

IFFs and Oil Commodity Trading Series

OIL COMMODITY TRADING AND ADDRESSING THE RISK OF ILLICIT FINANCIAL FLOWS



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Abstract

This paper starts from the recognition that despite the importance of the commodity trading sector for domestic resource mobilisation in many developing countries, engagement by OECD Development Assistance Committee (DAC) members with the commodity trading industry has been limited. The paper provides insights on the world of oil-commodity trading, shedding light on the actors, jurisdictions, and most common instruments through which trades are realised. It considers how these come together, the related risks in terms of illicit financial flows, and how these have been addressed to date.

Foreword

Tackling illicit financial flows (IFFs) has gained prominence in recent years, as evidenced by the scrutiny generated during the 2008-09 global financial crisis, the revelations of the Panama and Paradise Papers in 2016-17, and all-too-frequent, high-profile scandals involving some of the world's largest corporations and high-ranking politicians. The OECD Development Assistance Committee (OECD-DAC) has made substantive contributions to this field by measuring OECD responses to countering Illicit Financial Flows from Developing Countries (OECD, 2014[1]), tracing the efforts of OECD member countries to increase investigation and repatriation of stolen assets to countries of origin (World Bank and OECD, 2014[2]), and catalysing a shift in focus from IFFs as mere financial crimes towards a greater appreciation of their economic, security and development impacts, through its report on the economy of illicit trade in West Africa (OECD, 2018[3]).

Launched in March 2019 by the Anti-Corruption Task Team (ACTT) this programme of work examines the vulnerability of oil-producing countries to IFFs in the oil sales process, reviews the efficacy of official development assistance efforts in mitigating these vulnerabilities, and suggests ways to enhance the impact of future efforts. The GOVNET Anti-Corruption Task Team (ACTT) brings together OECD-DAC members to support policy makers, donors and developing countries to better fight corruption.

This paper fits in the IFFs and Oil Commodity Trading Series and complements the Synthesis Report from this work programme, *Illicit Financial Flows in Oil and Gas Commodity Trade: Experience, lessons, and proposals* (Porter and Anderson, 2021_[4]). It. This paper contributes to development practitioners' knowledge of the commodity trading industry, examining the actors, jurisdictions, and financial instruments involved. OECD designates corruption in commodity trading as an "emerging area of heightened risk" (OECD, 2016_[5]). Addressing this knowledge gap is essential so that ACTT policy responses in oil commodity trading are relevant and well-targeted.

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Executive summary

Oil represents almost half of all commodity exports in terms of value, and oil trade activities represent the most significant source of domestic revenue for many oil-producing developing countries. More than half of Africa's twelve oil and gas producers rely on these products for the majority of their export revenues (Leke, Gaius-Obaseki and Onyekweli, 2022[6]), and profits from oil sales significantly outstrips petroleum tax income in several oil-producing developing economies. From 2011-12, for example, the top 10 oil exporters in sub-Saharan Africa generated more than USD 250 billion in from oil sales, equalling 56% of their combined government revenue (Gillies, Guéniat and Kummer, 2014[7]).

Given the economic importance of the commodity trade, corruption and illicit financial flows (IFFs) in the sector can have severe and substantial effects on the fiscal, poverty, and stability prospects of a country. The United Nations Conference on Trade and Development (UNCTAD) estimates that IFFs related to the export of extractive commodities (at USD 40 billion in 2015) are the largest component of illicit capital flight from Africa. Furthermore, four of the top seven African emitters of IFFs (totalling almost USD 30 billion) are oil producers (UNCTAD, 2020_[8]).

However, despite the prominence of the commodity trading industry in many developing economies, and despite the risks of IFFs, little is known about the industry and its dominant players. Understanding is often lacking when it comes to how trades are carried out and what the associated IFF risks are. The findings of the series on *IFFs and Oil Commodity Trading Series*, demonstrate that, to date, the engagement by OECD Development Assistance Committee (DAC) members with the commodity trading industry has been limited. Donors, including bilateral and multilateral agencies, have largely stayed clear of involvement with the commercial side of the industry.

This paper aims to address the knowledge gap on the commodity trading industry, examining the actors, jurisdictions, and financial instruments involved.

Findings

Commodity trading brings together diverse players with different points of departure. Since the 1980s and early 90s, large integrated oil companies (IOCs) have shared the market with more specialised commodity trading companies buying from oil-producing countries, typically through national oil companies (NOCs). Commodity traders are characterised by their complex organisations, with exceptionally high use of offshore financial centres (OFCs), and fragmented ownership, equity, and accounting structures. This sophisticated organisation contrasts with the less dynamic and simpler structures of NOCs. As guardians of public resources, NOCs often face complex, multifaceted pressures in their home jurisdictions, which prevents them from optimising their position. This imbalance between players enables traders to trade or transfer risks to their advantage, while producer countries can end up in suboptimal trades that exaggerate vulnerabilities to IFFs.

As banks exit the commodity trading space, traders are emerging as financiers. While financing is central to commodity trading, recent years witnessed changes to the financing landscape with some banks

retreating from the industry. As a result, oil traders are tapping into innovative sources of funding, a trend expected to expand given the prospect of new fees and levies for investments related to fossil fuels. Increasingly, smaller banks, less subject to stringent regulation and with a higher appetite for risk, are coming to the forefront. Notably, large, independent traders have started to act as "shadow banks", extending credit to producer countries, often in return for resources.

Traders increasingly use jurisdictions in the 'East' to structure trades and transfer risks to their advantage. Commodity traders favour trading hubs with favourable regulation and lower tax rates, among other criteria. Increasingly, Asian trading hubs attract business with advantageous terms and, in certain cases, a willingness to accept trading that other hubs reject, such as trading with Russia despite widespread economic sanctions following its aggression against Ukraine.

Exceptionally high use of OFCs make commodity traders hard to regulate and supervise. Among independent oil and gas trading companies, 97% of their subsidiaries are owned via OFC-based holding companies. For comparison, a study of the top 100 multinational corporations showed that an average 18% of subsidiaries are owned via OFC-based holding companies. While OFC incorporation is legitimate, it can weaken states' ability to enforce regulatory standards or punish malfeasance, as assets are often sheltered from seizure or fines.

Deals with producer-country governments show that IFF risks emerge at specific stages of the commodity trade value chain. IFF risks tend to arise at three key points: (1) the selection of buyers and allocation of buyers' rights; (2) the negotiation of terms of sale; and (3) the collection and transfer of sale revenues into national spending systems. Risks are tied to lack of competition or misconduct in the public procurement process, opaque and unclear terms of a deal, and lack of transparency in the money trail.

Efforts to curb IFFs in the sector remain voluntary and industry-led, but legislation is making inroads. Industry players have been in the driver's seat, lobbying for the adequacy of voluntary, internally focused, private-sector-led initiatives to tackle wrongdoing. However, foreign bribery charges against major trading houses, including in Switzerland, the UK, and the US, cast doubt on the adequacy of responses to date.

IFF risks continue to accompany commodity trading, especially as traders become financiers with less regulation and scrutiny than banks. Only certain activities by commodity trading companies are subject to anti-money-laundering and counter-terrorism-financing regulation. The efficacy of indirect supervision – where the transactions of trading companies are overseen by the banks that finance them – remains contested: while regulation applies to the relationship between financiers and traders, banks are not required to perform due diligence on third parties, or to "know the customer's customer".

1 Introduction

The commodity trading industry can be traced back to the Dutch East India Company in the 17th century. While the role of commodity traders has evolved, key features remain. Commodity traders bring products to market, and balance global supply and demand. For example, while the Middle East can produce 43 barrels of crude oil per person per year, generating huge surpluses, Asia extracts only one barrel per capita (Berne Declaration, 2012[9]). Such imbalances mean that a sizeable share of resources is traded worldwide, with commodities constituting around a quarter of total world trade volume. Of this, crude oil accounts for almost half of all commodity exports in terms of value. Together, energy commodities — oil, natural gas, and coal — constitute nearly 60% of worldwide commodity exports, the rest consisting of minerals (20%) and agricultural commodities (20%).

Energy commodities often originate in developing countries. Fifty-nine percent of metals and ores (as much as 71% of copper), 63% of coal, and 64% of oil originate in developing countries.² In turn, natural resource exports make up a sizeable share of these countries' income. During 2011-13, receipts from the sale of physical commodities (known as first trade) by the top ten sub-Saharan Africa oil-exporting countries amounted to more than 50% of their combined government revenues, and more than 75% of total export earnings (Gillies, Guéniat and Kummer, 2014_[7]). Research by the Natural Resource Governance Institute (NRGI) showed that oil and gas sales from 35 national oil companies (NOCs) to commodity traders and other buyers generated over USD 2.1 trillion in 2018, up from USD 1.4 trillion in 2016, equal to 22% of their total government revenues (NRGI, 2019_[10]). The vast sums involved underscore oil-exporting countries' dependence on traders for bringing their products to market and national revenues. In addition, trading companies increasingly act as lenders of last resort for producer-country governments. While big international banks lose their risk appetite and withdraw from commodity trade, commodity traders are increasing their provision of long-term financing to producer-countries through complex financial agreements (Carbó and Duparc, 2020_[11]; Pirrong, 2014_[12]; Culbert, Dawson and Isaieva, unpublished_[13]).

This reliance of developing countries on the commodity trading industry is not without risk. The sector is known for opacity, complex supply chains with numerous participants (between which cargoes change hands many times), and sizable financial sums, creating opportunities for corruption and illicit financial flows (IFFs). There are high-profile examples of commodity traders involved in facilitating IFFs in Angola, Indonesia, Iraq, Nigeria, the Republic of Congo, and Turkmenistan (Sayne and Gillies, 2016[14]). In May 2022, one of the few publicly listed trading firms admitted to bribery and market manipulation, having paid officials in Brazil, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo (DRC), Equatorial Guinea, Nigeria, and Venezuela for over a decade to secure oil contracts or avoid audits. The United Nations Conference on Trade and Development (UNCTAD) estimates that IFFs related to the export of extractive commodities – USD 40 billion in 2015 – are the largest component of illicit capital flight from Africa. Four of the top seven African emitters of IFFs (totalling almost USD 30 billion) are oil producers (UNCTAD, 2020[8]).

Illicit financial flow risks in oil commodity trading

Research highlights three areas in the commodity trading value chain where IFF risks are felt most:

- 1. Selection of buyers and allocation of buyers' rights. Methods for buyer selection vary according to context, financial arrangements, and commodity markets: NOCs might use competitive bidding, direct negotiation with a buyer, or a combination (OECD, 2021_[15]). Given the enormous volume of commodities sold and amounts of money involved, getting buyer selection right is key to preventing public revenue losses through sub-optimal allocation and corruption. When buyer selection is opaque, it becomes hard to ensure due process and apply principles of fair competition to prevent unfair advantages. Like other public procurement processes, allocating the rights to buy oil or gas from NOCs can attract corrupt behaviour. IFFs arise when companies engage in illegal practices to secure a deal, be that bribery (direct or through an agent), conflict of interest among allocating officials, or awarding rights to companies owned by politically exposed persons.
- 2. Negotiation of terms of sale. The terms of an NOC oil or gas sale determine if the selling country receives the best value for its resources. As with trading rights, suboptimal terms can result from bribery and favouritism. But producer countries might also need commodity trading companies to bring their products to market, weakening the countries' bargaining position. Further, trading expertise, access to resources, and information can vary between the parties. This, combined with aspects of oil commodity trading, heightens IFF risk during terms-of-sale negotiations. One such aspect is the complexity of deals, sometimes spanning multiple years, players, and products. Prepayment arrangements have assumptions and insurances 'baked in', making it difficult to understand underlying prices and whether an agreement is realistic, balanced, and fair. In swap arrangements, exchanged products are often different and difficult to compare. Swaps can also be risky because of delivery time lags and/or variations in promised volumes. The complicated equation resulting from such exchanges also makes it possible to hide commissions and kickbacks (Carbó and Duparc, 2020[11]). Relatedly, the secrecy of commodity trade deals exposes them to manipulation and makes it harder for stakeholders to assess whether they are fair and realistic.
- 3. Collection and transfer of revenues into national spending systems. The risk of sale proceeds being diverted from national treasuries arises in the final stage of the process. NOCs often collect oil sale revenues themselves, but these are not always managed correctly nor subject to rigorous oversight. The payments collected are not always publicly disclosed, and might be buried in complex contract terms, making accounting of sales revenues difficult. Given the sums generated by oil sales, how much NOCs transfer to the state in taxes, dividends, or other payments affects the funds available for national development. Often, NOCs retain some revenue to cover costs and operating expenses. There are also examples of NOCs directing portions of the proceeds to public works, social programmes, or corrupt purposes and extra-budgetary spending before they reach the national treasury. Studying transfers made by 33 NOCs to governments in 2016, NRGI found these remitted only 22% of proceeds, while retaining approximately USD 1.2 trillion of the USD 1.6 trillion generated (Malden and Williams, 2019[16]). Although much of this might be used for onward investments, some went unaccounted for, limiting domestic resource mobilisation across oil-producing countries.

Notwithstanding the importance of the commodity trading sector and commodity trading companies to many developing country economies -- and despite the track record of IFF risks -- OECD Development Assistance Committee (OECD-DAC) members, development agencies, or multinational organisations have limited direct experience and knowledge of the sector. Previous development efforts focusing on developing countries' extractive sectors have typically focused on upstream oil activities including exploration, drilling, and extraction, with little view on what happens when these resources are marketed and sold. It was only in 2012 and 2013 that the first efforts to discuss the oil commodity trading system were entertained by ODA supported transparency and accountability initiatives, and only more

recently has oil and gas trading come to feature in aid-supported IFF risk mitigation programming (Porter and Anderson, 2021_[4]). One of the objectives of the OECD-DAC programme of work on IFFs in oil commodity trading has been to review the efficacy of ODA efforts to date in mitigating vulnerabilities faced by oil producing developing countries and suggest ways to enhance the impact of future ODA efforts in this area. Initial findings and conclusions arising from this body of work are summarised in a Synthesis Report, *Illicit Financial Flows in Oil and Gas Commodity Trade: Experience, Lessons and Proposals* (Porter and Anderson, 2021_{[41}).

