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## Proxy-led accountability for natural resource extraction in rentier states

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### ABSTRACT

The resource curse literature suggests that, in fragile states dependent on natural resource rents, structures of public accountability are weak because of an elite-controlled political economy indifferent to social and ecological interests. We examine accountability claims made by non-domestic proxy actors, holding governments and corporations accountable on behalf of communities adversely affected by natural resources extraction. This conceptualization is suggested by proxy-led transnational mobilization against mining-related damage in the Democratic Republic of the Congo. We identify an ‘hourglass’ structure of proxy actor engagement with affected communities: In a first phase, proxies rely on public mechanisms to define standards remotely. In a second phase, proxies ‘narrow’ the gap by seeking compliance information from affected communities. However, in a third phase, this gap ‘widens’ again when proxies remotely seek sanctions against responsible actors. We discuss the applicability of this heuristic framework to proxy-led accountability practices in other natural resource-dependent rentier states.

**KEYWORDS** Proxy accountability; resource extraction; rentier states; Democratic Republic of the Congo

### Introduction

Natural resource extraction is a significant source of economic wealth for many countries in the global South, yet it often causes major socio-ecological harms. Extractivist displacements include land dispossession, ecosystem degradation, and commodity-dependent development (Kramarz *et al.* 2021). The resource curse literature suggests that natural resource rents may, by elite capture and corruption, undermine structures of public accountability in states like the Democratic Republic of the Congo (DRC) with weak capacity (Le Billion 2013, Vijge *et al.* 2019). For rentier states – with political economies largely dependent on natural resource rents, taxes and royalties paid by transnational companies and other foreign entities

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(Beblawi and Luciani 2017) – this public accountability deficit is often pronounced. However, there has been a rise of other modes of accountability applied to extractive practices. These mechanisms and logics of action are associated with actors other than nation-states, from supranational bodies to civil society and industry organizations (Koenig-Archibugi and Macdonald 2013, Kramarz and Park 2019). In this paper, we examine accountability claims made by non-domestic proxy actors, holding governments and corporations accountable on behalf of communities adversely affected by natural resources extraction.

We follow North *et al.* (2013, p. 6) in broadly defining rents as net benefits from land and other non-produced assets, whether those returns are socially useful or not. They argue that rent-seeking, as a political-economic activity, is constitutive of ‘limited access orders’ (LAOs), in which controlling elites attempt to secure order through the sharing of rents with other powerful groups who might otherwise resort to violence. The creation of such ‘dominant coalitions,’ largely unconstrained by the rule of law and any obligation to provide basic public goods, severely limits the ability of other domestic actors to represent and protect their interests (North *et al.* 2013, pp. 3–10. See also, 2009, p. 263). Under this framework, the DRC is considered a ‘fragile LAO’ in which the dominant coalition struggles to maintain order in the face of internal and external violence (Kaiser and Wolters 2013). In fragile LAOs, the capacity for violence is the principal determinant of the distribution of rents, with blurred boundaries between political and economic choices, and between military and civilian actors (North *et al.* 2013, p. 11).

As noted by Omeje (2018, p. 8), rentier states are unlikely to regulate transnational corporations operating in their territories over environmental degradation. Only if LAOs allow the development of organizations independent of the state (e.g. civil society organizations, opposition parties and private firms) is there likely to be enough social and political capacity to hold state actors accountable for their actions (North *et al.* 2013, pp. 14–16). At the same time, efforts by the DRC to attract mining investment from multinational companies has generated greater transparency over its extractive resource rents. In 2003, the DRC joined the Kimberley Process Certification Scheme designed to prevent trade in diamonds that finance armed insurgents. Four years later, the country also joined another voluntary program, the Extractive Industries Transparency Initiative (EITI), which requires extractive businesses publicly to disclose their payments to governments (Haufler 2010, EITI 2021). There are also national and supranational legal commitments that open governance space for new accountability mechanisms targeting extractive harms in the DRC and other conflict-prone states. Most well-known are conflict-specific legal obligations on American (US Dodd-Frank Act Section 1502) and European (EU Conflict Minerals Regulation) importers of tantalum, tin, tungsten, and gold (3 T&G)

to demonstrate, through due diligence checks, that they are not financing armed groups (Sarfaty 2015, Partzsch 2018). Lastly, there are transnational civil society organizations (CSOs), such as Global Witness and the Enough Project, that have highlighted social and ecological harms caused by extractive industries in the DRC, focusing on ‘conflict’ minerals sourced from the eastern provinces.

Across these regulations and voluntary codes among states, firms, and CSOs, there is a common phenomenon of foreign actors advancing accountability practices over mineral extraction in the DRC. Many of these foreign actors claim to represent, to varying degrees, the public interest (e.g., on human rights, governance integrity and ecological sustainability) of communities negatively affected by mining. This is an exercise of what has been labeled ‘accountability by proxy’ (Koenig-Archibugi and Macdonald 2013). The proxies, holding power-wielders to account on behalf of affected communities, may be directly engaged with those injured by responsible practices or, more indirectly, claim to represent their interests – what are distinguished, respectively, as *solidaristic* and *distant* proxies (Koenig-Archibugi and Macdonald 2013, p. 503).

In this paper, we develop a conceptual framework for investigating proxied accountability for natural resource extraction in rentier states, informed by research on mining in the DRC. The DRC presents an apt case for evaluating a rentier state that, according to the LAO framework, lacks domestic capacity for public accountability yet also features proxy actors making accountability claims over social and ecological harm. Examples of such harm resulting from mining activities include the deterioration of plant and animal habitats, soil erosion, groundwater over-use and water pollution, the emission of heavy metals and other pollutants, forced migration, unsafe working conditions, and low wages and child labor (e.g., Global Witness 2021). In the case of the DRC, we identify an ‘hourglass’ shaped phenomenon in the kinds of engagements that emerge between proxy actors and affected communities (see Figure 1): In a first phase, proxies rely on public mechanisms to remotely define standards used to assess the host government. In a second phase, proxies ‘narrow’ the gap by seeking local compliance information from affected communities. However, in a third phase, this engagement gap ‘widens’ again when proxies remotely determine sanctions applicable to responsible actors.

