

LITERATURE REVIEW:

THE RISE IN CONFLICT ASSOCIATED WITH EXTRACTIVE
SECTOR PROJECTS - WHAT LIES BENEATH?

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EXECUTIVE SUMMARY

Conflicts relating to extractive sector projects appear to have sharply increased during the recent commodity boom, becoming a major source of concern for companies, communities and governments, as well as international human rights, environmental and development organizations. Focusing on community-level conflicts associated with mining, this paper reviews 303 publications to identify potential factors exacerbating the risk of conflict onset, and briefly discusses approaches to conflict prevention and resolution.¹

This review suggests that recent rising trend in reported community-level conflicts over mining projects mostly results from three main sets of factors:

At the structural level, and drawing in part from the broader literature on social conflicts, the recent decade-long commodity boom was preceded by extensive neoliberalisation reforms and structural adjustment plans that attracted new extractive sector investments while loosening regulatory frameworks and reducing state capacity. Some of these investments flowed into conflict-prone and under-regulated countries undertaking democratization processes frequently characterized by greater public protests, distrust towards government authorities, rising inequalities, and recurrent state repression. The acceleration of global economic growth and rising demand for primary commodities at the turn of the millennium resulted in rising prices and number of extractive activities, including by companies from 'emerging countries'.

At the contextual level, liberalization reforms that took place in a context of partial democratization often resulted in contentious politics and took the form of more assertive and institutionally-legitimated demands by local communities, civil society and local authorities to participate in decision-making and to directly benefit from mineral development. The accelerating pace of exploration and mine development across most parts of the world raised both expectations of benefits, but also concerns, among host societies, and in particular poor and historically marginalized communities, but also authorities in the affected region. Ill-designed or poorly implemented mineral development strategies, in part due to weak government capacity, left authorities in a challenging position when confronted with the expectations and concerns of many communities.

At the proximate or 'triggering' level, diverse factors often combined with contextual factors, to mobilize communities and their supporters against some of the specific developmental and environmental impacts of mining projects. While such concerns motivated unprecedented efforts in improving resource governance on behalf of an array of corporate, government and civil society actors, they also translated into greater mobilization against mining activities, most notably in Latin America, in a context where the liberalization of the sectors as well as further democratization (and decentralization) were not matched by greater government capacity – thereby creating a context prone to rising expectations and open contestations.

Specific triggering factors identified include, a) threat to land rights and local livelihoods, unfulfilled development expectations and a lack of pro-active community engagement in decision-making or failure of grievance mechanisms, notably with regard to impact assessments and benefits distribution, as well as poor company or government practices resulting in accidents, frustrations with hiring process, or abuses from security forces actions, b) distributive issues exacerbated by higher commodity prices and expectations for higher corporate standards - especially combined with contextual factors such as fiscal decentralization, weak local government capacities, deep poverty and limited alternative livelihoods c) greater exchange of information and greater ease of mobilization through social media and transnational advocacy networks often led to a leveraging of protests by local communities and supporters to articulate demands in contexts of historical distrust towards authorities and inadequate participatory decision-making processes, and d) violent reactions by governments and companies against public protests and alleged threats to 'civil order' often led to

an escalation of conflicts resulting in casualties, but also renewed negotiations and in some cases the cancellation of projects.

Summary Table of Conflict Factors

| Structural | Contextual | Proximate |
|-------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------|
| Neoliberal reforms and structural adjustment plans | Ill-designed or poorly implemented mineral development strategies | Characteristics and perceptions of mining projects |
| Investment in conflict-prone and under-regulated countries | Weak government capacity | Land rights and impacts on environment and local livelihoods |
| Commodity demand growth and 'emerging' companies | State repression and the leveraging of protests | Lack of participation or representation of local communities |
| Anti-extractivism and cultural friction over resource usage | Legacies of state repression and contentious politics | Poor company practices |
| | Poverty and marginalization | Asymmetry in the distribution of economic and social benefits |
| | National and host-community demands for a greater share of benefits | Distrust and breakdown of constructive relations between parties |
| | Polarization and politicization of tensions | Mobilization of opposition and tensions within communities |

Paradoxically, the rise in conflicts has taken place within the same time period of an increasing effort by governments and the extractive sector to prevent and reduce conflicts. Efforts to improve governance were introduced through guidelines for investment companies, conflict negotiation tools and institutions, stricter norms of transparency and accountability, as well as a vast array of recommendations for the various stakeholders in terms of community participation, land-use planning, operational practices, and value chain management.

INTRODUCTION

Community-level or 'social conflicts' related to the mining sector are reported to have sharply increased during the recent commodity boom. This paper seeks to understand the reasons for such a trend by reviewing the findings of publicly available studies, and to briefly outline the main approaches recommended to prevent and resolve conflicts. Here conflict is broadly understood as the interaction of two or more parties who perceive incompatible goals and engage each other through a range of practices, which can include persuasion, negotiation, arbitration, legal proceedings, intimidation, and physical violence (Schmidt and Kochan 1972; Aal 2011). Conflicts are often distinguished as being driven by either socio-environmental or labor issues, with the former dominating the literature identified for this survey. Conflicts are most frequently and widely reported when involving physical violence. While conflicts are generally examined for their negative impacts, they may also play a positive role through a progressive transformation of relations, changing viewpoints about projects and their development potential, and the creation of new governing institutions to enhance resource management (Arce 2014; Rios et al. 2015).

This study draws on 303 publications, including 117 studies specifically examining community-level conflicts over mining projects.² Studies in English language were identified through Google Scholar using key terms (conflict, mining, extractive sectors, protests) and citation links. This was complemented by a general web-based search to find relevant policy reports, as well as suggestions from referees. The 117 studies were selected for their empirical approach, classified by methodology and number of case studies, as well as assessed for the quality of their empirical evidence. Much of the literature relies on case study analyses - most of them informed through fieldwork - confirming a broad range of factors involved in conflict processes. The main strengths of this case study literature is to provide in-depth and often nuanced understanding of individual cases across a wide variety of factors stretching historical and geographical scales. Still, most studies look at recent and community or district-level factors, and this largely for Latin American and to a lesser extent cases from Sub-Saharan Africa and Oceania as compared to other regions of the world. The case study approach followed by these studies and the frequent lack of clearly defined and identified variables make the testing of generalizable claims across the universe of cases a difficult task. Most of the academic studies also have a limited coverage of the perspectives and practices of mining companies, and to a lesser extent of state institutions, as compared to those of local communities and civil society organizations.

Only seven studies used statistical analyses with a large number of variables (at sub-national, national or international levels). These quantitative studies tend to confirm a number of major factors triggering or aggravating conflicts, such as sharp increases in commodity prices (with yet no study examining the impact of the recent fall in prices), operations with broad footprints such as open-pit mining, and the socio-economic characteristics of host communities (e.g. poor agrarian households at the peripheries of state influence), while the marginal effect of the quality of governance institutions remains debated in part because of the lack of sub-national and finely disaggregated data (Arellano-Yanguas 2011; Haslam & Tanimoune 2016).

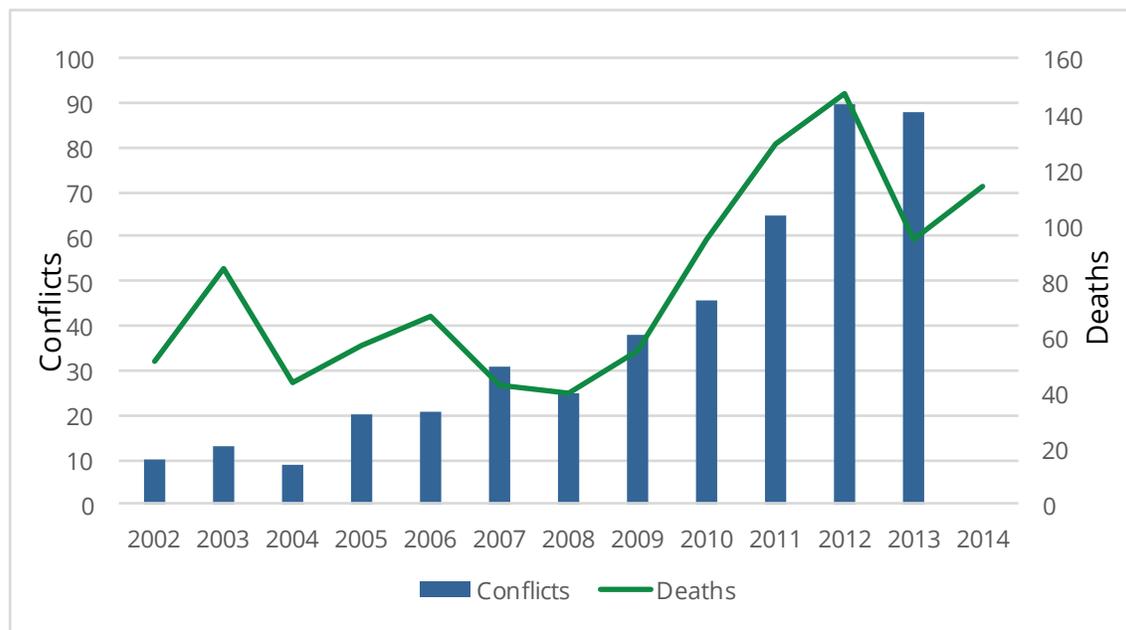
This paper is structured around three main sections. The first reviews evidence for trends in conflict occurrences since the turn of the millennium, and confirms a rise in the number of conflicts and use of physical violence. The second covers findings from the literature on the major explanatory variables for this rise in conflict at global, national and local levels. The third section reviews findings related to conflict prevention and resolution mechanisms, including major recommendations from the main policy reports.

1. ARE CONFLICTS AROUND EXTRACTIVE SECTORS PROJECTS INCREASING?

Based on two studies examining recent trends in extractive sector related conflicts at the global level, data indicates an increase in the number and severity of reported conflicts since the mid-2000s (see Figure 1).³

The International Council on Mining and Metals' latest report on company-community conflicts records an increase in the number of reported incidents, from 10 in 2002 to a peak of 90 in 2012 (ICMM 2015). This report is based on "publicly available resources," most notably data collected by the Business and Human Rights Resource Centre. This estimate is conservative, as it only accounts for conflicts involving open protest, the use of force, and/or legal proceedings, and thereby does not include other indicators of conflict such as written declarations and inter-personal expressions of grievances that are less visible.⁴ The Global Witness' (2014) database shows an increase in the number of killings of environment and land defenders, in general, with nearly three times as many people killed in 2012 (147) than 2002 (57). Between 2002-2012, at least 150 of 908 killings related to extractive sector conflicts, including oil and gas. Perpetrators were generally private security contractors, state security forces, or members of organized crime. Peru had the highest number of killings (46), followed by the Philippines (41).

Figure 1 - Reported Mining Conflicts and Deaths of 'Land Defenders'



Sources: Conflicts (ICMM, 2015); deaths (Global Witness, 2014, 2015). No conflict data for 2014.