The purpose of this paper is to provide insight and help build knowledge amongst OECD Development Assistance Committee (DAC) members, development agencies, and multinational organisations about the world of oil-commodity trading, shedding light on its actors, jurisdictions, and financial instruments that characterise it, as well as some of the responses to date, both mandatory and voluntary. Understanding the sector, its workings and its distinctiveness, is fundamental to developing a response by the DAC to help address the vulnerabilities faced by oil producing countries.

2 Oil commodity trade actors

Several critical junctures in the oil sector brought about new players and jurisdictions. In the 1970s, the oil industry was dominated by vertically integrated oil companies (IOCs) – the "oil majors", including BP, Shell, Total, and Chevron. These IOCs focused on production and did not trade with external parties or in oil they did not produce (Farchy and Blas, 2021_[17]). However, the OPEC embargo of 1973-74 signalled the start of increased resource nationalisation, with oil produced for the international market progressively brought under state control. National oil companies (NOCs) emerged in many producer countries, producing and marketing over half of the world's crude by the early 1980s (Goodermote and Mancke, 1983_[18]). Many NOCs came to rely on specialised service providers operating at different stages of the oil value chain to bring their products to market. The rise of these – including commodity trading firms – was encouraged by deregulation and privatisation of the oil sector in the late 1980s and early 1990s. By the turn of the century, IOCs had lost some of their market dominance to a more varied landscape (Farchy and Blas, 2021_[17]).

Producers

In most countries, governments hold monopoly ownership of sub-soil assets. Especially since the post-colonial resource nationalisation of the 1970s, governments play a dominant role in their countries' oil industry operations and management. In Africa (with the world's largest share of commodity-dependent countries), contrasts in the scale, organisation, historical depth, and regulatory, and institutional complexity across countries' oil and gas sectors is significant. The continent's largest producers, Angola and Nigeria first produced commercial quantities of oil in the 1950s. In comparison, Ghana is a newcomer, with the first commercial discoveries occurring barely a decade ago. While in Angola, Nigeria, and the Republic of Congo oil revenues account for significant portions of export and state revenues, relatively new producers, Ghana and Mozambique have managed to maintain more diversified economies. The resource-governance metrics developed by the Natural Resource Governance Institute (NRGI) show substantial differences in the ranking and performance of African producing states (Table 1).

Table 1. NRGI Resource Governance Index oil and gas composite score

	NIGERIA score (#/100)	GHANA (#/100)	MOZAMBIQUE (#/100)	CONGO (#/100)
COMPOSITE	42	67	50	39
Value Realization	50	65	66	42
Revenue Management	44	65	42	44
Enabling Environment	31	70	43	29
COUNTRY RANKING	55	13	41	58

Note: Ranking among 89 resource-based economies

Source: NRGI, https://resourcegovernanceindex.org/country-profiles (accessed March 20th, 2020).

NOCs are a standard vehicle through which governments exercise their role in the oil and gas sector and have come to dominate oil production in many of the world's oil-producing countries. According to the International Energy Agency (IEA), NOCs controlled 56% of global oil reserves in 2018 and 45.6% of all oil production fields (IEA, 2020[19]). In 2017, a study of 48 NOCs found combined assets of USD 3.1 trillion (Heller and Mihalyi, 2019[20]). Following the oil price boom that ended in 2013, at least 25 countries could be characterised as "NOC-dependent", where the NOC collects funds equal to at least 20% of government revenue (Manley et al., 2019[21]). Flows to NOCs often dwarf revenues that governments collect from foreign aid or domestic instruments such as income tax (Heller and Mihalyi, 2019[20]).

The nature of NOCs varies. Different governments define state-owned enterprises differently, including their properties and functions. NOCs often play multifaceted roles and thus face conflicting pressures. Some are commercial or operational companies, selling crude oil or raw minerals, managing state equity, or participating directly in extractive operations. Others are regulatory or administrative entities, or economic or state development instruments. Countries establish NOCs for many reasons. The existence of one can ensure greater state control over the production and share of revenues. Moreover, NOCs can help countries accelerate technological upgrades, develop expertise, and address market failures, especially in politically challenging operating environments where private investment might be reticent. In some cases, NOCs carry out service delivery, including social services, public infrastructure or fuel subsidies. In addition to being a substantial revenue source, many NOCs take on debt on behalf of the state, as there are instances where the NOC enjoys a higher credit rating than the sovereign. Venezuela's PDVSA and Angola's Sonangol are two examples where the NOC's debt exceeds 20% of its country's GDP (Manley et al., 2019_[21]).

In several examples, NOC activity takes place outside of national budgetary process, meaning these expenditures remain outside fiscal safeguards like national investment planning, national debt strategy, parliamentary scrutiny, national procurement procedures, and auditing. Because of such "quasi-fiscal expenditures", the true cost of government policies sometimes remains unknown (International Budget Partnership, 2011_[22]). For example, in Angola, a USD 32 billion accounting discrepancy in public funds was traced to quasi-fiscal operations by Sonangol (Wroughton, 2012_[23]).

The scale of NOCs fluctuates significantly too. While GNPC (Ghana) and ENH (Mozambique) have limited capacities, NNPC (Nigeria) is a massive, bureaucratic, regulatory, and commercial entity with investments across the country. In 2017, GNPC sold only ten cargoes (totalling USD 688 million) to three buyers, while NNPC sold 453 cargoes (USD 13.2 billion) to 61 buyers. Compared to the sophisticated corporate structures of buying companies, NOCs are characterised by comparatively simple organisational systems, comprising few subsidiaries (Nesvetailova et al., 2021[24]). Some, like Nigeria's NNPC and Angola's Sonangol, have trading divisions but this is not the norm. Often, performance lags in disclosing basic data. According to the Natural Resource Governance Index (2017[25]), 58% of NOCs do not disclose enough quality, timely information about activities and finances for proper external assessments.

State-owned enterprises and NOCs typically receive crude oil from two sources: (1) equity that states hold in an oil or gas field, either as operator or partner to IOCs; and (2) in-kind payments, e.g., physical barrels of oil delivered to the state by companies undertaking extractive operations. In a typical oil or gas production-sharing contract between a government and resource-extraction company, NOCs receive a share of the physical production alongside taxes, royalties, and other fees. As a result, the government might have a significant volume of oil or gas to sell. Several challenges face NOCs trading on international markets. First, many do not have their own distribution channels and must therefore market their oil to domestic and foreign refineries, IOCs, and commodity trading companies. Second, NOCs' ability to sell directly to the global market can be complicated by annual production targets set domestically, which might not align with the demand in international markets. They therefore rely on commodity traders to ensure steady demand for their products. Third, NOCs might not have assets like storage facilities that would allow them to optimise supply management, nor the management and hedging capabilities to protect against price volatility.

Buyers

Integrated oil companies

IOCs have evolved from focusing on production until the 1970s to becoming active in oil trading today. It is estimated that three IOCs – BP, Shell, and Total – traded 15 million barrels of crude oil per day in 2016. In comparison, the five largest, independent, commodity trading houses (see below) traded 18 million barrels of crude oil per day that year (Sheppard and Hume, 2016_[26]).

The typical business model of IOCs engages the entire oil value chain, transforming raw commodities into products for end-users. IOCs perform exploration and production, often in partnership with NOCs through production-sharing arrangements. They refine and distribute the oil and gas resources they produce, supplying their refineries with the required crude oil quality, and selling and distributing the refineries' output to their own downstream companies (fuel stations, and petrochemicals, oil and lubricant production plants). IOCs also buy and sell third-party production. Several have units that trade products on international markets outside the company's own needs. IOCs take advantage of a solid asset base (mineral rights, processing facilities, infrastructure) to fund trading activities using proprietary capital.

Commodity trading companies

Since the early 1990s, increased specialisation has occurred along the oil value chain. Commodity trading companies have emerged to take on a greater role alongside IOCs. By the 2010s, these companies controlled more than half the world's freely traded commodities (Schneyer, 2011_[27]). Today, the five largest commodity trading companies handle 24 million barrels of crude and refined products per day – equivalent to almost a quarter of the world's petroleum demand. Vitol, the world's largest oil trader, handles enough oil every day to supply France, Germany, Italy, Spain, and the UK combined (Farchy and Blas, 2021_[17]).

Smaller, less accessible markets are more likely to be served by trade intermediaries (Abel-Koch, 2013_[28]), and certain emerging markets have come to rely on traders to access foreign demand (European Parliament, 2015_[29]). African governments and NOCs sell a considerable share of oil to commodity trading companies. Studying 1 500 oil sales made by NOCs in sub-Saharan Africa during 2011-13, Gillies et al. (2014_[7]) found that a quarter were bought by Swiss commodity trading companies, constituting 500 million barrels or USD 55 billion in sales. In Cameroon, Chad, Equatorial Guinea, Gabon, and Nigeria, Swiss commodity trading companies represented the largest buyers of crude oil from the government (Gillies, Guéniat and Kummer, 2014_[7]).

Although they share some characteristics, commodity trading companies vary in their organisation. First, they are often stand-alone entities that specialise in commodity trading and transformation rather than production. Except Glencore, a major trading firm, big commodity trading companies do not engage in downstream activities. Second, while some traders work with both hard (oil, gas, minerals) and soft (agricultural products) commodities, they usually focus on a broader set of commodities within a particular sector. For example, two of the largest trading firms, Vitol and Mercuria, concentrate on energy commodities, with minimal presence in other segments. In contrast, Glencore participates in all major segments, albeit with a more substantial presence in non-ferrous metals, coal, and oil. Third, besides Glencore, all the big trading houses are privately owned and not listed on any stock exchange, which has implications for their reporting requirements and transparency.

Commodity trading firms also vary considerably by size. Large numbers of small firms trade in a single commodity, with revenues in the millions of dollars. At the other end of the spectrum, prominent traders participate in many markets, with revenues well over USD 100 billion, making them among the biggest companies in the world. According to *Futures* magazine, the biggest commodity trading company is Vitol, with USD 225 billion of revenue in 2019 (Vitol, 2020_[30]), followed by Glencore, Cargill, Gunvor, Trafigura, and Mercuria.

If the top 10 commodity trading companies combined were a country, it would compare in size to Canada, which has a GDP of around USD 1.9 trillion. (Futures Magazine, 2019_[31])

Commodity traders have evolved into highly complex, multi-subsidiary, multi-jurisdictional organisations, often encompassing hundreds, if not thousands of independent corporate entities linked in a complex web of ownership arrangements (Nesvetailova et al., 2021_[24]). This complexity makes it difficult to identify their corporate structure and the function of entities within it (Box 2.1).

Box 2.1. Accounting structures of commodity traders' corporate entities

According to research by City University, London, the names of subsidiaries in large, commodity-trading corporate groups suggest they are engaged in some aspect of trading. However, many of these entities have no visible financial accounts. When they do have accounts, these entities show relatively minor activity or even dormant status with no income statements.

Most operating activities (i.e., entities with operating income and expenses) concentrate in relatively few legal persons within a group. They normally combine trading functions in a 'hub' with other internal corporate financing and treasury functions. These hubs cluster in certain jurisdictions, with Singapore a clear favourite (discussed below).

It is often challenging to decipher the profit performance of these hubs because they are not set up as profit and loss centres. Instead, they exhibit a fixed-operating-margin cost structure suggesting that all their income exits the entity as an operating cost in a relatively fixed, highly correlated manner regardless of income volatility. In doing so, the companies' accounts appear to be "managed" to fit the regulatory regimes of the various countries where a group's entities are registered.

Source: Nesvetailova et al. (2021_[24]), Workstream 2 Report: IFFs and Commodity Trading — Mapping Networks of Corporate Arbitrage in Oil and Gas Trading, https://researchcentres.city.ac.uk/ data/assets/pdf file/0005/583565/IFFs-AND-COMMODITY-TRADING-final-oct-2020-.pdf

Domestic buying companies

Domestic buying companies are also increasingly active in the commodity trading space. These companies often operate only within producer countries, where they develop around the local market, but they might also have connections to international markets. Some of these companies are large and well-established, engaged in buying wholesale and selling retail, sometimes acting as buyers then quickly reselling the commodity to a larger trading company (Culbert, Dawson and Isaieva, unpublished_[13]). Alternately, their role might be akin to middlemen, or "briefcase companies", facilitating transactions between the NOC and large buyers. One can think of such companies as agents, a category discussed below.

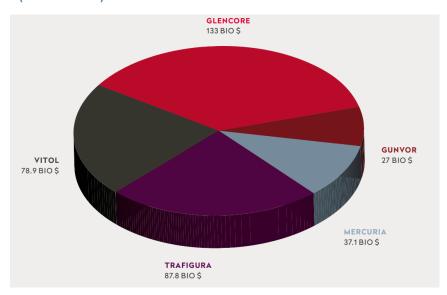
Local content criteria that require international traders to collaborate with domestic buying companies are prevalent in certain oil producing countries. International traders might also seek out domestic buying companies for partnerships to market their products locally. While the latter are typically far smaller than their international partners, domestic buying companies can be commercially and politically influential in their local market.

Enablers

Financiers

A shipment of oil by tanker can require tens or even hundreds of millions of dollars (Berne Declaration, 2012_[9]). Thus, commodity traders often require significant amounts of money to finance capital-intensive transactions. As a result, trade finance has traditionally come from large, internationally active banks. The major trading houses draw on several financial institutions to meet their financing needs (Figure 2.1). Trafigura, for instance, draw on 137 banking relationships around the world (Trafigura, 2018_[32]).

