on the Transition was signed in December 2002³; after the approval of its final act, "in 2003, a transitional government was established to create a new legal and institutional framework for the country, prepare for general elections, and reform the security sector" (Hoebeke et al, 2008, p. 3). In addition, MONUC's mandate was strengthened, and its military force was expanded. Internationally supported initiatives to facilitate the peace process and promote regional stability included the International Committee for Support of the Transition (known by its French name, *Comité International d'Accompagnement de la Transition -* CIAT) (Kibasomba, 2005), the *World Bank Multi-Country Demobilization and Reintegration Program* (MDRP, 2009), and the *International Conference on the Great Lakes Region*, the ICGLR. These and other entities "set out to help establish political stability, initiate economic recovery, and ensure the functioning of several transitional institutions; they also facilitated presidential, national, and provincial elections, held in 2006" (Hoebeke et al, 2008, p. 3).



Photo: The UN is a key player in eastern DRC, © Nicholas Garrett, 2009

_

³ On 17 December 2002, in South Africa, the Congolese parties signed an accord on an all-inclusive power-sharing arrangement for the transition government, following intensive negotiations. (Onishi, 2002).

Joseph Kabila won the presidential elections, held in 2006, which he had contested on the basis of his five-year plan, *Les Cinq Chantiers*, which foresaw a policy focus on the delivery of infrastructure, employment, shelter, education and healthcare. His campaign also promised peace in eastern DRC, yet the President was criticised for policy ambitions stated on paper to differ from those he pursued in practice. Vlassenroot and Raeymaekers sum this up as follows (2009, p. 3):

"[...] critique of Kabila's regime grew both nationally and internationally, as he was accused of indecisiveness in a number of important domains. Rather than good governance, peace, and stability, democratization in the DRC seemed to have led in the first place to nominal and privatized rule that is more reminiscent of the Mobutu years than of a viable democratic state. [...] National and local government structures continued to bathe in corruption, particularly in the mining sector where valuable concessions were traded with little benefit to the Congolese state. Another serious problem was the new Congolese army (FARDC). [...] Instead of providing security, its undisciplined, corrupt, and ill-trained soldiers continued to terrorize and extort the local population in a systematic and organized way".

With domestic efforts undermined by said implementation challenges, the international efforts mentioned above could not prevent clashes between various armed groups, including the FARDC, which continued to destabilise eastern DRC.

After the demise of the RCD-Goma a key objective of the *National Congress for the Defense of the People* (CNDP), was to protect the Kinyarwanda language-speaking Congolese - known as Rwandaphones - from the Hutu-dominated *Democratic Forces for the Liberation of Rwanda* (FDLR), the evolved organisational form of the *Interahamwe*, in turn, responsible for the mass slaughtering of Tutsis and moderate Hutus during the Rwandan genocide. In this context, in 2011 Laura Seay and I made the argument that a significant force in conflict dynamics are "longstanding tension over ethnicity, citizenship rights and land rights, which are in turn related to grievances over access to resources such as land, and over legitimacy and power" (Garrett and Seay, 2011, p. 85). These challenges predate the 1994 Rwandan genocide and primarily concern the citizenship and land-ownership status of the Rwandaphones (Turner, 2007), as "non-Rwandaphones continue to express grievances over access to land, blaming Rwandaphones for socio-economic and political challenges" (Garrett

and Seay, 2011). At the same time, supporting the CNDP also resulted in a greater ability of Rwandans to gain and retain a stake in the minerals and metals trade and has provided a direct intelligence line on issues pertaining to the FDLR and the DRC's government (Garrett and Seay 2011; Vlassenroot and Raeymaekers, 2009). This does not negate the fact, however, that there is intra-regional concern in Kigali about the status of Rwandaphones in the DRC. The economic integration and cultural proximity of eastern DRC with the DRC's eastern neighbours means conflict dynamics transcend borders into Rwanda and Uganda, as well as the wider region through political, ethnic and economic manifestations (Garrett, Sergiou, Vlassenroot, 2008).

The CNDP, formed in July 2006 and led by Laurent Nkunda, "mainly composed of combatants of Tutsi origin, [but] this movement also offered an attractive alternative to intellectuals from other ethnic communities that refused to support the transitional government or feared loss of power after the elections." (Vlassenroot and Raeymaekers, 2009, p. 5). Soon enough, the CNDP "posed the most serious threat not only locally [in North Kivu] but also increasingly against the newly elected Kabila regime [...]" (ibid.) causing President Kabila to ask Rwanda's President Kagame for help to broker a solution. The result was a failed attempt to the integrate Nkunda's troops into the FARDC and a descent back into conflict, before in November 2007 the 'Nairobi' agreement was signed by the Congolese and Rwandan governments, outlining a regional framework to address the presence of the FDLR in eastern DRC, with a particular emphasis on repatriation of FDLR combatants to Rwanda. Following the signature of the 'Nairobi Agreement', the 'Actes d'Engagement' were signed in January 2008 in Goma (henceforth 'Goma Agreement), following the committing to a ceasefire and the voluntary demobilisation of combatants in eastern DRC, to be implemented through the 'Amani peace process' (Ibid., p.6).

The 'Amani Peace Process' eventually failed later in 2008, which resulted in the CNDP advancing to within kilometres of Goma in October 2008, threatening to take the town and clashing with UN peacekeepers (BBC, 2008). The reasons for failures are widely debated, but key arguments I assign currency to are the following (Vlassenroot and Raeymaekers, 2009): a) the Amani talks reintroducing "a logic of warfare into the peace process" and leading to a "renewed proliferation of armed groups" (ibid, p. 6) in the Kivus, owing to the advantages for an armed group participating in peace talks; and b) the slow implementation of the 'Amani Peace Process' itself and in particular, considerable disagreement over where the

'brassage' (i.e. the intermixing) of armed groups and FARDC, as envisioned in the disarmament, demobilisation and reintegration (DDR) framework, was to take place. The non-state armed groups in particular insisted on 'brassage' taking place in the Kivus, which conflicted with the preference of the government.

The failure of the 'Amani Peace Process' in late 2008 resulted in a flurry of diplomatic activity, with high-level diplomats, including the foreign ministers of the United Kingdom and France, engaging in talks with the Congolese and regional governments with a view to resolving the crisis (Sturcke, 2008). Different talks at the UN, African Union (AU) and Southern African Development Community (SADC) levels in late 2008 primarily resulted in the confirmation of the regional framework previously agreed to resolve the crisis in the form of the 2007 'Nairobi Agreement' and the 2008 'Goma Agreement' (Hoebeke et al, 2008) and in agreement to dispatch an additional 3,000 UN peacekeepers to eastern DRC in 2009. However, in January 2009, and to the surprise of many observers, new hope came from improved diplomatic relations between Rwanda and the DRC. The RDF entered eastern DRC, to put into a practice a November 2008 agreement between the two states to deal militarily with the FDLR. The joint Congolese-Rwandan military operation (known as Umoja Wetu) began on January 20th 2009 and aimed, on the one hand, at forcibly disarming the estimated 6,500 FDLR militiamen remaining in eastern DRC (McCrummen, 2009). However, experts also suggest the operation served to reshuffle the CNDP leadership, with General Bosco Ntaganda replacing Laurent Nkunda later in January 2009, as he had become "too autonomous and thus 'uncontrollable' [for Rwanda]" (Vlassenroot and Raeymaekers, 2009, p. 8). Laurent Nkunda was eventually arrested later in January 2009. Umoja Wetu led to a reconfiguration of the political economy in the Kivus, as it included the accelerated integration of several rebel groups, including the CNDP, into the FARDC. The CNDP, in turn, announced its transformation into a political party and signed the 'Peace Agreement between the Government and the CNDP' on March 23, "on the condition that its members were to be given key positions [in Government] and were not transferred out of the Kivus" (Zounmenou and Kok, 2012, p. 2 of 3).

On the battlefield, things moved along too. By mid-February, it was reported that the *Umoja Wetu* "had forced out the FDLR from several of its key positions, especially around the town

_

⁴ Brassage was "the integration of former armed groups and former government forces into [...] the FARDC, and the demobilisation of those who are surplus or unsuited to the needs the new integrated army" (Turner, 2007, p. 130).

of Masisi, and the strategically important gold mines of Lubero (both in North Kivu)" (Oxford Analytica, 2009, p. 2 of 5). The FDLR's withdrawal from Masisi and Lubero may have been akin to a "tactical withdrawal" and "far from breaking down during the fighting, the FDLR's command and control structure in fact functioned perfectly adequately throughout the fighting, with battlefield movements being directly controlled by the organisation's leader, Ignace Murwanashyaka, from his base in Germany (via satellite phone)" (ibid.). The FDLR remained present in South Kivu and reclaimed some of its positions in North Kivu, following the on-time withdrawal of the Rwanda Defence Forces (RDF) in February 2009, which means it continued to constitute a security threat in the Kivu Provinces.

Following the end of Umoja Wetu and from early March 2009 until December 2009, MONUC supported FARDC operations against the FDLR (an operation known as Kimia II), with the objective of putting and end to FDLR counterattacks and to disband it. Without the backing of the military and organisational skill of the RDF, Kimia II only progressed slowly, but Kimia II nevertheless, achieved the arrest of Gregoire Ndahimana, a former mayor, whom the International Criminal Court later found "guilty of genocide and extermination as a crime against humanity" and then sentenced him to fifteen years in prison (International Criminal Tribunal for Rwanda, 2011, p. 1 of 1). FDLR political leaders Ignace Murwanashyaka and Deputy Straton Musoni were also arrested in Germany on 17 November 2009, and the operation achieved a 'modest increase' in the disarmament of FDLR fighters. While these achievement are notable, the operation is best known for being "heavily criticised for causing civilian suffering, failure to neutralise FDLR and delaying long-awaited security sector reform (SSR)" (ICG, 2010, p. 3 of 5) In fact, in November 2009, the United Nations concluded that Kimia II had failed to disband the FDLR, both politically and militarily (Africa Confidential, 2009). The UN itself recognised the failures of Kimia II and "in the last days of 2009, the UN mission signed a joint operational order with the Congolese government to end the Kimia II operations and begin a new phase, dubbed 'Amani Leo', or Peace Today" (CongoSiasa, 2010, p. 1 of 5), which would "absorb many of the armed group officers who were integrated into the army in 2009" (CongoSiasa, 2012, p. 1 of 23). At the end of my field research in 2009, therefore, the conflict continued and on this 15 March 2013, the day of my revision of this thesis, it is continuing. Many of the fundamental and conflictual issues, such as the presence of the FDLR in eastern DRC, have not changed. An Oxfam survey conducted between 2007 and 2010 suggested that the people of the Kivus felt less secure every year (Oxfam, 2010, quoted in Autesserre, 2012). Armed groups, including the FARDC, continue to

commit human rights abuses, including sexual violence against women and men, torture, the utilisation of child soldiers and others (Amnesty International, 2012). The DRC's position at 187th place in the Human Development Index is merely a number (UNDP, 2011). Vivid accounts of these incidences told by people in the field give a face to what it means to live in one of the planet's least developed countries.

My research of the 'conflict minerals' campaign thus also was undertaken to unearth some valuable information to inform peace building and economic reform attempts. The purpose of providing the reader with this scene-setting overview of both the mining sector and the conflict in eastern DRC is to highlight the complexities of processes that are playing themselves out on the ground. The 'conflict minerals' campaign, with its emphasis on measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') as conflict resolution tools has certainly set its goals high and with the level of public outreach and campaigning, it has also set global expectations high. The scene is therefore set for my research. Please refer to Annex 2 for a discussion of my research methodology, including the challenges I had to mitigate or overcome when I undertook my research. Annex 3 also highlights the limitations of my research.

2 – The research gap: 'coping'-, 'war'- and 'shadow'- economies and externalities of IANGO driven measures to curb 'conflict financing' in eastern DRC.

Introduction

Very few activities in today's world can be undertaken free of charge. This is particularly the case for activities that stretch beyond a very limited time, involve equipment, transport, food and personnel. A group of people can enjoy a beach for free for a couple of hours, if the beach is within walking distance and free to access. Even then, before long, at least one person will get thirsty, hungry, or in the mood to use some kind of instrument, whether a book to read or a volleyball to play with. This example shows how dependent we are on finance in day-to-day situations. Taking the bus to the beach costs money; so does food, drink and the book or volleyball. This fundamental logic also applies to anyone willing to partake in conflict. Partaking in conflict, whether inter-state or intra-state, requires access to finance.

This chapter takes the reader through the existing theoretical literature and establishes the analytical framework I use to frame my empirical research that I present in chapters 3, 4 and 5. It also presents the gap, I perceive in existing research, which my research sets out to fill. This chapter is divided into seven sections: The first section of this chapter discusses the existing research on 'conflict financing' through the commercialisation of natural resources and frames the issue as a governance challenge; the second section discusses existing research on governance arrangements in weak states; the third section defines and introduces IANGOs, as actors seeking to address the governance challenge of 'conflict financing' through the commercialisation of natural resources; the fourth section discusses the history of IANGO interventions to address the challenge of 'conflict financing' through the commercialisation of natural resources; the fifth section discusses current IANGO advocacy-driven interventions to curb 'conflict financing' through the mining and trade of 'conflict minerals' in eastern DRC, with the aim to embed the theoretical deliberations of the previous sections in the present context; the sixth section discusses reasons for the 'success' of the IANGO 'conflict minerals' campaign; the seventh section establishes the research gap that my thesis sets out to fill and it explains how the following chapters will do so.

'Conflict financing': a governance challenge

From a peace building perspective, it is important to understand why a conflict is fought, as doing so means there is a greater chance to achieve sustainability in conflict resolution (Annan, 2004) or in a narrower sense of relevance to the theme of this thesis, "the way one understands the political economy of conflict has a bearing on how one conceptualises the challenges involved in transforming war economies" (Pugh and Cooper, 2004, p. 21). While Since the 1990s the economic dimensions of conflict have been a prominent field of academic inquiry. It had become popular as – when post-cold war superpower sponsorship ceded - many observers began to highlight the self-financing nature of intra-state conflict, particularly on the African continent. Here, this notion applied to numerous conflicts, including in Angola, Cote d'Ivoire, DRC, Liberia and Sierra Leone (Jean and Rufin, 1996). Von Clausewitz once famously remarked, "war is the continuation of Politik by other means" (1832, quoted in Howard and Peters, 1984, p. 87). In a reformulation of this quote, Keen insinuated, "the conflict in Sierra Leone has often appeared to be a continuation of economics by other means" (2005, p. 48) In fact, in all of the countries above, natural resources were often portrayed as "a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8). Ballantine and Sherman quote Mary Kaldor, when they highlight that conflict economies are often "parasitic", "illicit" and "predatory" (2003, p. 2). According to Kaldor, they are "parasitic, because they are dominated by rent-seeking and the extraction and trade of primary products, rather than by value-adding activities; they are illicit, insofar as they depend heavily on black and grey markets that operate outside and at the expense of legal and formal economic activity of the state; and they are predatory - that is they are based on the deliberate and systemic use of violence to acquire assets, control trade, and exploit" labour" (Ibid. pp. 2-3). This characterisation of war economies suggests they undermine security and development and thus present a potent threat not only to conflict resolution and peace-building efforts, but also to development processes and the broader sustainability of societies.

Particularly in cases, where the estimated revenue of armed actors was greater than the finance they required to remain a potent party to conflict, academic observers asked the question, whether there was "more to war than winning" (Keen, 2000, p. 26). In this context, quantitative literature suggested that 'greed', i.e. the pursuit of profit, was more important in explaining conflict than 'grievance', often described as the pursuit of justice

(Collier and Hoeffler, 2003). This notion sparked a debate in the academic world, which rose to prominence as the 'greed' versus 'grievance' debate in the late 1990s and early 2000s.



85th brigade soldier, inspired by greed?, © Mark Craemer, 2007

Deliberations around 'grievances' and civil conflict are rooted in research that suggests that 'relative deprivation' fuels frustration (Gurr, 1970) and can, if the right conditions are in place (i.e. organisation, resources and opportunity) lead to violence, such as a rebellion, particularly if those deliberating rebellion make the rational choice that it is in their interest to pursue rebellion (Tilly, 1978). In this context, Murshed and Tadjoeddiin (2008, p. 2), highlight, "identity is [...] crucial to intra-state conflict [as...] it is difficult to mobilise large groups to undertake collective action, because of mutual mistrust, monitoring difficulties and the free-rider problem". Olson's 'logic of collective action' is the basis of this argument (1965). For the 'grievances' theory, constructing identities is thus a crucial element in war making, particularly in the process of mobilisation (Gurr, 1994, Tilly, 1978). That said, in the context of intra-state conflicts on the African continent in the 1990s and early 2000s, strong identities were often constructed, such as in Angola, where some writers identify "identity construction both as cause and consequence of the war" (Brinkman, 1993, p. 1). Stewart also found that inequality, particularly between regions or ethnic groups, could be

relevant to explanations of conflict (2002). However, others also warned that "emphasising the discourse of grievance can sometimes seem dangerously close to justifying violence" (Keen, 2002, p. 1). From Sierra Leone, for example, Keen reported:

"Many Sierra Leoneans, [...], have emphasised that the existence of a grievance [the pursuit of justice] is hardly an adequate justification for violence. [...] There are also dangers in going too far in embracing the discourse of grievance [...] grievances – stemming from poverty, poor education, and so on - are very widespread in Africa and the wider world but do not necessarily spill over into civil war." (Ibid.)

It was therefore brought into question, whether 'grievances' alone, could serve as a suitable explanation for conflict (Collier, 2006), particularly as motivations could also evolve from grievances on the one side of the spectrum to greed on the other side of the spectrum, which could in turn generate more grievances. David Keen states in this context that conflicts, which "have begun with political aims have mutated into conflicts in which short-term economic benefits are paramount" (1998, p. 12). Alternatively other thoughts include that greed motivated individuals could also cause a movement founded to redress legitimate grievances, to degenerate into "destructive, violent and state-destroying rebel organisations" (Weinstein, 2007, p. 603).

The 'greed theory', on the other hand, to varying degrees portrayed non-state armed groups as motivated by profit (Collier and Hoeffler, 1998) and suggested, "primary commodities are the most lootable of national assets" (Fick, 2002, p. 238), making them particularly attractive for conflict actors seeking commercialisation opportunities. In a landmark publication Keen says, "My own investigations of Sierra Leone's civil war have convinced me that a great deal of the violence has been motivated by greed [the pursuit of profit]. Indeed, rebels' idealistic statements contrast sharply with their abuses (including looting and ejection from resource-rich areas) against precisely the civilians they have claimed to be fighting for [...]" (2002, p. 1). At the same time, however, Keen also acknowledged that, the "'greed' discourse can also be seen as de-legitimising grievance [and entail] the danger of fuelling violence by stigmatising those who use violence as being purely criminal or purely self-interested - without even attempting to hear what they have to say" (ibid.). In a later relativisation of the 'greed' hypothesis, Collier and Hoeffler focussed on the opportunities for conflict, for example, natural resources or other forms of financing provide and also acknowledged that

there may in fact be an important relationship between opportunity and grievances (Collier and Hoeffler, 2001). Pugh and Cooper highlight, "other approaches view resource wars not as a function on the opportunities for predation, but either as distributional conflict over scarce resources or as a response to structural adjustment" (2004, p. 22). They quote Mark Duffield, who in the context of the 'greed' theory suggests, "the argument and the evidence used [...] are a powerful means of deligitimation and a good excuse for the World Bank, and others to pay little attention to critical voices from the South" (2001, p. 132). Whether motivated by greed or grievance or a combination of the two, or an altogether different set of incentives, "the aims in a war are complex" and it is important to examine "the violence that is legitimised within a particular working definition of what a conflict is 'about'" (Keen, 2008, p. 1).

Irrespective of what the motivation of combatants is, I personally assign much currency in this thesis to the basic economic argument that a party to conflict requires finance to sustain itself, but, contrary to common perception, I argue this does not necessarily have to be a significant amount of finance. Governments typically have a defence budget, which means inter-state conflicts are typically a relatively straightforward affair in that the defence budget, however it is fed, finances the state war machine. In conflicts where the lines are more blurred, such as in intra-state wars or regional wars, non-state armed groups also require access to finance, which means irrespective of their motivation to fight, they "have to become a business organisation" (Bannon and Collier, 2007, p. 3), unless they are "bankrolled by another country or an extensive and willing diaspora" (Ibid., p. 4). Bannon and Collier made a very practical point with respect to the necessities of 'conflict financing', when they suggested that rebel⁵ groups "for military reasons [...] tend to be based in rural areas and they tend to turn to business activities [available to them], such as various forms of extortion and the exploitation and trade of primary commodities" (ibid., p. 4). Assuming this point to be correct and divorcing the need for finance from any possible motivation to fight, it is clear that any business requires a market, because if there is no demand for a product, it is impossible to sell and generate revenue. This means that, unless there is a strong enough domestic demand, business activities of both non-state armed groups and national armies, once the defence budget can no longer be filled through, for example, tax revenue, will have to be integrated with regional or global markets.

_

⁵ They use the restrictive term 'rebel', which gives the false impression that national armies are *only* fed by defence budgets, which is factually incorrect, as this thesis will explain.

The onset and swift development of an increasingly liberalised global economy in the 1990s and 2000s resulted in markets increasingly crowding out the state-led development model (Cento, 2012). This development presented a wonderland of 'conflict financing' opportunities for self-financing armed groups, including national armies, and those actors that were willing to engage in business with them (see below). At the time, many conflicts were no longer the domain of states, but events occurring in the vacuum left behind by weak, retreated, or collapsed central states. Duffield highlights that "across the conflict zones of Latin America, Africa, the Middle East and Central Asia, asymmetric forms of autonomy and organised violence emerged that, through the shadow networks of transborder trade and the cultural and political flows of migrants and uprooted peoples, fully exploit the opportunities of the global/informational economy" (Duffield, 2002, p. 2). This meant global value chains emerged that allowed local armed actors to partake in global commerce. For example, "taking advantage of the central role of Lebanese diamond traders, conflict actors developed a complex supply chain extending from the alluvial diamond fields in rebel-held Sierra Leone through intermediate control by Liberians and Lebanese before eventual processing in such states as the Gambia and Liberia, which both boasted significant diamond exports despite a lack of domestic reserves. This regional economic network enabled rebel groups to derive significant revenues from diamond production as Sierra Leonean diamonds clandestinely entered global markets such as Antwerp" (Studdard, 2004, p. 4). While Studdard's account is limited to "alluvial diamond fields in rebel-held areas" (ibid.), research by other authors confirmed that the control of diamond mining and trade was a key strategic element, not only for rebel forces, but also for the government (Keen, 2005; Reno, 2008).

This example provides understanding of how it is possible for both state and non-state armed groups to partake in conflict and such accounts forced "observers to look at present conflicts from a new angle and to integrate the economic dimensions of civil war into their basic framework of analysis" (Vlassenroot and Romkema, 2002, p. 1). While quantitative research provided important insights with respect to economic dimensions of conflict, there remained a gap, however, in the early literature, as it failed to explain "how they matter, how much they matter, or in what ways" (Ballentine and Sherman, 2003, p. 5). Qualitative research carried out in a number of cases highlighted if, and to what degree economic factors played a role in concrete cases and these studies found a significant degree of variation (Regan, 1998; Cilliers and Dietrich, 2000; Gberie, 2005).

Proponents of the argument that primary commodities are lootable and therefore present formidable commercialisation opportunities for armed actors appear to assume that armed groups are able to control an entire trading chain from mine to export. This is not the case, as Vlassenroot and Raeymaekers argue, who suggest, "[armed groups] financial woes, as well as their lack of control over the country's [the DRC's] interior (where natural resources are typically exploited) ultimately make them inferior to established and pre-existing trade networks" (2004, p. 22). I therefore agree with Titeca (2010, p. 57), who says, "existing trading networks have to be taken into account that were not created through military involvement or the specific conditions of conflict and which were not necessarily abolished by the arrival of military actors". While Titeca limits his analysis to the importance of traders in facilitating commerce and the dependency of armed groups on pre-existing trading networks, I consider traders to be just one of several stakeholder groups, which have to be researched and analysed further. This is the case, as not just trade, but the type of economic activity, particularly in eastern DRC, with important caveats (e.g. the detrimental impact of insecurity on agriculture-based livelihood strategies), does not always differ fundamentally between pre-conflict, conflict and post-conflict times (see Chapter 1).

A stakeholder can be defined as "one who is involved in or affected by a course of action" (Merriam-Webster, 2013, p. 1). The stakeholder dimension is important, when taking into consideration the breadth of policy recommendations put forward in contexts where economic dimensions of conflict are deemed important. Collier and Bannon, for example, suggest two broad categories: The first is the "development agenda", which includes the sub-recommendations of "raising economic growth", "diversifying out of trouble" (i.e. diversify the economy away from natural resources dependence), and "reducing exposure to price shocks". The second is the "governance of natural resources", which includes the sub-recommendations of "increasing transparency of natural resources revenues", "shutting rebel organisations out of the market", i.e. preventing 'conflict financing' through the commercialisations of illicit commodities, "tightening scrutiny on illicit payments" and finally "attracting reputable companies to risky environments" (Collier and Bannon, 2007, p. 7).

The breadth of these recommendations shows that it is important to bear in mind that any intervention in a conflict will affect different stakeholders in different ways, and not all stakeholders are combatants engaged in a profitable enterprise. In this context it is useful to

undertake a stakeholder analysis of the actors in any particular conflict. Such an analysis serves not only to identify "those directly responsible for war and the secondary stakeholders that help maintain it" (Vlassenroot and Romkema, 2002, p. 1), but also those a) who operate in the same business sectors as the combatants, but who do not necessarily have a stake in the conflict itself, and b) those who have become dependent in their livelihood strategies on resource extraction, which is often "the default activity that still takes place after other economic sectors have come to a stop" (Brunnschweiler and Bulte, 2009, p. 617).

A useful framework, which I apply in this thesis for this type of stakeholder analysis, is the grouping of stakeholders into 'war', 'shadow' and 'coping' economy actors (Goodhand, 2004, p. 7). Goodhand explains these terms by assigning incentive structures to them. In this regard, "a 'war economy' includes the production, mobilisation and allocation of economic resources to sustain a conflict, and economic strategies of war aimed at the deliberate disempowerment of specific groups. A 'shadow economy' includes those actors who profit from war, but whose objective is not necessarily to wage war, and who may have an interest in peace, as long as they regard peace as compatible with their profit motive. A 'coping economy' includes population groups that are coping or surviving" (Ibid.). This differentiation between the groups of actors makes it clear that policy interventions in a conflict, particularly if they are economic interventions, will have externalities, whether positive or negative, for all three stakeholder groups. Particularly in the case where interventions that target the war economy have negative externalities for the 'coping' economy, policymakers quickly run the risk of their well-intended interventions actually doing more harm than good. This is particularly the case for global interventions that can have unintended consequences at the grassroots level (Hilson and Clifford, 2010).

Interestingly, a significant research body has focused on 'conflict' economy actors, such as, for example, the *Economic Drivers of the Maoist Insurgency in Nepal* (Bray et al, 2003), *Feeding the Tamil Tigers in Sri Lanka* (Gunaratna, 2003), or *A dirty war in West Africa: the RUF and the destruction of Sierra Leone* (Gberie, 2005). Likewise, a large research body has focused on 'shadow' economy actors. These are often investigative reports published by non-governmental organisations (NGOs), independent experts, and the press or United Nations investigators. Examples include, *When faced with a Gun [in the DRC]* (Global Witness, 2008) or *Reports of the Group of Experts submitted through the security council*

committee established pursuant to resolution 1572 (2004) [in Cote D'Ivoire] (UN, 2012). These reports often take on a 'name and shame' approach, exposing middlemen, traders and trade financiers and thus help to uncover the network that 'conflict' economy actors depend on to commercialise natural resources. Very few studies and reports focus on 'coping' economy actors. Examples include From Poverty and War to Prosperity and Peace? Sustainable Livelihoods and Innovation in Governance of Artisanal Diamond Mining in Kono District, Sierra Leone (Levin, 2005) or Diamonds without borders: A short history of diamond digging and smuggling on the border between the Democratic Republic of Congo and Angola (1980 – 2008) (De Boeck, 2008). While it is important to understand the 'conflict' economy and 'shadow' economy actors in order to understand the 'conflict financing' processes at hand, I approached my research on eastern DRC's war economy with the idea in mind to also gain as comprehensive a view as possible of the 'coping' economy. I will return to this point in the discussion of the analytical gap at the end of this chapter.

Governance arrangements in weak state

The discussion of governance arrangements in weak states in the following paragraphs is of critical importance, when analysing war economies and conflict financing activities, as these tend not to take place in what some scholars call an "institutional void" (Hajer, 2003, p. 175). This is at least the case in the dominant understanding of 'institutions', stipulated in the North Framework (North, 1997). According to this understanding, by institutions are "the 'rules of the game', or both formal and informal constraints on political, economic and social activities" (Aron, 2003, p. 471). The deliberations around institutions and the onset of wars in the wake of neoliberal policy interventions in the developing world during the 1970s and 1980s go hand in hand. In fact, "in the neoconservative world view, the overblown state, to paraphrase US President Reagan, had become the problem, not the solution [...] the prime mover for economic growth must be free private enterprise, not the state that was inherently inefficient, wasteful of scarce resources, vulnerable to corruption, and threatening to individual liberty, especially to freedom of enterprise" (Esman, 1991, p. 8). As a response to this doctrine, state structures were increasingly trimmed, particularly in Africa. Aron describes this process as follows (2003, p. 472):

"In general, aid donors concluded that the African state was corrupt and accordingly they encouraged a reduced role for the state, substituting private sector activity wherever possible in the first generation of reforms. The narrowing of the scope for government compounded the 'withering away of the state', already evident in the

flourishing of parallel markets after decades of misguided macroeconomic policies (Kiguel et al, 1997). However, adequate regulatory capacity was not put in place to supervise, in the public interest, newly liberalised markets and private sector activity (Collier and Gunning, 1999; Collier, 1996). The legacy for the 1990s and beyond was African states with considerably weakened institutional capacity (Aron, 1996)."

Whether one buys into the neoliberal view, which suggests that sound state regulatory capacity was in essence not existent due to corruption, mismanagement and the other ills that were evident prior to the rise to prominence of the neoliberal doctrine, or whether one holds responsible for weakened formal institutional capacity the neoliberal policy interventions to shrink the state, the factual reality was that state regulatory capacity in many African states in the 1990s was very weak. During the conflicts, which gripped many African states during the 1990s and early 2000s, it is fair to say that formal institutional arrangements were further eroded (Aron, 2003). In such contexts, the lack of state regulatory capacity provided opportunities to commercialise natural resources to finance conflict, irrespective of the combatants' initial or evolved motivations to fight (Ross, 2003). In contexts where a semblance of state institutional infrastructure remained, but formal governance was weak, researchers increasingly found and analysed alternative governance arrangements "in areas of limited statehood in which the state lacks authority and/or effective control, i.e. domestic sovereignty" (Risse, 2010, p. 3).

There are many definitions for the term 'governance' and I will for the purpose of this chapter draw on the following, "the use of institutions, structures of authority and even collaboration to allocate resources and coordinate or control activity in society or the economy" (Bigman, 2008, p. 150). Under said weak or alternative governance arrangements, "rule-making, collective goods and services [provision was provided] by various combinations of state and non-state actors using predominantly non-hierarchical modes of steering" (Risse, 2010, p. 3). Risse elaborates this description, by presenting an analysis of 'actors' and 'modes of steering'. In terms of actors, he portrays "multi-level governance", as a key feature of governance in areas of limited statehood, whereby, "it systematically involves a combination of local, national, as well as inter- and transnational actors, including foreign governments, [International Organisations] IOs, multinational companies, and NGOs" and that "... shared sovereignty among and between local, national, inter- and transnational actors is the rule in areas of limited statehood, irrespective of whether this is

formalised or not" (Ibid, pp. 10). While warlordism, which is an evident key theme of interest to this thesis, can present a hierarchical mode of steering, Risse suggests, "[...] much more common are non-hierarchical modes of social coordination [...that] are meant to affect the cost-benefit calculations of the relevant parties and to induce the desired behaviour" (Ibid. p. 11).

These are key observations in terms of conflict economy transformation, as some scholars believe, "the degree of institutional development achieved prior to conflict [is key], as institutional memory can probably be resuscitated more easily than it can be created" (Aron, 2003, p. 473). This is an important deliberation in the context of the DRC in particular, where in the Introduction Chapter, I made reference to the processes of state unravelling, economic informalisation and the perpetuation of patronage networks. In other words, the formal institutional infrastructure prior to war was eroded, and significant organisational capacity was lost, which means that in conflict economy transformation deliberations, it is important to understand the institutional configurations and governance structures that had been in place prior to conflict and also to understand how these have evolved with conflict. Vlassenroot and Romkema, suggest in the DRC the "peace process has hardly had any impact on [bad] 'governance practices'" and therefore "the promotion of good governance conditions should be an integral part of each programme developed by donor agencies and local partners" (Ibid. p.4). While I agree with Vlassenroot and Romkema, there is equal currency in Risse's point that governance can be effective "even in the absence of consolidated statehood casting a credible 'shadow of hierarchy'" (2010, p. 3). Combining Vlassenroot and Romkema's point with that of Risse, good governance promotion would require the "inclusion of non-state actors in the provision of collective goods and the regulation of social and political issues" (ibid, p. 2). This latter point is to a degree related to theoretical writings in the early 1970s, which advocated development from below. Particularly in the context of the mining and trade of 'conflict minerals', which includes a significant grassroots constituency, there is some merit in revisiting deliberations, which suggest,

"very considerable capacity for mobilising resources, providing needed services, and dispensing mutual self-help remained latent and untapped within society, especially in local communities (Owens and Shaw, 1972). By activating these underutilised potentials, communities could be encouraged by voluntary initiative and by drawing on traditional partners of cooperation to take greater responsibility for their own

development, to build participatory institutions that would reflect the interests of their members and respond to their needs and preferences rather than to those of distant governments or profit-seeking capitalists" (Esman, 1991, p. 8)

It is with this in mind that I am particularly interested in the coping strategies of the significant grassroots constituency undertaking and facilitating in the mining and trade of 'conflict minerals', which is a point I will return to in the final section, which elaborates the analytical gap, that I set out to fill.

That said, I also believe that there are some governance challenges in the DRC, like 'conflict financing', which do not fall within the regulatory domain of the Congolese state, or other national actors, alone. The example of 'conflict financing' is one, where local and often informal regulatory mechanisms set a framework for a largely informal trade to function, but only to a low equilibrium level, where the mining and trade of 'conflict minerals' generates revenue and provides livelihood opportunities, but not enough to have a significant development impact (see further below). While this can be described as a governance challenge that falls within the regulatory domain of the Congolese state, the fact that a significant amount of 'conflict minerals' leave the country informally and that these trade flows connect with international markets (see below), suggests to me that a national focus for finding a solution to governance challenges, like conflict financing', is incomplete.

In fact, 'conflict financing' through the predation on the mining and trade of 'conflict minerals', for example, is a governance challenge, which is facilitated by a) limited capacity of state-level governance institutions to regulate effectively global economic processes; and b) limitations of global governance institutions able to regulate effectively regional, transborder economic processes, particularly in areas with weak or parallel governance structures. There is thus a gap between global regulatory needs and the regulatory capacity of existing state regulatory mechanisms. This gap results in increased demand for other stakeholders and institutions to help rectify governance deficiencies (Eigen, 2004). Civil society organisations (CSOs) positioned between polities and economies – often defined as "a buffer zone strong enough to keep both state and market in check, thereby preventing each from becoming too powerful and dominating" (Anheier, 2005, p. 57) – are one set of actors that often becomes part of governance structures in the wake of state institutional failure. CSOs continue to play an important role in global governance today. In fact, in this

context it is difficult to deny the impact of what Khagram calls "contemporary progressive civic transnational advocacy" (2006, pp. 103) on processes and outcomes related to global governance challenges and issues. 'Conflict financing' has become another of such challenges and issues, which international advocacy non-governmental organisations (IANGOs) have taken an interest in and are working on.

Role of IANGOs in addressing governance challenges

While much literature focuses on the role of the state in addressing governance challenges, particularly in the post-conflict context (Cramer and Goodhand, 2002; Putzel and Moore, 1999), in the context of intra-state conflicts, Berdal and Malone assert, "a narrow statecentric approach to assessing these [intra-state] conflicts is [...] both of limited analytical value and policy relevance" (2000, p. 2). In my research on 'conflict financing' in eastern DRC, I place more emphasis on the role of civil society – and IANGOs in particular – not least because 'conflict financing' through the mining and trade of 'conflict minerals' in eastern DRC occurs in the context of weak state institutions, alternative governance arrangements and is integrated with global economic processes. This is not to say that IANGOs are the only non-state actor of relevance in this context. To the contrary, international development organisations (IDOs), states, businesses, independent experts and others also have roles to play. However, I am particularly interested in the role of IANGOs as they have been very vocal and successful in terms of influencing global policy on the issue of 'conflict financing', particularly through the 'conflict minerals' campaign. Hopefully, the emphasis on IANGOs will allow me to make observations that can inform impending interventions – at least those driven by IANGOs – rather than making observations purely of relevance to states and other stakeholders. The reason for this is that I am not the only observer of events in eastern DRC to suggest that it will take time to establish developmentally effective and accountably operating Congolese state institutions in eastern DRC that are capable of sustainably supporting, managing and driving initiatives to curb 'conflict financing' effectively, never mind driving a development process based on the eastern DRC's natural resources wealth (Tull, 2003; Vlassenroot and Raeymaekers, 2009). The next paragraphs, therefore, explore the concept of civil society and its subcategories to provide a theoretical overview of how IANGOs – as a subcategory of CSOs – can contribute to solution-finding processes for transnational governance challenges, such as 'conflict financing'.

As stated further above, for the purpose of this thesis, civil society can be defined as a "sphere located between state and market – a buffer zone strong enough to keep both state and market in check, thereby preventing each from becoming too powerful and dominating" (Anheier and Carlson, 2002, p. 2). NGOs, as a specific sub-group of CSOs, can be defined as "purposeful, role-bound social units" (Fowler, 1997, p. 20). They are voluntary organisations and unlike corporations, they do not make profits (Kaldor, 2003). Of course, "in any organisation, both internal relationships and relations with external stakeholders are regulated through a combination of coercion, monetary incentives, and altruism (values)" (ibid. p. 14). In the case of NGOs, values are supposed to be relatively more important. IANGOs are a subset of the larger group of NGOs. Jenkins states "advocacy is any attempt to influence the decisions of an institutional elite on behalf of a collective interest" (Jenkins, 1987, p. 297). IANGOs predominantly focus on "lobbying as well as public mobilisation and campaigning"; they can also undertake actions, such as "monitoring compliance with international treaties, particularly in the human rights field, conflict resolution and reconciliation, public education and the provision of alternative expert knowledge" (Kaldor, 2003, p. 16).

CSOs have become a powerful influence in the international political sphere and are shaping norms and practices, both locally and globally (Risse et al, 1999). CSOs are often seen as "instruments of greater transparency, heightened accountability and improved governance of public and private institutions, including the fostering of more accountable and ethical business and political practices" (Anheier et al, 2006, p. 8). This trend "may be related to a growing public frustration with traditional channels of political representation, increasing levels of public sector corruption, and weak formal accountability mechanisms" (World Bank, 2007, p. 1). The influence of CSOs on international politics means in many cases they have become key stakeholders in what is de facto global governance (Shaw, 2000). This new global governance has been given a plethora of names in academic literature, but most studies stress the following phenomena: "the increase in new non-state actors, new arenas for action, and the blurring of distinctions between domestic and global levels of politics" (Khagram et al, 2002, p. 4). Khagram, Riker and Sikkink (2002) have developed this approach in their seminal edited volume Restructuring World Politics - Transnational Social Movements, Networks and Norms, which has crystallised the following useful typology of transnational collective action involving CSOs, which is of immediate relevance to the analysis of the role of IANGOs in the solution finding process for 'conflict financing' in

eastern DRC. The typology distinguishes three broad types of transnational collective action: "transnational network, transnational coalition (campaign), and transnational movement" (2002, p. 6). I paraphrase the descriptions here:

Transnational advocacy networks are the most informal set of non-state actors in the advocacy context, who interlink transnationally based on shared values, campaigns and positions, as well as exchange of information and services (ibid., p. 7). Most international advocacy efforts involve some level of network activity and the distinction from the following two categories fundamentally rests in the more informal nature of networks, rather than coalitions.

Transnational coalitions involve slightly more formalised "sets of actors linked across country boundaries who coordinate shared strategies or sets of tactics [or transnational campaigns] to publicly influence social change" (Ibid.). This is the key type of transnational collective action that I am focusing on in this thesis. The advocacy work around the Kimberley Process Certification Scheme for Rough Diamonds (KPCS) is a key example in this context, also as a result of the importance of the analysis of the difference in trading chain attributes when comparing diamonds, gold and tin.

Transnational social movements are "sets of actors with common purposes and solidarities linked across country boundaries that have the capacity to generate coordinated and sustained social mobilisation in more than one country to publicly influence social change" (Ibid. 8). Social movements theory links transnational social movements and their successes to their ability to disrupt a given social order (Tarrow, 1998). The anti-globalisation protests in the late 1990s and early 2000s are prominent examples of transnational social movements.

Of course, bearing in mind the prominent role of CSOs in networks, coalitions and movements it is important to determine where to set the level of analysis with respect to all of the actors involved. Networks, coalitions and movements can include multiple-actors taking on multiple roles, but from an analytical perspective in the context of the analysis in this thesis, I focus more restrictively on IANGOs as it will help focus on the conscious undertakings and deliberate linkages formations IANGOs have engaged in the 'conflict minerals' campaign. It will also help to understand how these have influenced the formation

and effectiveness of transnational collective action – and ultimately influenced global public policy, which was an under-treated theme in the literature on 'conflict financing' at the time of my research.

Soon after commencing my research in 2007, it became apparent that IANGOs were putting pressure on Western governments to do something about 'conflict financing' in eastern DRC. In that context it occurred to me that this pressure was placed upon Western governments, with neither the IANGOs, nor the Western governments having a clear understanding, particularly of the 'coping' economy and how it interrelated with eastern DRC's war economy. In fact, the first comprehensive research programme into "trade flows of natural resources in the Great Lakes Region, and particularly the DRC with the view to [...] enhancing sustainable and equitable use of natural resources in the DRC, in the interest of regional stability and poverty eradication" (USAID, 2009, p. 1), was only launched in 2006. It was a jointly financed initiative by the United Kingdom's Department for International Development (DFID), the United States Agency for International Development (USAID) and the Common Market for Eastern and Southern Africa (COMESA) called Trading for Peace. The initiative had a clear mandate to understand the livelihood dimensions of the regional resources economy and played a role in emphasising the fact that economic activities in the natural resources sector were not anonymous activities, but undertaken by thousands of individual persons, the majority of which were sidelined into the coping economy. This suggests the potential externalities for 'coping' economy actors who may be dependent upon the mining and trade of 'conflict minerals' of international advocacy-driven interventions to curb 'conflict financing' in eastern DRC were also ill understood.

Historical perspective on the role of IANGOs and 'conflict financing'

A historical perspective can bring some clarity to research efforts on IANGO campaigns on 'conflict financing'; in this regard it is impossible to ignore the role of a transnational coalition of IANGOs having worked towards the establishment of the KPCS. The KPCS is in essence a certification process that is supposed to ensure a trading chain for rough diamonds that is 'conflict-free', in that it has not contributed to 'conflict financing'. It derived from the UK-based IANGO Global Witness's campaign *Combating Conflict Diamonds* and it remains a very prominent global intervention to address 'conflict financing' through the commercialisation of natural resources. In fact, the 'conflict diamonds' campaign brought the issue of 'conflict financing' through the trade of 'blood diamonds' to global attention

during the protracted conflicts in parts of Africa during the 1990s (Global Witness, 1998) and early 2000s (Global Witness, 2006). It was estimated that rebel groups in various diamond bearing African territories were implicated in as much as 20 per cent of global rough diamond supplies (Smilie et al, 2000, p. 9).

Following the campaign launch, Global Witness launched the report A rough trade: the role of companies and governments in the Angolan conflict (Global Witness, 1998). According to Hilson and Clifford, 2010), the report had three principal arguments. It suggested diamonds were fuelling civil war in Angola; it exposed links between then diamond mining and trading giant De Beers and diamond production in Angola's rebel-held areas; and it highlighted the failures of existing trade interventions, such as a an embargo on Angola's illegally exported diamonds. Industry was stirred up by the report and it galvanised interest in the subject matter beyond the narrow realms of the diamond industry. In 1999, the Canada-based NGO Partnership Africa Canada "joined the campaign, launching an intensive complementary programme of policy research, education, publication and advocacy" (Hilson and Clifford, 2010, p. 434). It soon emerged that the issue of 'conflict diamonds' was not limited to Angola, but similar commercialisation patterns could be found in Sierra Leone, Liberia, the DRC and other countries, which further legitimised the campaign and which is reflected in my discussions of the theoretical literature on 'conflict financing' further above. The campaign also lent further credibility to academic research emphasising the 'honey pot' nature of primary natural resources (De Soysa, 2000).

The persistent pressure exerted by the campaign brought about changes in the diamond sector, mediated also through a three-years long process of negotiation that started in the year 2000 in the diamond mining town of Kimberley in South Africa, and which would result in the birth and launch of the KPCS. The negotiations brought together representatives of industry, civil society and government officials and led to a consensus-based agreement that came into effect on January 1, 2003. On the official website of the KPCS the process is described as follows (KPCS, 2012, p. 1 of 2):

"The Kimberley Process Certification Scheme (KPCS) imposes extensive requirements⁶ on its members to enable them to certify shipments of rough diamonds as 'conflict-free' and prevent conflict diamonds from entering the legitimate trade. Under the terms of the KPCS, participating states must meet 'minimum requirements' and must

⁶ The requirements for participation are outlined in *Sections II, V (a) and VI (8,9)* of the KPCS, accessed 7 January 2013.

© Nicholas Garrett, 2014

53

put in place national legislation and institutions; export, import and internal controls; and also commit to transparency and the exchange of statistical data. Participants can only legally trade with other participants who have also met the minimum requirements of the scheme, and international shipments of rough diamonds must be accompanied by a KP certificate guaranteeing that they are conflict-free."

The KPCS is the first consensus-based trade agreement adopted by the three key stakeholder groups of governments, industry, and NGOs (Kantz, 2007). Since its ratification, it has expanded to 80 countries (KPCS, 2012), with supporters of the KPCS suggesting the process stemmed the flow of 'conflict diamonds' through a proof-of-origin verification system, "channelling funds accrued from diamond mining away from rebel groups, terrorist activities and corrupt politicians" (Hilson and Clifford, 2010, p. 435). Some of those involved in the KPCS have claimed that the KPCS "may be the biggest thing that has happened to the diamond industry in a hundred years" (Partnership Africa Canada, 2006, p. 3). And indeed the perceived success of the scheme was recognised also beyond the diamond sector, with Global Witness and Partnership Africa Canada jointly being nominated by US House of Representatives and Senate members for the 2004 Nobel Peace Prize for their work on 'blood diamonds' (PAC, 2013).

Critics of the KPCS, however, suggest that in reality, "the ability of the KPCS (or similar certificate-of-origin schemes) to prevent armed groups from benefiting from resources remains largely untested" (Mitchell, 2012, 1). While the process is often named in the context of the end of the Sierra Leonean and Angolan wars, it is important to remember that the KPCS only came into force after the wars had officially ended. The reservations to credit the KPCS with the ability to end diamond-fuelled wars is largely a result of the inadequate government capacity to monitor subnational diamond trading chains in those diamond producer countries that rely largely or entirely on artisanal diamond mining (Global Witness, 2007). This means that while the process claims to certify origin and thus the conflict-free nature of the stones, it cannot guarantee to do so in reality. Mitchell (2012, p. 2) describes this conundrum as follows:

"Although the KPCS requires producing countries to establish internal control systems to verify that diamonds are conflict free, full and genuine assurance of origin is difficult to obtain, particularly in developing countries with large artisanal mining communities, where the informality, size, and geography of the sector combine with

a lack of resources, capacity, and political will (Kimberley Process 2002, sect. IV). Recent studies have confirmed that, particularly in developing states with large and informal artisanal sectors, the informal trade in diamonds and other precious minerals within and between producer countries remains largely unmonitored (Garrett, Mitchell, and Levin 2008). Artisanally mined diamonds, which are produced in small mines that are often far from town centres, can easily be carried out of the country—from Sierra Leone to Ghana, for example, or from the Congo to Angola—by traders who use the gems as a lightweight and concealable form of currency, exchanging them for cash once they reach their destination. After obtaining a fraudulent origin along the way, many of these informally traded diamonds enter the formal trade in other KPCS member countries Garrett, Mitchell, and Levin, 2008)."

While unable to prevent 'conflict financing' through the trade in 'conflict diamonds', the KPCS has other achievements it can be proud of, which include a contribution to the formalisation of the international trade in diamonds at the point of export, which has led to a greater contribution of the diamond trade to fiscal revenue and also a contribution to the overall rationalisation of the sector (Garrett, Mitchell and Levin, 2008). These achievements, in turn, can be important indirect contributors to development and the sustainability of livelihoods, even if the KPCS fails in its efforts to directly prevent 'conflict financing' through a credible chain of custody process. In the context of the KPCS an interesting hypothesis appears that is of direct relevance to my research. The hypothesis is that IANGO-driven interventions to prevent 'conflict financing', like the KPCS, could be developed from a Western perspective, catering more to the demands of Western consumers for a 'conflict free' supply chain, rather than placing emphasis on a "do no harm" approach (elaborated by international and national NGOs in the early 1990s (CDA, 2004)), which would include adapting interventions to fit the needs and priorities of those 'coping economy' actors, whose livelihoods depend on the mineral economies in producer countries.

Few 'conflict financing'-specific examples that would support this hypothesis can be found in existing literature, but that may well be related to the general research gap on 'coping' economy actors in 'conflict' economies. Hilson and Clifford (2010) highlight that IANGO-supported temporary suspensions of Ghanaian diamond exports in 2006 and 2007, following accusations that diamonds from rebel-held territories in Cote d'Ivoire were traded through Ghana, disrupted Ghana's fragile diamond production economy and did not make the

country any less likely to be used as a trading centre for Ivorian 'conflict diamonds'. In fact, while no evidence was uncovered that the initial accusations were true, the economic impacts at the village level were sustained and devastating. "The ban depressed local prices for diamonds [...] bankrupting hundreds of the industry's local-level buyers and sponsors [...]" (Ibid, p. 432). In a gripping account from the key diamond-producing town of Akwatia, Hilson and Clifford report further, "the 'mini embargo' has crippled the economy of Akwatia: as one buyer put it, the town is now a 'shell of its former self'" (Ibid, p. 444). This example leads me to believe that a lack of knowledge of whether, and if so, how exactly 'coping' economy actors are dependent upon economic activities in conflict zones, means that IANGO-driven interventions to prevent 'conflict financing' may have unanticipated externalities for such 'coping' economy actors.

Another example is directly tied to what Bannon and Collier (2007) consider a potential indicator of success of the KPCS: armed groups having to sell diamonds at a significant discount through grey channels, as the KPCS makes it harder to sell through legal channels. While this makes sense from a pure 'curbing conflict-financing' perspective, as there would be an impact on the 'war economy', it is also true that declining prices have a significant knock-on effect on the 'coping' economy actors involved in diamond production, threatening 'coping' economy livelihood opportunities. In the worst case scenario, price declines may also require 'conflict' economy actors to increase their predatory efforts to make up for the revenue shortfall (Ellis, 2006). "Though the evidence is anecdotal, one industry expert formerly associated with De Beers has suggested that after the KPCS was instituted and rebel goods became more difficult to sell, people got scared—and the price of certain rough diamonds on the Antwerp Bourse dropped" (Gilbert 2010, quoted in Mitchell, 2012, p. 3). It is possible that such price declines had a knock-on effect on 'coping' economy actors in diamond producing developing countries.

If IANGO advocacy-driven initiatives, such as the KPCS, which are designed to stop 'conflict financing' have negative externalities for 'coping' economy actors at the grassroots level, then there is a gap in terms of our understanding of why this is the case, particularly considering it is most probably not the intention of the IANGOs to place additional hardship on these actors. Are Western consumer demands for 'conflict-free' products not compatible with the livelihood choices of 'coping' economy actors in developing countries? Are Western IANGOs ignorant of the realities of the 'coping' economy in developing countries? There are

a plethora of questions that present themselves, but it will be difficult to treat these satisfactorily in the context of this thesis. In fact, a separate thesis on the role of IANGOs' accountability would be a better place to discuss such normative elements. In this thesis I focus in more depth on the most prominent IANGO campaign on 'conflict financing' in eastern DRC, the US-based The Enough Project's 'conflict minerals' campaign' under the 'Raise Hope for Congo' banner; however, this focus is more for illustrative purposes, than a holistic scientific treatment of general IANGO advocacy and accountability.⁷

Current IANGO 'conflict minerals' campaign on eastern DRC

IANGOs working on, or having worked on 'conflict minerals' in eastern DRC are manifold. Global Witness⁸, for example, is running a 'conflict minerals' campaign and also works on the links between natural resources exploitation and corruption. Human Rights Watch⁹ used to (2005), but is not currently conducting a specific campaign on 'conflict minerals', however they are particularly focused on DRC for other conflict-related issues, such as international justice, refugees, women's and children's rights and small arms trafficking. International Alert is trying to contribute to peace building by disseminating knowledge about the conflict in eastern DRC.¹⁰ Other civil society groups, such as church groups and other grassroots organisations, are also working on conflict-related issues and sometimes lend their voice to support a 'conflict financing'-related intervention or viewpoint. However, as I shall introduce during the course of this thesis, there is not a defined 'civil society viewpoint' on 'conflict financing' in eastern DRC. Meanwhile the Enough Project has run the highest profile 'conflict minerals' campaign (see further below).¹¹

Views linking the on-going conflict in parts of eastern DRC and its financing to the predation on the mining and trade of natural resources were in the context of the DRC increasingly put forward in the late 1990s. They rose to prominence as part of the press coverage of the 'coltan rush' — an unusual spike in global tantalum prices — in the year 2001 (Vesperini, 2001). The 'coltan rush' saw thousands of people head to mines to dig for what is a vital component in electronics devices. Some (not all) of these people landed up working under exploitative conditions or were preyed upon by armed groups, including the FARDC, who in

⁷ http://www.raisehopeforcongo.org/content/initiatives/conflict-minerals, accessed 7 January 2013.

⁸ http://www.globalwitness.org/campaigns/conflict/conflict-minerals/democratic-republic-congo, accessed 21 August 2012

⁹ http://www.hrw.org/drc, accessed 21/8/2012

¹⁰ http://www.international-alert.org/ourwork/regional/greatlakes/drc, accessed 7/1/2013

http://www.raisehopeforcongo.org/content/initiatives/conflict-minerals, accessed 7/1/2013

turn were sometimes preying on the mining and trade of 'conflict minerals'. News reports from the Congo wars that raged between 1996 and 2003 often contained accusations against Rwanda and Uganda for 'pillaging' eastern DRC's natural resources (Moyroud and Katunga, 2002; Montague, 2002). In response, a United Nations (UN) Panel of Experts was formed to investigate what the UN called "the illegal exploitation of natural resources and other forms of wealth" (United Nations, 2001, p. 1). The establishment of a UN Panel of Experts "normally follows persistent and contradictory reports related to violations of an agreed-to peace treaty, international law or UNSC resolution, associated with a particular conflict by actors. It also follows the lack of clarity on who is involved and, by extension, what punitive action may be taken by the UN Security Council in furtherance of peace and security, threatened by conditions around a particular event" (Rupiya, 2005, p. 2).

The Panel of Expert found illegal exploitation of natural resources to be taking place "at an alarming rate" and occurring of phases of "mass-scale looting" and the "systematic and systemic exploitation of natural resources" (UN, 2001, p. 2). In exact terms, the report states (ibid.):

"... stockpiles of minerals, coffee, wood, livestock and money that were available in territories conquered by the armies of Burundi, Rwanda and Uganda were taken, and either transferred to those countries or exported to international markets by their forces and nationals.

... systematic exploitation flourished because of the pre-existing structures developed during the conquest of power of the Alliance of Democratic Forces for the Liberation of Congo-Zaire. These pre-existing structures were improved over time and new networks for channelling extracted resources were put in place. However, the systemic exploitation used the existing systems of control established by Rwanda and Uganda. In both cases, exploitation was often carried out in violation of the sovereignty of the Democratic Republic of the Congo, the national legislation and sometimes international law, and it led to illicit activities. Key individual actors including top army commanders and businessmen on the one hand, and government structures on the other, have been the engines of this systematic and systemic exploitation".

The Panel's reports and the on-going advocacy efforts of IANGOs cemented discussions on the international policy agenda around 'conflict minerals' and what to do about 'conflict financing' (Autesserre, 2012, p. 9). Global Witness, for example, called on the UN "to control the DRC's conflict resource trade as a primary move toward bringing peace" and (successfully) lobbied for the inclusion of a natural resources expert in the UN Panel of Experts (Global Witness, 2005). As discussed in Chapter 1, one of the key constraints IANGOs faced before 2008 was that hard evidence was lacking to link consumer-facing brand companies directly to 'conflict minerals', which would have made advocacy efforts more effective, as the link between these companies and the financing of conflict in eastern DRC would not have been made on assumptions, but on fact. Consumer-facing brand companies have a greater regulatory and reputational risk exposure, as many of them are listed companies operating in jurisdictions where consumers have greater access to information and advocacy channels, such as social media, "which expands the spectrum of reputation risks and boosts risk dynamics" (Aula, 2010, p. 1). In a seminal piece on reputational risk exposure, Eccles et al, explain, "companies with strong positive reputations attract better talent and are perceived as providing more value in their products and services, which often allows them to charge a premium. Their customers are more loyal and buy broader ranges of products and services. Since the market believes that such companies will deliver sustained earnings and future growth, they have higher price-earnings multiples and market values and lower costs of capital" (2007, p. 1). This means that threats to a company's reputation will likely lead to company actions to mitigate such threats, particularly if the brand otherwise has a good reputation.

In March 2008, some evidence was produced in the form of a supply chain investigation, published in the Financial Times, directly linking the global electronics industry to the militarily controlled tin-ore mine, Bisie, in North Kivu, which is one of geographical focus areas treated in my empirical research (Garrett and Mitchell, 2008). The advocacy response intensified from 2008 onwards, as it no longer focused on those companies and individuals immediately involved in the mining and trade of 'conflict minerals' in the DRC, but on the large consumer-facing brand companies. For example, Global Witness had for a long time 'named and shamed' minerals exporters, such as UK-based Afrimex (OECD Watch, 2009), but without being disrespectful to anyone involved, in terms of getting global attention and traction in policy circles and from a purely logical point of view, 'naming and shaming' a company such as Nintendo (Enough, 2012) that is worth US\$2.29 billion (Price Charting,

2011) or Hitachi, Microsoft, Pioneer and Samsung (Garrett and Mitchell, 2008), is likely to yield greater results. This is also reflected in existing research, which suggests, "NGO campaigns are particularly effective when they target firms with a strong brand name, whereas they are much less influential when attacking firms that lack such an identity" (Risse, 2010, p. 20).

