



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Curbing Illicit Financial Flows from Resource-rich Developing Countries: Improving Natural Resource Governance to Finance the SDGs

Working Paper No. R4D-IFF-WP03-2020

The Nuclei of the Global IFF Network: The role of global commodity trading hubs in defining the global patterns of Illicit Financial Flows

February, 2020

Kristina Enger

Graduate Institute of International and Development Studies, Geneva

Floris J.A. de Klerk Wolters

Graduate Institute of International and Development Studies, Geneva

Alex H.C. Wong

Graduate Institute of International and Development Studies, Geneva

© The Authors. All rights reserved. For more details, visit the project website: <https://curbing-iffs.org/>
This project is funded through the Swiss Programme for Research on Global Issues for Development (www.r4d.ch) by the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF).



Swiss Programme for Research
on Global Issues for Development



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



SWISS NATIONAL SCIENCE FOUNDATION

Acronyms Glossary

AML Anti-Money Laundering **AEOI** - Automatic Exchange of Information **CAD** Commercial Affairs Department (Singapore)
CCDP Centre for Conflict, Development and Peacebuilding
CDD Customer Due Diligence **CRS** Common Reporting Standard
CTF Counter-terrorism Financing
CVC Commodity Value Chain
DIFC Dubai International Financial Centre
DGCX Dubai Gold and Commodities Exchange
DMCC Dubai Multi-Commodities Centre
DNFBP Designated Non-Financial Businesses and Professions
DTT Double Tax Treaty
ECX Ethiopian Commodities Exchange
FATF Financial Action Task Force
FIU Financial Intelligence Unit (Central Bank of the UAE)
FTZ(s) Free Trade Zone(s)
HRC Human Rights Council
IFF(s) Illicit Financial Flow(s)
MAS Monetary Authority of Singapore
NECC National Economic Crime Centre (UK)
NGO Non-Governmental Organizations
PCM Partner-Country Method
PFM Price-filter method
PSMDs Precious Stones and Metal Dealers
SCA Securities and Commodities Authority (Dubai)
SGPMX Singapore Precious Metals Exchange
TBML Trade Based Money Laundering **TIN** Tax Identification Number
UAE United Arab Emirates
UK United Kingdom
(U)BO (Ultimate) Beneficial Ownership
UN SDGs United Nations Sustainable Development Goals
OECD Organization for Economic Cooperation and Development
VAT Value Added Tax

Table of Contents

EXECUTIVE SUMMARY	5
CHAPTER 1 - INTRODUCTION	9
CHAPTER 2 – METHODOLOGY	11
CHAPTER 3 - BACKGROUND TO ILLICIT FINANCIAL FLOWS IN THE COMMODITY SECTOR	14
3.1 THE CHANNELS AND GEOGRAPHIES OF ILLICIT FINANCIAL FLOWS	16
3.2 MISPRICING & MISINVOICING	17
CHAPTER 4 - THE COMMODITY TRADE HUBS.....	19
4.1 DUBAI	19
4.2 LONDON	20
4.3 SINGAPORE	21
CHAPTER 5 – PULL FACTORS	23
5.1 GOVERNANCE AND ENFORCEMENT PRACTICES	23
5.2 REGULATORY STRUCTURE AND FREE TRADE ZONES	26
5.3 TAX INCENTIVES	29
5.4 FINANCIAL SECTOR	30
5.5 INFRASTRUCTURE AND NETWORK FUNCTIONS	32
CHAPTER 6 - POLICY RECOMMENDATIONS.....	34
6.1 EXPAND BENEFICIAL OWNERSHIP (BO) PROGRAMS	34
6.2 EXPAND WHISTLEBLOWER PROGRAMS	35
6.3 MOVE TOWARDS INTERNATIONAL COLLABORATION ON TAX COMPETITION	36
6.4 ADOPT A RISK-BASED APPROACH CONCERNING AML/CTF IN TRADE FINANCE	36
6.5 DECREASING THE NUMBER OF INTERMEDIARIES	37
6.6 STRICTER CONTROLS ON SMALL VOLUME PRECIOUS METALS TRADE	38
6.7 EXPAND AND ENHANCE ORIGIN VERIFICATION AND DUE DILIGENCE SCHEMES	39
6.8 INCREASE DATA AVAILABILITY AND COLLECTION	40
6.9 INITIATE (HIGHER) PUNITIVE FINES TO STRENGTHEN ENFORCEMENT	41
CHAPTER 7 - CONCLUDING REMARKS	42
REFERENCES	43
APPENDIX	55
APPENDIX I: EXAMPLE INTERVIEW QUESTION LIST	55
APPENDIX II: RELEVANT COMMODITY TRADE AND IFF REGULATIONS UAE	56
APPENDIX III: ILLUSTRATION LEGALLY GRAY ZONE IFFs RELATED TO TAX PLANNING	57