Figure 2.1. Corporate loans and revolving credit facilities granted to the top five commodity traders, 2013-19 (USD billions)



Note: Figures do not include oil-backed loans and swaps. BIO= Billions
Source: Carbó and Duparc (2020[11]), Trade Finance Demystified: The intricacies of commodities trade finance, https://www.publiceve.ch/en/publications/detail/trade-finance-demystified

Until about ten years ago, several major banks had significant trade finance activities and were involved in physical trading operations. Regulatory changes and the rising cost of compliance following the 2007-08 financial crisis limited banks' ability and willingness to handle physical commodities (Arnold, 2014_[33]). Specifically, regulatory responses forced banks to increase the capital-adequacy ratio used to cushion complex trades considered high-risk assets. Consequently, banks must set aside considerable capital to participate in this type of financing despite the collateralised nature of physical commodity trade limiting risk and enhancing recovery rates. International capital requirements frameworks agreed by the Basel Committee on Banking Supervision (Basel III) require bank assets to be of a high-quality liquid nature, which is not the case for physical commodities, limiting banks' ability to manage commodities as collateral in the event of default. As a result, many international banks sold or shut their physical and commodity businesses, replacing physical trading with loans to commodities traders. Examples include Barclays and Deutsche Bank, who closed their commodity trading operations, JPMorgan, which sold its operation to commodity-trader Mercuria, and Morgan Stanley, which made a similar deal with commodity-trader Castleton. The *Financial Times* reported in 2014 that the revenues of the top 10 banks in commodities fell to USD 4.5 billion in 2014, down from a record USD 14.1 billion in 2008 (Arnold, 2014_[33]).

Changes in the trade finance landscape also leave large banks with fewer trade finance partners. Several scandals, including the collapse of Singaporean oil trader Hin Leong in 2021 following forgery charges,

prompted some banks to scale back lending to the sector. Some are closing the number of accounts and revolving credit facilities they provide, impacting mid-size and small traders most (Payne, 2020_[34]). Oil commodity traders are also feeling banks reducing their exposure to fossil fuel industries and redirecting their investments towards the energy transition (S&P Global, 2021_[35]). Risks stemming from climate change and broader environmental issues are changing the risk picture for the financial sector and will become even more prominent going forward, according to the European Banking Authority (2022_[36]). For example, policy makers worldwide are considering "brown penalising", or capital penalties for financial institutions with exposures to fossil-fuel-intensive and -dependent assets (Robertson, 2020_[37]).

These changes do not mean banks are no longer active in the space. As conversations with industry insiders make clear, the focus of financiers was always more on the financial aspects and derivative trade. As the co-head of global commodities at JPMorgan explained, "What we have exited is position-taking and the logistical aspects of physical commodities, mainly on the energy side. We won't move crude around anymore, but we will finance oil in tanks." (Hume, 2014[38]) Yet, banks' retreat from the commodity trading space is expected to make it increasingly difficult for small and medium-sized traders to raise money from larger financial institutions. A recent report by investigative non-governmental organisation Public Eye quotes a commodity trade financer explaining, "Large companies capture all the funding, and it is very difficult for small companies to raise money directly with banks, who consider it too risky and not sufficiently lucrative." The report describes how banks demand a company to hold at least USD 10 million of equity before they will issue a Letter of Credit (Carbó and Duparc, 2020[11]), the most widely used trade financing instrument (described below).

Alternative finance

The retreat of international banks from the sector leaves space for commodity traders to pick up their business, alongside regional banks, equity funds, and other alternative financiers, which typically face less stringent regulation and external scrutiny. As a consequence, commodity traders are becoming important sources of finance for producer countries and small traders that find it difficult to access financing by the conventional retail and investment banks. The International Monetary Fund (IMF) reports that collateralised loans have been on the rise in low-income countries, accounting for approximately 20% of commercial debt issued in 2016-17 (Imam, 2019[39]). Carbó and Duparc (2020[11]) point out that commodity-swap arrangements are likely to become more prevalent as access by state-owned companies to traditional forms of financing dries up.

With conventional bank finance less available, mid-size and small traders are consolidating and looking for alternative sources of finance, sometimes receiving credit lines from more prominent traders. Another trend is trade finance provided by local or regional banks. A 2014 publication by the Bank for International Settlements (BIS) notes that the share of trade financing provided by local banks has been rising since the 2008 global financial crisis (BIS, 2014[40]). Bank representatives confirm that banks located closer to producer countries have become increasingly active in trade finance. Although local banks might charge more, they often have bigger lending limits and credit appetites than local subsidiaries of multinational banks from abroad (Culbert, Dawson and Isaieva, unpublished[13]). Moreover, local banks might face looser capital and regulatory requirements that compel large, foreign banks to leave high-risk markets.

Agents/intermediaries

Commodity trading companies regularly use external consultants, known as agents or intermediaries, in the form of firms or well-connected individuals to assist with services like originating and facilitating commodity sale transactions, and maintaining on-the-ground presence. Agents might also provide risk analysis, security advice, and other specialist services, like port agents (Hume, 2019_[41]). Because, unlike large IOCs, commodity traders often lack on-the-ground presence, local agents become critical. In the case of business start-up or development, agents typically represent a trading company in a particular

territory to secure contracts and win business. Service agreements govern the relationship between agents and the trading company, whereby agents receive commission fees from the trader for arranging contracts, usually paid per metric ton for each delivery realised (WS3).

Because commodity traders rely on agents for introductions to decision-makers or intelligence on how to secure contracts, there are benefits to using agents well connected politically and in business. Sometimes, this includes politically exposed persons, defined as a natural person entrusted with prominent public functions in the administration, judiciary, police or military, or employees of state-owned enterprises (FATF, 2013_[42]). However, paying for the services of well-connected agents is not without risk. Corruption cases and investigations by regulators have uncovered how officials misuse their position as agents to secure deals on behalf of commodity trading companies. It has also been demonstrated how agents serve as conduits for bribes. At least 71% of the 427 bribery cases reported from 1999 to 2014 by signatory countries of the OECD Anti-Bribery Convention involved an intermediary (OECD, 2014_[43]). In addition, Stanford Law School's analysis of 240 United States Foreign Corrupt Practices Act (FCPA) cases from 1977 to 2017 found that more than 90% of these involved an intermediary (Moretti, 2018_[44]). As a result of increased scrutiny, some commodity trading companies declared that they no longer hire third-party consultants to perform business development. In their place, companies increasingly use their own staff at local level, including government contracts (Hume, 2020_[45]).

3 Where the actors operate

The actors described in the previous section operate in all corners of the globe, in countries at the source, transition, and destination for global trade. Understanding the context from which these actors come and how they interact with different geopolitical settings is crucial to understanding the opportunities and constraints they face. Importantly, the interconnectedness of global trade and the nature of commodity trading means that high-capacity context is often intertwined with highly fragile settings.

Developments in the commodity trading business suggest that this interconnectedness might be increasing with the rise of local banks, of joint-ventures with domestic companies, and of bringing activities in house previously outsourced to consultants – trends sometimes referred to as "localisation" (Culbert, Dawson and Isaieva, unpublished[13]).

Global trading systems

Trading companies concentrate their activities in particular entities, often separating them legally or geographically. Research confirms a high level of compartmentalisation, with company activities tending to be geographically spread. These complex, global structures contrast with the simpler corporate footprints of producer-country counterparties to these trades (discussed in the next section).

Trading hubs

Commodity trading companies and integrated oil companies (IOCs) on the buying side operate in a variety of commodity trading hubs. Hubs along the value chain of oil and gas trading fulfil several different functions related, for instance, to financing, storage, refining, and marketing. Hubs differ in size and in their commodities and region of specialty, with the main ones in Asia, Europe, and North America (Figure 3.1).

Figure 3.1. Global commodity hubs



Source: Enger, Wolters and Wong (2020_[46]), *The Nuclei of the Global IFF Network : The role of global commodity trading hubs (Dubai, Singapore, and London) in defining the global patterns of illicit financial flows (IFFs)*, https://curbingiffsdotorg.files.wordpress.com/2020/03/r4d-iff-wp03-2020.pdf

Amsterdam has access to Europe's largest port, Rotterdam, while Houston has huge oil refineries and storage facilities. Chicago and Hong Kong host meaningful commodity exchanges.

In contrast to other trading hubs, geographical location does not appear to factor in the status of either London or Geneva (Swiss Federal Council, 2020_[47]). The UK has the second-largest asset-management sector in the world after the United States, greater than those of the next three largest European markets combined (France, Germany, and Switzerland), allowing companies and investors there to raise and invest capital effectively (City of London, 2022_[48]). Moreover, London's appeal as a trading hub is tied to its skilled workforce and business-friendly environment, with low barriers to entry for foreign and domestic companies (Enger, Wolters and Wong, 2020_[46]). Switzerland has a similar pool of expertise, political and economic stability, and a business-friendly environment. Around one-third of the global trade is conducted from Switzerland (OECD, 2020_[49]), with Swiss companies operating 35% of international oil trading. Swiss-based Glencore alone accounts for over 25% of total world trade in several minerals, including zinc, copper, lead, and thermal coal; and Geneva-based companies sell up to 50% of Kazakh and 75% of Russian oil (Berne Declaration, 2012_[9]). Switzerland's dominant form of commodity trading is known as "transit trading" (or "merchanting"), defined by the Swiss National Bank as, "international goods trade in which companies based in Switzerland purchase goods on the world market and resell them abroad, without the goods ever being imported into or exported from Switzerland" (Swiss National Bank, 2015_[50]).

While Switzerland remains a popular place of incorporation, companies are increasing their use of Asian trading hubs, notably Singapore and Dubai. Dubai and, to some extent, Singapore can offer similar economies of scope and scale as Switzerland while offering proximity to physical assets and expanding markets. Both countries have benefitted from recent increased volumes of commodity trading due to growing customer bases and business outside of Asia (in the case of Singapore), and in Africa and the Middle East (Wyman, 2017_[51]). Dubai is also seen as offering attractive tax and regulatory terms. According to Financial Action Task Force findings on the effectiveness of anti-money laundering (ALM) measures, there is a trend away from traditional trading hubs, including Switzerland, the UK, and Singapore, towards jurisdictions seen as having less stringent ALM compliance (FATF, 2021_[52]).

What sets the leading commodity trading hubs apart is not geographical location but favourable legislation, regulatory environments and tax rates, as well as strong capital markets, a tradition of trade and shipping, and broad talent pools. Trading hubs are also judged on their ability to offer specialised financial services, including trade financing, and services such as inspection, shipping, insurance, trust, tax planning, and management consultancy (Swiss Federal Council, 2013_[53]; IMF, 2000_[54]).

Offshore financial centres

Several trading hubs fall into the category of offshore financial centres (OFC), defined as "a jurisdiction (often a country) that provides corporate and financial services to non-resident companies on a scale that is incommensurate with the size of its economy" (Garcia-Bernardo et al., 2017_[55]). Traditionally, OFCs are assumed to be small, low-tax jurisdictions in remote locations. In practice, determining which countries are OFCs is a highly debated topic. OFCs will typically attract financial activities on the back of their lower tax rates (e.g., no capital tax, no withholding tax on dividends or interest, no tax on transfers, no corporation tax, no capital gains tax, no exchange controls), lighter regulation and supervision, less stringent reporting requirements, and less stringent trading restrictions (IMF, 2000_[54]).

Research shows that large, independent traders use OFCs in their corporate structures to an exceptional degree (Nesvetailova et al., 2021_[24]). A study of 2018 income data for the top 100 global industrial firms showed that an average 18% of subsidiaries are owned via OFC-based holding companies. That figure rose to 29.6% when looking only at international oil companies, and again to 96.7% when including only large commodity trading firms. In contrast, national oil companies (NOCs) are "moderate" users of OFC jurisdictions (Nesvetailova et al., 2021_[24]).

Traders offer different reasons for their use of OFCs. First, incorporating in OFCs is preferred because of the legal flexibility these jurisdictions offer. For example, when a commodity trader wants to reduce share capital or raise additional capital, execution is more straightforward in an OFC than in jurisdictions where a court order might be required. In addition to legal flexibility, traders cite OFCs' links to shipping, limitations on liability and parent companies' exposure to disputes.

While the use of OFCs is legitimate, it can be problematic. OFCs can mask how much value is created, lost, or distributed by subsidiary entities. Additionally, although OFCs generally have well-developed regulatory institutions and comply with international laws on trade and money laundering, OFCs are frequently under scrutiny for facilitating corporate tax avoidance (Garcia-Bernardo et al., 2017_[55]) and for rules and systems that provide legal and financial secrecy to overseas clients (Tax Justice Network, 2020_[56]).

Producer-country contexts

The prevalence of trading hubs and OFCs in the commodity trading sector means that much of the financial conduct of the commodity trading industry takes place in jurisdictions known for their business-friendly environments. This contrasts with the situation often found in source countries where commodities are extracted and produced. Several structural weaknesses characterise producer-country settings and mean that these countries often end up in an inferior market position and a subordinate position in global trades.

Many oil-producing developing countries suffer from poor governance and weak institutional capacity. To some extent, these challenges are similar to those of developing countries more generally. But oil-exporting developing countries often perform particularly poorly across development indicators compared to their peers, leading to the concept of the "resource curse". More than half of low- and lower-middle-income countries dependent on oil and gas for exports and revenues are classified as 'fragile', and oil-exporting developing countries often score 'weak', 'poor', or 'failing' on metrics of good governance (NRGI, 2017[10]). Decision-makers in resource-rich countries frequently struggle to translate this wealth into

poverty-reduction and sustainable development, performing poorly across a number of metrics, including economic growth (Sachs and Warner, $1995_{[57]}$) democratic governance (Ross, $2012_{[58]}$), and conflict prevention (World Bank, $2011_{[59]}$)— overspending on consumption and infrastructure but neglecting priority sectors like education and health (de la Croix and Delavallade, $2009_{[60]}$). As a result, social services in oilrich developing countries are often deficient and fail to help vulnerable populations. Although pockets of efficiency in the form of capable and well-resourced state institutions do exist in these countries, these focus on additional resource extraction rather than public goods that enhance collective welfare ((Hertog, $2010_{[61]}$; Soares de Oliveira, $2007_{[62]}$).