Our thesis is that, due to the limited access opportunities for public interest organizations in rentier states dependent on natural resources, non-domestic actors are more likely to lead accountability claim-making over communities affected by significant ecological and social harm. A rentier political system internally unresponsive to those injured by rent-maximizing activities may be influenced by external accountability standards to the extent that ignoring these could threaten rental streams. In the next section,

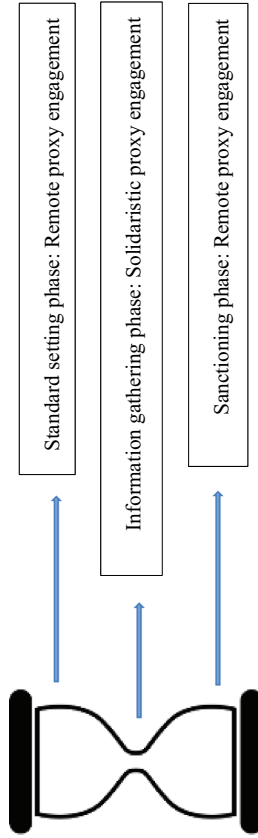


Figure 1. Proxy actors' engagements with accountability holders across three temporal phases.

we elaborate on the concept of proxy accountability, distinguishing between different logics of action and phases: this allows the presentation of a matrix of ideal-typical accountability practices. We then discuss proxy accountability for mineral extraction in the DRC, providing evidence of the hourglass pattern of proxy actor engagement with accountability holders. We conclude with a summary of findings and comments on the generalizability of this framework.

### Conceptualizing proxy accountability

The key difference between ‘standard’ (Rubenstein 2007) or ‘beneficiary’ (Koenig-Archibugi and Macdonald 2013) accountability arrangements and proxy formulations is that, in the standard case, *power wielders* are in principle held directly accountable to those most affected by their decisions, who are the *accountability holders*. In proxy accountability arrangements, surrogate actors claim to represent the preferences of these accountability holders. Accountability holders and their proxies may not have identical preferences, but solidaristic proxies who interact extensively with affected communities have better opportunities to represent their interests than remote proxies (Koenig-Archibugi and Macdonald 2013). Notwithstanding, in both cases proxy accountability represents a surrogate form of political representation that risks paternalism and the misinterpretation of accountability holders’ priorities. Therefore, the relationship between proxies and accountability holders needs to be investigated. In this section, we develop a framework for analyzing proxy-led accountability arrangements based on earlier work by Rubenstein (2007) and Kramarz and Park (2019).

Modifying models of standard accountability, Rubenstein (2007, p. 624) distinguishes three phases of proxy (labeled by her ‘surrogate’) accountability: 1) standard setting, 2) information gathering on compliance, and 3) sanctioning. In the first phase, standards are determined for holding the power wielder to account, which according to the behavior of the proxy, may or may not involve deliberations with power wielders and/or accountability holders. The second phase involves proxy actors gathering and/or collating information about power wielders’ compliance with the chosen standards. In the third phase, the proxy decides whether to help sanction the power wielder for perceived breach of standards.

Rubenstein’s three phases of accountability mirror what Kramarz and Park (2019) describe as ‘first- and second-tier accountability’ in global environmental governance. They view first-tier accountability as a *constitutive* phase where the norms and goals informing Rubenstein’s (2007) standards for answerability take shape. The second tier of accountability governance has a *regulative* function, encompassing the information gathering and sanctioning phases identified by Rubenstein. Kramarz and

Park (2019, pp. 15–16) highlight the importance of questions that emerge during the first tier of governance where problem definition, standards of appropriate behavior and mutual expectations between power wielders and accountability holders are negotiated. The standards that emerge in this first tier are informed by pre-existing social logics of public, private and voluntary action: the logic of social action in public domains is to represent, in private ones to generate economic returns, and in voluntary ones to promote moral conduct. In Table 1 we map these accountability systems onto the three phases of proxy accountability described by Rubenstein (2007). Theoretically, conjoining Kramarz and Park's model of accountability with Rubenstein's allows us to differentiate the accountability processes and logics of action guiding the conduct of public, private and voluntary proxies at three discrete phases of proxy decision-making. Of key analytical interest is whether and when these third parties engage in the solidaristic or remote representation of affected communities and how this shapes accountability practices.

In public (standard) accountability systems within liberal democratic states, political representatives are answerable to electoral constituencies and affected citizens (Kramarz and Park 2019, pp. 18–22). Under this public logic of action, relevant legal and administrative standards are in principle determined by open, deliberative processes as nourished by equality-affirming 'background institutions' (Rubenstein 2007, p. 619) empowering the representation of accountability holders – multi-party elections, the rule of law, impartial administrative agencies, a vibrant civil society and an independent media. In non-democratic states, these institutions may be absent or weak, decreasing the political viability and costs of accountability claim-making (Rubenstein 2007, p. 617). Dominant coalitions in natural resource-dependent LAOs are structurally unresponsive to concerns about extractive harms: their structural interest in maximizing resource rents restricts the political conditions of possibility both for affected communities to make accountability claims against powerful groups, and for the development of independent state institutions that could impose effective regulatory constraints on resource exploitation. The logic of limited access is to entrench exclusive, personalized privileges regardless of external costs to communities and ecosystems (North *et al.* 2013, p. 9).

In these contexts, *proxy public accountability* may be achieved when supranational organizations or states apply international rules – for example, on environmental harm prevention, conflict, and human rights – deemed to be violated by natural resource extraction in other states. As noted above, under the Dodd-Frank Act Section 1502 and the EU Conflict Minerals Regulation, US and European states require due diligence checks by publicly listed companies on their imports of 3 T&G to stop the financing of armed groups through international trade of these minerals.<sup>1</sup> There is also a more