The implications of big brand names in the 'conflict minerals' issue led to a proliferation of IANGOs working on the issue, particularly in the United States, where 'conflict minerals' advocacy previously was a marginal issue. The year 2008 is also the point in time where, in the context of eastern DRC, IANGO activities became more akin to what Khagram et al (2002), would call a 'transnational coalition' or 'campaign' (see previous section in this chapter). Inspired by the perceived successes of the KPCS and under pressure from IANGOs to do something about 'conflict minerals', bilateral donors – particularly from European countries – as well as some industry representative bodies, such as the International Tin Research Institute (ITRI), started to engage on 'conflict financing', with the largest amount of investment initially being channelled into research and the preparation of chain-of-custody schemes of those artisanally mined 'conflict minerals' most strongly linked to conflict-financing, namely tin, tantalum and tungsten, as well as gold (Levin, 2010).

With increasing global attention on end user companies' implications in the 'conflict minerals' issue, it is interesting to observe shifts in IANGO strategy. The IANGO Enough Project, for example, had produced several early research and advocacy outputs, which emphasised a need for increased civilian protection efforts in eastern DRC and promoted nuanced conflict resolution suggestions, but these received comparatively little attention (Enough Project, 2007). Only from 2009 did the Enough Project's focus shift to the link between the global electronics industry and the minerals and metals trade from eastern DRC. With this repositioning of their outputs, The Enough Project achieved more success in getting its voice heard (Seay, 2012). The IANGO then took centre stage in the United States in what can be described as an advocacy coup: the passing into law of the Dodd-Frank Section 1502 on Conflict Minerals (see below). The United States thus became the first Western nation to pass extraterritorial legislation on the 'conflict minerals' issue, as a consequence of IANGO pressure, which demonstrates the lobbying power of IANGOs in Washington's halls of power and which significantly increased the regulatory risk exposure for affected companies (KPMG, 2012).

Considering these are historical facts, I am replicating Laura Seay's chronology of the passing into law in full in the following two paragraphs (2012, p. 12):

"Enough and other activist groups working on D.R. Congo pursued a legislative strategy to pass a law that would require companies to be more transparent and accountable in their mineral sourcing practices. Their efforts centred on House Resolution 4128, the Conflict Minerals Trade Act, the purpose of which was to:

help stop the deadly conflict over minerals in eastern Congo by regulating the importation and trade of tin, tungsten and tantalum – minerals commonly used in cell phones, laptop computers and other popular electronic devices. Under the bill, U.S. Commerce Department-sanctioned auditors would audit mineral mines declaring them conflict free or not. These mines would be mapped to show which ones fund conflict. Furthermore, importers would have to certify whether they were importing conflict minerals – companies that do import conflict minerals will be reported to Congress by the United States Trade Representative (USA Congress, 2009).

HR 4128 was submitted by Representative James McDermott, Democrat of Washington State, and supported by the Center for American Progress (CAP, Enough's parent organisation), Human Rights Watch, Hewlett Packard, the International Labor Rights Forum, and the Information Technology Industry Council (ITIC, an industry lobby group). Despite gaining broad support from several sectors and getting co-sponsorship from other legislators after pressure from grassroots activists, the bill never moved out of the committees to which it was referred."

In July 2010, two provisions focusing on the D.R. Congo and conflict minerals were added to the Dodd-Frank Wall Street Reform and Consumer Protection Act. Section 1502 requires publicly trading companies to report to the Securities and Exchange Commission (SEC) and on their websites whether they source conflict minerals, defined as "columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivatives" from the D.R. Congo or its neighbours (Resource Consulting Service, 2011). It requires further reporting and auditing from companies that use D.R. Congo or neighbouring country conflict minerals, and requires the SEC (U.S. Security and

Exchange Commission) to create specific regulations as to how companies will satisfy the legislation's requirements (McDermott, 2010)."

The regulations were finally published in August 2012 (see chapter 6) and DF1502 will form a key part of the analysis in this thesis.

Reasons for IANGO 'conflict minerals' campaign 'success'

The 'success' of the 'conflict minerals' campaign the IANGOs had put forward, in terms of its influence on global public policy, can be attributed to a plethora of reasons and below I highlight what I consider to be key reasons:

The IANGOs employ a technique known as 'framing', which can be defined as "the strategic efforts by groups of people to fashion shared understandings of the world and of themselves that legitimate and motivate collective action" (Klandermans, 2007, p. 204). Frames are therefore ways to package ideas and information that "do not cause action. Instead they make action possible: they authorise, enable, and justify specific practices and policies while precluding others" (Autesserre, 2012. p. 6). IANGOs frame their campaign in a way that ultimately shapes the audience's perception of the situation on the ground and evokes an automatic prioritisation of particular challenges (such as predation on the mining and trade of 'conflict minerals') over others (such as conflict over citizenship issues and land – see chapter 1). The prioritisation based on the particular framing of the campaign in turn allows the audience to decide whether to respond to the challenges or not. In the context of 'conflict minerals' this means the way the IANGOs frame their advocacy authorises, enables and justifies decision-makers to develop, for example, measures to prevent 'conflict financing' (through the predation on the mining and trade of 'conflict minerals'), while it also authorises, enables, and justifies inaction on other, less reported conflict drivers, such as citizenship issues and land conflicts.

In line with Autesserre (2012), I can find three more reasons for the rise to prominence of the 'conflict minerals' campaign.

First, the actions of policy-makers, such as the development of measures to prevent 'conflict financing' (through the predation on the mining and trade of 'conflict minerals'), which were originally authorised, enabled, and justified by the IANGO advocacy, reproduced and

reinforced the frame originally used to define the 'conflict minerals' campaign. This process means that over time, "the narratives and the practices they authorise come to be taken as natural, granted, and the only conceivable ones" (Ibid., p. 6).

Second, audiences are more receptive to a campaign and more likely to act upon a campaign when it "assigns the cause of the problem to the deliberate action of identifiable individuals; when they include bodily harm to vulnerable individuals, especially when there is a short and clear causal chain assigning responsibility; when they suggest a simple solution; and when they can latch on to pre-existing narratives" (Ibid. p. 6). In the context of the IANGO advocacy this means soldiers and militiamen organised in armed groups preying on the mining and trade of 'conflict minerals' (assigning the cause of the problem to the deliberate action of identifiable individuals); they cause human rights violations, in particular sexual violence against women (bodily harm to vulnerable individuals; short and clear causal chain assigning responsibility); cutting them off from the minerals and metals means they will "wither away" (simple solution) (Bannon and Collier, 2007, p. 3); and pointing to economic explanations of conflict, particularly of the two Congolese wars (latching on to pre-existing narratives).

Third, the 'conflict minerals' campaign is a simple-to-follow story line that places the blame for what is happening partly with the consumer and the beloved products (such as smartphones) that s/he buys. This is likely to spark a reaction from consumers, as "some customer segments favour the products and services of companies that demonstrate corporate citizenship, and willingly pay a premium price for the products of these companies" (Fombrum, et al, 2002, p. 92). However, the public today face a surfeit of information coupled with a deficit of time. Therefore the temptation is high to simplify arguments into easily understood, 'bite-size' packages in order to reach key target audiences. The complexities of the conflict in the DRC are certainly not such a bite-size package, which means the IANGOs had to find a way of telling a story that would fit into few enough words that would make the story relevant to them, so as not to lose some of their key audiences.

The 'conflict minerals' campaign was thus partly born out of necessity and to this day remains the only simple to follow cause and effect explanation of the conflict in the DRC. It thus resonates with key audiences, particularly as good quality information on the conflict is

hard to come by (see below) and the plethora of the sometimes aligned, but often competing or intertwined explanations of the conflict, which exist in parallel to the 'conflict minerals' campaign are being perceived as "too complex for the average Joe to comprehend" (interview, international advocacy group manager, Washington DC, February 2008). This mirrors findings that suggest "policy makers, and the general public, usually perceive the conflict [in DRC] as extremely complex and intractable" (Autesserre, 2012 p. 7). Providing an easily digestible explanation for the conflict that involves the consumer and the product s/he purchases therefore has been a successful strategy to influence global public policy.

The research gap

The larger research puzzle this thesis will contribute is to address is why does conflict persist natural resource rich countries, and why in this critical case in particular. The proponents of the 'conflict minerals' campaign liberally placed the conflict in eastern DRC in the class of other African countries where natural resources were said to shape the power strategies of elites, and where the conflict parties have increasingly operated based on "the territorialisation of sovereignty around valuable resource areas and trading networks" (Le Billon, 2001, p. 561, quoted in Garrett, et al, 2009, p.). Relating this back to the theoretical discussion of 'conflict financing' in chapter 2, the 'conflict minerals' discourse places the 'greed theory' at the heart of its explanation of the conflict in North Kivu, suggesting mineral resources "act as a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8).

As the IANGOs celebrated the 'success' of their advocacy in bringing about policy action in the form of measures to prevent 'conflict financing', and particularly the passing into law of requirements to conduct mandatory due diligence on 'conflict minerals' supply chains, increasing dissent emerged. Academics who observed the conflict complex in eastern DRC put forward detailed explanations of the conflict; some suggested the conflict could "at worst be described as a 'resource conflict'" (Vlassenroot and Raeymaekers, 2009, p. 10). In policy and expert circles, it was also discussed that perhaps – following the example of the KPCS – too much emphasis was placed on curbing 'conflict financing', without fully understanding and taking into consideration the potential negative externalities for the local coping economy (Conference discussion, Trading for Peace regional Forum, Lusaka, 2009). Local CSOs warned very strongly that policy interventions championed by the IANGOs would

have grave negative externalities for the 'coping economy' in particular (Kajemba and de Failly, 2011).

Focusing my research on two key 'conflict minerals'-producing regions, Walikale territory in North Kivu province (cassiterite) and Watsa territory in Orientale Province (gold), prior to engaging in field research in 2007 (Walikale) and 2009 (Watsa), I elaborated the research gap, which my work would set out to fill:

The gap in the theoretical literature evident from this discussion is, while there is acknowledgement that a conflict economy is not a homogenous unit, there is little distinction made between the different sets of actors partaking in processes that facilitate 'conflict financing', and there is lack of distinction between their respective roles and incentives, as well as the different attributes of the mineral trading chains.

First, the general population is often portrayed as victims of conflict (Global Witness, 2008; Enough Project, 2012; HRW, 2005), but very little is known about the actual economic dependencies of the millions of people side-lined into survival or coping strategies in conflict situations, who are undertaking largely informal economic activities. I was particularly intrigued by the economic dependencies, challenges and coping strategies these actors employ to safeguard their livelihood or transform their livelihood into a sustainable one. An understanding of this, on the one hand, would provide a valuable perspective of how these 'coping' economy actors are likely to be affected by measures to curb 'conflict financing' (through the predation on the mining and trade of 'conflict minerals'), but, on the other hand, would also inform what such effects would mean for the strategies these actors employ to safeguard their livelihood or transform their livelihood into a sustainable one.

Second, much of the literature centres on 'conflict' economy actors and their ability to fight and/or prey on economic activities (Keen, 1998; Le Billon, 2001; Gberie, 2005). However, while some case study material exists on how conflict economy actors organise and prey on economic activities on the local level (UNSC, 2007; UNSC 2008; Global Witness, 2008; Titeca, 2010), I was particularly intrigued by the relative dependence of 'conflict' economy actors on such predation, and the incentives driving the behaviour of armed groups in the context of 'conflict financing'. Such information would provide a better understanding of how much the economic dimensions of conflict mattered, which would, in turn, provide some

perspective of the relative effectiveness of different measures, which the 'conflict minerals' campaign proposed to curb 'conflict financing'.

Third, economic actors active in conflict zones are often portrayed as 'conflict entrepreneurs', out to make a profit from conflict (Collier, 2003; Global Witness, 2008; UNSC 2008). However, very little was known about the actual incentive structure of 'shadow' economy actors and whether it would be more aligned with 'profit' in general, or whether it would be necessarily aligned with the idea of perpetuating conflict in order to safeguard profit. Understanding the relative importance of 'conflict' in the 'shadow' economy actors' business strategies would produce a better understanding of whether they would be a potential constituency for peace and reform or whether they would have to be addressed as key actors perpetuating conflict in measures to curb 'conflict financing', or both.

Fourth, as referred to on several occasions further above, the physical attributes of different commodities, i.e. high value/low volume (e.g. gold) and low value/high value (e.g. cassiterite) are not always sufficiently reflected in the discourse. The consequences of such differences for the structure of the associated trading chains and the control thereof are not sufficiently reflected in the current discourse.

The final analytical gap, I found related to the prevalent governance structures relevant to the mining and trade of 'conflict minerals'. If governance structures are in fact similar to those pre-conflict, but have also evolved with the conflict, then there is a likelihood of non-state actors influencing governance or playing active roles in governance in the DRC (Risse, 2010; Tull, 2003). I was intrigued by two aspects in particular: how local actors are involved in local governance structures, and the roles that IANGOs are playing in the global governance structure of relevance to the mining and trade of 'conflict minerals', including how they approach the issue of 'conflict financing' and what externalities their approach has on the ground. The emphasis in my analysis is placed on the roles and activities of IANGOs.

The hypothesis is that multiple incentive structures might be influencing the behaviour of the different sets of actors involved in the local economies that facilitate 'conflict financing'. If this is in fact the case, then IANGO advocacy-driven measures to curb 'conflict financing', which solely target one incentive structure, i.e. the motivation to profit from conflict, may in

fact be inadequate conflict resolution mechanisms. This hypothesis led me to develop two questions, which my thesis endeavours to answer.

The first question is what are the incentives for the different sets of actors partaking in the local economies that facilitate 'conflict financing', focusing specifically on the mining and trade in 'conflict minerals'. This means, if there are sets of actors whose incentive is not to wage conflict, nor to profit from conflict, then there may be externalities for such actors of IANGO advocacy-driven interventions to prevent 'conflict financing' through the predation on the mining and trade of 'conflict minerals'.

The second question is what role do the value and volume attributes of the different commodities play and what these mean for conflict resolution attempts through the implementation of mineral trade control measures?

The following chapters explore these questions in detail. The thesis thus follows a 'building block' approach to contributing to theory and practice in the broader space of the interrelationship of natural resources and conflict financing. George and Bennett define a building block approach as one that "is self-sufficient, in that its validity and usefulness does not depend upon the existence of other studies of different subclasses of that general phenomenon (2005, p. 78).

3 - 'Conflict minerals' production in North Kivu and Orientale Province

- The 'coping economy' 12

Introduction

From the beginning of the 1980s and with the Congolese state in crisis, it became increasingly necessary for "individuals, households, networks, and local organisations to fill some of [their] needs [themselves]" (Tripp, 1997, p. 103). In Chapter 1, I explained how an economic informalisation process set in, which was reinforced and accelerated by the Congolese wars in the 1990s and early 2000s as well as by the insecurity in parts of eastern DRC that followed the formal end of the second Congolese war in 2003. In Chapter 2, I refer to the group of economic actors that are merely surviving or coping as 'coping' economy actors. The term derives from Goodhand's typology of incentive systems present in conflict and post-conflict scenarios, which distinguishes between three types of economic interaction: "a 'war' economy, a 'shadow' economy and a 'coping' economy" (Goodhand, 2004, p. 4): A 'coping economy' includes population groups that are "coping or surviving" (ibid.). A 'shadow economy' includes those actors who profit from war, but whose objective is not necessarily to wage war, and who may have an interest in peace as long as they regard peace as compatible with their profit motive (ibid.). A 'war economy' 13 includes "the production, mobilisation and allocation of economic resources to sustain a conflict and economic strategies of war aimed at the deliberate disempowerment of specific groups" (ibid.).

In the following three chapters, I am analysing these types of incentive systems in the context of my two geographical research areas: Walikale territory in North Kivu and Watsa territory in Haut-Uélé district in Orientale Province. In chapter 5 I also place special emphasis on the volume and value attributes of cassiterite and gold to determine their implications for conflict financing. In Walikale elements of all three incentive systems were observable during the course of my field research. However, while secondary sources suggest 'conflict economy' incentive systems were present in Orientale Province, particularly during the Ugandan occupation during the Congolese wars (HRW, 2005), during my research I only observed 'coping' economy actors and 'shadow' economy actors, with the latter profiting

¹² Parts of the analysis in this chapter were pre-published in Garrett, 2007 and Garrett, 2008, as well as Hesselbein and Garrett, 2009.

¹³ I use the term 'conflict' rather than 'war' to describe the current conflict in eastern DRC.

not from conflict, but from the informality of the ASM sector. This chapter exclusively focuses on the 'coping' economy, with a discussion of actors limited to those in the 'primary ASM economy' and the 'secondary ASM economy' (see below for discussion of the two terms).

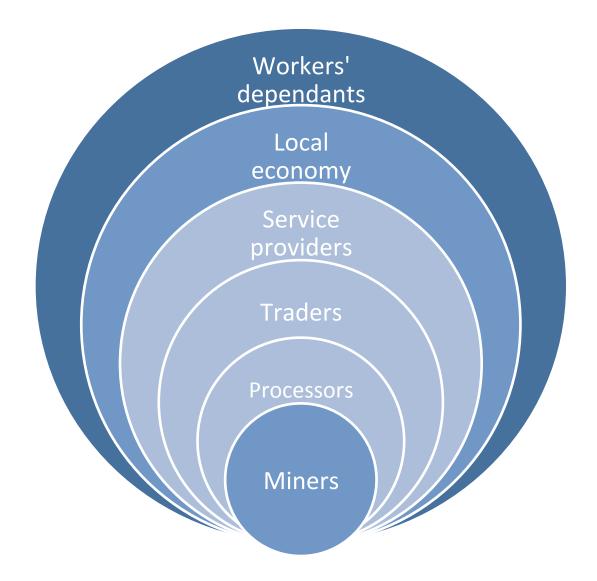
In line with the concept of economic informalisation, the discussion of the history of the ASM sector in chapter 1 suggests the accessibility of minerals and metals through ASM methods presented opportunities which led to the formation of a new class of operators: one dependent on the mining and trade of minerals and metals for their subsistence. In line with Goodhand's framework above, these operators were, at the time of my research, largely sidelined into the coping economy. Contrary to common perception of a marginal sector, at the time of my research, ASM generated 100 per cent of eastern DRC's mineral production, as industrial production had only begun in the case of precious metals, notably gold, in South Kivu province. Research by the World Bank suggests that ASM is also the DRC's most significant employment provider, with a fluctuating number of 500,000 to 2 million diggers (locally known as 'creuseurs' in the case of cassiterite and 'orpailleurs' in the case of gold) (World Bank, 2008, p. 60). Factoring an average of five dependants per miner, this 'coping' economy could provide a livelihood for up to one fifth of the Congolese population, or 12.5 million people. In North Kivu alone, a study published by CASM suggests an estimated 200,000 people are active in the sector (D'Souza, 2007), which would suggest an estimated one million dependants. While these figures give an idea of the scale of ASM, research conducted in 2010 suggests they may be even higher (Pact, 2010, p. 99):

"In an effort to try to get some data on levels of dependence on artisanal mining, we asked miners at all sites about the number of children they had and the number of 'dependants' (i.e. other family members who depended on them for financial support beyond their children. This was a random sample and not statistically significant. [...] The average number of direct dependants was 8.3."

The number of dependants is directly related to the structure of the ASM economy, which combines both a 'primary ASM economy', which incorporates actors directly involved in the mining activity, as well as a 'secondary ASM economy' that is dependent on the income generated by the primary ASM economy and works to provide support services and physical inputs into the primary ASM economy', such as mechanics, carpenters, and transporters. The graphic below shows this economy in concentric circles and serves to illustrate both the

levels of dependence and the relative importance of the sector in the context of rural economies.

Figure 1: ASM levels of dependency



I encountered a good example of this distinction between the two economic spheres in the Bisie mine in Walikale territory, the DRC's most significant cassiterite mine. The occupational diversity ASM provides translates into a mix of artisanal mineworkers from different social backgrounds and geographical areas. In the Bisie mine, an estimated 10.000 people live in the two support villages, Manoiré and Majoré, including the workers from the mining sites (interview with traditional authorities, Bisie, 2007). Women, girls, men and boys undertake a variety of activities both within the primary ASM economy and within the secondary ASM economy. In the secondary ASM economy, actors would work as a service provider to, or in

a support function to the primary ASM economy. Activities included selling food and general merchandise; for example, there were an estimated 200 trading stalls in the mine's support village Manoiré, each manned by 1 to 10 people. Other examples included transporting and trading cassiterite, or operating hair salons, local restaurants and nightlife venues. The existence of the secondary ASM economy is evidence that a significant amount of income earned in the primary ASM economy is reinvested in secondary economic activities, even though a greater percentage of the value added in the primary ASM activity is lost to inefficiencies in the sector, such as corruption and predation by authorities and armed groups.

The analysis of the coping economy' actors in this chapter and the way they are going about their livelihood focuses on structures and processes, which can help or impede the transformation of a person's livelihood into a sustainable or unsustainable one (Chambers and Conway, 1992). A commonly accepted definition of a sustainable livelihood is: "A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, without undermining the natural resource base" (Carney et al 1999, p. 8). The fact that ASM involves the extraction of a finite amount of minerals and metals, means that as an activity, it is necessarily unsustainable. That said, the resource base of the DRC suggests that deposits viable for ASM operations will not disappear in the short to medium term. For this reason, my analysis is particularly interested in the *social* sustainability of ASM as a livelihood choice. According to Chambers and Conway (1991, p. 6), "a livelihood is socially sustainable which can cope with and recover from stress and shocks, and provide for future generations."

In order to analyse the 'coping economy' actors in the ASM sector, I apply the Sustainable Livelihood Framework (SLF), developed by the United Kingdom Department for International Development (DFID), which places the individual, household or community and the issues of most concern to them at the centre of analysis (DFID, 2001). The SLF comprises five components, "which have multiple links between them. These components are the vulnerability context, asset profile, transforming structures and processes, livelihood strategies and livelihood outcomes. The social body, be it an individual or community is situated within a context of risks (vulnerability context). The person has the potential to act to either cope with or change these risks (livelihood strategies) according to the assets they have at their disposal (asset profile) and the structures and processes which ascribe value and meaning to these assets. By deploying the assets and pursuing a certain livelihood

strategy, the person can aim to achieve his/her desired livelihood outcomes. The SLF thus allows the researcher to build a picture of how people are affected by their physical and social environment (how the world works), how they cope with this environment (getting by in the world), and how they endeavour to change it (change the world)" (Levin, 2007, p. 12).

IVELIHOOD ASSETS Livelihood Outcomes **PORTFOLIO** + Income + Well-being + Vulnerability Policies, Institutions & Human Processes: household Natural Social neighbourhood Government central & local laws/policies culture **Private Sector Financial** Livelihood markets Strategies **Vulnerability Context** Shocks Trends Seasons

Figure 2: Sustainable Livelihoods Framework

Source: DFID, 2002

The SLA framework, presented schematically above, shows how the SLA works. "It does not work in a linear manner and does not attempt to provide an exact representation of reality. Rather, it seeks to provide a way of thinking about the livelihoods of poor people that will stimulate debate and reflection about the many factors that affect livelihoods, the way they interact and their relative importance within a particular setting. This should help in identifying more effective ways to support livelihoods and reduce poverty" (IFAD, no date, p. 2).

The focus on the coping economy' actors in this chapter is a direct consequence of the focus of my thesis on: what are the incentives for the different sets of actors partaking in the local

economies that facilitate 'conflict financing', focusing specifically on the mining and trade in 'conflict minerals'? If there are sets of actors whose incentive is not to wage conflict, nor to profit from conflict, then it is important to understand the externalities for such actors of IANGO advocacy-driven interventions to prevent 'conflict financing' through the predation on the mining and trade of 'conflict minerals'. The analysis in this chapter is key to answering those questions, particularly, as the analysis does not look at actors in the primary and secondary ASM economies as an anonymous productive force, but as potentially key stakeholders in process of sectoral reform and the transformation of their own livelihood into a sustainable one.

Why is this the case? In their account of conflict dynamics and natural resource extraction in the Kivus, Vlassenroot and Romkema suggest that to a certain extent, "the informalisation of the local extraction of natural resources could perhaps be explained as a democratisation of local mineral production" (Vlassenroot and Romkema, 2002, p. 10). The logic behind this statement would be that "the benefits of mining activities are no longer limited to multinational companies and national elites, but also spread to the grassroots level, creating a source of individual and household income" (ibid.). In a case study on cassiterite mining in Kalima for the Institute of Security Studies, Gregory Mthembu-Salter develops the argument that particularly at times of high commodity prices, ASM produced greater benefits for the miners as a result of higher employment levels; a greater per-ASM miner share in achieved prices, than per employee share under an industrial mining regime; and that a more democratic production structure leaves greater room for self-determination by the ASM miners (Mthembu-Salter, 2009). This argument ties in with Pact's observations, suggesting, "artisanal mining can be an important component of poverty alleviation strategies in mineral-rich countries, providing a livelihood for many who may not have means of income generation otherwise. Despite traditional perceptions, many artisanal miners do not fall into the category of being 'the poorest of the poor' but, instead, may earn significantly more than their non-mining rural peers. However, due to erratic spending habits and lack of a savings culture, artisanal miners still end up being poor" (Pact, 2010, p. 98).

The key argument I am making in this chapter is thus that ASM could probably be a sustainable livelihood, but currently falls short of this goal as a result of various dynamics and processes in the sector, both internal and external. The policy focus on 'conflict financing' (through the predation on the mining and trade of 'conflict minerals') means that

there is a risk (as opposed to an inevitable outcome) that the many operators sidelined in the 'coping economy' of the ASM sector will experience measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') more as another existential threat to their livelihood, rather than as assistance with the transformation of their livelihood into a sustainable one. The latter would be counterproductive in terms of poverty alleviation objectives in eastern DRC and would run contrary to the 'do no harm' approach elaborated by international and national NGOs in the early 1990s (CDA, 2004).

I present my discussion in four sections: The first section discusses the primary ASM economy, with a particular emphasis on the threats to the sustainability of activities in the primary ASM economy' as a livelihood choice. The second section discusses the costs of ASM activities, by examining socio-economic externalities for those involved in the primary ASM economy and those outside of the primary ASM economy. The third section analyses the secondary ASM economy to discern the level of economic diversification the primary ASM economy can bring about. An important part of that discussion is an analysis of alternative livelihood options and their relative competitiveness with livelihood options in the primary and secondary ASM economies. The fourth section concludes.

The primary ASM economy

In order to present the 'primary economy', I draw on a deeper discussion of the organisation of production at site level in the Bisie mine. While there are differences in the organisational structures in artisanal mines, the structure I observed in the Bisie mine is particularly illustrative and allows me to present the different roles of the primary economy actors to the reader. This section provides an overview of the actors in mining, the mining process, and the tools used for production. The analysis informs my overall understanding of the SLA components of the (local) vulnerability context, the miners' asset profile, local transforming structures and processes, livelihood strategies and livelihood outcomes. This analysis is particularly helpful to understand basic vulnerabilities and coping strategies.

Before production can start, prospecting is undertaken. Hunters, farmers, or former employees of industrial cassiterite mining companies, such as SOMINKI in the case of the Kivus, often take this first step in the ASM process (interview with traditional authorities, Bisie, 2007). The legend goes that in Bisie the initial surface deposit was so rich that, when a hunter discovered the mining site in 2002, a rush-mining situation occurred, where people

flocked to the site to literally pick cassiterite up off the ground (interview with Brian Christophers, MPC, Goma, 2007). More generally speaking, "it takes some expertise and experience to choose a site. If initial test digs are promising, the digger-prospector normally puts together a team of around ten people and seeks permission to prospect from the landowner and the 'local chief', who has customary rights to the land" (Pourtier, 2004, p. 14). Prospecting can then commence in a defined perimeter, in exchange for an agreed share (Ibid.). While this sounds relatively straightforward on paper, "in the prospection and mine development phase, significant effort and investment is wasted in digging non-productive holes which are then abandoned [which means] production is often as a result of luck and opportunism rather than judgment or sound planning" (Pact, 2010, p. 47). The latter suggests that those involved do not have a wealth of geological information to draw on when making their choice for prospecting sites, which explains, why areas where successful prospecting has been undertaken, an influx of significant numbers of artisanal miners can occur in a very short space of time, once the word has spread. I will expand on this point further below.

Where prospecting has been successful, several mine sites can spring up within a small geographical area. The Bisie mine, for example, comprises four mining sites, which are locally known as 'Chantier 5', 'Chantier 15', 'Gécamines' and 'Restaurant' (focus group with artisanal miners, Bisie, 2007). The mining sites are situated 5, 15, 35 and 45 minutes from Bisie's principal support village Manoiré. While the names 'Chantier 5' and 'Chantier 15' refer to the distance in minutes' walk to Manoiré, 'Gécamines' and 'Restaurant' refer to the productivity of the mining sites (Ibid.). 'Gécamines' is a reference to the parastatal company Générale des Carrières et des Mines, a former power-house of the Zairian economy in Katanga province and it is the largest and most productive mining site in Bisie (ibid.).

Bisie has highly productive and organised mine, with a unique occupational profile (Focus group with artisanal miners, Bisie, 2007):

- Chef de Collines are representatives of the 'owners' (see further below) of the tunnels, pits, etc. overseeing the mining;
- o Creuseurs are (in this case, cassiterite) miners;
- Pelleteurs clear the mining sites of rocks, soil and other overburden, depending on the mining method;
- o Petits négociants trade the mineral at the Gécamines mining site, and in the village

The mining is subdivided into alluvial, open pit and hard rock mining in 167 different pits, tunnels and alluvial sites (interview with geologist, MPC, Goma, 2007). Alluvial and open pit mining is undertaken on the surface; hard-rock mining is undertaken underground. The number of mining sites is roughly equally divided between the three mining methods; however, hard-rock mining accounts for the large majority of production volume, with an estimate of 75%, suggesting a far higher yield in the tunnels (Ibid.). The tunnels are named after their respective 'owner' or head miner. 'Papson', 'Makarios' and 'Safina' are the longest tunnels, all converging into a large cave called the 'Grand Salon' (focus group with artisanal miners, Bisie, 2007). The greater productivity of ASM in the tunnels is an incentive for the tunnel owners to drive tunnels ever further into the mountain; some an estimated 150 meters deep (focus group with artisanal miners, Bisie, 2007), which is far beyond the 30 meters stipulated as 'safe' in the DRC's mining regulations (Présidence de la République, 2003). With increasing depth, the mining becomes more precarious for those working in the tunnels, particularly as basic health and safety rules, such as wearing helmets, are not adhered to. Other safety hazards include mudslides, as well as naturally occurring CO₂ in the tunnels and also collapsing tunnels (Polgreen, 2008).

Considering these hazards, one could argue that the observed occupational structure signifies a complex organisational system operational in the mine that could be drawn upon to achieve safety and productivity improvements. Basic safety improvements could be brought about through extensive health and safety training and workers wearing helmets in the tunnels and open pits, as well as solid Wellington boots with protective toecaps. However, the latter stands in stark contrast to one of the principal reasons for ASM proliferation, which is that it is undertaken with basic tools and not in need of much technology. Any use of technology would critically depend on a power source, but power supply in Bisie is non-existent, except through small generators. Interestingly, however, a study highlights that the miners are making a conscious decision against wearing Personal Protective Equipment (PPE), for example. The reasons for this are related to the prevalent circumstances in the mine sites and include "(a) it can restrict their movements; (b) it can be hot and uncomfortable; (c) it is expensive and hard to get; (d) even if they can get it, it is hard to ensure that each miner can get the right size; and (e) it can be stolen" (Pact, 2010, p. 48). The lack of PPE can easily lead to accidents, highlighting the physical vulnerability of

those working in the tunnels.

The occupational profile is intertwined with the social structure prevalent in the mine. The four mining sites, 'Chantier 5', 'Chantier 15', 'Gécamines' and 'Restaurant' are associated with different mining techniques and differing social status. 'Chantier 5' and 'Chantier 15' are alluvial and open-pit mining sites, 'Gécamines' and 'Restaurant' are alluvial, open-pit and hard rock mining sites. The 'Gécamines' tunnels are the most productive and most hazardous production sites in Bisie, and therefore have the highest social status (two focus groups with artisanal miners, Bisie, 2007). It is considered "to be a privilege" to be able to work in the tunnels; socially unconnected new arrivals have to "work their way up" the 'social ladder' to be allowed to work in the tunnels (Ibid.). This process includes bribing, proving one's skill, becoming friends with the right people, doing the political bidding of others, and proving one's manliness (Ibid.). The latter suggests that not only an organisational order is observable, but also that a social order is being adhered to. ASM mining sites might therefore seem chaotic at first sight, but are in reality highly organised microcosms.



The GECAMINES site at the Bisie mine, © Nicholas Garrett, 2007

In the different mine sites in Bisie, I observed the creuseurs using simple tools and equipment for the different mining methods, such as hammers and chisels to chip away at the mountain, in narrow underground cassiterite galleries. Hammers are also used to crush the rock into smaller pieces, for transport. The battery-run torches are the sole sources of light, each with a pair of cheap batteries lasting up to three hours and requiring frequent replacement, which is thus an expensive element within the miners' sets of equipment. The pelleteurs fulfil a supporting role as they clear the mining galleries of waste rock and other overburden, and transport the ore to the tunnel exits. In the open pits, the creuseurs employ shovels, pickaxes and crowbars to break off soft-rock deposits; pelleteurs fulfil the same function as in underground hard rock mining described above. The production techniques are well-adapted to the physical environment, which, for example, lacks a source of power. However, "the lack of appropriate tools and techniques means that the level of labour invested in mining and processing minerals is [...] inefficient (Pact, 2010, p. 47). In other words, basic production techniques increase the miners' vulnerability, as more labour has to be invested than would be necessary, if the miners had access to better equipment, particularly mechanised equipment.

Water is essential for alluvial cassiterite mining and for washing the cassiterite ore. In case of insufficient rainfall, jerry cans are used to transport water to the mine from two nearby rivers, which is filled in a dugout pool. The ore is washed in the pool and a bucket is used for a separation process. The heavier ore sediments at the bottom of the bucket (author's observations, Bisie, 2007). Waste soil is then discarded and the ore collected separately. If it has rained sufficiently, a stream of water can be divided into several pools, where the same operation is undertaken. The ore-bearing sediment is subsequently further refined through a panning like ore separation process, producing a more valuable and higher quality product. Irrespective of the mining method, Tupperware, buckets and plastic flour bags are used to collect the cassiterite, which is then brought to the petit négociants who have helpers who fill the minerals into bags weighing 50 kilograms each. These are then transported on foot to Ndjingala and further on to Goma and/or Bukavu, as discussed in Chapter 5 on the shadow economy. While rudimentary, the production method demonstrates significant innovative potential and highlights that those involved in the 'primary ASM economy' have learned ways of reducing their vulnerability, despite the odds being stacked against them.

Earnings

In international research and policy circles ASM is often discussed as "a poverty-driven activity" (Hilson 2006, p. 1). In the same vein, much literature defines ASM as an activity largely reserved for marginal social groups, such as ex-combatants, orphans, or the rural and urban poor (D'Souza, 2007; Global Witness, 2005). Interview data from the Bisie mine suggested that an estimated 35% of interviewed artisanal miners had enjoyed some form of education (10% university/25% more than six years at school) (interviews with traditional authorities, Bisie, 2007; 2 focus groups with artisanal miners; interviews with 25 individual artisanal miners, Bisie, 2007). In Durba in Watsa territory, on the other hand, a focus group with artisanal miners suggested that many of the ASM gold sites have become host to large numbers of inexperienced people offering poor services and receiving limited earnings in return (focus group, artisanal miners, Durba, 2009). While these findings would support the notion of a 'poverty-driven' sector, further interviews suggested to me that ASM – at least in the context where I encountered it in Walikale and Watsa – is only partly poverty-driven, with only one-third of interviewees in the Bisie mine in Walikale indicating they originally started the activity as a last-resort income generator. However, just over half of all interviewed artisanal miners - and in particular those with some form of education indicated that they originally started the activity because of the prospect of 'quick money' (two focus groups with artisanal miners; interviews with 25 individual artisanal miners, Bisie, 2007). As I shall explain below, the two notions are in fact complementary. ASM offers an attractive opportunity for people living in poverty, particularly in a context of limited competitive alternatives. Insecurity, on the other hand, particularly in the case of Walikale, was a key driver behind the notion that ASM is required to make 'quick money', suggesting that alternative income opportunities, such as agriculture took too long to mature and are therefore not suited to the context at hand.

The idea of getting rich quickly, often referred to as a 'casino mentality' is in the context of eastern DRC linked to the destruction of other livelihood strategies by conflict and insecurity, as well as external market developments, such as the colombite-tantalite (coltan) rush in the years 2000 and 2001, when prices skyrocketed to US\$ 380 per pound on the back of a perceived supply shortage (Hayes and Burge, 2003). At the time, artisanal miners were earning considerable sums, but coltan prices have since collapsed, and cassiterite has become North Kivu's principal export commodity. The coltan rush, however, firmly cemented ASM as a livelihood strategy in the minds of countless men and women in the

province. In fact the lure of the prospect of getting rich quickly also attracted a significant element of migrant labour to the gold mines in Watsa territory (focus group with artisanal miners, Durba, 2009). At the time of research in North Kivu in 2007 and 6-7 years on from the coltan rush, the minerals and metals trade was the most important economic activity in eastern DRC, larger than the disposable income expenditure of the numerous humanitarian organisations in the local market, and generating the necessary hard currency to sustain the region's import-dependent economy (Bavier, 2007). An overall analysis of my interview data from both Walikale and Watsa territories suggest that both in Walikale and in Watsa a significant proportion of economic activity was dependent upon ASM, either as a directly-related activity to ASM, or as an activity dependent on the disposable income ASM would generate. Any impact that would reduce the disposable income from ASM in particular would have a significant negative knock-on effect on the local and regional economy. I discuss this in greater detail below and also refer back to this point in Chapter 6.

Despite this prominence of ASM in the local economy, it is important to look into actual earnings of the primary ASM economy actors in more detail in order to shed some light on what remains an ill-understood part of the ASM economy. Prior to drawing on my own observations, I would therefore like to present below the findings from a field study carried out by Pact, which provides an idea of earnings and spending patterns observed by primary ASM economy actors. While they are "neither comprehensive nor standard" (Pact, 2010, p. 98), they present some interesting context for the further analysis and support my argument later in this Chapter that ASM is relatively more attractive than other available income earning opportunities:

- o "In Kalehe, artisanal miners working in a reasonably productive mine would expect to produce around 5-6kg of cassiterite per miner per day. This has a trade price of around \$25. Of this, after the various taxes, etc, the artisanal miner might keep half;
- o In Orientale, orpailleurs working in a reasonably productive mine would expect to produce around 1g of gold per day (at around 90% purity). This is a conservative average to balance out the days when they don't produce anything. This would have a trade price somewhere around US\$28. Of this, they probably keep less than half;
- A teenager (under 18 years old) crushing cassiterite rock in South Kivu is paid 5,000 CFR (US\$5.80) to crush one 6-8kg sack of rock. He can usually crush one and a half sacks per day so earning a gross US\$8.70 per day. He pays a range of taxes on this,

- including 500 CFR (US\$0.60) for the rental of the hammer to crush the stones;
- o In a gold mine in South Kivu, it was reported that each gram of gold is split: 30% for the Mwami, 35% for the PDG, and 35% for the team of miners. In this case, each miner is probably getting around 7% of the value of each gram (US\$2) but the team will produce several grams per day together;
- o In Kolwezi, Katanga, projects to create alternative employment for artisanal miners need to offer around \$5 per day, on a contract with other benefits, to be attractive;
- In Twangiza, South Kivu, a minimum of \$4 per day needs to be offered to be attractive;
- Daily (casual) labourers working at a cassiterite depot in Goma filling 600kg drums with material for export are paid US\$5 per day. Over one hundred men queue up outside the gates every day hoping to be chosen for work;
- o Gold miners at a site in Orientale reported that when a gold mine is at a good level of production, an average of four bottles of beer (\$5), cigarettes (\$1), telephone units (\$3), and a visit to a casual prostitute (\$6, more for a 'favourite regular') would be considered a daily minimum for personal expenses over and above paying for food, household costs, etc." (ibid.)

Before analysing the implications of these observations in greater depth, I would like to add to this list my research findings from Walikale territory. The Bisie mine operations have an elaborate informal 'ownership' structure. Under this structure, proceeds of production from certain tunnels or pits directly accrue to private 'owners', who can be distinct from the concessionaire (interview with traditional authorities, Bisie, 2007). In the Bisie mine there are said to be 29 pits, which armed actors were operating, remotely controlled by known senior commanders (Tegera and Johnson, 2007, p. 46). While I was unable to verify the exact number of pits, two focus groups with artisanal miners confirmed this general pattern, and added that the direct involvement of the military in the mining activities stretches far beyond mere ownership of the pits (two focus groups with artisanal miners, Bisie, 2007). I explore military involvement and predatory aspects of mine control in depth in Chapter 4 on the war economy. The informal ownership structure has specific implications for the miners, in that only five to ten per cent of the miners in alluvial and open-pit mining work independently in groups of up to five people (ibid.). These independent miners share their production amongst themselves as currency. All other workers on the mining sites (pits and tunnels), i.e. creuseurs, boiseurs and pelleteurs, are not employed, but are paid for their

labour in cassiterite by the owner of the respective pit or tunnel, through his resident representative, the *Chef de Colline* (Ibid.). The income-earning potential of those involved in the primary economy was reported as per the bullet points below (Ibid.). It has to be noted that, as with Pact's data above, this sample is not representative, but presents a snapshot:

- Creuseurs: The creuseurs in Walikale estimated they can earn up to US\$ 10 on a productive day, which equated to 3.3 kilograms of cassiterite in mine site prices (2 focus groups with artisanal miners, Bisie, 2007). While the miners suggested that their actual daily production can reach a value of US\$ 100, they conceded that on average they do not produce as much cassiterite ("travaux lourds"), and that high prices of inputs in the mine (prices were at the time of research about 10 times higher than in the territorial capital, Walikale), and factoring predatory taxation by the military, state authorities and traditional authorities (see Chapter 4) further reduced their income to the point where they are able to keep half or less of their earnings.
- Orpailleurs: In Watsa territory, a focus group in Durba suggested the miners earn anything between half a gram and a gram of gold per day in a productive mine, which at the time equated to between US\$ 15 and 30 (focus group with artisanal miners, Durba, 2009). However, as with the miners in Bisie, not all miners were in the privileged condition where they were always working in a productive mine. While taxation from OKIMO, state and traditional authorities reduced their income; they were nevertheless able to retain a larger proportion of their income, by virtue of Durba being more accessible than the Bisie mine in Walikale, for example. This had a positive effect on local prices, with greater competition between traders pushing prices downwards.
- Pelleteurs: Under the same external conditions in the Bisie mine, feedback from the focus groups suggested pelleteurs could earn between US\$ 0.5 and US\$ 3 (Ibid.).
 Many pelleteurs hope to become creuseurs (two focus groups with artisanal miners, Bisie, 2007). I was unable to establish reliable income brackets for pelleteurs in Durba, but the income differential observed in Bisie is likely to be similar in the case of Durba, considering the artisanal miners that participated in my focus group spoke of pelleteurs as a lower income-bracket group.

The observed organisational structure was also reflected in earnings redistribution. While independent workers tended to split their proceeds equally across professional groups (i.e. creuseurs, pelleteurs et cetera), dependent workers tend not to (ibid.). A pattern that was relayed to me in the focus groups is that in alluvial mining a fixed percentage of production per day is set-aside for the workers, of which the owner's representative receives twosevenths, the creuseurs receive three-sevenths and the pelleteurs receive two-sevenths (Ibid.). The production over and above the fixed percentage set aside goes to the mining site owner (Ibid.). The size of the fixed percentage set aside for the workers differs by mining site and within their respective professional groups (i.e. creuseurs, pelleteurs...) the workers tend to split their proceeds equally (Ibid.). The way proceeds are split demonstrates both a hierarchy and a coping strategy that suggests that there is a clear realisation by all parties that at the end of the day everyone must benefit from the operation, as otherwise the complex socio-economic equilibrium (however low-level it may be) is at risk of collapse. This mirrors observations of other authors, particularly in the context of urban informal activity. Tripp, for example, suggests, "the rationale underlying this economy of reciprocity and mutuality is a sense of community: its participants share a common plight, in which survival is paramount, and everyone's survival is contingent on the survival of the others. The only way to ensure survival is to assist, share, and take care of one another [...]" (1997, p. 127).

The data from the Bisie mine and my research in Durba compares well with the earnings data established by Pact, which I presented above. It suggests that actors in the primary ASM economy earn an income. The earnings analysis allows me to infer two findings:

Firstly, work in the primary ASM economy pays more than other available income-earning opportunities in the rural economy that are, in turn, not dependent on the income generated by the primary ASM economy for their viability. The logic behind this statement is that there are a number of livelihood opportunities available to the people in Walikale and Watsa territory that may earn a good return, but require primary ASM economy income earners to expend their income. These livelihood opportunities would include, for example, those who rent accommodation to primary ASM economy actors. Livelihood opportunities that are viable independently of the disposable income derived from ASM, such as agricultural activities, fetch less than what actors in the primary ASM economy can earn and also less than those livelihood opportunities that directly cater to the primary ASM economy

actors. For example, a household survey for a gold-bearing area in Orientale Province, seen by the author, suggests trades from agricultural production can earn a household on average US\$ 6/day at a household size of 6.2 persons per household. This would suggest a perperson earning of less than US\$ 1/day (Household Survey, 2010). This level of income matches the low rural incomes suggested by statistical data, which puts the estimated GDP per capita at US\$ 400/year for 2011, which suggests just over US\$ 1/day (CIA Factbook, 2012, p. 1 of 3).

Secondly, the data suggests that actors in the 'primary ASM economy', since they earn 3-10 times more than, for example, a subsistence farmer in eastern DRC, should have enough income to participate in processes to transform their livelihoods from an unsustainable one into a sustainable one. The latter is particularly the case if external factors that reduce their income-earning ability, such as economic predation, could be removed. These findings from my research are also mirrored in other studies from other jurisdictions. Pact, for example, paraphrases a 2009 study by the Center for International Forestry Research and the International Union for the Conservation of Nature on the Congo basin, which suggests (Chupezi, et al, 2009, quoted in PACT, 2010, p. 101):

"mining incomes were spent on six basic needs, primarily food, with considerable proportions spent on education of children, purchases of clothes, construction of houses. The researchers considered that artisanal mining income in the study sites was already being used to increase the possibility of meeting the Millennium Development Goals of reducing poverty and meeting basic needs. Still, it is clear that a considerable proportion of ASM income is also spent on alcohol, drugs, and consumer goods, such as radios and televisions. However, the fact that appreciable proportions of miners were actually losing income implied that artisanal mining could also be treated as a risky business in alleviating poverty under prevailing socioeconomic and institutional arrangements".

It is therefore important to contextualise the income-earning opportunities of the actors in the 'primary ASM economy' with prevalent threats to their income. An understanding of the threats to earnings will allow for a more balanced discussion of whether activities in the 'primary ASM economy' are socially sustainable or not.

Threats to earnings

Actors, both in the primary and secondary ASM economy, face numerous threats to earnings. These threats are often conditioned by the institutional framework governing the sector, the broader security and socio-economic dimensions at play in the geography at hand, but also those inherent in the activity itself. While a comprehensive discussion is beyond the scope of this chapter, I will focus in the following sections on the legal status of ASM actors, lack of access to credit, debt and economic predation.

Legal status

The legal status of primary ASM economy actors can be a threat to their earnings potential, as illegality, where applicable, increases their vulnerability and makes them susceptible to rent-seeking and other forms of abuse. I discussed in the Introduction chapter how the *Mining Code* is out of touch with realities in the ASM sector. In fact, the *Mining Code* predominantly creates obligations for the weakest component in the trading chain, which is the artisanal miners, instead of imposing the heavier burden of compliance upon the more powerful actors further down the value chain (Eklund, 2007). This compliance burden means that it is often impossible for ASM actors to comply with statutory law in the first place. This means ASM often exists in a realm outside of the law, rather than in deliberate violation of it. The non-promulgation, non-application, and non-enforcement of statutory regulations contribute further to artisanal miners' inability to comply with the law, even if they wanted to (Garrett, Mitchell and Levin, 2008).

An example of such a legal paradox from the production level is the allocation of artisanal mining zones (AMZs). The *Mining Code* authorises the Ministry of Mines to designate AMZs in which ASM is permitted, so long as industrial or semi-industrial mining is not feasible (Présidence de la République, 2002, Art. 109). Artisanal miners have the right to exploit an AMZ on a renewable one-year basis, if they are listed in their artisanal miner's card (see below). At the time of my research in North Kivu in 2007, *operational* AMZs did not exist (interview with representative of World Bank, Kinshasa, 2007). At the time of my field research in Orientale Province in 2009, three AMZs had been designated, but none of them were in Haut Uélé (interview with representative of World Bank, Kinshasa, 2007). This was later confirmed by research undertaken by Pact (2010, p. 154). The absence of AMZs presents a legal conundrum for the primary ASM economy operators, as it contributes to

their marginalisation. Importantly, even where AMZs have been established they do not provide long-term security of tenure.

The *Mining Code* stipulates that if recommended by the Geology Department (*Direction de Géologie*), AMZs could be closed, so long as the factors upon which their creation was originally based have ceased to exist (Présidence de la République, 2002, Art. 110). The artisanal miners are then obliged to vacate the AMZ within sixty days of notification. In case artisanal miners intend to upgrade to small-scale mining, priority in title allocation is granted to resident mining communities. They are given a thirty-day period to apply for a title after the closure of the AMZ (Ibid.). This means that even if AMZs existed and were operational, the simple mechanism to close the zones and the license duration restriction to one year mean there is insufficient tenure security to apply for credit or justify productivity-enhancing investment into ASM, such as mechanisation. The *Mining Code* further confounds the empowerment of mining communities by erecting insurmountable barriers to entry into the formal economy. Expecting an artisanal mining community to apply for a mining title within 30 days of closure of an AMZ, for example, is nonsensical bearing in mind that applications would need to include, amongst other things, proof of financial capacities, a feasibility study and an environmental impact assessment (Présidence de la République, 2003).

Another example of the *Mining Code* not being applied and miners having little knowledge of the statutory law is the artisanal mining license, the *carte d'exploitant artisanal*. In the Bisie mine, two of 25 interviewed creuseurs had a card, valid for their mining area (two focus groups with artisanal miners, Bisie, 2007). In Durba, 7 of 14 interviewed orpailleurs had a card (focus group with artisanal miners, Durba, 2009). The cards are issued for an annual fee between US\$ 25 in Goma and US\$ 35 in Walikale (interview with representative of Provincial Division of Mines, Goma, 2007) by the provincial Division of Mines, which undermines their proliferation, as the costs are perceived as high. The widespread adoption of the card is further impeded by the remoteness of many mining areas, and the requirements for compliance with health and safety regulations and environmental provisions, which are hugely unrealistic under the prevalent conditions in the sector. In other words many provisions made in the *Mining Code* are also direct barriers to its promulgation and enforcement. The prevalent legal provisions therefore present a threat to the sustainability of ASM as a livelihood, as they marginalise those active in the 'primary ASM economy', which makes them susceptible to corruption and predation.

Lack of Access to Credit

Considering the lack of economic means of many of the actors in the 'primary ASM economy' as they enter the sector, many are dependent on credit to start operations. There are differing stories as to how much finance is exactly required to develop an ASM operation, but it is expensive considering the economic context and the high rate of unsuccessful prospecting. In a study published in 2010, it was reported, "one *Chef de Chantier* has invested around \$5,000 in one year in a pit which is still non-productive and, during that time, he has to support the miners who are digging the pit plus he is accumulating interest due to the investor. Another *Chef de Chantier* had invested \$1,500 and, now that the mine was in production, he was repaying that with an interest rate of 10% per month" (Pact, 2010, p. 103). In the Bisie mine, a *Chef de Chantier* relayed to me that he had invested US\$ 20,000 into a tunnel, with costs rising due to the remote location of the mine as well as the need to "pay off the military, the chief and the local authorities" (interview with Chef de Chantier, Bisie, 2007).

The evident need for finance is not matched by finance availability through traditional lending channels, such as banks, particularly as ASM as an activity does not pass several key elements of a credit check, which is a pre-requisite to convince traditional lending institutions that there is a case for return on investment or at least no risk of default. These include "migratory lifestyles, lack of land tenure, marginal legal status, and the social challenges associated with artisanal mining, along with poor (if any) financial and business planning skills. Mining areas may be remote, the mines may have a limited lifespan, and the sites often fall outside areas targeted by development programs. ASM is generally carried out with little access to geological assessment skills with which to identify or confirm the scale or value of the resource" (Pact, 2010, p. 103).

As the ASM economy cannot function without credit and because traditional financing options are limited or non-existent, a market has opened up for higher risk-taking private investors. These demand higher interest in order to make up for their risk exposure. In both Watsa and Walikale, focus groups with artisanal miners suggested that there are two principal set of actors financing mining activities: a) traders and b) businessmen based in the cities (two focus groups with artisanal miners, Bisie, 2007; one focus group with artisanal miners, Durba, 2009). The traders pre-finance mining activity and secure offtake agreements

in return (Ibid.). The businessmen normally work through an intermediary based in the locality to recover their initial investment plus interest (Ibid.). Both forms of financing pose a threat to earnings of those in the 'primary ASM economy, principally due to high interest repayments and spiralling debt, in case there are challenges with the mine such as a lack of production. I discuss the debt issue below.

Debt

Workers in the primary ASM economy are, according to my interview findings, subject to two principal sources of debt. The first one is pre-financing of mining activities and the second are high local prices for mining inputs and subsistence (two focus groups with artisanal miners, Bisie, 2007; one focus group with artisanal miners, Durba, 2009). The pre-financing of activities through traders or businessmen, as described above, presents a challenge for workers in the primary ASM economy, particularly in the context of gold ASM, where findings are less predictable than in the case of cassiterite ASM. In both cases, it can take a significant amount of time and resources until a viable deposit is located and brought into production. While some endeavours never produce a return, built-up debt remains (Ibid.). The exact amount of debt was difficult to determine, as responses differed, but judging from the required investment (see previous section), it is fair to say that it is likely to be thousands of US dollars in some cases.

The debt from pre-financing is confounded by debt arising from local inflation. "Economies around mines often suffer price inflation which increases the cost of living, making it difficult for people to survive outside of the mineral economy" (Pact, 2010, p. 100). This means that while workers in the primary ASM economy are not guaranteed to have a predictable income stream, particularly in the case of gold, they are forced to consume at inflated local prices. The traders, or *commerçants*, are frequently aligned with, or pre-financed by, the same mineral traders who have secured offtake agreements from the ASM operations (two focus groups with artisanal miners, Bisie, 2007), which would suggest that the traders based in the cities benefit both from the trade in 'conflict minerals', but also from the trade in consumables and mining inputs. In the case of the Bisie mine, traditional authorities said, the whole territory of Walikale is dependent on the cassiterite trade, as it is the primary source of income in the territory and transport of basic consumables into the territory would not be worthwhile for the traders, if they were not able to fill their trucks or plans with cassiterite on the return leg (interview with traditional authorities, Bisie, 2007).

The high debt level is one reason why many interviewed miners concluded that their activity actually erodes their physical assets or at least prevented them from building up their asset base (two focus groups with artisanal miners, Bisie, 2007; one focus group with artisanal miners, Durba, 2009). In the case of the Bisie mine, a proof of this aspect is up to 10 pawnshops in the support village of Manoiré - the so-called 'Banque Lambert' - where miners pawn anything from radios to their Wellington boots (ibid.). In the case of Watsa territory, the distinct lack of permanent construction in Durba town, for example, may be a case to support this notion, but it cannot be ruled out that proceeds are either invested elsewhere or simply accrue at a different stage of the trading chain (see Chapter 5).

I was unable to get reliable data on individual debt levels in Watsa territory, but a secondary source provides an example: "one *orpailleur* told us that he had a debt of 12 *kitcheles* (14.4g) due to a trader in the town. He had paid off 2 kitcheles (2.4g) and still had to return 10 (12g) at a rate of 1 *kitchele* (1.2g) per week" (Pact, 2010, p. 103). This demonstrates that interest payments can be very high and put those in debt under considerable pressure to find, in this case, gold. A debt mitigation strategy, which I observed in the Bisie mine, suggests that within their limited scope to manoeuvre, the workers have developed a 'roving savings system' as a strategy to build their asset base in the face of adversity. Within their groups, everybody donates the maximum possible share of their monthly income to a fund. The fund goes to a different team member each month, helping them to, for example, buy more expensive gear, such as Wellington boots (two focus groups with artisanal miners, Bisie, 2007; one focus group with artisanal miners, Durba, 2009). This is a clear indication of the resilience and creativity the artisanal miners respond with, when faced with livelihood risks and constraints (Levin, 2007, p. 73).

Economic Predation

A detailed tax regime for the ASM sector exists, but is rarely enforced due to capacity constraints on the sub-national level and corruption (interview with Ministry of Mines representative, Kinshasa, 2009). "The categories of tax applicable to artisanal mining and trading are laid out in the Mining Regulations. The Mines and Finance Ministries, through an Inter-ministerial Decree, jointly determine the rate, the base and methods of collection of the duties, taxes and fees applicable to small-scale miners, to dealers and to approved trading post as well as the applicable penalties for contravention" (Pact, 2010, p. 84). That

said, while the formal tax regime is rarely enforced, actors in the primary and secondary ASM economies are often victim to illegal rent-seeking, which can also be described as economic predation. At the present stage of development of the ASM sector, artisanal miners, both in Walikale and Watsa territories, described economic predation as a greater threat to their earnings than the formal taxation regime (two focus groups with artisanal miners, Bisie, 2007; focus group with artisanal miners, Durba, 2009).