The dependence of many producer countries on a single commodity for exports and revenues makes them vulnerable to market volatility. The largest share of commodity-dependent countries are in sub-Saharan Africa, but oil and gas make up over 60% of merchandise exports in many developing countries, including Algeria, the Islamic Republic of Iran, Iraq, Libya, and Timor-Leste (UNCTAD, 2019_[63]). During 2011-13, the proceeds of crude oil sales by the top ten sub-Saharan Africa oil-exporting countries amounted to more than 50% of their combined government revenues and more than 75% of export earnings (Gillies, Guéniat and Kummer, 2014_[7]). Meanwhile, the global oil price has become increasingly volatile since the 1970s. Prices more than recovered from their low during the COVID-19 pandemic – in part due to the Russian invasion of Ukraine – but the industry faces the prospect of structural decline and continued volatility, in part due to the decreasing cost of renewable energy and growing commitments to decarbonisation.

Market volatility has caused many producer countries to accumulate debt. From 2013 to the end of 2018, oil exporters' median debt-to-GDP ratios grew from 31% to 54% of GDP. Excluding Nigeria, the public debt of producers in sub-Saharan Africa increased by more than 40% since 2013 (to 73% of GDP in 2018). Much of this debt is on commercial, as opposed to concessional terms, and a significant amount is owed to private bondholders and commercial creditors, including commodity traders (Calderon and Zeufack, 2020_[64]). Commodity trading firms have become increasingly active in this space, with one reporting a 600% increase in collateralized loan activity between 2013 and 2019 (Trafigura, 2020_[65]).

The above structural changes contribute to the subordinate position of oil-producing countries in global trade, exacerbating vulnerabilities to illicit financial flows. Countries in sub-Saharan Africa and their NOCs are often deal-takers in oil-trade negotiations. Government owners of NOCs often pressure them to maximise revenue from production, even at the cost of long-term sustainability and returns. NOCs over and over again shoulder the burden of raising much-needed capital on behalf of governments and can be expected to continue to do so in response to future challenges, such as the energy transition. The Natural Resource Governance Institute (NRGI) found state-owned enterprises (SOEs) to be the borrower in as many as 40% of all resource-backed loans identified in sub-Saharan Africa and Latin America (Mihalyi, Adam and Hwang, 2020_[66]).

4 How traders operate

At its core, commodity trading is a process of transforming commodities in space, time, and form. Commodity traders seek to identify the most valuable transformations, undertake the transactions to make these transformations, and perform the actions to carry them out. Traders are interested in securing long-term access to resources, which they do through complex arrangements, including prepayment agreements, commodity swaps, and joint ventures. These require significant financial resources, and traders rely on banks for a suite of financial products. Banks have varying degrees of control and oversight of the financing they provide to commodity traders. One recent trend is the waning appetite of banks for financing high-risk commodity trade transactions. What is more, commodity trading firms increasingly act as financiers, baking financial products into their trades with commodity-producing countries to secure access to oil resources. Because commodity traders face less stringent regulation and external scrutiny than banks, there are risks to traders emerging as a source of finance for producing countries and smaller traders who find it difficult to access finance from the conventional retail and investment banks.

Physical and paper trade

An essential part of buying-companies' activity is physical trade, i.e., buying or selling a specified product grade. The trade is usually for a defined amount of product to be exchanged at a designated location with either a fixed price agreed at the time of the trade or a floating price determined later and based on a published price, often averaged over some period, such the month before delivery. Trades can be either single cargoes or long-term contracts covering multiple deliveries over extended periods.

Closely associated with physical trade are financial trades, also called paper trades. Paper trading is not the focus of this paper, but it is helpful to outline because actors engaged in physical trading often engage in some paper trading, with financial institutions being the most active in this space. In contrast to physical trade, paper traders do not take physical control of the commodities. Paper trades usually occur either on exchanges or bilaterally over-the-counter (OTC). Traders take a market position on an underlying commodity through futures, swaps, or options. Paper trade can be used for speculative purposes, but it also helps traders manage the risks – including price risks – associated with commodities trading.

Long-term arrangements

To help manage physical trade and short-term transactions, buyers often secure long-term access to resources. When companies lack sufficient production, they rely on steady, external sources of supply to meet demand. In addition to offering predictability, long-term deals help buyers avoid the cost of repeated negotiations with sellers. Traders can secure such arrangements through an off-take agreement, in which a trading firm agrees to purchase a specified quantity of a commodity from a producer (e.g., a national oil company (NOC) or refiner), usually at a floating price benchmarked to the market plus or minus a differential, which it then sells on. These contracts vary in duration from one to or multiple years, and in quantity from a fraction to the entirety of production. Prepayment is a standard arrangement that utilises off-takes (discussed below).

Traders also secure long-term supply through physical swaps, known as oil- or crude-for-product swaps, which exchange crude output for refined products. These are settled physically, meaning delivery of the actual commodity occurs. As opposed to cash-based swaps, physical swaps occur between government entities and commodity traders or IOCs. In addition to securing supply, such swaps can be motivated by a lack of refining capacity in oil-producing countries, limiting their ability to meet domestic fuel needs. For instance, the 42 refineries on the African continent meet only about 55% of the total need (Baidoo, 2021_[67]). Angola, Mexico, Nigeria, and Venezuela have used crude-for-product arrangements in the past.

Finally, to secure long-term supply, buying companies might establish joint ventures (JVs): legal entities that several companies own together, such as a trading company and NOC, or traders and a private domestic company. Companies across industries use JVs with local counterparts to enter new markets. These can be created to perform a specific task or implement an agreement; they also allow traders to access local markets and build a network. Sometimes, local laws require a JV, often called "local content" legislation. In Nigeria and South Africa, such laws aim to build local knowledge or enable investment in a country's infrastructure, such as storage, transportation, and services related to supply-chain operation. Buyer companies might also favour JVs as jurisdictions sometimes offer tax benefits for incorporation.

Financing

Buyer companies rely on a suite of instruments to manage the financial aspects of settling trades. As discussed below, buyers and particularly commodity trading firms sometimes act as financiers, providing structured financing to suppliers and other buyers, be they smaller firms or producer countries.

Letters of Credit

Of the most central financing instruments on which buying companies rely is the Letter of Credit (LC). A LC is a letter from a bank guaranteeing the amount and timing of a buyer's payment to a seller. When a seller presents the correct documents, such as a Bill of Lading, confirming that contracted goods are of agreed quality and have been loaded for transport, the bank that issued the LC will advance payment on the buyer's behalf. The bank will be reimbursed by the buyer once the transaction is completed. If the buyer cannot make a payment, the bank is required to cover the full or remaining amount. In contrast to standard loans, LCs do not depend on traders' financial strength. Instead, the shipment of commodities serves as collateral when the trader cannot reimbursing the amount, limiting the bank's risk exposure.³ The bank decides whether to scrutinise the transactions involved (Carbó and Duparc, 2020[11]).

Letters of Credit let traders partake in transactions that can surpass millions of dollars in the case of crude oil tankers, even when they do not have large amounts of cash on hand. Letters of Credit are especially important for smaller companies that do not often benefit from sizable credit lines or revolving facilities (see below). According to Trafigura, LCs "allow commodity trading firms to hold far more bank debt on their balance sheet than a normal company could". Over the past ten years, however, as new international liquidity regulations have rendered transactional finance (as opposed to larger loans not linked to specific transactions) too risky for banks and insufficiently lucrative, there has been a significant reduction in LCs, making them harder to access by smaller companies with less equity (Carbó and Duparc, 2020[11]).

Open account

Most world trade is carried out under 'open account', where buyers and sellers agree the terms of a contract, and goods are delivered followed by payment through the banking system (Wolfsberg Group, 2019_[68]). The commodity is delivered before payment is due. The seller thus effectively issues a loan to the buyer – with banks having limited involvement – and trust plays a vital role in this type of arrangement. Such transactions are riskier for sellers, but they expedite transactions and avoid the need for bank

commissions (Wolfsberg Group, 2019_[68]; Carbó and Duparc, 2020_[11]). Since banks are barely involved, there is a risk that suspicious transactions pass below the bank's radar (Carbó and Duparc, 2020_[11]).

Revolving credit facilities

Large commodity trading firms with solid balance sheets have access to sophisticated instruments, including sizeable credit lines and revolving facilities, which offer financial flexibility and little oversight. Revolving credit is a line of credit with an established maximum amount – sometimes billions of dollars – on which businesses can draw as needed. They tend to be awarded multiple banks syndicates that come together to share the risk through a syndicated loan. These credit facilities are typically unsecured (or unpledged), in contrast to collateralised transactional finance, granted for a specific trade and secured by goods. Under a revolving credit facility, it is possible to process transactions without prior approval from a bank as would be required in the case of traditional bilateral financing arrangements such as a LC. Accordingly, these longer-term credit facilities enable traders to work in certain high-risk countries where financial institutions would be reluctant or unable to offer financing, for instance due to sanctions.

Commodity traders as financiers

Increasingly, commodity trading firms act as financiers, motivated by exclusive access to crude or oil products and the potential for high returns. As traders, they can offer loans collateralised by physical commodities more readily than banks or other purely financial actors. For borrowers, such resource-backed loans can reduce the cost of credit. For some countries, or other counterparties, this might be the only to access credit and working capital, as the retreat of conventional lenders from segments considered too high-risk makes traditional financing increasingly unavailable or expensive (NRGI, 2019[69]).

Resource-backed loans are not new (Farchy and Blas, 2021_[17]). Since the 1980s, NOCs and governments have collateralised future oil output to access loans, either by offering shipments as a form of repayment or by using the commodity as a guarantee (George and Zhdanniko, 2016_[70]) (Pirrong, 2014_[12]). Still, these activities appear to be increasing, and the IMF reports collateralised loans by commodity trading firms increasing in low-income countries, accounting for around 20% of commercial debt issuance in 2016-17 (Imam, 2019_[39]). One commodity trading house reported a 600% increase in lending from 2013 to 2019 (Trafigura, 2020_[65]).

Often referred to as structured finance by the industry, different forms of collateralised loans are usually distinguished by their maturity. Prepayment arrangements, with a repayment period of 25 to 30 years, are the most common (Pirrong, 2014_[12]) (Mihalyi, Adam and Hwang, 2020_[66]). In prepayment, repayment is in-kind, based on volumes of natural resources where quantities are valued at an agreed benchmark price. This often involves a trading firm and a commodity seller entering into an off-take agreement, where funding is provided to the producer (the prepayment) and the terms of the off-take are set to repay the amount, for instance in the form of a percentage of future oil production (Carbó and Duparc, 2020_[11]).

In a typical, structured-finance arrangement, the commodity trader will initiate the financing proposal and structure the transaction. Sometimes, the trader retains the credit risk, but depending on the amounts involved, might open the arrangement to outside participation. Financial institutions or investors can then shoulder some risk through syndicate arrangements or by buying oil-backed bonds. In these cases, one might consider traders an intermediary between a producer and the banking or investor community (Pirrong, 2014_[12]). To reduce risk, financial institutions and investors might prefer extending credit to big trading firms instead of directly to a producer. The buyer (i.e., the trading company) typically underwrites the transaction and is responsible for repayment of the loan in the event of a default by the producer.

5 Illicit financial flow risks in practise

The actors, geographies, and trade and financing modalities that characterise commodity trading can come create opportunities for illicit financial flow (IFF) risks. Although not exhaustive, the case studies below exemplify a range of actors, contexts, and modalities in oil/gas trading in "high vulnerability" countries. These studies present well-known cases for which secondary material is readily available. While these are by now a few years old and the conduct of commodity traders is changing quickly, very recent cases, including an ongoing case connected to bribery of African government officials at Glencore (Ridley, 2022_[71]) and the 2020 Justice Department's investigation into violations of the Foreign Corrupt Practices Act (FCPA) by Vitol (US Department of Justice, 2020_[72]) demonstrate that these risks are still very much present and evolving.

Commodity swaps in Nigeria

The predictability of long-term supply and demand is an important motivator for commodity traders and producers to enter into oil-for-product swap agreements. When producer countries lack refining capacity, which many do, a swap arrangement can offer a convenient way to ensure access to refined products.

The Nigeria National Petroleum Corporation (NNPC) has been using swaps at least since former President Goodluck Jonathan came to power in 2010. Many of the swap arrangements during his 2010-15 presidency were so controversial that, when President Muhammadu Buhari came to power in 2015, the new administration reviewed, renegotiated and, in some instances, cancelled pre-existing agreements as part of their anti-corruption campaign (The Economist, 2016_[73]). Notwithstanding the controversies surrounding them, swap arrangements continue to be used in Nigeria, with fifteen consortia engaged in swaps with the Nigerian government (Africa Intelligence, 2020_[74]).

Before 2010, Nigeria used three methods to meet its domestic fuel needs. First, NNPC refined its crude, selling it through its network of retail filling stations. Second, private marketers imported products under permits issued by the Petroleum Product Pricing and Regulatory Authority (PPPRA), selling them to wholesale and retail buyers. Third, NNPC's wholly owned, downstream subsidiary, the Petroleum Products Marketing Company Limited (PPMC), imported products using traders on an open account basis to supply fuel retailers and various types of intermediary companies.

However by 2010, this system was running into problems. First, Nigeria's four NNPC-owned refineries were working at only 20% of capacity (Sayne, Gillies and Katsouris, 2015_[75]), with productivity suffering due to the adverse effects of subsidies, poor maintenance, general operational failure, and inconsistent input supply. Even at total capacity, the refineries would not have been able to meet local gasoline demand.⁴ Second, the private marketers with PPPRA import permits had been supplying about 50% of Nigeria's import needs, but were sensitive to foreign exchange fluctuations. Furthermore, this small circle did not always fill their delegated quotas. Finally, PPMC, which had operated a system of quarterly tenders to procure refined petroleum products for the Nigerian domestic market, was finding it difficult to pay suppliers of fuels on a timely basis (Sahara Group, 2015_[76]; Sayne, Gillies and Katsouris, 2015_[75]). By 2010, PPMC had accumulated over USD 3 billion in cash debts to commodity trading companies, including Mercuria, Glencore, Vitol, Arcadia Petroleum, and Trafigura, and to oil majors BP, Royal Dutch Shell, and Total (Zhdannikov, 2013_[77]), with some bills more than three years overdue (Sayne, Gillies and Katsouris,

2015_[75]). As a result, PPMC faced threats of litigation (Sahara Group, 2015_[76]). As a senior-level officer at a major trading house told Reuters, "The fact that this debt was not solved was creating many tensions – both for Nigeria's desire to put its finances in order and for traders, because a lot of these debts were massively overdue" (Zhdannikov, 2013_[77]).