Several databases and studies also provide information for the Latin America region. The Latin American Observatory of Mining Conflicts (OCMAL) report an increase in conflicts, most of which began in the 2000s, with 210 active mining conflicts in the region affecting 315 communities (OCMAL, 2015).⁵ The Center for International Environmental Law examines 14 cases from Mexico, Guatemala, Honduras, El Salvador and Panama, describing violence such as the destruction of personal and communal property; forced relocation; death threats; kidnappings; arbitrary detention and killings

(CIEL, 2010). Although it is unclear whether incidents increased over time, the report documents various instances of violence in the late 2000s. At the national level, Firpo Porto et al. (2013) recorded 400 socio-environmental conflicts in Brazil, of which at least 16% are directly related to mineral extraction. In Colombia, Perez Rincón (2014) observed a sharp rise in the number of conflicts after 2001, with a peak in 2009. In Peru, the country's Ombudsman has documented a proliferation of conflicts involving extractive sectors across time and space since the early 2000s. Between 2006 and 2011, mining activities accounted for 41.7% of all conflicts, and were responsible for 73 civilian deaths (Defensoría del Pueblo, 2012: 38, 53).

Large-scale Public Protests

The rising trend in conflicts related to extractive sector activities also appear to be part of a broader rising trend in the number of large-scale protests globally, which may reflect some possible common factors, notably in terms of greater political opportunities, ease of mobilization, grievances against rising inequalities and disaffection towards established political elites. According to Ortiz et al. (2013), 843 large-scale protest movements took place between January 2006 and July 2013 in 87 countries covering 90% of the world population, with the number of protests increasing from 59 in 2006 to 160 in 2012. Eleven protest movements directly related to the mining sector and seven to the oil sector – two thirds of which started after 2010. Labor issues were the most frequent cause (cited in 7 cases), followed by environmental concerns (6), resource nationalism (6), and local community and Indigenous rights (6), with multiple causes sometimes involved, though conflicts over the distribution of costs and benefits ('distributive conflicts') seemed to predominate over perceived incompatibility between extractive activities and other forms of production and traditional ways of life. Ortiz et al. (2013) noted that the rise in protests took place in the context of rising commodity prices (especially food and fuel), and in the wake of the 2008 financial crisis – which was followed by austerity policies in many countries, but also rising grievances about income inequalities, high debt levels, and regressive public policies.

2. WHAT IS DRIVING INCREASING CONFLICT?

The analysis of conflicts classically involves the systematic study of types, causes, actors and dynamics (CSC 2012; Ratner 2013). Conflict types generally relate to scale, form and intensity, with a basic distinction between a) community-level, national, and international conflicts, b) the object of the dispute, and c) between social and armed conflicts. The focus here is on social conflicts over resources, the impact of their exploitation, and distribution of their relative benefits (revenues, but others such as jobs) at the community level, though we recognize multiple scales and intensities may be involved.

The primary categories of actors involved are generally identified as local communities, extractive companies (mostly large-scale industrial ventures, but also their conflicts with artisanal and small-scale miners), and host governments (national and local levels). Others include non-governmental organizations (NGOs), unions, security forces (public and private, as well militias), political entrepreneurs and political parties, local business elites, and international financial organizations (Arce 2014). Finally, conflict processes are understood in terms of temporality, geography, and intensity. Our main concern here is with the factors relating to extractive sectors, and in particular mining, that were involved in the initiation and evolution of conflicts, notably in the escalation of conflicts towards more physical forms of violence (sabotage, detention, physical harm, extra-judicial executions). As such, we cover broader factors that may contribute to the rise of conflicts (see Tilly and Tarrow 2015), such as a widening of political opportunities for social movements and community-level protests associated with democratization processes; the growth of polarized interpretations of social relations across society such as increasing inequalities following neoliberalization processes; and factors influencing the mobilization of broad coalitions such as the diffusion of Internet, social media, and mobile phones.

Conflict factors are generally categorized as structural, contextual, and proximate (or triggering), and are situated at (but also frequently straddling) global, national, and local scales (CSC 2012; Grzybowski 2012; Ratner et al. 2013). Structural factors are generally understood as conditioning or generic risk factors often taking place at a global level (e.g. international commodity prices, international norms and rules governing resource extraction, development paradigms). Contextual factors capture the specificities of a particular case, often at a national scale (e.g. dispossession of Indigenous populations, socio-economic and political inequality, host country regime types, and quality of domestic institutions). Proximate or triggering factors are identified as tipping points that transform otherwise latent tensions into outbreaks of open (but not necessarily violent) conflict, with many of them taking place at a local scale (e.g. opening of a new mine; environmental disaster; repression of dissent). Distinct triggers may also lead to variations in conflict trajectory, either in a positive or negative sense. While triggers are more easily identifiable, they may not have produced an open conflict outcome in the absence of contextual and structural factors. Local-level conflicts are therefore likely to be a function of multiple variables that coalesce. As such, we treat each individual factor as being neither necessary nor sufficient for an outcome, but rather constitutes a singular element in a larger combination of factors that together are jointly sufficient (Mahoney 2010: 131).

As discussed below, studies have identified an array of potential situations that often contribute as structural, contextual or triggering factors (Anaya 2011; Bury 2007; Bebbington et al. 2008; Bond and Kirsch 2015; Hilson and Yakovleva 2007; ICMM 2015; Kirsch 2015; Kemp and Owen 2003; Odell and Silva 2006; Ríos et al. 2015; Watts 2005).

Structural factors: colonization and presence of Indigenous groups; pluri-legal land tenure regimes; high levels of inequalities and poverty; historical lack of public service to local communities (e.g.); high dependence on land-based livelihoods; high biodiversity and strong local environmental conservation agenda.

Contextual factors: rise in commodity prices; increase in land pressure and water demand, including from extractive projects; political changes; weakening of the quality of public institutions; type of extractive project (e.g. higher likelihood for open-pit mines); type of commodity produced; size, capacity and 'nationality' of mining company (e.g. higher likelihood for mid-size and foreign companies); overlapping claims and exploitation by artisanal miners and industrial projects; previous history of conflict, including related to the extractive sector.

Proximate/triggering factors: lack of consultation; dissatisfaction on local content or revenue distribution issues; land dispute; corruption; environmental risks and impacts; labour layoffs; failure to delivered on promised services and compensation; abuses by security forces; failure of grievance mechanisms.

As discussed below, the *recent* rise in extractive-related conflicts globally can be interpreted as the result of the combination of the following: First, an increase in resource prices and revenues, which was associated with greater struggles over revenue/benefits redistribution, especially within contexts of revenue decentralization. Second, an increase in the number and relative size of extractive projects, as well as in the number of artisanal and small scale miners, with frequent tensions between these different groups, as well as with local communities facing increased risks and uncertainties with regard to their environment and livelihoods.⁶ Third, an increase in criticisms expressed towards extractive-sector led development, due in part to growing awareness of poor past records (as demonstrated by a voluminous academic and policy literature on the 'resource curse'), as well as rising environmental concerns and aspirations for alternative models of 'development'. Beyond these broad trends, each conflict is unique and draws from the particular histories, institutional dynamics, and power relations of places where extractive activities take place. As such, and in part due to space limitations, this literature review documents but does not go into the details about contextual factors that have contributed to conflicts.

2.1 Structural Factors

2.1.1 Neoliberal Reforms and Structural Adjustment Plans

Throughout the 1980s, international financial institutions and donor agencies proposed developing countries reduce severe indebtedness and poverty through a series of macroeconomic reforms known as “Washington Consensus”. Policy prescriptions included public-sector cutbacks, the privatization of state-owned enterprises, and deregulation, among others. Reforms also sought to create regulatory frameworks that enabled mineral-rich developing countries to exploit their comparative advantage in extractive sectors. For instance, in 1992, the World Bank set out its ‘Strategy for African Mining’, which argued that the ‘underperformance’ of African mining was due to inefficient state-owned enterprises, informal exploitation (i.e., ASM), and under-resourced mining sector support institutions. Reforms focused on attracting FDI in order to develop economies and tackle poverty, and generally translated into changes in investment and mining legislations, including more attractive fiscal terms for companies.

While these reforms had notable successes in countries such as Ghana (Owusu-Koranteng, 2008) and Chile (Bridge, 2004; Schaffartzik et al., 2014), they did not always achieve their promised goals (Campbell, 2009). In some cases, they reduced institutional capacity, and drove down social and economic development standards (Campbell, 2004; McPhail, 2008; UNEC, 2011). As a contributing factor to poverty and inequality in mineral-rich developing countries, neoliberal reforms and the ways they were implemented contributed to some of the conditions creating higher risks of conflicts (Roberts 2006). Studies on Peru, for example, suggest a link between social conflict and the institutional arrangements of the post-structural adjustment period. Within the context of greater but highly fragmented democratization following the end of the civil war and fall of the Fujimori regime, political and fiscal decentralization schemes increased the number of contentious episodes at the sub-national level (Bland & Chirinos, 2014), which have interacted with the global resource boom to affect social conflicts over resource extraction and the distribution of the resulting benefits – the distribution of revenues (Canon Minerero) at the regional, provincial and district having exacerbated conflicts between local political competitors, and with communities (Arce, 2014; Arellano-Yanguas, 2010, 2011).

2.1.2 Investment in Conflict-Prone and Under-Regulated Countries

Exploration and production have increasingly taken place in more conflict-prone (or ‘fragile’) countries, and/or in those with weaker environmental regulations (or enforcement), where it is possible to use more controversial processing techniques (Ganson and Wennmann 2012; Erdogan 2014).⁷ As companies operate in countries with higher national baseline levels of conflict, the potential for specific operations to be affected by local-level social conflict is expected to increase. Likewise, as companies operate in countries with lower regulatory standards and governance capacity, the likelihood of socio-environmental grievances galvanizing resistance should also increase - although firms that adhere to higher international voluntary standards seem to see less conflicts around their particular operations - though this is not specifically tested for conflict-prone areas (Haslam and Tanimoune, 2016).

The literature on firm attitudes towards conflict-prone areas is mixed, and generally points towards company profiles as the salient determinant of risk-aversion (Wolf et al., 2007; Deitlehoff & Wolf, 2010). Larger firms generally seek to avoid conflict areas because of potential losses and reputational damage, whereas juniors tend to be less risk-averse, though there are major exceptions where companies believe they will have the capacity to address existing risks. Others suggest the type of stakeholder pressure (domestic vs. international) may also influence firms’ proclivity to operate in and respond to conflict-prone environments irrespective of size or industry (Oetzel & Getz, 2012). Some firms may even benefit from operating within the context of armed civil conflict in light of the entry barriers it creates for competitors, weaker government bargaining power, and secrecy in licensing

processes (Guildolin & La Ferrara, 2007). While Franks et al. (2014) have demonstrated the financial losses generated by social conflict, studies have not yet systematically assessed whether firms will avoid investing in areas prone to social conflicts, nor have they demonstrated the probable financial losses associated with policies and actions that delay or divert rather than resolve conflict.

Mining investments have transitioned from the global North to the global South, where government capacity as well as regulatory regimes are generally weaker (Hilson, 2002; Bridge, 2004; Bebbington et al., 2008), and while fears of inadequate controls and a 'race to the bottom' may be tempered by the voluntary social, environmental, and labor standards many companies now subscribe to (Schiavi and Solomon 2006), major concerns remain including a lack of accountability (Coumans 2010; Simons and Macklin 2014), and biased use of voluntary standards (Enns 2016). Moreover, the recent decline in commodity prices raises concerns that implementation of these voluntary standards will be weakened. Assuming companies adhere to lower domestic regulations, social conflict risk may increase as a result. For example, Dougherty (2011) has illustrated that competition between junior firms has led them to invest in countries amenable to low-cost production. In Guatemala, lenient policies and favourable geology have made the country very attractive for gold exploration and low-cost production contributing to high levels of conflict between communities and mining companies and high risk of corruption (Dougherty 2015), in a context characterized by civil war legacies, oppression and lack of trust of government.