Acknowledgment

This report would not have been possible without numerous individual contributions. Specifically, the authors would like to thank Professor Ugo Panizza, Rémi Pierre Viné, Rahul Mehrotra and Nikhil Ray for their efforts. On top of that, the report is built on the willingness of all those who were open to anonymous interviews about the topic. The authors remain grateful for their time and effort and would like to explicitly acknowledge their contributions.

Executive Summary

Illicit financial flows (IFFs), defined generally as cross-borders movement of capital associated with illegal activity (World Bank, 2016), pose a serious challenge for domestic resource mobilization and improving state capacity required by developing countries to finance the UN SDGs. While the international economic governance system has changed significantly since the 2008 financial crisis, there is still a **gap between the regulatory advancements and the realities of illicit flows**, both at the national and international level.

This report addresses the **pull factors for IFFs to prominent commodity trading hubs**, focusing on Dubai, London, and Singapore. Five categories of pull factors contribute to the IFF presence in commodity trading hubs. **1) Governance and Enforcement Practices:** Inadequacies in international business integrity regulations and lenient enforcement of rules governing commodity trading makes the hubs attractive destinations for IFFs; **2) Regulatory Structure and Free Trade Zones:** Loopholes in the regulations of anti-money laundering and counterterrorism financing (AML/CTF) and free trade zones help draw IFFs into these trading hubs; **3) Tax Incentives:** The tax environment of the hubs including aggressive tax incentives or favorable corporate tax rates provides a significant economic incentive to attract IFFs; **4) Financial Sector:** The presence of a large formal or informal financial services sector can help facilitate IFFs through banking secrecy or lack of beneficial ownership registrar; **5) Infrastructure and Network Functions:** The network function and value added infrastructure provided by hubs might facilitate inward and outward IFFs between source countries and the rest of the world.

The report also reviews available policy options to stimulate stakeholders to think about the various possible solutions to the challenges posed by IFFs. It should be emphasized that all these **pull factors and possible policy interventions exist in an intricately connected global environment, which cannot and should not be considered on an isolated basis.**

For a summary of the key findings on pull factors and policy recommendations, please see attached below in this section.

Summary on pull factors

Singapore	London	Dubai	
<ul style="list-style-type: none"> Very few human rights and business integrity initiatives and environmental protections 	<ul style="list-style-type: none"> Relatively extensive list of human rights and business integrity initiatives and environmental protections Many NGOs and relatively big influence CSOs 	<ul style="list-style-type: none"> Very few human rights and business integrity initiatives and environmental protections Very few NGOs and limited influence CSOs 	Governance, FT and Enforcement
<ul style="list-style-type: none"> FTZ identified to be under risks 	<ul style="list-style-type: none"> No FTZs, but many links with related jurisdictions (e.g. Cayman Islands) 	<ul style="list-style-type: none"> Large (over 30) number of FTZs 	
<ul style="list-style-type: none"> Key authorities: Ministry of Law, CAD, Singapore Customs 	<ul style="list-style-type: none"> Key authorities: HMRC, Home Office, NECC 	<ul style="list-style-type: none"> Key authorities: SCA, FIU, Central Bank of UAE & FTZs 	Regulatory Structure
<ul style="list-style-type: none"> Loopholes exist in largely unregulated PSMDs sector (luxury goods) Commodity trade largely unregulated until April 2019 	<ul style="list-style-type: none"> Faces compliance risks for ML/TF, especially in luxury good Also benefits from EU regulatory initiatives 	<ul style="list-style-type: none"> Has significantly improved AML/CTF regulations in past decade Relatively extensive legal framework, but still limited data & reported transactions 	
<ul style="list-style-type: none"> Problems in the awareness in AML/TBML compliance regulations 		<ul style="list-style-type: none"> Problems in the awareness in AML/TBML compliance regulations 	
<ul style="list-style-type: none"> Use shell companies 	<ul style="list-style-type: none"> Use shell companies 	<ul style="list-style-type: none"> Use shell companies 	