While Chapter 4 of this thesis deals with conflict financing (through predation on the mining and trade of 'conflict minerals'), the discussion in that chapter is largely limited to armed groups, including the FARDC, preying on the mining and trade of 'conflict minerals'. This is, however, not the only form of economic predation threatening the earnings of the actors, particularly in the 'primary ASM economy'. An example from the Bisie mine is illustrative. There are two types of cassiterite sold in Bisie: the relatively rare and hard-to-extract 'black' or 'fine' cassiterite has a higher tin content than 'red' cassiterite. 'Black' cassiterite is found in alluvial mining, whereas 'red' cassiterite is found in open-pit and hard rock mining (two focus groups with artisanal miners, Bisie, 2007). In Bisie mostly independent alluvial miners produce very small amounts of 'black' cassiterite, which they sold at the time of research at a rate of US\$ 4/kg, to petits négociants in the mining sites and in Manoiré (Ibid.). The base price per kilogram of 'red' cassiterite in Bisie at the time of research was US\$ 3/kg (Ibid.). This data suggests over 30% of total export value is added in the mine. This is revealing when juxtaposed with the estimated earnings of up to US\$ 10 per day per miner, which I introduced above. While inflated prices in the locality and debt repayments eat into earnings, there were also accounts of economic predation, including forms of taxation that are not recognised in statutory law (ibid.). Interview data from the Bisie mine suggested up to 70% of value added in the mine directly accrued to 'big men' in military, business and politics, remote controlling those who are in control on the ground; however, it is difficult to determine the extent of the financial flows beyond local economic predation accruing to, for example the armed groups, as I have done in Chapter 4. In the Bisie mine, an armed group, statutory and traditional authorities were all collecting 'illegal taxes' from the mining and transport of cassiterite on a significant scale. This is mirrored by findings by a research report published in 2010, which provides the following examples for another mine (Pact, 2010, p. 87):

- "The miners pay the production of 2 hours work per week to the FARDC;
- They pay the production of 2 hours work per week to the Chef de Groupement;

- One full day's work per week has to be given to the Mwami [Chief];
- 30% of each day's production has to be given to the Mwami [Chief];
- Each trader pays US\$5 per month to the Mwami [Chief] as a licence to trade."

In Watsa, I was unable to directly observe unauthorised rent seeking, but it is said to still exist. An interview with a representative of the local arm of the Congolese Chamber of Commerce (FEC), suggested that the parastatal gold mining company OKIMO, for example, was collecting a 30% tax on artisanal gold production across the parastatals' concession areas in Haut Uélé and Ituri districts (interview with FEC representative, Watsa, 2009). However, a focus group with artisanal miners, suggested that the collection of the 'tax' was not well organised and most ASM operators sought to avoid paying up (focus group with artisanal miners, Durba, 2009). Tax-avoidance strategies can, in the context of the ASM sector, be seen as a coping strategy, if adherence would put the viability of the ASM livelihood choice at risk; however, as I shall explain in Chapter 4, tax avoidance is not always a viable strategy, particularly if ASM activities are carried out under military guard.

Taking into consideration the issues of legal status, a lack of access to credit, debt and economic predation, it becomes apparent that the ability of the workers in the ASM economies to use their earning potential to transform their livelihood from an unsustainable one into a sustainable one is undermined by several threats, some of which are not inherent in the actual ASM activity. This suggests that with the right combination of external assistance, focused on long-term processes to transform the external environment and shorter-term interventions to directly assist the miners in making their livelihood choice safer, livelihood sustainability should be achievable, even though it is evidently a significant task. That said, the ASM sector does not exist in isolation and externalities of the activities therefore need to be taken into consideration, particularly when assessing the social sustainability of ASM as a livelihood choice. The following section therefore looks at the social costs of ASM. The analysis suggests the activity, as carried out at the time of my research, may also negatively affect the livelihood sustainability of others, who are subsisting outside of the 'primary ASM economy'.

Cost of ASM Livelihood – Socio-Economic Externalities

The previous section has highlighted a number of challenges to ASM as a sustainable livelihood, which are either external to, or inherent in the actual activity. The following

sections discuss the social sustainability of ASM as a livelihood choice, taking into considerations the externalities generated by the ASM economy as it functions in the contexts I have observed during my research for this thesis. The discussion here focuses on socio-economic externalities. While ample literature is available that discusses issues of environmental sustainability, such as mercury and cyanide usage, for example, I will limit the analysis to social sustainability, as per the frame for this chapter. Prior to the discussion, I would like to highlight once again the two principal socio-economic advantages provided by ASM activities. The first advantage is that ASM provides an income-earning opportunity for a significant number of people; in fact, far greater than the industrial mining sector could ever employ, considering its capital-intensive mode of production. The second is that the sheer number of people finding an income-earning opportunity in the ASM means that much of the disposable income is spent locally, which has led to, for example, one major mining company in Tanzania suggesting, "we are at risk of losing our 'social license to operate' to the ASM actors, as they provide more direct benefits to the local community, than we do" (interview with mining company representative, Mining Investment INDABA, Cape Town, 2012). However, these aspects have to be taken into consideration also in the context of negative socio-economic externalities, which I discuss below. Some of these are influx, child labour, gender issues and sex work. This is not a comprehensive list and it does not have to be. The rationale for the focus on those four areas is that those four areas are commonly quoted issues in the ASM context (Hentschel et al, 2003) and they were issues I was able to gather data on in both Walikale and Watsa territories. In fact, a study on the ASM sector in the DRC suggested, "whilst these are issues pervasive across the DRC, they are heightened in the case of the artisanal mining sector due to the migratory, opportunistic and relatively self-governed manner in which this economic activity takes place" (PACT, 2010, p. 90).

Influx

Successful prospecting or shocks to ASM operations in other areas, such as embargos, can spark a rush-mining situation, where an influx of people overwhelms an area. "The influx can occur quickly; many thousands of individual miners can appear in a matter of months" (CASM, n.d., p. 11). In the Bisie mine, focus groups with artisanal miners highlighted that the majority of miners originated from Bukavu (two focus groups with artisanal miners, Bisie, 2007). It was further suggested that most belonged to the Bashi ethnic group, dominant in the Bukavu area, which had a longer tradition and greater expertise in ASM than the local population in Walikale territory (ibid.). While the Bashi were dominant, there were little

conflicts reported between new arrivals and those living in the established mine support villages in Bisie (ibid.). New arrivals announced their arrival with the traditional authorities and were obliged to work in line with the established social structure in the mine sites, which I had discussed further above (Ibid.). The case of the Bisie mine is unique, however, in that it was a Greenfield site in the middle of the jungle, where no established community had been present prior to the arrival of the first artisanal miners in the early 2000s. Since then, the number of people occupying the site has swelled to an estimated 10,000 at the time of my research in 2007 (interview with traditional authorities, Bisie, 2007; interview with MPC representative, Goma, 2007).



Influx often leads to temporary structures being erected, @Nicholas Garrett, 2007

Since influx places considerable pressure on existing social services and infrastructure, primary ASM economy workers settling in an area, such as an existing village, where a community is already residing, may result in conflict (Hentschel et al, 2003). In fact, according to my own observations in ASM sectors in over 25 countries, existing villages can be overrun in an influx situation, with existing infrastructure quickly transformed into a camp-like structures, boasting temporary housing and makeshift market stalls. My observations in Watsa territory, particularly in Durba, suggest that hardly any permanent structures had been erected and the sheer number of primary ASM economy workers

arriving overwhelmed the existing infrastructure. The influx of significant population groups can also lead to upward pressure on prices, particularly on food prices; this fuels localised conflict, particularly with elements of the local population that are not actively involved in the ASM sector, and who are thus excluded from the income-generating opportunity it provides. The latter was observed in Walikale territory in particular (interview with representative of the territorial administration, Walikale, 2007). These developments related to influx are of critical importance in my analysis of IANGO advocacy-driven measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') and I will therefore return to this point in Chapter 6. It is also of note that the emergence of a local ASM-driven economy can "draw people away from their traditional livelihoods, delivering short term economic benefits at the expense of their other, possibly more sustainable livelihood strategies" (PACT, 2010, p. 101). In the same vein, it is important to also take into consideration the direct and damaging effect ASM-related migration has on the traditional extended family structure (D'Souza, 2008, p. 17):

"The extended family is a strong social security institution in the DRC, taking care of orphans, the elderly and widows. However, this crucial structure often disintegrates when the male miners have to travel far from home and are away for indefinite periods of time. The remaining female-headed households have to cope without their husbands for long periods and live in hope that they will send money back or return themselves soon. Some of the occurrences of child labour in ASM can be attributed to the fact that women in some areas are forced to bring their children along to work – even if just petty trading near the mining sites".

Taking the influx issue into consideration, it is possible to say that ASM can itself, in fact, be a 'shock' to existing livelihood configurations, which undermines the social sustainability of the sector.

Child Labour

From a social sustainability perspective, child labour is another negative externality of ASM that I was able to observe. The DRC is signatory to a number of child protection directives, such as the UN 'Convention on the Rights of the Child'; the International Labour Organization (ILO) 'Worst Forms of Child Labour Convention'; and the Organization of African Unity (OAU)'s Charter on the Rights of Children (D'Souza, 2007). In addition, there is a special Ministry of Social Affairs that has mandate over children (Ibid.). According to the

Congolese Labour Code, the legal age of employment is 18. "Employment of children at the age of 15 or more is allowed only if the Inspector of Work and the child's parents give permission. The writings of the law are, however, of limited use, since most children in the ASM sector are not formally employed" (Présidence de la République, 2002a; Loi no.015/2002 du 16 octobre 2002 portant Code du Travail, Exposé des Motifs, and Article 133, cited in Global Witness, 2006: 32; Pöyhönen and Simola, 2007: 31). A study suggests, "in some mines visited during the course of this study, up to 40% of the workers on any site could be considered children (acknowledging that it is hard to tell exact ages for teenagers between 16-19 years of age)" (Pact, 2010, p. 90). This can be contrasted with suggestions from a donor representative at an OECD conference in November 2012, who had conducted multiple mine-site audits in the context of one of the certification schemes I discuss in Chapter 6. The donor representative suggested, "child labour is not the most critical challenge of the ASM sector in the DRC and there are much more urgent issues to focus on" (conference contribution by donor representative, Paris, 2012). There is thus some contestation even in policy circles over the relative importance of child labour as an issue in the DRC's ASM sector.

In Bisie in 2007, I was unable to observe children that looked under the age of 10 in the mining sites, only sporadic ones that looked between 10 and 15 years old, but several children that could be between 15-18 years old. These observations were confirmed by two focus groups with artisanal miners held in the mine. While the older children could be found in narrow cassiterite alleys, younger children were engaged in alluvial mining and 'washing' of minerals, as well as in the transport of cassiterite (Author's observations, Bisie, 2007). In Watsa territory, I was unable to observe child miners; a focus group with miners in Durba suggested that children were not involved in the primary ASM economy (Focus group with artisanal miners, Durba, 2009). The miners explained this with the presence of OKIMO representatives in the areas, as well as more advanced policing, along with it being perceived as socially unacceptable to work with children (Ibid.). While these findings are indicative, I am not saying that there is no child labour in Orientale Province's ASM sector. The reasons for child labour are diverse and can include the following (PACT, 2010, p. 92):

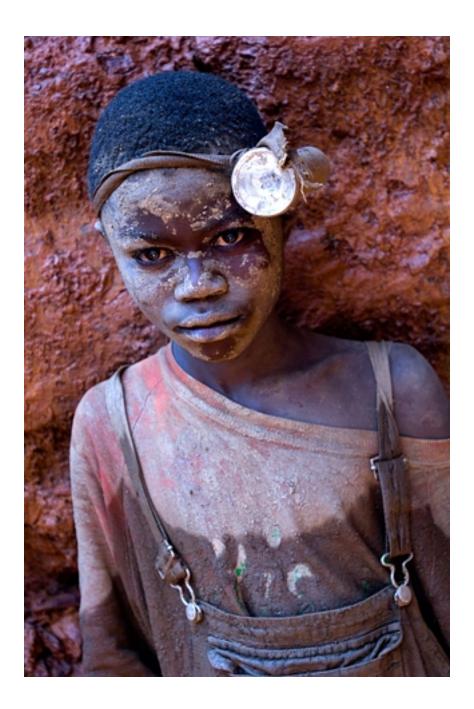
"The reasons why children work in mining in the DRC vary considerably. From a young age, infants and very small children may be brought to the mines because their parents (notably their mothers) work there. Children who spend their early years in the mines quickly become habituated to it and their transition from playing

on the edges to starting to work may occur almost un-noticed or through assumption that that is the natural course of events. In many cases, they work in the mines through economic necessity, either to contribute to their family in-come or for personal survival if they live alone. In some cases, children may be forced to work if a mine is under military control or if they have to service a debt, which their parents incurred. Many mining areas are remote and have very limited, if any, education facilities therefore children have few possibilities to go to school instead of working, even if they could afford it. In other (rare) cases, some children choose to go to the mines for social and personal reasons."

In this context it is important to note that, like agriculture, ASM can be a family-based activity, which makes the involved children very vulnerable. They "lose many of their basic rights; the stability and routine of village life that is critical in their infancy; contact with their extended family and friends; concepts of normal social conventions and moral stability; opportunities for an education; and even the opportunity to play safely" (D'Souza, 2007, p. 15). A related issue to this is that the income opportunities offered by the ASM sector to educated persons, such as teachers, suggests there will be long-term societal and national consequences that are clearly not favourable for the DRC's domestic reconstruction process, never mind the country's future development. However, one must be careful not to blame the existence of the ASM sector for the fact that the Congolese Government is not creating sufficient incentives for teachers to teach and for pupils to attend schools. In the same vein, it is important to frame child labour in the context of a country where it is considered normal for children to help supplement the family's earnings, be it in agriculture, ASM, or elsewhere.

The reality is that, "children have historically played an integral role in household work and income-generating projects. In fact, such child labour has been pervasive throughout Africa" (Schildkrout, 1982, quoted in Tripp, 1997, p. 129). This means that while the ASM sector is an economic sector that creates particular vulnerabilities for children, the presence of children in mining areas and their direct or indirect involvement in mining activities is often related to broader development issues and will therefore most likely be solved sustainably only when these broader development issues are being addressed effectively. In this regard, I concur with Tripp, who writes, "Government officials and even academics have often overlooked the conditions that have forced young people to resort to their various income-

generating strategies. Rural impoverishment and lack of sources of cash in rural households are two key factors that spur the migration of young people" (1997, p. 134).



Child miner in Bisie mine, © Mark Craemer, 2007

Gender Issues

Women are often involved in the ASM sector and they have the right to do so at least according to statutory regulatory instruments, such as the Congolese constitution. However, various factors affect the social sustainability of their livelihood in a particularly negative

way. CASM estimates 45-55 per cent of artisanal mineworkers in Africa to be female, who often undertake poorly remunerated support work, such as ore washing and water transport (D'Souza, 2007, p. 13). These general observations from Africa are also mirrored in the context in the DRC (Pact, 2010).

Generally speaking, many women in ASM communities find themselves faced with "traditional and religious obstacles including illiteracy, insufficient technical knowledge, sexist/chauvinist attitudes, patriarchal views, social taboos and family responsibilities. Women face difficulty in asserting their formal rights and discrimination under customary 'laws' further contributing to the feminisation of poverty in many rural areas" (D'Souza, 2007, p. 16). In Bisie and in some other mining areas of DRC, traditional authorities do not allow women on the mining sites (interview with traditional authorities, Bisie, 2007). After complaints by a number of male miners to the traditional authorities about miners having been 'bewitched' by resident women miners, and on their subsequent inability to find cassiterite, the traditional authorities banned women from entering the mining sites (two focus groups with artisanal miners, Bisie, 2007). The majority of women in Bisie now undertake tasks such as cooking, fetching firewood, and child rearing. Cultural considerations are also important in this context. For example, "little emphasis may be placed on education for girls therefore it may be assumed that they should start to work as soon as they are able on light tasks related to minerals or provision of goods or services" (Pact, 2010, p. 93). One could therefore describe a greater portion of the female population group in the ASM economy as economically marginalised and dependent, which demonstrates their particular vulnerability. A further dimension to this is the prevalence of women being subjected to sexual and gender-based violence, which was also reported in interviews in the Bisie mine and in Durba (two focus groups with artisanal miners, Bisie, 2007; focus group with artisanal miners, Durba, 2009). There are multiple explanations for this phenomenon, such as: "remoteness of mine areas where lawlessness is common; high number of ex-combatants now working in mines, and thus perpetuating war-time practices; increased numbers of state and non-state security actors around the mines who are increasingly responsible for perpetrating violence; levels of drug and alcohol consumption around sites which exacerbates violent tendencies as well as diminishing moral responsibility" (Pact, 2010, p. 95).



Women often have support roles in ASM, © Nicholas Garrett, 2009

However, not all women are entrapped in poverty and a "small but significant number of women work as traders of artisanally mined products. In some cases, they are very successful and may control significant sections of the market, holding positions of power that are comparable to their male counterparts" (PACT, 2010, p. 94). In fact, my interviews with two women traders suggested that women also engaged in rotating savings schemes, similar to those I described for the artisanal miners earlier, particularly as they feared keeping earnings at home, would mean they either be spent by their husbands or potentially fall prey to extortion attempts by the resident army brigade or other state officials (interview with two women traders, Bisie, 2007). This example shows that even in the context of severe constraints, women have found ways to make their livelihood more resilient and secure. In considerations of the sustainability of livelihood choices in the ASM economy, it is therefore important to look at women not only as dependent or passive actors, but one has to take into consideration "the particular ways in which women [...] engage in economic activity as producers of capital, as investors and savers, and as members of the labour force" (Tripp, 1997, p. 120).

Sex Work

Some authors suggest ASM fosters 'moral deprivation'. D'Souza for example, describes (2007, p. 11):

"Competent public security within transient AM communities is often policed weakly or not at all, and theft, other criminal activity and unconventional social behaviour gradually become the norm. [...] Sites and nearby towns rapidly become breeding grounds for crime (theft, assault, sexual violence, abuse, rape and murder), alcoholism, narcotics and substance abuse, and sex work, particularly amongst the young male migrant workers and ex-combatants, who in turn influence the local adolescents" (ibid).

I was unable to observe these patterns in great depth in the Bisie mine and in Durba, but then I did not spend the nights wandering around the support villages, so the lack of observation is not to say they don't exist there or elsewhere. In fact many miners confirmed that they exist (two focus groups with artisanal miners, Bisie, 2007; focus group with artisanal miners, Durba, 2009). A particularly prominent example highlighted by focus groups in both locations was that of sex work, which is rife in the ASM communities I researched in Walikale and Watsa territories. In the Bisie mine, sex work is widely referred to as 'Ndogongo' (two focus groups with artisanal miners, Bisie, 2007). Of the general population in the mine's support village, an estimated 1,000 women are so-called 'free women', who are unmarried and not in a permanent relationship (interview with traditional authorities, Bisie, 2007). Some of these women may hope to "secure a husband in the mines" (Pact, 2010, p. 94) and many of the male traders, for example, who are financially better off than the miners, were said to live in polygamous relationships with two or more wives, some of whom they had gotten to know in the support villages (interview with traditional authorities, Bisie, 2007). However, finding a husband is not the norm and the previous section highlighted that income-earning opportunities are more limited than for men, which increases women's vulnerability.

As a result, a number of women resort to or have to resort to sex work as part of their livelihood strategy, which has led to many contracting STDs, including HIV/AIDS, as well as an increase in teenage pregnancies (interview with local nurse, international medical NGO, Walikale, 2007). The prevalent macho culture in the male-dominated mining community means contraception is seldom used, which accelerates the contraction of STDs (two focus

groups with artisanal miners, Bisie, 2007). The miners prefer young women or girls, whom they consider more attractive and less likely to have contracted a serious STD (ibid). The money particularly attractive women can make in sex work – with some miners or commerçants reportedly willing to pay up to 50kg of cassiterite per night, but mostly earnings being not more than CF2,000 to CF3000 per night – draws in ever more young female migrants (interview with traditional authorities, Bisie, 2007).

In Durba town in Watsa territory a large number of women from the surrounding areas and further afield, such as Kisangani or Ariwara, earn a living through sex work (focus group with artisanal miners, Durba, 2009). Depending on the 'beauty' of the girl, the income earning potential is between CF1,500 and CF6,000 (ibid.) per customer, which translates into a reported daily maximum income of between CF3,000 and CF12,000, with interviewees reporting an income earning schedule of between 5 and 6 days per week (ibid.). The income redistribution patterns are divergent. The bigger share of income is spent on food, beauty products and clothes, while a smaller share is reserved for family members, who often live remotely (interview with two female sex workers, Durba, 2009). Sex work is therefore an example of a coping strategy, which in turn, severely undermines livelihood sustainability and, in fact, in the context of rural DRC, puts a woman's life at risk.

So, while sex work and other social challenges are rife, despite their size, the mining communities in both Bisie and Durba were intrinsically organised. Given the hardship of their everyday life, the majority of 'primary ASM economy' workers admitted to finding creative ways to enjoy themselves, but also suggested that after their shift most were too tired to think of anything other than food and sleep (Ibid.). While social challenges are widespread, presenting the social challenges of ASM in a 'moral depravity' framework appears unhelpful, as it runs the risk for debates and policy decisions on ASM being influenced by the impression of the ASM sector as one that automatically generates a morally depraved set of activities, rather than these being conditioned by external circumstances. The latter, in turn, can easily result in decisions being taken at a national or international level that can lead to further marginalisation of the sector and thus an increase in the hardship that stems from that very marginalisation. I will return to this point in Chapter 6.

The secondary ASM economy and alternative livelihoods

The previous section discussed livelihood sustainability, particularly of those involved in the primary ASM economy. Despite the challenges to the social sustainability of ASM activities, it remains largely a chosen livelihood option. The following paragraphs explore livelihood opportunities generated in the secondary ASM economy, which are in many instances directly dependent on the income that is generated in the primary ASM economy. The section also investigates whether there are viable alternative livelihood options outside of the secondary ASM economy that would be available to actors in the primary and secondary ASM economies, if ASM were to cease.

In the context of both Walikale and Watsa territories, at the time of my field research, formal employment opportunities were limited. In Walikale, formal employment was limited to the army, government and the administration (interview with representative of the territorial administration, Walikale, 2007). In the case of Watsa, there was an additional opportunity to become an employee of OKIMO, for example, or to become an employee of the security services provider of the concession-holding international mining company that was undertaking exploration at the time of research (two focus groups with artisanal miners, Bisie, 2007; focus group with artisanal miners, Watsa, 2009). These employment opportunities in the formal sector were very limited and the majority of economic activity in the local contexts was undertaken informally.

In the Bisie mine, a secondary ASM economy had emerged that provided livelihood opportunities as diverse as in transport, petty trading, basic maintenance, construction, hairdressing, catering, and the sex trade (author's observations, Bisie, 2007). These opportunities were dependent on the income the primary ASM economy would generate and where therefore as of themselves sustainable only to the point of income being generated in the primary ASM economy continuing to be expended on them. Without the disposable income the primary ASM economy would generate, the consensus was "there would be jungle again" (interview with traditional authorities, Bisie, 2007).

Durba is a town that has a history of mining activities that stretches far longer than those observed in the Bisie mine. That said, the majority of inhabitants were engaged in the primary ASM economy, with secondary economic activities limited to petty trading,

transport of goods and persons, and agricultural activities. I treat agriculture separately in the next section, but a particularly apt example of the dependence of secondary ASM activities on the income generated by the primary ASM economy is petty trading. In Durba, the array of traded goods was very diverse and included household items, clothes, spare parts for motorbikes, as well as food items. One trader suggested "there is nothing that we cannot get, since you can order pretty much anything you like at the market in Ariwara [close to the Ugandan border]" (interview with merchandise trader, Durba, 2009). When OKIMO cracked down on ASM, expelling artisanal miners from a handful of key ASM sites in the Durba vicinity in 2009, there was a reported overall trading volumes decline of around 20% (interview with representative of Watsa branch of Congolese Chamber of Commerce (FEC), Watsa, 2009). While there is an element of speculation, it is highly likely that trading volumes would have declined significantly more if ASM was to cease entirely. In Walikale, merchandise was brought into the territory by planes, which were then used to carry cassiterite production on the return leg (author's observations, Walikale, 2007; interview with representative of provincial division of mines, Goma, 2007). From an economic point of view, "it would be unviable to operate flights into Walikale unless cassiterite was brought back on the return leg, because it would be too expensive to fly the goods" (interview with merchandise trader, Walikale, 2007). I am discussing the cassiterite trading chain in greater detail in chapters 4 and 5, but for explanatory sake, cassiterite was flown from Walikale to Goma, as a result of insecurity along the Walikale - Goma road. There is thus a direct relationship between the income generated by the primary ASM economy and the secondary ASM economy, suggesting that the secondary ASM economy is not sustainable at least not to the same scale - without the income generated by the primary ASM economy.

Agriculture

In the context of the sustainability challenges to livelihood options in the primary and secondary ASM economies, it is useful to consider the relative attractiveness of alternative livelihood options, which are not directly dependent upon the income generated by the primary ASM economy. Agriculture is often named in this context (The Enough Project, 2012), which is why the following section briefly analyses the relative attractiveness of agricultural activity vis-à-vis the ASM sector.

Eastern DRC used to be a key food-producing area, yet since the onset of insecurity in the early 1990s, the agricultural sector has largely been destroyed (Johnson, 2009). That said, agricultural products still contribute up to 50% of recorded exports of North Kivu and Orientale, and the majority of the population is engaged in subsistence farming (Ibid.). In fact, "even today roughly 84% of the Orientale Province's population depends on agricultural as their prime livelihood source" (Pact, 2010, p. 102). Until the 1990s much of the Orientale's economy was dominated by a highly productive plantation economy consisting of coffee and tobacco, as well as cattle. This was sustained by unequal access to land and economic power (Higgins, 2010, pp. 6), but it also safeguarded a higher level of food and job security, as well as secured agricultural incomes (Johnson, 2009). While there is a recorded history of land conflicts in Orientale Province, dating back to Colonial times (Higgins, 2010, p. 31), the plantation economy system was destroyed through land conflicts that turned violent, pitting ethnic militia against each other and culminating in the looting of industrial agricultural operations (Johnson, 2009). With the unravelling of the Congolese state, as described in the Introduction chapter, rural roads fell into disrepair, while with the proliferation of conflict, armed actors increasingly preyed upon the agricultural sector, resulting in rising prices and lower yields and putting strain on rural livelihoods. In fact, agricultural decline is likely to have been a key driver for rural populations to choose artisanal mining as a livelihood option (Johnson and Tegera, 2008). This is an important argument in the context of alternative livelihood discussions: as many of those operating in the primary and secondary ASM economies deliberately would have migrated out of agriculture, it is therefore illogical that agriculture would be an attractive alternative livelihood. Factoring into the equation that "it is not unusual for miners to make five times as much as agriculturalists on average" (Pact, 2010, p. 102), it becomes clear that agriculture may not be an attractive alternative livelihood, where primary and secondary ASM economies provide higher and often more regular income in shorter intervals.

In Watsa, the local population that does not engage in mining is largely dependent on subsistence agriculture, with surplus sold in local markets or utilised to pay for school fees or local services (interview with representative of territorial administration, Watsa, 2009). Agricultural activities within the region include the cultivation of land for crops, growing and cultivation of fruit and timber trees (interview with an agricultural produce trader, Durba, 2009). The main agricultural crops cultivated are manioc and rice, with other products including maize, beans, sugar cane, peanuts, bananas, pineapples, mangoes, coffee, papaya,

teak and acacia (ibid.). I also observed animal husbandry, with chickens, cows, ducks, goats and pigs all present. A widely reported threat to the sustainability of agricultural production and animal husbandry as a livelihood option are parasites and livestock epidemics (ibid.).

In the Bisie mine, local food production was far from achieving subsistence levels, with subsistence agriculture limited to about ten small fields, where maize, bananas and pineapples were grown (Interview with agricultural produce trader, Bisie, 2007). Instead of producing locally, porters brought in the vast majority of food from Walikale, via the village of Ndjingala (Ibid.). Asked about food production, the interviewed 'primary ASM economy' workers suggested, it would be "easier to survive digging three meals a day, as opposed to growing your food" (two focus groups with artisanal miners, Bisie, 2007). While there is a constant need for food, local food production is linked to security of tenure and the local security situation, none of which were amenable to investment in agriculture (ibid.).

That said, developing agricultural production in key mining areas would help to reduce the percentage of disposable income workers in the primary and secondary ASM economies would have to expend on food brought in from afar. As discussed in the previous section on threat to earnings, local hyperinflation significantly eats into earnings of actors in the primary and secondary ASM economies. It would therefore be a key step to increase the livelihood sustainability of ASM activities. In this context it is worthwhile to look at examples of attempts to turn actors in the primary and secondary ASM economies into farmers (PACT, 2010, p. 102):

"Projects which have been undertaken in Katanga to transform artisanal miners into farmers have had mixed success to date. Where success is seen it has frequently been associated with focusing on women who seem to be more open to embracing alternatives and where it is developed as a supplement to artisanal mining. It requires significant investment in, amongst other things, access to inputs, the provision of training, promotion of techniques such as seed and produce storage, and development of market linkages. Agriculture also suffers from something of an image problem where many young people do not aspire to the rural subsistence life but would prefer to work in the mines or in the towns, ideally as employees of mining companies."

This example shows that in the present stage of economic development in North Kivu and Orientale Province, any attempt to transform actors in the primary and secondary ASM economies into farmers will have to overcome significant challenges to be successful and be aware of the fact that such a transformation would have to be achieved against trends and market forces. The principle reasons are summarised below (Pact, 2010, p. 102):

"Individual miners face disincentives to pursue other vocations. For one, diamond and gold mining provide the opportunity for miners to 'strike it rich,' and the 'casino mentality' associated with mining can be addictive. Second, many artisanal miners do speak of the collegial/familial feel to working in mines, and the comfort they derive from this in the country's current disparate community enclave structures. Third, in order to be effective, alternative livelihoods must not only provide a comparable income to that of mining; they must also provide long-term economic stability and an assurance for the future. Lastly, many miners are young men with limited education background and thus their re-integration into professional livelihoods is challenging."

Interestingly, my data from Walikale and Watsa territories does not suggest there is a significant difference in incentive structures in terms of pursuing ASM over alternatives such as agriculture, except for the security dimension. To the contrary, the incentive structures suggest that actors are more inclined to choose ASM over agriculture, irrespective of security aspects, even though insecurity does of course present an additional incentive to pursue ASM over agriculture, considering incomes in the ASM sector tend to be available in shorter intervals and often materialise quicker than in the agricultural sector.

Conclusion

This chapter analysed the 'coping economy' dimension of North Kivu and Orientale Province's ASM sectors, with a particular focus on the cassiterite and gold value chains from Walikale territory and Watsa territory respectively. The analysis distinguished between primary and secondary ASM economic activities, as well as those economic activities that can be pursued as an alternative to ASM, most notably agriculture. The number of dependants is significant, with at least five (if not more) dependants per person in the primary ASM economy, which could be as many as 12.5 million people (World Bank, 2008, p. 60). This number is directly related to the structure of the ASM economy, which combines both a 'primary ASM economy', which incorporates actors directly involved in the mining

activity, as well as a 'secondary ASM economy' that is dependent on the income generated by the primary ASM economy and works to provide support services and physical inputs into the primary ASM economy', such as mechanics, carpenters, and transporters.

The analysis focused on the structures and processes that can help or impede the transformation of livelihoods in the primary and secondary ASM economies into sustainable or unsustainable ones (Chambers and Conway, 1992). The analysis highlighted that actors in the primary and secondary ASM economies should in theory earn enough to more successfully work towards the transformation of their livelihood into a sustainable one. However, discussing the opportunities and impediments to reduce their vulnerability for actors in the primary and secondary ASM economies, it appears that, at present, the impediments, many of which are related to the external environment, outweigh the opportunities. Nevertheless, "it can be very difficult to persuade artisanal miners to abandon an activity which, despite being extremely tough, delivers a daily and often quite substantial income" (Pact, 2010, p. 8). In the context of the primary ASM economy, further threats to earnings, particularly given the widespread indebtedness of actors, would impede livelihood transformation further, not only in the primary ASM economy, but also in the secondary ASM economy.

That said, while actors in the primary and secondary ASM economies are exposed to risks to their livelihoods on a daily basis, they also have developed coping strategies to deal with such risks, demonstrating considerable resilience, which makes them actors of interest both in sub-national governance and as key stakeholders in solution-finding processes for the governance issue of the predation on the mining and trade of 'conflict minerals'. I related this to some of the writings in development theory from the 1970s, which highlighted the untapped potential in communities to contribute to their own livelihood transformation (Esman, 1991). The analysis thus also challenged the portrayal of the 'conflict minerals' production as an anonymous productive activity and helped to bring into question common stereotypes of artisanal miners. These stereotypes take on numerous forms, but often revolve around the following common characteristics: young, male, poor, uneducated and most likely an ex-combatant inspired by greed (various interviews, Mining Investment Indaba, 2009). This description, while sometimes correct, overall did not match my findings. Rather, there are people of all ages, with diverse educational levels and skills sets, from different geographical regions and belonging to different ethnic groups, involved in the ASM

sectors in North Kivu and Orientale Province. The discussion of gender issues and child labour in particular has highlighted the need for a nuanced approach to ASM, considering the degree of both women and children' dependence on income earned in the 'primary ASM economy' and their relatively more pronounced vulnerabilities, but also considering the coping strategies they have developed.

The common portrayal of the miners as victims who are forced to mine against their will (Free the Slaves, 2011) disregards the fact that many Congolese are actively trying to access the economic activities and trading networks in the primary and secondary ASM economies. They choose the sector as the most viable activity for surviving in this difficult economic and security environment, as other economic activities, such as agriculture, often have been rendered unviable by the conflict or are uncompetitive in terms of earning potential in particular (Vlassenroot and Romkema, 2002). While coerced labour does exist, an exclusive focus on this aspect ignores the more common scenario of people choosing to mine or trade simply because it is the most competitive livelihood option available. Bearing this in mind, there is thus an important 'coping' economy constituency whose behaviour is largely driven by the competitiveness of livelihood opportunities available to them. In terms of future policy development, these actors will need to play a greater role in the design of interventions to aid livelihood transformation. For this to happen it will be important to shed the notion of treating the actors in the primary and secondary ASM economies as a voiceless other. In line with Tripp's observations (1997, p. 120), my research suggests that actors in the primary and secondary ASM economies need to be considered - and respected as producers of capital, savers and investors and members of the labour force.

4 - 'Conflict minerals' production in North Kivu and Orientale Province - 'war' economy realities¹⁴

Introduction

Following the discussion of 'conflict financing' relevant theoretical deliberations in chapter 2, this chapter analyses 'conflict economy' realities in eastern DRC, with a particular emphasis on conflict financing through the predation on the mining and trade of 'conflict minerals'. While it attempts to portray a holistic picture of conflict financing in eastern DRC (through the predation on the mining and trade of 'conflict minerals'), its focus is driven by the field research imperatives of 2007, where I managed to obtain first-hand access to the Bisie cassiterite mine in Walikale territory, North Kivu, which was at the time militarily controlled by the FARDC's 85th brigade. Next to analysing data on conflict financing from established sources that fell within the same time frame as my research, such as the UN Group of Experts investigative reports (UNSC, 2008, 2009), this chapter also makes a unique contribution by presenting data from direct observation as well as triangulated data from interviews with those interacting with, and involved in the local 'conflict' economy in Walikale territory.

In order to retain an element of consistency between this chapter on the 'conflict' economy actors and the previous chapter on the 'coping' economy actors, as well as the following chapter on the 'shadow' economy actors, I have retained a reference to Orientale Province in the title of this chapter. However, I only marginally draw on data from Watsa in this chapter, as Watsa was at the time of my research a post-conflict territory, rather than a conflict-affected territory. Watsa territory is situated in Haut-Uélé district in Orientale Province and Haut-Uélé's (and other) gold-bearing areas were heavily affected by the large-scale looting of natural resources during the Congolese wars (see chapter 1). Under Ugandan occupation post-1998, Human Rights Watch (HRW) interviews with local geologists suggest almost one ton of gold, then worth around US\$ 9 million, was mined in the area under the control of Ugandan troops (2005, p. 15). While estimates like this need to be looked at with caution in the gold sector, considering the informal production and 'easy to hide' nature of the metal, it is in all likelihood true that a significant amount of gold was extracted during

¹⁴ Parts of the data and analysis in this chapter have been pre-published in Garrett, 2007; Garrett, 2008; and Garrett et al, 2009. Where I have included arguments elaborated in Garrett et al, 2009, which go beyond my own original data and analysis input, I have referenced and/or quoted the sections as e.g. (Vlassenroot's point in Garrett et al, 2009 or Sergiou's point in Garrett et al, 2009).

this period and that much of the revenue accrued to the Ugandan troops and those in control of the Ugandan troops.

During my research in Watsa territory in 2009, I was unable to observe any direct military involvement in the gold sector and one can only speculate whether Uganda's Lord Resistance Army (LRA) systematically targeted artisanal gold mining operations during the short spell when it passed through Haut-Uélé and attacked villages en route to the Central African Republic (Spittaels and Hilgert, 2010). Considering the LRA at the time was retreating to the Central African Republic (ibid.), it is perhaps more likely the LRA attacks on villages suggest the group chose to prey on civilians and steal from them, rather than setting up more time-consuming predatory operations in the gold ASM sector. However, I was unable to confirm this speculation due to obvious reasons of security and for the fact that they did not pass through the immediate vicinity of my area of research at the time of my research. The focus on conflict financing through the predation on the mining and trade of 'conflict minerals' is nevertheless an obvious choice for this chapter.

The entire 3T production in the DRC is undertaken through ASM, and during the time of my field research in 2007 and 2009, the entire gold sector was also reliant on ASM (interview with Ministry of Mines official, Kinshasa, 2007). Since then, industrial gold mining started in South Kivu in October 2011 through Banro Congo Mining S.A.R.L. Banro's Twangiza mine is projected to produce approximately 120,000 ounces of gold during its first full year of operation (Banro, 2013). In Orientale Province several mining companies are en route to developing industrial gold mining operations in the Kilo-Moto gold belt, particularly AngloGold Ashanti in Ituri through Ashanti Goldfields Kilo S.A.R.L. and Randgold Resources and AngloGold Ashanti through Kibali Goldmines S.P.R.L. in Haut-Uélé (Bahamin, 2011). There are also several other gold projects in exploration in Orientale Province (interview with Ministry of Mines official, Kinshasa, 2009).

Cassiterite remains the economically most important mineral in North Kivu and is the focus of this chapter, due to the principle armed groups (the CNDP, FARDC 85th brigade and FDLR) benefiting to varying degrees from the predation on the mining and trade of it. While the gold ASM sector in Haut-Uélé, was not directly preyed upon in Watsa territory during the course of my research, the predation on gold ASM is a key conflict-financing lever in both Kivu provinces and particularly for the FDLR (see below). Where required, I therefore draw

on gold ASM data from the Kivus in order to illustrate points of relevance to the analysis of 'conflict' economy actors.

The DRC's principal cassiterite mine, Bisie, is situated around 90km northwest of the town of Walikale in the Wassa *groupement* in Walikale territory (see graphic below). Walikale has largely intact cassiterite reserves, even though artisanal mining operations have produced a significant production level over the past decade (interview, geologist, M.P.C., Goma, 2007). At the time of my field research in 2007, the FARDC's non-integrated¹⁵ 85th brigade was in charge of Bisie and was comprised of former Mai-Mai militia¹⁶ that had been integrated into the FARDC (interview with MONUC representative, Goma, 2007). The 85th brigade derived revenue from the predation on cassiterite mining and trade, which I will be discussing in greater detail further below.

However, the brigade's activities were not limited to 'predation' alone; the 85th brigade had established around the Bisie cassiterite mine what could be described as a "coercive (security) governance structure" (Garrett et al, 2009, p. 2). "Compared with actors in other territories in North Kivu, its intentional provision of security and operation of a regulatory structure translated into a more secure environment for the population in the territory under its control. This confirms observations made in civil wars that the behaviour of armed groups is not limited to the exploitation of resources but in many cases may also include strategies to instigate regulatory structures in order to consolidate control over social and economic spaces" (Ibid.). The 85th brigade differs from non-state armed groups that have set up parallel governance structures by virtue of its status as an FARDC brigade. The case suggests, whether set up by a state actor or a non-state armed group, instead of governance 'void' in eastern DRC, there is in fact an institutionalisation of parallel governance structures.

The case of the predation on the mining and trade of cassiterite by the 85th brigade is complemented by a discussion of the FDLR's and the CNDP's financing patterns. It is important to compare the behavior of the 85th brigade with that of other relevant parties.

_

¹⁵ The term 'non-integrated' implies that the brigade had, at the time of research, not yet joined the countrywide 'brassage' (integration) process, which I had referred to in the discussion of conflict dynamics in chapter 1.

¹⁶ "The term Mai-Mai is an umbrella term for a series of rural militia that during the Congolese war were mainly operating in the provinces of North Kivu, South Kivu, Maniema and (northern) Katanga. As they usually recruited along ethnic lines and exclusively within autochthonous Congolese populations, their composition tended to mirror the local population profile" (Vlassenroot, 2002, quoted in Garrett et al, 2009, p. 8).

This will allow me to make inferences with a greater level of confidence and validity. In addition, it is my ambition in Chapter 6 to provide a balanced discussion of whether the policy measures advocated for by the 'conflict minerals' campaign, such as measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals'), are adequate conflict resolution measures. This requires a detailed understanding of the conflict financing patterns of the principal armed groups. In this regard, the chapter sets the scene for the more in-depth discussion of measures to curb conflict financing in Chapter 6.

The chapter is structured in the following manner: the first section analyses the case of the 85th brigade in Walikale's conflict economy. The second section of this chapter analyses the FDLR's and CNDP's conflict financing patterns and analyse what they might mean in the context of the 'conflict minerals' campaign's suggestion that measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') can be successful conflict resolution mechanisms. The third section concludes.



Photo: 85th brigade soldier on duty in the Bisie mine, ©Nicholas Garrett, 2007

Walikale's Conflict Economy

Prior to the start of the first Congolese war in 1996, the territory of Walikale has seen conflict principally over land ownership, causing thousands of casualties and resulting in large-scale population displacement (Vlassenroot, 2002). Since the first Congolese war in 1996, it has also been a militarily contested terrain, with different factions controlling parts of the territory at different times. These factions include the Forces Armées Congolaises (the Kabila-led army during the war), the FDLR (Sergiou, 2007), the RCD-Goma and 'pro-Kinshasa forces', comprised of Mai-Mai groups operating under the FARDC label (Tegera and Johnson, 2005). During the last years of the Congolese war, local Mai-Mai groups controlled the Bisie mine (Ibid.). The RCD-Goma – militarily and politically supported by Rwanda – controlled the cassiterite trading route from Bisie to Goma, as well as all exports from Goma to Rwanda (Ibid.). This resembled a co-optation of informal pre-war trading routes, utilised in the wake of formal economic collapse in the latter decades of the Mobutu era. The mineral trade was thereby facilitated by either foreign or Rwandaphone traders, who were either in support of the RCD-Goma, or had forged arrangements with RCD-Goma to be able to operate (Global Witness, 2005). In February 2004 the RCD-Goma took control of the Bisie mine and established sole control of cassiterite production and export (Tegera and Johnson, 2005). In December 2004, Mai-Mai fighters, by then operating as the FARDC's 85th brigade, forcefully displaced it from Walikale (ibid.). As a consequence, the RCD's revenues were reduced and the FARDC's 85th brigade resumed control, which it held until early 2009 (Ibid.). As part of the integration of the CNDP into the FARDC that year, the mine had thereafter been occupied by elements taking orders from an ex-CNDP commander, now part of the FARDC 1st Integrated Brigade (UNSC, 2009). Taking into consideration the discussion of the comparatively smaller CNDP revenues (vis-à-vis FARDC and FDLR) from the predation on the mining and trade of 'conflict minerals', discussed further below, the integration of the CNDP into the FARDC thus represents a profitable move and demonstrates the logic that access to the state in the DRC equates to access to lucrative rents, which is why non-state armed groups often negotiate over terms to access to state, rather than promoting secession (Englebert, 2003).

The non-integrated 85th FARDC brigade

The 85th FARDC brigade that is deployed in Walikale territory is a former Mai-Mai group. In the run-up to the peace deal signed in 2003 by all major Congolese belligerents, various Mai-Mai groups formed a political structure to strengthen their presence in the transitional

government (ICG, 2003). As a result, some of the larger and more structured Mai-Mai groups were able to obtain positions in the transitional political and military structures (Interview with MONUC representative, Goma, 2007). The same groups were also included in security sector reform; Mai-Mai leaders were granted official grades in the newly formed Congolese army, Mai-Mai brigades were integrated into the new army structures and large numbers of combatants were demobilised as part of the DDR process (Ibid.). Attempts were also made to turn the Mai-Mai into a political movement. Several Mai-Mai political parties were established but have been rather unsuccessful during the parliamentary elections in 2006 and today are of marginal political significance (Ibid.).

As discussed in chapter 1, the integration of former belligerents, including the Mai-Mai militia, into the FARDC remains a critical component of the peace process in the DRC. In 2007, the 85th brigade was the only non-integrated FARDC brigade in North Kivu (Interview with MONUC representative, Goma, 2007). The 85th brigade is mainly composed of soldiers recruited from Walikale territory and to a lesser extent from South Kivu (ibid.). The 85th brigade therefore differs from North Kivu's other Mai-Mai groups both in its ethnic composition, as it is mainly composed by the Nyanga and Tembo ethnic group which reflects the current population profile of Walikale territory (Interview with traditional authorities, Bisie, 2009), and that it was deployed in its former composition as a militia group (Interview with MONUC representative, Goma, 2007). The 85th brigade was centrally organised and enforced a system of sanctions, akin to a regulatory structure. Colonel Samy Matumo was the commander of the 85th brigade, himself a protégé of high military ranks in Kinshasa (interview with Natural Resources Expert at UN Group of Experts, March 2008). A MONUC memo suggests "alleged key figures regularly mentioned in this connection are 8th Military Region (MR) CoS Col Bindu, himself from Walikale, and FARDC Commander of Land Forces/former 8th MR Cmdr Maj-Gen Amisi" (MONUC, 2009, p. 1). In 2008 the then-DRC Vice-Minister of Mines, Viktor Kasongo, stated, "the 85th brigade is currently not under the control of the military central command" (Kasongo, Interview, Berlin, 2007). However, this statement is questionable since the Government did in early 2009 achieve to persuade Colonel Samy and the 85th brigade to leave the mine (UNSC, 2009).

In essence therefore, the brigade was a formal state actor, which provided it with legitimacy; in its constitution and structure, it largely remained a non-state actor, which facilitated its evasion of state influence and control (Garrett et al, 2009). The brigade was also embedded

in pre-election parallel power structures, compared with new power structures that have arisen from the elections and the reshuffling of political offices.

Security governance by the 85th brigade¹⁷

The 'governance' (Risse and Lehmkuhl, 2006) concept that takes into account the provision of collective goods by private actors – either in collaboration, co-existence or concurrence with public actors – can be usefully applied to processes of partially institutionalised macronetworks of strategic security, such as is the case with the 85th brigade. This idea is not completely new, but rather builds upon initial approaches to interpret the violent activity of non-governmental armed actors in areas of limited statehood as 'new' forms of governance (Duffield, 2001; Keen, 1998). In Garrett et al, 2009, Sylvia Sergiou, Koen Vlassenroot and I describe the issue as follows:

"The concept of 'security governance' (Chojnacki and Branovic, 2008) focuses on the provision of security to a defined social group and its strategic use for armed groups. It is a broad concept and comprises a large group of governance addressees who can be the inhabitants of a territory under control of an armed group or selectively chosen addressees by, for example, ethnic affiliation, or simply who is paying for security. The intention of the security provision by the armed actor (for a defined social group) is key. Security governance covers the structures and processes by which security is provided as a collective good in coercive regulatory systems or selfregulatory modes of horizontal social co-ordination. Accordingly, two ideal types of security governance have been developed: 'coercive governance' which is surmised as an institutionalised political and economic system of rules that allows reliability of agreements between the military leadership and the civilian population, and 'selfgovernance' as reaction to a violent environment. Within the type of coercive governance, the militarily potent actor invests in the establishment of the monopoly on the use of force and advances processes of governance formation, such as the establishment of institutionalised political and economic systems of rule. The security provider is a monopolist and uses his ability to control territory and social relations (i.e., the civilian population) to build up an internal and external protection system. The armed actor no longer finances himself by means of organised looting, but rather through an institutionalised taxation system."

¹⁷ This subsection draws on Sergiou, 2007.

At the time of research the security situation in Walikale territory was relatively stable. Compared to other FARDC brigades, the 85th brigade had a better track record with respect to human rights abuses (interview with MONUC representative, Goma, 2007). Despite the fact that the 85th brigade did not have any human rights training or training in international humanitarian law, a certain code of conduct was deployed, enforced centrally by Colonel Samy (interview with traditional authorities, Bisie, 2007; interview with representative of territorial administration, Walikale, 2007; interview with Colonel Samy, Walikale, 2007). The following observations, which I made in Walikale territory and the Bisie mine in 2007, and published previously in Garrett et al, 2009, provide a perspective of this:

In the territory under its control, the 85th brigade had established a rules system, within which they also undertook police functions in security provision (interview with traditional authorities, Bisie, 2007; interview with Colonel Samy, Walikale, 2007). The 85th brigade cooperated with the police and sometimes took over their functions and acted as the highest local echelon in decision-making (interview with representative of territorial administration, Walikale, 2007). There are soldiers permanently deployed in the mine, collecting taxes and enforcing the rules system and acting also as a mediator in cases of disputes between artisanal miners (interview with traditional authorities, Bisie, 2007; interview with Colonel Samy, Walikale, 2007). The highly centralised leadership structures and sanction mechanisms allow the evolution of such a 'security governance' structure that leads to a respectively secure environment (Garrett et al, 2009). Offences committed by soldiers of the 85th brigade are largely punished, mostly by arrest and detention (interview with traditional authorities, Bisie, 2007; interview with Colonel Samy, Walikale, 2007). Nevertheless, the 85th brigade regularly extorts 'rations', and violent incidences like rape and harassment were reported to happen, albeit irregularly (two focus groups with artisanal miners, Bisie, 2007). The population had learned to adapt to a certain level of insecurity and had grown accustomed to dealing with armed groups and the negative consequences their presence entailed, notably predation on economic activity. In this context, Sergiou reiterated a good point in that it should be considered that security situation analysis in a country that has recently undergone civil war has to incorporate the population's adaptation to insecurity, depending on their experience of violence, and the corresponding shift in their perception of what is considered secure (Sergiou, 2007).

The presence of the 85th brigade in the territory had a rather passive impact on security,

understood as the deterrence of other armed groups from deployment in the territory they control. By the middle of 2008, there was increasing militarisation pressure in the region, due to an enforced northward push of the FDLR, which has an estimated 4,000 armed personnel in the immediate vicinity (interview with MONUC representative, Goma, 2007). However, the threat of clashes between the 85th brigade and the local FDLR contingents had to be put into perspective, as there were reports of active co-operation between the 85th brigade and the FDLR in the predation on cassiterite mining and trade in Walikale, with some suggesting collaboration dated back to 2006 (Tegera, 2010). Cassiterite from FDLR-controlled mines and the Bisie mine is often mixed and transported through the same channels, which means that both armed groups were benefiting, and there was a mutual vested interest in the perpetuation of the trade (interview with Natural Resources Expert at UN Group of Experts, London, March 2008). Given that the overall situation in North Kivu remains transitional, Walikale territory (where under control of the 85th brigade) seemed at the time of field research relatively more stable and secure than many other parts of the province.

The 85th brigade's predation on the mining and trade of cassiterite

At the time of my research in Walikale territory in 2007, the FARDC's 85th brigade militarily controlled the Bisie cassiterite mine and derived revenue from the predation on the mining and trade of cassiterite. Inside the mine, the 85th brigade operated an indentured labour system called 'Salongo' (two focus groups with artisanal miners, Bisie, 2007). Under this system the miners were forced to surrender parts of their production for up to three days per week (ibid.). While a small number of soldiers had a permanent presence at the mine, during 'Salongo', which could happen at any time, more would appear in groups under orders to confiscate a portion of the mine's production (Ibid.). The 85th brigade was able to do so despite the presence of formal state organisations and their representatives in Walikale territory (except for the mining police, the 'police des mines').

Inside the Bisie mine and on the transport route from the Bisie mine, the 85th brigade had erected barriers, where it was preying on the cassiterite trade (observation in Bisie mine, Bisie, 2007). These barriers were not only manned by members of the 85th brigade, but by state authorities, such as the *Agence Nationale de Renseignements* (the national intelligence service – ANR) and the Direction Générale de Migration (internal migration department – DGM), all of whom extorted a share of the cassiterite passing through (interview with

traditional authorities, Bisie, 2007; interview with 85th brigade soldiers, Bisie, 2007; 2 focus groups with artisanal miners, Bisie, 2007). State authorities were also joined by local traditional authorities, which also claimed a share of production (2 focus groups with artisanal miners, Bisie, 2007). The 85th brigade and both traditional and state authorities levied fixed taxes at barriers on goods brought in and out of the mine, as well as a perperson tax (interview with FARDC soldiers, Bisie, 2007). The amounts quoted at the barriers at the time of research were between CFR 2,000 (about US\$ 4) and 10 per cent of minerals carried by the porters directly accruing to the authorities present at the barriers (interview with traditional authorities, Bisie, 2007; interview with FARDC soldiers, Bisie, 2007; focus group with artisanal miners, Bisie, 2007). Local police estimate the impromptu checkpoints on the routes in and out of Bisie generated up to US\$ 350,000 per month (Congolese Police Report, 2007). This shows the interlinking and mixing of public and private interests and demonstrates the impunity with which both state actors and non-state actors behaved. The coercive governance structure that had evolved in the part of Walikale territory under control of the 85th brigade was therefore best described as a hybrid form of state and nonstate governance structures, financed by an institutionalised system of predation on economic activity.

The 85th brigade also benefitted from the geographical location of the territory under its control, which was situated at the intersection of three important transport axes, connecting the trading centres of Goma, Bukavu and Kisangani. This increased the opportunities for predation and also increased the overall trade volumes available to exploitation. At the time of research, access to Walikale territory was possible by road via Masisi, but remained insecure via Hombo in South Kivu, where the FDLR retained a strong presence (interview with MONUC representative, Goma, 2007). Air access was restricted to planes landing on the Kilambo airstrip, which is a straight stretch of road several kilometres off the town of Walikale (author's observation, Walikale, 2007). The 'security governance' structure the 85th brigade was operating at the time of research meant it was difficult for the Kinshasa government to assert itself in Walikale. For example, in February 2008, when the Minister of Mines Martin Kabwelulu banned all exports of cassiterite from Walikale territory (Wild, 2008), it did not have the desired effect on the ground. Instead of halting mining operations, the 85th brigade and its trading partners instead sought alternative trading routes via South Kivu and Maniema and continued trading cassiterite from Walikale, with the government unable to credibly enforce their position (interview with Natural Resources Expert at UN

The cassiterite trading chain from Bisie to the export stage comprises multiple stakeholders; the 85th brigade focused on control of the source, while it actively co-operated with a network of local and foreign-owned companies in the marketing of artisanally mined cassiterite. This is a subject I will revisit in the context of the 'shadow' economy analysis in Chapter 5. However, it is important to mention in the discussion of the 'conflict' economy in this chapter that the 85th brigade has profited from the dispute over mining rights to the Bisie mine between the mining companies Groupe Minier Bangandula (GMB) and Kivu Resource's subsidiary Mining and Processing Congo (MPC), which I am discussing in chapter 5. The dispute between the two companies for access to mining rights at the Bisie mine allowed the 85th brigade to side with either mining company at different times, depending on which of the two companies was willing to engage with it and/or include it in negotiations over mining rights. This divide-and-rule tactic had allowed the 85th brigade to cement its stance in the mine and continue to profit, while it prevented any of the two companies to take active control of the mine.

An example of the 85th brigade's opportunist role in the ownership struggle and its collaboration with civilian authorities is a contract signed on 28 August 2006 with Dieudonné Tshishiku Mutoka, Administrator of Walikale territory (contract between Mutoka and GMB, 2006). In the contract Mr Mutoka committed to supporting and ensuring the security of GMB. In exchange for the security services provided by the Administrator, the company guaranteed Mr Mutoka a share of the mining revenue (Ibid.). The only credible provider of security in the area allied with the Administrator was the 85th brigade (UNSC, 2007). Thus, the greater the 85th brigade's access to cassiterite exploitation, and the better the cooperation with GMB functioned, the more they were able to distribute profits amongst their key stakeholders, whether on the local or national levels, perpetuating the 85th brigade's grip on the territory under its control. The better functioning their distribution arrangements from their effective predation on the mining and trade of cassiterite and the more deterring their potential for violence was, the stronger was their political power (see Reno, 1998). It is this political power that allowed the 85th brigade and its backers to assert themselves for such a long time throughout the DRC's peace process.

¹⁸ 10 per cent of the weekly production of the Bisie mine, US\$ 0.05 per kilogram of all cassiterite extracted by the company in the mine and 50% of the receipts generated at the intermediary cassiterite selling stations in the territory.

The case of the 85th brigade satisfied most criteria scholars commonly associate with armed rebellion financed by natural resource exploitations. In the Bisie cassiterite mine, the brigade controlled a 'highly lootable resource' (Ross, 2001; Ballentine and Nitschke, 2005). In addition, the cassiterite world market price was at the time of research at record levels and the mine is located far from the political or military influence of the government (Ross, 2003). As explained above, however, the pattern is more complicated than this argument suggests and it is indicative of the interstage of a conflict and peace economy that the DRC presently finds itself in. Under the control of the 85th brigade, coercive governance was in place in Walikale, an "intentional provision of security and institutionalisation of a regulatory system and tax (or 'extortion') system. The strategic use of its security provision is irrelevant - its intentionality remains decisive. Violent incidences happened, but only irregularly. Some of these incidences were immediately punished, which shows an interest in the maintenance of order" (Sylvia Sergiou's point in Garrett et al, 2009, p. 13). Some incidences of the brigade's violent behaviour could be explained under the perspective of selective violence as Kalyvas puts it, as a means to guarantee compliance (Kalyvas, 2003) and for the demonstration of power (Kalyvas, 2005).

The fledgling Congolese democratic state is critically dependent upon the provision of security in strategic areas. In the case of Walikale territory it is therefore possible to speak of an informal negotiated settlement, whereby the 85th brigade provided for security in a mineral-rich area. In return it was allowed to profit from the mining and trade of cassiterite. However, one must not overstate the benefits of such an arrangement. In theory, for example, security provision by the 85th brigade could provide an opportunity for reform of the local mining sector and an overall professionalisation and formalisation of the local mining sector. This was attempted in the summer of 2007, when the government tried to settle the dispute between the two mining companies who laid claim to the mining rights at Bisie, by negotiating an agreement between the two companies to resume ASM-based operations under two reconfigured and renamed economic entities (author's observations, Bisie mine, 2007). However, this attempt was unsuccessful, as the 85th brigade reclaimed control of the mine during the process and expelled the representatives of the mining companies, underlining it was not sufficiently incentivised to support local mining sector reform. Koen Vlassenroot, Sylvia Serguiou and I interpret this as follows (Garret et al, 2009, p. 13):

"In other words, the 85th brigade provides some public goods and creates some order so that the international pressure on the government to engage with the situation does not mount uncontrollably. Order is a good argument not to demand that the 85th brigade joins the brassage process and leaves Walikale; its principal incentive to stay in Walikale is its profit motive; if however the government presses for formalization, the 85th brigade causes sufficient disorder to derail the process. The "peace", stability itself is in this regard more a product of careful diplomacy, or "negotiation" as we would like to call it, instead of a real change in the underlying structures. The new hybrid of economic gain and security provision allows formerly illegal networks to legitimize themselves within the new institutional structure. As we have shown, the security governance structure can be interpreted as negotiated on a local level with links to the national level. On a local level it is negotiated between all locally present stakeholders so that everyone can profit from the exploitation of the natural resource. The links to the national level include the direct patronage of the military leadership in Kinshasa and evidence that suggested formalization of the government trying to work around the 85th brigade's presence in the territory, rather than approaching formalization with a clear view to evicting the 85th brigade from the Bisie mine."