2.1.3 Commodity Demand Growth and 'Emerging' Companies

Economic growth has driven increases in the level of resource consumption by developed countries and 'emerging economies' (i.e., physical flows of material and energy between societies and the environment). Rising demand for subsoil commodities may play a distant causal role by increasing the number and scale of extractive projects, and by extending the 'commodity frontiers of extraction' into more remote, under-regulated, ecologically sensitive, and politically risky areas.⁸ Europe and North America, have long been net importers of materials from developing countries (Giljum and Eisenmenger, 2004), while growth of the Chinese economy has steadily increased demand for natural resources worldwide (Muradian et al., 2012). These economies, moreover, have industrialized agriculture, shifted to the service sector, and largely outsourced mineral extraction (Krausmann et al. 2008). This has led to heavier reliance on (often less materially-efficient) imports from developing countries (Bruckner et al., 2012). As a result, the commodity frontier further expanded into the global south, facilitated by sector reforms (see below), rising mineral prices (mid-1990s-mid-2010s), strong equity markets and low domestic interest rates (Bridge, 2004). Technological advances have also made previously economically unviable reserves accessible (Moore, 2000). As a result, companies are now able to go deeper and farther, often into areas inhabited by ecologically vulnerable communities (Martinez Alier, 1991, 2003, 2009). For example, OCMAL (2014) points to an increase in the number of investments in environmentally sensitive areas such as moors, highland water reservoirs, glacier fed headwaters, and the Amazon.

As Krausmann et al. (2009) show, non-renewable resources accounted for more than 70% of total material use by the end of the 20th century, with worldwide extraction having increased by an estimated 3.4% per year between 1950 and 2010 (Schaffartzik et al., 2014). Growth in mineral extraction is compounded by the decline in the quality of reserves, often requiring larger energy inputs and generating higher waste outputs (Bridge and Wood 2010; Northey et al. 2014). Several studies have linked the increase in global demand for extractive resources in countries like Ecuador, Colombia and Argentina to an increase in socio-environmental conflicts (Vallejo et al., 2010; Vallejo et al., 2011; Walter et al., 2013). Based on a review of 59 cases, Bond & Kirsch (2015) suggest that the resulting price spikes between 2002-2011 associated with a dramatic increase in exploration and mining activity worldwide, led to an escalation of physical violence in company-community conflicts.

One more aspect of the recent boom has been the further rise of extractive companies - and

investment financing - from 'emerging' countries, and most notably Chinese, Indian and Malaysian companies. Such companies have frequently been decried for their poor practices and for their investments in authoritarian countries (Amnesty International 2013). Some empirical studies have nuanced this assessment, suggesting that in many cases these practices were not comparatively worse than that of companies from the OECD and much depended on the regulatory context of the host country (Irwin and Gallagher 2013; Haglund 2008; Pegg 2012; Tan-Mullins 2015), while it was noted that Chinese authorities and some companies were increasing their efforts to reduce negative impacts (Shankleman 2008; Greenovation Hub 2014).

2.1.4 Anti-Extractivism and Cultural Friction over Resource Usage

Extractive-led development models have come under much criticism over the past two decades as a result of the general rise of environmental or social concerns about climate change, water access, massive biodiversity loss, 'resource curse' effects, and the undermining of traditional livelihoods and cultures (especially in light of large-scale foreign-run extractive projects perceived as the embodiment of globalization, modernization, and formalization processes, (see Polier 1996; Marsh 2013). Opposition has been particularly strong against extractive activities with high climate change impacts, such as oil and coal, and those taking place in environmentally and culturally sensitive areas - especially where Indigenous cultures consider land and water as sacred (Ali 2003; Li 2015). These criticisms are important not only due to the opportunities they create for networking and cross-scalar alliances, but also for the increasing visibility and legitimacy of resistance to extractive projects. Concerns over extractive-led development have been extensively investigated by academic and policy organizations, most notably with a focus on oil (see Barma et al. 2012; Ross 2012), and while findings have motivated development-focused organizations to improve resource governance, they have also questioned the value of extractive activities for host countries and communities.

Various studies have demonstrated the salience of culturally-rooted critiques in community-level conflicts surrounding extractive sectors in countries as diverse as Argentina (Merlinksy & Latta, 2012), Bolivia (Gudynas, 2011; Acosta, 2009), Chile (Urkidi, 2010), Colombia (Chomsky & Striffler, 2014), Guatemala (Urkidi 2011), India (Shrivastava & Kothari, 2012), Nigeria (Nixon, 2011), Peru (Muradian & Martinez Alier, 2003), and Romania (Velicu, 2012; Badera 2014). Escobar (2006) has highlighted the importance of accounting for cultural differences when explaining resource-related conflicts. For many Indigenous communities, the natural environment is understood and used in markedly different ways than that common among 'industrialized' societies, which treat humans as external to nature and generally take a more materialist and utilitarian perspective on 'resources' and the places from which they can be extracted. Environmental Impact Assessments (EIAs) seek to address some of these issues, including through cost-benefit analyses calculating the trade off, as well as gains and losses of environmental change and cultural impacts caused by projects (de Groot et al., 2002; Martinez Alier et al., 2010). Although seeking to integrate the non-monetary significance of impacts, these methods do not always adequately capture the cultural and environmental values people actually hold, such as sacredness, livelihood, human rights, collective territorial rights, aesthetic value, and/or biodiversity (Spash 2000; Söderholm, 2001; Martinez Alier 2009; Temper & Martinez Alier 2013; Hoogeveen 2016).⁹ Concluding an extensive study of mining-related conflicts in Peru, Li (2015) suggests that the politics of 'equivalence' - the "methods with which to quantify and compare things such as pollution" across cultures and interest groups - is central to mining controversies. Cultural elements can also be instrumented as part of struggles over mining-related benefits, notably in term of claims for compensations. As pointed by Bainton et al. (2012) in the case of the cosmological dimensions of a rock formation in Papua New Guinea, tradition is "regularly harnessed as a resource in the political and economic struggles which [local communities] wage against one another, the mining company, and the State" (see also Otto and Pedersen 2005).

Globally, various social movements and transnational advocacy networks have arisen to protect human rights or express a deep rooted defense of local ecologies, traditional livelihoods, and

a desire for modes of development more harmonious with nature. Commonly referred to as the “environmentalism of the poor”, these movements generally seek a transformation of the global economic system into one that is less environmentally malign, and provides marginalized peoples with greater opportunities for participation (Escobar, 2001; Marinez Alier, 2003). As Nixon (2011) suggests, impoverished peoples often use resistance to extractive sector projects to articulate deeper critiques of global economic relations and development paradigms, not to mention concerns for poorly implemented mining practices - including in light of previous projects and their legacies (Graetz 2014). Although local communities may not be against the economic development that may come out of mining (which can put them at odds with counter-globalization supporters, see Kirsch 2007), they can also express concerns about historical patterns of social injustices, examples of technological failures around the world, and specific local conditions that may contrast with official risk assessments presenting a reassuring view of mining projects and sense that they are both ‘controllable’ and ‘inevitable’ (see for example Haalboom 2014).

More generally, there are also frequent cultural differences between communities, companies, and authorities in terms of perceptions and practices. Such differences affect both the ways in which mining and its social consequences are understood at the various stages of a project, including through culturally specific “conceptions of change, wealth, and resources” (Filer and Macintyre 2006: 215), and the ways of ‘doing things’. As Farrell et al. (2012: 194) note in the case of the Mogalakwena platinum mine in South Africa there is a greater risk of conflict when companies adhere to and emphasize “the technical and logistical facets of due diligence [notably on human rights], without sufficient attention to the relational, communicative and emergent aspects”, with thus a need for company management to “become more conscious of this cultural dimension of effective social management, particularly when interacting with communities whose cultures are markedly different from those of business corporations”.

2.2 Contextual Factors

2.2.1 Ill-designed or Poorly Implemented Mineral Development Strategies

Saad-Filho & Weeks (2013) reject the notion that mineral wealth tends to have systematic deleterious effects on the institutions of mineral-rich developing countries, as some of the resource-curse literature suggests (Busse & Groning, 2013; Kennedy & Tiede, 2013). Instead, they argue that curse-like symptoms are attributable to ill-designed or poorly implemented resource-based development strategies, including the inability “to build distributive economic policy alternatives” (Saad-Filho & Weeks, 2013: 13). In a report for the ICMM examining four cases - Chile, Ghana, Peru, Tanzania - McPhail (2008) found host-governments have a critical role to play in governing extraction-led development. National level policies designed to enhance the fairness of the tax regime; promote fair and adequate revenue allocation to resource producing areas; and clearly define land use and property rights could have social conflict reducing effects. Overall, scholars generally agree that government policies are a critical intervening factor in the relationship between mineral resources and socio-economic and political outcomes. In this regard, their ability to manage liberalized resource sectors is an important contextual factor that can shift the socio-political terrain towards, or away from community-level conflict. Moreover, since the early 2000s several countries have attempted to ensure that resource extraction better promotes local level development through the implementation of fiscal decentralization schemes (Arellano-Yanguas, 2011). Neoliberalism and decentralization have thus raised the stakes of extraction-led development. In the Philippines, decentralization efforts increased conflicts as various groups in Mindanao sought to “influence trajectories of institutional change, and the associated distribution of mineral wealth” (Verbrugge et al. 2015: 449). Crucially, as discussed below, host governments must complement revenue decentralization schemes with multilateral partnership efforts to enhance the capacities of regional and local authorities to manage and invest rents (McPhail, 2008).

2.2.2 Weak Government Capacity

Weak institutional capacity, including in the presence of sound policies, can increase the likelihood of conflict, notably through its relationship with corruption and the unwillingness or inability of authorities to realize development outcomes. Tensions are particularly likely where decentralization has resulted in a mismatch between the capacities and responsibilities of local authorities (Arellano-Yanguas, 2011; Pattenden et al. 2011), and where little accountability exists with regard to corrupt practices on the part of authorities. Distrust in public authorities is often prevalent as a result of previous neglect, corruption, and human rights abuses, and can easily combine with grievances towards companies which are seen as associated with (or even replacing) the state, and not sharing the benefits of extraction (Gibbs & Nash, 2014). One of the main negative relationships between mineral wealth and governance relates to a lack of transparency in the appropriation and use of state revenue (Bebbington, 2007; Collier, 2010). Mineral rents can lead to rent seeking behavior through bribes and patronage, and corrode the quality of government (Auty, 2008; Leite & Weidmann, 2002; Torvik, 2002). This can further diminish the often limited trust communities have in national and regional governments (Le Billon 2014; O'Higgins 2006; Rothstein 2011). Using data covering the 2004-2011 period, Bland & Chirinos (2014) found weak institutional capacity increased the likelihood of social conflict in Peru's revenue-rich mining regions. In these areas, subnational authorities did not have the experience, personnel, and administrative systems to manage rents adequately, giving rise to wasted revenues, inadequate service provision and corruption (see also Ponce and McClintock, 2014). Hinojosa's (2011) comparative study of Peru and Bolivia echoes these findings, concluding that socio-economic development in mining regions have had limited success in part due to the lack of technical expertise of subnational bureaucracies. The impact of weak government capacity, including for enforcement in the areas of health and safety, environment and labour have also been recognized (see Warhurst 1999; Honkonen 2013), though not specifically and systematically in terms of conflict likelihood or escalation.