<ul style="list-style-type: none"> Low or no taxes in commodity sector Investment grade precious metals exempted from tax <p>local gold markets (e.g. SGPMX)</p>	<ul style="list-style-type: none"> Low corporate tax rate Little information about tax planning practices Many tax connections with UK network <p>Cayman Islands)</p>	<ul style="list-style-type: none"> No personal income tax FTZ tax exemptions Lack taxation means relatively small paper trail Increasingly actively engaged in CRS, 	Tax
<ul style="list-style-type: none"> Regional to global financial hub 	<ul style="list-style-type: none"> Global financial hub 	<ul style="list-style-type: none"> Regional financial hub 	
<ul style="list-style-type: none"> Highly secretive financial jurisdiction Banking secrecy enshrined in law <p><small>Since 01 March 2015</small></p>	<p><small>Absence of BO register</small></p>	<ul style="list-style-type: none"> Highly secretive financial jurisdiction Presence informal Hawala banking system <p><small>Show increases, but roll forward BO</small></p>	
<p>Singapore has adopted a BO registrar following FATF's defined threshold</p>		<p>practices. Huge differences in BO practice between FTZs.</p>	
<ul style="list-style-type: none"> Excellent infrastructure Historical prominence as a trading hub in Asia Excellent connections in particular with East and Southeast Asia 	<ul style="list-style-type: none"> Excellent infrastructure Historical prominence global trading hub Excellent connections with Europe 	<ul style="list-style-type: none"> Excellent infrastructure Geographic location Hub function particularly connected to MENA region, Africa and South Asia 	Infrastructure and
		<ul style="list-style-type: none"> Presence gold refinery Visa policy 	

Summary on policy proposals

Policy Proposals	
Expand beneficial ownership (BO) programs	Expand whistleblower programs
Move towards international collaboration on tax competition	Adopt a risk-based approach concerning AML/CTF in trade finance
Decreasing the number of intermediaries	Stricter controls on small volume precious metals trade
Expand and enhance origin verification and due diligence schemes	Increasing data availability and collection
Initiate (higher) punitive fines to strengthen enforcement	

Chapter 1 - Introduction

Target 16.4 of the UN Sustainable Development Goals (UN SDGs) calls for a significant reduction in Illicit Financial Flows (IFFs) and arms trade, and a strengthening in the recovery and return of stolen assets, as well as the combating of all forms of organized crime (United Nations, 2018). Whereas exact definitions and methods of measurement are constantly debated, there is a common understanding that IFFs undermine the capacity of financially sustainable development. The main purpose of this report is to improve the understanding of the pull factors that draw IFFs into certain hubs, which through their prominence also fulfill a nuclear function in the global network of IFFs. The primary question driving this report is: *what are the pull factors for commodity trade-related IFFs in prominent trading hubs?* The report also aims to provide policy solutions to these challenges.

The report focuses on Dubai, London, and Singapore, but it should be noted that there is a long list of prominent trade hubs in the world (see figure I). Commodity-based IFFs concerning Switzerland have already been analyzed by Carbonnier and Mehrotra (2019), offering a better understanding of the sector and a methodology to investigate others. As shown throughout the report, looking at the micro-level alone is not enough in finding ways to comprehensively curb IFFs: many challenges are found at the macro-level rather than the micro-level, and curbing IFFs thus requires multi-level solutions. Following a Swiss Federal Council request of a report on Swiss commodity trading competitiveness, Oliver Wyham (2017) narrowed down the closest competitors as global commodity trade hubs to Dubai, London, Singapore, Houston and New York/Connecticut. The scope of this study was narrowed down to Dubai, London, and Singapore, to fit the mandate of this report.



