

Addison, Tony; Roe, Alan

Working Paper

Extractive industries: addressing transparency, corruption, and theft

WIDER Working Paper, No. 2024/32

Provided in Cooperation with:

United Nations University (UNU), World Institute for Development Economics Research (WIDER)

Suggested Citation: Addison, Tony; Roe, Alan (2024) : Extractive industries: addressing transparency, corruption, and theft, WIDER Working Paper, No. 2024/32, ISBN 978-92-9267-490-8, The United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki, <https://doi.org/10.35188/UNU-WIDER/2024/490-8>

This Version is available at:

<https://hdl.handle.net/10419/298082>

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WIDER Working Paper 2024/32

Extractive industries: addressing transparency, corruption, and theft

Tony Addison¹ and Alan Roe²

May 2024

Abstract: This paper analyses the roles that states, civil society, and international actors can play in tackling the weak governance that sometimes leads to resources being used for private rather than public benefit. It discusses the corruption that bedevils licensing and commodities trading; and oil theft which runs into billions of dollars. Ensuring transparency in revenue flows to the state is vital to better fiscal management, building governmental accountability to citizens, and to avoiding state fragility. Initiatives such as the Extractives Industries Transparency Initiative (EITI) have already achieved much, not least in improving the information base. Although corruption and theft may never be fully eliminated, they can certainly be reduced by building improved technical capacity in domestic regulation; by enhancing civil society's capacity to cast light on the sector (though dangerous work in authoritarian societies); and by strengthening transparency in supply-chains (in which information technology offers new opportunities).

Key words: commodities, corruption, extractive industries, mining, natural gas, oil

JEL classification: L71, L72, K42, O55

¹ University of Copenhagen, Denmark and UNU-WIDER, Helsinki, corresponding author: addison@wider.unu.edu; ² University of Warwick, Coventry, UK and UNU-WIDER, Helsinki

This study has been prepared within the UNU-WIDER project [Extractives for development \(E4D\)—risks and opportunities](#), part of the [Domestic Revenue Mobilization](#) programme, which is financed by the Norwegian Agency for Development Cooperation (Norad).

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ISSN 1798-7237 ISBN 978-92-9267-490-8

<https://doi.org/10.35188/UNU-WIDER/2024/490-8>

Typescript prepared by Lorraine Telfer-Taivainen.

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The Institute is funded through income from an endowment fund with additional contributions to its work programme from Finland and Sweden, as well as earmarked contributions for specific projects from a variety of donors.

Katajanokanlaituri 6 B, 00160 Helsinki, Finland

The views expressed in this paper are those of the author(s), and do not necessarily reflect the views of the Institute or the United Nations University, nor the programme/project donors.

1 Introduction

When Botswana achieved independence from the United Kingdom in 1968 the country had less than 150km of paved roads and an income per capita of barely US\$100. Botswana was one of the ten poorest countries in the world. Today, it is an upper-middle-income country of 2.3 million people enjoying an average real income of around US\$18,000 per annum: many times higher than in the 1960s, and some five times higher than the average in the rest of Africa.¹ All its main villages and towns can now be accessed via tarred roads, whereas at independence it had less than 10km. Botswana's mining and other natural resources have been central to its success, and it is often cited as an exemplar of how to manage resource wealth for prosperity.² The capacity of the Botswana state has been central to that success. So too has Botswana's achievement in building a democracy—one of the earliest countries to do so in Africa.

Contrast Botswana with the Democratic Republic of Congo (DRC), where a predatory colonial state was replaced by a predatory post-independence state, and one whose remit and authority after decades of conflict remains weak across much of the country. Whereas Botswana runs a fully transparent system for the sale of its diamonds, and one that protects the broader public interest, the revenue flows from the DRC's resource wealth—including the world's largest single source of cobalt—are often opaque and serve many private interests, with state actors enjoying lucrative connections to the mining industry. As a result, the DRC's per capita income is a meagre US\$1,337—placing it in the World Bank's category of low-income counties (LICs).³

Botswana and the DRC represent two extreme ends of the resource management spectrum. They illustrate how the nature and capability of the state determines whether or not resources can be used to achieve prosperity, or whether they will be squandered. Much ink has been spent in debating whether the market or the state can best deliver sustainable development.⁴ In practice, successful development is a far more subtle process than this. Indeed, success invariably is the result of substantial private investments that take place within a system of property rights secured by the state; and underpinned by its provision of public goods together with an appropriate regulatory framework that encourages the private sector to take investment risks—while securing the public interest in its economic, social, and environmental dimensions. It is a dynamic relationship that each country must build for itself and one that is much influenced by its resource base and, not least, its history.

This paper is the first of two exploring aspects of the state's role in relation to the extractive industries. In doing so it is easy to tilt towards extreme pessimism as there are too few countries like Botswana and too many resembling the DRC. This is especially so for this paper's focus on *governance and corruption*. Consequently, we provide examples of what can be done to improve matters, while recognizing that these are deeply political issues with many obstacles to success.

¹ <https://data.worldbank.org/country/botswana> All per capita income data are in 'purchasing power parity' (PPP) terms, for 2022.

² On Botswana's success, see Leith (2005).

³ <https://data.worldbank.org/indicator/>

⁴ Addison (2014) provides a review.

2 Weak governance

The term ‘weak governance’ is often applied to resource wealthy countries, but what does it actually mean? Social scientists debate the topic endlessly, but for our purposes we look to NRGIs (Natural Resource Governance Institute) authoritative Resource Governance Index (RGI). This nails down the concept using three sets of indicators and five performance bands from ‘good’ to ‘failing’ (Box 1).⁵

What does this show? In the 2017 RGI, not a single LIC was classified in the ‘good’ governance categories, and among the middle-income countries (MICs) only Chile was marked as good (Botswana is rated ‘satisfactory’). However, the 2021 RGI does show some improvements in the intervening years (see Box 1). Some MICs, ranging from lower-middle-income (LMIC) countries to upper-middle-income (UMIC), are generally classified as ‘satisfactory’ including Brazil, Columbia, India, Indonesia, and Ghana. But overall, in 2017, 39 out of the 89 sectoral assessments were rated in the ‘poor’ or ‘failing’ bands. The ten failing countries include, not surprisingly, the DRC, Equatorial Guinea, Eritrea, Libya, Mauritania, Myanmar, Sudan, and Zimbabwe—mostly African countries with high levels of political fragility.⁶

The RGI ratings confirm that many countries have far to go in improving resource governance. The remainder of the paper discusses what can be done and provides grounds for some (cautious) optimism.

Box 1: The NRG Resource Governance Index: selected countries

The RGI comprises three groups of indicators, measuring respectively:

1. **Value realization:** the governance of allocating extraction rights, exploration, production, environmental protection, revenue collection and state-owned enterprises.
2. **Revenue management,** national budgeting, subnational resource-revenue sharing, and sovereign wealth funds (SWFs).
3. The country’s overall enabling **environment for business.**

In the 2021 RGI, each of the 22 countries has an assessment of their mining and/or oil and gas sectors, to grade them into one of five performance bands: good, satisfactory, weak, poor and failing.

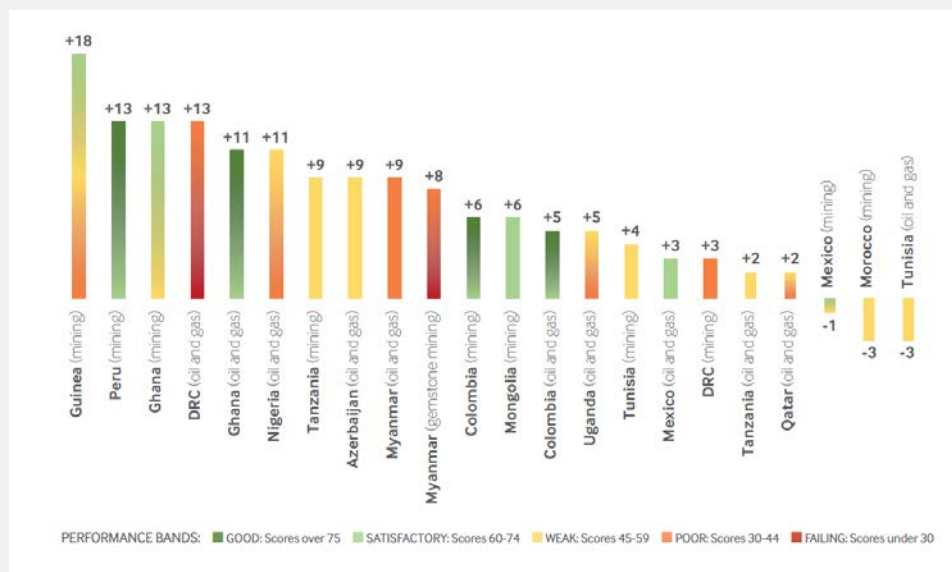
A sound performance under all three indicators is necessary to obtain the full benefit of a country’s resource wealth. Significantly, given our theme of economic transformation, component 3 (the enabling environment for business) enters alongside the more specific resource-related components (1 and 2) as a key element for success. A few countries that now perform tolerably well under headings 1 and 2 perform much worse on indicator 3, notably Guinea and Nigeria. This hinders not only their extractive industries but also their prospects for economic transformation through the development of non-resource sectors.