Before 2010, almost all major trading houses supplied fuel to Nigeria on an open account basis. But considering PPMC's payment difficulties, trading companies grew less willing to continue this practice, as it exposed them to significant risk. The reluctance to do business with PPMC also applied to major banks, which by 2010-11, declined to finance its open account imports. In 2015, the Natural Resource Governance Institute (NRGI) reported that banks were still holding unpaid debt from the company's open account imports worth approximately USD 1.5 billion.

These import challenges created an urgent need for NNPC and the Nigerian state to establish alternative ways to finance the import of refined petroleum products to avoid domestic fuel shortages. In 2008, NNPC announced the turn to swaps as a mechanism for importing gasoline and kerosene, the main fuel products on the domestic market, with several swap arrangements signed between 2010 and 2015. These swap deals took different forms, with the most scrutinised being the offshore processing agreement (OPA) and an agreement entered by PPMC with Ivorian state-owned Société Ivoirienne de Raffinage (SIR). Lasting from 2010 to 2014 and encompassing 60,000 barrels a day, the objective of the OPA was to secure a "reputable international refinery" to process Nigeria's crude oil offshore (Sahara Group, 2015_[76]; Sayne, Gillies and Katsouris, 2015_[75]). As explained by NRGI, the contract holder under an OPA – either a refiner or trading company – collects a certain amount of crude, refines it abroad, and delivers the resulting products back to NNPC. The contract lays out the expected product yields (i.e., the respective amounts of diesel, kerosene, gasoline, etc.) that the refinery will produce. The refining company could also pay cash to NNPC for any products that Nigeria did not need (Sayne, Gillies and Katsouris, 2015_[75]).

It soon became clear that the deal diverged from the original agreement between PCMM and SIR, leading observers to question its efficiency and even-handedness (Sayne, Gillies and Katsouris, 2015_[75]). Shortly after signing, SIR subcontracted commodity trader Sahara Energy Resources to manage the arrangement, transferring the "freight, operations, financial and administrative responsibilities", along with the rights to make "all decisions and executions". Sahara committed to pay SIR "a minimum USD 0.05 per barrel" in exchange for rights to trade and profit from the oil. Sahara Energy Resources is a shareholder of SIR and, at the time of the subcontracting, was one of its major suppliers of crude oil and purchaser of refined petroleum products (Sahara Group, 2015_[76]; Mbadi, 2019_[78]).

SIR subcontracted to Sahara even though a main premise of the deal had been that SIR would refine the crude oil. The basis for calculating the swap was furthermore based on SIR's actual outputs from refining Nigerian crude. Instead, PPMC and Sahara bypassed SIR's Abidjan refinery, selling crude and buying products from the global market. This was not reflected in the agreement between the parties, in which calculations were based on SIR refining the crude.

IFF risks arising in the case of Nigeria

The Nigerian example shows that swaps are not without IFFs risks. Rather, the case raised several risks at different stages of the commodity trading value chain:

• The involvement of passive intermediaries to secure business. Rigorous processes and robust criteria for the selection of buyers is crucial to preventing public revenue losses that arise through sub-optimal allocation and corruption (OECD, 2020_[79]). In Nigeria's OPA, the participation of SIR as an intermediary meant that a mid-sized trader (Sahara) was able to secure business it could not obtain otherwise as the OPA called for "reputable international refiners". Ivory Coast's SIR Oil Refinery never refined or imported the cargoes as contracted, but still collected a margin on oil it did not handle, paid by Sahara for managing the deal. According to NRGI, the margin

collected by SIR would amount to more than USD 4.8 million over the deal's life. SIR has subsequently been criticised for taking too big a cut in its role as a passive intermediary. Moreover, SIR was alleged to benefit from other compensation by PPMC, such as an allowance for oil lost in the refining process (Sayne, Gillies and Katsouris, 2015_[75]). The resulting opacity and waste disadvantaged Nigeria by decreasing the volume and quality of products it received and the revenue it could collect from their sales (Eboh, 2015_[80]).

- Opaque terms of sale. An inherent difficulty in crude-for-product swaps is ensuring equivalent value between often very different products and to judge whether a deal is based on realistic, balanced and fair commercial terms. There are no international standards on crude-for-product swaps. According to (Carbó and Duparc, 2020[11]), "On the one hand, you have a barrel of crude oil, on the other, refined petroleum products with very different prices depending on the quality and specification." In Nigeria's OPA, the weight of the crude oil lifted by the trader determined the amount of products due. According to NRGI, Sahara lifted light-weight grades of crude oil that ensured it owed the least amount to the Nigerian government, resulting in fewer refined products and fewer litres for PPMC to sell to end consumers (Sayne, Gillies and Katsouris, 2015_[75]).
- No money trail made corrupt behaviours difficult to detect. Information gaps or unclear instructions create room for individuals' discretion and make it difficult for external stakeholders to verify whether instructions are followed. NRGI's investigation of the OPA between SIR and PPMC noted that the multiplicity of accounts for transferring revenues from the country's swap arrangement left external stakeholders no way to ensure that payments had occurred (Sayne, Gillies and Katsouris, 2015_[75]). Unlike other deals by NNPC, this OPA did not include wiring instructions or bank details, making it impossible to determine which accounts the traders paid into or how funds travelled from PPMC to NNPC and the treasury. Researchers noted that past audits had failed to examine PPMC accounts (Sayne, Gillies and Katsouris, 2015_[75]). One cannot rule out that money might have diverged as it left the buyer and was transferred between the NNPCs different accounts before ending up in the treasury. A 2015 audit by PricewaterhouseCoopers on the orders of Nigeria's then-President uncovered that NNPC was spending nearly half the proceeds from crude oil sales, failing to remit billions of dollars to the treasury (Wallis, 2015_[81]).

Prepayments in Chad

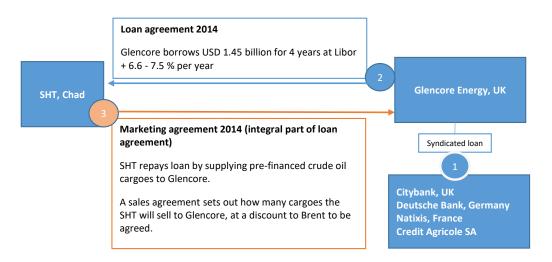
Chad is Africa's 10th-biggest oil exporter. The country emerged as an oil producer under difficult circumstances: low levels of human and physical capital; a virtual absence of basic infrastructure; landlocked; and with significant political instability. Chad's ability to attract financing on favourable terms to meet its financing needs and development ambitions has thus been limited. It is often in such circumstances that using resource wealth to secure financing becomes the most attractive – or potentially the only – option for countries with limited access to capital and credit.

Chad's petroleum resources are managed by state-owned Société Tchadienne des Hydrocarbures (STH). This task grew more important following the government's decision that certain extractive companies must pay royalties and taxes in-kind. Specifically, revenue-in-kind payments by companies operating in Chad under production-sharing contracts opened the possibility of oil-collateralised borrowing in the form of prepayment agreements (IMF, 2016_[82]). The first prepayment agreement was signed in 2013, with Glencore advancing USD 300 million to Chad in return for defined commodity shipments – subsequently increased to USD 600 million. This was equivalent to 4.5% of the country's GDP (IDA, 2015_[83]) and meant to help Chad cover government revenue shortfalls (Moore Stephens, 2017_[84]).

In 2014, Glencore, together with a syndicate of banks, extended an additional prepayment of USD 1.45 billion, helping Société des Hydrocarbures du Tchad (SHT) finance the purchase of a 25% share in an oil-producing field in south-western Doba (Figure 5.1). The *Financial Times* noted the loan equalled roughly

10% of Chad's GDP at the time (Blas, 2014_[85]). A second prepayment agreement was to be serviced from the proceeds of oil cargoes sold by SHT to Glencore. In 2014, with the price for Chadian crude oil at USD 90 per barrel, projections showed the purchase price could be recovered over four years while leaving a USD 500 million positive cashflow for the government (IMF, 2016_[82]). The interest rate offered by Glencore was significantly higher than that provided by, for instance, Chinese Eximbank on resource-backed loans to sub-Saharan African governments (Mihalyi, Adam and Hwang, 2020_[66]).

Figure 5.1. Overview of the 2014 prepayment agreement



Notes: SHT = Société des Hydrocarbures du Tchad

Source: Based on Culbert et al. (unpublished[13]) "The Nexus Between Traders and Bankers in First Trade Oil and Gas Transactions."

The prepayment agreements between Glencore and Chad entitled the company to up to 100% of oil profits initially and up to 50% of royalties paid in-kind subject to quarterly caps (Mihalyi, Adam and Hwang, 2020_[66]) (IMF, 2016_[82]). In 2015, Glencore bought crude oil at a price discount of up to USD 12.50 per barrel compared to the benchmark Brent Crude price. Chad's Doba crude is generally priced at a discount to Brent due to its lower quality and popularity, but it is also possible that Glencore received a price discount as part of the agreement (IMF, 2016_[82]; S&P Global Platts, 2020_[86]).

Problems occurred in late 2014 when oil prices dropped as much as 54% from their peak that year of USD 109.76 per barrel (Gridneff, 2015_[87]). As net proceeds from Chad's largest oil project no longer covered the country's debt service; the government approached Glencore to reschedule the prepayment agreements. Rescheduling with Glencore was a condition for Chad to secure USD 1.1 billion in debt relief under the Heavily Indebted Poor Country (HIPC) Initiative (World Bank, 2015_[88]). In December 2015, the prepayments of USD 1.448 billion were consolidated and rescheduled on non-concessional terms (IMF, 2017_[89]). The maturity of the loans was extended from four to more than six years, but the restructuring fees meant that the present value of the debt increased.

Soon after rescheduling the prepayment, it became apparent that the debt was still unsustainable as Chad struggled to meet budget needs. Debt service consumed nearly all the country's oil profits, representing almost 80% of export revenues. In 2018, a second restructuring deal for more than USD 1 billion was struck with Glencore and the four syndicate banks (Bloomberg, 2017[90]). The loan's maturity was extended, a two-year grace period on principal payments added, and a lower interest rate agreed (Payne, 2018[91]). The restructured deal also introduced triggers, meaning that Chad's repayment amounts vary according to global oil price: when the oil price goes up, interest and principal repayments increase, and vice-versa. However, the renegotiated terms have proven insufficient. In September 2020, Chad

approached Glencore to suspend payments in 2020 on its oil-backed loan, estimated in the range of USD 100 million (Soto and Hoije, 2020_[92]). In January 2021, Chad became the first country to ask for a debt overhaul under the G20 Debt Service Suspension Initiative (Shalal, 2021_[93]).

IFF risks arising in the case of Chad

Chad's case shows the considerable risks that come with complex financing arrangements like prepayments, potentially damaging the long-term development potential of borrowing countries:

- Opaque buyer-selection. Non-transparent buyer-selection makes it difficult to ensure that due process is followed and that principles of fair competition are applied. This was the case of Glencore in Chad, which, by 2010, held a monopsony on oil sales by Chad. But no information is available on how Glencore was selected as the buyer of the government's and SHT's entire share of oil as part of the prepayment agreement, even though other commodity trading firms had expressed interest. While the conditions under which Glencore was selected in 2013-14 are unknown, the company was charged with paying bribes to obtain and retain business with state-owned and state-controlled entities in four other African countries during this period (US Department of Justice, 2022_[94]). The selection of Glencore provided it an unrivalled position in the country's oil sector and economy for years to come, potentially discouraging competition that could have benefitted Chad.
- Lack of competition leaves oil exporters as deal takers. Commercial credit generally comes with shorter maturities and higher interest rates than would be the case with concessional lenders. This is especially true when the borrower is considered high risk. Moreover, when credit decisions must be made urgently, interest rates can reach excessive levels, between "3% per day or 100% per month", according to one report (Carbó and Duparc, 2020_[11]). In addition, both the banks and traders typically charge arrangement fees. According to Chad's Ministry of Finance, its loan repayments to Glencore on its 2013 loan almost doubled in 2017 due to fees and interest, (Carbó and Duparc, 2020_[11]).
- **Deal terms do not reflect market risks.** In prepayment arrangements, the borrowing country carries the bulk of the market risk. Even if the commodity price that serves as collateral for the loan falls, the principal amount remains unaffected, and the borrower is expected to pay back the loan in full. In the case of Chad, when oil prices declined, Glencore kept most of the state's share of oil revenues. In 2016, 90% of revenue from the country's major oil field went to repay the loan with little going to the country's treasury (Bloomberg, 2017_[90]). The lack of prudence evident in oil-backed loans such as those extended to Chad means that they risk becoming a financial liability for future governments and generations. In Chad, the loan, which was meant to last four years, has been extended to at least 16 years.
- Difficult-to-renegotiate terms can push governments into debt distress. The World Bank notes that commercial creditors are typically less open to restructuring (Calderon and Zeufack, 2020_[64]), and resource-backed loans in particular might be difficult to restructure, leaving borrower countries vulnerable. Many resource-backed loans are held by creditors who do not belong to forums for debt rescheduling, such as the Paris Club of the Institute of International Finance. Moreover, these types of loans are often treated as more senior than other, unsecured debt, which can complicate the coordination of creditors, and, therefore, the debt resolution processes (Mihalyi, Adam and Hwang, 2020_[66]). To the extent that resource-backed borrowing negatively impacts a country's debt sustainability, countries that heavily subscribe to these types of loans might also jeopardise their future access to concessional sources of financing (Imam, 2019_[39]). In the case of the loan agreements signed by Chad's government and Glencore, there seems to have been a clause whereby rescheduling was permitted in the event of a drop in the oil price (Mihalyi, Adam and Hwang, 2020_[66]).