Figure I: Overview of prominent commodity trade hubs (own work, partially based on Oliver Wyman, 2017).

The methodology underlying this report is presented in Chapter 2, while Chapter 3 lays out the theoretical dimensions of the research; also looking at the background, previous IFF-related studies, and the most common channels such as transfer mispricing and misinvoicing. The three hubs and their specific roles in the global commodity trade system are discussed in Chapter 4. In Chapter 5, the report identified key pull factor categories. Chapter 6 gives a range of policy suggestions, which would contribute to curbing IFFs both on a general and hub-level scale. Chapter 7 is the concluding section, in which the report's findings are again placed in a broader context.

Chapter 2 – Methodology

The report is primarily based on qualitative research, and the core research work is based on two methods. The first research method is literature research that synthesizes the vast body of literature on IFFs with the much smaller available body of literature on the specific role of trade hubs. This aspect also includes research into the legal and regulatory frameworks of the three trading hubs. The second method concerns primary research by means of interviews. This functions both to address gaps in the literature pertaining specifically to the role of Dubai, London, and Singapore, and to verify existing claims made on their role. Ten persons were interviewed. The majority were researchers and (area) experts on several of the topics pertaining to the most important commodity flows for each hub. This includes experts on specific commodities (e.g. gold, oil), each hub specifically, general IFF experts, and where possible professional perspectives (e.g. lawyers). Attempts to increase the number of industry-active sources (e.g. traders) were mostly futile, which is also true for people active in key related industries (e.g. accounting, law, and finance). Interviews were conducted with strict anonymity and followed a semi-structured approach¹: given the relative variety in backgrounds and the need for specific questions to verify claims independently or fill in the gaps, the structure of each interview was adapted to the interviewee at hand.

That also introduces the first of various methodological limitations: the fact that interviews were not strictly standardized but semi-structured hampers the generalizability of the interviews. This is difficult to overcome without losing the in-depth questions for the different aspects covered. More importantly, IFFs remain a very sensitive topic, which creates a barrier for people to talk openly about the manner. The number of interviewees and their background challenges the representativeness of

¹ See Appendix III for a sample of interview structure.

the report's analysis. There are only two representatives from the private sector,² and the majority of the data comes from sources with a nongovernmental or activist background. Several interviewees confirmed that one key reason for this is that many private sector practitioners are hesitant to commit to interviews. Despite being anonymous, talking about the matter carries the potential for severe reputational damage when names are connected to the field of IFFs. This outcome means there is a realistic risk of bias. Moreover, it can lead to one-sided perspectives on how the sector operates and what possible solutions are to meet the challenge. Future research should strive to incorporate a broader perspective where all parties are taken into account; government officials, the private sector, as well as civil society. This includes parties trading *with* these hubs, rather than only *within* them, to provide a better understanding of why traders seek these hubs rather than going elsewhere. On the other hand, the relative lack of transparency and the unwillingness to be interviewed adds a layer to the analysis of the case itself.

It is also noteworthy that N=10 itself raises questions about representativeness. As stated above, multiple interviewees confirmed that the key factor for this limitation is the fact that agreeing to an interview carries significant professional risk no matter if there is any wrongdoing or not. Even with anonymity assured, there is relatively little reward to a relatively high-risk decision to agree to an interview. Possible further studies could seek to find ways around this by increasing the rewards, reaching out on a bigger scale still, or seeking different ways to assure possible interviewees of anonymity. Regardless of the number of interviews and their background, all interviewees provided valuable insights into the role of commodity trade hubs. Future research can build on that with a higher sample size that is sufficiently diverse to ensure comprehensive representativeness. This would further increase the validity of the findings.