2.2.3 Legacies of State Repression and Contentious Politics

The legacies of civil wars and repressive authoritarianism can undermine the trust placed in government by local population and thereby increase the risk of social conflicts, especially in contexts where contentious politics combines with ineffective institutionalized conflict resolution mechanisms such as an independent and accessible judicial system. In some resource-rich developing countries, the strategic importance of extractive sector projects has been accompanied by a growing intolerance towards social resistance, resulting in the increasing use of repressive measures and the criminalization of protest (Global Witness 2014). In others, improved respect for human rights and less repressive policing have facilitated the growth of social movements openly contesting extractive projects when less oppositional tactics fail to yield results (on contentious politics, see Tilly and Tarrow 2015; Machado et al. 2011). In turn, a combination of greater civil liberties but weak governance institutions can increase the number and the violent character of protests and policing, resulting in frequent occurrences of fatalities and temporary states of emergency. Reactive and coercive responses have often overshadowed preventive and deliberative policy responses by governments, with NGOs (particularly in Latin America) expressing great concern (OCMAL, 2015; GRUFIDES, 2013). Although appearing transversally in the academic literature and recent legal precedents, this reaction by governments has yet to be examined in detail (Bebbington, 2011; Walter & Urkidi, forthcoming; Martinez Alier et al., 2014; Özen & Özen, 2009; Ward 2011). The industry has crucial role to play in this regard, as mine installations and property are often protected by state and private security forces, including through surveillance (Ferguson, 2006; Bebbington, 2007; Kamphuis, 2011; Campbell, 2006). Adherence to international and generally multi stakeholder initiatives, more specifically the Voluntary Principles on Security and Human Rights and the UN Guiding Principles on Business and Human Rights, can help address some of the concerns associated with the coercive tendencies of particular

host governments and/or the challenging security context in which companies operate (Guaqueta, 2013; Slack, 2012). As demonstrated in the case of the Kilwa/Dikulushi mine in the Democratic Republic of the Congo, implementing such principles can prove very challenging (not only for the company, but for investors too), especially in areas affected by armed conflicts (CAO 2005).

As further discussed below, and while governments must be held accountable for repressive tactics, it is important to note that in the absence of formal deliberative institutions, local communities may also have a strategic interest in utilizing conflict escalation as a bargaining tool. Given the asset fixity, large sunk costs, and reputational concerns of extractive sector projects, communities can strategically and credibly utilize conflict escalations to force dialogue (Anguelovski, 2011; Trebeck, 2007).

2.2.4 Poverty and Marginalization

The published literature reveals mixed reviews on the impact of the extractive industries on poverty (Gamau et al., 2015). Companies, states and international development agencies point to growth, fiscal transfers, job creation and forward and backward economic linkages as positive arguments for poverty alleviation (ICMM, 2006, 2013; Kumar, 2007; Pedro, 2006). Yet, the majority of academic studies challenge this optimistic narrative (Pegg, 2006; Ross, 2012; Gamau et al. 2015), with studies notably demonstrating economic underperformance, increasing inequality, employment volatility (Deaton & Niman, 2012), limited linkages (Bunker, 1985; Ferguson, 2005), as well as governance challenges (Ross, 2007). Some studies suggest that despite high social and environmental impacts artisanal mining can in some areas have much more forward and backward linkages with local economies and higher job creation, and would generally have more potential for poverty reduction than industrial mining (Gamau et al. 2015; Maconachie & Hilson, 2011). Accordingly, it is important to consider the roles of poverty and socio-political marginalization in conflict around projects, as well as the ways through which 'grassroots resistance' can emerge and challenge extractive interests (Horowitz 2012).

Poverty can have mixed effects on conflict. It may be unlikely to lead to conflict outbreaks as the chronically poor often lack time and resources to mount collective action, or may not want to bear the risks entailed (Bebbington, 2007; Conde & Kallis, 2012; Cleaver, 2005). However, poverty may reduce the opportunity cost of participating in conflicts (i.e. 'nothing to lose'), and may contribute to a sense of relative deprivation among local populations as their poverty is contrasted with perceptions of resource wealth and uneven distribution of risks and benefits. While extractive projects can provide direct and indirect economic opportunities, including jobs, for local community members, the effects of high levels of poverty on education levels and skills can reduce the employability of local residents by companies. Poverty can also increase the presence of small-scale artisanal miners or oil bunkerers seeking to operate within mining and oil concessions, thereby increasing tensions between local populations, companies and the state (Maconachie & Hilson, 2011). There is also anecdotal evidence of competition over jobs and access to mining sites, as well as conflicts over compensation between and within local community (including returning family members attracted by the hope of benefits) and 'outsiders' (including communities just outside the 'impacted area', or people in search of jobs), as documented in the case of Peru and Sierra Leone (Akiwumi, 2014; Maconachie, 2012). In their study of Latin America, Haslam & Tanimoune (2016) have found that local-level poverty increases the likelihood of conflict via the distributional demands that emerge.

2.2.5 National and Host-community Demands for a Greater Share of Benefits

States and citizens in the global South have struggled for decades with extractive companies over the distribution of rents and other economic and social opportunities produced by extractive sectors. Demands by societies and their governments for a fairer share of mining revenues, or greater control over national resources, can be a key national-level driver of local conflict and tension, especially in

relation to oil and gas industries, as seen in Bolivia (Perrault & Valdivia, 2010), but also with mining as in the case of iron ore in Brazil and Uruguay (Kohl, 2006; Perrault et al., 2011; Bridge, 2013; Gibbs & Nash 2014). Historically, high energy and commodity prices have spurred nationalizations. Oil producing countries such as Russia, Venezuela, Bolivia, Ecuador, Nigeria and Kazakhstan, have been re-negotiating arrangements with oil companies, seeking to maximize their share of high oil prices until recently (Stanislaw, 2009). Guinea, Liberia and Sierra Leone have also renegotiated mining contracts, increasing mineral royalties and corporate taxes, while the government of DRC reviewed 61 local mining contracts, with several cancelled or renegotiated. In Ecuador, Amazonian Indigenous peoples as well as national petroleum workers and union members strongly opposed FDI into the oil sector, arguing in favor of more state control (Perreault & Valdivia, 2010). In Bolivia, the favorable conditions for businesses promoted by the IMF during the late 1990s pushed Indigenous and union-led social movements to challenge the country's 'neoliberal' trajectory and move towards resource nationalization, which in turn resulted in tensions with some of the traditional elites (Kaup, 2010; Kohl & Farthing, 2012).

2.2.6 Polarization and Politicization of Tensions

Conflicts related to extractive sectors do not take place in a 'vacuum', but often build from and feed into broader political conflicts. Political opposition forces, for example, can use tensions over projects to bolster their relative position and legitimacy (Macintyre and Foale, 2004). While polarization may strengthen coalitions, it may also prevent constructive engagement between the various sides involved in conflict (Bebbington et al. 2008b). A study of 3,731 subnational social conflict events in Bolivia between 2000 and 2011 suggest that "high-value natural resources [oil, gas and mineral ores] can act as an important catalyst for the politicization of ethnic, specifically Indigenous identity, and contribute to social conflict as they limit the malleability of [social group identification] and raise the stakes of confrontations" - in other words, (self) identification as 'Indigenous' seems to limit the range of possible negotiated outcomes and increase the risk of social conflict (Mahler & Pierskalla, 2015). Such 'built-in' effect can also occur more broadly with regard to political and economic legacies including the historical neglect of particular regions or ethnic groups by the central government, which in turn can increase grievances and distrust as well as provide ground for claims of greater compensation and control over resource sectors (Le Billon 2013).

The politicization of tensions associated with extractive sectors can also reduce the chance of bringing about a transformation of economic processes, as emphasis is placed on political rather than economic transformations, and because of a reduced scope for wider alliances with major economic actors. Examining the effects of politicization on social conflicts across Peru's twenty-five regions, Arce (2014) found higher levels of resource revenues to be a good predictor of mining-related social conflict only within the context of the post-2002 political decentralization process, which has increased the number of parties/political entrepreneurs competing for sub-national office. Moreover, Arce (2014) finds a closer relationship between protests and local political conditions, than with resource revenues. Because local parties are often headed by "amateur" politicians with weak ties to national parties, their behavior is difficult to control. As a result, conflict likelihood increases as entrepreneurs adopt confrontational or populist methods to enhance their position vis-a-vis competitors.

2.3 Proximate or Triggering Factors

2.3.1 Characteristics and Perceptions of Mining Projects

The specific resources being mined and the geographic location of deposits may increase conflict likelihood (without triggering outbreaks) given their influence on the types of firms involved, and the nature and scale of the socio-environmental impacts. Commodity-types and the characteristics of

mineral deposits not only influence extraction and processing techniques, but can also affect the relative the size and experience of firms that can exploit them, as well as the impacts that extractive projects will have on local communities and landscapes (e.g. deposits more amenable to open-pit mining compared to deep-shaft underground mining).

First, the geological and geographic location of deposits may predispose conflict if the location has high cultural and/or environmental sensitivity, by influencing the type of mining operation developed and the accompanying livelihood impacts. Haslam & Tanimoune (2016) have shown open-pit mining to have the highest social conflict likelihood (versus underground or surface operations) due to its transformation of landscapes and adverse effects on underground and surface hydrogeology, especially at altitudes where communities confront an already redistricted livelihood portfolio. Second, Haslam & Tanimoune (2016) demonstrate a non-monotonic relationship (inverted U-shape curve) between firm size and conflict likelihood. While junior firms have no significant correlation to social-conflict, mid-tier and major firms do, with mid-tier companies being associated with a greater risk of conflict as compared to majors.

Additionally, commodity type determines the processing techniques involved (e.g. flotation, lixiviation, bioprocessing), the reagents used, and as a consequence, the real or perceived impacts on local communities. For example, gold mining is thought by some to increase the likelihood of social conflict given the usage of mercury in ASM, and cyanide in LSM. Research, however, has generated mixed conclusions on the effects of commodity type. While Bond & Kirsch (2015) suggest gold and copper mining to be related to more violent conflicts, Haslam & Tanimoune (2016) only find silver to be significantly correlated with conflicts.

Third, the stage of the mining operation is another crucial factor influencing how conflict evolves, and notably when communities decide to take action. Before the mine is in operation, communities are more likely to confront and oppose the project, with a risk of violence as security forces are deployed to 'clear land'; but if the mining project has been approved, developed, or being operated for a long time, the community is more likely to focus on compensation, jobs, environmental impact reduction, or land rehabilitation (Franks et al., 2014; Bebbington, 2012). The construction phase is a particularly sensitive phase, with greater job opportunities not always matching very high expectations on the part of populations, with impacts becoming visible while compensation may be delayed or people disappointed by the new arrangements (e.g. new housing), and with job and economic losses at the end of construction frequently resulting in rising grievances. Furthermore, incentives and time-pressure for mine construction companies to complete the infrastructure project can undermine the adoption of conflict prevention best practices.

While the diversity of conflict causes, types and likelihoods is recognized for different stages of project development, the literature does not yet seem to include a systematic empirical comparison drawing from a large number of cases.