• Opaque or unclear terms can cause confusion and unduly favour buyers. In Chad, budgeting of government transfers from oil sales was complicated by the terms of the prepayment arrangements. The loan contracts with Glencore did not specify the amount of debt service that STH was to pay per period, instead linking it to the value of oil shipments and other cost factors. This uncertainty impacted the amount that STH could transfer to Chad's treasury. According to the IMF (2016, p. 47_[82]), "accounting for past oil revenues is now more complicated as is projecting future revenues. The debt service on the oil-collateralised borrowing is both onerous and hard to predict since it is a function of oil prices and production." Glencore (likely in discussion with STH) eventually decided on the allocation of payments per oil shipment to service the loan. Chad's government, did not participate in this negotiation. In general, the treasury had little a priori knowledge of the transfer it was due and the amount varied significantly (IMF, 2016_[82]).

Prepayments in Congo

Despite having the fourth-largest proven oil reserves and fifth-largest proven natural gas reserves in sub-Saharan Africa, the Republic of Congo (hereafter Congo) has a track record of high indebtedness. Congo stood out among HIPC because of its "skewed debt structure". According to the (AfDB, 2010_[95]), "debt to bilateral and commercial creditors accounts for about 94% of the total outstanding debt stock. Multilateral debt represents merely 6% of the country's public and publicly guaranteed external debt." According to the IMF, from 1995 to 2000, some 75% of Congo's borrowing was backed by oil (Global Witness, 2005_[96]) and the country struggled with debt payments on these loans contracted with commodity traders. The involvement of the IMF was required to renegotiate the structure of the long-term debts or provide a bailout to the government. In March 2010, Congo met the requirements for debt rescheduling and relief under the HIPC Initiative, saving the country USD 1.9 billion in debt-service payments.

A requirement for Congo to qualify for HIPC was that it clean up the poor management and corruption characterising the country's oil sector. Mismanagement of the state-owned Société Nationale des Pétroles du Congo (SNPC) was especially acute. Created in 1998, SNPC has a dual mandate: (1) to manage its share of production received through stakes in oil fields from joint ventures with oil companies; and (2) to manage the state's share of oil on behalf of the government, which it receives in-kind (Melina, Selim and Verdugo-Yepes, 2019_[97]). The proceeds of oil sales – net of its fees – should be transferred to the treasury quarterly, though this has not always been the case.⁷

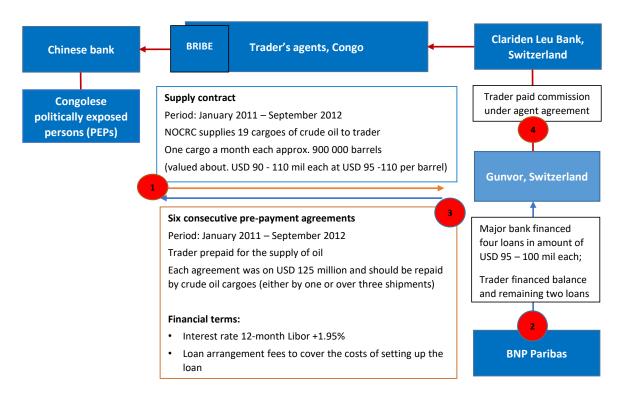
In line with the conditions set out by the HIPC, Congo pledged that all new external borrowing would have a minimum grant element of at least 50% and that "new prepayment by or on behalf of the government is strictly prohibited" (IMF, 2011, pp. 9-10_[98]). Yet as would become clear in subsequent years, the Congolese government accumulated new debt within months of the HIPC debt relief, while the country was under the watch of international finance institutions. With no access to conventional unsecured financing, Congo reverted to collateralising oil for loans from China and commodity traders, including Gunvor, one of the world's biggest. It was not until 2017, when Congo again had repayment problems, that the scale of the country's renewed indebtedness became public and more oil-backed loans, including from Trafigura and Glencore, were revealed (IMF, 2019_[99]). Generally, commodity traders make substantial disclosures only when repayment problems emerge, as was the case in both Chad and the Congo. Initially, the opacity of Congo's prepayment arrangement significantly complicated the job of policymakers, auditors, and concessional lenders like the IMF in getting an overview of the country's debt position.

In 2011, Gunvor entered Congo with the help of two local agents (Duparc, 2013_[100]). According to an investigation by Public Eye, the agents helped Gunvor win two oil contracts amounting to 22 crude oil tankers. These cargoes were valued at about USD 2.2 billion but were allegedly bought at a discount of USD 0.8-1.5 per barrel below market price (Duparc, Guéniat and Longchamp, 2017_[101]).⁸ Gunvor paid a

commission of USD 31.9 million into the agents' Swiss bank accounts for the job (Duparc, Guéniat and Longchamp, 2017[101]).

In exchange for the crude oil, Gunvor extended six prepayments of USD 125 million each to SNPC, totalling USD 750 million. A prerequisite for the second oil contract was prepayments by Gunvor "into an SNPC account in Congo in up to two or three consecutive instalments" (Duparc, Guéniat and Longchamp, 2017_[101]) in exchange for delivery of crude shipments. The loan repayments were tied to the price of the oil shipments. Gunvor minimised its risk exposure by taking one cargo of crude per month from 2011 until the summer of 2012. If Congo defaulted on a shipment, the contract terms provided a 30-day payment period, leaving Gunvor the option of not paying for the previous month's shipment. To finance part of the loan, Gunvor secured the participation of BNP Paribas (Duparc, Guéniat and Longchamp, 2017_[101]), a French bank that had significant presence in Africa and a history of participating in oil-backed loans (Africa Intelligence, 2020_[102]). Of the USD 750 million, approximately USD 380-400 million was secured by BNP Paribas, and Gunvor used company funds to supply the remainder.

Figure 5.2. Structure of the deal



Source: Based on Culbert et al. (unpublished[13]) "The Nexus Between Traders and Bankers in First Trade Oil and Gas Transactions."

Gunvor collected an arrangement fee to cover the cost of setting up the loan and irrespective of repayment terms, reportedly amounting to four times the interest payments on the loans themselves (Duparc, Guéniat and Longchamp, 2017_[101]).

IFF risks arising in the case of Congo

Gunvor's dealings in Congo became of interest to the Swiss Attorney General, who started investigating the company in 2017 for organisational deficiencies. A former employee signed a plea deal with the Swiss authorities in 2018 admitting he paid bribes to win contracts for the firm, including the prepayment

arrangements with SNPC (Payne, 2019[103]). Congo's prepayment arrangements raised several red flags along the commodity trading value chain:

- Selection of buyers without tender. Competitive tenders are important to ensure competitive buyer-selection processes. According to Public Eye, Congolese authorities issued no call for tender for the 22 cargoes purchased by Gunvor in 2011, rendering the sales contract illegal under Congo's Code of Public Procurement (Duparc, Guéniat and Longchamp, 2017[101]) and contrary to Congo's official position: in 2011, Minister of Finance Gilbert Ondongo announced that "procurement procedures are now solidly in place" and the majority of "contracts above USD 500,000 have been subject to competitive bidding" (IMF, 2011, p. 2[98]). Non-competitive selection of buyers continues to be a problem in Congo, representing an ongoing source of IFF risk. The IMF's 2019 Debt Sustainability Analysis of the country noted a "severe lack of published, timely and regular information on (i) regulations for competitive public tenders for the sale of oil, (ii) objective criteria for the selection of buyers or pre-qualification of local suppliers, (iii) list oil buyers and traders" (IMF, 2019, p. 97[99]). Producer countries might find themselves under pressure to offload cargo quickly due, for instance, to falling demand for their products - as was the case during the COVID-19 pandemic - or to decarbonisation in the context of the global energy transition (Gladstone, 2020[104]). This leaves countries vulnerable to contracts on less-than-favourable terms with companies that exploit the situation to secure deals. In crisis situations, due process is not always followed, and documentation can remain incomplete, making it challenging to follow up with audits, inspections, or investigations.
- Bribery by intermediaries to secure business for trading companies. IFF risks involved in using intermediaries to secure business in the oil commodity trading sector are well documented, leading several companies to end their use of intermediaries (Hume, 2020[45]). The Swiss authorities' case against Gunvor and its operation in the Congo noted that "the company did not attempt to manage the risk of corruption associated with using agents to obtain petroleum shipments, for which commissions of several tens of millions of US dollars were paid between 2009 and 2012. Gunvor had no formal selection process for any of the agents that it used, and it did not carry out any checks on their activities, even though Swiss and international anti-corruption standards... specifically highlight the increased risk of corruption associated with agents' activities" (Swiss Confederation, 2019[105]). The Swiss criminal investigation found that, at the time of the events, warning signs of illegal activities had been ignored by the company, and other irregularities had occurred, including substantial payments to third-party offshore companies unrelated to oil activities, and backdating of supporting letters to banks.
- Complex deals create room for mispricing. Complex agreements such as prepayments are context-specific with few industry-standard terms or best practices against which to measure them. This makes undervaluation and mispricing difficult to identify (OECD, 2020_[79]). Mispricing of oil trade transactions allow buyers to resell discounted oil at an inflated margin. In 2007, the World Bank reported that SNPC was selling the state's share of crude oil production at prices 5-6% lower than could be expected for Congo's primary Djeno blend type of crude. This mispricing continues, with the IMF again signalling that such practices were taking place in 2019 (IMF, 2019_[99]). Different motives might explain the deliberate mispricing of goods, including money laundering, avoiding or evading taxes, smuggling, or kickbacks for politically exposed persons, as noted Congo's case (Tax Justice Network Africa, 2019_[106]).
- Opacity and irregularities in NOC-to-government transfers. In Congo, SNPC remits its
 proceeds net of fees to the treasury every quarter. Still, its accounting and reporting are inadequate
 such that the Extractive Industries Transparency Initiative (EITI) can only reconcile oil transfers
 between producers and SNPC, but not between SNPC and the treasury (EITI, n.d.[107]). The IMF
 also raised the alarm, stating that Congo lacks a straightforward method for oil revenue forecasting
 and that inconsistencies remain between estimates of oil production volumes and oil revenues in

annual reporting (2019, p. 11[99]). Transfers from SNPC to its subsidiaries likewise represent a significant source of leakage. By one account, 12% of Congo's total annual oil profit for 2013 was transferred from SNPC to the *Congolese National Oil Refinery* (CORAF), remaining unaccounted for (Guéniat, 2015[108]). CORAF was run in 2011-18 by the Congolese President's son, Denis-Christel Sassou Nguesso. He has since become the target of French authorities' probe into suspected ill-gotten gains, and had his assets in France frozen while being investigated for embezzling millions of dollars in public funds from SNPC (Le Figaro, 2022[109]; Naval, 2022[110]).

6 Efforts to address illicit financial flow risks

How do countries address illicit financial flow (IFF) risks in the commodity trading sector? Acknowledging that each country's binding instruments and laws are unique, this report looks at the mandatory and voluntary requirements companies face in two major OECD-member trading hubs: Switzerland and the UK. The report also draws on other country examples, given that corruption proceedings and rulings raised by national authorities against large commodity-trading companies appear to be on the rise. Cases of suspicion of foreign corruption and bribery have been or are being pursued in the United States, Brazil, and Singapore (Reuters Staff, 2020[111]).9

National legislation

Anti-corruption

Switzerland

The Swiss Federal Council's 2020 report on supervision of commodities trading from the perspective of money laundering finds corruption to be the primary offence affecting the sector (2020_[47]). Switzerland is party to three international anti-bribery conventions: the OECD Anti-bribery Convention; the Council of Europe's Criminal Law Convention on Corruption; and the UN Convention Against Corruption. An anti-corruption law set out in the Swiss Criminal Code has been revised to meet these international conventions' requirements. Bribery of Swiss and foreign public officials and private individuals is illegal under Article 322 of the Swiss Criminal Code, covering natural and legal persons (e.g., financial institutions).

Switzerland is subject to peer review under procedures set out by the international conventions to which it belongs. The Swiss approach to anti-corruption generally receives positive feedback from these reviews. However, the 2018 OECD peer-review noted that "Swiss authorities should take action that includes more sustained enforcement and measures to prevent foreign bribery in those sectors that are identified as being at greatest risk. This includes the commodities trading sector, which should be the subject of tailored, binding regulations." (OECD, 2020[49]).

Two years later, as part of its follow-up, the OECD Working Group on Bribery noted Swiss efforts to counter foreign bribery, including allocating more resources to the Money Laundering Reporting Office, which is important in detecting foreign bribery, and efforts to raise awareness among companies about the issue of bribery of foreign public officials. Switzerland remains one of the most active countries in prosecuting foreign bribery offences (OECD, 2020[49]). At the time of the 2018 review, Switzerland's Office of the Attorney General was conducting criminal proceedings for foreign bribery in the commodity sector, leading to the decision to sentence Gunvor in 2019 to a fine of CHF 4 million and compensation for criminal proceeds of CHF 90 million for bribery of foreign officials (Swiss Confederation, 2019[105]).

On 26 February 2020, the Federal Council published "Supervision of Commodity Trading Activities from a Money Laundering Perspective" in response to the Swiss Parliament, which queried the effectiveness of

indirect supervision of trading activities carried out by financial intermediaries. The Federal Council judged Swiss authorities in charge of implementing the relevant legislation to largely have the legal foundations and the resources to prevent money laundering in the commodity sector and the corruption that goes along with it. Furthermore, it determined that the banks' due-diligence obligations and fulfilment in commodities trading were appropriate. Nonetheless, it found improvements could be made to enhance efficiency and further mitigate the risk of corruption and money-laundering attached to commodity trade finance, including private-sector initiatives to fight corruption, and the development and adaptation by the industry of sectoral guidelines on due diligence to combat money laundering (Swiss Federal Council, 2021[112]). The Federal Council did not endorse tailored, binding regulation, recommended in the 2018 OECD peer review.