**Table 1.** Proxy accountability logics: standards, information, and sanctions.

Phases of proxy accountability <i>Accountability logics</i>	Constitutive phase		Regulative phase	
	Standard setting	Information gathering on compliance	Sanctioning	
<i>Public (standard)</i>	Proxies identify standards defined by national or international rules	Proxies collect public information about power wielders' compliance with standards (e.g. state mandated reporting, environmental impact assessments)	Proxies promote sanctions against power wielders (e.g. legal action, trade sanctions, removal from office)	
<i>Private</i>	Proxies identify appropriate product and production standards	Proxies collect information about power wielders' compliance with standards (e.g. company reports)	Proxies promote sanctions against power wielders (e.g. legal action, reputational loss, market loss and firm collapse)	
<i>Voluntary</i>	Proxies identify social norms as standards of appropriate behavior	Proxies collect information about power wielders' compliance with standards (e.g. civil society reports)	Proxies promote sanctions against power wielders (e.g. reputational loss, naming, shaming, fines and loss of consumer confidence)	

Source: Authors' compilation based on Rubenstein (2007, p. 618) and Kramarz and Park (2019, p. 191)



general emerging trend of mandatory corporate accountability for the human rights and environmental consequences of global commodity chains: this is evident in France's corporate duty of vigilance law, adopted in 2017, and the development of a recent EU directive on human rights and environmental due diligence. Schilling-Vacaflor and Lenschow (2021) argue that these general legal duties have the potential to encompass multiple negative externalities of natural resource extraction, though they have yet to develop greater engagement with affected communities in producer countries.

In addition to public accountability, private accountability systems are well-established in natural resource extraction in the sense that producers have contractual obligations to shareholders, sub-contractors, employees and buyers, although the growing governance role of private authority has widened expectations as to the social and ecological responsibilities of corporations (Bloomfield 2017, Partzsch 2020). There are great variations in global value chains attached to extractive industries, as well as diverse corporate governance structures. In the DRC, foreign companies can only access mining deposits by buying or leasing assets from state-owned enterprises or creating joint ventures with them (Natural Resource Governance Institute 2020, p. 12). Canadian, European Union (EU) and UK mining companies active in the DRC face domestic legal obligations on payments made to governments and state enterprises: these financial disclosures go beyond the scope of EITI revenue streams to include, for example, payments for infrastructure improvements and transfers related to the sales of mining assets (Natural Resource Governance Institute 2020, pp. 22–23). The scholarly literature on private governance has neglected these complex corporate forms in global Southern contexts, although there is recognition that restricted political opportunity structures, as in rentier states, make it more difficult to mobilize collective action that could push corporations to recognize any social or environmental responsibilities (Mayer and Gereffi 2018, pp. 262–264).

As illustrated in Table 1, in the first constitutive phase of *proxy private accountability*, accountability holders and their surrogates seek the recognition by corporate power wielders (both private and state companies) of ecological and social standards relating to products and production methods. Alongside any legal rules on standards, proxy-led accountability claims can also use information revealed by companies through voluntary financial disclosure or 'ethical audits' (Haufler 2010). Under social pressure that shapes consumer expectations, this information has broadened out to encompass other production impacts and governance contexts (Koenig-Archibugi and Macdonald 2013, Mayer and Gereffi 2018). For example, under the wide-ranging governance standards of the EITI, information disclosed includes property rights, revenue streams, social and economic spending, and environmental impacts (Haufler 2010). Under the private accountability logic, proxies

promote sanctions against power wielders through market-induced losses to reputations and revenue if standards are breached. In highly integrated global value chains, such market sanctions can be imposed transnationally; for instance, civil society proxies persuading European and US consumers to boycott smartphones containing ‘conflict’ minerals from the DRC. However, proxies face high information and mobilization costs: ‘the sheer length and complexity of the accountability chain in global value chain governance invites opportunities for failure’ (Van der Ven 2019, p. 83).

Finally, *proxy voluntary accountability* refers to upholding and diffusing agreed-upon moral standards of conduct as promoted by norm champions – typically CSOs and activist groups – who claim to speak on behalf of broader social and environmental constituencies (Kramarz and Park 2019, p. 25). Proxy voluntary accountability is more diffuse in its scope than public and private models, though it can amplify accountability claims made in those domains. For example, activist networks can target the end use of natural resources to cascade normative standards up private value chains, thereby exerting economic pressure on raw material suppliers or processors. In an LAO context, this may offer a rare channel for registering social and environmental concerns if, for example, a foreign-owned lead firm voluntarily subscribes to sustainability standards. Voluntary proxy accountability can also involve transnational advocacy networks, led by foreign CSOs and other activists, bringing external pressure on states in a ‘boomerang pattern’ of political mobilization over chosen norms (Keck and Sikkink 1999, p. 93).

The representation of an accountability holder by a proxy bears several risks for the former, including paternalism and misinterpretation (Van der Ven 2019). Koenig-Archibugi and Macdonald (2013) argue that North-South proxy arrangements are especially prone to generate outcomes that may deviate significantly from the preferences of affected communities. In cases of misrepresentation, accountability holders lack established channels to rectify the political claims advanced by proxies on their behalf. At the same time, proxy-led accountability typically implies narratives signifying a lack of agency of ‘real’ accountability holders, and there is a risk that such narratives reproduce a framing of victims as disempowered (Partzsch 2021).

In what follows we outline how accountability proxies act on behalf of communities adversely affected by natural resource extraction in the DRC as a ‘fragile LAO’. We offer a preliminary assessment of the thesis that, in rentier states dependent on natural resources extraction, non-domestic actors are likely to be lead actors for accountability claim-making on behalf of communities affected by social and ecological harm. Rather than a comprehensive evaluation, the theoretical aim is to apply our matrix of proxy accountability to map the pattern of proxy political mobilization as it relates to affected communities in the DRC.