2.3.2 Land Rights and Impacts on Environment and Local Livelihoods

As the extractive frontier expands into impoverished rural areas, conflict likelihood increases as communities react against the real or perceived degradation of life and livelihood sustaining environmental resources such as land and water (Redclift, 1987; Guha & Martinez-Alier, 1997; Alvarez et al., 1998; Goodhand, 2001; Bebbington, 2007; Bebbington and Williams, 2008). The more direct, visible and immediate the impacts on health or livelihoods are, the more likely mobilization, especially given the lack of options faced by the poor to avoid or address these impacts (Conde & Kallis, 2012). Land rights and riparian water rights, in particular, constitute major factors of conflicts, especially when extractive projects affect Indigenous communities already struggling for recognition of their traditional territories. Conflicts often result from the legacies of colonial legislation dispossessing local communities and allocating subterranean resource rights to the state and corporations, and associated

controversies over the validity of customary rights entitling local communities to mine or lease their land for mining (Lange 2008; Umejesi 2012). More generally, inadequate recognition of traditional land uses and compensation for the loss of resource access rights constitute major grievances within communities (Hilson 2002; Boone 2015). Environmental and social impacts are inevitable consequences of mining activities, and often affect the livelihoods of local agrarian communities who react to protect themselves. Local livelihoods may be adversely impacted by changes in the quality and quantity of water, industry encroachment on grazing areas, and the erosion of traditional cultural practices and social relations as a result of displacement and in-migration (Bebbington et al. 2010; Bury, 2007).

The environmental burdens of extractive activities are often a proximate cause of conflicts that can transform grievances over livelihood impacts into larger, violent conflicts (Franks et al. 2014; Klare 2001; Switzer 2001). Water is often at the center (Boelens et al., 2010). In Peru, for instance, mining concessions are frequently located in high altitude headwater regions, with water impacts extending well beyond fence-line communities (Bebbington & Williams, 2008). In Bolivia, Perreault (2013) has shown that mining enclosures have driven conflict through the dispossession of land (in a frequent context of unclear and disputed land tenure system), the accumulation of toxic waste, and water pollution. Haslam & Tanimoune (2016) found that conflicts in Latin America were most likely to emerge around open-pit mining projects located at medium-level altitudes owing to the larger environmental impacts these projects had on communities already confronting restricted livelihood portfolios.

Summing-up findings from the extensive literature on mining-related social conflicts in the Andean region, Arellano Yanguas (2010: 81) concludes that communities are more concerned about uncertainties over resource assets such as land and water key to their sustainable livelihoods, than environmental damage per se. Moreover, different community members interpret this uncertainty according to their relative position with regard to the risk of traditional livelihoods unsustainability versus possible opportunities for new types of livelihoods relating to extractive operations and associated revenues (Gamau et al. 2015). In this regard, an open conflict - such as in the form of blockades - can sometimes help communities gain leverage over companies and authorities, either to protect traditional livelihoods or to enhance alternative ones (e.g. through more local employment, higher compensation, or a greater share of royalty revenues; Arellano Yanguas 2011), while conflicts resolved through strong and constructive government engagement, such as through independent judicial court rulings, may help - at least temporarily - to settle a conflict between project proponents and communities (North and Young, 2013; Temper and Martinez, 2013).

2.3.3 Lack of Participation or Representation of Local Communities

Conflict likelihood increases when affected communities are prevented from participating in resource governance (Ali & Grewal, 2006; Ballard & Banks, 2003; Horowitz, 2002). Jaskoski (2014: 873) observed in Peru that “very limited spaces for community participation in the environmental impact assessment process ... prompted and transformed popular mobilization in extractive zones, leading to outside scrutiny and the stalling of major projects”. Although public consultations are legally required in Bolivia, Perreault (2015: 433) observes that they are tightly managed and non-binding, and suggests that they mostly attempt to “legitimize extractive activities”. The presence of formal but often lengthy mechanisms for deliberation between local stakeholders and companies - such as dialogue tables and grievance protocols- should help reduce the likelihood and intensity of conflict and various studies have demonstrated the importance of local governance mechanisms (Flor 2014; Viscidi and Fargo 2015). However, anecdotal evidence suggests that protests and dialogue can coincide and relate to each other. For example, analyses of social conflict at the Tintaya mine in Peru have found communities utilized protest and confrontation to initiate and transform dialogue mechanisms (Caceres & Rojas, 2013; Anguelovski, 2011; De Echave, 2009; Barton, 2005). Bebbington et al. (2008) show in their analysis of rural and urban protests against the Yanacocha mine in Peru, that the objective of conflict has not been to shut down the mine per se, but to obtain fair compensation for lost land, increased share

of benefits, and crucially, greater participation in the governance structures. Furthermore, exclusion from these formal mechanisms can itself become the object of conflicts escalating into protests.

Direct engagement by communities with companies can take the form of Exploration Agreements and 'Impact Benefit Agreements' (IBAs) negotiated between companies and communities, either before or after mine development permits were granted. These types of agreements are now the accepted way of engaging Aboriginal communities in Canada and Australia. While they are not generally required by law, regulatory bodies will not normally grant a license to a company unless an IBA has been successfully completed and the community expresses satisfaction. In some cases though, power imbalances between communities and mining companies need to be addressed prior to the agreements if real changes for communities are to occur (O'Faircheallaigh 2008; Peterson St-Laurent and Le Billon 2015).

In other cases, participation may not entail direct dialogue with companies, but is focused on communities' rights to participate more broadly in the exercise of Free, Prior and Informed Consent (Escobar, 2001; Muradian et al., 2003; Urkidi, 2011). For example, Avci et al. (2010) found that conflict over gold mining in Mount Ida, Turkey was rooted not in the compensatory schemes offered by the company, but in the threat the project posed to local livelihoods and human health, and a demand by some community members to create and exercise a right of refusal for the project. In Guatemala, communities struggling with the Marlin mine linked local environmental concerns to the defense of their Mayan traditions and culture demanding "legal participation rights and the democratization of decision-making processes" (Urkidi, 2011). Consultas - public referendums or plebiscites generally conducted at the local level by community members themselves - are increasingly used by communities in several Latin America countries. Following the Tambogrande, Peru, consulta in 2002 (Haarstad & Fløysand, 2007; Muradian et al., 2003) as many as 68 consultas have been carried out up to 2012 in five different countries, and more are on-going with all mining projects being rejected by the communities (Walter & Urkidi, 2015; see also De Echave et al., 2009; Walter & Martinez Alier, 2010; Urkidi, 2011). Free, Prior and Informed Consent (see below) and participative processes organized by the state or mining companies can also determine or canalize communities' responses to conflicts at an early stage (Szablowski, 2010). Using a comparative analysis of three mining conflicts in Peru (Conga, Tia Maria, Quellaveco), Jaskoski (2014) shows that the extent to which EIAs facilitate the formal participation of stakeholder communities in the initial project stages, represent a critical juncture that determines whether or not conflicts morph into anti-mining movements calling for the outright rejection of a project.

Formal participation at various project stages is both a function of corporate activity and formal rules (i.e., regulatory regime) governing extraction, with many nuances in levels of information, consultation and effective participation in decision-making. Much attention has been given in Peru to 'Dialogue Tables', a mechanism created by law to foster citizen participation or consultation, which can allow for more peaceful and collaborative relations between local population representatives, mining companies and state entities; though at times resisted by part of the communities of concern, Angelovski (2011: 384) suggests that an "iterative relationship between dialogue and resistance can improve intercultural relations and mitigate power differentials".

2.3.4 Company Social Responsibility Practices

While some communities may oppose mining per se, many conflicts arise from poorly implemented company practices, including on health and safety, hiring, reimbursement of local contractors, and community engagement (Zandvliet and Anderson 2009; McClearn 2015). The past two decades have seen increasing numbers of mining companies recognizing the importance of community engagement and social responsibility practices, commonly referred to as corporate social responsibility (CSR), as an aspect of their operations necessary for achieving 'sustainable development'. This has been motivated by increasing demands for better practices by local communities, home governments,

host governments, civil society groups and ethically-driven investors, and as poor practices have been implicated in the prevention of lasting relationships with local groups and to increasing costs associated with conflicts (ICMM, 2013; Dashwood, 2012).

Major mining projects can suffer significant financial losses from conflicts, including for delayed production (Franks et al. 2014), thus providing a strong business case to address social and environmental risks. Besides reputational and delays in construction risks, financial risks from conflicts include extra-conditions for borrowing and declines in share prices, as well as the withdrawal of permits, imposing penalties or tightening of requirements by host governments (World Resources Institute, 2007). There is, however, a concern that companies have only integrated short-term fixes to conflict avoidance – some of which may be aggravating factors for future conflicts – rather than long-term solutions towards conflict prevention and transformation. Furthermore, CSR activities are often given even greater importance in the context of the absence or weakness of state institutions and public services, thereby relocating de facto expectations and responsibilities onto companies frequently identified as state-like (and state-approved) actors by communities. Company practices, including day-to-day operations (e.g. contractor management) but also CSR activities (or lack thereof), seem to be important determinants in the likelihood and severity of conflicts.

A basic responsibility of companies towards their shareholders is to ensure the protection of their assets. However, a core corporate social responsibility towards local stakeholders is to ensure that this protection does not violate human rights. Asset security is frequently performed through the use of public and/or private security to guard mine installations, protect company employees and supply companies (Ferguson, 2006; Bebbington, 2007). Often hosted and supported by companies, these public forces are often perceived by local communities as allied with, and responding to the concerns of companies, rather than protecting the public interest, which can aggravate local tensions that already exist. Private security can occur with state support that provides and willingly delegates its own security forces (on and off-duty) (Campbell, 2006), while some corporate security strategies have “consciously enlist[ed] local elites as the first line of defense” against environmental activists (in the case of Batu Hijau mine in Indonesia, see Welker 2009). Despite efforts to improve the conduct of security forces, such as through the Voluntary Principles on Security and Human Rights, grave human rights abuses continue to occur in association with the extractives industry (Coumans 2010; Pitts 2011), including the killing of environmental defenders (Global Witness, 2014). Security forces are often perceived to have a major role in the escalation of conflicts and poor outcomes for local communities (Kamphuis, 2011), and thus constitute a core social responsibility for mining companies as acknowledged by the Voluntary Principles on Security and Human Rights.

Given the growing number and corporate awareness of conflicts, many companies have radically changed their community engagement practices, notably by shifting from little or no information channels to more rigorous engagement and social development strategies encapsulated under the CSR umbrella (Ali & O’Faircheallaigh, 2005; Himley, 2013; Jenkins, 2004; O’Faircheallaigh et al., 2008; Yakovleva, 2005). These are a set of policies and programs that include the use of cleaner technologies, shared decision-making, improved communication strategies at different levels, as well as better distribution and allocation of benefits to local communities with the aim of preventing costly opposition and minimizing conflicts, with at times broader goals of building long-term trust and winning community support for their projects (Himley, 2010; Moffat and Zhang, 2014; O’Faircheallaigh & Ali, 2008; Zandvliet & Anderson, 2009). The two main critiques to these programs include their voluntary and non-enforceable nature (Fulmer et al., 2008; Watts, 2005), and poor implementation (Szablowski, 2002).

Companies generally carry out CSR programs at the local level to obtain and maintain a ‘social license to operate’ (Commdev_ 2008; Costanza 2016). CSR programs may confer material goods and opportunities in support of sustainable development, yet they may also cause or aggravate conflicts by raising expectations, heightening distributional asymmetries between or within stakeholder communities, acting as subtle mechanisms of control, or be implemented in a flawed manner causing

unintended consequences. Based on research in Peru, Li (2010) suggests that companies have used CSR programs as a strategy to defuse local opposition. In a detailed study of CSR practices in Argentina, Mutti et al. (2012) identify widespread disappointment among local community members and civil society organizations who frequently emphasize that CSR does not respond to their major concerns, and is mostly used in a reactive manner.