Figure 1 shows the improvements achieved since 2017 but also the many weak, poor, and failing scores in countries whose economies are dominated by resource wealth. Governments with an unsatisfactory 2017 RGI score received an astounding US\$1.2 trillion of public resource revenues (Mihalyi and Fleming 2017). The prospects for spending the revenue in ways that benefit all citizens, and not just the elite, remain limited until governance improves.

⁵ <https://resourcegovernanceindex.org/about/global-report>

⁶ The RGI defines a ‘failing’ country as one that ‘has almost no governance framework to ensure resource extraction benefits society. It is highly likely that benefits flow only to some companies and elites’.

Figure 1: Score and performance band shifts between the 2017 and 2021 Resource Governance Indices



Source: NRGi (2017a, 2021). Figure reproduced here with permission from the Natural Resource Governance Institute.

3 Tackling corruption and theft

Corrupt practices will always be with us, but none of the parties to bribery welcome more light.⁷ Their incidence and damage can in principle be reduced by building the technical capacities of the national institutions responsible for regulating and managing natural resources. The World Bank, African Development Bank (AfDB) and other regional development banks, bilateral aid agencies such as Norway's NORAD, and the UN agencies all provide significant assistance.⁸ Progress has been achieved under the UK's DFID (now FCDO) FOSTER project in Nigeria, for example.⁹ Moreover, the NRGi, the Extractive Industries Transparency Initiative (EITI) and Transparency International (TI) all promote improved governance and their data-gathering greatly helps civil

⁷ Noting that the concept of 'corruption' is not straightforward: what is legal in one country can be illegal in others, and there is a grey area involving 'lobbying' which is pervasive across all societies (see Kauffmann and Vicente 2005). On corruption specifically in the natural resource sectors, see Williams and Le Billon (2017).

⁸ NORAD (Norwegian Agency for Development Cooperation). The World Bank's Extractives Global Programmatic Support (EGPS) Multi-Donor Trust Fund assists countries to improve the governance of their oil, gas and mineral resources in such areas as transparency, legal and regulatory reform, local economic diversification, institutional strengthening and social and environmental sustainability <https://www.worldbank.org/en/programs/egps>.

⁹ DFID (Department for International Development); FCDO (Foreign, Commonwealth & Development Office); and FOSTER (Facility for Oil Sector Transparency and Reform). On FOSTER, see Buckley, McCulloch, and Travis (2018) and Lopez Lucia et al. (2019).

society's advocacy for reform.¹⁰ We return to the assistance provided to Civil Society Organizations (CSOs) later.

However, any institutional restraints on corruption faces an uphill task if not backed by the top layer of government.¹¹ The worst cases involve *state capture* in which political leaders place family members, allies and other politically connected persons (PEPs) into high-level positions in national oil companies (NOCs), energy ministries, and SWFs. Private companies linked to PEPs are also created to win contracts via opaque public procurement processes. Oil economies are especially vulnerable as large fortunes can quickly be made: one study estimates that for petro-states with autocratic rulers around 15 per cent of a typical oil boom is deposited in accounts in tax havens.¹²

These political dynamics mute the effectiveness of any technical assistance. These situations are much harder to resolve than those in which the main problem is deficient technical capacity but where accountability in the political system exists (legislatures can then hold the executive to account) and where the media and civil society are reasonably free. No country is irredeemably bad, but they do vary enormously in the amount of progress needed, seen or yet to be achieved.

The World Bank's Worldwide Governance Indicators (WGI) are one way to track progress.¹³ Nigeria has deep governance problems but nevertheless shows progress in some areas with both its WGI and RGI scores improving, for example (see Box 1 on the RGI). South Africa pulled itself back from the abyss, after the state capture that characterized the Zuma presidency (2009–18). South Africa's democratic institutions, civil society and media provided some defence, although the damage was substantial and is still under repair.

Progress can never be taken for granted and is always in danger of reversal, as Myanmar demonstrates. Myanmar joined the EITI in 2014 following the start of its democratic transition and its RGI score in oil and gas improved (see Box 1).¹⁴ But achieving transparency in mining and commodity trading has been much harder as the military retains its extensive business interests in jade, gemstones, and timber. The 2021 coup has protected the military's commercial ventures and provided further scope for their expansion.

In sum, resource wealth remains an open temptation to weak governance, corruption, and theft. However, rather than throwing up our hands in horror and concluding that this is inevitable, let us now dig deeper into what can be done to make progress.

¹⁰ The term 'civil society' embraces non-governmental organizations (NGOs), local community groups, faith groups, trade unions, the press, and social media.

¹¹ There is a large literature on institution-building and development, especially in the context of fragile states and violent conflict. A sample includes Andrews et al. (2017), Pritchett (2013), Pritchett et al. (2017), and Werker and Sen (2021). Addison (2003) discusses the issues in the context of Africa's conflicts and 'post-conflict' recoveries. Much depends on whether an 'elite bargain'—an agreement to pursue long-term development—emerges or not (Dercon 2022).

¹² Andersen et al. (2017). On corruption in the oil industry see Gillies (2019a).

¹³ Since 1996 the World Bank has been quantifying 'Control of Corruption' as one of the six indicators included in its Worldwide Governance Indicators (WGI) database: <https://info.worldbank.org/governance/wgi/>. This indicator reflects: 'perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests'.

¹⁴ EITI (2019).

3.1 Actions by richer countries: the US Foreign Corrupt Practices Act

Despite their stronger rule of law, the rich world is complicit in corruption in the developing world: their companies pay bribes, their banks launder money, and they host the wealth of many corrupt officials and politicians. These points are often made, but they bear repeating. Not so long ago many members of the Organisation for Economic Co-operation and Development (OECD) allowed tax deductibility for business expenses relating to payments to secure contracts abroad: it only ended for Swiss companies making payments to private individuals in 2022 (and for payments to public officials in 2001). A catalyst for national action was the OECD's initiatives on bribery, including its convention on combatting bribery of foreign officials (which was adopted in 1997 and came into force in 1999).¹⁵ This has been adopted by all 36 OECD member countries and by eight non-OECD members.

How much progress has there been? The US Foreign Corrupt Practices Act (FCPA) of 1977 was a major step forward and is still the most widely enforced anti-corruption law. FCPA was the first to introduce corporate liability responsibility for third parties and extra-territoriality for corruption offences, whereby companies and persons can be held criminally and civilly responsible for corruption offences committed abroad. Nevertheless, and despite the FCPA getting off to a good start, the number of enforcement actions was only one or two per year in the Act's first three decades, a limiting factor being the lack of cooperation from other countries. This started to change around the millennium, notably when the OECD adopted and promoted its anti-bribery convention in the late 1990s.¹⁶ This resulted in more international cooperation on investigations and prosecutions. Around 2005–07, the US Department of Justice (DoJ) and the US Securities and Exchange Commission (SEC), the FCPA's dual enforcers, stepped up prosecutions and this continued under the Biden administration.¹⁷

The FCPA matters hugely for companies in the oil, gas and mining industries, as well as the commodity traders and banks: the sector has seen some of the largest cases, with the imposition of large fines. For example, in 2020 Eni entered into an agreement with the SEC to pay US\$24.5 million in resolution of a case brought under the FCPA, concerning improper payments of €198 million (around US\$200 million) by an Eni subsidiary, Saipem, to Algerian government officials (Eni neither admitted nor denied the SEC's findings).¹⁸ In 2021, Credit Suisse agreed to pay US\$475 million to US and UK authorities for violating the FCPA with regard to Mozambique and in connection with two bond offerings and a syndicated loan (the 'tuna bonds scandal'), while a London-based subsidiary of the Russian VTB bank also settled with the SEC for US\$6.4 million in relation to the second bond offering.¹⁹ Such successes represent hard-won progress but corruption's damage to the economies and societies of poorer countries can be truly enormous.

Another advance was the US Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010; Section 1502 requires companies reporting to the SEC to report their use of designated

15 See <http://www.oecd.org/corruption/oecdantibriberyconvention.htm>. Work under the Convention is supported by a variety of guidance documents such as OECD (2009, 2011).