## Proxy accountability for mineral extraction in the DRC

Applying the framework by North *et al.* (2013), the DRC is a ‘fragile LAO’ (Kaiser and Wolters 2013). Félix Tshisekedi, leader of the Union for Democracy and Social Progress (UDPS), the DRC’s oldest political party, won the presidential election in 2019. However, his coalition government struggles to maintain order in the face of internal and external violence, while the capacity for violence has remained the principal determinant of the distribution of rents since the country’s independence. Large flows of mining rents in the post-independence Mobutu period (1965–1997) fueled the development of a deeply corrupt, rentier model that survived, though two civil wars (1996–2003), into the so-called post-conflict period (2003–) of low-intensity violence (Matti 2010, Kaiser and Wolters 2013, Ngoie and Omeje 2018). In 2017 mining sector revenues generated 55% of total government revenues and 17.4% of GDP, which very likely understates all mining company payments to state actors (EITI 2021, Natural Resource Governance Institute 2020, pp. 12–13). In addition, the UN estimates that organized crime in the DRC derived 40–120 million USD from gold, 7.5–22.6 million USD from 3 T minerals and 14.3–28 million USD from diamonds per annum: rebels may also have earned 16–48 million USD from timber and 12–35 USD from charcoal sales (UNEP-MONUSCO-OSESG 2015, pp. 3–4). In particular, the Allied Democratic Forces (ADF), an Islamist rebel group active in North Kivu province with links to the Somali militant Islamist organization Al-Shabaab, is recorded as financing its activities through sales of ‘conflict’ resources (Lawson 2014). There is, to be sure, a complex picture of shifting elite alliances tied not only to rents from subnational mineral endowments – copper/cobalt in the south-east (Katanga), coltan and gold in the north-east (Maniema, Kivus and Orientale) and diamonds in the south-west (Kasai) – but also, more recently, rents also from foreign aid, military projects, and concession-led infrastructure deals, e.g. the US \$9.25 billion Sicomines deal in 2008 with a group of Chinese companies over copper and cobalt concessions (Kaiser and Wolters 2013, Larmer *et al.* 2013).

In the DRC, consistent with an LAO political economy, there is little domestic capacity to hold power wielders publicly accountable for extractive harms. However, there are foreign and supranational legal commitments that facilitate accountability practices, allowing proxies to target transnational corporations involved in resource extraction that finances armed conflict. What are the relationships between accountability logics (public, private, voluntary) and proxy forms (solidaristic or remote) that have emerged in the DRC in relation to minerals extraction? We answer this empirical question by identifying practices of proxy-led political mobilization and communication across the three phases of accountability identified in Table 1 – standard-setting, information gathering on compliance, and attempted sanctioning of responsible actors.

### **Proxy-led accountability: standard setting phase**

When proxies engage in the first phase of *standard setting*, they claim to act on behalf of accountability holders by seeking answerability from power wielders causing major harm (Rubenstein 2007, p. 628). When proxies appeal to a public logic of action, they identify power wielders and refer to publicly defined standards. By contrast, in private systems proxy actors rely on product and production standards defined by producers and consumers. In case of a voluntary accountability logic, standards involve appeals to particular social norms. In the DRC, we claim, proxy actors invoked a *public* logic of accountability, derived from *voluntary* norm-promotion, to determine the standards of answerability attached to state and corporate actors. However, these standards were identified through *remote* engagements with accountability holders, with evidence of misrepresentation of affected communities.

Since the mid-1990s, Global Witness and other international development CSOs played an important, but remote, proxy accountability role in creating awareness of resource extraction financing armed groups in the DRC and elsewhere. This was part of an extensive networking effort amongst civil society groups promoting transparency of extractive industry supply chains, including transparency on payments made to governments to extract natural resources – for example, the Publish What You Pay coalition (2002-) in which Global Witness was one of the six founding CSOs. While norm-championing over natural resource extraction was led by non-state groups, it appealed to general norms of public accountability (transparency, harm prevention, good governance) which already have extensive currency in liberal democracies and various multilateral organizations. It is likely that this ‘normative fit’ (Keck and Sikkink 1999, pp. 98–99) is a significant reason for the relative speed in moving from the awareness-raising of the CSO-led advocacy coalition to the adoption of such accountability norms in UN embargos, the EITI, the Kimberley Process, the US Dodd-Frank Act Section 1502, the OECD and Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains, and the EU Conflict Minerals Regulation (Smillie 2005, Partzsch 2020). Concerns over the conflict impacts of mining in DRC were central to these institutional responses. In the United States, prior to the Dodd-Frank Act, Global Witness coordinated its activities with the Enough Project, another international CSO. Launched in 2007, a priority for the Enough Project was the issue of ‘conflict’ minerals sourced during hostilities in the eastern area of DRC (Radley and Vogel 2015, Partzsch and Vlaskamp 2016).

CSOs argued that cell phone and computer producers should be held accountable for violence associated with mining in the DRC, as companies were using ‘conflict’ minerals in their products. The Enough Project’s

campaign ‘Raise Hope for Congo’ received a lot of media attention, using a range of celebrities, such as George Clooney and Angelina Jolie (Partzsch and Vlaskamp 2016). Its connection to the Center for American Progress (a high-profile liberal think-tank) also gave the Enough Project political contacts to influence governance efforts. Eventually, norm champions accomplished the codifying of moral standards into public supply chain-related laws, namely the 2010 US Dodd-Frank Act Section 1502 and the 2017 EU Conflict Minerals Regulation (Sarfaty 2015, Partzsch 2018). UN Security Council Resolution 1952, passed in 2010, called for governments to urge traders importing goods from the DRC to exercise due diligence in supply-chain management, and the Organisation for Economic Cooperation and Development (OECD) adopted its Due Diligence Guidance for Responsible Supply Chains of Minerals in 2011 (revised in 2013 and 2016). The Guidance aims to ensure that companies and their business partners engaged in the minerals sector in fragile states are not involved in the violation of fundamental human rights or the commission of international crimes. It has served as a blueprint for official guidelines in Australia, China, Turkey and the United Arab Emirates. Furthermore, on part of the affected (exporting) countries, the International Conference on the Great Lakes Region (ICGLR), with 12 African member states, also set up a Mineral Tracking and Certification Scheme based on these standards (Partzsch and Vlaskamp 2016). In addition to these public guidelines, non-state actors, such as the Enough Project, published best practices (Sarfaty 2015, p. 443), and several private, or multi-stakeholder, certification and monitoring systems emerged; for example, the ITSCI Programme for Responsible Mineral Supply Chains and the Better Sourcing Program (BSP) (Partzsch and Vlaskamp 2016, Postma *et al.* 2021).