Comparing diverging community support for two projects run by the same gold mining company in Guatemala, Dougherty & Olsen (2014) stress the importance of the projects' socio-material contexts and impacts (e.g. geology, hydrology, and land tenure), suggesting that such factors are crucial to the success of CSR activities -which should address the specific contexts in which they are deployed, rather than usual 'blue-print' development projects. The perspectives of local stakeholders are crucial for assessing the efficacy of CSR to prevent and mitigate conflict. While company representatives recognize the importance of good CSR practice and generally have a favorable impression of their effects on conflict management, maximizing CSR's conflict management potential - including through integrated social performance and social investments - requires a refined assessment of the perspectives of local communities (Rees 2009; Rees et al. 2012).

Several studies of CSR programs for mining projects in Guatemala (Dougherty & Olsen, 2014), Ecuador (Warnaars, 2012), Ghana (Hilson & Yakovleva 2007) and Kenya (Abuya 2016) suggest that in many cases they are not well designed, increase rather than alleviate the communities' hardship, and can trigger conflicts when CSR projects are delayed or not implemented. Gilberthorpe & Banks (2012) show how CSR weaknesses stem from the companies' emphasis on meeting global 'performance standards' instead of aligning their programs to the needs of each social context advocating for the need to have greater community engagement. The issue of participation of local communities is another common critique; unlike the state, companies differentiate between recipients of benefits, prioritizing those closer to their project or local elites, ignoring some communities that might also be impacted causing on some occasions inter and intra-community conflicts (Jenkins & Yakovleva, 2006; Newell, 2005; Warnaars, 2012). Moreover, Jenkins (2004) showed through the analysis of company reports, that the community was envisaged in relation to the company (not as an external complex reality) and that the company's actions are determined by external constraints such as conflict, with no attempts to understand the communities' nature and needs. The context in which these programs are developed is also of crucial importance; weak governance (Yakovleva, 2005) or post-confrontational events where the company has already lost its legitimacy don't provide good grounds for CSR programs (Warnaars, 2012). With the ever increasing exchange of information across networks and alliances, communities are already questioning the merits of the extractive 'development' model and CSR programs brought by the mining companies (Bebbington et al., 2008a). In response to these criticisms the UN, WB and industry advisory bodies like the ICMM as well as other think tanks and researchers have been working on ways to improve community-company relations; developing guidelines and providing advice to both mining companies and communities in order to reach agreements and avoid conflict (see below).

2.3.5 Asymmetry in the Distribution of Economic and Social Benefits and Impacts

Franks et al. (2014) have identified distribution of benefits issues as a crucial predisposing factor of community-company conflict. For producing areas, extractive sector projects entail jobs, social investments, and rents. However, these material goods are often concentrated in fence-line communities and producing jurisdictions, and can stoke grievances both within and between communities. Furthermore, social differentiation is often exacerbated or reworked through uneven access to benefits within communities themselves, for example through compensation, employment, or CSR beneficitation (van de Standt 2009). Moreover, high company profits can generate incentives for communities "to claim the fulfillment of promises" as well as compensation for lost assets and livelihoods as in the case of Papua New Guinea (Kirsch, 2007) and New Caledonia (Ali & Grewal, 2006). The alarming increase in social conflict in Peru following the global minerals boom has been driven not by an outright rejection of extractive projects per se, but by stakeholder desires to access a greater

share of the unprecedented profits, and by tensions between producing jurisdictions seeking access to resource rents (Arellano-Yanguas, 2011).

2.3.6 Distrust and Breakdown of Constructive Relations Between Parties

Distrust in mining companies and governments can also increase the likelihood of confrontation (Muradian et al., 2003). Trust is a socially constructed outcome of the iterative interactions stakeholders have with companies. Based on a longitudinal study of trust between local communities and mining companies in a mining region of Australia, Moffat and Zhang (2014: 61) argue that “community members’ perceived contact quality and procedural fairness” significantly contribute to (re)building such trust, even following major environmental impacts. Perceptions of projects’ socio-environmental impacts are also an important determinant of the degree of trust communities have in companies (De Echave et al., 2009; Li, 2015; Zavaleta, 2013); with community perceptions and distinct expectations, (dis)trust and grievances, varying over time as the project is proposed, developed, operated, and closed (Lawson and Bentil, 2014). While the effects of trust on community-level conflicts are difficult to study systematically, several case studies have provided anecdotal evidence of its role. Studying the decisions of Kanak villagers in New Caledonia, Horowitz (2010) argues that trust was not determined by the scientific validity of the information provided by the company, but by the personal perspectives and sense of affiliation of villagers with either the company, or the protest group mobilizing against it. In Peru, scholars suggest that resistance to Minera Yanacocha’s Quilish, Conga and Southern Coppers’ Tia Maria operations was influenced, in part, by widespread distrust in the company stemming from decades of strained relations (Tanaka and Melendez, 2009; De Echave & Diez, 2013).

2.3.7 Mobilization and Transmission of Opposition to Mining Operations

Extra-local alliances between communities and NGOs, as well as the broader political economy network related to extractive projects, manifest at the regional, national and international levels and contribute to the emergence, escalation and geographical expansion of conflicts (Conde & Kallis, 2012; Holden & Jacobson, 2009; Bebbington et al., 2008a). Communities are more informed, mobilize more easily and communicate more effectively as a result of the availability of internet and social media, with the diffusion of information across national and transnational networks helping communities to identify potential mining impacts, decide on the most effective modes of resistance, raising funds and mobilizing supporters, often before operations start (Walter & Urkidi, 2015; Özen & Özen, 2011; Svampa et al., 2009; Bebbington, et al. 2008a; Conell & Cohn, 1995). Communities that do not have extra-local contacts may be less likely to escalate resistance.

Alliances also allow for conflicts to “jump” scales. Through connections with international NGOs, lawyers, scientists, and other communities and local activists, affected communities may realize that their struggle is not simply a local problem, but the result of broader issues, such as regional and national regulatory frameworks (Urkidi & Walter, 2011), or a weak position within the global free market (Martinez Alier, 2003; Watts, 2005). Extra-local alliances also affect the strategic framing of conflicts. For example, Haarstad & Fløysand (2007) demonstrate that opposition to the Tambogrande project in Peru’s northern Piura region utilized a local identity frame rooted in the defense of land, a national frame defending Peru’s iconic national dish, ceviche, and a global frame of human rights and democracy. In Chile, activists transformed the Pascua Lama conflict by connecting the project to the broader issues of climate change (including the preservation of glaciers and glacial melt waters), democracy, and access to information (Urkidi, 2010).

It is important to highlight that responses to mining projects (or extractive projects in general) are rarely homogenous. Divisions within communities, and their broader networks, are common due to different visions of development, different values, vulnerabilities (e.g. with some community members

relying on their land and resources more than others) or some community members obtaining more benefits from the mines than others through jobs or development projects (Horowitz, 2002, 2012; Bebbington et al., 2008a).

3. MECHANISMS FOR CONFLICT TRANSFORMATION, PREVENTION AND RESOLUTION. WHAT MECHANISMS HAVE PROVEN MORE EFFECTIVE?

Adherence to 'good practices' in terms of exploration, mining development, production and closure can decrease the likelihood or severity of conflict. Several reports provide the extractive industry with guidance on conflict prevention and transformation, including:¹⁰

- International Alert's "Conflict-Sensitive Business Practice: Guidance for extractive industries" (Banfield and al., 2005).
- ICMM's "Human Rights in the Mining & Metals Industry" (ICMM, 2009b).
- UN Global Compact's "Guidance on Responsible Business in Conflict Affected and High Risk Areas" and UN Guiding Principles on Business and Human Rights (Powell et al., 2010).
- EU-UN's "Toolkit and Guidance for Preventing and Managing Land and Natural resources Conflict – Extractive Industries and Conflict" (Grzybowski, 2012).
- PDAC's Preventing Conflict in Exploration and E3 Plus Guidelines on CSR for mineral exploration and development.
- IHRB's "Promoting Human Rights, Ensuring Social Inclusion and Avoiding Conflict in the Extractive Sector" (Wachenfeld et al. 2014).
- UN-WB's "Preventing Conflict in Resource Rich Regions" (Rios et al. 2015)

These reports share several recommendations, including:

- Conduct social, environmental and political due diligence and risk analysis prior to going on-site (especially for companies);
- Regularly conduct thorough and multi-level conflict analyses (for companies and governments);
- Engage local communities and stakeholders and promote their active participation in decision-making, including over land-use planning (for companies and governments);
- Ensure the enforcement of more stringent environmental regulations and mitigate negative social and environmental impacts (for governments and companies);
- Prevent complicity in abuses by security services, government officials and subcontractors through policies and monitoring (for governments and companies);
- Ensure that benefits, including revenue transfers, reduce poverty and promote greater equity (for governments);
- Manage revenues in a transparent and accountable way (for governments and companies);

- Strengthen legal frameworks and institutional capacity (for governments);
- Follow an approach to extractive governance incorporating a focus on human rights, social inclusion and conflict prevention;
- Promote constructive engagements between the various stakeholders, and address grievances and disputes in a pro-active way (for governments, companies, and communities).

Most of the guidelines, toolkits and reports are aimed at extractive sector companies, and to a lesser extent governments, rather than to local communities (but see, Collins & Fleischman, 2013; UNPFII 2008; NRCan 2013). Further guidance for communities - such as PDAC's Mining Information Toolkit and e3 Plus, as well as De Brouckere (2014) and RLI (2105) - would help to achieve much of what company-oriented guides advocate for: community empowerment, broad-based involvement (including women, marginalized groups, etc.), capacity building, community understanding of the project and participation in decision making processes. If communities are well-informed and given the option of refusing or accepting a project, and remain involved in decision-making throughout its lifespan, conflict risks may be reduced. In this respect, three key aspects are identified across the literature: 1) participation in decision-making over projects; 2) negotiation frameworks and agreements over state-company-community relations; and 3) transparency and accountability in revenue management and community-led development.

3.1 Participation

Establishing fair and transparent dialogue and negotiation processes early on is widely recognized as the path to positive relationships with communities (Banks, 2013; Caballero-Anthony, 2013; Helwege, 2015; Sawyer & Gomez 2008; UNPFII, 2008). As noted above, the industry has increasingly adopted CSR and participatory processes to address community needs and grievances and reach agreements (Baker & McLelland, 2003; O'Faircheallaigh & Corbett, 2005; Perreault, 2008 O'Faircheallaigh, 2013; Kemp & Owen, 2013). As summed-up by Franks (2009), "[b]y opening meaningful dialogue, understanding the community's past and desired futures, addressing real and perceived community concerns, and negotiating a space for development within that vision, resource companies may be better placed to avoid conflict with community and the costs that conflict brings". Wachenfeld et al. (2014: 33) stress in particular the importance of "reaching out to socially excluded groups to engage them in decision-making that will affect them, will help in identifying impacts unique to the group or impacts that may fall disproportionately on the most vulnerable, while at the same time signal important messages about social inclusiveness".