16 See Transparency International (2020) on enforcement.

17 The SEC intends to implement a policy requiring more companies and individuals to admit wrongdoing when they settle civil enforcement actions; previously the SEC had allowed most companies and individuals to settle on a 'neither admit nor deny' basis. This will make it easier to bring private litigation against companies and provide more potential for DoJ criminal prosecutions. At present companies can settle and move-on, essentially transferring the cost of the fines to their shareholders, and thereby limit the reputational damage.

18 <https://www.sec.gov/enforce/34-88679-s>. See also Transparency International (2020: 73).

19 <https://www.sec.gov/enforce/sec-enforcement-actions-fcpa-cases>

‘conflict minerals’. A parallel set of standards comprising the Kimberley Process was adopted in 2002 by a coalition of 37 nations to try and prevent conflict diamonds from entering legal supply chains.²⁰

In sum, progress is evident. Yet there is still much that is opaque, including companies protecting the identities of their shareholders, financial statements that hide corrupt payments, and the use of tax havens to hide the payment of bribes, and the laundering of the gains.²¹

4 Transparency and the power of civil society

Transparency is centre stage in the international struggle of the past 2-3 decades to improve accountability in licensing, tax agreements, and payments. There is a strong link between weaknesses in transparency on the one hand and the incidence of corruption, tax evasion and illicit financial flows (IFF) on the other.²²

The turn of the century saw a step change in international action, when advocacy by Global Witness, the Open Society Foundations, and others rallied under the banner of *Publish What You Pay* (PWYP).²³ This culminated in an international conference convened in London by the UK’s DFID (now FCDO) in June 2003, which agreed a Statement of 12 Principles to increase transparency of payments and revenues in the extractives industries. EITI was founded to give effect to these principles.²⁴ The take-up of EITI has been impressive and over 50 countries now implement the EITI standard (see Figure 2).²⁵ In its twenty-year life EITI has helped clarify the revenue picture of its members, including in Africa which accounts for over half of EITI’s membership.²⁶ EITI also provides an important platform for dialogue among stakeholders, including civil society and companies in addition to governments, especially in countries where this might otherwise be absent.

Nevertheless, there is a long way to go. EITI would be greatly strengthened if more big resource economies signed up: Brazil, Russia, and South Africa remain outside, and Iraq is the lone member in the Middle East and North Africa (MENA) region. The United States withdrew during the Trump administration, leaving Germany and the UK as the only G7 members (France is surprisingly absent).²⁷ Countries that withdrew or were suspended due to lack of progress in

20 <https://www.kimberleyprocess.com>. See Bieri (2010); Smillie (2010, 2014); Östensson (2020).

21 https://www.transparency.org/topic/detail/oil_and_gas. Blas and Farchy (2021) provide insight into the activities of the large international companies trading oil and gas.

22 Additionally, and as noted by Östensson (2020), weak transparency results in serious allocative inefficiencies that reduce economic growth. On the methods used in IFFs see the Financial Action Task Force (FATF), an intergovernmental body charged with combatting money laundering <https://www.fatf-gafi.org>.

23 On the history of PWYP see Van Oranje and Parham (2009). The UN Global Compact, established in 1999, was another catalyst.

24 The Dodd-Frank initiative as it applies to the extractives sector (section 1504) is a parallel initiative with similar objectives. If enforced (a matter that remains in doubt) it would require the disaggregated reporting of payments by 90% of the world’s largest international oil companies (IOCs), as well as eight of the world’s ten largest mining companies.

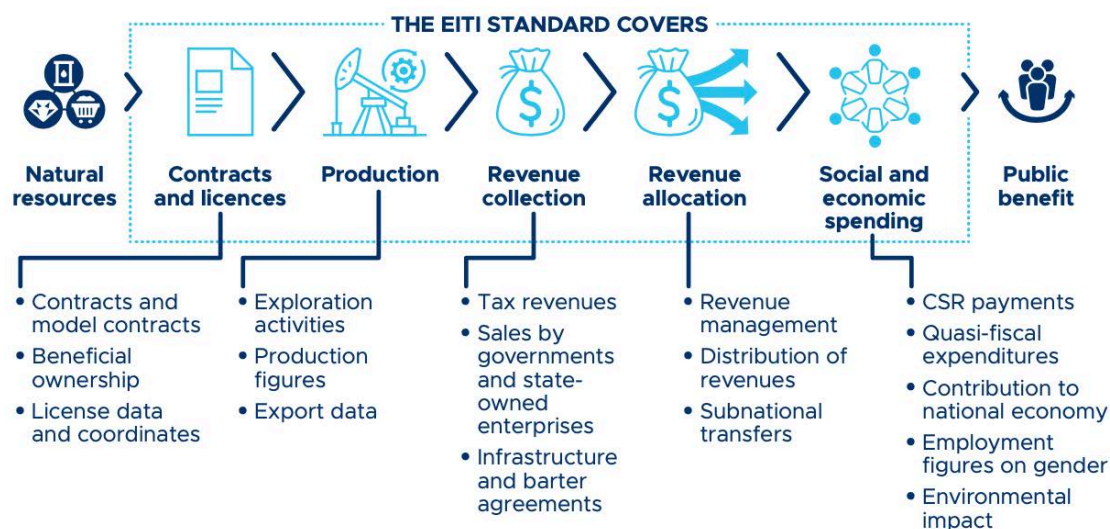
25 <https://eiti.org/countries>

26 See Cust (2018) and Van Alstine (2017) for reviews of EITI’s effectiveness.

27 Western Europe’s biggest oil and gas producer, Norway, is implementing EITI. In addition, 68 companies support EITI.

implementing the standard are Afghanistan, Azerbaijan, Equatorial Guinea (which applied to re-join, but has made insufficient progress), Solomon Islands and Yemen—and Myanmar was delisted in 2024 due to its political regression, including its crack down on civil society.²⁸ Given the increased role of Chinese and Indian companies, it would greatly boost EITI’s reach if their governments were to join.

Figure 2: Data disclosed under the EITI standard



Source: Extractive Industries Transparency Initiative (EITI); eti.org. Reproduced here in line with terms and conditions for reproducing content from EITI website.

Zimbabwe illustrates the struggle around revenue transparency. There is a longstanding illicit trade in gold, which is bought by politically connected traders who smuggle it through South Africa and Mozambique and then onward to the Gulf. One government minister has said that no less than US\$100million of gold leaves Zimbabwe illegally every month, which represents a massive loss of revenue for the state.²⁹ Zimbabwe is not yet an EITI member: reformers within government are in favour, others denounce it as ‘another western plot’. The politics of extractives interact intimately, as in every country, with the broader agenda of democratic accountability.³⁰ EITI membership offers no magic bullet, but the chair of the Zimbabwe Environmental Law Association (ZELA), Tumai Murombo, is surely right in concluding that: ‘While the EITI may not prevent the corruption and plundering of a country’s extractive resources, it will be a step towards building trust and a culture of transparency and accountability’.³¹

Chad is another illustration of EITI’s potential—along with many of its difficulties. In 2006, the government broke an agreement with the World Bank over revenue transparency, including saving 10 per cent of Chad’s oil revenues into a Future Generation Fund which was supposed to remain untouchable. This led to the Bank’s withdrawal from the project. However, elements within the

28 <https://eti.org/news/myanmar-delisted-eiti-due-political-instability>

29 GITOC (2021: 11). At least 50% of Zimbabwe’s artisanal gold is estimated to be smuggled. Gold smuggling is a global problem: see UNU-WIDER studies of Kenya and Peru by Smith et al. (2023) and of Bolivia (Brugger et al. 2022).

30 Robinson (2021). Zimbabwe once had one of the most promising futures in southern Africa (see Addison and Laakso 2003).

31 Murombo (2021: 21). <http://www.zela.org>.

leadership wanted to maintain good relations with Chad's aid donors.³² Moreover, drawing on an earlier national PWYP network, Chad's civil society mobilized strongly in support of joining EITI.³³ By 2010 Chad had signed up, and was fully compliant with EITI principles by 2014, becoming something of a laboratory for the practice of revenue transparency.³⁴ But progress has been far from smooth and off budget expenditures to service resource-backed loans remain of particular concern.³⁵ Moreover, the Sahel region's insecurity still impacts on the country's politics, and thereby on the prospects for progress on transparency.