These various accountability standards were, and still are, remote from affected people in the DRC. Autesserre (2012, pp. 210–213) highlights how supply chain standards applied by proxies to the DRC have misrepresented local interests by focusing only on the illegal exploitation of minerals as the main cause of conflict rather than corrupt state institutions and disputes over other sources of rent. Mandatory due diligence requirements incentivize companies to source from ‘safe’ countries, rather than high-risk areas that require greater due diligence requirements. In consequence, some critics claim that the US Dodd-Frank Act created a ‘de facto embargo on mineral trade in the DRC’ (Jeffrey 2012, pp. 503–504, Koch and Kinsbergen 2018). Both the EU and US laws cover only 3 T&G, while leaving aside other conflict resources, such as diamonds and charcoal. Moreover, compliance costs tend disproportionately to burden artisanal and small-scale miners (Radley and Vogel 2015). Therefore, in the end, the proxies’ efforts may have caused further marginalization of vulnerable communities in the DRC (Autesserre 2012).

### ***Proxy-led accountability: information gathering on compliance phase***

In a second phase of accountability claim-making, proxies gather and disseminate information to determine if a power wielder has complied with the relevant standards identified in the first phase. Depending on the accountability logic, this can involve accessing publicly available information, private disclosures, or voluntary reporting. Determining whether a power wielder has complied with accountability holders' preferences and/or relevant rules can be especially difficult for proxies if physically or culturally distant from injured parties (Rubenstein 2007, p. 628). In the case of the DRC, private and voluntary proxies from the US and Europe created *solidaristic* links with local CSOs to gather information on mining as it relates to conflict and other socio-ecological harm. EU and North American supply chain laws, making information disclosure mandatory for importers, apply to all DRC companies – including state-owned and Chinese – exporting to these markets. EU and North American importers therefore have to devote resources and develop expertise to locate and regulate their mineral suppliers. Difficulties include inadequate local security and weak governance, which inhibit mapping and traceability in the DRC and neighboring states (Sarfaty 2015, p. 452). Only 7% of the US Securities and Exchange Commission (SEC)-listed companies carried out a 'strong due diligence' in 2014, the first year of implementation (Sarfaty 2015, p. 423; see also Kim and Davis 2016). Industry and multi-stakeholder initiatives, such as the International Tin Supply Chain Initiative (ITSCI), have emerged since 2010 in response to Dodd-Frank Act Section 1502. In addition, a range of international CSOs, including the Enough Project and Global Witness, have continued to work on 'conflict' mining in the DRC (Partzsch 2020). For example, the Enough Project set up the Thematic Working Group on Mining and Natural Resources with 31 CSOs in South Kivu and published their statements on its website and in blog posts (The Enough Project 2021). In some cases, there is also collaboration between the mining industry and CSOs, such as Pact, a US-based CSO implementing the ITSCI program in the DRC (ITSCI 2021, Pact 2021).

At the same time, there was a broad debate on Section 1502 of the Dodd Frank legislation in the United States. DRC experts emphasized that minerals are not a root cause of the violence and have only fueled an already existing conflict (Radley and Vogel 2015). In 2017, the SEC stated that it would suspend enforcement of the due diligence and audit requirements of the conflict minerals regulation. However, the regulation has remained in force, and companies have continued to file disclosures about the source of minerals in their products (Woody 2021). Preceding the SEC decision, in 2016 the US administration requested public comments on Section 1502 and, in addition to a range of international CSOs, more than 100 Congolese CSOs responded (Callaway 2017, p. 9). Besides the Thematic Working Group, the

Réseau Ressources Naturelles (RRN), a network of more than 250 civil society groups, collaborated with international CSOs and consultancies to build up capacities of local people regarding their rights to access natural resources and land. It provided legal and administrative assistance and published on the situation in the country (RRN 2021). Hence, although standards were defined by external actors in the first phase of accountability, both international and domestic CSOs were involved in reporting on the situation in the DRC.

While there was remote proxy-led accountability in the first phase, more solidaristic engagements between proxies and affected communities emerged in the second phase to facilitate private and voluntary mechanisms of information gathering. However, significant gaps remain given the *selective* demands made by North American and European non-state proxies. Obligations to reveal payments to governments for mining rights or other extractive sector services are enforced on foreign mining enterprises covered by relevant disclosure laws in their home countries or at their final market destinations. Chinese companies, which face no domestic supply chain disclosure rules, are therefore only covered via importers as they supply North American and European markets. Also, while the DRC mining code requires all foreign and state-owned enterprises to report mining revenues, other relevant payments, such as consultancy fees and asset sales, are not covered by the mining code and may be missed by EITI reporting. For example, in 2016 state-owned enterprise Gécamines sold its equity in the Metalkol copper and cobalt plant to an offshore entity with an unnamed beneficial owner, eventually linked to the Eurasian Resources Group (Natural Resource Governance Institute 2020, p. 28). The effective monitoring of global supply chains has remained difficult for foreign governments and other proxy actors seeking accountability for mining-related activities and impacts (Partzsch 2020, Postma *et al.* 2021). Indeed, while remote actors worked with local collaborators to gather information on compliance, this second phase reveals the multiple loopholes and difficulties inherent in complex global commodity chains, with divergent accountability expectations across different national and regional jurisdictions.

### ***Proxy-led sanctioning of power-wielders phase***

Any measures taken by proxies that question political authority or threaten resource revenues can be expected to provoke strong opposition from dominant coalitions in rentier states. Proxy-promoted sanctioning through voluntary and private accountability logics may have more scope insofar as any economic and reputational losses move through global value chains affecting the choices of foreign importers and customers. In the case of the DRC, Congolese authorities started in 2012 to suspend (Chinese) companies from

trading minerals on the basis of the ICGLR mineral certification standards (Partzsch and Vlaskamp 2016). However, for the most part sanctioning mechanisms followed a private logic of action. They were leveled at power wielders through *remote* engagements with affected communities; that is, they were articulated more as upholding externally selected procedural (transparency) and substantive (conflict prevention and human rights) norms than as forms of redress for injuries determined by affected communities. Mineral supply chain laws were focused on disclosure by business entities about payments to the governments of exporting countries, which does not directly challenge the political authority of governing elites. Following a private logic, however, non-compliance with the foreign laws may lead to downstream buyers and consumers sanctioning industry through reputational and market loss. Thus, mineral suppliers failing to disclose relevant information or revealing non-acceptable activities (such as trading with armed groups) may result in proxies seeking to undermine major foreign markets.