Consultation processes, however, have also often been limited to environmental, human rights or health and safety issues, negating resource control issues or the rights of communities to decide their own development path, externally driven rather than owned by communities themselves, used at the onset rather than throughout the life of a project, while still representing a challenge for some communities to defend or articulate their perspectives and demands (ELLA, 2012; Laplante & Spears 2008; Lockie et al., 2008; UNPFII, 2008; Flemmer and Schilling-Vacaflor, 2015). Effective participation thus requires strong principles, practices, adherence to established methodologies and benchmarking to international practices (see e.g., Arbelaez-Ruiz, 2015). Reaching agreement with impacted communities over compensation and support, as well as between large-scale and small-scale miners is especially important when local livelihoods are at stake (Hilson 2002).

3.1.1 - Participatory Principles

A major principle of community participation advocated by some is the concept of 'Free, Prior and

Informed Consent' (FPIC), which is stated in international law for Indigenous Peoples through the aspirational, non-binding declaration of the UN General Assembly, and the ILO 169 treaty which has so far been ratified by 22 countries. According to FPIC principles, community consent to a project must be entirely voluntary, obtained before legal permission is granted, enable affected communities to know as much about their rights and the proposed project as the proponents, so both can negotiate with equal information (ELI 2004; Goodland, 2004; Prno & Slocombe, 2012; for an implementation guide, see Hill et al., 2010). FPIC has often been resisted by governments and companies, and faces challenges even when legislated, though many large mining companies have now committed to FPIC (Oxfam America, 2013; 2015). International financial institutions have generally favoured a diluted version known as "free, prior and informed consultation" leading to "broad community support" (WB, 2005; IFC, 2012). Part of the industry has recognized the importance of a 'social licence to operate' (SLO) through which companies secure broad acceptance from impacted communities (Prno & Slocombe, 2012). Lehr & Smith (2010: 8) have suggested that embedding FPIC principles "within broader Indigenous peoples or community engagement" could be in the long-term interest of companies.

The Inter-American Court on Human Rights has established a jurisprudence requiring the consent of Indigenous communities for extractive projects potentially affecting their survival as Indigenous peoples (Ward, 2011). Arguing that customary decision-making mechanisms were frequently undermined by intra-community divisions and the exclusion of women and other marginalized groups, the ICMM (2013) has stressed the need for 'whole community' processes. In this regard, the rise of community referendums, most notably in Latin American countries and especially Guatemala, is seen by some as a democratic way to implement some of the FPIC principles, notably as a mechanism to express local consent, while others point at the use of questionable voting practices (e.g. vote by children) and influence of broader agendas on voting decisions (e.g. self-determination) (McGee, 2009; Comunicaciones Aliadas, 2011; Laplante and Nolin, 2014; Walter and Urkidi, 2015).

Reaching 'definite' decisions may not be as important as having Indigenous peoples' rights, views and opinions respected. Owen & Kemp (2014) advocate opening up debate over FPIC beyond its legal applications to include issues such as its compatibility in countries with weak government structures, and the ability of local communities to decide how to weigh the opinions of those who do not participate. One of the main reasons for inadequate participation is bargaining power asymmetries. In Australia and Canada, different land titling legislations give communities different powers to negotiate (O'Faircheallaigh, 2008). Szablowski (2007) exposed unequal power relations in World Bank consultation processes over involuntary resettlement dominated by expert-led consultations with minimal input from local communities. Smith et al. (2012) uncovered the manipulation of participative processes by the Government of Madagascar that appointed local government officials as representatives of civil society. Such relations not only translate into limited legal rights for communities or biased processes, but can also increase conflict likelihood.

3.1.2 Participatory Practices

Stakeholder participation is generally mandated by Environment Impact Assessments, and more recently by mining legislation (e.g. new Ontario Mining Act). Multi-stakeholder alliances with grassroots organizations, NGOs and churches; processes that are inclusive of marginalized and vulnerable groups; and third party oversight are crucial to empower local communities during participatory processes (Rios et al., 2015; Bamat et al., 2011; UNDP, 2015; O'Faircheallaigh, 2013; Vieyra & Masson, 2014; Boelens et al. 2010; De Echave et al., 2009; OSSREA, 2006; Schilling-Vacaflor, 2012; Bascopé, 2010). The Good Practice Guide and Community Development Toolkit of the ICMM recommends using local languages and allowing communities to reflect and take time when making decisions (ICMM, 2010-3; 2012a), while demonstrating that community inputs affect project design and decision-making (Herbertson et al., 2009). Good participatory practices include baseline studies, social mapping, cultural heritage assessments and impact assessments (Instituto del Bien Comun, 2008; O'Faircheallaigh & Corbett, 2005; ICMM, 2010-3, 2012a), as well as early dialogue and consensus

building platforms.¹¹ Decentralized institutions can help fulfill community-level aspirations for local government participation and help create a 'new governance culture' involving greater democracy, responsibility, transparency and accountability (Knight, 2000). Yet, as noted by Padilla et al. (2008), institutional changes and especially the creation of new institutions within communities can also generate internal conflicts as incumbents are challenged by newly empowered individual and interest groups.

Greater visibility and legitimacy of local actors can be gained through the creation of alliances between them and scientists in order to generate co-produced knowledge, which in turn can increase the aspirations of participation of communities in social and environmental decisions making (Conde, 2014; Velasquez, 2012). Ultimately, trust and high-quality engagement can emerge from these processes. Several studies have demonstrated that community members want to feel heard and have their recommendations taken into account (Rios et al., 2015; Moffat & Zhang, 2014; Zandvliet & Anderson, 2009; Horowitz, 2010; Labda, 2011; Barton, 2005; ICMM, 2009; Commdev, 2008).

3.2 Agreement Frameworks

One of the major objectives of participatory processes is to reach agreements between mining companies, communities and the state. Failed agreements over project location and scale, revenue management, environmental impact mitigation, and community compensation and development initiatives can trigger conflict (Rios et al., 2015). Negotiation processes are key to reach such agreements and prevent an escalation of conflicts (Ali, 2003). This requires processes reaching out to local communities and regional authorities, early and long-term investment in community relations by extractive companies, as well as grievance mechanisms and official arbitration mechanisms trusted by local communities (Triscritti, 2013; UNEP 2015). Agreements with communities over compensation are notably crucial to conflict prevention (Hilson, 2002; Kemp et al., 2011), especially if projects involve resettlement (Carson, 2005; International Alert, 2005), but equitable and fair agreements must also address long-term development goals (ICMM, 2010-3).

Negotiations and mediation have also been found to help resolve disputes and bring agreements between artisanal miners and mining companies (Andrew, 2003), as well as between ASM operations and surface landowners (Verbrugge et al., 2015). To reduce the risk of conflict, a compromise of ceding or sub-leasing part of the company's property can help enable some constructive forms of 'coexistence' between ASM and large-scale mining, especially if the company provides technical assistance to ASM and local communities, including exploration and mining efficiency gains.¹² Yet, as noted in the case of some water-related conflicts in Peru, while legal and technical agreements can help reduce and delay tensions, agreements need to account for the frequent political dimensions of conflicts associated with large-scale mining (Sosa and Zwarteveen, 2016), and seek to achieve a 'sustainable positive peace' - rather than a fragile and imposed end of 'hostilities' - through mutually agreeable terms (see, Bond, 2014a,b).

3.2.1 Community Development and Impact Benefit Agreements

Formal agreements such as IBAs and Indigenous land-use agreements (ILUAs) are becoming a common feature in the sector. They are being advocated by many civil society organizations and international donors such as the World Bank and generally increase the chance of government approval of legally required permits. Countries like Sierra Leone, South Sudan and Afghanistan - or quasi-autonomous jurisdictions such as Nunavut in Canada - have already made these agreements legal requirements for large extractive projects (Stevens et al., 2013). The ICMM (2010-3) points to different types of agreements based on their financial channel, profit-base, accessing royalties or equity share ownership of the project. Though agreements between companies and communities can help prevent or address

conflicts through the establishment of community development commitments and clarifying roles and responsibilities, factors that can undermine them and end up escalating the potential for conflict include the confidentiality of negotiations, the use of vague language and insufficient funding (Sosa & Keenan 2001; ICMM, 2010-3). The role of the state should be clarified in such 'bilateral' agreements to ensure that the rights of communities are being upheld and to counter the (often truthful) perception that the state is on the side of companies (Afful-Koomson et al. 2013; Peterson St-Laurent and Le Billon 2015). Such agreements should also consider the (long-term) implications of transferring of what is normally considered the role of the state, such as responding to community needs for public services, onto extractive companies (CommDev 2008; Sawyer & Gomez 2008).

3.2.2 Grievance Management Systems

Companies can more effectively prevent and manage conflict escalation by implementing grievance mechanisms and protocols (see OHCHR 2011, section III Access to Remedy). In his 2010 special report on the operationalization of grievance mechanisms, UN Secretary-General's Special Representative for Business and Human Rights, John Ruggie, concluded that all mechanisms remained underdeveloped, confirmed the importance of a "corporate responsibility to respect all human rights", and called for greater policy coherence at the domestic and international levels. To be effective, their design and implementation must be culturally appropriate, accessible to all stakeholders, transparent and accountable, predictable and equitable, rights-compatible, based on engagement and dialogue, as well as be able to monitor and review companies' actions to resolve complaints.

Specific recommendations include ensuring the anonymity of complainants; facilitating formal avenues for appeals; implementing protocols to transmit complaints to senior management; enabling the participation of third party observers (ICMM 2009a; IFC 2012). States should "ensure that they do not erect barriers to prevent legitimate cases from being brought before the courts", that "the provision of justice is not prevented by corruption", "courts are independent of economic or political pressure", "legitimate and peaceful activities of human rights defenders are not obstructed", and that access to non-judicial and non-state based grievance mechanisms is facilitated (OHCHR 2011: 28-31). At the corporate level, Kolk & Lefant (2010) pointed to a lack of corporate reporting on conflict issues, making it hard to identify cases. Kemp et al. (2011) found there had been negligible attempts to alter power imbalances between companies and communities, and only partial attempts to facilitate dialogue, with collaborative resolutions limited to two out of six cases examined. Advocacy groups suggest that little progress seems to have been made in practice (Hill and Lillywhite 2015).

Studies of corporate-led grievance mechanisms, such as that of Barrick in Papua New Guinea to remedy victims of sexual assaults by company guards (Knuckey and Jenkin 2015: 801), suggest that these can offer "more accessible and convenient remedies", yet should be used sparingly and under strict safeguards as they can reflect major power differentials between victims and companies and act as a substitute to formal or customary legal systems, including criminal processes (see also OHCHR 2013). Studies on perceptions from within mining companies highlight how community relations staff often struggle to get other departments (e.g. legal, operations and environment) involved in conflict prevention and management, especially those that are the source of the problem (Rees et al., 2012; Kemp & Owen, 2013). These findings renew calls for using formalized procedures, but also organizational cultural change, to involve such departments when mechanisms are trusted and well-timed (CSR, 2009).

3.3 Revenue Management, Transparency and Accountability

Constructive community-company relationships rest in part on effective revenue management (Rios et al., 2015). International financial institutions have increasingly advocated for the decentralization

of revenue management systems in extractive sectors, arguing that local jurisdictions in producing areas best understand their development needs and should have authority to spend fiscal resources accordingly. However, several empirical studies have shown that the decentralization of revenues can lead to problems due to weak sub-national institutions, with revenues exacerbating rather than mitigating community-level conflict (Arce 2014; Bauer, 2013; Arellano-Yanguas, 2011; Hinojosa, 2011; Paler, 2011; Bland & Chirinos, 2010). To be effective as a conflict management tool, revenue decentralization schemes must be coupled with multi-stakeholder initiatives to enhance the capacities of local governments/authorities (McPhail, 2008).