Ghanaian civil society has expertise ranging from community development to fiscal governance, and was therefore well placed both to encourage Ghana to join EITI as well as to help create the Public Interest Accountability Committee (PIAC) which oversees the use of the nation's petroleum revenues.³⁶ In the Shama district in Ghana's western region, the Ghanaian NGO Friends of the Nation (FON) has worked with the district assembly on participatory budgeting and public oversight of spending funded from oil revenues.³⁷ There is also progress in Peru where, despite weak formal accountability (local governments and companies often ignore the law), CSOs have successfully identified discrepancies in revenue transfers and project execution.³⁸

Nigeria's FOSTER project, supported by the UK's DFID (and now FCO), is one of the most impressive examples of civil society's influence. Aid projects can be rigid in design and execution, usually being implemented through an organization chosen by the donor and the host government. Instead, FOSTER was designed to work flexibly with any counterpart agency or group (some outside the government entirely) that promoted and supported reform, with the choice being vested in the local Nigerian team. FOSTER also adapted its modalities as political circumstances changed. The FOSTER team provided evidence-based information about the oil sector, which was used by a wide range of CSOs and other partners to enhance public debate. Notably, this helped strengthen Nigeria's EITI and support Nigeria's National Assembly in preparing new legislation for the oil and gas sector. It was also a critical player in the development of Nigeria's pioneering Gas Flare Tracker that has resulted in significant reductions in methane emissions from production facilities.³⁹

From these examples, three lessons emerge on strengthening the hand of CSOs. First, build their resources and technical capacity so that they can more effectively contribute to EITI and other transparency initiatives.⁴⁰ High-quality, accurate, and up-to-date information is the vital raw

³² Not least because Chad was going through the Heavily Indebted Poor Countries (HIPC) debt relief process. Addison et al. (2004) discuss HIPC.

³³ Hoinathy and Jánosky (2017).

³⁴ Hicks (2015: 39).

³⁵ <https://eiti.org/countries/chad>. EITI (2022: 6). Resource-backed loans, where oil is used as collateral, are a feature of China's lending (Horn et al. 2019: 23).

³⁶ <https://www.piacghana.org/> This was one component of the 2011 Petroleum Revenue Management Act. See Slack (2018). EITI (2018) discusses EITI's engagement with Ghana's oil and gas trading.

³⁷ In 2013, Ghana's CSOs organized a successful campaign on 'Oil for Agriculture', which convinced the government to commit 15% of its oil revenue to small-scale agriculture (Offenheiser 2014).

³⁸ Slack (2018). These achievements are especially important given the finding of the 2021 RGI assessment that the *governance of local impacts*—the environmental and social aspects of extraction—often showed worsening performance in the five years after 2017 (NRGI 2021: 14).

³⁹ On Nigeria's emissions from oil and gas, see Romsom and McPhail (2023).

⁴⁰ This section draws on Slack (2018).

material for civil society to do its job effectively. Second, put more resources into improving awareness among citizens of the value of revenue transparency and what ‘good governance performance’ can and should look like. Third, any donor-funded technical assistance to CSOs must try to ensure genuine local-ownership: Nigeria’s FOSTER is a good model.⁴¹

In sum, CSOs can be a powerful force for monitoring state behaviour, exposing corruption and pushing the transparency agenda, especially when national organizations combine through international initiatives like EITI, and other mobilizers of technical assistance and financial support. At the same time, we must recognize civil society’s limitations: CSOs can be institutionally fragile, not all are progressive (authoritarian politicians create their own to exercise influence and spread disinformation), and they must operate in difficult and sometimes highly dangerous environments.⁴² Their chance of success is therefore much influenced by the national and local political environment. Progressive governments recognise the support that a well-functioning civil society can provide in shaping the resources debate, monitoring the effectiveness of regulation, and giving voice to marginalized communities. Truly democratic politicians and responsible companies might not like criticism, but they listen with respect.

5 Tightening up licensing

The award of licenses to explore and to operate (produce) is an area of high corruption risk.⁴³ Licensing is the starting point of the life cycle of all mining and oil and gas projects after successful exploration and is therefore critical to the anti-corruption battle. NRGi’s 2021 RGI states that: ‘Governance of licensing was the lowest-scoring dimension of resource governance. This was primarily due to poor scores on laws regarding beneficial ownership transparency and asset disclosures by public officials’.⁴⁴

For oil and gas, a study for UNU-WIDER by Marcolongo and Zambiasi (2022) finds that the incorporation of offshore shell companies in tax havens increases around the time that exploration licences are awarded (with the association being stronger during oil booms).⁴⁵ This suggests corruption involving PEPs with influence over the award of licenses; and the active use of shell companies (controlled by people with links to the country in which the licensing is underway), established with intent to hide illicit payments. The study limits itself to companies created before (or in the aftermath) of the award of licenses, in a six-month window.

Corruption in licensing also occurs in mining. Recognizing this reality, Transparency International has a Mining Awards Corruption Risk Assessment Tool enabling governments and other stakeholders to identify and assess the underlying causes of corruption in mining sector awards.

⁴¹ ‘FOSTER’s Abuja team was Nigerian led from the start, and by 2015 was entirely Nigerian’ (Lopez Lucia et al. 2019: 1).

⁴² There is a long history of persecuting the CSOs created by indigenous peoples in Latin America, including the murder of community leaders and activists.

⁴³ The award of contracts to firms providing services to the mining and oil and gas industries is also open to abuse.

⁴⁴ NRGi (2021: 12).

⁴⁵ Marcolongo and Zambiasi (2022). The study covers 119 countries over the period 1990–2014 and uses data from the Offshore Leaks Database constructed by the International Consortium of Investigative Journalists (ICIJ).

The tool has been used to assess the risks in 23 mining jurisdictions, identifying more than 80 common corruption risks.⁴⁶

The NRG's Benchmarking Framework, which uses The Natural Resources Charter to frame its building blocks, also enables governments and civil society to evaluate licensing arrangements against good practice (see Figure 3).⁴⁷ Specifically, the benchmarking for licensing (precept No.3) is organised under three sets of questions: (i) *planning* that precedes allocation; (ii) *screening* processes for allocation to ensure that all licensees are of good standing and can offer value for money; and (iii) *monitoring* processes once the licenses are issued. Under the second of these headings NRG's Framework also offers detailed advice about *license disclosure* (of information relevant to the license) both before and after the license is issued. The Framework has been applied in over 15 countries and helps in interpreting EITI results when these indicate possible deviations from the rules.⁴⁸ Relatedly, NRG has also developed 'Twelve Red Flags' to help spot license abuses (see Box 2).

Figure 3: The natural resource charter decision chain



Source: NRG (2014). Figure reproduction here with permission from the Natural Resource Governance Institute.

There are many examples where licensing has gone wrong, resulting in complex and often protracted legal cases. One especially tangled tale is that of Nigeria's 'Oil Prospecting License 245' (OPL 245) which began in 1998 when General Sani Abacha, the country's head of state (after seizing power in 1993) awarded OPL 245—a potentially rich offshore asset—to a local company which counted the then oil minister as one of its shareholders. Over the following years, Eni and Shell acquired stakes in OP 245, leading to accusations of corrupt payments. Eni and Shell denied any wrongdoing and stated that they acquired the license through legitimate agreements with the Government of Nigeria.⁴⁹ There then followed protracted litigation in both national and

⁴⁶ Transparency International (2017). Furthermore, contracts supported by finance or technical assistance from the World Bank and the AfDB are subject to stringent external audit. Specifically, these development banks can debar companies that are guilty of dubious practices and also 'cross debar' them from accessing contracts from other agencies.

⁴⁷ NRG (2017b) and <http://www.resourcegovernance.org/approach/benchmarking-framework>

⁴⁸ On using EITI disclosures for an anti-corruption investigations, see Sahla et al. (2021).

⁴⁹ 'Timeline: Nigeria's OPL 245 Oilfield Licence Bribery Cases'. *Reuters*, 17 March 2021.

international courts. In March 2021, and after a three-year trial, an Italian court acquitted Eni, Shell, and other defendants of all charges.⁵⁰ Nevertheless, Nigeria's Economic and Financial Crimes Commission (EFCC) is still pursuing the case. A quarter of a century after the concession was first awarded, OP 245 still casts a dark shadow over oil and gas licensing in Nigeria and has undoubtedly impacted investment into the sector.

Box 2: Red flags for corruption

NRGI's red flags provide a useful lens for investigating corruption as they are based on an analysis of common patterns of corrupt behaviour. This covers the award of exploration and production licenses, service contracts, and commodity trading contracts. The presence of an individual flag does not necessarily indicate corruption, but as the number of red flags increases so does the corruption risk. We reproduce here the red flags from Sayne, Gillies, and Watkins (2017: 2):

1. The government allows a seemingly unqualified company to compete for, or win, an award.
2. A company or individual with a history of controversy or criminal behaviour competes for, or wins, an award.
3. A competing or winning company has a shareholder or other business relationship with a PEP or a company with a PEP interest.
4. A competing or winning company shows signs of having a PEP as a hidden beneficial owner.
5. An official intervenes in the award process, resulting in benefit to a particular company.
6. A company provides payments, gifts or favours to a PEP with influence over the selection process.
7. An official with influence over the selection process has a conflict of interest.
8. Competition is deliberately constrained in the award process.
9. A company uses a third-party intermediary to gain an advantage in the award.
10. A payment made by the winning company is diverted away from the appropriate government account.
11. The agreed terms of the award deviate significantly from industry norms.
12. The winning company or its owners sell out for a large profit without having done substantial work.