Private sanctioning of extractive industries takes place mostly in the non-public sphere of industry or multi-stakeholder programs. An increasing number of companies have committed to these programs since the adoption of Section 1502 of the Dodd-Frank Act. In particular, ITSCI has developed a de facto monopoly in the DRC region. Given this unique position, being suspended or expelled from ITSCI significantly constrains a company's market access (sometimes temporarily), even in cases where companies still hold a government license, adhere to a different due diligence program, or conduct their own due diligence (Postma *et al.* 2021). Based on its collaboration with Pact as an international CSO, ITSCI provides a monthly confidential due diligence list (or 'blacklist') to its stakeholders. This list displays companies or mining sites where persistent risks are identified (Pact 2021, Postma *et al.* 2021).

Extractive industries can frame their commitment to voluntary norms in a positive way, especially entrepreneurial norm leaders, such as the Fairphone company, which developed a mobile device that does not contain any 'conflict' minerals and has 'fair' labor conditions for the workforce along the supply chain (Partzsch and Vlaskamp 2016). Demanding certificates, such as for Fairtrade Gold, downstream actors use their power over upstream suppliers. Although affected communities can report standard violations through grievance mechanisms provided by private initiatives, such as ITSCI, enforcement of norm violations very much depends on industry initiatives themselves. For example, ITSCI's monthly due diligence lists are only available to members (Postma *et al.* 2021). Communities lack basic capacities, such as language and internet access, to bring an action (Partzsch 2020). This means that, in this third phase, downstream buyers and consumers act as private proxies by holding DRC extractive industries, including



artisanal miners, remotely accountable. This strategy was successful with regard to the ‘conflict-free’ standard remotely defined in the first phase: fewer armed groups directly benefitted from the exploitation and trade of 3 T&G in the DRC (UN Security Council 2016, p. 2). However at the same time, artisanal miners lost their markets and mining communities suffered from loss of income (Autesserre 2012, Haan and Geenen 2016). This demonstrates the inherent risks of proxy-led accountability for local communities, particularly when these engagements are remote rather than closely coordinated with accountability holders.

In the DRC, there are significant obstacles to the proxy-directed sanctioning over extractive industry harms because of a political system captured by elites dependent on mining industry rents. Solidaristic interaction with affected groups by CSO-led voluntary proxies during the information gathering phase is not sustained at the sanctions phase, which seems to reflect the high barriers affected communities face in seeking redress from elite power wielders for injuries suffered because of mining and associated violence. Voluntary proxies still appeal remotely to importing states to enforce disclosure and due diligence rules governing extractive industries in the DRC, for example, through reports shaming the mining industry in the DRC (Global Witness 2021, The Enough Project 2021). Risks to revenues and reputation from private accountability sanctions register more with companies directed to Western markets where consumers are increasingly dismissive of unethical products, while these Western downstream companies pass requirements onto, and often at the expense of, their suppliers upstream (e.g. exclusion of artisanal miners) (Haan and Geenen 2016.; Postma *et al.* 2021).

## Conclusion

We develop an analytical framework for investigating proxy-led accountability addressing social and ecological harm caused by natural resource extraction in rentier states. Proxy claim-making for accountability involves surrogate actors claiming to represent (remotely or solidaristically) the interests of those directly affected by harm, deploying various logics of accountability (public, private, voluntary) depending on the power wielders deemed to be responsible and the processes for holding them to account. We provide a conceptual matrix to inform comparative studies of proxy-led accountability, showing how these logics of action by proxy interact during different phases of accountability (standards, information gathering and sanctions). This framework can be applied to other state formations and issue areas where proxy-led accountability emerges. For example, the highly anticipated renewable energy transition is already driving a global surge in demand for minerals required for the production and processing of solar photovoltaics, onshore wind and lithium-ion batteries (such as cobalt,

lithium, nickel, and rare earths) (Kramarz *et al.* 2021). This intensification in extraction will require more research on accountability to identify pathways that can help expose and possibly mitigate harms. In this article, we illustrate the heuristic value of a proxy accountability framework by applying it to an LAO state dependent on natural resource rents.

In the DRC, we identified an ‘hourglass’ profile of engagement between proxy actors advancing accountability claims and affected communities (the accountability holders). Supply chain-related due diligence laws and mandatory disclosure obligations for North American and European companies operating in the DRC illustrate a public logic of proxy accountability, which creates a *remote* relationship between proxy actors and affected communities in the first and third phases (standards and sanctioning). The accountability focus on conflict finance was defined by foreign governments and civil society networks, supplemented by several extractive industry reporting initiatives. In the second phase of information collection, these foreign proxy actors interacted more closely with DRC civil society groups to check domestic compliance and investigate the (potential) impact of Section 1502. However, this *solidaristic* engagement was limited to information gathering to check the compliance of corporate entities with external ‘conflict-free’ standards. Lack of capacities, such as language barriers, prevented local communities from directly raising grievances. In the third phase, there was little evidence of foreign state sanctioning, through due diligence and payment to government disclosure laws, of mining companies in the DRC. This was despite extensive campaigns by civil society proxies highlighting conflict-related and other human rights harms from mineral extraction. The increasing dominance of Chinese mining companies in copper and cobalt extraction in the DRC further insulates rent-seeking elites from the influence of North American and European norms of corporate responsibility.

The hourglass shape of political communication broadly confirms the thesis that, due to the limited access opportunities for public interest organizations in rentier states dependent on natural resources, foreign proxy actors championing harm prevention and human rights norms are more likely to lead accountability claim-making over communities harmed by extractivist activities. Yet this finding does not account for the mix and sequencing of remote and solidaristic representation, especially in complex supply chains of minerals that cross national jurisdictions: this is an empirical question to determine for different cases of proxy-led accountability. To what extent is the hourglass pattern of proxy engagement with accountability holders replicated in other LAO states where rent-seeking from natural resource extraction is a structural feature of the political economy? Is *remote* representation at the standard-setting and sanctioning phases an effective leveraging by proxies of external rules and governance relationships? Are

*solidaristic* attempts by proxies to consult affected communities more likely at the information gathering phase, where issues of factual credibility and representative legitimacy are salient? These are substantive research questions for comparative study.