United Kingdom

In the UK, anti-corruption laws are contained in the Bribery Act 2010, which came into force on 1 July 2011. The Act has near-universal jurisdiction, allowing for the prosecution of an individual or a company linked to the UK regardless of where their actions took place. Unlike the equivalent US Foreign Corrupt Practices Act (FCPA), the UK Bribery Act does not distinguish between bribery and facilitation payments. As well as covering bribery generally, the Act includes liability for the failure of commercial organisations to prevent bribery on their behalf. The scope of this provision is broad: a company can be found guilty if the bribery is conducted by an employee, an agent, a subsidiary, or a third party. In "Exporting Corruption 2020: Assessing Enforcement of the OECD Anti-Bribery Convention", Transparency International noted that the UK was one of only four (including Switzerland) active enforcers of anti-bribery laws among 47 leading global exporters, of which 43 were signatories to the OECD Convention (Transparency International, 2020[113]).

In 2019, the UK's Serious Fraud Office opened an investigation into suspicions of bribery by the Glencore group of companies, its officials, employees, agents, and associated person (UK Serious Fraud Office, 2019_[114]). In June 2022, a UK subsidiary of Glencore was convicted on all charges of bribery brought against it, admitting to multiple counts of paying bribes to secure access to oil and generate illicit profit. The investigation found that Glencore employees and agents paid bribes of over USD 28 million for preferential access to oil, including increased cargoes, valuable grades of oil, and preferable dates of delivery. These actions were approved by the company across its operations in Cameroon, Equatorial Guinea, Ivory Coast, Nigeria, and South Sudan. Sentencing will take place in November 2022 (UK Serious Fraud Office, 2022_[115]).

United States

National legislation like the FCPA, which is automatically binding for entities within US jurisdiction, can have an extraterritorial effect. The FCPA covers the actions of people and businesses with a predetermined degree of connection to the US wherever they occur, and it covers foreign individuals when the corrupt conduct occurs in the US. The FCPA has no materiality threshold, meaning the value of the bribe is irrelevant. The Department of Justice and Securities and Exchange Commission vigorously enforce the FCPA, with fines ranging into the hundreds of millions of dollars. The most recent case concerns the US affiliate of commodity trader Vitol, ordered in December 2020 to pay USD 164 million to settle charges of bribery, corruption, and manipulative and deceptive conduct. The case marked the first time that the US Commodity Futures Trading Commission brought action based on the market effects of foreign bribery giving the company "unlawful competitive advantages in trading physical oil products and related derivatives to the detriment of its counterparties" (Brasseur, 2020[116]).

Anti-money laundering (ALM) regulation

The scope and application of AML regulation is broadly comparable in the UK and Switzerland. National legislation in both countries follows the Financial Actions Task Force (FATF) standard for international AML

and combating terrorism financing (CTF). The Swiss and UK AML/CTF frameworks initially targeted regulated financial services and expanded over time to include other sectors of the economy.

The controls in place and the obligations of market players depend on the nature of companies' activities. Notably, only certain activities by commodity trading companies are subject to AML/CTF regulation (Duparc, Guéniat and Longchamp, 2017_[101]). As a rule, trading in physical products falls outside the scope. In contrast, any financial instrument trade associated with oil and gas (e.g., paper trading or oil-price derivatives) would require a trading company to adhere. Sometimes traders have the means to self-finance part of their operations, including prepayments. Commodity trading on a trader's own account falls outside of AML regulation as there are no third-party assets that would be accepted or kept in deposit as part of the trading activity (Duparc, Guéniat and Longchamp, 2017_[101]).

However, if traders use bank financing during the purchase or sale of raw materials, the trader becomes indirectly subject to AML regulation through the financing institution. The Swiss Federal Council remarked that "the vast majority of trading carried out in Switzerland (between 80 and 90% according to the estimates of financial intermediaries interviewed) are financed through bank loans, granted by banks in Switzerland or to abroad" (Swiss Federal Council, 2020, p. 5[47]).

If the bank's client is a commodity trader, financial intermediaries must follow normal AML/CTF obligations. The bank will want to know about the client, the operation the loan will finance, the counterparties and countries concerned, and the expected annual transaction flows and volumes. Moreover, the bank will want to ensure that their client's business partner does use the money for activities prohibited by international sanctions or embargoes. While banks state that they will know the business partners of their customers, Swiss law does not require it (Swiss Federal Council, $2020_{[47]}$). The extent to which banks know the clients of their clients depends mainly on the bank's ability and willingness to pursue this information. When the bank does not provide financing as part of a trading transaction, but only facilitates payment transfer, it can be expected to be less familiar with the details of the transaction, making it more difficult to identify illegal trading operations (Swiss Federal Council, $2020_{[47]}$).

Where there is suspicion of criminal funds or where the risks are particularly high, Swiss AML/CTF law holds that banks should strengthen their indirect supervision by documenting, limiting, and monitoring the risks associated with the commercial activity. However, this applies only in cases where funds are deposited into accounts that the bank manages. In contrast, when a bank grants credit to a commodity trader to buy oil from a national oil company, it is not responsible for monitoring the use of funds by the ultimate beneficiary.

While the Swiss Federal Council, responding to Parliamentarians' concerns, determined that banks' due-diligence obligations and fulfilment in commodities trading were appropriate, civil society organisations have also questioned the adequacy of indirect supervision applied by banks to commodity traders and their transactions. According to Public Eye, "of the thirty or so anti-money laundering checks that [Swiss Financial Market Supervisory Authority] FINMA carries out on financial institutions each year, only one or two relate specifically to trade finance" (Carbó and Duparc, 2020, p. 2[11]). Moreover, in cases where Swiss commodity traders do not have a bank account in Switzerland and use no financial intermediary based in the country, activities fall outside the Swiss AML/CTF system. These limitations on the scope of relevant AML/CTF legislation apply in both Switzerland and the UK (Culbert, Dawson and Isaieva, unpublished[13]).

The Swiss Federal Council did suggest improvements, focused on industry-led, private-sector initiatives to fight corruption, and the development and adaptation of sectoral guidelines on due diligence by the industry to combat money laundering (Swiss Federal Council, 2021[112]).

Sanctions

Sanctions are restrictive measures against individuals, organisations, and jurisdictions that governments use to change behaviours or take a stance against certain activities, such as human rights violations or

terrorism. The most frequently applied international sanction is economic, typically a ban on business dealings, or trade sanctions, which usually take the form of tariffs or similar measures rather than outright bans on trade (FINMA, 2021[117]). The use of sanctions has increased, with governments more readily adopting unilateral measures and using sanctions as a foreign policy tool, with some sanctions having extraterritorial reach.

In the UK, the Sanctions and Anti-Money Laundering Act of 2018 allows the treasury to impose sanctions for compliance with a UN or other international obligation, for the prevention of terrorism, in the interests of national or international peace and security, or to further a UK foreign policy objective through post-Brexit unilateral sanctions and anti-money laundering measures (Townsend and Benson, 2018_[118]).

Switzerland also implements sanctions imposed by UN Security Council resolutions via ordinances issued by the Federal Council, based on its Embargo Act. The Federal Council can also enact independent freezing measures to safeguard Swiss interests and take coercive measures to enforce compliance. Decisions whether to undertake or partially undertake a foreign sanctions regime are made case-by-case. The Swiss State Secretariat for Economic Affairs (SECO) maintains a list of sanctioned countries, persons, or organisations, and FINMA publishes coercive measures and freezing measures relevant to the financial sector and notifies supervised financial institutions of appropriate changes on its web page.

New forms and new challenges

Although traditional geographic sanctions predominate, new forms of sanctions are emerging with implications for IFFs in commodity trading. In 2016, the US adopted the Global Magnitsky Human Rights Accountability Act, the first of a new generation of sanctions programmes that can be applied flexibly to perpetrators all over the world regardless of their location, in contrast to traditional sanctions targeted at specific countries. The Magnitsky Act authorises imposing economic sanctions and denying entry into the US to any foreign person identified as engaging in human rights abuse or corruption (United States Treasury, 2017[119]). EU foreign ministers approved a similar mechanism in late 2020, opening up for the imposing of sanctions on individuals and organisations responsible for human rights abuses anywhere in the world (Deutsche Welle, 2020_[120]). In 2021, the UK adopted its version of the Magnitsky Act, targeting corruption. The new sanctions regime provides powers to prevent individuals involved in corruption from entering the UK or channelling their funds through its financial system. The strategy document promises to fund the reform of Companies House and the register of overseas entities that own property in the UK. The US Magnitsky Act appears the most active of these new programmes, targeting over 300 individuals and entities from 40 countries by late 2021 (Russell, 2021[121]). Among these, an alleged business associate of Glencore was sanctioned in 2017 for high-level corruption in Congo (Resource Matters, 2018[122]).

Sanctions can create price disparities from which commodity traders are able to profit, creating an incentive for them to evade the sanctions (Pirrong, 2014_[12]). Commodity traders have been involved or accused of breaching sanctions in the recent past (Basquill, 2021_[123]), and in two cases, companies based in Switzerland and the UK were connected to people on the US sanctions list, administered and enforced by the US Department of the Treasury's Office of Foreign Assets Control (U.S. Department of the Treasury, 2021_[124]). In at least one instance, this led to further investigations in the Swiss case involving Glencore. Glencore's former partner in the Democratic Republic of Congo was placed on the US sanctions list in December 2017 for, amongst other things, "opaque and corrupt mining and oil deals" (Hume, 2018_[125]). Similarly, Trafigura's work in South Sudan is said to have benefitted from the connections of an Israeli middleman who was placed on the US sanctions list in 2018 for undermining "peace, stability, and security in South Sudan" (Reed, 2019_[126]).

More recently, sanctions against Moscow following the 2022 invasion of Ukraine have complicated global commodity markets. Three-quarters of the trade in Russian and Ukrainian wheat, oil, and gas is believed to be managed through Switzerland (Etienne, 2022[127]). The Swiss Trading and Shipping Association

stated in June 2022 that its commodity trading members were having difficulties funding or guaranteeing trade with Russia, and that companies fully compliant with sanctions were having their bank accounts frozen (Philippe, 2022_[128]). By the end of 2022, EU restrictions will ban the insurance and financing of transporting Russian oil to countries outside the bloc, and Switzerland has said it will do likewise (Hunter et al., 2022_[129]). The situation has led some traders of Russian commodities to relocate to Dubai, which has steered clear of imposing sanctions on Russian individuals and entities, reinforcing Dubai's emergence as a global commodities hub (Hunter et al., 2022_[129]).

Mandatory transparency

In Switzerland, extractive companies must disclose payments they make to governments around the world for the right to explore and extract oil, gas, and minerals. Similarly, in 2016, UK-incorporated and -listed oil, gas, and mining companies began to publicly disclose their payments to governments annually under the European Union Accounting and Transparency Directives, and UK law. The regulations require companies to file disaggregated and granular reports that provide data on each country and project level (Litvinoff and Williams, 2019_[1301]).

At the European level, the EU adopted a requirement for listed and large unlisted companies active in the extractive industries (oil, gas, and mining) and logging of primary forests to disclose their payments to governments on a country and project basis (Country-by-Country Reporting). These Accounting and Transparency Directives were adopted in June 2013 to provide relevant information to civil societies and parliaments, to hold governments to account for receipts from multinationals for exploiting natural resources (European Commission, 2013[131]).

The US also has an extractives payment transparency law in place, though implementation has been beset by legislative and legal challenges for almost a decade. Extractive industry payment disclosure rules were finalised in 2021, requiring disclosure of payments to governments by extractive industry companies engaged in commercial development of oil, natural gas, or minerals at the project level (KPMG, 2021[132]).

So far, commodity traders buying oil, gas, and minerals abroad are not covered by transparency laws that apply to the extractive sector. Instead, the laws focus on companies engaged in development and production. Switzerland's Federal Council has the authority to apply the transparency provisions to commodity traders buying oil, gas, and minerals abroad, but has yet to do so, while waiting for authorities in other major trading hubs to make a similar move (Swiss Federal Council, 2021[112]). So far, voluntary measures (discussed below) seem to be the preferred way for Swiss authorities to be seen as working on transparency in the commodity trading space without having to make disclosure mandatory.

Internal controls and voluntary measures

Recent years have seen companies active in commodity trading investing in compliance systems and growing their compliance teams (Culbert, Dawson and Isaieva, unpublished[13]). According to the Swiss Federal Council (2020[47]), compliance measures in the Swiss commodity trading industry are mainly applied on a voluntary, risk-mitigating basis. These include due diligence checks on counterparties, codes of conduct and internal control systems adopted by companies, training for employees or subcontractors, the elimination of cash payments, or more stringent recruitment procedures. More recently, several commodity traders decided to end the use of intermediaries for business origination and development purposes, recognising that compliance procedures might be difficult to apply to third-party actors (Hume, 2020[45]).

A distinction is often made regarding the extent of compliance systems in large and smaller commodity trading companies. The latter typically have more limited compliance checks (Swiss Federal Council, 2020_[47]), whereas many larger commodity trading companies¹⁰ report having sophisticated corporate

governance procedures to mitigate risks related to counterparties, price, market, reputation, etc. Contractual negotiations and approval of trade transactions, many of which have complex structures, typically require approvals by different departments (compliance, risk, credit, legal etc.), including at the management level. Through internal procedures, traders structure deals with relevant internal departments and, in line with company policy, carefully assess the market and optimise risks. Compliance checks and approvals are necessary to enter transactions or set up contracts. According to the trading companies, if the compliance team does not approve the counterparty, the trader should not be able to conclude a deal, and the counterparty is not registered in the trading system (Culbert, Dawson and Isaieva, unpublished[13]).

Smaller trading companies, for which more sophisticated compliance programmes might not always within reach, might be inclined to leverage the due diligence programs of their banking partners to limit and mitigate risks (Culbert, Dawson and Isaieva, unpublished_[13]). Moreover, the Swiss Federal Council (2020_[47]) notes that there might be a degree of harmonisation of controls across different types of trading companies, as bank customers are expected to fully comply with certain requirements to enter business relationships and access bank financing, regardless of company size.

Alongside a focus on internal controls, initiatives in the commodity sector have tended to be voluntary, be they directed at the trader or financier. Because guidelines and self-regulation codes for managing financial crime risks, such as that by the Wolfsberg Group or disclosure requirements as part of the EITI Standard, are not legally binding, companies may choose the extent to which they comply.