More generally, such cases illustrate the risks to companies' reputations in dealing with authoritarian governments, and for countries the need to avoid highly personalized allocations of licenses rather than fully transparent processes that protect the public interest. A declaration of public officials' assets is vital to avoiding conflicts of interest in the award of licenses, whether in oil and gas or mining (NRGI's Red Flag No.3 in Box 2). Many countries have worked hard to reform the legal frameworks around their extractive industries, but enforcement can lag far behind, a result of limited administrative capacities and sometimes political interference.⁵¹ In sum, licencing

⁵⁰ A subsequent appeal failed in 2022 but Nigeria may appeal to the Italian Supreme Court. In June 2022, a UK commercial court also ruled against Nigeria in a related case involving the transfer of payments by JP Morgan Bank on behalf of Eni and Shell. Also in 2022, the Netherlands public prosecutor dropped an investigation into Shell regarding OP 245. For Eni's statements on the case see <https://www.eni.com/en-IT/media/opl245-case-process-nigeria.html>. Shell's statement is here: <https://www.shell.com/media/news-and-media-releases/2021/shell-comments-on-the-verdict-from-the-milan-tribunal-over-opl-245.html>. See also Global Witness (2018a).

⁵¹ Thus, for example, Senegal has made significant progress on closing the implementation gap but there is still much to be done, especially regarding beneficial ownership (Diene and Woodroffe 2021). In 2019, a BBC programme,

can be a complex business, huge sums are involved, and there is a need for much more transparency using the tools developed by TI, NRGi and others.

6 Cleaning up commodity trading

Commodity trading is a big business: it made a record US\$115 billion in gross profits in 2022.⁵² There are the big international commodity trading companies such as Gunvor, Trafigura, and Vitol which remain private partnerships, while Glencore eventually became so large—as it diversified into mining—that it went public in 2011. The energy majors have highly profitable trading arms, notably Shell, as do some international banks and hedge funds. Some of the IOCs are still vertically integrated (producing, refining, and selling to the consumer) but many commodities pass through a chain of multiple sales, involving a variety of intermediaries and markets before they reach their final destinations: smelters, refineries, power plants, and factories. Tracking these intermediate trades is complex, as the commodities can and often do move through many jurisdictions. And there are numerous independent registered traders along the way, as well as large and illicit trading networks.

Traders are spread across the world, with China and the Gulf region of special and growing importance. However, many of the older trading companies are still headquartered in Switzerland, the world's leading commodity trading hub, with some 500 companies active in trading, shipping, transaction financing, inspection services and product testing. They account for 3.5 per cent of Swiss GDP, and 15 to 25 per cent of the global trade in commodities.⁵³

Founded as private companies, the big trading houses have a chequered history of malpractice including bribery, sanctions evasion, mis-invoicing, tax evasion, and the evasion of financial regulations.⁵⁴ Because of the substantial size of many of the trades, the costs of such malpractices are potentially huge.

Swiss-based companies have been under sustained pressure to become more transparent, not least because of the damage to Switzerland's reputation itself. In 2011 prominent Swiss NGOs came together around the 2011 Berne Declaration which pulls no punches when it states: 'Trading houses that often operate on the legal and political fringes are dangerous for Switzerland ... After the fall of Swiss bank secrecy, they are the country's next exposed flank'.⁵⁵ The Federal Council of

Panorama and Africa Eye, investigated the 2017 award of offshore gas blocks in Senegal: <https://www.bbc.com/news/av/world-africa-48475068>. A statement by the Timis corporation, denying the allegations made in the programme, is here: <https://www.bbc.com/news/world-africa-48483250>. BP also denies any improprieties: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/what-we-do/worldwide/bbc-panorama-response-english.pdf>. The deal triggers at least 7 of NRGi's 12 red flags (Gillies, 2019b). In 2019 Global Witness called for US and UK authorities to investigate further: <https://www.globalwitness.org/en/press-releases/global-witness-calls-on-uk-and-us-to-investigate-bp-and-city-bad-boy-frank-timis/>. The Organized Crime and Corruption Reporting Project (OCCRP) has also looked into the case: <https://www.occrp.org/en/investigations/senegals-offshore-oil-reserves-a-pricey-pawn-in-covert-deal>.

⁵² 'Global Commodity Trading Earnings Reach Record \$115bn', *Financial Times*, 5 March 2023.

⁵³ Berne Declaration (2011).

⁵⁴ Blas and Farchy (2021) is the best single source for the history of the opaque world of commodity trading.

⁵⁵ Berne Declaration (2011). See Carbonnier and Zweynert de Cadena (2015) on the history.

the Swiss Government has been increasingly alert to these concerns with new tax and other legislation among the instruments designed to achieve improvement.

Today all the bigger and more familiar names in the business claim to be squeaky clean (and some have signed up to EITI as supporters, notably Glencore). Yet any casual perusal of the business press over the last five years still yields many cases that have been successfully prosecuted or settled before going to court as well as ongoing trials, continuing investigations, and a host of allegations (many involving company and state actor behaviour that raises multiple red flags).

A sample of cases, and just in relation to oil trading, include Vitol, the world's largest independent oil trader, which in 2020 settled for US\$164 million in a deferred prosecution agreement with the DoJ after admitting to bribery in Brazil, Ecuador and Mexico.⁵⁶ In 2019, oil trader Gunvor agreed to pay US\$95 million in settlement of a Swiss investigation into the bribery of officials in Côte d'Ivoire and the Republic of Congo.⁵⁷ In 2021, a former agent for Gunvor pleaded guilty to bribing officials of Petroecuador, the country's NOC, following a DoJ investigation, and in its 2022 accounts Gunvor took a US\$200 million provision relating to the case.⁵⁸ In 2022, a London court ordered Glencore to pay over US\$200 million in penalties after the company pleaded guilty to charges relating to bribery in Cameroon, Côte d'Ivoire, Equatorial Guinea, Nigeria, and South Sudan to secure access to oil on preferential terms.⁵⁹ In 2023 a New York court ordered Glencore to pay US\$700 million relating to bribery in Brazil, DRC, Nigeria and Venezuela.⁶⁰ These are just the recent cases reported in the media, a complete list covering decades of commodities trading would fill an entire book.⁶¹ Moreover, the dealings of Chinese and Russian companies remain opaque, to say the least.

Many of the cases just cited involve the use of agents acting for bigger traders. Many agents are honest businesses and given their knowledge of sellers and buyers, such intermediaries improve market efficiency by reducing transactions costs. But a minority offer a convenient cover for bribery, enabling the bigger players to deny culpability. Nigeria has seen exceptionally large amounts of oil sold through intermediaries in this way. Until the 2016 reforms, Nigeria's 'briefcase companies' (so-called because of their method of transporting cash for payments) bought oil from the Nigeria National Petroleum Corporation (NNPC) and then rapidly resold it, skimming a margin in the process.⁶² One allegedly operated on behalf of a minister of petroleum. Accordingly,

⁵⁶ 'Vitol Pays \$164 mln to Resolve US Allegations of Oil Bribes in Latin America'; *Reuters*, 3 December 2020.

⁵⁷ 'Gunvor Pays Almost \$100m to Settle Africa Corruption Case'; *Financial Times*, 19 October 2019.

⁵⁸ 'Ex-Gunvor Employee Pleads Guilty to Foreign Bribery Scheme', *Bloomberg*, 6 April 2021. The employee became an agent for Gunvor in 2018, but the case also related to bribery before that date, with some US\$22 million being paid to officials between 2012 and 2020.

⁵⁹ 'Judge Orders Glencore to Pay £276 mn over African Bribery', *Financial Times*, November 04, 2022. Investigations by the UK's Serious Fraud Office revealed that Glencore employees transported US\$800,000 in cash by private jet to South Sudan to pay bribes.

⁶⁰ 'Glencore Sentenced to Pay \$700 Million in US after Bribery Guilty Plea'; *Reuters*, 28 February 2023. At the time of the decision, the company said it expected to eventually pay US\$1.5 billion to settle bribery and market manipulation accusations.

⁶¹ While the fines are substantial, the sums are minor relative to the profits. In 2022, Gunvor's net income was US\$2.36 billion, and Glencore's was US\$17.3 billion. Sources: 'Energy Trader Gunvor Posts Record \$2.36 bln Net Profit in 2022'. *Reuters*, 5 April 2023, and 'Global Commodity Trading Earnings Reach Record \$115bn', *Financial Times*, 5 March 2023.