From the LAO theoretical perspective, the DRC is a fragile state that regressed into open conflict during the civil war period and remains dominated by a coalition of elite actors enriched by privileged access to resource rents. Kaiser and Wolters (2013, pp. 106–7) observe that elite rent-seeking in the country has become even more short-term and opportunistic, as the dominant coalition identifies other, largely untapped, natural resources (notably oil) and partners increasingly with major Chinese investors facing less domestic pressure regarding extractive sector externalities. Fragile LAOs have the least favorable conditions for state accountability within what North *et al.* (2013, pp. 10–14) label the spectrum of LAOs, as their political economies are closely identified with the dominant coalition, which is incentivized to extract rents quickly to maintain a workable balance of power across violent elite factions. There are clear parallels, for example, between the DRC since 2003 and ‘post-conflict’ Iraq, where the dominant coalition of ethno-sectarian elites has rendered the state an unstable nexus of hydrocarbon rent-seeking, patronage, and violence. Assisted by international actors, Iraq has created institutional structures for state accountability, but the dispersal of coercive power amongst multiple militias undermines the rule of law and the development of an independent civil society that can engage with accountability holders over answerability and redress for social and environmental harms (Dodge and Mansour 2020). Other fragile LAOs are a logical first step for comparative research before considering more stable natural resource-dependent LAOs (e.g., Ecuador, Saudi Arabia, UAE), where public institutions may admit greater domestic claim-making on social and ecological accountability.

In fragile LAOs, where there are limited opportunities for communicating political grievances, affected communities may be voiceless without proxies, yet proxy relations can also be problematic. Proxy accountability is a makeshift arrangement that brings its own set of challenges to accountability holders. In the DRC case, proxy actor engagement with affected communities was largely confined to the gathering of information to enable proxies to verify extractive industry practices benchmarked against external standards. Whatever the solidaristic intent of the consultation, domestic actors had no say in the standard-setting – the constitutive phase of accountability claim-making – increasing the risks for proxies of paternalism and the misinterpretation of local needs. This risk is likely to be amplified in accountability practices featuring global Northern proxies claiming to act on behalf of accountability holders in the global South. In cases of misrepresentation, accountability holders lack established channels

to redress and rectify the political claims advanced by proxies on their behalf (Koenig-Archibugi and Macdonald 2013). An epistemic challenge for researchers of proxy accountability is to adopt methodological strategies that truthfully capture the understanding of those who are often categorized as victims, and critically examine those who claim to speak on their behalf.

## Note

1. Section 1502 was not enforced under the Trump administration

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## References

- Autesserre, S., 2012. Dangerous tales: dominant narratives on the Congo and their unintended consequences. *African Affairs*, 111 (443), 202–222. doi:10.1093/afraf/adr080
- Beblawi, H. and Luciani, G., eds., 2017. *The rentier state*. Abingdon, UK: Routledge.
- Bloomfield, M.J., 2017. *Dirty gold: how activism transformed the jewelry industry*. Cambridge, MA: MIT Press.
- Callaway, A., 2017. Demand the supply: ranking consumer electronics and jewelry retail companies on their efforts to develop conflict-free minerals supply chains from Congo. Available from: [https://enoughproject.org/wpcontent/uploads/2017/11/DemandTheSupply\\_EnoughProject\\_2017Rankings\\_final.pdf](https://enoughproject.org/wpcontent/uploads/2017/11/DemandTheSupply_EnoughProject_2017Rankings_final.pdf) [Accessed 25 January 2021].
- Dodge, T. and Mansour, R., 2020. Sectarianization and de-sectarianization in the struggle for Iraq's political field. *The Review of Faith & International Affairs*, 18 (1), 58–69.

- EITI. 2021. Democratic Republic of Congo. Extractive industries transparency initiative. Available from: <https://eiti.org/democratic-republic-of-congo> [Accessed 2 May 2021].
- The Enough Project. 2021. Homepage. Available from: <https://enoughproject.org/products/reports/congo> [Accessed 26 June 2021].
- Global Witness. 2021. Homepage. Available from: <https://www.globalwitness.org/en/all-countries-and-regions/democratic-republic-congo/> [Accessed 26 June 2021].
- Haan, J. and Geenen, S., 2016. Mining cooperatives in Eastern DRC. The interplay between historical power relations and formal institutions. *The Extractive Industries and Society*, 3 (3), 823–831.
- Haufler, V., 2010. Disclosure as governance: the extractive industries transparency initiative and resource management in the developing world. *Global Environmental Politics*, 10 (3), 53–73.
- ITSCI, 2021. Homepage. Available from: <https://www.itsci.org/wp-content/uploads/2017/01/iTSCi-Booklet-2016-.pdf> [Accessed 26 June 2021].
- Jeffrey, J.C., 2012. Tungsten is forever: conflict minerals, Dodd-Frank, and the need for a European response. *New England Journal of International and Comparative Law*, 18 (1), 503–514.
- Kaiser, K. and Wolters, S., 2013. Fragile states, elites, and rents in the Democratic Republic of Congo (DRC). In: D.C. North, et al., eds. *In the shadow of violence: the problem of development for limited access societies*. Cambridge, UK: Cambridge University Press, 70–111.
- Keck, M.E. and Sikkink, K., 1999. Transnational advocacy networks in international and regional politics. *International Social Science Journal*, 68, 89–101.
- Kim, Y.H. and Davis, G.F., 2016. Challenges for global supply chain sustainability: evidence from conflict minerals reports. *Academy of Management Journal*, 659, 1896–1916.
- Koch, D.-J. and Kinsbergen, S., 2018. Exaggerating unintended effects? Competing narratives on the impact of conflict minerals regulation. *Resources Policy*, 57, 255–263.
- Koenig-Archibugi, M. and Macdonald, K., 2013. Accountability-by-proxy in transnational non-state governance. *Governance: An International Journal of Policy, Administration, and Institutions*, 26 (3), 499–522.
- Kramarz, T. and Park, S., 2019. Identifying multiple accountabilities in global environmental accountability. In: S. Park and T. Kramarz, eds. *Global environmental governance and the accountability trap*. Cambridge, MA: MIT Press, 3–33.
- Kramarz, T., Park, S., and Johnson, C., 2021. Governing the dark side of renewable energy: a typology of global displacements. *Energy Research and Social Science*, 74, 101902. <https://doi.org/10.1016/j.erss.2020.101902>
- Larmer, M., Laudati, A., and Clark, J.F., 2013. Neither war nor peace in the Democratic Republic of Congo (DRC): profiting and coping amid violence and disorder. *Review of African Political Economy*, 40 (135), 1–12.
- Lawson, S., 2014. Illegal logging in the Democratic Republic of The Congo. London: Chatham House. Available from: [https://www.chathamhouse.org/sites/default/files/home/chatham/public\\_html/sites/default/files/20140400LoggingDRCLawson.pdf](https://www.chathamhouse.org/sites/default/files/home/chatham/public_html/sites/default/files/20140400LoggingDRCLawson.pdf) [Accessed 30 June 2021].
- Le Billion, P., 2013. *Wars of plunder. Conflicts, profits and the politics of resources*. Oxford: Oxford University Press.