Wolfsberg Group guidelines

The Wolfsberg Group's Anti-Bribery and Corruption Compliance Programme Guidance helps the financial industry design and operate compliance in areas of AML/CTF and know-your-customer. The Wolfsberg Group is an association of thirteen global banks (Wolfsberg Group, 2019_[68]) but its guidance is implemented by financial institutions generally who engage in cross-border and/or other higher risk Correspondent Banking services. The Wolfsberg Group's Trade Finance Principles outline the standards for control of financial crime risks associated with trade activities. They apply to banks' activities when financing trade operations, including those of commodity traders. More complex type of financial arrangements, such as structured finance and commodity traders acting as banks, are not covered by the Wolfsberg Group's principles.

Extractive Industries Transparency Initiative

The multi-stakeholder EITI stands out among standards to promote good governance and prevention of wrongdoing in the commodity trading sector. It emerged in the early 2000s as the leading standard for transparency in the upstream oil and gas sector (licensing, tenders, tax and royalty-benefit sharing). Reporting for the commodity trading space was included in 2013, and the standard has since been updated and its ambitions on commodity trading transparency broadened.

The establishment of a Commodity Trading Working Group in 2015 brought companies in the sector to the table, aiming to "guide EITI and host governments implementing the EITI in their efforts to develop and implement disclosure requirements of government-owned commodities". Further, members of the Working Group committed to "develop guidance and offer advice to MSGs in relevant EITI-implementing countries helping address practical questions around the level of disaggregation, frequency and timeliness of reporting, comprehensiveness, data reliability, the format of publications and user-friendliness." The terms of reference for the Working Group have grown more ambitious, while membership of the group increased. In 2014, Trafigura was alone in supporting the EITI. By mid-2019, other major Swiss-based companies, Glencore, Gunvor, and Philia, followed suit. Glencore, Gunvor, and Trafigura had, by 2019, voluntarily disclosed their payments to governments based on the EITI Standard. The Working Group was a way for companies to join discussion of an obligation bound to affect them. "In EITI-implementing countries that

choose to include buyers in the reporting requirements, traders' disclosure of payments to governments becomes mandatory regardless of corporate policies at the global level" (EITI, 2015[133]).

Moreover, the business case for transparency in the industry has been gaining traction. Transparency is a way for companies to improve their standing in an industry under increasing competitive pressure. According to (Egali and Fischer, 2015_[134]), "As global commodity traders, including Trafigura, Gunvor and Louis Dreyfus Commodities expand their access to global capital markets through equity and fixed-income debt issuance, formulating transparency policies increasingly yields direct financial rewards in terms of cost of financing." The EITI Secretariat also makes the business case clear: "There is mounting evidence that transparency supports greater competition and that following best practice can result in reputational gains and improved access to capital." (Poretti, 2019_[135])

The impact of EITI disclosures along the extractive value chain remains contested – also true for disclosures specific to commodity trading (OECD, 2023[136]). So far, there is little analysis of the data resulting from disclosure requirements for commodity trading. More recent efforts focus on moving beyond disclosures to facilitating use and dialogue around published data (EITI, 2020[137]), the success of which hinges on, among other things, data-users' understanding of the topic and ability to act on the information made available through EITI reporting. The latter might be particularly challenging given the complexities of the commodity trading industry.

Conclusions and emerging issues

Oil trade activities are the most significant source of domestic revenues for many oil-producing developing countries. More than half of Africa's twelve oil and gas producers rely on these commodities for over 50% of their total export revenues (Leke, Gaius-Obaseki and Onyekweli, 2022_[6]), and revenue from oil sales significantly outstrips petroleum tax income in several oil-producing developing economies. From 2011-12, the top ten oil exporters in sub-Saharan Africa generated more than USD 250 billion in oil sales, equalling 56% of their combined government revenue (Gillies, Guéniat and Kummer, 2014_[7]).

At the same time, the United Nations Conference on Trade and Development (UNCTAD) estimates that IFFs related to the export of extractive commodities – USD 40 billion in 2015 – are the largest component of illicit capital flight from Africa with four of the top seven African emitters of IFFs (totalling almost USD 30 billion) are oil producers (UNCTAD, 2020_[8]).

Despite illicit financial flows (IFFs) in the oil commodity trading sector having severe and substantial effects for the fiscal, poverty, and stability prospects of producer countries, knowledge about the commodity trading sector is often incomplete in development circles and engagement by donors, including bilateral and multilateral agencies, has historically been limited.

Important players often under the radar

Like all industries, commodity trading is not static, with players on the buyer side changing roles in recent years. Initially, vertically integrated oil companies (IOCs), or "oil majors", including BP, Shell, Total, and Chevron dominated. Large commodity trading companies emerged in the late 1980s, aided by deregulation and privatisation in the oil sector. Recent years have seen greater "localisation", with players who have closer ties to producer countries emerging on the buyer side, either alone or in partnership with traders.

IOCs typically engage vertically along the value chain, transforming raw commodities into products for endusers. They engage in commodity trading, but it is not their main business. On the contrary, specialised commodity trading companies control most of the world's freely traded commodities (Schneyer, 2011_[27]). Although they take many forms, commodity traders are characterised by exceptionally high use of offshore financial centres (OFCs) and complex structures, including fragmented ownership, equity, and accounting arrangements. These features contribute to opacity in their accounts, weaken states' ability to enforce regulatory standards or punish malfeasance, and help shelter assets from seizure or fines.

The sophisticated nature of commodity traders contrasts with the less dynamic and complex structure of the national oil companies (NOCs), which act as their counterparties. NOCs play multifaceted roles: in addition to being the vehicle through which governments exercise fossil fuel production, development, and marketing, NOCs enable sovereign energy or infrastructure investments, and in many cases, perform service delivery and quasi-fiscal functions. NOCs rely on commodity traders to bring their products to market as they might not have the optimal infrastructure and flexibility to manage their supply.

Both sides of the commodity trading business rely on enablers to make their deals a reality. Financiers are needed to fund typically capital-intensive transactions, and commodity traders draw on multiple sources of finance. The financing landscape changed in recent years with some banks retreating from commodity trading, the consequences of this being felt most by mid-sized and small traders forced to look for

alternative finance sources. Commodity traders also rely on intermediaries to make up for their lack of presence in producer countries, including on-the-ground presence to originate and facilitate commodity transactions. However, the use of intermediaries carries corruption risks, leading many commodity traders to on-board their activities in producer countries.

Operations across diverse contexts

Most commodity trading companies operate in trading hubs with favourable regulation and tax rates, strong capital markets, trade and shipping, and human capital resources (Enger, Wolters and Wong, 2020_[46]). These hubs fulfil several functions related to financing, storage and refining, and marketing. They differ in their size and the commodities and region in which they specialise. While the traditional hubs of Switzerland and the UK remain popular places of incorporation, observers note companies increasing their use of Asian trading hubs, notably Dubai and Singapore. These offer similar economies of scope and scale, adding proximity to physical assets and growing markets, plus more attractive tax and regulatory terms.

Several hubs fall into the category of OFCs, which typically attract financial activities through lower tax rates, lighter regulation and supervision, and less-stringent reporting requirements and trade restrictions (IMF, 2000_[54]). The exceptionally high use of OFCs by commodity traders can make it difficult to trace how value is created, lost, or distributed by different entities. Additionally, while OFCs have well-developed regulatory institutions and comply with international laws on trade and money laundering, they are often scrutinised for facilitating tax avoidance (Garcia-Bernardo et al., 2017_[55]) and for rules and systems that provide legal and financial secrecy to overseas clients (Tax Justice Network, 2020_[56]).

But commodity trade actors operate in countries with considerable variation in socio-economic development and market position. Producer countries, which are often characterised by structural weaknesses, can end up in an inferior market position. Poor governance, weak institutional capacity, resource dependence, and high debt levels, are just some of the factors that contribute to the subordinate position of oil-producing countries in global trade, exacerbating IFF vulnerabilities.

From traditional finance to complex financial arrangements

Commodity trading seeks to identify the most valuable transformations, undertake the necessary transactions, and perform the actions required to carry them out. Buyers seek to secure long-term supply, and sellers aim to ensure steady demand for their resources, be this through crude-for-products swaps, prepayment agreements, or joint ventures. Commodity trade deals require significant financial resources, and traders typically rely on banks and a suite of financial products to realise their trades.

Banks have different degree of control and overview over the financing they provide to commodity traders, and one trend observed in recent years is the risk appetite of banks subsiding regarding traditional trade finance instruments such as open accounts, letters of credit, and revolving credit facilities. In response, commodity trading firms increasingly act as financiers, building structured financing into trades with commodity producing countries to secure exclusive access to crude or oil products. For borrowers, collateralised lending, sometimes referred to as resource-backed loans, can reduce the cost of credit. For some countries or other counterparties, this might be the only way to access credit and working capital, given that more traditional sources of financing are increasingly unavailable or expensive as conventional lenders withdraw from segments considered too high-risk (NRGI, 2019[69]). Because commodity traders face less stringent regulation and external scrutiny than banks, there are risks involved in them providing long-term financing to producer country counterparties through complex financial agreements (Carbó and Duparc, 2020[11]; Pirrong, 2014[12]; Culbert, Dawson and Isaieva, unpublished[13]).

Illicit financial flow risks in the commodity trade value chain

IFF risks tend to arise at three key points in the commodity trading value chain: (1) the selection of buyers and allocation of buyers' rights; (2) the negotiation of terms of sale; (3) and the collection and transfer of sale revenues into national spending systems. Examples from Chad, the Republic of Congo, and Nigeria show how the actors, geographies, trade, and financing modalities that characterise commodity trading come together to create IFF risks.

The case of crude-for-product swaps in Nigeria demonstrates IFF risks from the use of intermediaries. Using a passive intermediary to secure business with the Nigerian state contradicted the contract's intent. Combined with a poorly set-out contract, this contributed to losses for the Nigerian treasury, and ultimately the Nigerian people. In Chad, prepayment agreements entered almost a decade ago left the country financially tied to one commodity trading company for years to come. Chad's weak market position forced it to accept unfavourable condition, including high fees and difficult repayment terms. How the company came to be chosen is unclear, but recent bribery charges against it in other African countries increases the likelihood that IFFs were involved. In the Republic of Congo, corruption was confirmed in the country's 2011 prepayment agreements. The agreements were secured via uncompetitive buyer selection, without tender and through documented bribery of government officials. Investigation was complicated by the lack of transparency and accountability in the money trail from the government's oil sales.

Voluntary responses amid growing legislation

IFF risks in commodity trading are addressed through mandatory and voluntary measures. These have increased during the last decade, but it has been noted in the case of Switzerland, for example, that they remain inadequately addressed.

Domestic legislation appears most relevant for targeting corruption offences, including bribery. Both Switzerland and the UK are parties to major international anti-bribery conventions and subject to peer-review of their implementation. Both have recently charged commodity traders for bribing foreign officials. In contrast, only certain activities by commodity trading companies are subject to anti-money laundering/counter terrorism financing (AML/CTF) regulation. Importantly, trading in physical products falls outside the scope of AML/CTF oversight unless traders use bank financing in the purchase or sale of raw materials, in which case the trader becomes indirectly subject to AML regulation through the bank. Even so, while transactions between banks and traders are subject to regulation, onward transactions between traders and producer countries remain outside the purview. A final tool, sanctions, are relevant for commodity traders who operate in high-risk jurisdictions (and have historically been known to engage in sanctions evasion). With increasing sanctions in recent years, culminating in those against Russia following its invasion of Ukraine, some traders have moved operations to countries with lighter sanction regimes.

Overall, efforts to fight IFFs in oil commodity trading have focused on voluntary, often private sector led initiatives, while binding regulation has remained absent. Increased focus on internal compliance in the commodity trading sector is noticeable, but this remains voluntary and motivated by risk-mitigating, with considerable differences between large and smaller industry players. While voluntary initiatives like the Extractive Industries Transparency Initiative (EITI) are leading the discussion on good governance and anti-corruption in the commodity trading industry, traders remain in the driver's seat.

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Notes

- ¹ UNCTAD Commodity market per share.
- ² BMWFJ Federal Ministry of Economy, Family and Youth of the Republic of Austria, World Mining Data: Commodities Production, Vienna 2011.
- ³ In Standby Letters of Credit, a pure financial guarantee, the bank only commits to paying the seller in cases where the trader cannot do so.
- ⁴ PWC has shown how at 0.002 BPD/capita, Nigeria's per capita refining capacity is low even by African standards. Libya, by comparison is 0.06 BPD/capita, and South Africa has a 0.01 BPD/capita (PWC, 2017_[138]).
- ⁵ Interview with Head of Structured Finance and Head of Africa Section, Multinational Bank, Geneva, November 2019.
- ⁶ The average Brent Crude price for 2015 was USD 52 per barrel, according to the US Energy Information Administration.
- ⁷ When Congo was being considered for debt relief in 2005-06, an independent auditor uncovered a hole of USD 300 million in the 2004 budget.
- ⁸ Whilst the Congolese Djeno crude blend is frequently sold at a discounted price due to its heavier blend, higher sulphur content and lower yields of petrol and distillates, prices are driven down further by a lack of competition for the purchase of Congolese crude, most of which goes to China. As a result, the price of Djeno generally fluctuates between USD 2 and USD 5, lower than a barrel of Brent crude, the benchmark for most of the oil produced in Africa (Duparc, Guéniat and Longchamp, 2017_[101]).
- ⁹ For example, in the first half of 2020, several Singapore-based commodity trading companies, including one of Asia's largest fuel traders, Hin Leong Trading Pte Ltd, were placed under judicial management and court-led restructuring by Singaporean authorities after having collapsed amid allegations of fraud and suspicious transactions (Hume and Pamla, 2020[139]).
- ¹⁰ Consulted as part of the OECD Programme of Work on IFF in oil commodity trading.
- ¹¹ Other trading companies, notably Mercuria and Vitol, are members of the EITI Working Group on Transparency in Commodity Trading but not supporters of the initiative, meaning they are not required to disclose.