⁶² Sayne et al. (2015).

intermediaries are often the starting point for investigations by law enforcement agencies, and their presence constitutes a red flag for corruption risk.⁶³

As a result of successful law enforcement, but also investor pressure, big commodity traders are now reducing their use of intermediaries. Trafigura ceased to do so in 2019, and was one of the first trading houses to join EITI as a supporting company (later followed by Glencore and Gunvor).⁶⁴ EITI supporting companies are expected to uphold the EITI standard by reporting in EITI implementing countries in which they operate.⁶⁵ As such, EITI membership is a signal of credibility for companies that care about reputational risk, and it also increases the ability of analysts to verify trades by such entities as NOCs in EITI implementing countries.

In summary, much attention is rightly focused on transparency in the ‘first trade’, especially oil sales by NOCs which have featured in multiple corruption cases. Tests of whether a trade is a source of illicit gain include the following. First, has the sale been efficiently conducted, and what were the terms on which the sale was made: specifically, does the sale price reflect prevailing market conditions/prices or has it been under-priced for the benefit of a particular buyer? Is there a relationship between the officials in charge of the sale and the buyers? What happens to the money once the sale goes through? Does all of it appear in the accounts of the government? Large amounts of timely data are needed to verify the facts, but also analysts skilled in understanding the market and industry are still in short supply.

Corruption is fundamentally theft: taking money for private gain from the public purse—and ultimately away from the public goods it could otherwise fund. A dollar stolen is a dollar lost to basic healthcare, primary schooling, or developmental infrastructure. Corruption on a grand scale ultimately degrades the state, social trust, and makes societies more inclined to settle their differences by resort to violence. Given the scale of the losses, which are not just financial, the penalties should be commensurate, and not just fines on the companies—which are then largely paid for by the shareholders—but serious penalties, including jail time, for those not just directly engaged in the payment and receipt of bribes, but those facilitating them right up to the highest levels. Given the damage from corruption in all its forms—not only in commodity trading but also in licensing etc—it is surely time to seriously consider the creation of an International Anti-Corruption Court, as championed by the UK’s Lord (Peter) Hain.⁶⁶

7 Theft and state fragility

A related but equally difficult challenge is the theft of the resource itself, after its extraction, at some point along the global value chain. Again, we return to the case of oil since it is the largest stolen resource globally—a staggering US\$133 billion is lost annually—while fuel is the most smuggled natural resource.⁶⁷ Oil theft varies in scale from tapping pipelines (a longstanding practice in Nigeria’s Delta region and in Mexico) though to maritime piracy and large ship-to-ship

⁶³ Sayne et al. (2017).

⁶⁴ <https://eiti.org/commodity-traders>. Trafigura (2021:19).

⁶⁵ <https://eiti.org/documents/expectations-eiti-supporting-companies>

⁶⁶ A proposal not yet endorsed by the British government. See the 6th July 2023 House of Lords debate, including Lord Hain’s robust summary of the issues and the merits of an International Anti-Corruption Court: <https://hansard.parliament.uk/Lords/2023-07-06/debates/DB0613A7-1D77-482D-A180-20745447DD92/InternationalAnti-CorruptionCourt>.

⁶⁷ This section draws on UNU-WIDER studies by Romsom (2022a, 2022b).

transfers at sea beyond national jurisdictions (especially off the coasts of Bangladesh, Indonesia, Somalia, and West Africa). Oil may be sold on, often across borders, or used as fuel (in Colombia the low-grade fuel *pategrillo* is used in cocaine refining). The costs go beyond lost revenues (borne by companies and governments) to include disruption to international trade (e.g., piracy in the Gulf of Guinea has led to port shutdowns) and challenges to the very security of the state.

One way forward is to use a chemical marker (such as an isotope) to ‘fingerprint’ oil products and construct a database—blockchain has potential—to enable companies and law enforcement agencies to track the commodity from its source through the value chain to any final sale. In Ghana, a full-scale Petroleum Product Marking Scheme (PPMS) was implemented, after a pilot in 2013, for officially imported fuels. Fuel stations selling unmarked fuels are now penalised and the incidence of fuel adulteration has dropped markedly. Success was achieved in Uganda after fuel marking regulations were introduced in 2009. And a PPMS commenced in 2019 to counter lost tax revenues from fuel smuggling amounting to US\$7.1 billion over 2010–19.⁶⁸

A very different market to oil is that for gemstones. Here the issue to be highlighted is illegal control over mining itself and subsequent trading. Gemstones are of special concern as they are easily smuggled, often from conflict zones via rebel and terrorist groups, and can then swiftly pass through opaque global trading networks, with their origin readily concealed.⁶⁹ Following the publicity around West Africa’s blood diamonds, Botswana became so concerned about consumers turning away from the stones that it launched a highly transparent and regulated diamond auction process in 2013.⁷⁰ The government-owned Okavango Diamond Company auctions diamonds from De Beers (in which the Government of Botswana is a shareholder). Every prospective buyer must undergo pre-auction verification checks as to their legitimacy. And details of all transactions, and the final price, are posted online. In sum, it is a highly-regulated online auction of gemstones where the buyer is assured of the integrity of the seller—the auction is run by a body operating under government license—and in which the seller undertakes thorough checks on the probity of the buyers and is an innovation to be recommended. This differentiates Botswana’s legitimately sourced diamonds from illegitimate stones, which means that they can command a premium among ethical buyers in the luxury jewellery business as well as final purchasers.

Another corrective innovation is to use online databases and blockchain technologies to track gemstones from source to buyer. A blockchain number is etched microscopically into the stone, and then entered into a blockchain record, which cannot—by virtue of the technology—be tampered with. Several jewellery houses have already trialled this technology with promising results. Their incentive is partly commercial: ethically conscious consumers increasingly demand assurance of the cleanliness of the supply chain.⁷¹ And it helps in the increasing competition between mined diamonds and lab-grown diamonds for market share.

⁶⁸ However, this is harder for crude oil once multiple crude types are blended together in a pipeline, in storage or upon loading, any forensic information on any one component and its ultimate source can be lost in the mix.

⁶⁹ Siegel (2009) discusses the ‘trust networks’ that characterize diamond trading.

⁷⁰ <https://www.odc.co.bw>

⁷¹ Note, however, that Botswana’s diamonds are mined industrially from kimberlites which prevents ‘leakage’, and then enter a tightly controlled supply-chain. West Africa’s diamonds originate mainly from artisanal mining in alluvial fields, and therefore need to be effectively regulated at source before beginning their movement through the supply chain. Botswana and Sierra Leone make for an interesting comparison as regards the development outcomes from diamonds as both gained independence with approximately the same (low) per capita income, but then followed strikingly different trajectories. These may be attributable to institutional differences but also to the nature of the diamonds sector in each country (kimberlite versus alluvial respectively).

Clamping down on the extraction and trading of gemstones, precious metals (gold, silver, but also rare and valuable industrial metals e.g., coltan), ornamental minerals (e.g., amber and jade), crude oil and fuels, sand and stone (e.g., rare marble) by armed non-state actors (sometimes in collusion with state actors such as the military) remains one of the biggest challenges.⁷² These items are readily shipped through illicit networks and often traded alongside drugs (heroin and cocaine in particular), rare timber species, ivory, endangered wildlife, weapons, and even people with the respective trades financing each other (drugs gangs in Colombia and Mexico will also tap oil pipelines for example, while in Myanmar the mining and trading of amber and jade interconnects with the country's heroin and crystal meth industries).⁷³ Aside from organized crime, such activities have funded wars in Angola, DRC, Liberia, and Sierra Leone, as well as insurgencies by Al Qaeda and Islamic State in the Middle East. Islamic State 'franchises' continue to finance themselves with gold mining and trading operations across the Sahel region. Much of the mining of gemstones, precious metals, and ornamental minerals is undertaken by informal artisanal labour in local communities. Child labour and even forced labour is often used in unsafe mines, and refugees and migrants can be used in transportation and smuggling.

These activities are a major source of IFFs with the money commonly laundered via investments in property, businesses—thereby transferring the wealth far from its originating source. The resulting funds, together with informal 'taxation', create a substantial financial base for armed militias which ally with, or more often challenge, the incumbent state. When building their local political base, rebels may sometimes spend more of the revenue in ways that benefit communities: possibly more so than if the revenue (taxes, licensing fees etc.) had gone into the national exchequer—thereby creating a local 'social contract' to challenge the legitimacy of the established state. Nonetheless, the loss of revenue to the government reduces its ability to fund social and development spending in a conventional manner.

State actors as they compete for control of a country's resources can easily turn routine political competition into violent conflict. One example is gold mining and trading by the 'Rapid Support Forces' (RSF), the paramilitary force implicated in massacres during the Sudan's 2018-19 political transition (originating in the Janjaweed deployed in massacres in Darfur, Sudan) and Sudan's subsequent descent into civil war in 2023.