This case shows that the brigade has fulfilled a number of functions beyond that of an economic actor. One has to regard the case of the 85th brigade as a mirror of the situation in North Kivu at large, where the fledgling democratic institutions find it difficult to assert themselves vis-à-vis entrenched interests. In purely economic terms, this case would suggest a departure from patterns of profit accumulation under the seeming chaos of war (Keen, 1998) towards profiteering under the seeming order of the DRC's fledgling state institutions, which continue to lack the capacity to apply themselves in an accountable manner, particularly in outlying areas (Bavier, 2008). The same case, however, suggests that in this situation of neither-war-nor-peace (Richards, 2005), a negotiated, mutual accommodation of economic and political interests linked with security provision can be found. The 85th brigade co-operated with the territorial administrator and a number of trading companies in the predation on the cassiterite mining and trade, and simultaneously provided (some) security for the local population. The 85th brigade's security provision was likely to be one of several reasons for the Congolese government not attempting to dislodge the brigade from Walikale Territory. The 85th brigade's strategy served mainly self-interest, but their presence

had larger implications. "This pocket of parallel economic and political power undermined the DRC's reconstruction process, as it deterred investment into the area and thus prevented the expansion of a formalised peace economy and the harnessing of the great economic potential of Walikale's mineral riches for reconstructive ends" (Koen Vlassenroot's point in Garrett et al, 2009, p. 3). A research body suggests that trade flows in natural resources and other commodities hold development and conflict resolution potential (Sunman and Bates, 2007). This chapter suggests that, given the realities on the ground, this may be correct, but a considerable effort will be required to transform the 'potential' into a development and conflict resolution reality, particular in the case of Walikale.

The FDLR's and CNDP's predation on economic activity

The previous section in this chapter discussed the functioning of Walikale's 'conflict' economy drawing on the case of the FARDC's 85th brigade and the coercive security governance it had established in and around the Bisie cassiterite mine. It suggests, instead of governance 'void' in eastern DRC, there exist parallel governance structures, which can provide some benefits, but ultimately weaken the state further. In comparison to the 85th brigade, I had already introduced and analysed the FDLR and the CNDP in chapter 1 of this thesis. The second section of this chapter therefore focuses its analysis on the FDLR's and CNDP's conflict financing mechanisms only. In Chapter 6, I discuss what the analysis of the conflict financing mechanisms (through the predation on the mining and trade of 'conflict minerals' in particular) might mean in the context of the 'conflict minerals' campaign's suggestion that measures to curb conflict financing can be successful conflict resolution mechanisms. The key indicators this section analyses are the type of economic activity the CNDP and FDLR prey upon and the type of mineral or metal the CNDP and FDLR predominantly prey upon.

The FDLR's and CNDP's predation on economic activity: Type of Economic activity

While, at the time of research, the 85th brigade mainly derived revenue from the predation on the mining and trade of cassiterite in and around the Bisie cassiterite mine, both the CNDP and the FDLR appear to have a diversified revenue base. The December 2008 and the May 2009 report by the UN Group of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth in the DRC (UNSC, 2008, 2009) details these diversified revenue sources. According to the UN research, the CNDP benefitted from (in no specific order):

- Support by the Government of Rwanda and the Rwandan Defence Forces (UNSC, 2008, §61 and following)
- Control of the import and export processes at the Bunagana border post until January 2009) (UNSC, 2008: §35 to 47; UNSC, 2009: §46)
- Local mineral transport taxation (UNSC, 2008: §57 and following)
- Taxation of transport routes and taxation of economic activity (UNSC, 2009: §23 and
 36)
- Taxation of the food and charcoal trade, as well as road toll (UNSC, 2008: § 33)
- Seizure of weapons from FARDC and other sources and other sources (UNSC, 2008: § 25 and following; UNSC, 2009: §34)
- A "pool" system of financing, a sophisticated financial network of Congolese and Rwandans in the diaspora (UNSC, 2008: § 30)
- Cash and kind donations by the business community in Goma (UNSC, 2008: § 31)
- Blackmail of the business community in Goma (UNSC, 2008: § 31)
- Protection money from wealthy farmers (UNSC, 2008: § 34)
- Cattle (UNSC, 2008: § 34)
- Remittance flows and individual financiers (UNSC, 2008: §48 and following)
- Part-control over the Bisie cassiterite mine as part of the FARDC's 1st integrated brigade that replaced FARDC 85th brigade in early 2009 (UNSC, 2009: §39)

The revenue sources the UN investigators unearthed suggest the predation on the mining and trade of 'conflict minerals' is one of many revenue sources for the CNDP. I will return to this point in the section below on the relative importance of the predation on the mining and trade of 'conflict minerals' to the CNDP's overall budget. However, what is clear to infer from this list is that preventing the CNDP from deriving revenue from the predation on the mining and trade of 'conflict minerals' will *not* deprive the armed group of access to revenue overall and will also *not* deprive the armed group from access to weaponry.

According to the UN research, the FDLR benefited from:

- Control over cassiterite and gold mining sites (UNSC, 2009: §54, 64, and 105)
- Trade in mineral resources cassiterite, gold, coltan and wolframite areas under their control in North and South Kivu (UNSC, 2008: §72 and following)
- Taxation of the charcoal trade (UNSC, 2008: §113)
- Involvement in the drugs and timber trade (UNSC, 2008: §113)

- Attacks on civilians (UNSC, 2009: § 54)
- An extensive international support network allegedly involved in fund-raising activities and organizing international money transfers (UNSC, 2009: § 60)
- Collaboration with the FARDC (UNSC, 2009: § 62)
- Support networks in Burundi (UNSC, 2009: § 63)
- Charcoal production in the Virunga National Park and charcoal taxation (UNSC, 2009§ 65)

The revenue sources the UN investigators unearthed suggest that the predation on the mining and trade of 'conflict minerals' is an important source of revenue for the FDLR, considering the FDLR's revenue sources are not as diversified than those of the CNDP. I will return to this point in the section below on the relative importance of the predation on the mining and trade of 'conflict minerals' to the FDLR's overall budget. It is possible to infer from this list that preventing the FDLR from deriving revenue from the predation on the mining and trade of 'conflict minerals' will *not* deprive the armed groups of access to revenue overall, but considering the group's less diversified revenue base, it would in theory have a greater impact on this group, than, for example, on the CNDP.

In this context it is important to remember the point I made in chapter 1 of this thesis, which are that economic activity does not differ significantly in war time, from economic activity in peace time, except for a greater dependence on the mining and trade of minerals and metals, due to the insecurity-related diminishing returns from subsistence agriculture. When analysing the CNDP's and FDLR's revenue base it is apparent that their predation extends to several economic sectors. The armed groups have an impact on the production in minerals and metals, as well as cattle, charcoal, drugs and timber, but most importantly they prey on trade, which captures all categories of transported and traded goods and therefore they hinder economic activity in all economic sectors. I discussed this point in greater detail in Chapter 3 on the 'coping' economy in the context of the importance of the continuation of economic activity to the livelihoods of the 'coping' economy actors. I will return to this point in the context of Chapter 6, when discussing whether the measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') are right in their prioritisation of measures targeting conflict financing, which target the revenues of armed groups, over measures targeting the presence of armed groups themselves, such as Security Sector Reform (SSR).

The FDLR's and CNDP's predation on economic activity: Type of mineral or metal

The theoretical discussions in Chapter 2 suggest the success of measures to curb conflict financing (through the predation mining and trade of 'conflict minerals') will depend on the nature of the 'conflict mineral' the armed groups are preying on, which is a critical point, which I also will revisit in chapter 6. According to this logic, measures are likely to be relatively more successful in targeting armed groups with a greater dependence on highvolume, low-value 3T minerals, than those with a greater dependence on low-volume, highvalue gold. The idea behind it is that high-volume 3T minerals are harder to conceal considering a greater volume of minerals will need to be commercialised in order to receive a significant amount of revenue. The discussion of the 85th brigade has demonstrated the dependence of the brigade's revenue generation on the predation on the mining and trade of cassiterite, which would suggest the 85th brigade (or any armed group preying on mining and trade of cassiterite in and around the Bisie mine) would be relatively more likely be affected by measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals'). The UN research findings introduced above suggest that the FDLR also preys on the mining and trade of gold, and more so than the CNDP has, which is largely due to the territory under the FDLR's control being more abundantly gold bearing. This would suggest that the FDLR (or any armed group preying on the artisanal mining and trade of gold) would be relatively less likely to be affected by measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals').

At the time of my field research in North Kivu in 2007, the CNDP did not appear to control mining operations directly. It is speculation only to suggest that this may be due to the fact that there was limited mining activity in its area of operation. The one prominent exemption at the mining stage could be the tantalum mining operations of Mwangachuchu Hizi International at the Bibatama mine in Masisi territory. The UN Group of Experts reports, "sources in the mining industry say General Nkunda has given [the owner, Mr. Mwangachuchu] permission to remain at the concession in return for a cut of production. Mr. Mwangachuchu himself informed the Group that he pays \$0.20 per kilogram of coltan exported at checkpoints set up in the vicinity of the mine, which he suspects are linked to CNDP" (UN, 2008, p. 14). In addition, the CNDP controlled the Bunagana border crossing with Uganda —one of North Kivu's principal cassiterite export points — through which up to 40 per cent of cassiterite exports were, at the time of research, leaving North Kivu every

month, security on the road permitting (interview, mineral exporter F.E.C. representative, Goma, 2007). The CNDP's predation on the mining and trade of gold was an underresearched area at the time of my research and only in 2011 did reports surface of a strong involvement of CNDP personnel, like Bosco Ntaganda, in the trade of gold. Press reports suggested, "on February 3 [...] when a plane from Nigeria touched down at the airport in Goma, [...] More than [US] \$6.5 million in cash was allegedly taken from the plane to Ntaganda's compound, [...and...] Ntaganda's men later delivered more than 450 kilos of gold to the plane" (Clifford, 2011, p. 1). In line with the argument above, measures to curb conflict financing (through the predation on the mining and trade of 3T minerals) thus would be relatively more likely to have an effect on the CNDP by virtue of the CNDP's predation on the easier-to-control, high-volume 3T minerals. However, as discussed in the section above, this does not mean that the effect on CNDP revenues would be sufficient for the CNDP to stop operating and wither away. Should further evidence emerge over and above the gold shipment mentioned above, that the CNDP has access to revenues from the predation on gold mining and trade, then the likelihood of measures to curb conflict financing (having an effect on the CNDP would diminish, as the low-volume nature of gold makes it significantly harder, if not impossible, to control. I will elaborate further on this in Chapter 6.

One dimension of note is that the CNDP had installed a parallel governance structure in the area under its control and an administrative structure that was working particularly effectively around the Bunagana border crossing, where import and export taxes were collected for the CNDP that amounted to an estimated US\$ 154,000 between September 2007 and September 2008 (UN, 2008, p. 9). The fact that the CNDP had built up a parallel governance structure, with its own administrative structure suggests to me that while the taxation of general production and trade within the CNDP's area of operation was systematic, the taxation of the mining and trade of 'conflict minerals' can, in comparison with the FDLR and 85th brigade, be described as *opportunistic* in the sense that production and trade was taxed, because the opportunity arose as part of a greater effort to establish a formal tax base for the CNDP, rather than being a key focus of the group's military strategy. This, in turn, would suggest the CNDP was benefiting from the predation on the mining and trade of 'conflict minerals', but it was, as an organisation, not necessarily fighting to benefit from the predation on the mining and trade of 'conflict minerals'. Revisiting Keen's (1998) point that combatants' incentive structures can evolve as time progresses and there can be an evolution of initial grievance-based violence to greed-based violence, the CNDP's

incentives appear to have changed less than those of the FDLR, for example, which appears to have a relatively more direct and intentional focus on the predation on the mining and trade of 'conflict minerals' (see below).

This would mirror expert considerations, that suggest, "since 1996, the area around Goma—especially the highlands of Masisi and Bwito populated mostly by descendants of immigrants from Rwanda—has been ruled by elites closely linked to the Rwandan Patriotic Front (RPF) in Kigali. This history has bound local elites and their constituencies together in a potent web of self-interest, ethnic solidarity, and distrust of the Kinshasa government. While this binding network has begun to fray, it is unlikely to unravel altogether—or change the way it perceives Kinshasa" (Stearns, 2012, p. 52). This is an important observation when evaluating the validity of the argument that measures to curb conflict financing (through the mining and trade of 'conflict minerals') are promising conflict resolution mechanisms. I return to this point in Chapter 6.

The FDLR appears to be a more complex case than the CNDP. MONUC reported the FDLR was running coercive governance structures around some mines (without specifying these), including, in rarer instances, forced labour coerced through violence (interview with MONUC representative, Goma, 2007). In a later UN Group of Experts report, it was stated, the "[...] FDLR is reaping profits possibly worth millions of dollars a year from the trade of minerals in eastern Democratic Republic of the Congo, in particular cassiterite, gold, coltan and wolframite" (UNSC, 2008, p. 20). The minerals business is a high priority for the FDLR, "whose commanders detach units to tax and control the trade of minerals in a system they call 'non-conventional logistics'. Some former combatants have informed the Group that the revenues earned by FDLR have been passed back up through the movement's hierarchy" (UN, 2008, p. 20). What is evident is that there appears to be a *systematic and focused* element to the FDLR's predation on the mining and trade of 'conflict minerals', suggesting it was a key focus of the group's military strategy.

During my research in 2007, it became apparent that the FDLR operated in and controlled some of the cassiterite mining areas of Southern Walikale around the border with South Kivu and in the Kahuzi-Biega National Park in South Kivu (interview with MONUC representative, Goma, 2007 and interview with FARDC 85th brigade soldiers, Walikale, 2007). This was confirmed by the UN Group of Experts in a 2008 report, which estimated that the

FDLR "controls the majority of the principle artisanal mining sites in South Kivu, which are mostly cassiterite, gold and coltan mines. In North Kivu, FDLR controls many gold-mining pits based in the jungle west of Lubero" (UNSC, 2008, p. 20). The FDLR thus also benefitted from scattered resources, as opposed to easily identifiable point resources, like is the case with the 85th brigade and the Bisie mine (Spittaels and Hilgert, 2008). This is an important observation with respect to the potential success of mechanisms to curb conflict financing (through the mining and trade of 'conflict minerals'), which I discuss in Chapter 6. These measures would have to be effectively implemented to prevent FDLR financing through the predation on the mining and trade of 'conflict minerals' in multiple mine sites, including inside the Kahuzi Biega National Park, and across multiple transport routes and export points, particularly in the case of gold (see below).

The second aspect of importance is the FDLR's predation on the mining and trade of gold. "A Democratic Republic of the Congo senate report published in September 2009 estimated that 40 tonnes, or \$1.24 billion of gold, is smuggled out of the Democratic Republic of the Congo each year. On the basis of that figure and other interviews, the Group estimates that armed groups, in particular FDLR, may derive several million dollars of revenues each year from the trade, which therefore represents one of the most significant avenues of direct financing for them" (UNSC, 2009, p. 32). These observations from the UN Group of Experts highlight the magnitude of artisanal gold production in the Kivu provinces alone. While I will return to the gold trade in Chapter 5 on the 'shadow' economy, the most important aspect that I would like to highlight here is that the FDLR is preying on production and trade that are almost entirely informal. "The use of gold by armed groups has become markedly accentuated in the past few years owing to the ease with which it can be smuggled, although this is difficult to quantify given that government mining documents from North Kivu and South Kivu show only a few kilograms of gold exported officially each year" (Ibid.). This suggests that for measures to curb conflict financing to effectively reduce the FDLR's revenue from the predation on the mining and trade of gold, they would have to be able to prevent the FDLR from being able to prey on the mining and transport of a metal that is so valuable in small quantities that several grams already amount to a significant revenue stream for individual units. I will return to this point in Chapter 6.

Conclusion

The discussion of the 'conflict' economy actors involved in the predation on the mining and trade of 'conflict minerals' in North Kivu and beyond show that alternative governance regimes have emerged, particularly in areas where the state has limited reach. Ballentine and Sherman suggest the opportunity structure for rebellion is a) "deeply influenced by the relative strength of the state being challenged" and b) "a function of the relative capacity of the state to ensure just and effective economic governance" (2003: 265). The predation on economic activities has allowed those controlling the alternative governance regimes to prey on economic activity, with the three key armed groups I discussed all to varying degrees benefitting from the predation on the mining and trade of 'conflict minerals'. Vlassenroot and Raeymaekers in this context suggest, the "underlying sources of this peace-making fallacy are a series of incorrect assumptions about the nature of the Congolese state as failed and collapsed. By continuously underplaying informal forms of governance in the eastern borderlands, the international community is missing a crucial chance to trigger a fundamental political transformation [...]" (2009, p. 1). They further recommend, "instead of [...dealing with renewed] 'emergencies', the international community would do best to tackle the fundamental obstacle to peace in the DRC, which is the violent and privatized governance of public goods and resources" (Ibid, p. 10).

What is evident is that the key armed groups I discussed do take advantage of revenue generating opportunities far beyond the mere predation on the mining and trade of 'conflict minerals'. This fact is underlined by the UN Group of Experts investigative reporting on the conflict in the DRC, as I outlined above. This highlights a) the burden the armed groups place on the existing economic system, and b) how their presence is a key impediment to tangible reform in their areas of operation, both in the context of the mining and trade of 'conflict minerals' and in the context of broader economic diversification.

Le Billon's work on the 'ecology of conflict' provides some perspective on how geographic aspects and the concentration of mineral endowments impact on the strategy of armed groups (Le Billon, 2001: 572). While the geographical typicality of the terrain easily permits the 85th FARDC brigade to control and economically benefit from the Bisie mine, the 85th brigade's coercive 'security governance' implementation is rational, as it translates into greater economic productivity, particularly in the Bisie mine, which was the brigade's key source of income. The growing productivity leads to a higher income in tax collection for the

armed group, which mirrors Chojnacki and Branovic's (2007) explanation of the emergence of 'security governance' with geographic and economic opportunities. This is similar behaviour other researchers have found with other armed groups in eastern DRC, such as the FAPC (Titeca, 2010) and is a key aspect that would refute to a degree suggestions that natural resources "act as a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8).

Existing literature suggests that if combatants can access resources directly, instead of having to work through a command structure, this can create discipline problems, which can impede conflict resolution attempts that require combatants to go along with settlements agreed to by their superiors (Ross, 2003). The Congolese government suggested the FARDC's 85th brigade is operating outside of the army's central command, means there is an element of applicability of this theory to my case, though at the same time, this view does not explain how and why the brigade maintained coherence and contributed to a relatively more secure environment in Walikale territory and finally, after my field research period in Walikale, withdrew from the Bisie mine, which I discussed in the Introduction chapter and in chapter 3.

Likewise, it is difficult to see how Ross' point applies to the principal non-state armed group operating in gold and cassiterite-bearing areas, the FDLR. FDLR combatants and commanders have access to resources outside of their command structure by virtue of their geographic disbursement. However, if reports, which I discussed in chapter 1, are truthful, the theory does not explain why the FDLR seemed to maintain its command structure and demonstrated organised withdrawals, even from lucrative gold bearing areas during the joint RDF-FARDC *Umoja Wetu* military campaign against the group, which I also discussed in chapter 1, and how it subsequently re-established control of those areas, following the withdrawal of the RDF (Oxford Analytica, 2009). This is another hint at the fact that the FDLR is not simply a gold and cassiterite commercialisation business and divorcing it from the ASM production and trade may not simply result in it fading away.

The 'conflict minerals' campaign portrays the conflict in eastern DRC as one that requires large amount of finance in order to be sustained. That is not necessarily the case, as my analysis suggests. Bannon and Colliers (2007) point out that rebel groups have to become a business operation, unless a foreign government or diaspora supports them. However, my

analysis of the 'conflict' economy actors suggests another important point is to consider what 'conflict' actually means in the context of eastern DRC today and whether much finance is required to maintain it. Maintaining insecurity or the type of 'security governance' I was able to observe in Bisie, is relatively straightforward in an environment that is awash with small arms (IRIN, 2006). An AK-47 assault rifle, for example, can be purchased for 30US\$ in Walikale territory in North Kivu (BSR, 2010; Author's Observation, Walikale, 2007). As long as one carries a gun or another weapon, using expensive ammunition is neither required to prey on the mining and trade of 'conflict minerals', nor is ammunition imperative to be able to prey on civilians, abduct children and/or rape children, women and men. While in many areas in eastern DRC the security situation has improved, particularly in Orientale Province (MONUC, 2007), a situation of permanent insecurity remains the reality in parts of North Kivu (Mushi, 2012). Permanent insecurity is different from full-scale warfare that requires expensive and high-tech weaponry, which is mainly deployed where the United Nations Organisation Stabilisation Mission in the Democratic Republic of the Congo /FARDC drive military operations against the FDLR (UNSC, 2008). The armed actors in eastern DRC therefore require far less revenue to maintain their presence, than is commonly assumed. In the same vein, the UN Group of Experts has unearthed evidence that the "CNDP captures most of its weapons and ammunition during offensives against FARDC" (UNSC, 2008, p. 6). The latter further diminishes the CNDP's need for finance. This suggests, while, for example, the FDLR is making millions of dollars from its predatory economic activities (UNSC, 2009), it does not have to make even a fraction of that amount in order to maintain fighting capacity. In fact, the one armed group that requires the most finance, is the FARDC, as it is overstaffed and their lack of doctrine, training and chain of command, means it frequently dissolves when faced with armed aggressors, surrendering its expensive equipment, or simply "leaks" weaponry to armed groups (Amnesty International, 2012, p. 16).

The implication here is that it is a policy limitation to just focus on the predation on the mining and trade of 'conflict minerals' as a conflict resolution avenue or, in a more limited wording, avenue to curb conflict financing, without also addressing the presence of the armed groups per se, as well as other, underlying causes of conflict.

5 – 'Conflict minerals' production in North Kivu and Orientale Province

- the 'shadow economy'

Introduction

The previous chapters have provided an analysis of the realities of the mining stage of the ASM sector, with a special emphasis on 'coping' and 'war' economy dimensions. This chapter presents an analysis of the trade in cassiterite from Walikale territory in North Kivu and the gold trade from Watsa territory in Orientale Province through the theoretical lens of a 'shadow economy'. The terms "'black', 'illicit' or 'illegal' economies are problematic and value-laden, particularly in contexts where there is a statutory legal vacuum" (Goodhand, 2004, p. 3), which is at least partly applicable in eastern DRC. In fact, "illegal economic activity may be tolerated and even encouraged by officialdom, not only because it offers elites opportunities for self-enrichment, but also because, in conditions of chronic underdevelopment or conflict, it has positive social effects in enabling people to cope along the margins of a dysfunctional formal economy" (Pugh, et al, 2004, p. 8). In Chapter 3, I discussed in more detail the 'coping economy' elements within eastern DRC's 'conflict minerals' economy.

I argue that within the economic system in eastern DRC, there is a difference between those whose objective is to profit from waging war or from war being waged, and those whose aim is simply to profit. In this regard, I believe the following definition to be an accurate portrayal of the 'shadow economy': "the term 'shadow economy' refers to economic activities that are conducted outside state-regulated frameworks and are not audited by state institutions" (Ibid. p. 9). This is a definition distinct from other definitions of the informal sector, which focus on the characteristics of an economic entity, such as size, or resource endowments (Mlinga and Wells, 2002, Tokman, 2001), rather than the activity the entity or operator is engaged in. In line with Pugh et al's definition, and unlike the proverbial 'conflict entrepreneur', 'shadow' economy actors may not necessarily be disincentivised by the prospect of peace, so long as they can maintain or increase their profits in peacetime (Goodhand, 2004). The importance of this concept in the context of eastern DRC is that the economic actors may actually support peace or conflict resolution, so long as they are sufficiently incentivised.

The phenomenon of a shadow economy is not a new one. During the cycle of decline during

the latter years of the Mobutu era, a dramatic increase in cross-border economic transactions undertaken by the 'shadow economy' consolidated the emergence of a vast regional network of informal trade, which became "the means by which seemingly disastrous national economies managed to keep going" (MacGaffey, 1991, p. 22). Vlassenroot goes so far as to say, "where official international treaties in the Great Lakes Region failed to create regional economic integration, unrecorded cross-border trade resulted in unofficial market integration beyond the state" (2009, p. 6). Historically, "it was partly owing to the ingenuity of local entrepreneurs that (...) Zaire was able to ward off harsh blows of a decade-long flight of foreign capital and cuts in economic assistance" (Mwansali, 2000, p. 140). Yet, "it was not only local entrepreneurs who profited from these activities: private businesses, transportation companies, and tax-collecting bureaucracies throughout the region benefited significantly from the informal sector and the income opportunities it provided" (Vlassenroot, 2009, p. 6). These patterns have been observed in selected cases across the African continent (e.g. Pugh et al, 2004) and in the context of eastern DRC persist to this day.

This chapter, in line with the theme of this thesis, explores the shadow economy in the context of the 'conflict minerals' trade in eastern DRC, with a specific emphasis on my two cases. The gold trade from Orientale Province and the cassiterite trade from North Kivu involve a number of stakeholders, each with their own incentive structure, comprising local, national, regional and international actors. The 'conflict minerals' campaign posits that economic actors in the trade have a direct incentive to ensure conflict remains, as it is the conflict that allows them to profit from the predation on the mining and trade of 'conflict minerals' (Global Witness, 2008; Enough Project 2012). This chapter analyses whether this is in fact the case and it suggests that most actors in the trade, except for the armed groups, actually may have more to gain, or at least not too much to lose, from peace, as long as peace would allow them to continue to make a profit. In a similar vein, I suggest that economic actors may choose to formalise if they are sufficiently incentivised, which means if joining the formal economy is both possible and a 'better deal' for them. That said, considering the history of state predation on formal economic activity, which I discussed in chapter one, one could suggest that 'shadow' economy actors not only deliberately contravene statutory law with criminal motivations, but perhaps do so as a coping strategy in response to corruption and economic harassment.

This chapter presents these arguments in the following sections. The first section presents the cassiterite trade from Walikale territory in North Kivu. The second section provides an analysis of the gold trade from Watsa territory in Orientale Province. The fourth section discusses formalisation as a feasible reform process, and concludes.

The trade in 'conflict minerals' in North Kivu and Orientale Province – the 'shadow economy'

The following sections of this chapter present an analysis of the informal trade in cassiterite from Walikale territory in North Kivu and the informal trade in gold from Watsa territory in Orientale Province. The analysis focuses on the structure of the trade and the key economic actors partaking in the trade, with a view to gaining a better understanding of their incentive structure, so to allow me to determine whether they are more likely to be 'conflict entrepreneurs' or 'shadow' economy actors.

As per my discussion further above, the two commodities display different characteristics. Gold is a high-value, low-volume and highly fungible commodity. It is of significantly higher value than cassiterite and, as I have discussed in Chapter 4, it is also a key revenue source for armed groups in parts of the Kivu provinces, such as the FDLR. As I will explain later in this chapter, estimates from various sources suggest that the trade in artisanally mined gold is almost exclusively informal, depriving the Congolese state of significant revenues. One of the key dimensions to analyse, therefore, is why the gold trade is almost exclusively informal, which is the subject of the discussion in Chapter 6. This chapter 5 aims to present some key dimensions, particularly of the gold trade, that will bring important perspectives to the discussion around externalities for the different sets of actors involved in the mining and trade of 'conflict minerals' of IANGO advocacy-driven measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals').

The trade in cassiterite from Walikale territory in North Kivu province differs from the gold trade from Watsa territory in Orientale Province. The discussion in Chapter 4, in particular, has provided a dimension, which was notably absent in the area of my research in Watsa territory: predation by armed groups on the mining and trade of cassiterite. In addition, the cassiterite trade was at the time of my research not entirely informal. In fact, as I shall explain further below, an estimated 35% of the trade was undertaken informally. Being a high-volume, bulk product, the trade is much more visible than the gold trade, making it

comparatively more complicated to trade the commodity informally. This means much of the trade formalises at the point of export, which suggests that, contrary to the gold trade, a far greater number of formal entities are engaged in the trade in cassiterite. I discuss the implications of this in the penultimate section of this chapter, which deals with trade formalisation. Importantly, the power dynamics in the trading chains in 'conflict minerals' are often conditioned by power struggles at the mining stage, particularly between those who hold statutory legal titles to either explore or exploit ore bodies with industrial methods, and shadow economy actors who have a stake in the on-going ASM activities. For this reason, I am introducing the analysis of both the cassiterite trade and the gold trade with a brief description of examples of local power struggles, prior to analysing the actual trade in more detail. The competition between statutory actors and shadow economy actors provides an important dimension in the later cost-benefit analysis of formal versus informal operations, which I present in a discussion on formalisation later on in this chapter.

The trade in cassiterite in North Kivu – the Walikale Goma Route¹⁹

In Chapter 3 of this thesis I have provided an in-depth perspective of the 'coping economy', as I observed and researched it in Walikale territory, with a particular emphasis on the Bisie mine, the principal cassiterite mine in North Kivu. The dimension notably absent from that discussion is that of power struggles between actors who, at the time of my research, held statutory legal rights over the Bisie mine, and shadow economy actors who had vested interests in the on-going ASM activities. The case of overlapping areas of interest, particularly between junior exploration companies and ASM operations is a frequent occurrence in the context of the DRC and key risk for formal operators (interview with World Bank representative, Kinshasa, 2007). That said, many small, high-risk-taking companies have recently acquired mining concessions, most of which already host artisanal mining communities, with the companies divided between mineral and metals exporters (comptoirs) and smaller international mining companies (ibid.). At the time of my research, both types were influential political players, as they were the most financially potent economic operators in North Kivu, after the numerous international aid agencies in the region (Interview with vice-governor of North Kivu province, Goma, 2007).

¹⁹ The following paragraphs were pre-published in Garrett, 2008. In the revision of my thesis, I have revised the analysis, re-checked interview sources and where required, have supplemented the analysis with additional secondary sources. I have not extended the time horizon the analysis covers, as in its original form it illustrates the key points that I am trying to convey.

Most of the comptoirs who have acquired concessions have done so with foreign financial backing, predominantly from European, Canadian, Chinese, Rwandan, and South Africanbased companies or individuals. The two companies of relevance to the Walikale case study are Mining and Processing Company (MPC) and the Groupe Minier Bangandula (GMB). Jonah Capital, Metmar and Coronation Capital had invested in Kivu Resources, the parent company of MPC (iTSCi, 2008). Company documents seen by the author highlighted that Alexis Makabuza Rusenga, the majority shareholder in GMB, had sought international investment from the Ichikovitz Group of Companies, amongst others. A key reason for investors having retained an interest in the companies operating with cassiterite is a longterm positive outlook for tin, as a result of continued growth in the global electronics industries (Sutter, 2012). While the cassiterite industry can be described as a marginal mining industry considering the exponentially greater economic potential in copper, cobalt, gold and diamond mining, some of these companies have stated their aim to expand to small- or medium-scale mining in the medium term, pending satisfactory geological surveys, stabilisation of the security situation, and improvements in physical infrastructure such as the erratic electricity grid and roads (focus group with representatives from operators in North Kivu's cassiterite industry, Lusaka, 2008). If the operators would be able to undertake such investments and contribute to a continuum of company sizes from ASM to mediumscale mining, development theory suggests this would be a welcome economic contribution, as small- to medium-scale mines tend to display a higher employment rate and greater tangible benefits arising from economic linkages to other domestic economic sectors than industrial mines, whose economic contribution is skewed towards the fiscal (Auty, 2006).

That said, at the time of my research, no tangible investment into up-scaling of ASM activities had begun in Walikale territory. Instead, there was a violent contest between MPC and GMB over the rights to the Bisie mine. The origins of the contestations are as follows:

In October 2005, GMB signed a lease agreement (seen by the author) over seven cassiterite concessions (PE 55, 58, 59, 60, 62, 64 and 65) with SAKIMA, the successor of the former part state-owned company SOMINKI. At the time of signing the contract, GMB was under the impression that Bisie formed part of SAKIMA's Biruwe concession, to which it holds exploration rights (interview with GMB shareholder, Goma, 2007). "In June 2005 the Lutundula Commission, a special National Assembly commission led by parliamentarian Christophe Lutundula, submitted a report on its investigations into mining and other

business contracts that rebels and government authorities signed between 1996 and 2003, when Congo was wracked by war. The report found that dozens of contracts are either illegal or of limited value for the development of the country and it recommends their termination or renegotiation" (RAID, 2006, p. 1). GMB's contract have been placed in 'category C: to be revoked' following a mining contract review process that followed the Lutundula Commission's recommendations (Lutundula Commission, 2005).

However, prior to this and following the signing of the agreement with SAKIMA, GMB took charge of the Bisie mine, followed by the FARDC's non-integrated 85th brigade, which I analysed in depth in Chapter 4, in preying on the mining and trade of cassiterite in and around the Bisie mine by demanding extra-legal taxes of the primary and secondary ASM economy actors. This was documented in detail in a police intelligence report seen by the author, which calculated that these taxes would amount to US\$ 315,000 per month at the global cassiterite prices valid at the time. In a letter to President Kabila, seen by the author, Kidege Ramazani, customary chief of the Bisie mine, complained about GMB's activities, albeit without results. A contract seen by the author, which was signed on 28 August 2006, Dieudonné Tshishiku Mutoka, then Administrator of the Walikale territory, commits to supporting and ensuring the security of GMB in the Bisie mine. In exchange for the security services provided by the Administrator, the company guaranteed Mr Mutoka 10 per cent of the weekly production of the Bisie mine, US\$ 0.05 per kilogram of all cassiterite extracted by the company in the mine, and 50% of the receipts generated at the intermediary cassiterite selling stations in the territory. The UN Group of Experts subsequently concluded that the only possible provider of security in the area allied with the Administrator is the FARDC's non-integrated 85th Brigade (UNSC, 2007).

In spring 2006 GMB's rival company MPC used GPS data to establish that the Bisie mine is in fact situated outside of GMB's Biruwe concession. With this knowledge, MPC registered an exploration permit for the Bisie mine with the mining registry and on September 29th 2006 a research permit (*Permis de Recherche* PRS5266), signed by the Minister of Mines, was awarded to MPC (interview with representative of Ministry of Mines, Kinshasa, 2007). At the time of research, the UN recognised MPC as Bisie's legitimate concessionaire (UNSC, 2007, p. 7). Following the awarding of the exploration permit to MPC, the company found itself embroiled in conflict with GMB over the concession, culminating in an unsuccessful assassination attempt on MPC staff on a visit to the Bisie mine on October 29th 2006

(interview with traditional authorities, Bisie, 2007; interview with MPC representative, Goma, 2007). It is at this time where the power struggle between GMB as the shadow economy actor, with no formal right to mine the Bisie mine on the one hand, and the holder of a research permit enshrined in statutory law, took a strategic turn.

With no resort to statutory legal means to win the Bisie concession, GMB proceeded with the establishment of the cooperative COMIMPA in the mine, which is supposed to represent the resident artisanal miners (interview with traditional authorities, Bisie, 2007; two focus groups with artisanal miners, Bisie, 2007). "10 GMB shareholders signed the statutes of COMIMPA compared to only five non-shareholders", which implies that COMIMPA is in effect GMB (UNSC, 2007, p. 19). At the time of my research, focus groups with artisanal miners suggested that the resident community was opposed to COMIMPA, as it was aware of the fact that COMIMPA in effect represented GMB, and that GMB had cooperated with the FARDC's non-integrated 85th brigade (two focus groups with artisanal miners, Bisie, 2007). MPC took advantage of the situation and encouraged the miners to found a rival cooperative, COCABI (*Coopérative des Creuseurs Artisanaux de Bisie*) (ibid.). This development shows that the miners were manipulated to support either of the two companies' political and economic ends.

Under pressure from the Ministry of Mines and the Provincial Division of Mines to progress with the formalities to obtain an exploitation permit, MPC subsequently gave in to a compromise that allowed for the establishment of COMIMPA in Bisie, for the duration of MPC's Research Permit (interview with representative of the provincial division of mines, Goma, 2007; interview with representative of MPC, Goma, 2007). SAESSCAM was part of the negotiation even though Bisie is not an official AMZ, underlining the negotiated nature of the deal. Once agreed upon, COMIMPA began trying to enlist the resident artisanal miners. COMIMPA also started talks with COCABI to seek an agreement between the two cooperatives as it now had a license to operate in Bisie, while COCABI did not (interview with COMIMPA representative, Goma, 2007). The result of the installation process is that the formal actor, who was regarded as the legitimate concessionaire in statutory law, had been undermined, while the owners and financial backers of COMIMPA, who were operating as part of the shadow economy with no statutory right to mine the Bisie mine, had attained a formal revenue stream. Follow-up research in December 2007 had uncovered that the FARDC's non-integrated 85th brigade had retaken physical control of the mine, with

COMIMPA at least temporarily retreating, and MPC continuing to struggle to roll out an exploration programme. In 2008, MPC declared *force majeure*, suggesting that it was impossible to operate considering the 85th brigade's presence in the mine (Metalbulletin, 2008).

This example shows that alliances and power relationships are frequently shifting, and these realities can evolve independently of formal legality and at least partly outside the horizon of possible action by the Government in Kinshasa. In terms of the shadow economy, the example above suggests that dynamics at the mine site level are linked to power dynamics in the urban centres, and incentive structures of 'shadow economy' actors can thus be multi-dimensional. This is why understanding incentive structures are a key element in understanding the internal functioning of the 'shadow economy', which is also evident from the discussion of the trading chain that follows.



Photo: Cassiterite bags are being prepared for transport, @Mark Craemer, 2009

At the time of my research, cassiterite was traded on the 'Gécamines' mining site, in Manoiré and in the mine's other support village, Marojé. Given that there is no road access, porters on foot each transport 50 kilograms of cassiterite from Manoiré to the village of

Ndjingala. The 45 km trail that connects Manoiré and Ndjingala is the sole access to the mine, and takes around 8-12 hours on foot to navigate, depending on the weather conditions (interviews with two porters, Ndjingala, 2007). The cassiterite from Bisie was then traded in Ndjingala and Mubi, two villages located 42 km and 31 km northwest of the town of Walikale on the Walikale–Kisangani road, where *négociants* prepared the cassiterite for transport. A curved, 300 meter-long section of the Kisangani–Walikale road in the village of Kilambo, 22 km north of the town of Walikale, served as an airstrip, from which (at the time my visit) approximately 80% of the mineral was flown to Goma, with the rest transported by road to Bukavu and Kisangani (interview with *négociant*, Mubi, 2007). The landing strip at Kilambo breaches international aviation safety regulations as it runs through a populated area and has not even the most rudimentary facilities one would expect of an airport. However, both transport and passenger aviation companies departing from Goma use the landing strip (author's observation, Kilambo, 2007). The Kilambo airstrip can be regarded as a sign of the level of resilience of those organising the trade, even in the face of broader infrastructure and security constraints.

A key element of note is that of extra-legal taxation. Research published in 2010, suggests, taxes "levied in Mubi represented 6.1 per cent of an 1.8 tonnes cargo of cassiterite worth US\$12,240" and that "the same service taxes mineral cargos several times and in various places [and often illegally] for several reasons: the service is not mandated to collect tax on minerals, the taxation personnel are sometimes not legally from the civil service, and the tax amount does not always have a legal basis" (Melmoth, 2010, p. 29). These taxes collected in Mubi would be in addition to taxes collected at checkpoints at the entrance and the exit of the trail connecting the villages of Ndjingala and Manoiré (author's observations, 2007). There are two more checkpoints, one between the mining sites and the village of Manoiré and one between the mining sites and the village of Majoré (author's observations, 2007). At the time of my research, fixed taxes were levied at these barriers on goods brought in and out of the mine, as well as a per-person tax. The amounts quoted at the barriers at the time of research were between 2,000 CFR (about US\$ 4) and 10% of minerals carried by the porters directly accruing to the authorities present at the barriers (two focus groups with artisanal miners, Bisie, 2007; two interviews with porters, Ndjingala, 2007; interview with négociant, Mubi, 2007). The collection of illegal taxes at roadblocks and barriers is a ubiquitous phenomenon in North Kivu and is not only an opportunist rent-seeking model employed by armed groups, but another symptom of state fragility employed for private

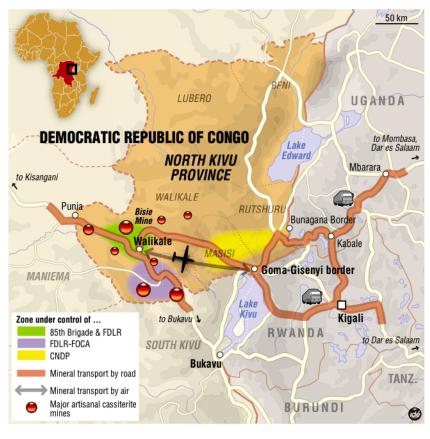
gain (Englebert, 2003). I return to this point of rent seeking further below.

In Kilambo the minerals are loaded on to six Let-410 transport planes, which transport up to two tons of cassiterite each to Goma. Charges from Walikale were US\$ 0.3 per kg of cassiterite (interview with *négociant*, Mubi, 2007). The aviation companies can thus earn US\$ 600 per flight, plus passenger fares. The six planes did on average four rotations per day on the route known as the Walikale Express, with a 35-minute flying time per leg (ibid.). To offset per-flight costs, the transport planes normally haul between one and two tons of cargo, ranging from food supply to motorcycles to Walikale when departing from Goma (ibid.). This underlines the significance of the trade for the 'coping' economy in Walikale, as discussed in Chapter 3, particularly as the costs involved are too high to justify a privately operated air bridge, without the planes leaving full of cassiterite on the return leg (ibid.).

One interviewee argued, "the airlines have an inherent interest in a perpetual conflict, as they would otherwise go out of business" (UN official, Goma, 2007). This is a limited worldview, however, as eastern DRC's infrastructure constraints mean planes will for a long time to come be a principal mode of transport and it will take a long time before infrastructure will be extended to more remote locations. In my opinion this suggests that the airlines do not necessarily have an interest in conflict so long as they can make a profit in peace time, which, considering the country's infrastructure constraints, they most likely could, at least in the short- to medium-term.

The Walikale–Goma road, which the German NGO Deutsche Welthungerhilfe (at the time of my research) was reconstructing between Goma and Walikale as and when security permitted, has the potential to open up an important trade corridor (interview with Vice-Governor of North Kivu, Goma, 2007). However, since the FDLR and CNDP were controlling parts of the territory the road was traversing, it remained particularly prone to predation — not only from the militia, but also from state actors. The FARDC, the FDLR and the CNDP manned barriers along the road, where fluctuating 'taxes' were extorted in return for safe passage (interview with UN representative, Goma, 2008). Considering their vulnerability to extortion, the trucking companies should therefore have a greater stake in peace than in conflict. The presence of the armed groups is similarly preventing the trade from having a more tangible poverty reduction effect along the roads, which in other parts of the DRC are often vibrant trade corridors and provide economic opportunities to local villagers and they

would also reduce prices for consumer goods in Walikale, meaning more disposable income could be directed to saving or other investments.



Map 1: Cassiterite Transport Routes in North Kivu

Source: Garrett, 2008b

Goma is North Kivu's cassiterite trading centre, where *comptoirs* (at the time of my research) bought cassiterite arriving from North Kivu, Maniema, South Kivu and northern Katanga. At Goma airport the cassiterite was offloaded and transported to the different *comptoirs* for processing. Depending on the size of the *comptoir* and the size of the shipment, anything from 5 to 100 day labourers were employed in processing in shifts, earning up to US\$ 7 per day (interview with comptoir, Goma, 2007) – a significant premium considering that the average Congolese earns less than a dollar a day (Solidarity Center, 2012). Once the *comptoirs* obtained a critical mass of between 20 and 25 tons, the material was exported in containers for the Kenyan port of Mombasa or the Tanzanian port of Dares-Salaam (interview with comptoir, Goma, 2007).

At the time of my research, Sodexmines, Amur and MPC were the largest cassiterite comptoirs in Goma; however there were also a number of smaller comptoirs. Not all of the

comptoirs bought from the Bisie mine. MPC, for example, was buying higher value 'black' cassiterite from Kalima in Maniema province (interview with MPC representative, Goma, 2007; Mthembu-Salter, 2009). Until early 2007, the *comptoirs* had primarily exported cassiterite in unprocessed form, with little or no value being added on the territory of the DRC (interview with representative of Provincial Division of Mines, Goma, 2007). This practice led to an export stop in April 2007 and a review of export practices by the Ministry of Mines (ibid.). Export licenses were subsequently issued to selected *comptoirs*, who could provide evidence of processing capacities. In May 2007 the *comptoirs* were Amur, Mining and Processing Congo (MPC), Sodexmines, Starfield, Bakulikira, Ets Panju, M.H.I, Munsad, Clepad, Hill Side, Bulongo Gems, Avisam-Trad, W.M.C. and Metachem (ibid.).

Amongst the *comptoirs*, the export stop led to some professionalisation as financially potent *comptoirs* undertook investment in their minimum processing facilities, and many smaller *comptoirs* accelerated their search for foreign investment to upgrade their facilities (interview with Vice-Governor of North Kivu, Goma, 2007). Those *comptoirs* not considered for an official export license had either closed down, continued to smuggle or, at times, struck arrangements with official *comptoirs* to sell their stocks through them (interview with representative of Provincial Division of Mines, Goma, 2007).

Most licensed *comptoirs* allegedly continued to engage in fraudulent practices, such as under-declaring or wrongly declaring their exports (interview with OFIDA representative, Goma, 2007). In addition, unofficial *comptoirs* and other smaller operators continued to smuggle cassiterite across North Kivu's porous borders, jeopardising the operational profitability of the licensed *comptoirs* (interview with representative of Provincial Division of Mines, Goma, 2007). In this context it is important to understand actual export volumes and compare them with actual declarations. These calculations were pre-published in Garrett, 2008, p. 51. I have replicated the original text here:

"The airport at Goma serves as a transit hub for minerals from all over eastern DRC. In 2007, the Division of Mines in Goma recorded 2,381 tonnes of cassiterite arriving from other provinces at the airport, in addition to 6,675 tonnes from North Kivu (Provincial Division of Mines, 2007). However, on a normal day, six planes, transporting two tons of around 50% tin-content grade cassiterite each, fly four rotations from the Kilambo airstrip in Walikale alone (Author's observations, 2007).

This suggests 48 tons arrive in Goma per day from Walikale, which is 17,520 tonnes per year. Flights operate seven days a week, if the weather permits (Interview with négociant, Mubi, 2007). Factoring fluctuations in output, it is perhaps prudent to deduct 20% of that sum, which leaves 14,000 tonnes per year (Interview with comptoir, Goma, 2007).

Deliveries by road fluctuate depending on the security situation and weather affected road conditions, but can add approximately 10% over the year (ibid.) In addition, roughly 30% of cassiterite arriving in Goma comes from other parts of eastern DRC, which would give a figure of just over 19,600 tonnes, calculated 40% from 14,000 (ibid.). Official exporters process the cassiterite up to an export grade of up to 65% tin content, with around 30% of weight lost in the process (ibid.). This leaves a net volume of 13,700 tonnes of export grade cassiterite in Goma for export. This compares with official exports of 10,175 tonnes of cassiterite in 2007, or an estimated under reporting from official figures of approximately 35%."

The comptoirs explained fraudulent exports with unfavourable export charges in the DRC that were not harmonised with export taxes in neighbouring countries (ibid.). This highlights the positive potential that a harmonisation of export charges across borders could bring, which is currently a direct incentive for trading outside the law (Sunman and Bates, 2007). Another reason cited is the significant amount in bribes that the different Congolese authorities demanded for official exports to pass the Congolese border points. As one comptoir put it, "even when all documents are in order, you still have to pay bribes for the shipment to pass" (interview with comptoir, Goma, 2007). The "number and nature of regulations and regulatory bodies", as well as other opportunist state rent-seekers, "add to transaction costs for traders and confusion", causing increased "opportunity for corruption along the trading chain. There was an unnecessary multiplicity of state-agencies, and there were often too many state agents at crossing points", displaying some level of organised collusion for profit (Sunman and Bates, 2007, p. 35). The general feedback both from the private sector and state officials was that, at the time of research, it was not possible to conduct business in North Kivu's 'conflict minerals' sector in compliance with all relevant regulatory frameworks. I return to this point further below in the section on trade formalisation.



Photo: Some value is added to cassiterite exports from North Kivu, but in a very limited manner, © Mark Craemer, 2009

In the following paragraphs I analyse the fiscal linkage of the trade. The fiscal linkage is an important indicator in the context of the shadow economy discussion, because if the fiscal linkage from a formalised trade generates more revenue than Congolese government officials may earn privately from the trade, then this could be a potent incentive for the Congolese Government to invest more into a reform agenda. If, however, the fiscal linkage is negligible, it is certainly not an incentive to invest more into a reform agenda. The North Kivu Division of Mines Annual Reports of 2007 and 2008 provided a collection of revenue figures collected by a number of Congolese state services. While incomplete, the figures provide insight into the minimum fiscal revenue received in 2007, which the report suggests amounted to US\$2,012,995 (Provincial Division of Mines, 2007, 2008; quoted in Garrett and Mitchell, 2009, p. 32). The bottom line is that revenues accrue to the state, but not to the degree that they should. This discussion ties in with the shadow economy analytical frame chosen for this chapter, as there is possibly an element of collusion between the state officials and the *comptoirs*, suggesting that the state officials also have a stake in the shadow economy.

A state official I interviewed explained rent-seeking activities with irregular and inadequate pay, which implies that many relied on additional income from bribes to subsist (interview with OFIDA representative, Goma, 2007). It will be important to break this circle; however, suggestions that "a paid and trained customs officer with clear rules to follow will derive his social status and respect from his salary and reputation rather than from the rent-seeking opportunities his job afforded him" (Sunman and Bates, 2007, p. 11) are perhaps too simplistic, as they ignore the burden of patronage. Patronage networks continue to provide social cohesion and economic opportunity in North Kivu, but they also create difficulties for those in official employment, who have to take care of their extended circle of relatives. One state official said, "my income is high enough for myself, but because my relatives know that I have an income, they demand that I take care of them too. So I have to generate more" (interview with OFIDA official, Goma, 2007). This suggests that the issue of petty corruption by state officials is tied to broader development considerations, at least in the context of eastern DRC's 'conflict minerals' trade.

The comptoirs, meanwhile, are often portrayed as "conflict entrepreneurs" (Arnson and Zartman, 2005, p. 10). To recap, Goodhand defines a conflict entrepreneur as profiting from conflict, but sees that group of operators as potentially distinct from shadow economy operators, who "may have an interest in peace - if peace can enable the maintenance or increase of profits" (Goodhand, 2004, p. 3). From a conflict entrepreneur one would expect some reference to 'the prospect of peace' being a key risk for his/her business activities. The export process which I describe above leads to the important conclusion that instead of seeing 'peace' as the most potent threat to their business activities, the comptoirs displayed a far greater number of characteristics and described a far greater number of constraints that, combined, vest considerable confidence in me that they are in fact shadow economy actors. They are making a profit under the present conditions, which is often a "no peace, no war" scenario, to quote Richards (2005), and which I described in chapters 1 and 3. However, their grievances centred on the 'corrupt state', the 'insecurity' and the 'lack of infrastructure' – as you would expect from economic operators working in one of the worst places to do business in the world (DoingBusiness, 2012). Their principal grievance was certainly not 'the prospect of peace'.

The gold trade in Orientale Province – the Watsa–Ariwara Route

This section deals with the gold trade from Watsa territory to Ariwara, from where gold is

typically exported via Kampala in Uganda and onwards to overseas markets. Contrary to the situation in Walikale – and the Bisie mine more specifically – Watsa territory has a long history of industrial gold mining. Fahey summarises the historical trajectory of the company as follows (2009, p. 358):

Commercial exploitation by the Belgians started in 1905. In February 1926, the Belgian colonial government created the Société des Mines d'Or de Kilo-Moto (SOKIMO), which expanded operations and industrial mining. [...] During Kilo-Moto's tenure, it was unheard of for the miners and locals to possess or trade in gold. On 15 July 1966, during Mobutu's first year in office, the government nationalized SOKIMO and created a new parastatal, the Office des Mines d'Or de Kilo-Moto (OKIMO). OKIMO (also called Kilo-Moto) was given exclusive mining rights over 83,000 km2 in the Ituri and Haut-Uélé districts of Province Orientale, but it inherited a mining operation in decline. During the 1970s, OKIMO was unable to successfully halt the decline in production due to financial difficulties, an overall declining economy, and enclavement of mining areas due to degraded infrastructure. On 2 April 1981, the Mobutu regime liberalized the mining sector leading to an influx of foreign companies, foreign investment, and artisanal mining to Kilo-Moto.

At the time of my research OKIMO still controlled a significant size of mining concessions, altogether 83,000km² in Haut-Uélé and Ituri districts, which is divided into three concessions (38, 39, 40) and an exclusive research zone (UNSC, 2006, p. 17). The UN suggests the "value of all these properties is based on reserves of about 20 million ounces of gold" (Ibid.), though the UN does not state or explain how it established this figure, particularly as exploration activities were still on-going at the time of the publication of its report. Watsa territory is part of concession 38 and was at the time of my research being explored by Moto Goldmines Ltd (UNSC, 2006, p. 19).

In 2009, OKIMO played a key role at the mining stage in Watsa territory, having established a 'production sharing' agreement with artisanal miners, the *Règlement d'Ordre Intérieur de l'OKIMO – Régissant l'Exploitation Artisanale d'Or* (1998). The long-standing presence of OKIMO in the locality significantly altered the power relations between artisanal miners and the company. Contrary to the example of the Bisie mine, where a company tried to undertake exploration activities in a locality that had historically only been exploited by artisanal miners, in Watsa, OKIMO was there first. As discussed in Chapter 3, under

'production sharing' agreement, "OKIMO issues contracts to sub-contractors (*Chef de Sous Traitants*) to manage the artisanal mining workings and to collect 30% share of all gold produced on site" (Pact, 2010, p. 41). This is one of a series of 'taxes' that are levied on artisanal gold production, which could mirror the following (adapted from Tegera and Johnson, 2007, p. 93), considering these were collected in different OKIMO locations:

Table 5: Taxes and charges paid in artisanal gold mining (Ituri example in US\$, based on 379 mine sites)

Tax or other charge	Amount per pit	Annual revenue	Legally
	(US\$)	collected (US\$)	recognised
Traditional authority	200	75,800	No
Collectivity	90	32,040	No
Collectivity annual tax	100	37,900	Yes
OKIMO prospection charge	150	53,400	Yes
OKIMO lease	250	89,000	Yes
OKIMO royalties	30% of	2,613,600	Yes
	production		
Bureau des Mines registration	20	7,580	No
Bureau des Mines mining	100	37,900	No
authorisation form			
Bureau des Mines file	17566,325		No
Bureau des Mines mining license	25	9,475	No
Bureau des Mines trading license	250	94,750	No
Provincial tax	10% of	792,000	Yes
	production		
IPMEA (small enterprise tax)	32	12,128	Yes
Total	40% of	3,921,898	
	production plus		
	US\$ 1,392		

While the calculation in table 5 suggests that state could earn as much as around US\$ 3.9 million per year from the artisanal gold mines, the researchers from the Pole Institute contend that "the public purse receives nowhere near US\$3.9 million" (Ibid. p. 94). I will

return to this point further below.

OKIMO's Règlement d'Ordre on artisanal gold exploitation is a parallel rule system, which works outside of the regulatory framework set out in the Mining Code and Mining Regulations. This demonstrates that even formal actors such as the parastatal enterprise OKIMO do not necessarily adhere to the current regulatory framework, at least in the case of ASM. OKIMO's arrangements to purchase gold from artisanal miners on its concessions are a challenge for industrial mining companies who have entered into joint venture agreements with OKIMO to industrially exploit OKIMO's concessions, as the industrial mining companies struggle to relocate artisanal miners working on key ore bodies on the concessions (interview with representative of territorial administration, Watsa, 2009). A US cable suggests "between 35,000 and 200,000 thousand miners could be active in OKIMO's concession areas" (CableGateResearch, 2011, p. 1). OKIMO-operated buying counters for artisanally mined gold would appear to significantly complicate this process, as it creates perverse incentives for the artisanal miners to remain on the concession and to continue to artisanally mine key ore bodies. That said, the OKIMO's Règlement d'Ordre on artisanal gold exploitation states under Article 4 that "OKIMO can, at any time, cancel the authorisation for artisanal mining on any site which is found to have industrial potential" (1998). While speculative, it is perhaps likely to assume that OKIMO would only seek to enforce Article 4 if industrial mining companies were moving out of the exploration phase and into the next mine development phase, as this would prolong OKIMO's income stream from the artisanal operations for as long as possible.

In Chapter 3 I highlighted the limited formal employment opportunities that present themselves in Watsa territory, which means that transactions between the artisanal miners and gold buyers are a key revenue earner for the local economy. While OKIMO does purchase gold from artisanal miners, a parallel buying structure has emerged over time; with artisanal miners suggesting that at least 15 gold buyers or *négociants* were active in Durba alone (focus group with artisanal miners, Durba, 2009). These gold traders either listen to the radio or use their mobile phones to receive updates on world gold prices and then determine their own buying and selling prices (interview with gold buyer, Durba, 2009). Gold transactions are carried out using old Zairean coins called a *'kitchele'*; one kitchele weighs 1.2 grams. Larger quantities are weighed using *'tolas'*, with one tola equating to 9.5 kitcheles (11.4 g) (ibid.). A trader in Durba explained to me that out of one tola gold, he keeps 0.5

'kitcheles' or 0.6 grams of gold as profit (interview gold trader, Durba, 2009). At the time of my research, the price per ounce locally was US\$290, meaning the trader made a profit of US\$15.17 per ounce, which equates to an income of US\$ 121.37 per day, considering the trader bought on average 8 ounces of gold per day.