- Matti, S., 2010. Resources and rent seeking in the Democratic Republic of The Congo. *Third World Quarterly*, 31 (3), 401–413.
- Mayer, F. and Gereffi, G., 2018. Regulation and economic globalization: prospects and limits of private governance. In: G. Gereffi, ed. *Global value chains and development: redefining the contours of 21st century capitalism*. Cambridge, UK: Cambridge University Press, 253–275.
- Natural Resource Governance Institute, 2020. *DRC's mining revenues: increasing accountability by analyzing payments to governments reports*. London: NRGI. Available from: <https://resourcegovernance.org/analysis-tools/publications/drc-mining-revenues-increasing-accountability-analyzing-payments> [Accessed 3 May 2021].
- Ngoie, G.T. and Omeje, K., 2018. Rentier politics and low intensity conflicts in the DRC: the case of Kasai and Katanga provinces. In: K. Omeje, ed. *Extractive economies and conflicts in the global South: multi-regional perspectives on rentier politics*. Abingdon, UK: Routledge, 135–148.
- North, D.C., et al., 2013. Limited access orders: an introduction to the conceptual framework. In: D.C. North, et al., eds. *In the shadow of violence: the problem of development for limited access societies*. Cambridge, UK: Cambridge University Press, 1–23.
- North, D.C., Wallis, J.J., and Weingast, B.R., 2009. *Violence and social orders: a conceptual framework for interpreting recent human history*. Cambridge, UK: Cambridge University Press.
- Omeje, K., 2018. Extractive economies and conflicts in the global South: re-engaging rentier theory and politics. In: K. Omeje, ed. *Extractive economies and conflicts in the global South: multi-regional perspectives on rentier politics*. Abingdon, UK: Routledge, 1–26.
- Pact, 2021. Homepage: Democratic Republic of Congo. Available from: [www.pactworld.org/country/democratic-republic-congo](http://www.pactworld.org/country/democratic-republic-congo) [Accessed 28 June 2021].
- Partzsch, L., 2018. The new EU conflict minerals regulation: normative power in international relations? *Global Policy*, 9 (4), 479–488.
- Partzsch, L., 2020. *Alternatives to multilateralism: new forms of social and environmental governance*. Cambridge, MA: MIT Press.
- Partzsch, L., 2021. European Union's proxy accountability for tropical deforestation. *Environmental Politics*, 30 (4), 600–621.
- Partzsch, L. and Vlaskamp, M.C., 2016. Mandatory due diligence for 'conflict minerals' and illegally logged timber: emergence and cascade of a new norm on foreign accountability. *Extractive Industries and Society*, 3 (4), 978–986.
- Postma, H., Geenen, S., and Partzsch, L. 2021. Digging for due diligence: the case of non-state mineral supply chain regulation by ITSCI in Rwanda. *Extractive Industries and Society*. online first. doi:10.1016/j.exis.2021.100920
- Radley, B. and Vogel, C., 2015. Fighting windmills in Eastern Congo? The ambiguous impact of the 'conflict minerals' movement. *The Extractive Industries and Society*, 2 (2), 406–410.
- RRN, 2021. Facebook page. Available from: <https://www.cncd.be/+rrn-+> [Accessed 26 June 2021].
- Rubenstein, J., 2007. Accountability in an unequal world. *Journal of Politics*, 69 (3), 616–632.
- Sarfaty, G.A., 2015. Shining light on global supply chain. *Harvard International Law Journal*, 56 (2), 419–463.

- Schilling-Vacaflor, A. and Lenschow, A., 2021. Hardening foreign corporate accountability through mandatory due diligence in the European Union? New trends and persisting challenges. *Regulation & Governance*. doi:10.1111/rego.12402
- Smillie, I., 2005. What lessons from the Kimberly certification scheme? In: K. Ballenstein and H. Nitzschke, eds. *Profiting from peace: managing the resource dimensions of civil war*. Boulder: Lynne Rienner, 47–67.
- UN Security Council, 2016. *Report of the secretary general on the implementation of the peace, security and cooperation framework for the Democratic Republic Of The Congo and the Region S/2016/232*. New York: United Nations.
- UNEP-MONUSCO-OSESG., 2015. Experts' background report on illegal exploitation and trade in natural resources benefitting organized criminal groups and recommendations on MONUSCO's role in fostering stability and peace in eastern DR Congo: Final report. Available from: [http://postconflict.unep.ch/publications/UNEP\\_DR Congo\\_MONUSCO\\_OSESG\\_final\\_report.pdf](http://postconflict.unep.ch/publications/UNEP_DR Congo_MONUSCO_OSESG_final_report.pdf) [Accessed 30 June 2021].
- Van der Ven, H., 2019. Private accountability in global value chains. In: S. Park and T. Kramarz, eds. *Global environmental governance and the accountability trap*. Cambridge, MA: MIT Press, 63–84.
- Vijge, M.J., et al., 2019. Transforming institutional quality in resource curse contexts: the extractive industries transparency initiative in Myanmar. *Resources Policy*, 61, 200–209.
- Woody, K., 2021. Section 1502 of the Dodd-Frank act: past, present & future. assent blog. Available from: <https://blog.assentcompliance.com/index.php/dodd-frank-past-present-future/> [Accessed 28 June 2021].