None of these matters lend themselves to easy technical solutions. They involve deep and complex issues of state authority, resolving the causes of fragility in fractured and conflictual societies, and coordinated international action. The latter must not only involve international organizations and governments, but also the companies that are engaged in the extractives sector.

8 Trade and illicit financial flows

Much attention has been paid by campaigners to allegations of false documentation in the declaration of traded commodities (often referred to as trade mis-pricing).⁷⁴ Although such allegations implicate the commodity traders, their target is also the large producing companies.

⁷² FATF (2013); FATF and APG (2015).

⁷³ On Myanmar, see Global Witness (2018b).

⁷⁴ Mispricing takes one of two basic forms: *transfer mispricing*, when a price different from the 'normal' market price is applied between related companies, and *mis-invoicing*, where the transaction takes place between unrelated companies, but where the price for the seller and buyer are different, with an intermediary appropriating the difference.

Analysis has yielded some very large estimates; for example, UNCTAD (2020) concludes that Africa alone loses some US\$30–52 billion annually through trade mis-invoicing.

However, while trade mis-invoicing undoubtedly occurs, measuring the scale of lost revenues is very difficult to get right: some of the standard measurement approaches suffer from well documented difficulties. Examples are the use of residuals in balance of payments statistics as a measure of capital flight, and the use of so-called ‘mirror-trade analysis’ as a way to measure trade mis-invoicing.⁷⁵ For example, much of UNCTAD’s estimate for Africa derives from trade data on South Africa’s gold exports, and the size of that estimate appears to result from the way that South Africa records its gold exports and not from any large-scale misappropriation of the gold itself. Indeed, the South African Revenue Service (SARS) issued a refutation of an earlier UNCTAD (2016) study on this same issue.⁷⁶

9 Conclusions

Corruption, illicit payments, and non-transparency are endemic in the extractive sectors and are regrettably embedded in many producing countries. Yet pessimism must be tempered as there are some impressive initiatives to at least contain the problems, if not resolve them. Our examples indicate how this is already being done and how it could be further improved.

First, advanced countries that had previously been quite passive in acting against malpractices by their own companies have tightened up significantly. Following the early lead of the US FCPA, we have had the Kimberley Process, the OECD’s Anti-Bribery Convention, and initiatives such as Switzerland’s Berne Declaration. The paper has given examples of high-profile prosecutions, some of which have been successful. Yet more needs to be done, as the large fines handed out by the SEC and others to commodity trading companies and officials are still small compared to the millions earned by employees tempted to cross the borders of legality. Those at the very top of companies need to take responsibility and need to face jail time if they do not.

Second, since the Millennium some large companies and many governments have been more willing to disclose more about revenues, contracts, licensing awards etc. Transparency has dampened some corrupt practices. Transparency alone is no panacea but as our examples show it is the foundation of anti-corruption practice.

Third, and related to the second trend, the broad-based transparency agendas led by EITI, Transparency International and others have received valuable support from the enactment of a growing set of agreed (and often mandated) standards of good corporate practice. The tone for this was set by the Sustainability Framework of the International Finance Corporation (IFC), an arm of the World Bank, and later the International Council on Mining and Metals (ICMM) standards for its own mining company members. NRG’s Natural Resources Charter and its NRG Governance index which systematically documents actual governance practices are invaluable, as are the World Bank’s governance indicators. From the 1990s onwards, Global

⁷⁵ Earlier trade mis-invoicing studies that have received a great deal of attention are those by the NGO Global Financial Integrity whose studies conclude that up to 80% of illicit outflows could be accounted for by mis-invoicing (GFI 2014, 2019).

⁷⁶ SARS Media Statement on UNCTAD Report: <https://www.tralac.org/images/docs/10208/sars-media-statement-on-unctad-report-29-july-2016.pdf> (29 July 2016). Eunomix (2017) provides an evaluation of the UNCTAD methodology. See Östensson (2018, 2020) and Forstater (2016, 2018) for extensive discussion of the methodological difficulties.

Witness led the way through its in-depth investigations illicit payments in the resources sector and this has inspired newer initiatives notably by the ICIJ.

Finally, but not least, organised civil society is demonstrating a powerful monitoring and restraining influence in domestic politics and on the extractives industries themselves, facilitated by social media and rapid communication. The record of achievement is of course uneven across counties—autocratic regimes have become more sophisticated in countering civil society—but in many countries civil society is a force to be reckoned with, especially through EITI membership and support from EITI Oslo as well as other international agencies.

References

- Addison, T. (ed) (2003). *From Conflict to Recovery in Africa*. Oxford: Oxford University Press for UNU-WIDER. <https://doi.org/10.1093/acprof:oso/9780199261031.001.0001>
- Addison, T. (2014). 'Development'. In P. Burnell, V. Randall and L. Rakner (eds), *Politics in the Developing World*. Oxford: Oxford University Press.
- Addison, T., H. Hansen and F. Tarp (eds) (2004). *Debt Relief for Poor Countries*. London: Palgrave Macmillan for UNU-WIDER. <https://doi.org/10.1057/9780230522329>
- Addison, T. and L. Laakso (2003). 'The Political Economy of Zimbabwe's Descent into Conflict', *Journal of International Development*, 15(4): 457–70. <https://doi.org/10.1002/jid.996>
- Andersen, J.J., N. Johannesen, D. Dreyer Lassen, E. Paltseva (2017). 'Petro Rents, Political Institutions, and Hidden Wealth: Evidence from Offshore Bank Accounts', *Journal of the European Economic Association*, 15(4): 818–60. <https://doi.org/10.1093/jea/jvw019>
- Andrews, M., L. Pritchett, and M. Woolcock (2017). *Building State Capacity: Evidence, Analysis, Action*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198747482.001.0001>
- Berne Declaration (eds) (2011). *Commodities: Switzerland's Most Dangerous Business*. Lausanne and Zurich: Berne Declaration (Public Eye).
- Bieri, F. (2010). *From Blood Diamonds to the Kimberley Process: How NGOs Cleaned Up the Global Diamond Industry*. Farnham, Surrey: Ashgate Publishing. s
- Blas, J., and J. Farchy (2021). *The World For Sale: Money, Power, and the Traders Who Barter the Earth's Resources*. Oxford: Oxford University Press.
- Buckley, J., N. McCulloch, and N. Travis (2018). 'Donor-Supported Approaches to Improving Extractives Governance: Lessons from Nigeria'. In T. Addison and A. Roe (eds), *Extractive Industries: The Management of Resources as a Driver of Sustainable Development*. Oxford: Oxford University Press for UNU-WIDER. <https://doi.org/10.1093/oso/9780198817369.003.0027>
- Brugger, F., J. Proksik, and F. Fischer (2022). 'The State and the 'Legalization' of Illicit Financial Flows: Trading Gold in Bolivia', WIDER Working Paper 2022/171. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2022/304-8>
- Carbonnier, G., and A. Zweynert de Cadena (2015). 'Commodity Trading and Illicit Financial Flows', *International Development Policy*. Geneva: Graduate Institute of International and Development Studies. <https://doi.org/10.4000/poldev.2054>
- Cust, J. (2018). 'The Role of Governance and International Norms for Managing Natural Resources'. In T. Addison and A. Roe (eds), *Extractive Industries: The Management of Resources as a Driver of Sustainable Development*. Oxford: Oxford University Press for UNU-WIDER. <https://doi.org/10.1093/oso/9780198817369.003.0019>
- Dercon, S. (2022). *Gambling on Development: Why Some Countries Win and Others Lose*. London: Hurst.