A local merchant weighs gold in Durba. © Nicholas Garrett, 2009

The *négociants* then organised the transport of the gold from Durba to Ariwara. This either takes the form of the *négociants* travelling to Ariwara themselves or for Ariwara-based *comptoirs* to go to Durba to fetch the gold (interview with gold trader, Durba, 2009). It also happens that *négociants* simply stash gold in their pockets or socks or carrier bags and directly head for Kampala in Uganda (Ibid.). I will return to the latter point further below. The town of Ariwara is an important trading and export point for gold from Orientale, even though the volumes passing through Butembo in North Kivu are significantly greater, as it is a geographically more convenient export hub for other key gold-producing regions and because it is the centre of the Nande trust network, a well-developed trading network operated by Nande traders, who are engaged in gold and merchandise trading, particularly in Ituri (Raeymaekers, 2006–2007). Ariwara, on the other hand, is dominated by the Lubarra

trust network, comprised of Lubarra traders who are engaged in gold and merchandise trading, particularly in Haut-Uélé (interview with representative of territorial administration, Watsa, 2009). The Lubarra traders are complemented by a rich contingent of traders from Central and East African countries, owing to its strategic location in the border triangle between South Sudan and Uganda (author's observation, Ariwara, 2009). It is at the export stage where the Lubarra trust network interlinks with the Asian-dominated trust networks in the East African Community. The largely Indian and Pakistani buyers use their intercontinental business ties to sell the gold internationally, as far afield as Dubai, the UK and India (interview with gold trader, Durba, 2009).

In a study, PACT estimates, "there are approximately six large traders in Ariwara, each handling around 5kg of gold per week, which would indicate around 120kg of gold moving through Ariwara each month" (Pact, 2007, p. 31). Visiting Ariwara, I counted at least 30 gold buying stations, or at least shops advertising the fact that they were buying gold, but assuming that the information of 6 'larger' traders is correct, around 50kg of gold per week is transiting into Uganda and most probably more.

Quoting a number of legal texts, Pact (2007) portrays the official export taxation regime is portrayed on table 6 below:

Table 6: Official export taxes

The anticipative annual fees to be paid during the approval/renewal of the	US\$ 200
trading post	
Mineral exit tax	,
Tax on turnover (ICA) of the export	3%-13%
Remuneration tax for the intervening services	1%
Foreign work permit	?
Agrément acheteur	US\$ 500
"common interest" taxes due to the Decentralised Administrative Authority	1%
(EAD)	

Two gold buyers in Ariwara suggested that, while they were aware of the official taxation structure, no 'official' export taxes were being paid on gold exports, but that several extralegal taxes were levied regularly on them as operators as well as sporadically on informal

exports at the border, but only when the authorities at the border were aware that gold was being exported, which was rarely the case (interview with two gold exporting traders, Ariwara, 2009). Tegera and Johnson highlight in this context, "informal cross-border trade in Ituri predates the legalisation of artisanal gold mining in 1982 and has always been substantial [...]" (2007, p. 98). The gold trade has thus not all of a sudden disappeared underground, but entrenched and well-organised networks have been organising the informal trade in artisanally produced gold for decades. It was reported in 2008 "the DRC legally exported only 122 kilograms of gold, compared with an estimated 5 tons of production" (Pact, 2010, p. 72). The World Bank suggests the actual figure is double that amount, estimating 12 tons per year (2008, p. 56). While there is significant variation in the quoted figures, owing principally to the fact that exact production and trade figures are hard to come by, it is undeniable that a significant amount of gold is being exported fraudulently, washing millions of dollars into grey channels. The lack of harmonisation of regional export taxation regimes is a key contributor to fraud, as export taxes in the DRC are typically higher than in neighbouring countries. "The main structural issue of concern here is the general difficulty the Congolese state has in collecting domestic revenue as this leads it to an overreliance on international trade taxes [...] which are easier to collect than most domestic revenue. Yet this punishes the country's international trade to the detriment of the economy [...as] over-reliance on revenue from international trade taxes pushes up not only export tax rates but also import tariffs, which encourages the smuggling of goods both into and out of the country" (Mthembu-Salter, 2009, p. 9).

The informal nature of the trade makes it susceptible to predation, as I described in the context of cassiterite in North Kivu earlier in this chapter, as well as the examples of military predation on the mining and trade of gold in South Kivu, which I provided in Chapter 4. Ariwara is often mentioned in this context and has attained a reputation for being a key 'dirty gold' trading hub, ever since the Ugandan occupation of the gold-bearing areas of Orientale Province. Investigations by the UN Group of Experts have looked at Ariwara in depth and I present here Dan Fahey's one-paragraph summary of the UN Group of Expert's work and its effectiveness (2008, p. 371):

"The UN Group of Experts estimated in July 2005 that Ariwara's foremost gold trader, Mr. Mazio, was exporting 15 to 18 kg every ten days (45 to 54 kg each month) to Kampala. The Group followed the paper trail of Ozia Mazio's transactions in Aru, Kampala, Nairobi, Dubai, London, Jersey (United Kingdom) and Neuchâtel

(Switzerland). In exchange for the gold Mr. Mazio sold to Kampala-based Machanga, he received lines of credit that he used to purchase goods from Hong Kong, Dubai, and Nairobi; he then shipped these goods through Uganda to Ituri duty-free. In recent years, the trade in gold at Ariwara was closely tied to arms smuggling, support of armed groups, and conflict. The major gold traders engaged in business with Commander Jerome of the FAPC militia and received preferential commercial treatment and safe passage through FAPC's area of control in exchange for a share of the profits. On 1 November 2005, the Security Council included Ozia Mazio and James Nyakuni on its sanctions list for violating the Security Council's arms embargo, including by providing assistance and funding to FAPC. In July 2006, the Group of Experts reported that Ozia Mazio was continuing his cross-border commerce, and that no action had been taken by authorities in either the DRC or Uganda to comply with UN sanctions. Despite the imposition of sanctions, during 2007 Mr. Mazio was reportedly still doing business in Kampala. In February 2008, Mr. Mazio and other Ariwara businessmen were reportedly buying gold from Mongbwalu twice a week, suggesting that UN sanctions are not significantly affecting this branch of the gold stream."



Photo: The border post in Aru – smuggling is easy, ©Nicholas Garrett, 2009

It is important to contextualise this quote by the fact that the FAPC, which counted an estimated 2,000-3,000 fighters, was disarmed and that April 2005 in essence signified the

end of the armed movement (Kristof, 2011, p. 50). Furthermore, what is striking is that the UN sanction regime seemingly had neither had a tangible effect on the sanctioned trader nor did it prevent the gold trade from continuing. The latter highlights the resilience of the gold trade from Orientale Province, which has managed to remain active throughout various crises and has shown a remarkable ability to adapt to changing circumstances. In fact, during the course of my research in 2009, I was unable to observe predation on the mining in Durba and trade by armed groups and a visit to the border post in Aru confirmed that there was no military presence at the border point that would support a hypothesis that the military was systematically preying on the gold trade, at least at the export stage. The lack of military predation is mirrored by suggestions by the UN Group of Experts that underline no military predation was taking place on concession 38 (UNSC, 2006, p. 22):

"The situation of artisan mining and sub-State actors has not been assessed in Watsa/Doko. MONUC and FARDC deny any illegal armed group activities and claim complete control over this area. This is supported by OKIMO, and explains the intense efforts by Moto Goldmines Ltd. to explore between five and seven concession areas."

A more recent report by Southern African Resource Watch equally confirmed this, suggesting (2012, p. 41):

"All miners report real improvements regarding the elimination of physical threats and attacks by militias or renegade FARDC forces. "We have no militias left in the region," stated Issamba Jado, a farmer and part-time artisanal miner from Mbudu. "We have total peace; nobody has to fear for his life anymore. The security situation has improved to the point where our most serious problems are now with AGK." Some miners have even pointed out that they rely on FARDC to protect their mines and gold when they transfer it to the buyer".

While I would like to refrain from suggesting that gold traded from Watsa through Ariwara is 'conflict-free', the research findings suggest the key dimension with respect to the gold trade from Watsa that is of relevance for the theme of my research is that of informality. While, during the course of my research, neither the mining stage in Durba nor the export stage in Aru/Ariwara were subject to predation by armed groups, the informal nature of the trade means that the *comptoirs* in Ariwara, for example, have no guarantees that part of the gold that they trade has not been subject to predation by armed groups somewhere along

the trading chain. While the existence of trust networks could be described as a level of assurance of origin, having a more or less exact idea of origin does not provide proof that the gold traded has not contributed to conflict financing through the predation on mining and trade of gold by armed groups. This is particularly the case as gold on the sub-national level is traded in small quantities and anyone can sell to a comptoir, which makes it virtually impossible to determine with certainty the conflict-free status of gold. This is a point to which I will return in Chapter 6.

Relating this point back to the 'shadow economy' frame of this chapter, it appears that the persistence of the informal gold trade highlights that the actors involved in the gold trade do not have a particular stake in conflict, so long as they can continue to make a profit in peacetime. In fact, the resumption of industrial mining activities on sites that are responsible for a significant quantity of artisanally mined gold would be a clear incentive for any conflict entrepreneur to finance an armed group to overrun the mining concession so that s/he can continue to profit from the trade in artisanally mined gold. While clearly a risk factor for the industrial mining companies that are looking to resume industrial gold production in Orientale Province, this scenario so far has not materialised in practice. This would suggest to me that conflict, just as much as illegal taxation or the onset of industrial mining, is simply regarded as another obstacle thrown in the way of the trade of gold, which has over the past decades managed to circumvent any obstacle placed in its path. It remains to be seen whether IANGO advocacy-driven measures to curb conflict financing (through the mining and trade of natural resources) will simply be another obstacle the trade will navigate.

Formalisation as the answer?

This chapter analysed the 'shadow' economy actors in the trade in cassiterite and gold from Walikale territory in North Kivu and Watsa territory in Orientale Province, respectively. It presented key incentives 'shadow' economy actors, it analysed the trading chains, as well as the fiscal linkage of the trade. Much of the cassiterite trade formalises at the export stage, while the gold trade remains almost entirely informal and underground. Particularly important to the analysis of the incentives structures of the 'shadow' economy actors is the existence of a significant informal economy, prior to the onset of conflict, which I discussed in the Introduction chapter. In this regard, Vlassenroot (2002) emphasises that economic activity during peacetime does not necessarily differ significantly from economic activity, during times of conflict. The type of activity is in this regard different to the scale of activity,

as informal activity has further expanded during the two Congolese wars and the on-going conflict in eastern DRC.

While IANGOs like Global Witness have for a long time spread the notion that "competition over the lucrative minerals trade has become an incentive for all conflict parties to continue fighting" (Global Witness, 2012, p. 4), my research suggests that most economic actors — other than the armed groups — involved in the mining and trade of 'conflict minerals', which continue to be a vital lifeline for the 'coping' economy actors — displayed characteristics of what Goodhand describes as 'shadow economy' actors (2009). Instead of the stereotypical 'conflict entrepreneur' incentive structure, who has an interest in the perpetuation of conflict, as they would be unable to serve their profit motive in peacetime, my research suggests that many economic operators mainly have an interest in 'profit', rather than 'profit from conflict'. This is a point that is supported in particular by my research on the gold trading chain in Orientale Province, where *comptoirs* and other economic operators, for example, continue to trade gold even after armed groups that used to prey on the mining and trading of gold are no longer present. This point suggests that 'shadow' economy actors in the trade in 'conflict minerals' trade are potentially a powerful constituency that would support conflict resolution, as it appears that they can also pursue 'profit' in peacetime.

Formalising this 'shadow economy' could help to divert up to 35% of the cassiterite trade from North Kivu and up to 95% of the gold trade from Orientale Province into the formal sphere (Garrett and Mitchell, 2009). In fact, formalisation of the ASM mining and trade has become a dominant narrative since the mid-1990s, which was also reflected in policy approaches (Barry, 1996). Formalisation was not only considered to be an end as of itself, but that other objectives, such as increasing efficiency, reducing environmental impacts and improving labour conditions were considered as outcomes that could be achieved through formalisation, or at least once ASM was formal (SDC, 2011; Barry, 1996; Barreto, 2011).

The broader theoretical literature on the informal sector is particularly informative in terms of providing a perspective to help understand barriers to formalisation, such as entry costs and operating costs (De Soto, 1992). I considered this discussion as a key to determining the incentive structures of shadow economy operators. Entry costs are those an entity faces throughout the process of transformation from an informal into a formal entity, which typically includes a licensing process. De Soto highlights that there is ample evidence that

corruption and inefficiency are partly responsible for often lengthy and complicated procedures to register a business (1992). In the case of the mining and trade of 'conflict minerals' in DRC, I discussed some of the practical implications of a complicated licensing process, underlining the significant barriers to entry into the formal economy in the DRC.

In a 2010 study, Fahey highlights the example of the Congolese Government attempting to make it easier for *comptoirs* to trade legally, with "changes in the law including reductions in fees and taxes" (2010, p. 17). While Fahey speaks of at least two new *comptoirs* having set up shop in Bunia since the change in the law (Ibid., p. 18), De Koning reports that in the context of South Kivu, for example, "government initiatives to formalise the gold trade have not had any significant effect so far. Lower license fees have not stimulated the establishment of new *comptoirs* for gold" (2010, p. 38). While the licensing process has been made easier, there is no significant improvement in the formalisation of the gold trade in particular.

This led me to believe that, while entry costs stand in the way of formalisation, it is first and foremost the operating costs, once the actors or entities are formalised, which stand in the way of greater trade formalisation, in addition to the lack of stringent enforcement capacities which are further undermined by petty corruption. This is certainly reflected in both cases on the cassiterite and gold trades analysed in this chapter. The literature on formal operating costs presents numerous examples, which highlight the burden placed on formal operators, particularly by required formalities set out in regulations. In other countries these typically fall within five categories, which are a) a lot of required time to comply, b) burdensome complex taxes, c) unaffordable labour regulations, d) cumbersome property registration and formal loan application, and e) inefficient contract enforcement mechanisms (Ishengoma and Kappel, 2006). All five categories equally apply in the DRC, which is also underlined by the 'Doing Business' ranking, developed by the World Bank, which ranks the DRC as the 181st best country to do business in, out of a total of 185 countries (World Bank, 2013).

There are also specific risks that come with being a formal operator engaged in the DRC's ASM sector, which comprise legal and compliance risks in particular, as well as reputational risks. Legal and compliance risks mean that, since extraterritorial legislation dealing with, for example, corruption or 'conflict minerals' have been introduced, there has been increased

scrutiny of mining and trading activities in the ASM sector (SEC, 2012). Formal operators could face legal proceedings under a mine's host-state legislation or extra-territorial legislation if their engagement in the ASM sector fails to meet relevant requirements (ibid.). In this thesis, I have repeatedly referred to demands for extra-legal payments by state authorities, as well as the lack of visibility into the gold trading chain in particular, which makes it impossible for gold *comptoirs* to prove that the gold they trade is 'conflict-free', and which could complicate or prevent the legal trade of 'conflict minerals'. These are key risks to informal operators that apply to a far lesser extent to those operating informally. In Chapter 3 and Chapter 4, I also have highlighted occurrences of child labour, human rights abuses or environmental accidents that could develop into public relations incidents for formal operators, damaging the reputation of formal operators more so than informal operators. This suggests that the reputational risk to operate formally is high. These risks are direct disincentives for operators to formalise if they do not fear significant repercussions and particularly if they do not have the capacity to manage those risks adequately and sustainably.

There are thus real costs to formalisation, which the literature on the mining and trade of 'conflict minerals' often only discusses in a fragmented manner. However, there are also real costs to operating informally. Literature on the informal economy presents broad categories of costs of informality, which are a) exposure to penalties and corruption, b) limited access to public services, c) difficulty of expanding profitably without drawing attention, d) limited access to financial and business development services, and e) limited possibilities to cooperate with formal enterprises (Ishengoma and Kappel, 2006). I mirrored these costs with eastern DRC-specific examples and it is clear from the analysis that there is a trade-off between formal and informal modes of operation in the mining and trade of 'conflict minerals'. However, overwhelming evidence on the ground suggests that, at the time of my research, the benefits of operating in the mining and trade of the 'conflict minerals' shadow economy' outweighed the benefits of operating formally, as otherwise a significantly greater proportion of the mining and trade of 'conflict minerals' would have been conducted formally, particularly in the gold sector.

Conclusion

The incentive structures of 'shadow' economy actors appear to primarily concerned with 'profit', rather than 'profit from conflict'. There is therefore no reason why they should be a

constituency that opposes conflict resolution so long as they are able to pursue profit in peacetime. In fact, the key constraints to operating formally, I found to be the operating costs, once an entity has formalised, suggesting that overall, 'shadow' economy actors currently have greater incentives to operate informally, rather than formally. In order to change this, the provision of incentives would have to go beyond the mere provision of security, particularly as key hubs of shadow economy activity in the mining and trade of 'conflict minerals' are located in secure areas, and would also have to go beyond the provision of other basic public services, with a view to improving on all indicators that would make a formal business more attractive than an informal business. The key lesson is therefore that formalisation efforts would have to be based on practical cost-benefit analysis tools to help assess whether overall policy frameworks provide the adequate incentives for formalisation for the 'shadow economy' operators themselves, as without a clear alignment of formalisation efforts with the incentive structures of 'shadow economy' operators, formalisation attempts are likely to fail.

6 - IANGO advocacy-driven measures to curb conflict financing in eastern DRC and their consequences

In chapter 2 of this thesis, I explained the theoretical logic behind the explanations of the economic dimensions of conflict. While the extreme version of the 'greed' hypothesis suggests, resources are "seen to act as a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8). The more moderate version is that irrespective of motivation, finance is required to become and remain a party to conflict (Collier, 2006). According to the latter logic, armed groups necessarily have to run a business operation to partake in conflict, unless a government or a willing diaspora is bankrolling them (Bannon and Collier, 2007). In the context of eastern DRC, the so-called 'conflict minerals' are the highest value natural resource available to armed groups and it therefore makes logical sense for them to prey on their mining and trade. The analysis in Chapter 4 suggested this predation occurs in a manner that allows the mining and trade of 'conflict minerals' to function, while also providing a significant profit to the armed groups.²⁰

The 'conflict minerals' campaign portrays 'conflict minerals' as the 'fuel' powering the conflict in eastern DRC. Developed by IANGOs – in particular the United States based Enough Project and United Kingdom based Global Witness – has had such 'success' that economic explanations of conflict have become the dominant lens through which the conflict in eastern DRC is interpreted and portrayed. This is evident both from media coverage, such as CBS's 60 Minutes programme on *How Gold Pays for Congo's Deadly War* (CBS, 2009), policy action, such as the development of the *Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 1502 on 'Conflict Minerals'* (DF 1502), the *OECD Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* (OECD DD), as well as private sector initiatives, such as the *Solutions for Hope* conflict-free closed-pipe trading chain set up from Katanga province or the World Gold Council's *Conflict-free Gold Standard*.

Applying Goodhand's framework of 'coping', 'conflict' and 'shadow' economy actors, which I introduced in chapter 2 of this thesis, to the artisanal cassiterite and gold mining and trade

© Nicholas Garrett, 2014

²⁰ Bannon and Collier limit their analysis to "rebels", which in the context of the DRC is an incomplete reading of the situation, as the FARDC, while not a rebel group, is in many areas operating as if it were a non-state armed group. I therefore use the term "armed group" in my analysis, rather than the term "rebels".

from North Kivu and Orientale Province, which I undertook in chapters 3, 4 and 5, my analysis suggests that a significant proportion of eastern DRC's 'coping economy' actors' livelihoods are reliant upon the mining and trade of 'conflict minerals', which is a fact that is often ignored or under-emphasised in the IANGO advocacy outputs (e.g. Enough Project, 2012; Global Witness, 2008). My analysis of the 'conflict' economy actors suggests they do in fact prey on the mining and trade of 'conflict minerals' and generate profits from this predation that go beyond their financial requirements to partake in conflict, however, my analysis also suggests that significantly less finance is required for the key armed groups partaking in conflict, such as the FDLR, which diminishes the relative importance of revenues from the predation on the mining and trade of 'conflict minerals' for their ability to maintain fighting capacity. This view is also supported by the fact that a significant proportion of eastern DRC's ASM sector is not affected by the predation by armed groups, which would appear to be illogical, if the predation on the mining and trade of 'conflict minerals' was the principal objective of the key conflict actors. The latter perspective casts a significant shadow of doubt over the 'conflict minerals' fuelling conflict analogy promoted by the 'conflict minerals' campaign. My analysis also suggests that many 'shadow' economy actors, while profiting from the mining and trade in 'conflict minerals' are primarily interested in the pursuit of 'profit', rather than in the pursuit of 'conflict in order to profit'. This would suggest that there are a potentially important constituency for conflict resolution, if the resolution of conflict allows them to maintain their profits or allows them to increase their profits. The fact that traders in the conflict-free parts of Orientale Province are continuing to trade in non-conflict areas, highlights that it is less the conflict, but the ability to pursue profit, which incentivises them.

While IANGO research outputs often emphasise the human rights implications of the conditions under which the mining and trade of 'conflict minerals' take place (HRW, 2005), they do not necessarily pay equal attention (Global Witness, 2008) to some of the key aspects related to the 'coping economy', which I discussed in chapter 3. These are, in particular, the facts that many 'coping' economy actors are actively trying to access the primary and secondary ASM economies, as they are the most competitive livelihood option available to the considering the realities on the ground. The secondary ASM economy, in particular, is dependent upon the revenue generated in the primary ASM economy, with the average miner having, for example, five or more direct dependents, and many more indirect dependents. There thus appears to be a disjuncture between western IANGOs' concerns for

human rights and the local population's dependence upon an activity many of those involved in it chose to pursue, as a result of the prevalent realities on the ground.

That said, with a view to stopping the conflict in eastern DRC by stopping conflict financing, IANGOs have successfully advocated for measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') to be implemented in eastern DRC. The particular emphasis in this chapter is on policy action in the form of a) chain-of-custody schemes to keep 'dirty' minerals out of the market; and b) extraterritorial legislation in the from of DF1502 requiring companies sourcing 'conflict minerals' to conduct due diligence on their supply chains to ensure these are 'conflict free' (Levin, 2010; OECD 2012; SEC 2012). This chapter analyses such measures and provides a perspective on their relative utility in terms of resolving conflict, particularly in the case of North Kivu, and on their externalities for 'coping', 'conflict' and 'shadow' economy actors. In line with the research gap identified in chapter 2, a particular focus of the analysis is to determine the externalities for 'coping economy' actors involved in the mining and trade of 'conflict minerals'.

The principal argument I am making in this chapter is that while such measures to curb conflict financing have generated some positive outcomes, such as more transparent supply chains and a greater awareness of human rights issues and socio-economic challenges at source level, these measures also have generated significant negative externalities, particularly for the 'coping' economy actors, not only in conflict affected mining areas of North Kivu, such as Walikale territory, but also in conflict-free mining areas, such as Watsa territory in Orientale Province. The most prominent example of such externalities are: a de facto ban on the export of 'conflict minerals' into international 'conflict-free' markets, which affects primarily the 'coping' economy and 'conflict' economy actors; strong incentives for 'shadow' economy actors, particularly in the gold sector, to continue to operate informally and thus outside of the purview of the state; strong incentives for international 'conflictfree' purchasers of 'conflict minerals' to disengage from buying DRC 'conflict minerals', forcing local 'shadow' economy actors to sell into grey markets; and strong incentives for 'conflict' actors to increase predation, particularly on the gold ASM sector, as the measures are currently unable to affect the informal trade in gold; strong incentives for 'conflict' actors to increase predation on economic activities, other than 'conflict minerals'. This would suggest that the advocacy efforts of the 'conflict minerals' campaign, while they have

achieved some positive outcomes, have had an overall negative impact on the local economy and efforts to resolve the conflict in eastern DRC.

This chapter presents this argument in three sections. The first introduces prevalent measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals'). The second discusses the externalities of the measures for 'coping', 'conflict' and 'shadow' economy actors and the third section concludes.

Measures to Curb Conflict Financing

Depending on the stage of development of the 'conflict minerals' campaign, IANGOs have demanded different sets of policy actions from policy makers. While a clear-cut timeline is not always possible, as demands have at times overlapped, this section traces two key sets of measures that have been advocated for: a) chain-of-custody schemes to keep 'dirty' minerals out of the market; and b) mandatory due diligence in the form of extraterritorial legislation (which was eventually passed in the United States in the form of DF 1502, which I had introduced in chapter 2) (Levin, 2010; OECD 2012; SEC 2012). It is important to note that chain-of-custody schemes were under development prior to the development and passing into law of DF 1502 (Seay, 2012). An example is UN Group of Expert report Letter dated 29 April 2010 from the Group of Experts on the Democratic Republic of the Congo addressed to the Chair of the Security Council Committee established pursuant to resolution 1533 (2004), which suggested that traceability [chain-of-custody] measures are not enough to prevent the financing of armed groups, and called for third-party audits and due diligence to be carried out by downstream users of minerals and metals from the Great Lakes region (UNSC, 2010, paragraph 79). DF 1502 makes it mandatory for companies that file reports with the SEC under the Exchange Act, and 'conflict minerals' are "necessary to the functionality or production" of their manufactured product, to conduct due diligence on their supply chains to ensure these are free of 'conflict minerals' originating from the DRC and 9 surrounding countries (SEC, 2010). The advocacy and UN Group of Experts support for DF 1502 can thus be interpreted – at least on the side of the UN – as one consequence of little confidence in the ability of chain-of-custody schemes already under development prior to DF 1502 implementation to curb conflict financing in eastern DRC. Looking at conflict financing as a governance challenge, it is also evident that both advocacy and UN Group of Experts support for DF 1502 can be interpreted as having little confidence in alternative governance arrangements in eastern DRC producing outcomes that would support conflict resolution,

which is why DF 1502, as, to use Risse's terminology, a "hierarchical mode of steering" (2010, p. 11), was seen as producing governance outcomes more amenable to conflict resolution, certainly with respect to the governance issue of conflict financing.

Chain-of-custody schemes

The implementation of chain-of-custody schemes in the minerals and metals sectors is a contested policy domain. This section focuses on chain-of-custody schemes in 'conflict minerals', but also will revisit briefly the KPCS (discussed in more depth in chapter 2), which certifies the origin of rough diamonds. The KPCS is widely held up as a model for certification schemes in conflict-affected areas. Collier and Bannon suggest, "if the KPCS is successful it could form the model for the governance of other commodities for which there is significant inadvertent funding for conflict" (2007, p. 13). The Enough Project suggests, "the [...] KPCS, although far from perfect, has helped to consolidate peace in those areas, playing a significant role in ending conflict in Sierra Leone, Liberia, and Angola" (Prendergast and Hall, 2011, p. 1 of 2). There are significant issues with these views, with two arguments standing out in particular. First, the KPCS can be said to have many (and mostly inadvertent) achievements, which I discussed in chapter 2, and which include, "increased export revenues for producing countries, some rationalisation of the sector, particularly with respect to encouraging 'shadow' economy actors to formalise at least part of their business, an increase in transparency in the diamond supply chain, and finally, enlarging the debate around diamonds to include issues pertaining to labour practices, the environment and human rights more broadly" (Mitchell and Garrett, 2009, p. 27). However, it is "empirically false to say that the Sierra Leonean, Liberian and Angolan wars ended due to the KPCS and its potential effect on revenue for armed groups" (Seay, 2012, p. 22). This is not least the case, because the KPCS only came into effect after these wars were officially over.

Second, the cornerstone of successful KPCS implementation is the state's ability to monitor and control sub-national diamond mining and trade, thereby ensuring that illicit (or potential conflict) diamonds are prevented from entering the market (Vlassenroot and Van Bockstael 2008). Such internal controls are a particular challenge in failed states with significant informal ASM sectors, such as the DRC, and thus threaten to undermine the integrity of the process (Garrett, Mitchell and Levin, 2008). The reason for this is that the diamond trading chain gradually formalises from informality at the ASM stage towards formalised and certified export (though a significant proportion of diamonds are still

exported informally due to lack of oversight in key producer countries). The need to control the ASM stage of the trading chain is therefore the key weakness of the scheme. In fact, Global Witness, a founding member of the KPCS highlighted in 2008 that the KPCS potentially certifies non-compliant diamonds with undetermined origin (Global Witness, 2008). Global Witness left the KPCS in December 2011 citing "many flaws and loopholes" in the scheme and that "most of the governments that run the scheme continue to show no interest in reform" (Global Witness, 2011, p. 1 of 2). This means, despite the KPCS failing on its basic premise to prevent conflict financing, IANGOs, such as The Enough Project, continue to view the KPCS as a model for controlling 'conflict minerals' (Prendergast and Hall, 2011).

With the discussion of the KPCS in mind, I am limiting my discussion of chain-of-custody schemes to those operating on the upstream (mine to smelter) part of the global trading chains in 'conflict minerals'. This is important, as other schemes focus on the downstream (smelter to end user) section of the trading chain. The 'Conflict-Free Smelter Program' (CFS), for example, is such a scheme; it certifies smelters as 'DRC conflict-free' under the auspices of the global industry collective action platform, the Electronic Industry Citizenship Coalition (EICC) (Conflict Free Smelter Program, 2012). At the time of my research there were three chain-of-custody schemes under development in eastern DRC. They were the International Conference on the Great Lakes Region's (ICGLR) Regional Certification Mechanism (RCM), the German Federal Institute for Geoscience and Natural Resources' (BGR) Certified Trading Chains (CTC) scheme, as well as the private sector-driven initiative of the International Tin Research Institute's (ITRI) Tin Supply Chain Initiative (iTSCI). In addition to these chain-ofcustody schemes, the OECD began to convene a multi-stakeholder process to develop the OECD DD Guidance, which I discuss in the context of my analysis of DF 1502, which is presented further below. All of the five schemes set out to stop conflict financing, and have built in several assurance steps so to guarantee that the material they trace and/or certify is 'conflict free' (Levin, 2010, p. iv). The tables in the paragraphs that follow provide an overview of the respective initiatives. The tables are replicated from Levin (2010, pp. ii) and I follow each table with a brief descriptive analysis of the chain-of-custody scheme in question.

The RCM for the ICGLR RINR

In November 2006, member states (Angola, Burundi, Central African Republic, Republic of Congo, Democratic Republic of Congo, Kenya, Uganda, Rwanda, Sudan, Tanzania and

Zambia) of the ICGLR signed a *Protocol against the Illegal Exploitation of Natural Resources* as part of a *Pact on Security, Stability and Development*. In 2010, the ICGLR launched the RCM for the 3T minerals and gold under its RINR, which in turn, had been launched in 2008 (PAC, 2012). The aim of this RCM, which was designed in collaboration with Partnership Africa Canada (PAC), is "not only to address the failures of the KPCS, but also the challenges around monitoring key minerals frequently trafficked into and out of the Great Lakes region" (Africa Files, 2012, p. 1 of 2).

Table 7: The ICGLR RCM (Levin (2010, pp. ii))

	Element	Main Event	Assurance Outcome	Line of Defence	Level of Assurance	Timing of Assurance
1)	Chain of custody	Operators'	Minerals	First.	1 st party.	Immediate
	tracking from	documents	certified.			(export
	mine site to	checked.				depends on
	export.					it).
2)	Regional tracking	Document	Anomalies	Second.	2 nd party.	3-6 months
	of mineral flows	data entered	flagged.			after
	via the ICGLR	and analysed.				certificate
	database.					is issued
						(timing
						depends on
						how quickly
						data can be
						retrieved).
3)	Regular	Database	Operators	Third.	3 rd party.	Every 3
	independent	checked	and trading			months.
	third-party	Operators'	chains			
	audits.	activities and	certified or			
		documentation	de-certified.			
		checked.				
4)	Independent	CoC	De-	Fourth.	3 rd party.	Whenever
	mineral chain	investigated;	certification			necessary.
	auditor.	Operators	is possible.			
		investigated.				

By December 2010, a certification manual had been developed and approved by the ICGLR member states. The ICGLR RCM has four main pillars (PAC, 2012):

- 1. Mineral Tracking from Mine Site to Export
 - a. Mine Site Inspection and Certification
 - b. Chain of Custody Tracking
 - c. Certification of Mineral Exports
- 2. Regional Mineral Tracking via an ICGLR Database
- 3. Independent Third Party Audits
- 4. ICGLR Independent Mineral Chain Auditor

By the end of 2011, first efforts were "underway to start issuing ICGLR regional certificates and the DRC's mine inspectors have started visiting mine sites in the Kivus" (Schatsky, 2011, p. 1 of 2). Given that the certification mechanism presently concerns minerals from mine to export, only upstream companies are concerned, whose role involves (Bore and Smilie, 2010):

- 1. "Adequately document mineral chain of custody:
 - a. Industry must obtain and keep records adequate to show chain of custody beginning at the mine or pit for all minerals they wish to export.
 - b. Industry must present these records to national governments in order to obtain an export permit and an ICGLR certificate.
- 2. Transmit data to the ICGLR on a regular basis:
 - Data on purchases and exports, plus copies of original documents as required, should be sent to the ICGLR on a monthly basis.
- 3. Cooperate in Managing System through Audit and Standards Committees:
 - a. One third of key Audit and Standards Committees is reserved for industry.
 - b. Intelligent, engaged participation crucial to system success.
- 4. Cooperate with Audits and Investigations:
 - a. Provide third-party auditors with full access to records and data.
 - b. Provide investigators from the ICGLR with full access to all data and records.
- 5. Fund Third-party Audits
 - a. Payments made to dedicated (escrow) account, to be used solely for paying auditors.
- 6. Inform the ICGLR of wilfully non-compliant actors"

In addition to developing a certification scheme, the ICGLR has provided a draft legislation model to member states to "domesticate the legal provisions of the Protocol [on the Fight against the Illegal exploitation of Natural Resources, which summarises the actions taken by the ICGLR and includes an article on the RCM] into national legislation" (SARW, 2013, p. 2 of 15). The domestication of the legislation would make the adoption of the RCM mandatory for companies operating in those ICGLR member states that adopt the Protocol into national legislation.

The ICGLR has made some efforts to harmonise the RCM with the two other chain-of-custody schemes in operation in eastern DRC (see further below), which goes some way to mitigate fears of compliance costs for upstream operators and duplication of effort. For example, the ICGLR signed a partnership with ITRI to "cooperate in setting up a tracking system, aimed at certifying the conflict-free origin of cassiterite (tin) from the Great Lakes Region" (Ibid. p. 4 of 15). By May 2012, the ICGLR had also announced collaboration between the ICGLR and the OECD that " focuses on the implementation of the OECD Due Diligence Guidance, on the definition of joint auditing standards and on joint awareness raising measures" (Ibid.).

These activities suggest that the initiative is making some progress with respect to implementation, but since the system is not yet fully operational, it is too early to say whether it has a chance to be effective or not. The principal worry with the ICGLR scheme is that "member state governments are responsible for implementing and supervising the chain of custody tracking system within their own borders" (PAC, 2012, p. 4). Similarly to the discussions around the KPCS in this thesis, there remain significant doubts over the capacity of the Congolese government to be able to effectively implement the scheme, particularly in the Kivu provinces, as a result of the prevalent insecurity and governance deficiencies, which I discussed at length in this thesis.

Certified Trading Chains (CTC)

After the ICGLR member states signed a Protocol against the Illegal Exploitation of Natural Resources as part of a Pact on Security, Stability and Development in November 2006, BGR started to develop a regional mechanism to monitor and certify the origin and social and environmental performance of the trade in the mining and trade of minerals and metals in the Great Lakes region (Franken, et al, 2012). The 'certified trading chains' standard (CTC) has the aim to "combat the illegal exploitation of minerals by increasing transparency,

traceability, and the ethical performance and development potential of mineral production and trade, and by improving capacity of institutions responsible for minerals governance, and thereby the regulation of the artisanal sector as well as increasing state revenues in developing nations" (Levin, 2010, p. 12). The certification scheme also "aspires to improve supply security for the processing industry, and fosters responsibility in industrialised economies" (BGR 2010, p. 3). The CTC scheme seeks to achieve this through the creation of "islands of good governance, where mineral substances are produced and traded legally, transparently, and in ways which protect workers, communities, and the environment. Certification will also progressively transform and formalize informal mining" (Ibid, p. 4). Independent mine site audits are part of the 3rd party assurance to international mineral and metals buyers, so that these can source inputs with confidence even in the context of DF 1502 implementation.

Table 8: The CTC Mechanism (Levin (2010, pp. ii))

	Element	Main Event	Assurance Outcome	Line of Defence	Level of Assurance	Timing of Assurance
1)	Development of	Operators	Company-	First.	1 st party.	Unclear.
	policies at the	develop	based			
	company or mine	policies based	management			
	site level.	on the	and			
		national-level	reporting			
		standards.	systems for			
			internal			
			monitoring			
			of			
			conformity.			
2)	Regular	Operators'	Operators	Second.	2 nd party.	Every two
	independent	activities and	and trading			years.
	third-party	documentation	chains			
	audits.	checked.	certified or			
			de-certified.			
3)	Optional	Minerals' origin	Operators	Third.	3 rd party.	As
	analytical	verified based	and trading			necessary.

fingerprinting.	on the	chains			
	mineralogical	certified or			
	and	de-certified.			
	geochemical				
	characteristics				
	of the sample				
	vs. that of the				
	mine site.				
1		I	I	1	1

The implementation of the CTC scheme in the DRC comprised of three components and was to be implemented over a four-year period from 2009-2012. The BGR describes the work under each component as follows (BGR, no date, p. 2 of 3):

"Component 1

In the first component the institutional conditions for certification are put in place on the national level. The BGR-initiated working group "certification" of the Congolese mining ministry developed a plan of action and a time schedule and also compiled a handbook for the implementation of the national certification system, which was signed into law in June 2011. An infrastructure/routine for the data-transfer between national and provincial sector authorities will subsequently be established and an audit of the national certification agency CEEC will be performed.

Component 2

The second project component aims to implement the certification system in selected small-scale mining areas in Maniema, Katanga, South and North Kivu (eastern DR Congo). These provinces are the pilot regions for the first phase of the project. Four areas were selected for pilot implementation: two for gold and two for tin, tantalum and tungsten ores. The selection of pilot areas occurred in close coordination with national and provincial mining sector authorities as well as with representatives of small-scale miners, local trades and civil society. Project activities of this regional component also contain advanced training and skill enhancement of employees of the mining authorities (national Small Scale Mining Service SEASSCAM and the South Kivu Provincial Division of Mines). Subsequently, locations of individual extraction sites, production conditions and production volumes have been registered by baseline audits in the four pilot areas.

Component 3

In a further component the project shall also contribute to an improved dialogue between authorities, mining enterprises a civil society with the foremost aim of a better transparency in the mining sector."

BGR appears to have made good progress with the implementation of its certification scheme. This is an achievement the German agency can be proud of, particularly as initial concerns over 'duplication of effort' between BGR's CTC system and the ICGLR's RCM appear to have been mitigated through more concerted efforts to work in alignment and in complementarity. Known challenges, do persist, however, such as the capacity of the Congolese mining sector institutions to effectively and sustainably implement the project, which is related to general project sustainability post German government commitment. Another is the up scaling of implementation in conflict zones. The BGR itself, for example, states, "the on-going difficult security situation hampers a visit of the gold mine Misisi. The security situation in the gold mine Mukungwe also became worse due to conflicts between cooperatives and the company Banro about mining rights" (Hagemann, 2012, p. 2).

iTSCi

The Malaysia Smelting Corporation Berhad (MSC), the Thailand Smelting & Refining Co Ltd (Thaisarco, a subsidiary of the UK-based Amalgamated Metal Corporation) and Traxys Europe SA initially developed the Tin Supply Chain Initiative (iTSCi) in 2008. iTSCi is a traceability system, which seeks to effectively track and trace tin production from eastern DRC and surrounding countries to ensure that it is conflict-free, and which includes risk assessment, traceability and audit requirements. The initiative tags production at the mine and processing levels, so to help upstream companies operating in the DRC and surrounding countries to comply with the requirements of EICC's CFS, the OECD DD Guidance and the requirements of DF 1502.

iTSCi functions in three phases (Levin, 2010, p. 22):

"Phase 1 is "establishing harmonised document requirements for export shipments including written declarations confirming the lack of involvement of armed groups in the upstream supply chain" (iTSCi 2010a). This is an effort to aid smelters sourcing from Congolese comptoirs or regional traders to undertake due diligence of their supply chains by introducing document-based systems to check that exports are

legally done. In this phase the comptoir's licence, legitimacy and authorisation to export, and the provenance of the comptoir's minerals to the smelter are all assured.

Phase 2 is developing and implementing a system to physically track tin (and tantalum) ores from the mine site in DRC to the exporter and develop chain of custody data to assure the minerals' origin. It depends on the participation of select government agencies.

Phase 3 involves "implementing basic performance standard measurement of social and environmental factors at the mine sites and to consider incentives and methods for improvements" (iTSCi 2010a). As a step towards compliance with the OECD Due Diligence Guidance, ITRI members already sign up to an ASM policy and declaration on sourcing from DRC and surrounding countries, but their compliance is not yet verified (ITRI 2010b). The social and environmental impacts of process and production methods at the mine will be assured."

Table 10: The iTSCi mechanism (Levin (2010, pp. ii))

ı	Element	Main Event	Assurance outcome	Line of Defence	Level of Assurance	Timing of Assurance
Phase :	l					
1)	Harmonised	Comptoirs	Smelter verifies	First.	1 st and 2 nd	Immediate.
	document	present	consistency of		party.	
	requiremen	documentation	documentation.			
	ts for export	to assure their				
	shipments.	licence				
		legitimacy,				
		authorisation to				
		export and the				
		minerals' origin.				
2)	Third party	Independent	Auditor verifies	Second.	3 rd party.	Unclear.
	audit of	auditor verifies	documentation.			
	document-	comptoirs'				
	based	compliance with				
	system.	phase 1				

		requirements.				
Phase 2						
3)	Restricted	iTSCi issues tags	iTSCi decides	First.	n/r	n/r
	issuing of	to mine s and	which mines to			
	tags by iTSCi	traders not	issue tags to, and			
	only to	considered to	how many tags to			
	eligible	be contributing	issue.			
	mines and	to conflict				
	traders.	financing and				
		human rights				
		abuses.				
4)	Mineral is	Buyers purchase	Buyers self-	Second	2 nd party.	Immediate.
	tagged and	only tagged	monitor	and Third.		
	tracked	bags.	purchases to			
	from mine	Government	tagged bags only.			
	site to	agents weigh	Government			
	comptoir.	and tag bags of	agents verify			
		minerals,	consignment's			
		entering data in	characteristics			
		the relevant	against the			
		logbook.	information on			
		Documents	the operator's			
		issued in	document, and			
		triplicate to	issues new			
		operator, iTSCi	documentation.			
		and				
		government.				
5)	Centralised	Data is input by	iTSCi monitors	Fourth.	Monitoring.	A few days
	database	iTSCi, who	data for			to a few
	storing all	verifies	anomalies.			weeks after
	data from	consistency				elements 3
	along all	with	Observers (UN,			and 4.
	supply	documentation	ITRI, government)			
	chains.	provided.	monitor data for			
			anomalies.			
6)	Third party	Auditors check	Risks and	Fifth.	Monitoring.	Monthly.
	monitoring	iTSCi monitoring	violations			

	of iTSCi	system and	identified and			
	system	identify key	highlighted to			
	oyoto	risks.	downstream			
		11313.	users.			
7)	Third party	Auditors verify	Traders and	Sixth.	3 rd party.	Every 6-12
//	audit of CoC			SIXUI.	5 party.	months
		operators"	trading chains			months
	system.	declarations	certified or			
		and	decertified.			
		documentation				
		against	Audit findings	Seventh.		
		information in	published.			
		database and				
		based on field				
		visits.				
8)	Third party	GeSI/EICC	Smelters' systems	Eighth.	3 rd party.	Unclear.
	audit of all	smelter	audited			
	upstream	verification				
	data.	scheme audits				
		smelters'				
		upstream data				
Phase 3						
9)	Social /	Standards and	n/r	First.	n/r	Undecided.
	environmen	systems remain				
	tal	to be developed				
	performanc	but may be				
	e standards	based on CTC				
	for the mine	system.				
	site level					
10)	Third party	Audit system	Mine site certified	Second.	3 rd party.	Undecided.
	audit of S&E	remains to be	or decertified.			
	performanc	developed.				
	e standards					
		<u> </u>				

iTSCI was highly successful in attracting both governmental and industry partners to the scheme and it has led to significant changes in company internal procedures to ensure they can effectively participate in the scheme and comply with due diligence requirements

(Mitchell et al, 2012). As with other schemes in the extractive industries, such as the Extractive Industries Transparency Initiative (EITI) a key advantage of iTSCi is its narrow focus, which in the case of iTSCi is solely on the assurance of the supply chain from specific mines to specific smelters.

According to the OECD's Upstream Pilot Implementation of the OECD DD Baseline Report on the Supplement on Tin, Tantalum, and Tungsten, "due to the requirements imposed on smelters under the CFS program, the introduction of iTSCi in the region has become an absolute precondition for the trade to resume. The financial cost of the iTSCi system, however, is considerable. The price iTSCi currently charges in Katanga and Rwanda is USD 500/T of minerals" (OECD, 2011, p. 17).

The study also pointed out that some upstream companies were essentially "outsourcing" their due diligence responsibilities to iTSCi (Ibid., p. 12). That said, companies do not achieve OECD DD compliance through iTSCi implementation alone, as they have to take further actions themselves, including around "requirements relating to contractual agreements and the adoption of a mineral supply chain policy, as well as the final decision to continue to engage or disengage from a trading relationship" (ITRI, n.d., p. 2 of 2).

Another challenge of iTSCi relates to the geographical scope of implementation, which at the time of research was limited to Katanga and Rwanda. Programme implementation would be directly affected by political instability and/or conflict and therefore has limited use in conflict-affected areas. According to ITRI, "iTSCi has been in development since 2008 and was first piloted in South Kivu, eastern DRC, during the summer of 2010, but project activities had to be closed down due to the mining suspension initiated by the Government of DRC from September 2010 to March 2011. Projects in the Kivus will be re-started in the near future depending on international and industry approval of non-conflict-mines, further funding, and the confirmation that Dodd-Frank compliant buyers will re-enter the market" (Itri, 2012, p. 1 of 3). Finally, experts suggest, "the long term may see ITSCI integrated into other regional schemes to ensure sustainability" (Mitchell et al, 2012, p. 45).

This flurry of activity on chain-of-custody schemes demonstrates the level of policy action the IANGO's 'conflict minerals' campaign had sparked, which in turn helped to reinforce further the 'conflict minerals' campaign, as it provided a level of justification for the 'conflict

minerals' arguments. If, after all, major powers in the world are working to stop conflict financing in eastern DRC in order to stop conflict, then surely this is the most sensible way to stop conflict? Or, perhaps, is it not? The argument is that irrespective of the technical specifications of the chain-of-custody schemes, their successful implementation is first and foremost dependent upon the ability to a) be implemented on the ground effectively and sustainably; and b) the ability to guarantee that material entering the chain-of-custody scheme at the mine level is 'conflict free', and in the case of the BGR and ICGLR schemes, also has been mined in line with a range of ethical standards. This argument relates back to the brief discussion of the KPCS above. In essence, the chain-of-custody schemes, introduced above, will have to avoid the same credibility challenge the KPCS is faced with, which is that it is currently not doing what it promises to do: to guarantee, is at a very basic level, that the diamonds it certifies are conflict free. For chain-of-custody schemes to function, the implementation environment therefore will have to be amenable to their successful implementation, which includes having full visibility and control over the first stage of the trading chain, which is ASM production, which is currently not always the case, particularly in conflict affected areas, i.e. the areas where the effective implementation would in theory have the greatest impact on conflict financing.

Control over the ASM production stage could be a possibility in high volume minerals, such as tin and tantalum, in conflict-free areas of the DRC, such as Katanga or conflict-free parts of the Kivu provinces, if effective government supervision and/or management of the schemes can be guaranteed. In Northern Katanga, for example, industry players have set up 'closed-pipe trading chains', such as the *Solutions for Hope* trading chain, which only market material from defined and certified 'conflict free' mines (Solutions for Hope, 2012). This example underlines that it is indeed possible to source 'conflict-free' material from 'conflict-free' areas in the DRC, and if the 'closed-pipe' models turn out to be scalable and sustainable, there is a case to be made to roll out 'closed-pipe' trading chains across other conflict-free parts of the DRC and in fact, globally. The reason for this is that they potentially present a formidable opportunity to reform ASM sectors across the developing world, ensuring real benefits to those involved in the ASM sectors, including the 'coping economy' actors.

However, the positive example of the *Solutions for Hope* trading chain neither shows that chain-of-custody schemes have applicability in conflict-areas, nor does it show that chain-of-

custody schemes are useful conflict resolution tools. The fact that at the time of research there was no functioning chain-of-custody scheme effectively certifying 'conflict minerals' in conflict-affected parts of North Kivu and no chain-of-custody scheme was effectively certifying artisanally produced gold from Orientale province or anywhere else in the DRC, is testimony to this argument. It further suggests that the Congolese Government currently neither has the capacity nor is it presented with the right incentives to oversee and regulate the ASM sector in North Kivu and other conflict-affected areas, which means chain-of-custody schemes in North Kivu, particularly in the gold sector, would face integrity concerns, similar to those of the KPCS. In fact, Ministry of Mines representatives in Kinshasa confirmed in an interview "it will be a serious challenge, in the short to medium term, for the government to control the mining stage in the artisanal value chain" (interview, DRC Ministry of Mines, 2009).

In this context it is imperative to refer back to the low volume and high value gold trading chain, which I introduced in chapter 5 of this thesis, which is distinct from the high volume and low value tantalum, tin and tungsten trading chains. The artisanal gold trade is the most important reason why chain-of-custody schemes are ineffective conflict resolution mechanisms and that they are ineffective measures to curb conflict financing, as the almost entirely informally functioning and – due to the high value and low volume nature of gold – currently uncontrollable artisanal gold trading chain will continue to be a reliable source of income for armed groups, including the FDLR and FARDC, at least for the foreseeable future.

That said, considering the positive outcomes they can have, which I discussed in the context of the KPCS in chapter 2, it appears that they should be complemented by and aligned with a broader strategy of sequenced conflict resolution measures, not least to ensure that reformed governance structures can guarantee their effective and sustainable implementation. Insisting on the immediate implementation of chain-of-custody schemes *as conflict resolution mechanisms*, as Global Witness, for example, has again done in a report published in 2012 (Global Witness, 2012) is not only dividing attention from efforts that are looking to solve the conflict in eastern DRC, such as political engagement and security sector reform, but is also having negative externalities, particularly for the 'coping economy' actors dependent on the mining and trade of 'conflict minerals' in eastern DRC, which is a point I return to further below.

Extraterritorial Legislation on mandatory due diligence

In chapter 2, I introduced how IANGOs in the US, most notably the Enough Project, lobbied successfully in the US for the adoption of extraterritorial legislation on 'conflict minerals'. DF 1502 requires companies sourcing 'conflict minerals' from the DRC and its surrounding countries to conduct mandatory due diligence to ensure their supply chains are 'conflict-free' (Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010). The act was signed into law in the United States on 21 July 2010 and implementation rules were published on 22 August 2012. In a blog, Mitchell breaks down the key elements of the implementation rules, which demand a three-step process for companies to "first assess applicability, then determine the origin of material, and then conduct full due diligence" and I replicate his explanation here (2012, p. 1 of 2):

"Step 1: At step 1, companies need to identify whether the rule applies to them. The final rule applies to "any issuer that files reports with the Commission under Section 13(a) or Section 15(d) of the Exchange Act, including domestic companies, foreign private issuers, and smaller reporting companies". It applies to "any issuer for which conflict minerals are necessary to the functionality or production of a product manufactured or contracted by that issuer to be manufactured". The Commission adds, "whether a conflict mineral is deemed 'necessary to the functionality' of a product or 'necessary to the production' of product depends on the issuer's particular facts and circumstances". [...] while there are some notable exemptions, most companies who have 'conflict minerals' in their product, or where 'conflict minerals' are 'necessary to function and purpose' of the product, appear to be subject to the rule.

At step 2, if the rule does apply to the company, it will need to conduct a reasonable country of origin enquiry to identify where minerals come from. The issuer must submit a Conflict Minerals Report concerning those conflict minerals that originated in the Covered Countries, and make that report available on its website. The SEC specifies that a reasonable country of origin inquiry is consistent with the supplier engagement approach in the [OECD DD]. However, during a temporary period, issuers unable to determine whether they use conflict minerals may describe products as "DRC conflict undeterminable" for 2 to 4 years depending on the size of the company. Still, these companies are "required to exercise due diligence on the

source and chain of custody of its conflict minerals and submit a Conflict Minerals Report describing its due diligence".

At step 3, if the company identifies that 'conflict minerals' come from a 'covered country' or unknown origin, they will need to submit a detailed Conflict Minerals Report, which must include must include a description of the measures taken by the issuer to exercise due diligence on the source and chain of custody, and the results of an independent private sector audit."

DF 1502 thus presents serious pressure on downstream industry actors to ensure their supply chains are 'conflict-free'. In chapter 2 I discussed the issues of regulatory and reputational risk exposure as drivers of action, particularly for consumer facing brand companies. I will revisit this discussion here to set the scene for some of the analysis to follow. Consumer-facing brand companies have a greater regulatory and reputational risk exposure, as many of them are listed companies operating in jurisdictions where consumers have greater access to information and advocacy channels, such as social media, "which expands the spectrum of reputation risks and boosts risk dynamics" (Aula, 2010, p. 1). In a piece on reputational risk exposure, Eccles et al, explain, "companies with strong positive reputations attract better talent and are perceived as providing more value in their products and services, which often allows them to charge a premium. Their customers are more loyal and buy broader ranges of products and services. Since the market believes that such companies will deliver sustained earnings and future growth, they have higher priceearnings multiples and market values and lower costs of capital" (2007, p. 1). This means regulatory and reputational threats to such companies will likely lead to company actions to mitigate such threats, particularly if the companies' brands otherwise have a good reputation. Non-compliance with DF1502 presents both a regulatory and reputational threat of significant proportion for consumer-facing brand companies, which has led to many companies deliberately avoiding to source from the DRC and surrounding countries, which has far reaching consequences and is a point that I return to in greater detail in the sections that follow.

Prior to that, it is important to introduce the OECD DD Guidance, which is currently the most comprehensive and widely approved guidance to have been developed to meet the regulatory requirements of DF 1502. The OECD DD Guidance "provides management"

recommendations for global responsible supply chains of minerals to help companies to respect human rights and avoid contributing to conflict through their mineral or metal purchasing decisions and practices. The OECD DD Guidance is for use by any company potentially sourcing minerals or metals from conflict-affected and high-risk areas" (OECD, 2012, p. 1 of 2). The Securities and Exchange Commission (SEC), along with the US State Department, the UN Security Council and a broad coalition of governments, companies and civil society organisations officially endorsed the OECD DD as a credible due diligence tool (RCS, 2011, p. 1). Levin (2010, p. iii) breaks down the key elements of the OECD Guidance:

Table 11: The OECD DD Mechanism (Levin (2010, pp. ii))

	Element	Main Event	Assurance outcome	Line of Defence	Level of Assurance	Timing of Assurance
1)	Strengthen	Policies are set;	As main event.	First.	n.r.	Immediate.
	company	management				
	management	systems are				
	systems.	strengthened				
2)	Identify and	Risks are	Risks are			On-going.
	assess risks in	identified by	identified and	Second.	2 nd party.	
	the supply	Joint	assessed.			
	chain.	Assessment				
		Team and				
		assessed by				
		company.				
3)	Design and	Risk	Risk	Third.	n.r.	Following
	implement a	management	management			reporting
	strategy to	systems are	systems are			from JAT.
	respond to	designed and	designed and			
	identified risks.	implemented.	implemented.			
4)	Ensure	Due diligence	Operators are	Fourth.	3 rd party.	Unknown.
	independent	practices and	certified or			
	3 rd party audit	operators'	decertified.			

	of smelter's	compliance with				
	due diligence	OECD guidance				
	practices	is verified.				
5)	Publish an	Risk	Transparency	Fifth.	Monitoring	Annual.
	annual report	assessment,				
	on supply	systems, and				
	chain due	audit results are				
	diligence.	reported.				

The OECD DD provides a five-step implementation framework as laid out in the table above. Each step is a process and requires management and external experts' input, as companies may struggle to undertake all steps by themselves, even though in many cases, they build on existing company policies. As RCS points out, "Step II: identify and assess risk in the supply chain, in particular, includes requests for companies to identify the method and conditions of extraction, presence of armed groups and the extent to which armed groups were involved in the extraction or handling of minerals either directly, or indirectly through third parties" (RCS, 2011, p. 2). Verification that a company's immediate supplier has conducted an analysis of its supply chain is not accepted by the OECD DD as sufficient due diligence, though being able to demonstrate appropriate due diligence action up the supply chain will be helpful in demonstrating the company's commitment to achieve compliance (Ibid.).

In order to test the implementation of the OECD DD in the downstream industry, a one-year pilot project was initiated for the OECD DD implementation of the *Supplement on Tin, Tantalum, and Tungsten* (OECD, 2013). A number of important lessons were achieved through the pilot implementation, which reconfirmed some of the positive aspects of chain-of-custody scheme implementation discussed in chapter 2, but it also underlined some of the externalities for the 'coping economy'. With respect to the 'coping economy' externalities, the report on the implementation of the pilot project states (OECD, 2013, p. 60):

"[...]The SEC Rule creates a disincentive to source minerals from the DRC and its nine neighbouring countries, because those companies that do source from the region have to conduct due diligence, write a conflict minerals report and get an independent audit, while companies that do not source from the covered countries do not have to go through these steps. Participants have increased their commitment to continuing responsible trade: Over the course of the pilot phase,

there has been a general shift in companies' approach to risk as they become more familiar with in-region sourcing. More specifically, some participating companies now indicate that they aim to source responsibly from the region instead of taking a purely risk averse approach that would entail ending trade with the region. Several participants have actively sought out opportunities to support responsible trade from Central Africa and demonstrate a strong commitment to continuing responsible trade from the region. [...] However, participants note that only a few leadership companies actively participate in these programmes, and the spread of such practices is challenged by the final SEC rule and by customer requirements that do not have the same approach."

These observations from the OECD DD pilot implementation thus confirm that there are potentially externalities from DF 1502 implementation with respect to a significant reduction in trade and thus a reduction in livelihood opportunities in the ASM sector in eastern DRC's conflict-affected provinces in particular. This is a complex point, which I will return to in the next section of this chapter. On the other hand, obtaining greater visibility into the subnational trading chain back to the mine of origin is one of the rationales and potential benefits of the chain-of-custody schemes, which I discussed above. Considering DF 1502 is concerned with formal trade, as opposed to informal trade (see below), it is clear that in order for companies to be able to conduct due diligence on their supply chain in line with the OECD DD, they require a formal process that guarantees them the 'conflict free' status of their inputs. As discussed above, at the time of research there was no effective chain-of-custody scheme in operation in North Kivu that was actively and effectively certifying 'conflict minerals' production from North Kivu as 'conflict-free'. Neither was there a chain-of-custody scheme for artisanal gold effectively implemented anywhere in the DRC. This means at the time of research and in the context of the research cassiterite and gold trading chains, it was not possible for a company that has to prove compliance with DF 1502 to be compliant with DF 1502, if it was sourcing artisanally mined gold from Orientale Province (or anywhere else in the DRC), or cassiterite from North Kivu, unless it was sourcing certified 'conflict-free' cassiterite from other parts of the DRC that were exported through Goma. Even though stakeholders generally agreed that an embargo on 'conflict minerals' exports from the DRC would be counter-productive, the discussion of DF 1502 suggests that while there is no de jure embargo in place, there is a de facto embargo in place on formally traded cassiterite from North Kivu and formally traded artisanal gold from anywhere in the

DRC, preventing the sale of both into international 'conflict-free' markets. The following section discusses the implications of such a *de facto* embargo for the 'conflict', 'shadow' and 'coping' economy actors.