Another central objective in revenue management involving extractive industries is transparency. Whilst transparency is not a panacea, it is necessary for greater openness and accountability, and to encourage civil society participation (Vierya & Masson, 2014). To be effective, transparency requires governments to make high-quality information available in user-friendly formats that can be disseminated to citizens and facilitate feedback. Created in 2003, the Extractive Industries Transparency Initiative (EITI) has set international norms and mechanisms requiring third party assessments and the involvement of frequently fledgling, coopted or repressed civil society in an effort to redress the balance of power (Aaronson 2011; Asgill, 2012), and moving beyond the voluntary nature of corporate reporting (Smith et al., 2012). There is also increasing pressure for greater transparency along the whole extractive industry value chain including the contract and licensing allocation process (Alley 2013; Hayman & Crossin 2005).

Another emerging tool to share the benefits of extractive activities with communities is the use of foundations, trusts and funds (FTFs). Wall & Pelon (2011) carry out an analysis of these approaches in several countries pointing to three key aspects: the complexity of FTFs should be proportional to the level of financing and capacity at local level; they need to be based on extensive social assessment of the beneficiaries to achieve their objectives; and FTF activities need to be integrated into local and regional development plans so that the government or other development actors don't see the need to diminish their support. O'Faircheallaigh (2013) also highlights the value of inter-generational equity and fairness through the creation of investment funds for future generations. In this regard, Lockhart (2013) contrasts the experience of Sovereign Wealth Funds showing how the Alaskan experience generated annual dividends but also caused inflation, whilst the global markets investments strategy used by Norway for its savings funds reduced the potentially inflationary impacts of resource revenues.

CONCLUSIONS

To sum-up the literature reviewed for this study suggests that the recent rising trend in reported community-level conflicts over mining projects mostly results from four main factors:

A first set of mostly structural factors - which is in part derived from the broader literature on social conflicts - includes liberalization reforms, which in the context of partial democratization often resulted in contentious politics taking the form of more assertive and institutionally-legitimated demands by local communities, civil society and local authorities to participate in decision-making and to directly benefit from mineral development. A second set of factors is associated with the impact of the global commodity boom in increasing the onset likelihood and severity of conflicts as the pace of exploration and mine development sharply accelerated across most parts of the world, raising both expectations of benefits, but also concerns, among host societies, and in particular local communities and authorities in the affected regions. A third set of factors, which often combines with the second set of factors to mobilize communities and their supporters, relates to concerns over the developmental and environmental impacts of extractive sector-led growth. While such concerns motivated unprecedented efforts in resource governance on behalf of an array of corporate, government and civil society actors, they also translated into greater mobilization against extractive activities, most notably in Latin America, in a context where the liberalization of the sectors as well as further democratization (and decentralization) were not matched by greater government capacity – thereby creating a context prone to rising expectations and open contestations. Finally, a fourth set of factors consist of triggering events that are more diverse and case-specific, but often include unfulfilled development expectations and a lack of pro-active community engagement in decision-making or failure of grievance mechanisms, notably with regard to impact assessments and benefits distribution, as well as accidents or repressive actions potentially attributable to companies or governments, and political events such as electoral campaigns.

The literature reviewed demonstrates some strengths and weaknesses. Among these strengths are: a) the wealth of individual cases studies conducted by academics; b) the significant attention given to the prevention and positive transformation of conflicts within the industry and policy community; c) the recent formalization of hypotheses and increase in more systematic methodological approaches. This literature, however, suffers from some weaknesses, including: a) regional and negative selection biases, which reflect in part the geographical focus of the core groups of academic researchers and a draw towards conflicts that escalated into physical violence; b) findings reflecting the positionality of researchers (with generally academic researchers often relating to communities through participatory action research approaches seeking to drastically modify or cancel projects , and policy-focused researchers generally relating to extractive companies seeking ‘actionable’ recommendations to carry-on projects); c) relative lack of collaboration between scholars and ‘conflict management’ practitioners working for corporations; d) lack of publicly available and detailed cases studies coming from within the industry (and to a lesser extent from within government).

Suggestions for further research include:

Better understanding of corporate perspectives and practices on conflicts. Such study should include participant observation, full access to internal documents, and ‘candid’ interviews in order to make a more significant contribution. More generally, multi-perspective and multi-stakeholder approaches to analyzing case studies could enrich the literature by comparing perceptions and explanatory narratives, while making the findings relevant to a broader audience.

Comparative multi-case studies enabling a dynamic analysis of conflict processes and the relative importance of the various factors involved (including the history of exposure to mining projects by local communities). This could involve a collective synthesis of research within an agreed analytical framework among major researchers, and possibly a coding of factors and conflict processes allowing for a statistical analysis of a large number of documented case studies.

There remains a limited knowledge of the micro-politics and psychological dimensions of conflict escalation. Drawing on the rich literature studying of social movements and public protests, more fine grain analyses of factors, actors, and processes resulting in the escalation of conflicts could include in-depth interviews and micro-level surveys of incentives and motivations to participate in protests, as well as participant observation and other ethnographic approaches.

Given the debates remaining – at least academically - around the relative importance of institutions, more systematic analyses examining the significance of the quality of diverse institutions at national, provincial and local levels. Statistical and comparative case study analyses at a variety of scales may provide greater clarity on which institutional dimensions matter.

This review points to gaps between community demands (participation, rights, environmental, economic, etc.) and company strategies to deal with them (CSR development programs, conflict management mechanisms). Comparative discourse analysis of internal documents and interviews could help further identify which are the main demands and understand challenges to address them, as well as compare perceptions of what works and what does not from the perspectives of companies, communities and government.

Most of the literature on conflict prevention and resolution remains geared towards providing advice to extractive companies, though more recommendations have recently been directed at local communities. A study could help further compile and disseminate findings in this area, notably to increase capacity building in negotiating agreements, environmental impacts, legal advice, regulations, with the aim of achieving a satisfactory settlement for both parties.

Conflicts can have progressive or regressive results. More detailed studies of the various means of conflict prevention and transformation, such as community consultations, dialogue tables or judicial processes, could help match causal factors with the most effective options, and to better understand why some solutions are being adopted while others are not, and what conditions and processes influence progressive or regressive outcomes.

There is frequent sense of impunity associated with conflicts, some of which is said to be justified by fear of further escalating conflicts. Detailed case studies including in-depth interviews could help identify the legal, political, financial, psychological and ethical factors influencing violent actors (and their relative impunity), including security forces, political entrepreneurs, and illegal actors, and the relative effect this may have on the reproduction of conflicts and reoccurrences of violence.

Finally, a more integrated account of the types and likelihood of conflicts for the various phases of extractive projects, stages along commodity chains, as well as contexts and types of extractive projects could help build a more holistic model.

From a methodological standpoint, and as observed for a recent review of the literature on extractive industries and poverty (Gamun et al., 2015), we note again the vast prevalence of individual and small-n studies, with only one cross-national and two sub-national statistical studies. Future studies could usefully employ mixed methods-based research to examine the conflict inducing effects of some of the factors identified in the case study literature and clarify some of the level of causality proposed for these factors.¹³

NOTES

1. Among the 280 publications, 80% originate from academia, 11% from NGOs, 5% from industry, and 4% from (inter)governmental agencies. Whereas industry and (inter)governmental publications are largely focused on assisting extractives companies to avoid and resolve conflicts affecting their activities, much of the academic and NGO sector publications seek to explain conflicts, with a frequent focus on the voices and interests of affected communities – especially for studies from NGOs. We note that many studies relating to conflicts and corporate social responsibility (CSR) programs are conducted within or for companies, and remain confidential. As such the literature reviewed here is not fully reflective of the evolution and current state of knowledge, notably on the part of the industry. The dominance of academic studies, often linked or supportive of community and environmental activists, as compared to the perspectives of governments and especially companies, thus not only influence the findings of this review, but as renowned geographer Anthony Bebbington (2011: 219) notes, also requires academics and activists to “know far more about how industry networks operate and how companies assume particular strategies vis-à-vis particular countries and territories.”
2. Of the 117 studies, 78% were from refereed journals, 11% from NGO reports, 6% from aid agency reports, 4% from corporate reports, and 1% from government reports. In terms of geographical coverage, 43% were covering Latin American cases, 32% global/multi-regions, 9% Africa, 9% Oceania, 3% Asia, 3% Europe and 2% North America.
3. These figures, however, do not permit us to determine if this rising trend simply reflects the growing number of extractive projects taking place, or shows an increasing proportion of extractive projects affected by conflicts. Furthermore, most studies rely on press reports and are thus open to a reporting bias that may have under-reported events in earlier periods due to lower journalistic awareness and interest, and in regions with lower levels of reporting (e.g. Sub-Saharan countries).
4. ICMM data mostly originates from press reports and is not corroborated by the parties involved or by third parties. The Environmental Justice Atlas, part of the European Union-funded EJOLT project, provides a geo-referenced database of 1672 conflicts, 21% are related to mining and 19% to fossil fuels and climate justice issues (Özkaynak et al., 2015; EJAtlas.org). EJOLT data is provided mostly by environmental groups and academics, and includes start and end dates for conflicts, but no trend could be directly assessed from the publicly available interface.
5. A definition used for OCMAL data is that of contention associated with “sustained, organized and observable collective action expressed through public claims upon authorities” (Haslam and Tanimoune 2016).
6. On the rise of extractive sector production, see (ICMM 2012); on the level of effort (incl. energy) put into production by the coal industry, see (Davison et al. 2014); on the number of ASM miners in the world, see (Seccatore et al. 2014).
7. Statistical evidence for this ‘Pollution Heaven’ hypothesis is not demonstrated for most economic sectors, but there is anecdotal evidence for the extractive sector.
8. On concepts of resource frontiers, see Tsing (2003) and Watts (2015).
9. Mc Neish (2012) warns against the simplified portrayal of communities, and argues that in many occasions “militant pragmatism” drives some community members to seek dialogue and negotiated settlements with the mining company (see also Ali & Grewal 2006), while others seek to avoid any compromise. Indigenous groups have thus at times struck deals with mining

companies in exchange for monetary compensation, and left supporters such as environmental groups aside (Horowitz 2012).

10. See also PDAC (2015) on guidelines for explorers about first field visit; and E3 Plus: on CSR for mineral exploration and development.
11. See for example in Peru, “Mesas de Diálogo y Negociación”, <http://prodialogo.org.pe/sites/default/files/material/files/mcsyd.pdf>
12. See for example the Adamus Resources Limited (ARL) project at Nkroful in 2015. (Public Hearing on EIA, 2015 of ARL)
13. This would also invite scholars to address some of the methodological and substantive gaps we find in the case-study literature. This includes utilizing statistical methods to analyze sub-national and local level conflict processes. Although local studies using ethnographic methods offer fine-grain insights into the micro-level politics of conflicts, they may seem too idiosyncratic for policymakers in search of scaled-up responses. By using data at the local and provincial scales, additional variables can be controlled for using a combination of statistical and qualitative methods to avoid some of the reductionist tendencies of large-N cross-national studies. Most-similar systems design can help isolate conflict escalation factors and provide more specific recommendations, while greater clarity on the use of process-tracing method can yield more robust findings. Methodological pluralism, particularly when focused on provincial and local levels, could help scholars determine whether a specific mechanism was, in fact, responsible for the outcomes observed.

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