- Diene, P.D., and N. Woodroffe (2021). 'Step by Step: Closing the Implementation Gap in Senegal's Petroleum Licensing Process'. Briefing. New York: Natural Resource Governance Institute.
- Eunomix (2017). *A Review of the UNCTAD Report on Trade Misinvoicing, with a Full Counterfactual on South African Exports: Final Report*. Johannesburg: Eunomix.
- EITI (2018). *Report on Ghana EITI Oil and Gas Commodity Trading Pilot*. Oslo: Extractive Industries Transparency Initiative.
- EITI (2019). *Myanmar Extractive Industries Transparency Initiative (MEITI): 4th MEITI Report*. Oslo: Extractive Industries Transparency Initiative.
- EITI (2022). *Validation of Chad: Final Assessment of Progress in Implementing the EITI Standard*. Oslo: Extractive Industries Transparency Initiative.
- FATF (2013). *Money Laundering and Terrorist Financing Through Trade in Diamonds*. Paris: Financial Action Task Force.
- FATF and APG (2015). *Money Laundering and Terrorist Financing Risks and Vulnerabilities Associated with Gold*. Paris and Sydney: Financial Action Task Force and Asia/Pacific Group on Money Laundering (APG).
- Forstater, M. (2016). 'Illicit Flows and Trade Misinvoicing: Are We Looking Under the Wrong Lamppost?', CMI Insight 5. Bergen: Chr. Michelsen Institute.
- Forstater, M. (2018). 'Illicit Financial Flows, Trade Misinvoicing, and Multinational Tax Avoidance: The Same or Different?', CGD Policy Paper 123. Washington, DC: Center for Global Development.
- GFI (2014). *Hiding in Plain Sight: Trade Mis-invoicing and the Impact of Revenue Loss in Ghana, Kenya, Mozambique, Tanzania, and Uganda: 2002–2011*. Washington, DC: Global Financial Integrity.
- GFI (2019). *Illicit Financial Flows To and From 148 Developing Countries: 2006–2015*. Washington, DC: Global Financial Integrity.
- Gillies, A. (2019a). *Crude Intentions: How Oil Corruption Contaminates the World*. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780190940706.001.0001>
- Gillies, A. (2019b). 'Who Gets Rich? Lessons from BP's Senegal Payout'. New York: Natural Resource Governance Institute.
- GITOC (2021). *Illicit Gold Markets in East and Southern Africa*. Geneva: Global Initiative Against Transnational Organized Crime.
- Global Witness (2018a). *Take the Future: Shell's Scandalous Deal for Nigeria's Oil*. London: Global Witness.
- Global Witness (2018b). *Jade: Myanmar's Big Secret*. London: Global Witness.
- Hicks, C. (2015). *Africa's New Oil: Power, Pipelines and Future Fortunes*, London: Zed Books. <https://doi.org/10.5040/9781350218208>
- Hoinathy, R., and B. Jánosky (2017). 'The Extractive Industries Transparency Initiative (EITI): The Latest Attempt at Governing the Extractive Industries in Chad', *Extractive Industries and Society*, 4(4): 825–32. <https://doi.org/10.1016/j.exis.2017.11.004>
- Horn, S., C.M. Reinhart, and C.T. Trebesch (2019). 'China's Overseas Lending', NBER Working Paper 26050. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w26050>
- Kauffman, D. and P. C. Vicente (2005). 'Legal Corruption'. Washington, DC: World Bank.
- Leith, C. (2005). *Why Botswana Prospered*. Montreal and Kingston: McGill-Queens University Press. <https://doi.org/10.1515/9780773572416>
- Lopez Lucia, E., J. Buckley, H. Marquette, and N. McCulloch (2019). 'Lessons from Nigeria for Improved Thinking and Working Politically in the Extractives Sector', *Development Policy Review*, 37(S1): 16–32. <https://doi.org/10.1111/dpr.12441>

- Marcolongo, G., and D. Zambiasi (2022). 'Incorporation of Offshore Shell Companies as an Indicator of Corruption Risk in the Extractive Industries', WIDER Working Paper 2022/14. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2022/145-7>
- Mihalyi, D. and A. Fleming (2017). 'Countries Struggling with Governance Manage \$1.2 Trillion in Resource Wealth', New York: Natural Resource Governance Institute.
- Murombo, T. (2021). 'The Extractive Industries Transparency Initiative (EITI) in Zimbabwe: An Appraisal of Prospects and Challenges', *Journal of Energy and Natural Resources Law*, 40(1): 133–53. <https://doi.org/10.1080/02646811.2021.1894006>
- NRGI (2017a). *2017 Resource Governance Index*, New York: Natural Resource Governance Institute.
- NRGI (2017b). *Natural Resource Charter Benchmarking Framework*, New York: Natural Resource Governance Institute.
- NRGI (2021). *2021 Resource Governance Index*, New York: Natural Resource Governance Institute.
- OECD (2009). *Recommendation for Further Combating Bribery of Foreign Public Officials in International Business Transactions*. Paris: Organisation for Economic Co-operation and Development.
- OECD (2011). *Guidelines for Multinational Enterprises: 2011 Edition*. Paris: Organisation for Economic Co-operation and Development.
- Offenheiser, R. (2014). 'What Do Oil Revenues Have to Do with Smallholder Farmers?'. Washington, DC: Oxfam America.
- Östensson, O. (2018). 'Misinvoicing in Mineral Trade: What Do We Really Know?', *Mineral Economics*, 31: 77–86. <https://doi.org/10.1007/s13563-018-0141-3>
- Östensson, O. (2020). 'Transparency in Extractive Industry Commodities Trading'. WIDER Working Paper 2020/172. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2020/929-7>
- Pritchett, L. (2013). *Folk and the Formula: Fact and Fiction in Development*, WIDER Annual Lecture 16. Helsinki: UNU-WIDER.
- Pritchett, L., K. Sen and E. Werker (2017). *Deals and Development: The Political Dynamics of Growth Episodes*. Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780198801641.001.0001>
- Robinson, M. (2021). 'Working Politically: the EITI and the Politics of Natural Resource Governance', Blog. Oslo: Extractive Industries Transparency Initiative.
- Romsom, E. (2022a). 'Global Oil Theft: Impact and Policy Responses', WIDER Working Paper 2022/16. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2022/147-1>
- Romsom, E. (2022b). 'Countering Global Oil Theft: Responses and Solutions', WIDER Working Paper 2022/35. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2022/166-2>
- Romsom, E., and K. McPhail (2023). *Nigeria's Super-Emitter Flares: Flare Performance Comparison*. Singapore: EnergyCC for Oxford Policy Management.
- Sahla, S., A. Gillies, and M. Salomon (2021). *How Can Anticorruption Actors Use EITI Disclosures?* New York: Natural Resource Governance Institute.
- Sayne, A., A. Gillies and C. Katsouris (2015). *Inside NNPC Oil Sales: A Case for Reform in Nigeria*. New York: Natural Resource Governance Institute.
- Sayne, A., A. Gillies and A. Watkins (2017). *Twelve Red Flags: Corruption Risks in the Award of Extractive Sector Licenses and Contracts*. New York: Natural Resource Governance Institute.
- Siegel, D. (2009). *The Mazzei Ritual: Culture, Customs and Crime in the Diamond Trade*. New York: Springer. <https://doi.org/10.1007/978-0-387-95960-3>
- Slack, K. (2018). 'Capturing Economic and Social Benefits at the Community Level: Opportunities and Obstacles for Civil Society'. In T. Addison and A. Roe (eds), *Extractive Industries: The Management of Resources as a Driver of Sustainable Development*. Oxford: Oxford University Press for UNU-WIDER. <https://doi.org/10.1093/oso/9780198817369.003.0031>

- Smillie, I. (2010). *Blood on the Stone: Greed, Corruption and War in the Global Diamond Trade*. London: Anthem Press for International Development Research Centre.
- Smillie, I. (2014). *Diamonds*. Cambridge: Polity Press.
- Smith, N.M., K. Seguin, U.M. Saka, S. Duzgun, D. Soud, and J. White (2023). 'Indicators of Illicit Activities in Gold Supply Chains: Insights from Peru and Kenya', WIDER Working Paper, 2023/68. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2023/376-5>
- Trafigura (2021). *Code of Business Conduct 2021*. Singapore: Trafigura.
- Transparency International (2017). *Combating Corruption In Mining Approvals: Assessing the Risks in 18 Resource-Rich Countries*. Berlin: Transparency International.
- Transparency International (2020). *Exporting Corruption: Progress Report 2020: Assessing Enforcement of the OECD Anti-Bribery Convention*. Berlin: Transparency International.
- UNCTAD (2016). *Trade Mis-invoicing in Primary Commodities in Developing Countries: The Cases of Chile, Côte d'Ivoire, Nigeria, South Africa and Zambia*. Geneva: United Nations Conference on Trade and Development.
- UNCTAD (2020). *Tackling Illicit Financial Flows for Sustainable Development in Africa*. Geneva: United Nations Conference on Trade and Development.
- Van Alstine, J. (2017). 'Critical Reflections on 15 years of the Extractive Industries Transparency Initiative (EITI)', *Extractive Industries and Society*, 4(4): 766–70. <https://doi.org/10.1016/j.exis.2017.10.010>
- Van Oranje, M. and H. Parham (2009). *Publishing What We Learned: An Assessment of the Publish What You Pay Coalition*. Oslo: Extractive Industries Transparency Initiative/Publish What You Pay.
- Werker, E. and K. Sen (2021). *Deals and Development in Fragile and Conflict-Affected States*. Helsinki: UNU-WIDER. <https://doi.org/10.35188/UNU-WIDER/2021/023-8>
- Williams, A., and P. Le Billon (eds) (2017). *Corruption, Natural Resources and Development*. Cheltenham, UK: Edward Elgar. <https://doi.org/10.4337/9781785361203>