Consequences of DF 1502 and chain-of-custody schemes

There are a number of externalities of both the implementation of chain-of-custody schemes, as well as the passing into law of DF 1502, some of which I have already alluded to above. On the international level, the 'conflict minerals' campaign has stirred up the global industries that use 'conflict minerals'. In the introduction to this thesis, as well as in chapter 2, I discussed how some end-user companies were confronted for the first time in 2008 with the fact that they probably would not be able to rule out that their products contain, for example, cassiterite originating from the militarily controlled Bisie mine in North Kivu (Garrett and Mitchell, 2008). In an age where information spreads quickly whether through social media and news reports, reputational risks are particularly pertinent for consumerfacing brand companies. The passing into law of DF 1502 in the US means that companies along the trading chain in 'conflict minerals' face new compliance requirements to mitigate the risks associated with non-compliance. By the SEC's estimate, "approximately 6,000 issuers will be directly impacted by the rule and that many private companies in the supply chains of these issuers will be impacted indirectly" (Ernst & Young, 2012, p. 1). The cost of this exercise will be substantial. The SEC has stated, "it expects that the costs will be substantial to both issuers and non-issuer suppliers, and estimates the initial cost of compliance to be between US\$3 billion and US\$4 billion, with annual costs thereafter of between US\$207 million and US\$609 million. Public commentary on the proposed rule had previously estimated compliance costs to be as high as US\$16 billion" (ibid).

Some companies initially remained concerned about the potential complexity and scope of the DF 1502 regulations and the costs that compliance with a 'conflict-free' supply chain would entail. Aware of these complexities and costs, "the U.S. Chamber of Commerce and the National Association of Manufacturers want a federal court to modify or scrap what they call burdensome" (Geman, 2012, p. 1 of 2). At the time of research, the outcome of the appeals process were not known, but while costs are one aspect that received attention, many companies I interviewed under conditions of anonymity expressed concerns "over the obvious reputational risks attached with continuing to purchase from the DRC and surrounding countries, whether from conflict-affected areas or conflict-free areas",

principally because they did "not want to be associated with the 'conflict minerals' campaign, whether positively or negatively" (Interview with two representatives of two electronics manufacturing companies, Paris, 2011). For example, representatives of two manufacturing companies said, "this issue is getting too hot for us" and "we do not want to have anything to do with it, so we're putting distance between our supply chain and that part of the world" (Ibid.). In line with the findings of the OECD DD Guidance implementation study presented above, many of these companies chose to play it safe and sourced their 'conflict minerals' from other, often non-African, geographies, where 'conflict-free' supplies could be guaranteed. These smelters were certified under the EICC's CFS programme, which has produced a list of global 'DRC conflict-free' smelters (Conflict-Free Smelter Program, 2012).

Again in line with the OECD DD Guidance implementation study presented above, while many companies decided to look elsewhere, a handful of others took a very proactive approach, both from a strategic and reputational point of view. I discussed the *Solutions for Hope* closed-pipe trading chain earlier, which continues to see support from high-profile electronics companies and component manufacturers, for example. An electronics industry expert explained, "to support an initiative other brand companies are supporting is a low-risk option to demonstrate to the world that your company would like to be part of the solution, rather than turning a blind eye. It is good PR, but also demonstrates a genuine willingness on behalf of the companies to demonstrate that it is indeed possible and of strategic value to develop the DRC's 'conflict minerals' deposits and to commercialise them" (electronics industry expert, 2011, interview).

As discussed, however, while it is not impossible, there remain doubts over the scalability to conflict areas of the pilot project in 'conflict-free' Katanga, such as conflict-affected mining areas in North Kivu, and questions remain over the sustainability of the project in such areas of heightened insecurity. Judging purely from the discussions in chapters 3, 4 and 5 of this thesis, these doubts complement considerations related to insecurity, such as more difficult access and monitoring, low state capacity to monitor and assist in areas of insecurity, as well as the more significant costs involved of operating in a conflict-affected area, such as, for example, staff security and logistics. This is not to say that it would not be a significant achievement and an encouraging development for North Kivu's and Orientale Province's ASM sector, which was the focus of this thesis, if the closed pipe model could be extended

to mines in conflict-affected areas and to mines in the gold sector. The scalability discussion of model supply chains is a natural transition point to discuss a number of externalities that derive from DF 1502 and, where indicated, from the implementation of chain-of-custody schemes for the 'war economy', shadow economy' and 'coping economy' actors.

An initial analysis of conflict financing processes on the ground, as undertaken in chapters 4 and 5, suggests that it is unlikely that DF 1502 will be able to significantly reduce conflict financing in the short- to medium-term. The reason for this rests in DF 1502's focus on ensuring that formal trade does not contribute to conflict financing. The key point of contention is that armed groups primarily prey on informal trade and particularly the informal gold trade, which is not significantly affected by DF 1502 and which, at the time of research, except for Banro's industrial gold production from South Kivu, remained largely informal, underground and impossible to control. In real terms this means DF 1502 will not significantly cut funding of the FDLR, for example, which is the rebel group benefiting the most from the informal gold trade (De Koning, 2011). In fact, the informal gold trade will in all likelihood increase in volume in the short term, as a result of a migration of artisanal miners from tantalum, tin and tungsten mines from North and South Kivu into the informal gold mining sector (see below). This will continue to be the case until coordinated efforts are put into place to address the socio-political and economic causes of conflict, or until the gold that one can mine with artisanal methods is depleted (Gallo, 2011), or if the price of gold drops to a level that makes it uneconomical to mine it. If IANGOs remain convinced that the conflict in North Kivu is fought over natural resources, the logic of their own argument would suggest that the armed groups would thus follow the income-earning opportunity, which would entail moving into neighbouring provinces and gold-bearing areas. This is certainly an area that future research should take a closer look at, but at a very basic level is only likely to be the case if the armed groups are forced to do so by circumstance, particularly considering the immense accessible wealth in mostly conflict-free areas of the DRC, such as the diamond mines of the two Kasai provinces or the gold mines of Orientale province, which armed groups have largely chosen to ignore, particularly since the end of the two Congolese wars (Seay, 2012).

It is in this context that one has to evaluate arguments that chain-of-custody schemes can be rated a success, as long as armed groups are only able to sell their commodities into a market at deeply discounted prices, thus reducing their revenue from production and trade

(Bannon and Collier, 2007). While inapplicable to the gold trading chain in eastern DRC, this argument may to an extent apply to the trading chains in high volume and low value tantalum, tin and tungsten. The Enough Project is claiming, "the Dodd-Frank law is making a serious dent on the militias in eastern Congo, cutting their profits from the conflict minerals of tin, tantalum, and tungsten by more than 60 per cent" (Fidel Bafilemba, 2012, quoted in The Enough Project, 2012, p. 1 of 2). This claim, however, appears to be largely based on the fact that overall production in the 3T minerals has declined, which is a point I will discuss in greater detail in the context of the 'coping economy' further below. In support of my argument above, the report confirms that very little progress has been done to bring under control the trade in artisanally mined gold (Bafilemba, Lezhnev, Wimmer, 2012). The impact of DF 1502 on the 'conflict' economy thus remains subject to debate and in fact, there are credible arguments that suggest DF1502's ability to either curb conflict financing or to resolve the conflict in DRC is most probably unlikely and certainly far from proven. While only time will tell, the structure of the trading chains and physical attributes of the commodities suggest it is not the silver bullet that IANGOs would like to have global audiences believe.

In contrast to the impact on the 'conflict' economy, DF1502 and related policy developments on the international level have an effect on the 'shadow economy' in eastern DRC, particularly for formal comptoirs, who export at least part of their trading volumes formally. For these comptoirs, working towards DF 1502 and chain-of-custody compliance comes with pressures to professionalise operations through adapting management systems and processes and demanding greater levels of professionalism and formalisation from their own supply chain, which is used to operating largely informally. This is a significant increase in their risk exposure. If a significant number of comptoirs will strive to become compliant with DF 1502 and the various chain-of-custody schemes, DF 1502 could become an incentive for 'shadow economy' actors to formalise and thus contribute to a larger process of formalisation of the ASM sector, which is a similarly positive effect as I had discussed in the context of the KPCS in chapter 2. However, DF 1502 pressures in the form of reporting on compliance for the first time in 2014 for the year ending on December 31, 2013, presents the local industry with a catch 22 situation. While DF 1502 presents an incentive to professionalise and formalise for the 3T industry, the ability to implement this process is dependent upon the industry's ability to continue to trade, so to generate the necessary capital to remain in business and see through a professionalisation and formalisation

process. However, in order to continue to trade, at least to trade into international 'conflict free' markets, the local 3T industry is dependent upon a functioning chain-of-custody scheme, so as to fulfil the reassurance requirements of the end-user companies.

The downstream industry requires chain-of-custody systems between mine and smelter that are useable and credible enough to instil confidence in the downstream users that they would stand up to a due diligence process in accordance with DF 1502 (Interviews with three end-user companies, EICC/GeSI workshop, Brussels, September 2011). As I have discussed above, at the time of research there was no functioning chain-of-custody schemes in operation in Orientale Province for gold or in North Kivu for cassiterite, which means the exporters at the time of research cannot be compliant with DF 1502, if they source cassiterite from mines in North Kivu or gold from any artisanal mining operation in the DRC. This sequencing issue constitutes a de facto ban on the comptoirs' ability to sell into international 'conflict free' markets, which include major electronics and aerospace firms, which have historically been their - several steps removed - customers (Garrett and Mitchell, 2008). In addition to these practical constraints, discussions of DF1502 compliance tend to ignore the very real constraints to doing formal business in the DRC, which I discussed in chapters 2 and 5. There are reasons that make business sense for operators in the trading chains in ASM production to conduct business informally and without a tangible improvement in the business climate, it is likely that the added costs and risks that come with DF1502 implementation will reinforce incentives to trade informally, particularly in the production and trade of artisanally mined gold.

It is this *de facto* ban which brings about the most significant externalities of DF 1502 and, where indicated, chain-of-custody schemes implementation, for the 'coping' economy actors, who are dependent upon the mining and trade of 'conflict minerals'. I discussed the nature and scope of this dependence in detail in chapter 3 and return to this discussion further below. In order to illustrate the consequences of a *de facto* ban, critics of DF 1502 point to two examples of previous bans on artisanally mined and traded 'conflict minerals'. In September 2010, DRC President Kabila banned mining activities in the two Kivu provinces and Maniema (Seay, 2012). Mining ground to a halt, which to a degree would have had an effect on non-state armed groups benefitting from the 3T trade, but at the same time, "it also led to increased militarisation of the mining sector as the FARDC took over many mines that had previously been non-militarised" (ibid, p. 13). The analysis in chapters 1 and 4 of

this thesis suggests the FARDC is a cornerstone of insecurity in eastern DRC, which is why this development has likely resulted in greater insecurity in selected mining areas.

To this day, there is widespread speculation over President Kabila's motivations to institute the ban. The government itself related it to its efforts to improve the security situation in eastern DRC (BBC, 2011); however, this may or may not be true. Equally, it is unclear to what degree the government-led ban may or may not be related to DF 1502 implementation, however, an internationally driven ban on 3T exports from eastern DRC was (Seay, 2012). In the run up to the passing of DF 1502, while there were no sanctions imposed on the mining and trade of any minerals and metals from eastern DRC, the combination of being 'named and shamed' in UN investigative reports and being the target of IANGO campaigning has left several traders and purchasers to suspend all purchasing activities from eastern DRC, citing reputational and political risks (Kavanagh, 2010). As Seay reports (2012, p. 14): "In April 2011, the Malaysia Smelting Corporation (MSC) began refusing to buy Congolese tin under pressure from industry representative body, the Electronics Industry Citizenship Coalition (EICC)". Under the CFS program corporations had to guarantee the 'conflict free' status of their minerals and metals inputs (GeSI, 2011). However, MSC, which was a key customer, purchasing up to 80% eastern DRC's cassiterite production was unable to ensure the conflict-free status of its supplies and with its decision to withdraw, North Kivu exports of tin ore fell by 90% (Kavanagh, 2011). The result was a de facto embargo in place on tin ore destined for international conflict free markets, even though there was no de jure embargo on 'conflict minerals' exports from eastern DRC.

In a 2009 report and thus prior to the passing of DF 1502 into law, Garrett and Mitchell argued a *de facto* ban would likely "drive the 'conflict minerals' trade further underground, leaving the market open to less reputable and/or criminal traders based in countries with less public scrutiny mechanisms, further decreasing the opportunities for proactive and constructive engagement with the 'conflict minerals' trade" (2009, p. 13). In December 2011, Tegera wrote in the context of the *de facto* ban, "the leeway for action of the mining operators in Kivu is diminished and the temptation to turn towards the market in Southern Asia is great. Among the 31 mineral trading companies operating in North-Kivu in 2010 identified by the SAESSCAM, only three are Chinese-owned (Donson International, T.T.T Mining and Huaying), and one belongs to an Indian company (Afromet). [...] We may suppose that if the Chinese and the Indians, who feel less concerned by the American Dodd-

Frank Act, continue to buy mineral products from the former Kivu province as they did before the September 2010 ban, the vast majority of Congolese trading companies will automatically turn towards the Chinese or Indian markets, especially if these markets pay better prices" (2011, p. 21). This account reconfirms that DF 1502 implementation will only be an incentive to 'clean up' the minerals and metals trade from eastern DRC, if China and India ask the same standards of their Congolese suppliers. As of January 2012, "only three of Goma's 25 exporters were officially operating, but these were selling primarily to China" (Seay, 2012, p. 14). A reorientation towards the Chinese market would not only make logical sense for a greater number of traders, but would also once again reconfirm Raeymaekers' (2006-2007) observations that local actors have significant capacity to adapt to changing circumstances and to work around barriers to the sustainability of their livelihoods.

The analysis in chapter 3 found that many people were actively trying to access the primary and secondary ASM economies, as they presented the most competitive livelihood options, considering the realities on the ground. The analysis in chapter 3 also underlined the fact that actors in the primary and secondary ASM economies sustained five or more direct dependants, and a greater number of indirect dependants. This coping economy was at the time of research severely affected by the *de facto* ban. Aronson described in a New York Times op-ed how a sudden lack of income from the minerals trade meant mothers were giving birth at home, children had to drop out of school, and people were unable to buy food (Aronson, 2011). While these are examples of the visible humanitarian consequences, there are also less reported knock-on effects from the *de facto* ban. The Enough Project states on its website in 2012, "over the past year, many miners in the Kivus have changed livelihood strategies to working in conflict-free mines in neighbouring provinces or in the agriculture or small business sectors" (The Enough Project, 2012, p. 1 of 2). It is important to clearly refute the Enough Projects claims that these externalities are positive impacts of DF 1502 and the *de facto* ban it has generated. I will deal with these three claims in turn.

First, there are significant doubts over the validity of the Enough Project's claim that many miners have found livelihood opportunities in the agriculture sector. A migration of a significant number of miners from mining into agriculture would have had to go hand in hand with an improvement in the security situation. The reason for that is that insecurity led many former farmers and agricultural labourers to pursue ASM as a livelihood strategy in the first place (see chapter 3). The Enough Project's claim directly contradicts not only the

conflict reality on the ground, which has seen a significant increase in fighting in 2012, but also the findings of security perception research undertaken for Oxfam, which I discussed in the introduction to this thesis and which suggests that year on year, the population in eastern DRC has been feeling more insecure (Oxfam, 2010, quoted in Autesserre, 2012). There is no reason to believe that an increase in fighting should be positively correlated with a migration from the ASM sector into the agricultural sector, taking these points into consideration.

Second, there are significant doubts over the validity of the Enough Project's claim that many miners have found livelihood opportunities in the small business sector. The reason for this is directly related to the implementation of the *de facto* ban. It is unlikely that either entrepreneurialism, or employment in a sector that is dependent upon access to capital and purchasing power is likely to rise in a context where overall purchasing power and access to capital has declined. The increase in fighting and the reduced availability and the reduced disposable income due to the *de facto* ban-related contraction in the ASM sector would also suggest that the secondary ASM economy is unlikely to be a provider of jobs or be a fertile ground for entrepreneurial activity, at least until the *de facto* ban is lifted.

Third, while the Enough Project is correct to say that a significant number of miners from the Kivus have adapted their livelihood strategies by seeking opportunities in conflict-free mines in neighbouring provinces, this is akin to promoting as a positive DF 1502 impact the large-scale economic displacement of 'coping' economy actors, which is a direct violation of these actors' human rights. That said, the Enough Project's claim merits closer analysis and discussion. Considering the differences in the high volume and low value 3T trade and the high value, low volume gold trade in eastern DRC, DF 1502 will generate a different set of impacts and externalities in the respective trading chains. This is of foremost importance in order to understand the underlying reasons for the large-scale mining population movements from areas where the DF 1502-related 'de facto' mining ban has taken effect, to those gold bearing areas where it has not taken effect, such as in Orientale Province.

As discussed further above, to this day it remains impossible to control the trading chain in artisanally mined gold in the DRC, which means gold ASM and the trade in artisanally mined gold are continuing, and in all likelihood will continue as long as gold deposits are accessible with artisanal means. The DF 1502-related *de facto* ban in North Kivu and the impact thereof

thus largely apply to the ASM and trade in the 3Ts, which are high volume minerals that are less easy to smuggle in large quantities. As long as chain-of-custody systems are not operational in North Kivu, it is highly likely that 3T ASM and trade will be depressed in North Kivu at least in the short to medium term.

A key question here is how much the gold ASM sector can become an alternative livelihood provider for 'coping economy' actors active in the ASM sector. In line with the Enough Project's claim discussed above, initial field evidence suggests that in the short term, gold ASM is absorbing a significant number of 3T miners (Karen Hayes, 2012, interview). Key gold ASM areas, such as in Ituri and Haut-Uélé in Orientale Province saw a significant influx of miners from the Kivus in the first half of 2011, when the official government ban was in place in the Kivus and Maniema (interview with two gold mining companies with interests in Ituri and Haut Uélé, June 2012). However, accessible surface gold deposits in the key gold ASM areas, such as in Mongbwalu in Ituri are no longer as rich as they used to be due to intensive ASM (interview with geologist, Johannesburg, November 2010). This means that with additional influx, the miners will have to dig for gold at more dangerous depths, making the activity overall more hazardous, leading to more accidents. This means from a sustainable livelihoods perspective, the influx of additional miners from North and South Kivu and Maniema is making the gold ASM livelihood strategy more hazardous.

There are broader community repercussions to consider too. Local community members I interviewed in Durba, Orientale Province, were particularly concerned about the influx of significant numbers of artisanal miners, who were said to compete with the local communities for local resources and place additional burden on already stretched local infrastructures (Interview with three community members, Durba, 2009). These interviews not only mirror common community concerns in areas with ASM potential globally, but they were also undertaken in 2009 - so before the latest *de facto* ban in North Kivu set in. This suggests that a significant increase in miners migrating to already overstretched gold ASM centres, resulting from the *de facto* ban in North Kivu, may lead to serious disruptions in the social infrastructures and local conflict in the currently 'conflict-free' gold ASM areas of Orientale Province, for example.

In addition, most gold-bearing areas in eastern DRC are in fact held under valid research or exploitation permits by mining companies (see chapters 1 and 3), which pits migrant

artisanal miners against research or exploitation permit holders. A senior representative of one gold mining company stated, "we don't know how to manage with the thousands of miners that have arrived here since the beginning of the year" (interview, senior representative of junior mining company, Cape Town, 2012). In a country with dire need for investment, this is a serious impediment for re-industrialisation of the mining sector. A country report by AngloGold Ashanti available on the internet states, "the very large numbers of orpailleurs (artisanal gold miners) within Concession 40, [in Ituri] especially in a post-conflict context, is a challenge for Ashanti Goldfields Kilo [its joint venture in the DRC]" (AngloGold Ashanti, 2007, p. 14). This shows how ASM influx risks can make it more difficult to attract reputable companies to the DRC. Bannon and Collier argue that this is a concern, as reputable operators "may well be replaced by companies that are less reputable or less vulnerable to international pressure or shareholder concerns" (2007, p. 15). Such a development would make it harder to attract actors with a greater commitment to corporate citizenship and an active interest in mining sector governance improvements. It would also make it harder to exert external influence over less exposed economic operators, which should equally be a concern for IANGOs, who, as I discussed, have much greater leverage with consumer-facing brand companies or listed companies. These arguments show that the DF 1502-related de facto ban had several negative externalities, not only for actors in the conflict affected Kivu provinces, but also for communities and economic operators in neighbouring provinces that are largely conflict-free, such as Orientale Province, and which were on track to achieve some mining sector re-industrialisation.

The arrival of DF 1502 has led to local CSOs operating in a crisis-management mode, trying to prevent the legislation from undermining the population's 'coping' strategies. A good example is the appeal of Eric Kajemba (Observatoire Gouvernance et Paix (OGP)) and Pere Didier de Failly (Bureau d'Etudes Scientifiques et Techniques (BEST)), who suggested to the Securities and Exchange Commission (SEC – see below) that unless certain caveats were met, the implementation of the IANGO-driven DF 1502 "would be the permanent loss of livelihood for 400,000 artisanal miners in the Eastern Congo" (2011, p. 7). Local CSOs also pointed to the several local initiatives currently in place to increase transparency in the production and trade of minerals, which are rarely reported on or acknowledged by IANGOs (see below). These are, "collecting and harmonising the statistical data from the government departments and the trading companies; supporting the efforts of the SAESSCAM for the identification and regularisation of mining players: exporters, trading companies, traders,

diggers, demilitarised mines, etc; centralising information in English and making sure it is distributed; encouraging the mining operators to make payments through the bank; reinforcing the lobbying of the supreme command of the armed forces to demilitarise the mines; drawing the boundaries to separate artisanal from industrial mining sites; and requiring an external independent audit after six months to assess the due diligence efforts made by the different initiatives" (Tegera, 2011, p. 28).

In this regard it is interesting to contrast the IANGOs' work with that of local CSOs. There is a multitude of local CSOs present in the Kivu provinces and in particular active in research and policy advisory on 'conflict minerals'. Local CSOs like the Pole Institute in Goma²¹ and OGP and BEST in Bukavu have done excellent research and provided thoughtful commentary²² on the interrelationship of the ASM sector and the 'conflict minerals' trade and conflict in North Kivu and eastern DRC more broadly. These local CSO work appears to have often taken a significantly more nuanced approach than the 'conflict minerals' campaign has put forward.

The Pole Institute published its first major research report on 'conflict minerals' in 2002 following the coltan rush in North Kivu, which highlighted the impact of the migration of agriculturalists into mining on food security in the province; the dangers of juvenile delinquency developing in the context of easy money and the proliferation of small-arms; the grave economic consequences a ban on coltan mining would have on the province; and the need to include economic security into DDR strategies (Tegera, Mikolo and Johnson, 2002). In a follow-up publication in 2005, the organisation highlighted the Congolese government's natural resource management deficiencies and persistent structural challenges; explained how individual interests were often backed up by force and a shortterm outlook continued to dominate the mining sector; highlighted a lack of a development dividend from the sector; and underscored the fact that the root causes of conflict remained unaddressed (Johnson and Tegera, 2005). In a further follow-up publication, the organisation provided a detailed account of the areas that require improvement for the cross-border trade in minerals and metals to provide real benefits to the Congolese people. These included improvements in the business climate and physical infrastructure, including regional management of energy sources; mining sector governance improvements; and strengthening of ASM-related livelihoods (Tegera and Johnson, 2007). In their latest report, in response to the already grave impact of DF 1502 and the assumption that there will be no

_

²¹ http://www.pole-institute.org/site%20web/echos/echo114.htm, accessed 21/8/2012

²² www.sec.gov/comments/s7-40-10/s74010-442.pdf, 21/8/2012

phased implementation of DF 1502 (see further below), the Pole Institute recommended "not to throw out the baby with the bathwater, as the American legislation has done, but to step up efforts to support the initiatives to increase the transparency and traceability of minerals from eastern DRC" (Tegera, 2011, p. 28). Considering the breadth of the Pole Institute's previous recommendations, the latter comment shows how the dominant 'conflict minerals' campaign has certainly narrowed the room for local CSOs to make the full extent of their recommendations heard.

Conclusion

The 'conflict minerals' campaign has become so prominent that it has made economic causes of conflict the dominant lens through which the conflict in eastern DRC is interpreted. In this chapter, I analysed the principle measures to curb conflict financing in eastern DRC, inspired by the 'conflict minerals' campaign. They are on the one hand chainof-custody schemes to prevent 'dirty' minerals from entering international 'conflict free' markets and on the other hand, extraterritorial legislation in the form of DF1502, requiring businesses to undertake mandatory supply chain due diligence to ensure their supply chains are 'DRC conflict-free' (Levin, 2010; OECD 2012; SEC 2012). While these schemes in their current application will bring many benefits, similarly to the KPCS, they are ultimately inadequate conflict resolution tools – like the KPCS – and are particularly inadequate conflict resolution tools in the context of eastern DRC. In fact, staying within the theoretical framework of the 'conflict', 'shadow' and 'coping' economy actors, which I have applied throughout this thesis, my analysis finds a range of externalities arising from the implementation of said policy measures for each stakeholder group. With the 'conflict' economy actors least affected and the 'coping' economy actors, who are the most vulnerable actors, most affected, said policy measures are currently failing not only their intended purpose, but are also failing some of the most vulnerable people of the DRC.

7 – Conclusion: Conflict minerals, coping, conflict and shadow economy actors and IANGO accountability

Introduction

The larger research puzzle this thesis contributed to is why does conflict persist natural resource rich countries, and why in the critical case of the DRC in particular. This is where I started off this thesis, which within this larger puzzle looked at two questions in detail: First, how the incentive structures of different actors in a 'conflict economy', including 'coping', 'conflict' and 'shadow' economy actors, can shape the dynamics of conflict and conflict resolution. I explored these incentives structures in three distinct chapters on 'coping', 'conflict' and 'shadow' economy actors in the context of the artisanal and small-scale mining (ASM) sector and the trade in artisanally mined cassiterite (tin ore) from conflict-affected Walikale territory in North Kivu and gold from post-conflict Watsa territory in Orientale Province. Second, how the physical attributes of the minerals and metals at hand, i.e. high volume and low value tin, tantalum and tungsten, as well as high value and low volume gold would determine how effectively 'conflict minerals' control measures can be implemented, which the 'conflict minerals' campaign proposed as key conflict resolution measures in the context of the DRC.

What I describe as the 'conflict minerals' campaign, driven by IANGOs like the US-based advocacy group The Enough Project and UK-based Global Witness (Enough Project, 2012; Global Witness, 2013) explains armed actors' access to – and competition for access to – tantalum, tin and tungsten (the '3T' minerals) and gold mining and trade opportunities as a key reason for continued conflict in eastern DRC (ibid.). These IANGOs' advocacy efforts have led to the 3Ts and gold now habitually being referred to as 'conflict minerals' in both the global media and public policy documents, at least in the geographical context of the African Great Lakes region. The 'conflict minerals' campaign has inspired public policy action in the form of a) chain-of-custody schemes to keep 'dirty' minerals out of international conflict-free markets; and b) extraterritorial legislation in the from of DF1502 requiring companies sourcing 'conflict minerals' from the DRC and surrounding countries to conduct due diligence on their supply chains to ensure these are 'conflict free' (Levin, 2010; OECD 2012; SEC 2012). Both sets of interventions have the principal objective to cut off funding to armed groups, by preventing armed groups from benefiting from the predation on the mining and trade of 'conflict minerals'. The end result, according to this logic, is that the

conflict fire is starved of fuel and will eventually extinguish.

The research gap

The proponents of the 'conflict minerals' campaign liberally place the conflict in eastern DRC in the class of other African countries where natural resources were said to shape the power strategies of elites, and where the conflict parties have increasingly operated based "on the territorialisation of sovereignty around valuable resource areas and trading networks" (Le Billon, 2001, p. 561). Relating this back to the theoretical discussion of 'conflict financing' in chapter 2, the 'conflict minerals' campaign places the 'greed theory' at the heart of its explanation of the conflict in North Kivu, suggesting mineral resources "act as a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8).

As the 'conflict minerals' campaign celebrated its advocacy 'success' in bringing about public policy action in the form of measures to curb 'conflict financing', and particularly the passing into law in the United States of requirements to conduct mandatory due diligence on 'conflict minerals' supply chains from the DRC and surrounding countries, increasing dissent emerged. Academics who observed the conflict complex in eastern DRC put forward detailed explanations of the conflict; some suggested the conflict could "at worst be described as a 'resource conflict'" (Vlassenroot and Raeymaekers, 2009, p. 10). In policy and expert circles, it was also discussed that perhaps – following the example of the KPCS – too much emphasis was placed on curbing 'conflict financing', without fully understanding and taking into consideration the potential negative externalities for the local coping economy (Conference discussion, Trading for Peace regional Forum, Lusaka, 2009); said externalities ranged from price reductions for 'conflict minerals' production even from conflict-free mines, to an overall de facto ban on eastern Congolese 'conflict minerals' for export into international conflict-free markets, affecting not only 'conflict' economy actors, but also 'coping' economy actors (Garrett and Mitchell, 2009; Seay 2012; Aronson 2012). Local CSOs warned very strongly that policy interventions championed by the 'conflict minerals' campaign would have grave negative externalities for the 'coping economy' in particular (Kajemba and de Failly, 2011). This was an inspiring environment to complete my research in, which identified and set out to close the following research gap:

While there was acknowledgement that a conflict economy is not a homogenous unit, there was little distinction made between the different sets of actors partaking in processes that facilitate 'conflict financing', and there was lack of distinction between their respective roles and incentives, as well as the different attributes of the mineral trading chains and how these attributes impacted on suggested conflict resolution mechanisms, particularly mineral trade control measures.

First, the general population was often portrayed as victims of conflict (Global Witness, 2008; Enough Project, 2012; HRW, 2005), but very little was known about the actual economic dependencies of the millions of people side-lined into survival or coping strategies in conflict situations, who continue to undertake largely informal economic activities, such as ASM. I was particularly intrigued by the economic dependencies, challenges and coping strategies these actors employ to safeguard their livelihood or transform their livelihood into a sustainable one. An understanding of this, I believed, would provide a valuable perspective of how these 'coping' economy actors are likely to be affected by measures to curb 'conflict financing' (through the predation on the mining and trade of 'conflict minerals'). On the other hand, an understanding of these impacts would also help to understand the strategies these actors employ to safeguard their livelihood or transform their livelihood into a more sustainable one.

Second, much of the literature centred on 'conflict' economy actors and their ability to fight and/or prey on economic activities (Keen, 1998; Le Billon, 2001; Gberie, 2005). However, while some case study material existed on how conflict economy actors organised and preyed on economic activities at the local level (UNSC, 2007; UNSC 2008; Global Witness, 2008; Titeca, 2010), I was particularly intrigued by the relative dependence of 'conflict' economy actors on such predation, and the incentives driving the behaviour of armed groups in the context of 'conflict financing'. Such information, I believed, would provide a better understanding of how much the economic dimensions of conflict mattered, which would, in turn, provide some perspective of the relative effectiveness of different measures, which the 'conflict minerals' campaign proposed to help curb 'conflict financing'.

Third, economic actors active in conflict zones were often portrayed as 'conflict entrepreneurs', out to make a profit from conflict (Collier, 2003; Global Witness, 2008; UNSC 2008). However, very little was known about the actual incentive structure of 'shadow'

economy actors and whether it would be more aligned with 'profit' in general, or whether it would be necessarily aligned with the idea of perpetuating conflict in order to safeguard profit. Understanding the relative importance of 'conflict' in the 'shadow' economy actors' business strategies would produce a better understanding of whether they would be a potential constituency for peace and reform; or whether they would have to be addressed as key actors perpetuating conflict when considering measures to curb 'conflict financing', or both.

Fourth, the physical attributes of the different 'conflict minerals', i.e. high value/low volume gold and low value/high value cassiterite and other 3Ts are not always sufficiently reflected in the discourse. The consequences of the different physical attributes for the structure of the associated trading chains and the likelihood of success of the implementation of measures that seek to control these trading chains also were not sufficiently reflected in the current discourse. Gold, it appeared, should be much harder to control than the 3Ts.

The final analytical gap, I found related to the prevalent governance structures relevant to the mining and trade of 'conflict minerals'. If governance structures are in fact similar to those pre-conflict, but have also evolved with the conflict, then there is a likelihood of non-state actors influencing governance or playing active roles in governance in the DRC (Risse, 2010; Tull, 2003). I was intrigued by two aspects in particular: how local actors are involved in local governance structures, and the roles that IANGOs are playing in the global governance structure of relevance to the mining and trade of 'conflict minerals', including how they approach the issue of 'conflict financing' and what externalities their approach has on the ground. The emphasis in my analysis was placed on the roles and activities of IANGOs, with a focus on those involved in the 'conflict minerals' campaign.

The hypothesis was that multiple incentive structures might be influencing the behaviour of the different sets of actors involved in the local economies that facilitate 'conflict financing'. If this is in fact the case, then IANGO advocacy-driven measures to curb 'conflict financing', which solely target one incentive structure, i.e. the motivation to profit from conflict, may in fact be inadequate conflict resolution mechanisms. This hypothesis led me to develop two questions, which my thesis endeavoured to answer.

The first question was what are the incentives for the different sets of actors partaking in

the local economies that facilitate 'conflict financing', focusing specifically on the mining and trade in 'conflict minerals'. This means, if there are sets of actors whose incentive is not to wage conflict, nor to profit from conflict, then there may be externalities for such actors of IANGO advocacy-driven interventions to prevent 'conflict financing' through the predation on the mining and trade of 'conflict minerals'.

The second question is what role do the value and volume attributes of the different commodities play and what these mean for conflict resolution attempts through the implementation of mineral trade control measures?

I explored these questions in the past 4 chapters:

Coping economy actors analysis

Chapter 3 analysed the 'coping economy' dimension of North Kivu and Orientale Province's ASM sectors, with a particular focus on the cassiterite and gold value chains from Walikale territory and Watsa territory respectively. The analysis distinguished between primary and secondary ASM economic activities, as well as those economic activities that can be pursued as an alternative to ASM, most notably agriculture. The number of dependants in the ASM sector is significant, with at least five (if not more) dependants per person in the primary ASM economy, which could be as many as 12.5 million people in the DRC (World Bank, 2008, p. 60). This number is directly related to the structure of the ASM economy, which combines both a 'primary ASM economy', which incorporates actors directly involved in the mining activity, as well as a 'secondary ASM economy' that is dependent on the income generated by the primary ASM economy and works to provide support services and physical inputs into the primary ASM economy', such as mechanics, carpenters, and transporters.

The analysis focused on the structures and processes that can help or impede the transformation of livelihoods in the primary and secondary ASM economies into sustainable or unsustainable ones (Chambers and Conway, 1992). The analysis highlighted that actors in the primary and secondary ASM economies should in theory earn enough to more successfully work towards the transformation of their livelihood into a sustainable one. However, discussing the opportunities and impediments to reduce their vulnerability, at present, the impediments, many of which are related to the external environment, continue to outweigh the opportunities. Nevertheless, "it can be very difficult to persuade artisanal

miners to abandon an activity which, despite being extremely tough, delivers a daily and often quite substantial income" (Pact, 2010, p. 8). Further threats to earnings, particularly given the widespread indebtedness of actors, would impede livelihood transformation further, not only in the primary ASM economy, but also in the secondary ASM economy.

That said, while actors in the primary and secondary ASM economies are exposed to risks to their livelihoods on a daily basis, they also have developed coping strategies to deal with such risks, demonstrating considerable resilience, which makes them actors of interest both in sub-national governance and as key stakeholders in solution-finding processes for the governance issue of the predation on the mining and trade of 'conflict minerals'. I related this to some of the writings in development theory from the 1970s, which highlighted the untapped potential in communities to contribute to their own livelihood transformation (Esman, 1991). The analysis thus also challenged the portrayal of the 'conflict minerals' production as an anonymous productive activity and helped to bring into question common stereotypes of artisanal miners, which I found particularly prevalent in the context of my research in the African Great Lakes region. These stereotypes take on numerous forms, but often revolve around the following common characteristics: young, male, poor, uneducated and most likely an ex-combatant inspired by greed (various interviews, Mining Investment Indaba, 2009). This description, while sometimes correct, overall did not match my findings. Rather, there are people of all ages, with diverse educational levels and skills sets, from different geographical regions and belonging to different ethnic groups, involved in the ASM sectors in North Kivu and Orientale Province.

While coerced labour does exist, many persons actively try to access the economic activities and trading networks in the primary and secondary ASM economies. They choose the sector as the most viable activity for surviving in this difficult economic and security environment, as other economic activities, such as agriculture, often have been rendered unviable by the conflict or are uncompetitive in terms of earning potential in particular (Vlassenroot and Romkema, 2002). There is thus an important 'coping' economy constituency whose behaviour is largely driven by the competitiveness of livelihood opportunities available to them. In terms of future policy development, these actors will need to play a greater role in the design of interventions to aid livelihood transformation and in line with Tripp's observations (1997, p. 120) they thus need to be considered – and respected as – producers of capital, savers and investors and members of the labour force.

Conflict economy actors analysis

The discussion in chapter 4 of the 'conflict' economy actors involved in the predation on the mining and trade of 'conflict minerals' in North Kivu and beyond showed that alternative governance regimes have emerged, particularly in areas where the state has limited reach. Ballentine and Sherman suggest the opportunity structure for rebellion is a) "deeply influenced by the relative strength of the state being challenged" and b) "a function of the relative capacity of the state to ensure just and effective economic governance" (2003: 265). The predation on economic activities has allowed those controlling the alternative governance regimes to benefit from economic activity, with the three key armed groups discussed in chapter 4 all to varying degrees benefitting from the predation on the mining and trade of 'conflict minerals'. Vlassenroot and Raeymaekers in this context suggest, the "underlying sources of this peace-making fallacy are a series of incorrect assumptions about the nature of the Congolese state as failed and collapsed. By continuously underplaying informal forms of governance in the eastern borderlands, the international community is missing a crucial chance to trigger a fundamental political transformation [...]" (2009, p. 1). They further recommend, "instead of [...dealing with renewed] 'emergencies', the international community would do best to tackle the fundamental obstacle to peace in the DRC, which is the violent and privatized governance of public goods and resources" (Ibid, p. 10).

The key armed groups discussed in chapter 4 take advantage of revenue generating opportunities far beyond the mere predation on the mining and trade of 'conflict minerals'. This fact is underlined by the UN Group of Experts investigative reporting on the conflict in the DRC, as I outlined in chapter 4. This highlights a) the burden the armed groups place on the existing economic system, and b) how their presence is a key impediment to tangible and sustainable reform in their areas of operation, both in the context of the mining and trade of 'conflict minerals' and in the context of broader economic diversification.

Le Billon's work on the 'ecology of conflict' provides some perspective on how geographic aspects and the concentration of mineral endowments impact on the strategy of armed groups (Le Billon, 2001: 572). The geographical typicality of the terrain easily permitted the 85th FARDC brigade, whom I discussed in detail in chapter 4, to control and economically benefit from the Bisie mine. The 85th brigade's coercive 'security governance'

implementation was rational, as it translated into greater economic productivity in the Bisie mine, which was the brigade's key source of income. The growing productivity lead to a higher income in tax collection for the armed group, which mirrors Chojnacki and Branovic's (2007) explanation of the emergence of 'security governance' with geographic and economic opportunities. This is similar behaviour other researchers have found with other armed groups in eastern DRC, such as the FAPC (Titeca, 2010) and is a key aspect that would refute to a degree suggestions that natural resources "act as a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8).

Existing literature suggests that if combatants can access resources directly, instead of having to work through a command structure, this can create discipline problems, which can impede conflict resolution attempts that require combatants to go along with settlements agreed to by their superiors (Ross, 2003). The Congolese government suggested the FARDC's 85th brigade was operating outside of the army's central command meant there was an element of applicability of this theory to my case. At the same time, this view did not explain how and why the brigade maintained coherence and contributed to a relatively more secure environment in Walikale territory and, after my field research period in Walikale, withdrew from the Bisie mine, which I discussed in the Introduction chapter and in chapter 3.

Likewise, it is difficult to see how Ross' point applies to the principal non-state armed group operating in gold and cassiterite-bearing areas, the FDLR. FDLR combatants and commanders have access to resources outside of their command structure by virtue of their geographic disbursement. However, if reports, which I discussed in chapter 1, are truthful, the theory does not explain why the FDLR seemed to maintain its command structure and demonstrated organised withdrawals, even from lucrative gold bearing areas during the joint RDF-FARDC *Umoja Wetu* military campaign against the group, which I also discussed in chapter 1, and how it subsequently re-established control of those areas, following the withdrawal of the RDF (Oxford Analytica, 2009). This is another hint at the fact that the FDLR is not simply a gold and cassiterite commercialisation business and preventing it from preying on the ASM sector may not result in it simply fading away.

The 'conflict minerals' campaign portrays the conflict in eastern DRC as one that requires large amount of finance in order to be sustained. That is not necessarily the case, as my analysis suggests. Bannon and Colliers (2007) point out that rebel groups have to become a

business operation, unless a foreign government or diaspora supports them. However, my analysis of the 'conflict' economy actors suggests another important point is to consider what 'conflict' actually means in the context of eastern DRC today and whether much finance is required to maintain it. Maintaining insecurity or the type of 'security governance' I was able to observe in Bisie, is relatively straightforward in an environment that is awash with small arms (IRIN, 2006). An AK-47 assault rifle, for example, can be purchased for 30US\$ in Walikale territory in North Kivu (BSR, 2010; Author's Observation, Walikale, 2007). As long as one carries a gun or another weapon, using expensive ammunition is neither required to prey on the mining and trade of 'conflict minerals', nor is ammunition imperative to be able to prey on civilians, abduct children and/or rape children, women and men. Wilding a gun is. While in many areas in eastern DRC the security situation has improved, particularly in Orientale Province (MONUC, 2007), a situation of permanent insecurity remains the reality in parts of North Kivu (Mushi, 2012). Permanent insecurity is different from full-scale warfare that requires expensive and high-tech weaponry, which is mainly deployed where MONUSCO and FARDC drive military operations against the FDLR (UNSC, 2008). The armed actors in eastern DRC therefore require far less revenue to maintain their presence, than is commonly assumed. While this does not mean that the armed groups are not motivated by profit, it simply means that, from a combat perspective, the predation on the mining and trade of 'conflict minerals' does not have to be the top priority within the groups' military strategies.

In the same vein, the UN Group of Experts unearthed evidence that the "CNDP captures most of its weapons and ammunition during offensives against FARDC" (UNSC, 2008, p. 6). The latter further diminished the CNDP's need for finance. This suggests, while, for example, the FDLR continues to financially profit from its predatory economic activities (UNSC, 2009), it does not have to make even a fraction of that amount in order to maintain fighting capacity. In fact, the one armed group that requires the most finance, is the FARDC, as it is overstaffed and its lack of doctrine, training and chain of command, means it frequently dissolves when faced with armed opposition, surrendering its expensive equipment. It has also been found to simply "leak" weaponry to armed groups (Amnesty International, 2012, p. 16). The implication here is that it is a policy limitation to just focus on the control of the predation on the mining and trade of 'conflict minerals' as a conflict resolution avenue without also addressing the presence of the armed groups per se, as well as other underlying causes of conflict.

Shadow economy actors analysis

Chapter 5 analysed the 'shadow' economy actors in the trade in cassiterite and gold from Walikale territory in North Kivu and Watsa territory in Orientale Province, respectively. It presented key incentives of 'shadow' economy actors, the structure and geography of the trade, as well as its scope and scale and the revenue to the Congolese state that derived from it. I found that significant proportions of the cassiterite trade formalised at the export stage, with some *comptoirs* paying taxes, while the gold trade remained almost entirely informal and underground. Particularly important to the analysis of the incentives structures of the 'shadow' economy actors was the existence of a significant informal economy, prior to the onset of conflict, which I discussed in the Introduction chapter. In this regard, Vlassenroot (2002) emphasised that economic activity during peacetime does not necessarily differ significantly from economic activity during times of conflict. The type of activity in this regard is different to the scale of activity, as informal activity had further expanded during the two Congolese wars and the on-going conflict in eastern DRC.

While IANGOs like Global Witness for a long time spread the notion that "competition over the lucrative minerals trade has become an incentive for all conflict parties to continue fighting" (Global Witness, 2012, p. 4), my research found that most economic actors - other than the armed groups - involved in the mining and trade of 'conflict minerals', which continue to be a vital lifeline for the 'coping' economy actors - displayed characteristics of what Goodhand describes as 'shadow economy' actors (2009). Instead of the stereotypical 'conflict entrepreneur' incentive structure, who has an interest in the perpetuation of conflict, as they would be unable to serve their profit motive in peacetime, my research found that many economic operators mainly had an interest in 'profit', rather than 'profit from conflict'. This is a point that is supported in particular by my research on the gold trading chain in Orientale Province, presented in Chapter 5, where comptoirs and other economic operators, for example, continued to trade gold even after armed groups that used to prey on the mining and trading of gold were no longer present. 'Shadow' economy actors in the trade in 'conflict minerals' trade are therefore potentially a powerful constituency that may well support conflict resolution, as it appears that these actors can also pursue 'profit' in peacetime.

Formalising this 'shadow economy' could help to divert up to 35% of the cassiterite trade

from North Kivu and up to 95% of the gold trade from Orientale Province into the formal sphere (Garrett and Mitchell, 2009). In fact, formalisation of the ASM mining and trade has become a dominant narrative since the mid-1990s, which was also reflected in policy approaches (Barry, 1996). Formalisation was not only considered to be an end as of itself, but that other objectives, such as increasing efficiency, reducing environmental impacts and improving labour conditions were considered as outcomes that could be achieved through formalisation, or at least once ASM was formal (SDC, 2011; Barry, 1996; Barreto, 2011).

The broader theoretical literature on the informal sector is particularly informative in providing a perspective to help understand barriers to formalisation, such as entry costs and operating costs (De Soto, 1992). I considered this discussion as a key to determining the incentive structures of shadow economy operators. Entry costs are those an entity faces throughout the process of transformation from an informal into a formal entity, which typically includes a licensing process. De Soto highlights that there is ample evidence that corruption and inefficiency are partly responsible for often lengthy and complicated procedures to register a business (1992). In the case of the mining and trade of 'conflict minerals' in DRC, I discussed some of the practical implications of a complicated licensing process, underlining the significant barriers to entry into the formal economy in the DRC.

While the licensing process was made easier, there was no significant improvement in the formalisation of the gold trade in particular. This led me to believe that, while entry costs stand in the way of formalisation, it is first and foremost the operating costs, once the actors or entities are formalised, which stand in the way of greater trade formalisation. This is certainly reflected in both cases on the cassiterite and gold trades analysed in this thesis. The literature on formal operating costs presents numerous examples, which highlight the burden placed on formal operators, particularly by required formalities set out in regulations. In other countries these typically fall within five categories, which are a) a lot of required time to comply, b) burdensome complex taxes, c) unaffordable labour regulations, d) cumbersome property registration and formal loan application, and e) inefficient contract enforcement mechanisms (Ishengoma and Kappel, 2006). All five categories equally apply in the DRC, which is also underlined by the 'Doing Business' ranking, developed by the World Bank, which ranked the DRC 181 out of 185 countries to do business in, in 2013 (World Bank, 2013).

I also underlined the specific risks that come with being a formal operator engaged in the DRC's ASM sector, which comprise legal and compliance risks in particular, as well as reputational risks. Legal and compliance risks mean that, since extraterritorial legislation dealing with, for example, corruption or 'conflict minerals' were introduced, there has been increased scrutiny of mining and trading activities in the ASM sector (SEC, 2012). Formal operators could face legal proceedings under a mine's host-state legislation or extraterritorial legislation if their engagement in the ASM sector fails to meet relevant requirements (ibid.). In this thesis, I have repeatedly referred to demands for extra-legal payments by state authorities, as well as the lack of visibility into the gold trading chain in particular, which currently makes it impossible for gold comptoirs to prove that the gold they trade is 'conflict-free', and which could complicate or prevent the legal trade of 'conflict minerals'. These are key risks to formal operators that apply to a far lesser extent to those operating informally. In Chapter 3 and Chapter 4, I also highlighted occurrences of child labour, human rights abuses and environmental accidents that could develop into reputational incidents for formal operators, whose public exposure is greater than that of informal operators. These risks are direct disincentives for operators to formalise if they do not have the capacity to manage those risks adequately and sustainably.

There are thus real costs to formalisation, which the literature on the mining and trade of 'conflict minerals' often only discusses in a fragmented manner. However, there are also real costs to operating informally. Literature on the informal economy presents broad categories of costs of informality, which are a) exposure to penalties and corruption, b) limited access to public services, c) difficulty of expanding profitably without drawing attention, d) limited access to financial and business development services, and e) limited possibilities to cooperate with formal enterprises (Ishengoma and Kappel, 2006). I mirrored these costs with eastern DRC-specific examples and it is clear from the analysis that there is a trade-off between formal and informal modes of operation in the mining and trade of 'conflict minerals'. However, evidence on the ground suggests that, at the time of my research, the benefits of operating in the mining and trade of the 'conflict minerals' shadow economy' outweighed the benefits of operating formally, as otherwise a significantly greater proportion of the mining and trade of 'conflict minerals' would have been conducted formally, particularly in the gold sector.

In order to change this, the provision of incentives would have to go beyond the mere

provision of security, particularly as key hubs of shadow economy activity in the mining and trade of 'conflict minerals' are located in secure areas, and would also have to go beyond the provision of other basic public services, with a view to improving on all indicators that would make a formal business more attractive than an informal business. The key lesson is therefore that formalisation efforts would have to be based on practical cost-benefit analysis tools to help assess whether overall policy frameworks provide the adequate incentives for formalisation for the 'shadow economy' operators themselves, as without a clear alignment of formalisation efforts with the incentive structures of 'shadow economy' operators, formalisation attempts are likely to fail. In the context of measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') this means a significant proportion, at least of the trade in artisanally produced gold, will remain informal, undermining their applicability and effectiveness (see below).

'Conflict Minerals' Trade Control Measures

The analysis of governance arrangements is of critical importance when analysing war economies and conflict financing activities, as these tend not to take place in what some scholars call an "institutional void" (Hajer, 2003, p. 175). This is at least the case in the dominant understanding of 'institutions', stipulated in the North Framework (North, 1997). According to this understanding, by institutions, therefore, "we mean the 'rules of the game', or both formal and informal constraints on political, economic and social activities" (Aron, 2003, p. 471). In the DRC, the onset of democracy in 2006 has not brought about a significant improvement of overall governance quality. In fact, effective and good economic governance is currently absent, as the incentive structure that governs the state remains structured in a way that facilitates the exploitation of state power for private gain (Vlassenroot and Romkema, 2007). Vlassenroot and Raeymaekers, (2009, p. 4), quote Callaghy 2001, when they say, "by mediating access to resources, such privatized governance structures eventually forced the Congolese government to engage in 'archipelago statehood', in which government maintained only a disparate and fragmented control over its economy and population". The discussion of the 85th brigade, the FDLR and the CNDP in this thesis support the argument that the "existence of such parallel control structures increasingly enabled political factions (government and non-government alike) to skilfully exploit local insecurity in order to secure private political and economic gains" (ibid., p. 4).

A confidential corruption assessment undertaken by a bilateral donor organisation, seen by the author, underlines (2009, p. 1):

"Corruption in the DRC is pervasive, corrosive, and systemic. [...] Graft in Congo is characterized by both petty and grand corruption, or "need and greed." Petty corruption is driven in large part by poverty and poor governance, while grand corruption – or elite capture of state resources – is enabled by a system of impunity that provides no disincentives for the embezzlement of massive amounts of state resources for personal gain."

In many contexts where a semblance of state institutional infrastructure remained, but formal governance was weak, researchers increasingly found and analysed alternative governance arrangements "in areas of limited statehood in which the state lacks authority and/or effective control, i.e. domestic sovereignty" (Risse, 2010, p. 3). My research confirmed this, especially in the context of parallel governance structures that the armed groups, as I discussed in Chapter 4, had set up in areas under their control. Chojnacki and Branovic (2007) explain the emergence of 'security governance' with both geographic and economic opportunities, which certainly mirrors my observations in the context of the 85th brigade in Walikale territory. In particular, the discussion of the CNDP's financing demonstrates how sophisticated alternative governance regimes can be, to the point that parallel administrative and taxation structures are built up and effectively operated, particularly at the point of export. Risse suggests that, what he refers to as "warlordism" can present a hierarchical mode of steering, but emphasises, "[...] much more common are non-hierarchical modes of social coordination [...that] are meant to affect the cost-benefit calculations of the relevant parties and to induce the desired behaviour" (2010, p. 11).

Under weak or alternative governance arrangements, "rule-making, collective goods and services [provision was provided] by various combinations of state and non-state actors using predominantly non-hierarchical modes of steering" (Risse, 2010, p. 3). This is related to Risse's idea of "multi-level governance" in areas of limited statehood, which "systematically involves a combination of local, national, as well as inter- and transnational actors [...and that...] shared sovereignty among and between local, national, inter- and transnational actors is the rule in areas of limited statehood, irrespective of whether this is formalised or not" (Ibid, p. 10). My findings brought some perspective to this in the context

of both local and international actors (limited to IANGOs in the context of the 'conflict minerals' campaign).

Vlassenroot and Romkema suggest, "the promotion of good governance conditions [in the DRC] should be an integral part of each programme developed by donor agencies and local partners" (Vlassenroot and Romkema, 2007, p.4). While I agree with Vlassenroot and Romkema, as their point is a relative straightforward one, I found Risse's point that governance can be effective "even in the absence of consolidated statehood casting a credible 'shadow of hierarchy'" (2010, p. 3) intriguing in this context. Combining Vlassenroot and Romkema's point with that of Risse, good governance promotion would require the "inclusion of non-state actors in the provision of collective goods and the regulation of social and political issues" (ibid, p. 2), but this provision should occur along the principles of good governance.

During my research in Watsa territory, where no armed groups dominated the local governance landscape, I found that local governance structures, which would include traditional authorities, state officials (in either official or private function), businessmen, small businesses, local NGOs et cetera, produced a governance outcome where the ASM and trade of gold generated revenue and provided employment, but not enough to have a significant development impact. My research found, however, that both in Walikale and in Watsa, two locations with very different governance structures, there was significant untapped human capacity, which is an interpretation I largely based on the observed coping strategies and active attempts at livelihood transformation evident in both mining areas. In the theoretical deliberations in Chapter 2, I explained that a significant school of thought in the 1970s suggested there was ample scope for 'development from below', and while I am not advocating self-rule and I am aware of the pitfalls of the 'development from below' concept, "communities could be encouraged to take greater responsibility for their own development, to build participatory institutions that would reflect the interests of their members and respond to their needs and preferences rather than to those of distant governments or profit-seeking capitalists" (Esman, 1991, p. 8). Such participatory institutions could potentially become a powerful element within sub-national governance constructs and ensure that the view and priorities of the 'coping' economy actors in particular are more respected and reflected in policy design and/or governance outcomes.

My research also confirmed that international actors were playing a role in governance outcomes in eastern DRC and policy response, particularly in the context of 'conflict financing' through the predation on the mining and trade of 'conflict minerals'. Pugh and Coopers' observation, "conflict complexes are arenas not only where national and global factors interact, but also where state authorities collapse and borderlands become critically important determinants of peace and stability" (2004: 219). It would be foolish to conceptualise eastern DRC's political and economic environment to exist in isolation of regional forces, such as economic integration, which can have a profound impact on the character of conflict and its duration. Neighbouring countries would potentially benefit economically on a significantly larger scale from a developing eastern DRC, than from persistent conflict, which is an economic calculation that would be fascinating to research in a separate PhD. Instead of focussing on regional governments, such as Rwanda and Uganda, which are often fingered as contributing to instability in eastern DRC, or regional organisations such as the ICGLR or COMESA, which are actively working towards greater economic and political integration, I decided to place greater emphasis on the role of INAGOs in this thesis.

The fact that a significant amount of 'conflict minerals' left the country informally and that these trade flows connected with international markets suggested to me that a national analytical focus of governance challenges, like 'conflict financing' through the predation on the mining and trade of 'conflict minerals', would be incomplete. 'Conflict financing' through the predation on the mining and trade of 'conflict minerals', for example, I considered to be a governance challenge, which is facilitated by a) limited capacity of state-level governance institutions to effectively regulate global economic processes; and b) limitations of global governance institutions to effectively regulate regional, trans-border economic processes, particularly in areas with weak or parallel governance structures. While local CSOs were actively engaged on the issue of 'conflict financing', the focus in my analysis was firmly on the 'conflict minerals' campaign, driven by IANGOs, as a result of the 'success' of the 'conflict minerals' campaign in terms of influencing global public policy, as well as out of the necessity driven by the fact that 'conflict financing' is a transnational governance challenge.

IANGOs have taken up the cause of 'conflict financing'; the outcome of which has been policy action in the form of a) chain-of-custody schemes to keep 'dirty' minerals out of international conflict free markets; and b) extraterritorial legislation in the from of DF1502

requiring companies sourcing 'conflict minerals' to conduct due diligence on their supply chains from the DRC and surrounding countries to ensure these are 'conflict free' (Levin, 2010; OECD 2012; SEC 2012). Interestingly, DF1502 in particular, represents a "hierarchical form of steering", albeit from outside of the Congolese state (Risse, 2010, p. 10). This has various externalities for the 'coping', 'conflict' and 'shadow' economy actors in the DRC.

Externalities of 'conflict minerals' control measures for the 'coping' economy actors

In the context of the 'coping' economy actors, "speaking strictly in economic terms, it is possible that artisanal mining may contribute to poverty alleviation under favourable regulatory arrangements that provide land tenure and mitigate risk to the miners. However little studies and experience has demonstrated that once the real costs of doing business are properly accounted for, artisanal miners may gain a sufficient standard of living" (Pact, 2010, p. 101). That said, my research found that the economic fallout from a ceding of 'primary ASM economy' activities would be severe and would increase the vulnerability not only of the dependants of those actors active in the primary ASM economy, but also actors in the secondary ASM economy, including their respective dependants. This was evident from the de facto ban on conflict mineral exports from North Kivu destined for international conflictfree markets, caused by the implementation of measures to curb conflict financing (Garrett and Mitchell, 2009; Aronson, 2011; Seay 2012). These developments exacerbated social fault lines and tensions, particularly in gold-bearing areas, such as in Orientale province, also due to large-scale population influxes, akin to forced economic displacement from de facto ban affected 3T mining areas. Future policy interventions therefore should be informed by research and an assessment of impacts on the 'coping economy' prior to their application. The findings of such an assessment should be reflected in policy design and application, incorporating appropriate mitigation strategies. Not doing so would be a direct violation of the "do no harm" approach, elaborated by international and national NGOs in the early 1990s (CDA, 2004).

Externalities of 'conflict minerals' control measures for the 'conflict' economy actors

My research found that 'conflict minerals' trade control measures designed to curb 'conflict financing' (through the predation on the mining and trade of 'conflict minerals') which I analysed in this thesis are unable to prevent 'conflict' economy actors from preying on the mining and trade of 'conflict minerals' and are therefore unable to starve 'conflict' economy actors off a key revenue source. In fact, my findings suggest, measures to curb conflict

financing (through the predation on the mining and trade of 'conflict minerals'), if they can be implemented effectively in conflict-affected areas (which at the time of my research was an untested quantity), will affect armed groups only in line with their relative financial dependence on the predation on the mining and trade of 'conflict minerals'. My research supports the findings of the UN Group of Experts in that this relative dependence differs by armed groups and by the respective centrality of predation on the mining and trade of 'conflict minerals' to their respective military strategy (see Chapter 4; UNSC, 2008; UNSC 2009). Those armed groups that pursued a strategy with one – of potentially several – objectives being to benefit from the predation on the mining and trade of 'conflict minerals', like the FDLR and the 85th brigade, would be relatively more affected than those, like the CNDP, which seemed to pursue a more opportunistic approach to the predation on the mining and trade of 'conflict minerals', particularly as other sources of finance and weapons supplies were available to it.

In answer to my second research question also found that the success of measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals') also depended on the value and volume attributes of the 'conflict mineral' the armed groups were preying on. For example, measures were likely to be relatively more successful in targeting armed groups with a greater dependence on high-volume 3T minerals, such as the 85th brigade, than those with a greater dependence on low-volume gold, such as the FDLR, due to the comparatively greater formality and visibility of the mining and trade in the 3Ts.

The gold ASM sector, in particular, turned out to be the perfect financing vehicle for armed groups in eastern DRC, as gold is very easy to smuggle, low quantities have high value and the gold market has all characteristics of perfect competition. The barriers to entry are very low, there are an almost unlimited number of producers (poverty and circumstance mean every ASM miner enticed out of a mine will swiftly be replaced by another) and consumers, and it has an elastic demand curve. The failure of the Kimberley Process to curb conflict financing through the control of the mining and trade of diamonds demonstrates the impossibility of subnational oversight of trading chains in artisanally mined, high-value, low-volume commodities in states with weak subnational regulatory capacity (Global Witness, 2008; Garrett, Mitchell and Levin, 2008). This means the armed groups, which derive the majority of their revenue from gold ASM and the trade in artisanally produced gold, will not

be affected by 'conflict minerals' trade control measures, at least not in the short- to medium-term.

Externalities of 'conflict minerals' control measures for the 'shadow' economy actors

Measures to curb 'conflict financing' (through the predation on the mining and trade of 'conflict minerals') were creating both incentives and disincentives to formalise. Particularly in conflict-affected areas and in the gold ASM sector, i.e. where it matters from a conflictresolution perspective, the measures provided disproportionally more disincentives to formalise, as a result of the greater regulatory risk exposure and significantly greater compliance costs and as a result of ineffective enforcement measures against informally operating 'shadow' economy actors. While my research found that 'shadow' economy actors are incentivised primarily by 'profit', rather than by 'profiting from conflict', the key impediment for them to formalise was the cost of doing formal business in the DRC. Measures to curb 'conflict financing' (through the predation on the mining and trade of 'conflict minerals') are doing little to reduce these operating costs and actually add on additional cost factors, such as those related to traceability and certification compliance. The profit motivation of most shadow economy actors suggests that only once the price differential between international conflict-free markets and grey markets is large enough to make it worthwhile, will more operators seek to formalise and abide by international conflict-free requirements.

Conclusion and way forward

Taking the externalities of IANGO advocacy-driven measures to curb conflict financing into consideration, the IANGO driven 'conflict minerals' campaign is controversial. I found that local CSOs, while not without challenges in their own right, for example, often called for a much more nuanced approach to solving the 'conflict minerals' issue, championing more selective and more developmental engagement with the mining and trade of 'conflict minerals' (Tegera and Johnson, 2007; Johnson, 2009; Tegera, 2011; Kajemba and De Failly, 2011). At the same time, Autesserre makes the important point that [IANGO] advocates have put "the Congo on the agenda of some of the most powerful states and organisations, and thus prompted action to end what remains a 'forgotten conflict'" (2012: 3). The principal grievance the critics of the 'conflict minerals' campaign - including myself – have, was thus *not* that IANGOs are working on the transnational governance challenge of 'conflict

financing'. To the contrary, it is the role of IANGOs to do so, considering the transnational nature of the governance challenge at hand.

The principle grievance was rather the translation of the simplistic cause-and-effect relationships-based advocacy of the 'conflict minerals' campaign into equally simplistic policy recommendations; and for these policy recommendations finding their way into policy action in the form of legislative requirements to implement measures to curb conflict financing (through the predation on the mining and trade of conflict minerals); and for these measures to have significant negative externalities for the 'coping' economy and not the anticipated effects on the 'war' and 'shadow' economies. Unerman and O'Dwyer highlighted, "some of these unforeseen consequences [...] might unintentionally impact negatively upon the people or entities which an NGO aims to support" (2006, p. 369).

On the one hand one has to applaud the strategists behind the IANGO driven 'conflict minerals' campaign for the success the campaign found in influencing US policy. This was a game-changing achievement and will probably be the subject of much research and analysis in the 'global governance' context for years to come. On the other hand, there remain two key consequences of the IANGO 'success' for practice and further research, which I would like to underline:

First, measures to curb conflict financing (through the predation on the mining and trade of 'conflict minerals' continue to be implemented and considering DF1502 has been signed into law, it is from a practical perspective important to mitigate the impact of the implementation of the measures and the law, particularly for the 'coping' economy actors. Considering the sheer number of dependants on primary and secondary ASM activities, which the World Bank puts at possibly 12.5 million Congolese (World Bank, 2008, p. 60), impact mitigating policy measures will have to be bold and far-reaching. The IANGO advocacy-driven policy measures will otherwise likely leave the majority of those dependants worse off, rather than better off. In other words, such bold and far-reaching policy action will have to ensure DF1502 and other IANGO advocacy-driven measures to curb 'conflict financing' will not become yet another threat to processes of livelihood transformation in the primary and secondary ASM economies, further undermining the sustainability of ASM, which I found was the most competitive and therefore often chosen livelihood strategy for most actors in the primary and secondary ASM economies.

The principle bold and far-reaching policy action to mitigate the impact of DF1502 on the 'coping' economy is to make DF1502 obsolete by re-focussing on ending conflict in eastern DRC. Attempts to solve the conflict in eastern DRC will have to – not ignore – but certainly look beyond the economic domain. A well-informed policy response that takes into consideration the incentive structures of the 'coping', 'conflict' and 'shadow' economy actors is required, with efforts in multiple domains that are intelligently sequenced. These domains include improving governance and the business environment, "resolving land conflicts, inter-community reconciliation, jump-starting economic development, ensuring that state authorities respect human rights and fighting corruption" (Autesserre, 2012, p. 4).

This will require dealing with key challenges in eastern DRC, which I consider to be the presence of armed actors, widespread impunity, the privatised and violent governance structures, unaddressed underlying grievances (which includes intra-regional issues) and the excessive cost of doing business. De Koning underlines this point when he writes, "surely, efforts to dislodge or transform security actors on the ground are much riskier than controlling trade flows in a few trading centres and border posts. But unless comprehensive efforts are undertaken to improve governance and civil protection at the production level, mineral certification [i.e. trade control measures...] will function as a façade that hides the real challenges and responsibilities" (2011: 194).

In 2009, Mitchell and I argued, the "build up of functioning security institutions in support of a better functioning governance regime is important, as without a trained army with effective and accountable chains of command that is under state civilian control, armed groups will continue to proliferate in the region and will be able to operate at will (2009, p. 10). This is a rather state-centric concept, in the sense that it is complementary to suggestions that there is a "need to develop coherent and complementary strategies which support the emergence of a legitimate state with the capacity to provide security, wealth and welfare" (Goodhand, 2004, p. 16). However, considering the predatory nature of the state in the DRC, which my thesis again underlined, there are obvious challenges with the idea that simply strengthening state structures will solve the DRC's ills. In fact, my findings complement those of other researchers that this may, at least in the short-run be counterproductive (Autesserre, 2012; Vlassenroot and Romkema, 2007). One of the two key challenge for further research, which I would like to underline is therefore the need to

unearth further information about how subnational governance structures currently internally function and what the key levers are to transform existing governance arrangements into ones that produce a more developmental outcome.

Second, the 'success' the INAGO's have seen in terms of influencing global public policy on conflict financing (through the predation on the mining and trade of 'conflict minerals') is an encouraging sign in the sense that there is movement and power shifts in global governance structures. It will be important to harness these power shifts for the greater good. It is therefore of importance that IANGOs, which are enjoying a greater profile in global governance structures are handling with care and due custodianship their increasing global responsibility. "The age of 'blind faith' in institutions is over. We have entered the age of 'accountability'; the processes, by which institutions are made responsible to external audiences and constituencies, are now the subject of intense and on-going attention" (Naidoo, 2003, p. 2). This means, similarly to other organisations, for IANGOs their legitimacy and accountability are important dimensions, as they directly affect their organisational credibility (Brown, 2008). NGO [including IANGO] accountability can be defined as "the process by which an NGO [or IANGO] holds itself openly responsible for what it believes, what it does and what it does not do in a way which shows it involving all concerned parties and actively responding to what it learns" (Slim, 2002, p.11). Established good practice in the form of the INGO Accountability Charter, for example, states, "transparency and accountability are essential to good governance, whether by governments, business or non-profit organisations" (2006, p. 2). It would appear illogical for the benefits of accountability to somehow not apply to IANGOs working on conflict financing and those IANGOs driving the 'conflict minerals' campaign, considering the IANGOs vociferously stress the benefits of accountability for business and government. With continuing globalisation and the spread of information technology to the last uncovered corners of this planet, the influence of IANGOs in global governance and their power in promoting or undermining global public policy responses is likely to rise further, rather than decline. This thesis is therefore not an attack on the crucial role of IANGOs in global governance, particularly in terms of holding market and state to account. It is rather meant to underline the point that future research not only has to focus on 'governance issues' at hand, such as 'conflict financing', but increasingly on how 'governance actors' can be capacitated to accountably, responsibly, effectively and efficiently develop and implement solutions to solve such governance challenges.

Bibliography

Books, Articles, Reports and Websites

- AFRICA CONFIDENTIAL, 2009, "On the brink of massive failure", Africa Confidential Special Report, available at: http://www.africa-confidential.com/special-report/id/21/On_the_brink_of_massive_failure, accessed 28 January 2013.
- AMNESTY INTERNATIONAL, 2012, 'If you resist we'll shoot you' The Democratic Republic of the Congo and the case for an effective arms trade treaty, Amnesty International
- ANGLOGOLD ASHANTI, 2007, Country Report Democratic Republic of Congo 2007. AngloGold Ashanti
- ANHEIER, Helmut K., 2005, Nonprofit Organizations: Theory, Management, Policy.

 Routledge.
- ----- and CARLSON, Lisa, 2002, *Civil Society: What It Is, and How to Measure It*. Centre for Civil Society, London School of Economics.
- -----, THEN, Volker, SCHRÖER, Andres, VON HIPPEL, Thomas, 2006, *Center for Social Investment: A Programmatic Statement*, Ruprecht-Karls-Universität Heidelberg, available at: www.csi.uni-heidelberg.de/downloads/CSI_Paper_eng_print.pdf, accessed 15 March 2013.
- ANNAN, Kofi, 2004, "The Causes of Conflict and the Promotion of Durable Peace and Sustainable Development in Africa", *African Renaissance*, Vol. 1: 3
- ARNSON, Cynthia J. and ZARTMAN, I. William, 2005, *Rethinking the Economics of War: The Intersection of Need, Creed, and Greed*. Baltimore: The Johns Hopkins University Press.
- ARON, Janine, 1996, "The Institutional Foundations of Growth", in Stephen Ellis (ed.), *Africa Now: People, Policies and Institutions*, London: James Currey/Heinemann and Paris: Karthala.
- ARON, Janine, 2003, "Building institutions in post-conflict African economies", *Journal of International Development*, 15 (4), pp. 471-485.
- ARONSON, David, 2011, "How Congress Devastated Congo", *New York Times*, August 7.

 Available at: http://www.nytimes.com/2011/08/08/opinion/how-congress-devastated-congo.html. Accessed 14 June 2012.
- ASKIN, Steve and COLLINS, Carole, 1993, "External Collusion with Kleptocracy Can Zaire Recapture its Stolen Wealth?", Review of African Political Economy, 20 (57), pp. 72-85.

- AULA, Pekka, 2010, "Social media, reputation risk and ambient publicity management." Strategy & Leadership, 38, no. 6, pp. 43-49.
- AUTESSERRE, Séverine, 2012, "Dangerous Tales: Dominant Narratives on the Congo and their Unintended Consequences", *African Affairs*, 111 (444), pp. 1–21. Available at: http://afraf.oxfordjournals.org/content/early/2012/02/09/afraf.adr080.full.pdf+htm l. Accessed 14 August 2012.
- AUTY, Richard, "Mining Enclave to Economic Catalyst: Large Mineral Projects in Developing Countries", *The Brown Journal of World Affairs*, XIII (I), pp. 135-145.
- BAFILEMBA, Fidel, LEZHNEZ, Sasha, ZINGG WIMMER, Sarah, 2012, From Congress to Congo,

 The Enough Project.
- BAHAMIN, Poubak, 2011, *The DRC A maturing mining market*, Norton Rose, available at:
- http://www.nortonrose.com/knowledge/publications/62024/the-drc-a-maturing-mining-market, accessed 15 March 2013.
- BANNON, Ian and COLLIER, Paul, 2007, "Natural Resources and Conflict: What can we do" in BANNON, Ian and COLLIER, Paul, 2007, Natural Resources and Violent Conflict:

 Options and Actions, The World Bank
- BANRO, 2013, Banro Website, available at: http://www.banro.com/s/Home.asp, accessed 15 March 2013.
- BALLENTINE, Karen and NITZSCHKE, Heiko, 2005, *The Political Economy of Civil War and Conflict Transformation*. Berghof Research Center for Constructive Conflict Management.
- -----, and SHERMAN, Jake, 2003, *The Political Economy of Armed Conflict*. Lynne Rienner Publishers Inc., Colorado
- BARRETO, M.L., 2011, Legalization Guide for Artisanal And Small Scale Mining (ASM), ARM and Materials Efficiency Research Group MERG.
- BARRY, Mammadou, 1996. Regularising informal mining: a summary of the proceedings of the international roundtable on artisanal mining. IEN Occasional Paper, No. 6.
- BATES, Robert, GREIF, Avner and SINGH, Smita, 2002, "Organizing Violence", *Journal of Conflict Resolution*, 46 (5), pp. 599-628.
- BAVIER, Joe, 2007, "Chinese Firms Face New Reality of Congo Mining", *Reuters*, 14 May. Available at: http://www.reuters.com/article/2009/06/19/idUSLI291088. Accessed 13 August 2012.
- -----, 2008, "Smugglers bypass eastern Congo mining ban minister", *Reuters*, 12 March. -----, 2008a, "Congo authorities quit rebel-held eastern border", *Reuters*, 3 September.

- -----, 2008, "Congo Suspends Mining in Tin Ore-rich Eastern Area", Reuters Africa, 25

 February. Available at:

 http://www.resourceglobal.co.uk/documents/Reuters%20Article%2025_2_08.pdf.

 Accessed 17 August 2012.
- BAYART, Jean-François, 1993, The State in Africa: The Politics of the Belly. London: Longman.
- BBC, 1997, Mobutu Dies in Morocco, available at:

 http://www.bbc.co.uk/news/special/politics97/news/09/0908/mobutu.shtml,
 accessed 15 March 2013.
- -----, 2008, Rwanda: How the genocide happened, http://news.bbc.co.uk/2/hi/1288230.stm, accessed 28 January 2013
- -----, 2008, *UN joins battle with Congo rebels,* available at: http://news.bbc.co.uk/go/pr/fr/-/2/hi/africa/7692932.stm, accessed 28/7/2012
- -----, 2011, *DRC bans mining in eastern provinces*, http://www.bbc.co.uk/news/world-africa-11269360, accessed 15 March, 2013.
- BERDAL, Mats and MALONE, David, 2000, *Greed & grievance: Economic agendas in civil* wars. Lynne Rienner
- BIGMAN, David, 2007, Globalization and the least developed countries: potentials and pitfalls. CABI.
- BLORE, SHAWN and SMILIE, IAN, 2010, An ICGLR Tracking and Certification System for minerals from the Great Lakes Region of Central Africa. Partnership Africa Canada.
- BRAY, John, LUNDE, Leiv and MURSHED, S. Mansoob, 2003, "Nepal: Economic drivers of the Maoist insurgency", in BALLENTINE, Karen and SHERMAN, Jake, (eds), 2003, *The political economy of armed conflict: Beyond greed and grievance.* Lynne Rienner Publishers.
- BRINKMAN, Inge, 1993, "War and Identity in Angola." *International Relations*, 9, no. 6, pp. 495-511.
- BROWN, David L., 2008, *Creating credibility: legitimacy and accountability for transnational civil society*, Kumarian Press.
- BRUNNSCHWEILER, Christa N. and BULTE, Erwin H. 2008, "Linking Natural Resources to Slow Growth and More Conflict", *Science*, 320 (5876), pp. 617-618.
- BSR, 2010, Conflict Minerals and the Democratic Republic of Congo, Responsible Action in Supply Chains, Government Engagement and Capacity Building, May. Available at: http://www.bsr.org/reports/BSR_Conflict_Minerals_and_the_DRC.pdf. Accessed 17 August 2012.

- CABLEGATE SEARCH, 2011, US Embassy Cable 06KINSHASA1234, available at: http://www.cablegatesearch.net/cable.php?id=06KINSHASA1234, accessed 15 March 2013.
- CALLAGHY, Thomas M., 1984, *The state-society struggle: Zaire in comparative perspective*, New York: Columbia University Press.
- CALLAGHY, Thomas, 2001, "From reshaping to resizing a failing state? The case of Congo/Zaire", in O'LEARY, Brendan, LUSTICK, Ian S. and CALLAGHY, Thomas (eds.), Rightsizing the State: the politics of moving borders. Oxford University Press.
- CARNEY, Diana, DRINKWATER, Michael, RUSINOW, Tamara, NEEFJES, Koos, WANMALL, Samir and SINGH, Naresh, 1999, Livelihoods approaches compared, DFID.
- CASM, n.d., Working together. CASM
- CENTO, Juan N., 2012, *The economy of global trade*, available at, www.g8.utoronto.ca/newsdesk/loscabos/g20loscabos2012-03.pdf, accessed 9 March, 2013
- CENTRE FOR DEVELOPMENT STUDIES (CDS), 2004, Livelihoods and Policy in the Artisanal and Small-Scale Mining Sector An Overview. Centre for Development Studies University of Wales, Swansea
- CDA, 2004, Collaborative Learning Projects The Do No Harm Handbook, CDA Collaborative Learning Projects, available at:

 http://www.cdainc.com/dnh/docs/DoNoHarmHandbook.pdf, accessed 15 March 2013.
- CHAMBERS, Robert and CONWAY, Gordon, 1992, Sustainable Rural Livelihoods: Practical Concepts for the 21st Century, IDS Discussion Paper 296, Brighton: IDS. Available at: http://opendocs.ids.ac.uk/opendocs/handle/123456789/775?show=full. Accessed 13 August 2012.
- CHOJNACKI, Sven and BRANOVIC, Zeljko, 2008, "New Modes of Security. The Violent Making and Unmaking of Governance in War-torn Areas of Limited Statehood", in: RISSE, Thomas (eds.), *Governance in Areas of Limited Statehood*, New York: Columbia University Press.
- -----, 2007, "Räume strategischer (Un-)Sicherheit. Ein Markt für nichtstaatliche Gewaltakteure und Gelegenheiten für Formen von Sicherheits-Governance", in: RISSE, Thomas and LEHMKUHL, Ulla (eds.), Regieren ohne Staat? Governance in Räumen begrenzter Staatlichkeit. Baden-Baden: Nomos.
- CHUPEZI, Tieguhong Julius, INGRAM, Verina and SCHURE, Jolien, 2009, Study on impacts of

- artisanal gold and diamond mining on livelihoods and the environment in the Sangha Tri-National Park (TNS) landscape, Congo Basin. Center for International Forestry Research and the International Union for the Conservation of Nature, Bogor Barat, Indonesia.
- CIA Factbook, 2012, Democratic Republic of the Congo GDP per capita (PPP), available at:
- http://www.indexmundi.com/democratic_republic_of_the_congo/gdp_per_capita_(ppp).ht ml, accessed 15 March 2013.
- CILLIERS, Jakkie and DIETRICH, Christian, 2000, *Angola's War Economy*. Institute for Security Studies
- CLIFFORD, Lisa, 2011, "Bosco Ntaganda: the Terminator's golden business", International Justice Tribune. Available at: http://www.editions-sources-du-nil.com/article-bosco-ntaganda-the-terminator-s-golden-business-68467370.html, accessed 15 March 2013.
- COLLIER, Paul, 1996, "The Role of the African State in Building Agencies of Restraint", in LUNDAHL, Mats and NDULU, Benno, New Directions in Development Economics:

 Growth, Environmental Concerns and Government in the 1990s. Routledge: London and New York.
- ----- and HOEFFLER, Anke, 1998, "On Economic Causes of War", Oxford Economic Papers, 50 (4), pp. 563-573.
- -----, and GUNNING, Jan, 1999, "Explaining African Economic Performance", *Journal of Economic Literature*, 37 (1), pp. 64-111.
- -----, 2000, Economic causes of civil conflict and their implications for policy, World Bank.
- -----and HOEFFLER, Anke, 2001, Greed and Grievance in Civil Wars, World Bank.
- -----and HOEFFLER, Anne, 2004, *Greed and Grievance in Civil War*, Oxford Economic Papers, 56 (4), pp. 563-595
- CONFLICT FREE SMELTER PROGRAM, 2012, Official Website, www.conflictfreesmelter.org, accessed 28/8/2012
- CONGOLESE POLICE REPORT, 2007, Report on Walikale, seen by author.
- CONGOSIASA, 2010, *Amani Leo Old Wine, New Bottles?*, available at: http://congosiasa.blogspot.com/2010/01/amani-leo-old-wine-new-bottles.html, accessed 28 January 2013.
- CONGOSIASA, 2012, An update on the desertions, available at:

 http://congosiasa.blogspot.com/2012/04/update-on-desertions.html, accessed 28

 January 2013

- CONTRACT, 2006, Contract signed on 28 August 2006 with Dieudonné Tshishiku Mutoka,

 Administrator of Walikale territory, seen by the author.
- CRAMER, Christopher and GOODHAND, Jonathan, 2002, "Try Again, Fail Again, Fail Better?

 War, the State, and the 'Post–Conflict' Challenge in Afghanistan", *Development and Change*, Vol. 33, pp. 885–909.
- CUVELIER, Jeroen, *The Complexity Of Resource Governance in a Context of State Fragility:*The Case of Eastern DRC, International Alert. Available at: http://reliefweb.int/sites/reliefweb.int/files/resources/Full_Report_38.pdf.

 Accessed 13 August 2012.
- D'SOUZA, Kevin P.C.J., 2002, Artisanal and Small Scale Mining in Africa, A Reality Check.

 Paper presented at the Seminar on Artisanal and Small-scale Mining in Africa,

 Identifying Best Practices and Building the Sustainable Livelihoods of Communities,

 Yaoundé, Cameroon
- -----, 2007, Artisanal mining in DRC (Key issues, Challenges and Opportunities). Draft prepared for Discussion at the DRC Donor Coordination Meeting. Available at: http://www.ddiglobal.org/login/Upload/CASM-%20ASM%20in%20DRC%20briefing%20note.pdf. Accessed 13 August 2012.
- DEATON, Angus, 1999, "Commodity Prices and Growth in Africa", *Journal of Economic Perspectives*, 13, (3), pp. 23-40.
- DE BOECK, Filip, "Diamonds without borders: A short history of diamond digging and smuggling on the border between the Democratic Republic of Congo and Angola (1980 2008)", in VLASSENROOT, Koen and VAN BOCKSTAEL, Steven, 2008, Artisanal diamond mining: perspectives and challenges, Academia Press.
- DE KONING, Ruben, 2010, "The Bukavu-Uvira-Bujumbura Gold Triangle", in Jeroen Cuvelier, (ed.), The Complexity of Resource Governance in a Context of State Fragility: the Case of Eastern DRC. International Alert, pp. 32-40.
- ______, 2011, Conflict Minerals in the Democratic Republic of the Congo. Aligning Trade and Security Interventions. SIPRI Policy Paper, 27 June. Available at: http://books.sipri.org/files/PP/SIPRIPP27.pdf. Accessed 14 June 2012.
- DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (DFID), 2001, Sustainable Livelihoods

 Guidance Sheets, Numbers 1–8, Available at:

 http://www.ennonline.net/resources/667. Accessed 17 August 2012.
- DE SOTO, Hernando, 1992, Marktwirtschaft von unten. Die unsichtbare Revolution in Entwicklungsländern. Orell Füssli, Zürich, Köln.

- DE SOYSA, Indra, 2002, "Ecoviolence: Shrinking pie, or honey pot?", *Global Environmental Politics* 2.4: pp. 1-34.
- DOING BUSINESS, 2012, *DRC*, available at http://www.doingbusiness.org/rankings, accessed 15 March 2013.
- DJANKOV, Simeon, LIEBERMAN, Ira, MUKHERJEE, Joyita, and NENOVA, Tatiana, 2003, "Going Informal: Benefits and Costs." *The Informal Economy in the EU Access Countries:*Size, Scope, Trends and Challenges to the Process of EU Enlargement, Center for Study of Democracy, pp. 63-79.
- DUFFIELD, Mark, 2001, Global Governance and New Wars. The Merging of Development and Security. London: Zed Books.
- -----, 2002, "War as a network enterprise The New Security Terrain and its
 Implications", Cultural Values: The Journal for Cultural Research, Vol. 6 (1&2), pp.
 153-166
- ECCLES, Robert G., NEWQUIST, Scott C. and SCHATZ, Roland, 2007, "Reputation and its risks", *Harvard Business Review*, 85, no. 2, p. 104.
- EIGEN, Peter, 2004, Chasing Corruption Around the World: How Civil Society Strengthen

 Global Governance, Arthur and Frank Payne Distinguished Lecture, Stanford

 University.
- EKLUND, Maria, 2007, "The impact of the Mining Code on artisanal mining in the DRC", in:

 UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA (UNECA) and INITIATIVE

 FOR CENTRAL AFRICA (INICA), 2007, Natural Resources and Trade Flows in the Great

 Lakes Region, Annex IV. Available at:

 http://www.resourceglobal.co.uk/documents/4.1%20INICA%20
 %20Phase%20I%20Report%20Annexes.pdf. Accessed 16 August 2012.
- ELLIS, Stephen, 2006, *The Mask of Anarchy: The Destruction of Liberia and the Religious Dimension of an African Civil War*, New York University Press.
- ENGLEBERT, Pierre, 2003, Why Congo Persists: Sovereignty, Globalization and the Violent Reproduction of a Weak State, Paper written for the Queen Elizabeth House Carnegie Project on "Global Cultural and Economic Dimensions of Self-Determination in Developing Countries." QEH Working Paper N. 95, February.
- -----, 2009, Africa: Unity, Sovereignty & Sorrow. Boulder: Lynne Rienner.
- ENOUGH PROJECT, 2007, Averting the Nightmare Scenario in Eastern Congo. Available at: http://www.enoughproject.org/publications/averting-nightmare-scenario-eastern-congo-activist-brief. Accessed 14 June 2012.

-----, 2012a, Enough, the Project to end genocide and crimes against humanity –

Website. Available at: http://www.enoughproject.org/. Accessed 18 June 2012.
-----, 2012b, New Enough Report: Dodd-Frank Bill Leads to Decrease in Conflict Minerals

Trade in Congo, Smuggling Remains a Concern, The Enough Project, available at:

http://www.enoughproject.org/blogs/new-enough-report-dodd-frank-decrease-

conflict-minerals-trade-congo-smuggling Accessed 28/8/2012

- -----, 2013, Conflict minerals company ranking, available at:

 http://www.raisehopeforcongo.org/content/conflict-minerals-company-rankings,
 accessed 31 January 2013
- ERNST & YOUNG, 2012, Conflict minerals What you need to know about the new disclosure and reporting requirements and how Ernst & Young can help, Ernst & Young
- ESMAN, Milton Jacob, 1991, Management Dimensions of Development: Perspectives and Strategies. Kumarian Press Inc.
- EUROPEAN UNION, 2003a, WEEE, available at: http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0024:0038:en:PDF, accessed 15 March 2013.
- -----, 2003b, *RohS*, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0019:0023:EN:PDF, accessed 15 March 2013.
- FAHEY, Dan, "Le fleuve de l'or: the production and trade of gold from Mongbwalu", L'Afrique des Grands Lacs: Annuaire 2007-2008: pp. 357-384.
- ______, 2010, "The Informal Trade in Ituri's Gold, in Jeroen Cuvelier, (ed.), *The Complexity of Resource Governance in a Context of State Fragility: the Case of Eastern DRC.*International Alert, pp. 14-17
- FEENEY, Patricia, 2006, *DR Congo: End Illegal Exploitation of Natural Resources*, available at: http://raid-uk.org/news/lutundula_report.htm, accessed 15 March 2013.
- FICK, David S., 2002, Entrepreneurship in Africa: A study of successes. Praeger.
- FOMBRUN, Charles J., GARDBERG, Naomi A., and BARNETT, Michael L., 2002, "Opportunity platforms and safety nets: Corporate citizenship and reputational risk", *Business and Society Review*, 105.1: pp. 85-106.
- FOWLER, Alan, 1997, Striking a Balance: A Guide to Enhancing the Effectiveness of NGOs in International Development. London: Earthscan.
- FRANKEN, Gudrun, VASTERS, Jürgen, DORNER, Frank, MELCHER, Frank and SITNIKOVA, Maria, 2012, "Certified Trading Chains in Mineral Production: A Way to Improve

- Responsibility in Mining", in SINDING-LARSEN, Richard and WELLMER, Friedrich Wilhelm, (eds.), *Non-Renewable Resource Issues: 213 Geoscientific and Societal Challenges*, Springer Science+Business Media B.V.
- FREE THE SLAVES, 2011, *The Congo Report, Slavery in Conflict Minerals*, June. Available at: http://www.freetheslaves.net/Document.Doc?id=243. Accessed 12 August 2012.
- GALLO, Carol Jean, 2011, Digging Deeper Into the Dodd-Frank Congo 'Blood Minerals'

 Controversy, UN Dispatch, August 9. Available at:

 http://www.undispatch.com/digging-deeper-into-the-dodd-frank-congo-blood-minerals-controversy. Accessed 14 June 2012.
- GARRETT, Nicholas, 2007a, The Extractive Industries Transparency Initiative (EITI) & Artisanal and Small-Scale Mining (ASM), Preliminary Observations from the Democratic Republic of the Congo (DRC). Available at: http://www.resourceglobal.co.uk/documents/Garrett_EITI_10_2007.pdf. Accessed 16 August 2012.
- -----, 2008a, Walikale. Artisanal Cassiterite Mining and Trade in North Kivu Implications for Poverty Reduction and Security. Washington D.C.: Communities and Small-Scale Mining. Available at: http://www.resourceglobal.co.uk/documents/CASM_WalikaleBooklet2.pdf.

 Accessed 14 June 2012.
- -----, 2008a, "Guns, Sweat and tears in North Kivu's tin ore mines", *The Africa Report*, 13 (October-November), pp.42-44. Available at: http://www.resourceglobal.co.uk/documents/Garrett_Africa_Report_Congo_Tin%2 0Trade%201.pdf. Accessed 16 August 2012.
- -----, and LINTZER, Marie, 2010, "Can Katanga's Mining Sector Drive Growth and Development in the DRC?", *Journal of Eastern African Studies*, 4(3), pp. 400-424.
- -----, and MITCHELL, Harrison, 2008a, "Congo rebels cash in on demand for tin", Financial Times, 5 March. Available at: http://www.ft.com/intl/cms/s/0/1f3dfd4e-ea3e-11dc-b3c9-0000779fd2ac.html#axzz1oC7ZxKsm. Accessed 15 August 2012.

-----, and MITCHELL, Harrison, 2009, Trading Conflict for Development, Utilising the Trade in Minerals from the Eastern DRC for Development. April. Available at: http://www.dfid.gov.uk/r4d/PDF/Outputs/CrisisStates/trade-conflictdevelopment.pdf. Accessed 13 June 2012. -----, MITCHELL, Harrison, and LEVIN, Estelle, 2008, "Regulating Reality. Reconfiguring approaches to the regulation of trading artisanally mined diamonds", in: VLASSENROOT, Koen and VAN BOCKSTAEL, Steven, 2008, Artisanal Diamond Mining, Perspectives and Challenges. Egmont Institution for International Relations and Department for International Development (DFID), pp. 126-158. Gent: Academia Press. ------, and SEAY, Laura, 2011, "Trade, Development, and Peacebuilding in the African Great Lakes: The Role of the Minerals Sector", in: RAMSBOTHAM, Alexander and ZARTMAN, William, eds. 2011, Paix Sans Frontières: Building Peace Across Borders. Accord: An International Review of Peace Initiatives, Issue 22. ------, SERGIOU, Sylvia and VLASSENROOT Koen, 2009, "Negotiated Peace for Extortion: the Case of Walikale Territory in Eastern DR Congo", Journal of Eastern African *Studies*, 3(1), pp. 1-21 GBERIE, Lansana, 2005, A dirty war in West Africa: the RUF and the destruction of Sierra Leone. Indiana University Press. GEENEN, Sara, 2010, "The Gold Trade in Butembo", in Jeroen Cuvelier, (ed.), The Complexity of Resource Governance in a Context of State Fragility: the Case of Eastern DRC. International Alert, pp. 21-26. GEMAN, Ben, 2012, "Dodd-Frank 'conflict minerals' rule draws industry lawsuit", The Hill, available at: http://thehill.com/blogs/on-the-money/1005-trade/263463-doddfrank-conflict-minerals-rule-draws-industry-lawsuit#ixzz2IEc5jooY, accessed January 13, 2013. GERMAN FEDERAL INSTITUTE FOR GEOSCIENCES AND NATURAL RESOURCES, 2010, Certified Trading Chains in Mineral Production: Project Outline and Status, Federal Institute Geosciences Natural for and Resources. available at: http://www.bgr.bund.de/EN/Themen/Min rohstoffe/Downloads/CTC-update-Mai2010.pdf? blob=publicationFile&v=1, accessed 15 January, 2013.

date,

http://www.bgr.bund.de/EN/Themen/Min_rohstoffe/CTC/Mineral-Certification-

Website,

- DRC/Implementation/implementation_drc_node_en.html, accessed 15 January 2013.
- GEORGE, Alexander L. and BENNETT, Andrew, 2005, Case Studies And Theory Development In The Social Sciences, MIT Press.
- GLOBAL SECURITY, 2012, Congo Civil War, available at: http://www.globalsecurity.org/military/world/war/congo.htm, accessed 15 March 2013.
- GLOBAL WITNESS, 1998, A Rough Trade, The Role of Companies and Government in the

 Angolan Conflict. Available at:

 http://www.globalwitness.org/sites/default/files/pdfs/A_Rough_Trade.pdf.

 Accessed 14 August 2012
- -----, 2005a, *Under-mining peace, Tin: the Explosive trade in Cassiterite in Eastern DRC.*June. Available at: http://www.globalwitness.org/sites/default/files/pdfs/Under-Mining%20Peace.pdf. Accessed 17 August 2012.
- -----, 2005b, Open Letter to the UN Security Council, regarding conflict resources and peacekeeping in Liberia and the Democratic Republic of Congo (DRC), available at: http://www.illegal-logging.info/item_single.php?it_id=256&it=document, accessed 27/8/2012.
- -----, 2006, Digging in Corruption: Fraud, Abuse and Exploitation in Katanga's Copper and Cobalt Mines, July. Available at: http://www.globalwitness.org/sites/default/files/import/kat-doc-engl-lowres.pdf. Accessed 17 August 2012.
- -----, 2007, Loopholes in the Kimberley Process, Global Witness
- -----, 2007a, Artisanal mining communities in eastern DRC: seven baseline studies in the Kivus, Global Witness, available at:
 - http://www.globalwitness.org/sites/default/files/Summary_of_baseline_studies_Global_Witness.pdf, accessed 15 March 2013.
- ------, 2007b, Global Witness calls upon the UK Government to hold British company

 Afrimex to account for fuelling conflict in the Democratic Republic of Congo, Global

 Witness, available at: http://www.globalwitness.org/library/global-witness-calls-upon-uk-government-hold-british-company-afrimex-account-fuelling, accessed 15

 March 2013

- -----, 2008, When faced with a gun..., Global Witness. Available at: www.globalwitness.org/library/faced-gun-what-can-you-do. Accessed 16 August 2012.
- -----, 2008b, Broken Vows: Exposing the "Loupe" Holes in the Diamond Industry's Efforts

 to Prevent the Trade in Conflict Diamonds. Available at:

 http://www.globalwitness.org/sites/default/files/library/broken%20vows.PDF.

 Accessed 16/8/2012
- -----, 2009, Bisie killings show minerals at heart of Congo conflict, Summary findings of Global Witness visit to eastern DRC, 18 August. Available at: http://www.globalwitness.org/fr/node/3836. Accessed 16 August 2012.
- -----, 2011, Global Witness leaves Kimberley Process, calls for diamond trade to be held accountable, press release, Global Witness, available at:

 http://www.globalwitness.org/library/global-witness-leaves-kimberley-process-

calls-diamond-trade-be-held-accountable, accessed 28/7/2012

- -----, 2012, Coming Clean, How supply chain controls can stop Congo's minerals trade fuelling conflict, May. Available at: http://www.globalwitness.org/sites/default/files/120531_Coming%20Clean_lowres. pdf. Accessed 20 August 2012.
- GOODHAND, Jonathan, 2004, "From War Economy to Peace Economy? Reconstruction and State Building in Afghanistan", *Journal of International Affairs*, 58 (1), pp. 15-175.

 Available at: http://relooney.fatcow.com/SI_Expeditionary/Shadow-Economy_23.pdf. Accessed 20 August 2012.
- GUNARATNA, Rohan, 2003, "Sri Lanka: Feeding the Tamil Tigers." in BALLENTINE, Karen and SHERMAN, Jake, (eds), 2003, *The political economy of armed conflict: Beyond greed and grievance.* Boulder, Colorado: Lynne Rienner Publishers.
- GURR, Ted, 1970, Why Men Rebel. Princeton, NJ: Princeton University Press.
- -----, Ted, 1994, Minorities at risk. Washington DC: US Institute of Peace.
- JEAN, Francois and RUFIN, Jean-Christophe, 1996, Economie des guerres civiles. Hachette.
- HAGEMANN, Antje, 2012, Implementation of a Certification System for Mineral Resources in the Democratic Republic of the Congo, Project period: 01.05.2009 31.12.2012.

 German Federal Institute for Geosciences and Natural Resources.
- HAJER, Maarten, 2003, "Policy without polity? Policy analysis and the institutional void", *Policy Sciences*, 36: pp. 175-195, Kluwer Academic Publishers.

- HAYES, Karen and BURGE, Richard, 2003, Coltan Mining in the Democratic Republic of Congo: How tantalum-using industries can commit to the reconstruction of the DRC.

 Cambridge, UK: Fauna & Flora International. Available at: http://www.gesi.org/LinkClick.aspx?fileticket=PoQTN7xPn4c%3D. Accessed 14 August 2012.
- HENTSCHEL, Thomas, HRUSCHKA, Felix, and PRIESTER, Michael, 2003, "Artisanal and Small-Scale Mining, Challenges and Opportunities", *Mining, Minerals, and Sustainable Development Project* (MMSD).
- HESSELBEIN, Gabi, 2007, The Rise and Decline of the Congolese State: an analytical narrative on state-making, Crisis States Working Papers Series No.2, Working Paper No. 21, November, Crisis States Research Centre. Available at: http://www.dfid.gov.uk/r4d/Output/176285/Default.aspx. Accessed 21 June 2012.
- HIGGINS, Chris, 2010, Land, Power and IdentIty roots of violent conflict in eastern DRC,
 International Alert
- HILSON, Gavin, M., 2006, *Small-scale mining, rural subsistence and poverty in West Africa*.

 Practical Action.
- -----, and CLIFFORD, Martin J., 2010, "A 'Kimberley protest': Diamond mining, export sanctions, and poverty in Akwatia, Ghana", *African Affairs* 109, no. 436: pp. 431-450.
- HOEBEKE, Hans, BOSHOFF, Henri and VLASSENROOT, Koen, 2008, Assessing Security Sector Reform and its Impact on the Kivu Provinces, Institute for Security Studies (ISS) Situation Report, 26 November.
- HOLLAWAY, John, 1997, "Mineral policy in Zimbabwe: its evolution, achievements and challenges", *Resources Policy*, 23 (1/2), pp. 27-32.
- HUMAN RIGHTS WATCH (HRW), 2005, *The Curse of Gold, Democratic Republic of Congo.*New York. Available at:

 http://www.hrw.org/sites/default/files/reports/drc0505_0.pdf. Accessed 15 June 2012.
- ICGLR, 2006, Protocol against the Illegal Exploitation of Natural Resources.
- -----, 2011, Regional Initiative Against Illegal Exploitation of Natural Resources, http://www.icglr.org/IMG/pdf/Natural_Resources_En_original.pdf, accessed January 16 2013.
- INGO ACCOUNTABILITY CHARTER, 2006, Official Website, www.ingoaccountabilitycharter.org, accessed 28, July 2012

- INTERNATIONAL CRISIS GROUP (ICG), 2003, "The Kivus. The Forgotten Crucible of the Congo Conflict", Africa Report, no. 56, 24 January. Available at: http://www.crisisgroup.org/~/media/Files/africa/central-africa/dr-congo/The%20Kivus%20The%20Forgotten%20Crucible%20of%20the%20Congo%20 Conflict. Accessed 17 August 2012.
- ------ 2007, The International Crisis Group and the ENOUGH Project: A Complementary Relationship, International Crisis Group Media Release. Available at: http://www.crisisgroup.org/en/publication-type/media-releases/2007/the-international-crisis-group-and-the-enough-project-a-complementary-relationship.aspx. Accessed 18 June 2012.
- ------2010, *DR Congo Conflict History*, available at: http://www.crisisgroup.org/fr/publication-type/key-issues/Research%20Resources/Conflict%20Histories/DR%20Congo%20Conflict%20History.aspx, accessed 28 January 2013.
- INTERNATIONAL DONOR AGENCY, 2009, Confidential corruption assessment, seen by the author, International donor agency.
- INTERNATIONAL MONETARY FUND (IMF), 2012, The end of Bretton Woods System (1972 1981), International Monetary Fund Website. Available at: http://www.imf.org/external/about/histend.htm. Accessed 21 June 2012.
- INTERNATIONAL CRIMINAL TRIBUNAL FOR RWANDA (ICTR), Grégoire Ndahimana Sentenced to 15 Years in Prison, available at: http://www.unictr.org/tabid/155/Default.aspx?id=1241, accessed 28 January 2013
- IRIN, 2006, "Guns Out of Control: the Continuing Threat of Small Arms", IRIN In-Depth, May.

 Available at: http://www.irinnews.org/pdf/in-depth/Small-Arms-IRIN-In-Depth.pdf.

 Accessed 14 June 2012.
- ISHENGOMA, Esther K. and KAPPEL, Robert, 2006, "Economic growth and poverty: Does formalisation of informal enterprises matter?", GIGA working papers, No. 20.
- iTSCi, 2010a, A Phased and Constructive Approach Towards Improved Due Diligence, Governance and Traceability: Phase 2 Project Outline.
- -----, 2010b. iTSCi News Bulletin. March 2010.
- ITRI, n.d., iTSCi Membership Area, available at:

 https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=2196&Item_id=190, accessed 15 March 2013.

- ITRI, 2008, Kivu Resources drops DR Congo mine plan, available at: https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=1024&Item id=177, accessed 15 March 2013.
- -----, 2010, Confirmation of Signatories to the ITRI Member Declaration on Artisanal and Small-scale Mining, ITRI.
- -----, 2012, iTSCi Project Overview, available at:

 https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=2192&Item
 id=189, accessed January 13, 2012
- -----, 2009, DRC Mines Ministry backs ITRI cassiterite traceability project, accessible at:

 https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=1005&Item
 id=177, accessed 15 March 2013.
- ITU NEWS, 2012, "Conflict minerals in the ICT supply chain", ITU News, № 7 2012, available at: https://itunews.itu.int/en/2854-Conflict-minerals-in-the-ICT-supply-chain.note.aspx, accessed 15 March 2013.
- JENKINS, Craig (1987), "Nonprofit organizations and policy advocacy", in Walter POWELL (editor), *The non-profit sector: A research handbook*, pp. 296-320, New Haven, CT: Yale University Press.
- JOHNSON, Dominic, 2009, *Minerals and Conflict in Eastern DRC*, Discussion Paper, Institut Interculturel dans la Région des Grands Lacs. Available at: http://www.pole-institute.org/site%20web/echos/echo114.htm. Accessed 13 August 2012.
- -----, 2009a, Trading for Peace Phase 3 Report, DFID
- KAJEMBA, Eric and DE FAILLY, Didier, 2011, Written Submission to Roundtable on Issues

 Relating to Conflict Minerals under § 1502 of the Dodd-Frank Wall Street Reform and

 Consumer Protection Act (Release No. 34-65508; File No. S7-40-10), Security and

 Exchange Commission, Washington DC, available at: www.sec.gov/comments/s7-4010/s74010-442.pdf, accessed 27 August 2012.
- KALDOR, Mary, 2003, "Civil Society and Accountability", *Journal of Human Development*, Vol. 4: 1.
- KALYVAS, Stathis N., 2003, "The Ontology of 'Political Violence': Action and Identity in Civil Wars", *Perspectives on Politics*, 1 (3), pp. 475-494.
- -----, 2005, "Warfare in Civil War", in: DUYVESTEYN, Isabelle and ANGSTROM, Jan (eds.),

 Rethinking the Nature of War. Abingdon: Frank Cass.
- KANTZ, Carola, 2007, "The power of socialization: engaging the diamond industry in the Kimberley Process", *Business and Politics*, Issue 9, Volume 3.

KAVANAGH, Michael, 2010, "Malaysia Smelting, Rwandan Company Are Main Buyers of Tin", Congo Bloomberg, available at: http://www.bloomberg.com/apps/news?sid=a1p3C4mCsY2o&pid=newsarchive, accessed 28 August 2012. , 2011, "Congo Tin Trades Tumble 90% as Companies Avoid 'Conflict Minerals'", Bloomberg, 23 May. Available at: http://www.bloomberg.com/news/2011-05-23/congo-tin-trades-tumble-90-percent-as-companies-avoid-conflict-minerals-.html, accessed 14 June 2012. KEEN, David, 1998, The Economic functions of violence in civil wars, Adelphi Paper 320, Oxford: Oxford University Press for the ISS. -----, 2000, "Incentives and disincentives for violence" in BERDAL, Mats R., and MALONE, David, 2000, Greed and grievance: Economic agendas in civil wars: pp. 19-42, Lynne Rienner. , 2002, ""Since I am a dog, beware my fangs": beyond a 'rational violence' framework in the Sierra Leonean war", Working Paper Series, London School of Economics Crisis States Research Centre. , 2005, Conflict & Collusion in Sierra Leone. Oxford: James Currey. Complex Emergencies: David Keen ----, 2008, Responds, available http://africanarguments.org/2008/06/08/complex-emergencies-david-keenresponds/, accessed 15 March 2013. -----, 2012, Useful Enemies: When Waging Wars Is More Important Than Winning Them, Yale University Press. KIBASOMBA, Roger, 2005, Post-war Defence Integration in the Democratic Republic of the Congo, Institute for Security Studies, ISS Paper 119. Available at: http://dspace.cigilibrary.org/jspui/bitstream/123456789/31202/1/119.pdf?1. Accessed 13 August 2012. KIGUEL, Miguel Alberto, LIZONDO, José Saúl and O'CONNELL, Stephen A. (eds), 1997, Parallel Exchange Rates in Developing Countries, Macmillan. KIMBERLEY PROCESS, 2002, Kimberley Process Certification Scheme Core Document, available http://www.kimberleyprocess.com/documents/10540/11192/KPCS%20Core%20Doc ument?version=1.0&t=1331826363000, accessed 7 January 2013. KLANDERMANS, Bert, 1997, The Social Psychology of Protest. Oxford: Blackwell Publishers

- KPMG, 2012, Dodd Frank Act Conflict Minerals (Section 1502) Overview.
- KRAMER, Reed, 2001, "The Failure of the Inter-Congolese Dialogue Through the Eyes of Ketumile Masire", *All Africa*, 30 October. Available at http://allafrica.com/stories/200110300638.html. Accessed 13 August 2012.
- LE BILLON, Philippe, 2001, "The Political Ecology of War: Natural Resources and Armed Conflicts", *Political Geography*, 20 (2001), pp.561–584
- LESSIG, Lawrence, 2011, Republic, Lost: How Money Corrupts Congress and a Plan to Stop

 It. New York City: Hachette/Twelve.
- LEVIN, Estelle, 2005, From Poverty and War to Prosperity and Peace? Sustainable Livelihoods and Innovation in Governance of Artisanal Diamond Mining in Kono District, Sierra Leone. MA Thesis, Department of Geography. Vancouver: University of British Columbia. Available at http://hdl.handle.net/2429/16555. Accessed 17 August 2012.
- -----, 2007, A Sustainable Livelihoods Assessment of Operators in the Natural Resources

 Sectors, INITIATIVE FOR CENTRAL AFRICA (INICA), unpublished article.
- -----, 2010, Mineral Certification Schemes in the African Great Lakes Region A comparative Analysis, Executive Secretariat of the International Conference on the Great Lakes Region.
- LIAKOUNAKOU, Alexia, 2012, "DRC: Katanga's Artisanal Miners Face Uncertain Future Concerted government efforts are needed to tackle the DRC's hazardous, exploitative and unregulated small-scale mining", *Think Africa Press*, available at: http://thinkafricapress.com/drc/uncertain-future-katanga-artisanal-miners-coppercobalt, accessed 15 March 2013.
- LONDON METAL EXCHANGE, 2008, tin price graph.
- LUMUMBA–KASONGO, Tukumbi, 1999, *The Dynamics of Economic and Political Relations***Between Africa and Foreign Powers. Westport: Praeger Publishers.
- LUTUNDULA COMMISSION, 2005, République Démocratique du Congo, Assemblée Nationale

 Commission Spéciale chargée de l'Examen de la Validité des Conventions à Caractère

 Economique et Financier Conclues Pendant les Guerres de 1996-1997 et de 1998,

 Rapport des Travaux. 1ere partie. Kinshasa : Assemblée Nationale.

 http://www.freewebs.com/congo-kinshasa/. Accessed 16 August 2012
- MACGAFFEY, Janet, 1991, The Real Economy of Zaire: The Contribution of Smuggling and
 Other Unofficial Activities to National Wealth. Philadelphia: University of
 Pennsylvania Press.

- MACGAFFEY, Wyatt, 1982, The Policy of National Integration in Zaïre, *The Journal of Modern African Studies*, 20(1), pp. 87–105.
- MALONE, David M and BERDAL, Mats, 2000, "Greed and Grievance: Economic Agendas in Civil Wars (Introduction), in MALONE, David M and BERDAL, Mats, 2000, Greed and Grievance: Economic Agendas in Civil Wars. Lynne Rienner Publishers.
- MARCHAL, Roland and MESSIANT, Christine, 2002, "De l'avidité des rebelles. L'analyse économique de la guerre selon Paul Collier". *Critique Internationale*, 3 (16), pp. 58-69.
- MERRIAM-WEBSTER, 2013, 'Stakeholder' definition, available at: http://www.merriam-webster.com/dictionary/stakeholder, accessed 15 March 2013
- MCCRUMMEN, Stephanie, 2009, "U.N. peacekeepers won't back Congolese soldiers accused of killing civilians", *Washington Post Foreign Service*, November 3. Available at: http://www.washingtonpost.com/wp-dyn/content/article/2009/11/02/AR2009110203286.html. Accessed 13 August 2012.
- MCDERMOTT, Will and EMERY, 2010, *The 'Conflict Minerals' Provision in the Dodd-Frank Act Imposes New Disclosure Requirements on Manufacturers*. 22 July. Available at: http://www.mwe.com/index.cfm/fuseaction/publications.nldetail/object_id/131146 20-b2dd-466a-8392- e53e3da0a162.cfm. Accessed 14 August 2012.
- METAL BULLETIN, 2008, "Kivu Resources declares force majeure on DRC tin project", *Metal Bulletin*, available at: http://www.metalbulletin.com/Article/2028615/Kivu-Resources-declares-force-majeure-on-DRC-tin-project.html, accessed 15 March 2013.
- MITCHELL, Harrison, 2012, A first look at the Securities and Exchange Commission's Final Rules for Dodd-Frank 1502 on Conflict Minerals: What does it mean for companies?,

 Resource Consulting Services, available at: www.resourceglobal.co.uk.
- -----and GARRETT, Nicholas, 2009, Beyond Conflict: Reconfiguring approaches to the regional trade in minerals from Eastern DRC, London School of Economics, Crisis States Research Centre, Conflict Research Group.
- MITCHELL, Harrison, SOLLAZZO, Roberto, PAGET, Dan, 2012, The political and economic feasibility of an international mechanism to support due diligence for responsible mineral supply chains, Resource Consulting Services.
- MLINGA, R. S. and WELLS, Jill, 2002, "Collaboration between formal and informal enterprises in the construction sector in Tanzania." *Habitat International* 26, no. 2: pp. 269-280. MONUC, 2009, Memo on Walikale, seen by author.

- MONTAGUE, Dena, 2002, "Stolen Goods: Coltan and Conflict in the Democratic Republic of Congo", SAIS Review, XXII (1, Winter–Spring), pp. 103-118.
- MOYROUD Celine and KATUNGA John, 2002, "Coltan Exploration in Eastern Democratic Republic of the Congo (DRC)", in: LIND, Jeremy and STURMAN, Kathryn (eds.), 2002, Scarcity and Surfeit: The ecology of Africa's conflicts, African Centre for Technology Studies and Institute for Security Studies (ISS), Chapter 4. Available at: http://www.iss.co.za/pubs/Books/Scarcity+Surfeit/Chapter4.pdf. Accessed 21 August 2012.
- MPINGA, Kasenda and GOULD David J., 1975, Les Réformes administratives au Zaïre, 1972-1973, Volume 1. Kinshasa: Presse Universitaire du Zaïre.
- MSF, 2009, MSF Releases 12th Annual "Top Ten" List, available at http://www.doctorswithoutborders.org/publications/topten/2009/, accessed 15 March 2013.
- MTHEMBU-SALTER, Gregory, 2009, Social and economic dynamics of mining in Kalima, DRC, Institute for Security Studies, ISS Paper 185, April. Available at: http://www.issafrica.org/uploads/PAPER185.PDF. Accessed 13 August 2012.
- MURISON, Katharine, 2003, *Africa South of the Sahara*. 33rd edition, London: Europa Publications.
- MURSHED, Syed Mansoob, and TADJOEDDIN, Mohammad Zulfan, 2008, "Revisiting the greed and grievance explanations for violent internal conflict", *Journal of International Development*. Vol 21, no. 1, pp. 87-111.
- MUSHI, Ferdinand Mugumo, 2012, Insecurity and Local Governance in Congo's South Kivu,

 Research Report No. 74, March. Available at:

 http://www.ids.ac.uk/files/dmfile/RR74.pdf. Accessed 14 June 2012.
- MWANASALI, Musifiky, 2000, "The View from Below", in: BERDAL, Mats R. and MALONE David, *Greed & Grievance: Economic Agendas in Civil Wars*, Boulder: Lynne Rienner Publishers.
- NAIDOO, Kumi, 2003, "Civil Society Accountability:"Who Guards the Guardians?", *Lunchtime Address*, UN Headquarters, New York
- NORDSTROM, Carolyn, 2000, "Shadows and Sovereigns", *Theory, Culture and Society*, 17 (4), pp. 35-54.
- NORTH, Douglass, 1997, WIDER Annual Lectures 1: The Contribution of the New Institutional

 Economics to an Understanding of the Transition Problem, United Nations

 University, Helsinki.

- NDIMUBANZI NGOROBA, Emmanuel, 2007, *Annual Report 2007*, Division of Mines of North Kivu, Goma.
- OAU, 1986, African Charter on Human and Peoples' Rights, Organization of African Unity,
 Eighteenth Assembly of Heads of State and Government, 21 October, Nairobi.
- ODINAKALU, Chidi Anselm, 2000, "Why More Africans Don't Use Human Rights Language",

 Human Rights Dialogue, Series 2.1 (Winter) Human Rights for All? Available at:

 http://www.carnegiecouncil.org/resources/publications/dialogue/2_01/articles/602
 .html. Accessed 14 June 2012.
- OECD Watch, 2009, *Global Witness vs. Afrimex*, available at: http://oecdwatch.org/cases/Case 114, accessed 15 March 2013.
- OLSON, Mancur, 1965, *The logic of collective action: public goods and the theory of groups.*Vol. 124. Harvard University Press.
- ONISHI, Normitssu, 2002, "Congo Factions Gather for Peace Talks", *New York Times*, February 26, 2002.
- ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), 2011, OECD

 Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict
 Affected and High-Risk Areas. Paris: OECD Publishing. Available at:

 http://www.oecd.org/daf/internationalinvestment/guidelinesformultinationalenter

 prises/46740847.pdf. Accessed 15 August 2012.
- ------, 2011, Upstream Pilot Implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict Affected and High-Risk Areas -Baseline Report on the Supplement on Tin, Tantalum, and Tungsten, OECD.
- -----, 2012, OECD Due Diligence Guidance for Responsible Supply Chains of *Minerals*from Conflict-Affected and High-Risk Areas Website, available at:

 http://www.oecd.org/fr/daf/investissementinternational/principesdirecteurspourles
 entreprisesmultinationales/mining.htm, accessed January 13, 2013.
- -----, 2013, Downstream Implementation of the OECD Due Diligence Guidance for
 Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas Final downstream report on one-year pilot implementation of the Supplement on Tin,
 Tantalum, and Tungsten, OECD, available at:
 - http://www.oecd.org/daf/internationalinvestment/guidelinesformultinationalenter prises/DDguidanceTTTpilotJan2013.pdf, accessed 16 January, 2013

- OSSOWSKI, Rolando, VILLAFUERTE, Mauricio, MEDAS, Paulo A., THOMAS, Theo, 2008,

 Managing the Oil Revenue Boom: The Role of Fiscal Institutions, Occasional Paper

 260. Washington DC: The International Monetary Fund.
- OWENS, Edgar and SHAW, Robert, 1972, Development reconsidered; bridging the gap between government and people, Lexington Books.
- OXFORD ANALYTICA, 2009, "Congo-Kinshasa: FDLR threat continues in Kivus", *Relief Web*, 23

 July. Available at: http://reliefweb.int/report/democratic-republic-congo/congo-kinshasa-fdlr-threat-continues-kivus. Accessed 13 August 2012.
- PADDON, Emily and LACAILLE, Guillaume, 2011, Stabilising the Congo, Forced Migration Policy Briefing 8, Refugee Studies Centre, Oxford Department of International Development, University of Oxford, December. Available at: http://www.rsc.ox.ac.uk/publications/policy-briefings/rscpb8-stabilising-congo-en-030512.pdf. Accessed 13 August 2012.
- PACT, 2007, Natural Resource Trade Flows, DFID/USAID/COMESA.
- -----, 2010, PROMINES Study Artisanal Mining in the Democratic Republic of Congo.
- PAGET, Dan and GARRETT, Nicholas, 2012, *Timeline and short history of key events in the global ASM sector since 1960*, AngloGold Ashanti.
- PARTNERSHIP AFRICA CANADA (PAC), 2006, Killing Kimberley? Conflict diamonds and paper tigers.
- -----, 2012, Briefing Note on the ICGLR Regional Certification Mechanism, available at: http://www.pacweb.org/Documents/icglr/PAC_Briefing_Note_on_the_ICGLR_Regio nal_Certification_Mechanism_June_2012.pdf, accessed 8 January 2013.
- -----, 2013, *PAC's Work*, available at: http://www.pacweb.org/en/about-us/pac-work, accessed, 15 March 2013.
- POLGREEN, Lydia, 2008, "15 and Broke in a Cut-Throat Congo Mining Town", *The New York Times*, 15 November. Available at: http://www.nytimes.com/2008/11/16/world/africa/16imani.html?pagewanted=all. Accessed 16 August 2012.
- POURTIER, Roland, 2004, *The Mining Economy in the Kivu and its Regional Implications*,

 Draft Version, Report following a mission to North Kivu, South Kivu and Rwanda, 17

 April 9 May, INITIATIVE FOR CENTRAL AFRICA (INICA). Available at:

 http://archive.niza.nl/docs/200603061614031069.pdf. Accessed 16 August 2012.
- PÖYHÖNEN, Päivi and SIMOLA, Eeva, 2007, Connecting Components, Dividing Communities:

 Tin Production for Consumer Electronics in the DR Congo and Indonesia, FinnWatch,

- December. Available at: http://germanwatch.org/corp/it-tin.pdf. Accessed 17 August 2012.
- PRENDERGAST, John, 2009, Can You Hear Congo Now? Cell Phones, Conflict Minerals, and the Worst Sexual Violence in the World, Enough Project, Available at:

 http://www.enoughproject.org/publications/can-you-hear-congo-now-cell-phones-conflict-minerals-and-worst-sexual-violence-world. Accessed 14 June 2012.
- -----, and Hall, Aaron, 2011, *Certifying Congo's Deadly Conflict Minerals*, The Enough Project, available at: http://www.enoughproject.org/blogs/certifying-congos-deadly-conflict-minerals, accessed 10/6/2012
- ------ and ATAMA, Noel, 2009, Eastern Congo: An Action Plan to End The World's Deadliest

 War, The Enough Project, available at:

 http://www.enoughproject.org/publications/eastern-congo-action-plan-end-worlds-deadliest-war, accessed 15 March 2013.
- PRICE CHARTING, 2009, What is Nintendo worth?, http://blog.pricecharting.com/2011/08/what-is-nintendo-worth.html, accessed 15 March 2013.
- PUGH, Michael Charles, COOPER, Neil and GOODHAND, Jonathan, 2004, *War economies in a regional context: challenges of transformation*, Lynne Rienner Publishers.
- PUTZEL, James, LINDEMANN, Stefan and SCHOUTEN, Claire, 2008, *Drivers of Change in the DRC*. Crisis States Working Papers Series No.2, Working Paper No. 26, January, Crisis States Research Centre. Available at: http://www2.lse.ac.uk/internationalDevelopment/research/crisisStates/download/wp/wpSeries2/WP262.pdf. Accessed 21 June 2012.
- PUTZEL, James and MOORE, Mick, 1999, *Politics and Poverty: A Background Paper for the World Development Report 2000/01*, IDS, University of Sussex.
- RAEYMAEKERS, Timothy, 2005, Sharing the spoils: the reinvigoration of Congo's political system, Conflict Research Group, University of Ghent, pp. 27-33. Available at: http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDs QFjAA&url=http%3A%2F%2Fkms1.isn.ethz.ch%2Fserviceengine%2FFiles%2FISN%2F1 09862%2Fichaptersection_singledocument%2F23b45582-fa22-4358-a980-77dea7e2de58%2Fen%2FPolitorbis%2B42_CH4.pdf&ei=LtosUKWsH8-p0AWhjYCoDA&usg=AFQjCNG7YanU2zfCqmQN-d5WFygR8nSmMw. Accessed 16 August 2012.

- -----, 2006-2007, The Power of Protection, Governance and Transborder Trade on The Congo-Ugandan Frontier. Dissertation presented in fulfilment of the requirements for a Ph.D. degree in Political and Social Sciences, Option Political Sciences. Ghent University.
- RAISE HOPE FOR CONGO, 2012, an Enough Project campaign Website. Available at: http://www.raisehopeforcongo.org/. Accessed 18 June 2012.
- REGAN, Anthony, 1998, "Causes and course of the Bougainville conflict", *The Journal of Pacific History*, Vol. 33: 3, pp. 269–85.
- RENO, William, 1998, Warlord Politics and African States. Boulder: Lynne Rienner,.
- -----, 2008, *Corruption and State Politics in Sierra Leone,* Cambridge University Press.
- RESOURCE CONSULTING SERVICES, 2011, US Legislation on Conflict Minerals: RCS Private

 Services Guidance on the Dodd-Frank Act Section 1502, April. Available at:

 http://www.resourceglobal.co.uk/documents/RCS_DF_ACT_GUIDANCE_APRIL_2011
 _lowres.pdf. Accessed 14 August 2012.
- -----, 2011, Ensuring your company's compliance with the latest legislation on Conflict Minerals.
- RICHARDS, Paul, 2005, *No Peace, No War: Anthropology Of Contemporary Armed Conflicts.*Athens: Ohio University Press.
- RISCH, Line, 2009, Reconstructing Fragility? The post-conflict state in the DRC Royal Institute for International Relations and the Institute for Security Studies, Pretoria Kloofzicht Lodge, Muldersdrift Johannesburg, South Africa, 24 and 25 August 2009.
- RISSE, Thomas, 2010, "Governance Under Limited Sovereignty", Paper Prepared for FINNEMORE, Marty and GOLDSTEIN, Judith (eds.), 2010, Back to Basics: Rethinking Power in the Contemporary World. Essays in Honor of Stephen D. Krasner Presented at the Annual Convention of the American Political Science Association, Washington DC.
- -----, LEHMKUHL, Ursula, 2006, Governance in Areas of Limited Statehood, New Modes of Governance?, SFB-Governance Working Paper Series no. 1, December. Available at: http://www.sfb-governance.de/en/publikationen/sfbgov_wp/wp1_en/wp1_en.pdf?1327580527.
 - Accessed 17 August 2012.
- -----, ROPP, Stephen. C., & SIKKINK, Kathryn. (Eds.), 1999, *The power of human rights:*international norms and domestic change (Vol. 66). Cambridge University Press.

- ROSS, Michael L., 2001, "Does Oil hinder democracy?", World Politics, 53 (3), pp. 325-361.
- to World Bank Research Observer, 15 August. Available at: www.unepfi.org/fileadmin/documents/conflict/ross_2003.pdf. Accessed 17 August 2012.
- RUPIYA, Martin, 2005, "The Goldenberg conspiracy UN Panel of Experts A peace-building tool?" *Occasional Paper 112,* Institute for Security Studies.
- SECURITIES AND EXCHANGE COMMISSION (SEC), 2012, Final Rule Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act relating to the use of conflict minerals, available at: http://www.sec.gov/rules/final/2012/34-67716.pdf, accessed 15 March 2013.
- -----, 2012, SEC Adopts Rule for Disclosing Use of Conflict Minerals, available at: http://www.sec.gov/news/press/2012/2012-163.htm, accessed 27 August 2012
- SHAW, Timothy, 2000, "Overview Global/Local: States, Companies and Civil Societies at the End of the Twentieth Century", in *Global Institutions and Local Empowerment:*Competing Theoretical Perspectives, edited by STILES, Kendall, New York: St. Martin's Press.
- SLIM, Hugo, 2002, By What Authority? The Legitimacy and Accountability of Non-Governmental Organisations, the International Council on Human Rights Policy.

 Paper presented at the "International Meeting on Global Trends and Human Rights –

 Before and After September 11th", Geneva, January 10-12.
- SCHATZBERG, Michael, 1988, *The Dialectics of Oppression in Zaïre*. Bloomington: Indiana University Press.
- SCHATSKY, David, 2011, Conflict Minerals: Taking Stock, available at:
- http://section1502.com/2011/12/04/conflit-minerals-taking-stock-str-rs/, accessed 15
 January 2013
- SEAY, Laura, 2012, What's Wrong with Dodd-Frank 1502? Conflict Minerals, Civilian Livelihoods, and the Unintended Consequences of Western Advocacy. Centre for Global Development, Working Paper 284, January.
- SERGIOU, Sylvia, 2007, Security Provision in North Kivu DRC? The Role of Non-State Actors.

 Paper presented at the AEGIS European Conference on African Studies, African Studies Centre, Leiden, 11 14 July.

- SIEGEL, Shefa and VEIGA, Marcello, 2009, "Artisanal and small-scale mining as an extralegal economy: De Soto and the redefinition of "formalization", *Resources Policy*, 34, pp. 51-56.
- SMILIE, Ian, GBERIE, Lansana, HAZLTON, Ralph, 2000, The heart of the matter Sierra Leone, diamonds and human security, Partnership Africa Canada.
- SOLIDARITY CENTER, 2012, *Reaching Out to Artisan Miners in the DRC*. Available at: http://www.solidaritycenter.org/content.asp?contentid=665. Accessed 20 August 2012.
- SOLUTIONS FOR HOPE, website, available at: www.solutions-network.org/site-solutionsforhope/, accessed 27 August 2012.
- SOUTHERN AFRICAN RESOURCE WATCH (SARW), 2013, Conflict Gold to Criminal Gold, accessible at: http://www.gold.sarwatch.org/reports/introduction, accessed 15 March 2013.
- -----, 2013, *The International Conference on the Great Lakes Region (ICGLR)*, available at: http://www.gold.sarwatch.org/Resources/international-conference-great-lakes-region-icglr, accessed 15 March 2013.
- SPETT, David, 2012, Email communication with Nicholas Garrett
- SPITTAELS Steven and HILGERT Filip, 2008, *Mapping Conflict Motives: Eastern DRC*, IPIS, Fatal transactions. Available at: http://www.ipisresearch.be/maps/Oost-congo/20080506_Mapping_Eastern_DRC.pdf. Accessed 15 August 2012.
- STEARNS, Jason, 2012, From CNDP to M23 The Evolution of an Armed Movement in Eastern Congo, Rift Valley Institute.
- STEDMAN Stephen J., 1997, "Spoiler Problems in Peace Processes", *International Security*,22 (2), pp.5-53.
- STEWART, Francis, 2002, "Horizontal Inequalities as a Source of Conflict", in HAMPSON, Fen Osler and MALONE, David M., eds, *From Reaction to Conflict Prevention:*Opportunities for the UN System. Boulder, Co: Lynne Rieder Publishers.
- STUDDARD, Kaysie, 2004, *War Economies in a Regional Context: Overcoming the Challenges of Transformation*, International Peace Academy.
- STURCKE, James, 2008, "Miliband holds talks with Congolese president", The *Guardian*, November 1 2008.
- SUNMAN, Hilary and BATES, Nick, 2007, Trading for Peace, Research Report, Achieving security and poverty reduction through trade in natural resources in the Great Lakes area. Department for International Development (DFID). Available at:

- http://www.forestsmonitor.org/uploads/2e90368e95c9fb4f82d3d562fea6ed8d/DFI D_tradeforpeace_complete_report.pdf. Accessed 15 August 2012.
- SUTTER, John D., 2012, "Tech companies make progress on 'blood phones' and 'conflict minerals'", CNN, 16 August. Available at: http://edition.cnn.com/2012/08/16/tech/gaming-gadgets/congo-blood-phones-report/. Accessed 16 August 2012.
- SWISS AGENCY FOR DEVELOPMENT AND COOPERATION (SDC), 2011, SDC experiences with Formalization and Responsible Environmental Practices in ASGM in Latin America and Asia (Mongolia).
- TEGERA, Aloys, MIKOLO, Sofia and JOHNSON Dominic, 2002, The coltan phenomenon: How a rare mineral has changed the life of the population of war-torn North Kivu province in the east of the Democratic Republic of the Congo, Pole Institute.
- ----- and JOHNSON Dominic, 2005, "Digging Deeper: How the DR Congo's mining policy is failing the country", in Pole Institute report, *Regards Croisés*, 15, Goma, December.
- -----, 2007, Rules for Sale: Formal and Informal Cross-Border trade in Eastern DRC.

 Goma: Pole Institute, August.
- -----, 2010, Blood Minerals The Criminalization of an Economic Sector in Eastern DRC, accessible at: http://www.pole-institute.org/site%20web/echos/echo134.htm, accessed 15 March 2013
- -----, 2011, "Mining companies resume operations in eastern DR Congo: the issues at stake and the challenges", in Pole Institute report, *Regards Croisés* 30.
- THE OFFICE OF THE UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (UNHCR), 2012, Official Website, Democratic Republic of the Congo, 2012 UNHCR country operations profile. Available at: http://www.unhcr.org/pages/49e45c366.html. Accessed 13 August 2012.
- THE WORLD BANK, 2007, Civil Society's Role in the Governance Agenda in Ecuador: Assessing Opportunities and Constraints, Washington DC.
- THE WORLD BANK, 2008, Democratic Republic of Congo, Growth with Governance in the Mining Sector, The World Bank, Oil/Gas, Mining and Chemicals Department, Report No. 43402-ZR, May, Washington DC.
- TILLY, Charles, 1978, From Mobilization to Revolution. New York: McGraw-Hill.
- TITECA, Kristof, 2011, "Access to Resources and Predictability in Armed Rebellion: The FAPC's Short-lived" Monaco" in Eastern Congo", *Afrika Spectrum*, 46, no. 2, p. 43.

- TOKMAN, Victor E., 2001, "Integrating the Informal Sector into the Modernisation Process", *SAIS Review*, Vol. 21, No. 1, pp. 45-60.
- TRIPP, Aili, 1997, "Changing the rules: The Politics of Liberalization and the Urban Informal economy in Tanzania", *Canadian Journal of Political Science*, Vol. 30, Issue 3, pp. 594-595.
- TULL, Dennis M., 2003, "A reconfiguration of political order? The state of the state in North Kivu (DR Congo)". *African Affairs*, Vol. 102, Issue 408, pp. 429-446.
- TRANSPARENCY INTERNATIONAL, 2011, Corruption Perceptions Index 2011. Available at: http://cpi.transparency.org/cpi2011/results/. Accessed 13 August 2012.
- TURNER, Thomas, 2007, The Congo Wars: Conflict, Myth & Reality, London: Zed Books.
- UNERMAN, Jeffrey, and O'DWYER, Brendan, 2006, "Theorising accountability for NGO advocacy." *Accounting, Auditing & Accountability Journal* 19, no. 3: 349-376.
- UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP), 2011, Human Development

 Statistical Annex. Available at:

 http://hdr.undp.org/en/media/HDR_2011_EN_Tables.pdf. Accessed 13 August 2012.
- UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA (UNECA), 2002, Compendium of Best Practices in Small-Scale Mining in Africa. Addis Ababa: UNECA.
- UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP), 2012, Analysis of formalization approaches in the artisanal and small-scale gold mining sector based on experiences in Ecuador, Mongolia, Peru, Tanzania and Uganda, Division of Technology, Industry and Economics (DTIE), Chemicals Branch.
- UNITED NATIONS OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS (OCHA), 2007, Democratic Republic of the Congo: Humanitarian Situation Update: North Kivu 8 to 14 Dec 2007, Report 14 December. Available at: http://reliefweb.int/report/democratic-republic-congo/dr-congo-humanitarian-situation-update-north-kivu-8-14-dec-2007. Accessed 16 August 2012.
- UNITED NATIONS ORGANIZATION MISSION IN THE DEMOCRATIC REPUBLIC OF CONGO (MONUC), 2007, Security situation improving in Ituri, Report, 08 August, Relief Web.

 Available at: http://reliefweb.int/report/democratic-republic-congo/dr-congo-monuc-security-situation-improving-ituri. Accessed 17 August 2012.
- -----, 2009, The end of the Amani programme is a milestone in the peace process,

 Report, 9 July. Available at: http://reliefweb.int/report/democratic-republic-

- congo/dr-congo-monuc-end-amani-programme-milestone-peace-process. Accessed 14 August 2012.
- UNITED NATIONS ORGANIZATION STABILIZATION MISSION IN THE DEMOCRATIC REPUBLIC OF CONGO (MONUSCO), 2012, Official Website, Context, Introduction. Available at: http://monusco.unmissions.org/Default.aspx?tabid=10672&language=en-US.

 Accessed 14 August 2012.
- UNITED NATIONS PANEL OF EXPERTS, 2001, Report of the panel of experts on the illegal exploitation of natural resources and other forms of wealth of the Democratic Republic of the Congo. Available at: http://www.un.org/News/dh/latest/drcongo.htm. Accessed 14 August 2012.
- UNITED NATIONS SECURITY COUNCIL (UNSC), 2001, Letter dated 12 April 2001 from the Secretary-General to the President of the Security Council, S/2001/360, 12 April.

 Available at: http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N01/333/04/PDF/N0133304.pdf?OpenElement.

 Accessed 20 August 2012.
- -----, 2006, Letter dated 26 January 2006 from the Chairman of the Security Council Committee established pursuant to resolution 1533 (2004), available at: http://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/DRC%20S2006%2053.pdf, accessed 15 March 2013.
- -------, 2007, Letter dated 25 January 2007 from the Chairman of the Security Council Committee established pursuant to resolution 1533 (2004) concerning the Democratic Republic of the Congo addressed to the President of the Security Council.

 Available at: http://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/DRC%20S200740.pdf. Accessed 13 August 2012.
- -----, 2007, Letter dated 16 July 2007 from the Chairman of the Security Council

 Committee established pursuant to resolution 1533 (2004) concerning the

 Democratic Republic of the Congo addressed to the President of the Security Council,

 United Nations, available at:
 - http://www.un.org/ga/search/view_doc.asp?symbol=S/2007/423, accessed 15 March 2013.
- -----, 2008, Final report of the Group of Experts on the DRC submitted in accordance with paragraph 18(d) of Security Council resolution 1807, S/2008/773. Available at: http://www.un.org/ga/search/view_doc.asp?symbol=S/2008/773. Accessed 13 August 2012.

- -----, 2009, Interim report of the Group of Experts on the Democratic Republic of the Congo, S/2009/253. Available at: http://www.reliefweb.int/rw/rwb.nsf/db900SID/EGUA-7S9RVT?OpenDocument.

 Accessed 17 August 2012.
- -----, 2010, Letter dated 29 April 2010 from the Group of Experts on the Democratic Republic of the Congo addressed to the Chair of the Security Council Committee established pursuant to resolution 1533 (2004), United Nations.
- -----, 2012, Reports of the Group of Experts submitted through the security council committee established pursuant to resolution 1572 (2004), United Nations, available at: http://www.un.org/sc/committees/1572/Cl_poe_ENG.shtml, accessed 15 March 2013.
- -----, 2012, Official Website, Publications on the Democratic Republic of the Congo.

 Available at:

 http://www.securitycouncilreport.org/site/c.glKWLeMTIsG/b.2400693/. Accessed
 13 August 2012.
- USAID EAST AFRICA, 2009, COMESA to Expand Trading for Peace Initiative, USAID East Africa

 Press Release, 19 March. Available at:

 http://eastafrica.usaid.gov/en/Article.1201.aspx. Accessed 21 August 2012.
- USA CONGRESS, 2009, *Conflict Minerals Trade Act, HR 4128*. Submitted to Congress on 19

 November. Available at: http://www.opencongress.org/bill/111-h4128/show.

 Accessed 14 June 2012.
- USA CONGRESS, 2011, Testimony of John Prendergast, Co-Founder, Enough Project, House of Representatives Committee on Foreign Affairs, Subcommittee on Africa, Global Health and Human Rights, March 8. Available at:

 http://foreignaffairs.house.gov/112/pen030811.pdf. Accessed 18 June 2012.
- USA CONGRESS, 2010, Dodd-Frank Wall Street Reform and Consumer Protection Act, 124
 Stat. 1376 Public Law 111–203—July 21. Available at:
 http://www.gpo.gov/fdsys/pkg/PLAW-111publ203/pdf/PLAW-111publ203.pdf.
 Accessed 14 June 2012.
- VESPIRINI Helen, 2001, "Congo's coltan rush", BBC, available at: http://news.bbc.co.uk/2/hi/africa/1468772.stm, accessed 27/8/2012
- VLASSENROOT, Koen, 2002, "Citizenship, identity formation and conflict in south Kivu: the case of the Banyamulenge", *Review of African Political Economy*, 29 (93–94), pp. 499–516.

- -----, and ROMKEMA, Hans, 2002, The Emergence of a New Order? Resources and War in Eastern Congo, Journal of Humanitarian Assistance, 28 October. Available at http://archive.niza.nl/docs/200211181206574061.pdf. Accessed 13 August 2012. -----, 2003, « Violence et constitution de milices dans l'est du Congo: Le cas des mayimayi », in: REYNTJENS, Filip and MARYSSE, Stefaan (eds.), L'Afrique des Grands Lacs, Annuaire 2002-2003, pp.115-152. Paris: L'Harmattan. ----- and RAEYMAEKERS, Timothy, 2004, Conflict and social transformation in Eastern DR Congo, Academia Press. -----, 2008, Armed Groups and Militias in Eastern DR Congo, Lecture Series on African Security, University of Ghent, Swedish Defence Research Agency (FOI) and the Nordic Africa Institute (NAI). Available at: http://www.nai.uu.se/research/naifoi%20lectures/calendar2009/vlassenroot.pdf. Accessed 13 August 2012. -----, and VAN BOCKSTAEL, Steven, 2008, Artisanal Diamond Mining: Perspectives and Challenges, Egmont Royal Institute for International Relations. -----, 2009, Negotiating and Contesting Public Order in Eastern DR Congo, Johns Hopkins - SAIS, African Studies Program, Spring 2009 Lecture Series. Available at: http://www.sais-jhu.edu/sebin/e/v/Koen-Vlassenroot-flyer.pdf. Accessed 16 August 2012. and RAEYMAEKERS, Timothy, 2009, "Kivu's intractable security conundrum", African Affairs, 108, no. 432: pp. 475-484. ------ and PERKS, Rachel, 2010, "From Discourse to Practice: A Sharper Perspective on the Relationship between Minerals and Violence in DR Congo" in CUVELIER, Jeroen, The Complexity Of Resource Governance in a Context of State Fragility: The Case of DRC, International Available Eastern Alert. at:
- WALLERSTEIN, Immanuel, 1974, *The Modern World-System*. New York: Academic Press WEINSTEIN, Jeremy M., 2006, *Inside rebellion: The politics of insurgent violence*. Cambridge University Press.

http://reliefweb.int/sites/reliefweb.int/files/resources/Full_Report_38.pdf.

WILD, Franz, 2008, "Congo Bans Tin Mining in Eastern Region Over Safety (Update 1)",

Bloomberg, 25 February. Available at:

http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aLzlwytXeu54.

Accessed 17 August 2012.

Accessed 13 August 2012.

- YOUNG, Crawford, 1968, *Politics in the Congo: Decolonization and Independence*. Princeton: Princeton University Press.
- ZOUNMENOU, David and KOK, Naomi, 2012, *Democratic Republic of the Congo: What Happens after Goma's Fall*, Institute for Security Studies, available at: http://www.issafrica.org/iss today.php?ID=1572%260, accessed 28 January 2013.

Laws and decrees

ASSEMBLEE NATIONALE, 2006, Constitution de la République Démocratique du Congo, Kinshasa Février.

PRESIDENCE DE LA REPUBLIQUE, 1982, Ordonnance-loi n° 82-039 modifiant et complétant l'Ordonnance-loi n° 81-013 relative aux mines et aux hydrocarbures

-----, 2002, Loi n° 007/2002 portant Code Minier, Journal Officiel de la République Démocratique du Congo, 11 July.

-----, 2002a, Loi n° 015/2002 du 16 Octobre portant Code du Travail, Journal Officiel de la République Démocratique du Congo, 25 Octobre.

-----, 2003, Décret no. 038/2003 du 26 Mars 2003 portant Règlement Minier, Annexe V: Code de conduite de l'exploitant artisanal.

Interviews

Interview, senior representative of junior mining company, Cape Town, 2012

Interview with two representatives of major electronics companies, Paris, 2011

Interview with mining company representative, Mining Investment INDABA, Cape Town, 2012

Interview with FEC representative, Watsa, 2009

Interview with merchandise trader, Walikale, 2007

Interview with merchandise trader, Durba, 2009

Interview with agricultural produce trader, Bisie, 2007

Interview with representative of territorial administration, Watsa, 2009

Interview with an agricultural produce trader, Durba, 2009

Interview with two female sex workers, Durba, 2009

Interview with Chef de Chantier, Bisie, 2007

Interview with comptoir, Goma, 2007

Interviews with two porters, Ndjingala, 2007

Interview with COMIMPA representative, Goma, 2007

Focus group with representatives from operators in North Kivu's cassiterite industry, Lusaka, 2008

Interview with GMB shareholder, Goma, 2007

Interview with two gold exporting traders, Ariwara, 2009

Interview with gold exporter, Ariwara, 2009

Interview with World Bank representative, Kinshasa, 2007

Interview with DFID representative, Kinshasa, 2007

Interview with World Bank representative, Kinshasa 2009

Interview with GTZ representative, Kinshasa, 2009

Interview with representative of CEEC, Kinshasa, 2009

Interview with representative of World Bank, Kinshasa, 2007

Interview with representative of Provincial Division of Mines, Goma, 2007

Interviews with traditional authorities, Bisie, 2007; two focus groups with artisanal miners;

interviews with 25 individual artisanal miners, Bisie, 2007

Conference contribution by donor representative, Paris, 2012

Interview with Ministry of Mines official, Kinshasa, 2007

Interview with Ministry of Mines official, Kinshasa, 2009

Interview with Electronics Company representative, Paris, 2008

Interview with FARDC soldiers, Bisie, 2007

Household Survey, 2010 – this is the SRK survey for Mongbwalu

Interview, geologist, M.P.C., Goma, 2007

Interview, Mineral Exporter F.E.C. Representative, Goma, 2007

Interview, Administrator of Walikale territory, Walikale, 2007

Interview with MONUC representative, Goma, 2007

Interview with customary Chief, Bisie, 2007

Interview with Natural Resources Expert at UN Group of Experts, London, March 2008

Interview with Electronics Industry Expert, 2011, interview

Interview with Karen Hayes, 2012

Interview with cooperative leader, Goma, April 2007

Interview with UN representative, Goma, April 2007

Interview with a government official, Goma, April 2007

Interview with a geologist who had worked on the Bisie mine, Goma, April 2007

Interview, Brian Christophers, MPC, April 2007

Interview with Goma-based exporter, April 2007

Interview with member of the 85th brigade, Walikale, December 2007

Interview with IANGO representative, Goma, December 2007

Interview with mining company representative, Mining Investment INDABA, Cape Town,

2012

Interview with Natural Resources Expert at UN Group of Experts, March 2008

Interview with Colonel Samy, Walikale, 2007

Interview with 85th brigade soldiers, Bisie, 2007;

Conference discussion, Trading for Peace regional Forum, Lusaka, 2009, for details, see:

http://eastafrica.usaid.gov/en/USAID/Article/1201/COMESA_to_Expand_Trading_for_Peace_ __Initiative, accessed 15 March, 2013.

E-mailed communication from author to the Enough Project, 2012

Annex 1: List of Pre-Publications

GARRE	TT, Nic	holas,	2007	a, The E.	xtractive	Industries	Transpa	rency I	Initiative	(EITI) d	& A1	rtisanal	
	and .	Small-S	Scale	Mining	(ASM),	Prelimino	ary Obse	rvatio	ns from	the L	Эem	ocratic	
	Repul	blic	O,	f	the	Congo	(1	DRC).	Av	ailable	į	at:	
	http://www.resourceglobal.co.uk/documents/Garrett_EITI_10_2007.pdf. Accessed												
	16 Au	ıgust 20	012.										
	, 200	08a, <i>V</i>	Valiko	ale. Art	isanal (Cassiterite	Mining	and	Trade ii	n Nor	th	Kivu –	
	Implications for Poverty Reduction and Security. Washington D.C.: Communities and												
	Small-Scale				Min	ing.		Ava	ilable	at:			
	http://www.resourceglobal.co.uk/documents/CASM_WalikaleBooklet2.pdf.												
	Accessed 14 June 2012.												
	, HES	SSELBE	IN, Ga	abi, 200	9, "Econ	omic Reso	urce Mol	oilisatio	on in DR (Congo,	, Rw	anda,	
	Tanzania and Zambia: The Case of the Mining sector", Crisis States Research												
	Program, London School of Economics, available at:												
	http://www.lse.ac.uk/internationalDevelopment/research/crisisStates/download/se												
	minars/HesselbeinOct28.pdf, accessed 17 March, 2014												
	, SERGIOU, Sylvia and VLASSENROOT Koen, 2009, "Negotiated Peace for Extortion:												
	the Case of Walikale Territory in Eastern DR Congo", Journal of Eastern African												
	Studies, 3(1), pp. 1-21												
	, and	d LINT	ZER,	Marie,	2010, "	Can Katar	ga's Mi	ning S	ector Dr	ive G	row	th and	
	Devel	lopmer	nt in t	he DRC	o", Journ	al of Easte	rn Africa	n Studi	ies, 4(3),	pp. 40	0-42	24.	
	, and	l SEAY,	, Laur	a, 2011	, "Trade	e, Develop	ment, ar	nd Pea	cebuildir	ng in t	:he	African	
	Great Lakes: The Role of the Minerals Sector", in: RAMSBOTHAM, Alexander and												
	ZARTMAN, William, eds. 2011, Paix Sans Frontières: Building Peace Across Borders.												
	Accor	rd· An I	Intern	ational	Review (of Peace In	itiatives	Issue 1	22				

Annex 2: Methodology and Research Constraints

The following paragraphs present my research methodology, as well as my research constraints and challenges. The Gantt chart below presents the different research phases through which the work has evolved with time between the winter semester 2006/2007 and the winter semester 2012/2013. I have been working on this PhD project part time, driven by external circumstance. The thesis covers the research period of 2007 – 2009 in terms of its analysis of the conflict and the 'coping', 'conflict' and 'shadow' economy actors in chapters 3, 4 and 5. I researched and analysed the 'conflict minerals' campaign specific data reflected in chapter 6 in 2011 and 2012. This gap was a necessity, as neither the 'conflict minerals' campaign, nor its consequences were fully developed, when I set out my research in 2007.

PhD Thesis, Nicholas Garrett, Progress Chart

	WS		ws		ws		ws		ws		WS		SS
	06/07	SS07	07/08	SS08	08/09	SS09	09/10	SS10	10/11	SS11	11/12	SS12	12/13
Stage 1: Preparation and Methodology Development													
Initial Planning													
Preparatory Desk Research													
Methodology Development													
Stage 2: Fieldwork													
Field Work North Kivu and Kinshasa													
Analysis													
Field work Haut Uele and Kinshasa													
Analysis													
Stage 3: Contextual Analysis and Finalisation													
Analysis of 'conflict minerals'													
campaign													
Write up and finalisation													

Stage 1: Preparation and Methodology Development

Following on from my PhD research design, which I had to submit in order to get accepted into the Freie Universität Berlin, I set out to undertake a comprehensive literature review of relevant literature, with a particular emphasis on literature on the economic dimension of conflict economies. The aim of the literature review was to understand the state of existing knowledge and also to identify gaps in the literature. The literature I reviewed is reflected in the bibliography of this thesis and includes a broad selection of:

- Academic literature
- Investigative studies, such IANGO and UN reports,
- Donor and consultancy reports
- · Government publications, including laws and regulations
- Media reports

Chapter 2 of this thesis presents the literature review and also clearly identifies the research gap, which my subsequent research sought to fill. This methodological section will not reiterate the discussion in chapter 2 in any great detail and the reader should revert to chapter 2 for any clarification.

Stage 2: Field Work

The gap definition in stage 1 led to the elaboration of key research tasks for my field research. The overarching quest was to gather the required data on the physical and value attributes of the commodities and the consequence thereof for their role in conflict financing, as well as information on the 'coping', 'shadow' and 'conflict' economy actors to allow me to undertake my analysis. On top of setting out the basic field research objective – access to data – the preparation also saw me contemplate a number of indicators that would allow me to infer conclusions from the dataset that I would unearth. These are reflected in chapters 3, 4 and 5 of this thesis, which deal with the incentives of the 'coping', 'conflict' and 'shadow' economy actors. The methodology is summarised in table 4 below.

Gathering the data reflected in chapters 3, 4 and 5 included a significant amount of fieldwork. I visited the DRC 13 times on various assignments between March 2007 and October 2011; two of these visits were specifically intended to gather data for this thesis. The two trips took place in the summer semester of 2007 (North Kivu and Kinshasa) and in

the winter semester of 2008/2009 (Orientale Province and Kinshasa). I also took advantage to interview key informants at various conferences, which is reflected in the bibliography under the interview references.

Field research in North Kivu and Orientale Province was circumstantially driven, as through contacts on the ground I was confident I would be able to gain access to the data set that I required. I believed the following:

Considering my field research had to unearth data on the mining and trade of 'conflict minerals', it was imperative to actually research the mining and trade of 'conflict minerals'. My analytical framework (see chapter 2) suggested there are multiple sets of actors undertaking or facilitating the mining and trade of 'conflict minerals' (i.e. 'coping' and 'shadow' economy actors); my analytical framework also suggested that there are actors preying on the mining and trade of 'conflict minerals' (i.e. 'conflict' economy actors). This meant I had to gain access to those sets of actors.

A key focus of my research was the incentive structures of the different sets of actors, which is why I had gain access to sets of actors in both conflict-affected and post-conflict areas, so to analyse whether any differences in incentive structures, or in fact economic activity was evident. This in turn would allow me to infer, whether incentives were related to the fact that a conflict was on-going, or whether incentives were more of a universal nature, which would, in turn, allow to bring considerable perspective to claims of the 'conflict minerals' campaign. *Examples* from each set of actors include:

- I would be able to research the specific motivations of 'coping' economy actors to partake in ASM of 'conflict minerals' and discern whether there were any differences in their incentive structures in conflict-affected and post-conflict areas. Such differences would allow me to judge the level of their respective dependence on the activity, which was a crucial dimension of the analysis, particularly in the context of evaluating the 'coping' economy specific impacts of the 'conflict minerals' campaign driven policy action.
- I would be able to research whether natural resources were "a 'honey pot' that provides incentives for profit-seeking groups to engage in violent actions" (De Soysa, 2000, p. 8), or whether it was other incentives driving the behaviour of 'conflict'

economy actors. I would also be able to make inferences over the relative capacity of armed groups to prey on the mining and trade of 'conflict minerals' and the relative utility of preying on different types of minerals and metals, which in turn would have an impact on the effectiveness of 'conflict minerals' campaign-driven measures to curb conflict-financing

• I would be able to research whether 'shadow' economy actors are facilitating trade only in conflict time, suggesting they were out to 'profit from conflict', or whether they are facilitating trade also in post-conflict times, which would suggest they were out to 'profit', rather than 'profit from conflict'. This in turn would allow me to make important inferences about their role in conflict resolution processes and also allow me to evaluate the 'shadow' economy specific impacts of the 'conflict minerals' campaign driven policy action

These are just examples to highlight the need for a diverse set of cases, so the be able to cover important comparative dimensions in the analysis. It is important to highlight here that empirical data was, at least at the beginning of my research in 2007, relatively scarce, I had to focus in many instances on baseline data gathering in a first phase, before being able to undertake the analysis which was further supplemented with key informant interviews and secondary sources, as and when they became available.

Table 4: Field research methodology

Stakeholders interviewed and sources acquired	Information gathered
Visits to provincial capital city or other relevant urban centres	
Government officials; secondary literature;	Attitudes of key stakeholders;
military; mineral exporters; mine concessionaires;	contextual data on 'coping', 'shadow'
customs officials; UN personnel; NGO	and 'conflict' economy;
representatives	Incentive structure of 'shadow'
	economy actors.
	Institutional and organisational
	governance structure of the ASM
	sector and the trade in 'conflict
	minerals';
	Trade data, including cost structure
	and economic data, level of formality /
	legality, corruption;

- Roles, activities, value accrued downstream in ASM gold and tin supply chains;
- Attitudes and interests of gold and tin traders;
- Relationships between actors downstream; regional gold and tin trade networks.

Visits to mining areas, ASM sites and communities near ASM sites

Traditional authorities, local government and state services representatives; police; military and armed actors; mine owners; mine manager/foremen; mine workers; families of miners; dealers; other land users; NGOs.

- In field data on 'coping', 'shadow' and 'conflict' economy actors;
- Incentives of 'coping' and 'conflict' economy actors.
- Predation by armed groups on the mining and trade of 'conflict minerals';
- Scale and key characteristics, incl. legality, demography, gender, child labour, forced labour and other human rights abuses, earnings, economic linkages of the ASM sector (i.e. support industries to ASM etc.)
- Value and volume attributes of minerals and metals trading chains.
- Roles, activities, value accrued upstream in ASM gold and tin supply chains;
- Attitudes and interests of ASM actors and dealers;
- Relationships between actors
 upstream, especially between minesite actors, scoping of gender and child
 labour issues;
- Attitudes and interests of government officials, politicians and other stakeholders to ASM;
- Relationships between actors upstream, especially between ASM,

and communities and politicians;

- Understanding of local economy and relative importance of ASM activities and trade to local economy;
- Livelihoods, including motivations and vulnerabilities and dependency on ASM and existence of accessible economic alternatives to ASM.

3. Interviews in Kinshasa

National government officials, national politicians, spectators (journalists, experts, NGOs); donor representatives.

- Perspective on formal state governance structure for ASM;
- Political settlements on ASM;
- Relationships between ASM and central government; data on overall ASM activity.

During the visits I interviewed over 100 persons in the 'coping', 'shadow' and 'war economy' in North Kivu and Orientale Province. To establish the incentive structures of the 'coping', 'conflict' and 'shadow' economy actors, I relied upon interviews with ASM actors, traders, armed actors, government and non-governmental sources. In addition, to gain deeper understanding of how socio-political relationships between actors are constructed and how dynamics emerge between these actors, I relied on a broader range of interviewees, including with other interested parties, informed observers, the political agents and representatives of ASM, and their opponents. Interviewees were largely drawn through snowballing and random sampling (in mining areas in particular) with the majority of interviews insisting on anonymity, in which case I am referring to, for example: 'Interview with representative of territorial administration, Watsa, 2009'. In order to raise my own level of confidence in my own data, I sought to triangulate findings wherever possible.

Stage 3: Contextual analysis and finalisation

Stage 3 included a significant time of desk-based analysis, with writing and revision time spread out over five semesters. The analysis in this thesis is presented in an analytical narrative that is structured and determined by the analytical gap, which I had identified during my initial desk-based work and the field-based data that I was able to gather. The overall research process was an iterative one, built upon recognition that the structural, institutional and stakeholder variables that characterise the ASM sector in the trading chains

in 'conflict minerals' in North Kivu and Orientale province are highly interlinked. The following discussion of the practical challenges I had to overcome or mitigate when carrying out the field research and subsequent research and analysis provide further perspective.

Methodological challenges and resolution or mitigation strategies

In order to carry out and complete the research for my thesis in line with the methodology outlined above, I had to overcome or mitigate numerous practical challenges, which I discuss here in turn:

Financing

The first challenge was to ensure I would be able to not only start the thesis, but also complete it, including the extensive field research required. For this I required financial support Several sources made this possible, including my family, the Extractive Industries Transparency Initiative (for which I wrote a consultancy report on the ASM sector in eastern DRC), Sylvia Sergiou of the Freie Universität Berlin (with whom I shared field research costs, such as transport), the Vodafone Foundation Germany (which provided an initial one-year stipend, which it refused to extend for the remainder of the thesis), and the Heinrich-Böll-Foundation (which provided a two-year stipend after the Vodafone Foundation did not extend its initial commitment).

Access to key mining areas

The second challenge was getting access to the key cassiterite mining area in Walikale and the key gold mining area in Haut Uélé. During the course of my initial research in the provincial capital and trading hub, Goma, it soon became evident that the majority of cassiterite traded through Goma originated from one mine: Bisie. The mine was portrayed as a "mystical place" (interview with cooperative leader, Goma, April 2007), "dangerous" (interview with UN representative, Goma, April 2007), "full of potential" (interview with a government official, Goma, April 2007) or a "shithole" (interview with a geologist who had worked on the mine, Goma, April 2007). These characterisations transformed my prioritisation of a mine visit from 'it would be nice' to 'it's an absolute must'. I was fortunate to visit the Bisie mine twice; both times I accessed the mine by helicopter chartered by the concessionaire Mining and Processing Congo (MPC). I stayed in the mine for a combined seven days. The reason why the helicopter was allowed by the resident FARDC 85th brigade to land in the mine (see chapter 3), was because the concessionaire was at the time trying to

negotiate a co-habitation strategy with the resident ASM community in the presence of government services, such as the small-scale-mining technical assistance and training service (SAESSCAM). Access to the key gold mining area of Durba in Watsa territory in Haut Uélé was easier, due to accessibility by road (motorbike) about 170 kilometres from Bunia.



Access to key mining areas requires motorbike travel, © Nicholas Garrett, 2009

Survival in the Bisie mine

The third challenge was surviving in the mine. During my initial research in Goma it was explained to me that on a previous visit to the Bisie mine, an assassination attempt was carried out, which had targeted MPC employees (interview, Brian Christophers, MPC, April 2007). There was an obvious security issue to consider, particularly with my stay being stretched over several days, including a weekend, which would potentially involve heavy drinking by soldiers and miners alike, which raised the spectre of some form of trouble being a real possibility. In addition, I had no clear conceptions of the type of governance structure the 85th brigade was operating in the mine. Possibilities were a 'mining at gunpoint' scenario akin to that portrayed in the Hollywood blockbuster 'Blood Diamond' and largely inspired by horror stories of the civil wars in Sierra Leone and Liberia or something else. I discovered to

my relief that there was no mining at gunpoint. In fact, the resident 85th brigade appeared to maintain order (see chapter 4 for discussion and perspective) to the point that I felt comfortable undertaking interviews around the mine sites and the support villages.



Interviewing members of the 85th brigade, © Nicholas Garrett, 2009

Access to key informants and information

The third challenge was getting access to key informants and information. The stakeholders in the ASM sector and the associated trade were very cautious and I had to spend time and build trust in order to get access to key interviewees. Many interviewees initially cited fear of being named and shamed in IANGO or press reports as a key reason not to talk to me. According to many stakeholders, IANGO researchers and journalists had previously approached them without fully disclosing their organisational affiliations and the purpose of their research. As one trader put it, "one day you are nice to a guy, who says he is a student and you have a nice lunch and a good discussion with him; the next day you find yourself portrayed as a war criminal in a newspaper or an NGO report" (interview with Goma-based exporter, April 2007). The key reasons, I believe, why interviewees eventually agreed to talk to me was that I guaranteed them anonymity, if they insisted on it, but also as a result of clearly explaining that my mission was not to 'name and shame' anyone in IANGO or press reports. For this very reason, the vast majority of interviews quoted in this thesis are not

assigned to a named person (e.g. Nicholas Garrett), but ascribed to the position of a person (e.g. researcher). It is important to note here that the regional division of mines in Goma was very helpful in facilitating my research and providing information, for which I am thankful.

Getting a view of government capacity and incentive structures also required access to state officials beyond the provincial level. My budget was extremely limited, which is why I would not have been able to undertake research in Kinshasa, which is a very expensive city, had it not been for several consultancies I undertook throughout the course of my research. These consultancies provided me with high-level access across the Congolese Government. The Rwandan Government was significantly easier to access. On the one hand Kigali is a mere two-hour drive from Goma, whereas *safe* travel to Kinshasa would involve a regional flight. In addition, government capacity and organisation was considerably more elaborate in Rwanda, which meant it was relatively straightforward to schedule meetings, even with high-level ministers.

Informant perceptions and translation

The fourth challenge was overcoming the perception of key informants that I was somehow aligned with vested interests. Entering the Bisie mine by helicopter, for example, sparked the interest of the entire resident community, with probably about 2,000 people gathering to witness the landing and take-off procedures at both visits, including the resident FARDC soldiers. It did not escape the population that I emerged from the helicopter along with the MPC delegation. Equally, I could have been mistaken for, for example, an employee of Moto Goldmines, the then industrial mining exploration permit holder, in the case of Watsa in Haut Uélé, had it not been for my travelling on a motorbike.

In both cases, this meant I had to explain clearly to interviewees my independent status as a student. This process brought both advantages and disadvantages as on the one hand, it took relatively longer to gain people's trust, but at the same time also meant a number of people, who did not seem to hold a prominent position within the social hierarchy, came to me with information or passed information to me that may otherwise not have surfaced. The key to overcoming an initial lack of trust was to engage with the local population in most aspects of their activities. I held initial discussions with the resident traditional authorities. I climbed into the mining tunnels and galleries with the miners. I carried bags with the

transporters. I gathered overburden with the *pelleteurs*. I washed cassiterite with support workers. I sat with soldiers smoking cigarettes. It would have been impossible to gather a viable amount of data in the short time that I was able to spend in the mining areas without a quick trust-building process.



The tunnels are fertile ground for data collection, © Mark Craemer, 2007

Related challenges included those of translations, interpretations and the perception of myself as a foreigner. I share a common characteristic among Western researchers in the Great Lakes region in that I am white Caucasian of European origin and I do not speak Kiswahili, Kinyarwanda or Lingala, which are the three most widely spoken local languages in the region. The majority of my interviews were conducted in French in the DRC and in

English in Rwanda. Where required I drew on translators, particularly in the Bisie mine and tried to triangulate their translation of responses to my questions. This served to a) determine the accuracy of responses and my own correct understanding; and b) to understand whether or not or to what degree the translator had 'filled in the gaps' so to facilitate my understanding. Of course it is therefore quite likely that not all interviewees were able to convey to me the full extent of the information they could have passed on, had I spoken their mother tongue.

Time limitations

The fifth challenge was time limitations. Time limitations were an obvious issue in the context of my semi-structured interviews with formal entities, whose representatives had to take time out of their schedule specifically to meet with me. This included, for example, UN, Congolese Government, Rwandan Government and NGO representatives. Time limitations equally applied to exporters, who were 'happy to chat' but also reminded me frequently 'they had a business to run'. Of a significantly different dimension were the time limitations I witnessed in the mining areas, where miners and artisanal mine support workers were either busy or too tired to spend a significant amount of time specifically to discuss my questions. I mitigated this challenge the same way I built trust with them. I accompanied my interviewees wherever I could and joined in their activities, so that they could speak to me without taking significant time out of their day-to-day undertakings.

Multiple truths and accuracy of secondary sources

The sixth challenge was that of multiple truths. Throughout my research process I uncovered multiple truths. It seemed every interviewee had his or her own understanding of the situation on the ground as well as their own agendas to defend. It seemed important for the armed actors I interviewed to portray themselves in a good light, such as, for example, "we guarantee the security of the population, that is our job" (interview with member of the 85th brigade, Walikale, December 2007). This logic also applied to IANGO representatives, who were working for organisations with a given mission or preconceived mandate, which often dictated their approach, understanding and argumentation. For some IANGO interviewees it was as important to portray mineral traders in a bad light, or as "war crime-facilitating dirt", so to ensure that I would "get the message" (read: their message) (interview with IANGO representative, Goma, December 2007). Throughout my research I approached this challenge by triangulating information and by undertaking a significant amount of

participant observation. I documented activities using field notes and also worked with a photographer (though this was not always possible, as people often did not want to have their picture taken). In this regard I can say that I adopted an ethnographic approach to treating the entire research experience as part of my research. This included the critical reflection of my interactions not only with interviewees but also with the people at large, as well as monitoring – to the degree possible – my own intellectual and emotional responses.

This same approach helped to overcome doubts over the accuracy of secondary literature and data. The more time I spent on the ground and the more I understood the dynamics on the ground, the less faith I had in the accuracy of secondary sources of literature. I realised there were often two or more sides to a story that were portrayed as a fact in secondary literature. This led to the decision to use secondary literature as an analytical starting point, rather than as accepting them as the truth, and to attempt to triangulate facts stated within them. At the same time statistical data, particularly on the Congolese side, often proved to be incomplete, factually incorrect and of limited use. In order to calculate cassiterite quantities that were flown from Walikale to Goma, for example, I decided not to rely on the data provided by the provincial division of mines, but to spend two days at the Kilambo airstrip (see chapter 3) and to count the number of cassiterite-carrying planes that were taking off for Goma. This provided an alternative and in my view useful and complementary way of portraying the situation on the ground.

Evolution of Events

The seventh challenge was the fact that dynamics on the ground change rapidly. I have hedged for this, by limiting the timeframe for empirical data gathering to the summer semester of 2007, from April to September 2007 and the summer semester of 2009, from April to September 2009. I have only used secondary data since October 2009, particularly to integrate the analysis of the impact of INAGO advocacy driven policy action to curb conflict financing. The impacts of such policy action on the 'coping economy' were not measureable at the time of my field research, because the initiatives were not yet sufficiently developed or implemented. This, in turn, forced me to rely on secondary sources for the basis of my analysis, which obviously means that my analysis is subject to the same constraint that I discuss under challenge six, namely that there is no guarantee that secondary sources portray the situation on the ground with sufficient accuracy.

Inferences

The eighth challenge is the case study approach I had to adopt in order to be able to undertake and complete my research within a given time period and budget. With a student budget, it would have been impossible to cover more ASM sites in the same depth, as I have done in both cases. Of course this translates into limitations, one of which is that inferences from my case studies may not have universal validity or are applicable in other contexts. Where appropriate I have restricted inferences to the cases and context at hand, and where I believe inferences were more widely applicable, I sought to triangulate my inferences with secondary sources, whether in the form of literature or interviews. I'm therefore indebted to a number of colleagues in academia and policy circles over the past years, who have helped me to shape and keep in check my understanding and analysis.

Finally, a word on my usage of the first person in this thesis, which I draw on in order to emphasise the responsibility I feel for the argumentation, interpretations and conclusions I'm presenting in this thesis. I'm not trying to represent or give voice to anyone in this thesis. For the sake of increasing the objectivity of this thesis, which is ultimately a product of my undertakings and interpretations in a particular context, I will gladly be held to account for its contents. After all, any omissions and misrepresentations are my own and entirely born out of my own limitations.

Annex 3: English Summary of Key Points

Artisanal mining and conflict financing in eastern Democratic Republic of Congo (DRC); coping, conflict and shadow economy actors and the impact of the 'conflict minerals' campaign.

Nicholas Garrett

Within the puzzle of why conflict persists in natural resource rich countries, and why in the critical case of the DRC in particular, I looked at two questions in detail: First, how the incentive structures of different actors in a 'conflict economy', including 'coping', 'conflict' and 'shadow' economy actors, can shape the dynamics of conflict and conflict resolution. Second, how the physical and market attributes of high volume and low value cassiterite, as well as high value and low volume gold determine how effectively 'conflict minerals' trade control measures could be implemented, which the 'conflict minerals' campaign driven by International Advocacy NGOs proposes to resolve conflict. The implementation of trade control measures and their impact showed a misalignment with the incentive structures of 'coping', 'shadow' and 'conflict' economy actors. Instead of resolving conflict their implementation a) generated significant negative externalities in the form of loss of livelihood or reduction in earning potential for the 'coping' economy actors in the primary and secondary ASM economy; b) failed (on their own) to provide sufficient incentives for the 'shadow' economy to formalise and comply with trade control measures' requirements. As grey markets remained open and gold continued to be traded indiscriminately (as its physical and market attributes meant its mining and trade continued despite the implementation of trade control measures), low prices offered by grey market buyers compared to world market prices offered by international 'conflict free' buyers inspired some 'shadow economy' actors to work towards compliance; c) they did not significantly impact 'conflict economy' actors' ability to generate finance due to these actors' diversified revenue base and trade control measures inability to control the lucrative gold trade. The puzzle of why conflict persists in natural resource rich countries, and why in the critical case of the DRC in particular is therefore due to a misunderstanding of local incentive structures resulting in a misaligned set of conflict resolution attempts, which in the case of 'conflict minerals' have further complicated conflict dynamics on the ground. Key practical suggestions from the thesis are: a) it is from a practical perspective important to mitigate the impact of the implementation of the trade control measures on the 'coping' economy; b)

the most efficient way to do so is to make the measures obsolete by ending conflict in eastern DRC. This will require dealing with: the presence of armed actors directly, widespread impunity, privatised and violent governance structures, unaddressed underlying grievances (which includes intra-regional issues) and the excessive cost of doing business; c) to do so, research should establish how subnational governance structures currently internally function and what the key levers are to transform existing governance arrangements into ones that support peace and development; d) considering IANGOs are increasingly important actors in global governance, future research should also focus on how global 'governance actors' can be capacitated to accountably, responsibly, effectively and efficiently develop and implement solutions for governance challenges and to minimise externalities of such solutions going forward.

Annex 4: Zusammenfassung der wichtigsten Punkte

Kleinbergbau und Konfliktfinanzierung im Osten der Demokratischen Republik Kongo; Bewältigungs-, Konflikt-, und Schatten-Wirtschaftsakteure und die Auswirkungen der "Konfliktrohstoff" Kampagne.²³

Innerhalb des Rätsels, warum Konflikte in rohstoffreichen Ländern bestehen, und warum gerade im kritischen Fall der Demokratischen Republik Kongo, erforscht meine Arbeit zwei Fragen im Detail: Erstens, wie die Anreizstrukturen der verschiedenen Akteure in einer Konfliktwirtschaft, einschließlich "Bewältigung-" , "Konflikt-" und Wirtschaftsakteure die Dynamik von Konflikten und Konfliktlösung gestalten. Zweitens, wie die Markt und physikalischen Attribute von Zinn-Erz (großes Volumen und niedriger Wert) und Gold (kleines Volumen und hoher Wert) bestimmen, wie Handelskontrollmaßnahmen für "Konfliktrohstoffe" umgesetzt werden können. Die letzteren werden von der "Konfliktrohstoff"-Kampagne, die von internationale interessenvertretende Nichtregierungsorganisationen (international advocacy NGOs) vorangetrieben wird, als Konfliktlösungsmechanismen dargestellt. Die Umsetzung der Handelskontrollmaßnahmen und deren Auswirkungen deutet auf eine Fehlausrichtung mit den Anreizstrukturen der "Bewältigungs-", "Schatten-" und "Konflikt-" Wirtschaftsakteure. Statt der Konfliktlösung hat ihre Umsetzung die folgenden Resultate erzeugt: a) negative Externalitäten in Form von Existenzverlust oder Minderung des Erwerbspotenzials für die "Bewältigung-" Wirtschaftsakteure in der primären und sekundären ASM Wirtschaft; b) das Versagen (allein durch Ihre Anwendung) ausreichende Anreize für die "Schatten-" Wirtschaftsakteure zu schaffen, den Anforderungen der Handelskontrollmaßnahmen zu entsprechen. Grauen Märkte sind offen und Gold wird weiterhin wahllos gehandelt da der Handel aufgrund der Markt- und physikalischen Eigenschaften von Gold nicht durch Handelskontrollmaßnahmen kontrollierbar ist. Anstatt der Handelskontrollmaßnahmen haben niedrige Preise in Graumärkten, wenn verglichen mit Weltmarktpreise, welche in "konfliktfreien" internationalen Märkten geboten werden einige "Schatten-" Wirtschaftsakteure inspiriert konform mit Anforderungen den Handelskontrollmaßnahmen zu arbeiten; c) sie nicht wesentlich die Finanzierung von

²³ My first language is English. Therefore please also refer to the English summary version, as well as the main text.

"Konflikt-" Wirtschaftsakteuren treffen, da diese Akteure auf diversifizierte Umsatzbasen zurückgreifen können und ungehinderten Zugang zum Goldhandel beibehalten können.

Das Rätsel, warum Konflikte in rohstoffreichen Ländern bestehen, und warum gerade im kritischen Fall der Demokratischen Republik Kongo, ist daher auf ein Missverständnis der Anreizstrukturen von verschiedenen Gruppen von Akteuren zurückzuführen, was zu einer falsch ausgerichteten Reihe von Konfliktlösungsversuche geführt hat. Im Falle von "Konfliktrohstoffen" haben letztere die Situation vor Ort noch komplizierter gestaltet. Wichtige praktische Anregungen aus der Arbeit sind: a) die Auswirkungen der Umsetzung der Handelskontrollmaßnahmen für die "Bewältigungs-' Wirtschaftsakteure zu mildern; b) der effizienteste Weg dorthin ist die Handelskontrollmaßnahmen überflüssig zu machen, v.a. durch die Beendigung des Konfliktes im Ost-Kongo. Dies erfordert es die folgenden Punkte anzugehen: die Anwesenheit von bewaffneten Akteure, weit verbreitete Straflosigkeit, privatisierte und gewalttätige Governance-Strukturen , grundliegende Beschwerden (zu denen auch intra-regionale Fragen gehören) und die hohen Kosten der Geschäftstätigkeit; c) um dies tun zu können, sollte zukünftige Forschung etablieren wie subnationale Governance-Strukturen momentan intern funktionieren und etablieren, was die wichtigsten Hebel sind um bestehende Governance-Regelungen in solche umzumünzen, die Frieden und Entwicklungsprozesse unterstützen können; d) da IANGOs zunehmend wichtige Akteure in der Global Governance sind, sollte zukünftige Forschung etablieren, wie auch globale " Governance-Akteure" kapazitiert werden können, mit Rechenschaftspflicht, verantwortungsbewusst, effektiv und effizient Lösungen für Governance-Herausforderungen zu entwickeln und anzuwenden, und etwaige negative Externalitäten dabei in Zukunft zu minimieren.

Annex 5: CV