² One legal practitioner in the commodity sector based in Asia and one Senior Consultant in commodity trading in London.

Another limitation is the fact that the quantitative side of the hubs' function remains relatively underdeveloped. Attempts to elucidate this, for instance by analyzing detailed (e.g. transaction or firm-level) data, deserve a separate report and require access to data that remains relatively restricted for the public.³ Last, but not least, the report focuses mainly on the top-level commodity trade hubs, with most information stemming from the case studies of Dubai, London, and Singapore. Many of the pull factors and policy recommendations are also valid for differently sized hubs (i.e. what the report dubs as secondary or tertiary level hubs). However, it is difficult to generalize the report's findings across the entire board of commodity trade hubs, including smaller and more specialized or regionalized hubs, which might also experience more context-dependent dynamics.

³ The lack of transparent and clear data itself then also constitutes a policy recommendation, as it obstructs a clear view on the severity of IFFs as present in commodity trade hubs.

Chapter 3 - Background to Illicit Financial Flows in the Commodity Sector

SDG 16.4 constitutes a global commitment to reduce IFFs, but the international community has yet to reach an intergovernmental agreement on its exact definition, making it hard to estimate and measure IFFs consistently. The lack of a common definition creates challenges as to what to measure, hindering the establishment of a transparent and systematically recorded IFF database. It falls outside the scope of this report to define IFFs, but this is also not *per se* necessary to identify pull factors for IFFs towards certain hubs. However, readers are encouraged to look at Figure II, which sets out the definitions of the World Bank and OECD, and to keep in mind that the type of IFFs covered in this report is only one of many in the spectrum of global IFFs.

Pull factors for IFFs in trading hubs need to be addressed more broadly than commodity trading, and readers are encouraged to familiarize themselves with this debate. Evaluations and policy recommendations are based on the definition of Musselli and Bonanomi's (2018) work: *"Commodity trade-related IFFs are illicit financial flows associated with commodity trade. The term conflates distinct dimensions that should be kept analytically distinct: the cross-border commercial practices that contribute to illicit flows, the underlying activities that generate illicit flows, and corruption-related flows in the commodity economy"* (p. 12).

To add on to their definition, the UN Inter-Agency Task Force on Financing for Development (n.d.) interpretation outlines three main components of IFFs that are related to transnational criminal activity, tax, and corruption. Figure III offers a simplified overview of how IFFs work, illustrating the channels and resulting assets in addition to the main components. IFFs are often complex and a general understanding of the concept and the activities they involve is crucial. It highlights how IFFs typically find their origins in several illicit activities at the source (e.g. transnational crime), and subsequently can be transformed or otherwise laundered into directly disposable or other types of assets, such as real estate and bank accounts in off-shore tax jurisdictions. This can be done through a variety of different 'channels', ranging from intra-MNE FDI flows to (flawed) trade transactions.

IFF Definitions	
World Bank (2016)	<p>Now generally refers to cross-border movement of capital associated with illegal activity or more explicitly, money that is illegally earned, transferred or used that crosses borders. This falls into three main areas:</p> <ul style="list-style-type: none"> • The acts themselves are illegal (e.g., corruption, tax evasion); or • The funds are the results of illegal acts (e.g., smuggling and tracking in minerals, wildlife, drugs, and people); or • The funds are used for illegal purposes (e.g., financing of organised crime).
(Dohlman & Neylan, 2015 (OECD))	<p>Illicit financial flows (IFFs) means all cross-border financial transfers which contravene national or international laws. This is a wide category which encompasses several different types of financial transfers, made for different reasons. It can include:</p> <ul style="list-style-type: none"> • Funds with criminal origin, such as the proceeds of crime (including corruption); • Funds with a criminal destination, such as bribery, terrorist financing or conflict financing; • Funds associated with tax evasion; • Transfers to, by, or for, entities subject to financial sanctions; • Transfers which seek to evade anti-money laundering /counter-terrorist financing measures or other legal requirements (such as transparency or capital controls).

Figure II: Table with definitions World Bank & OECD for IFFs.

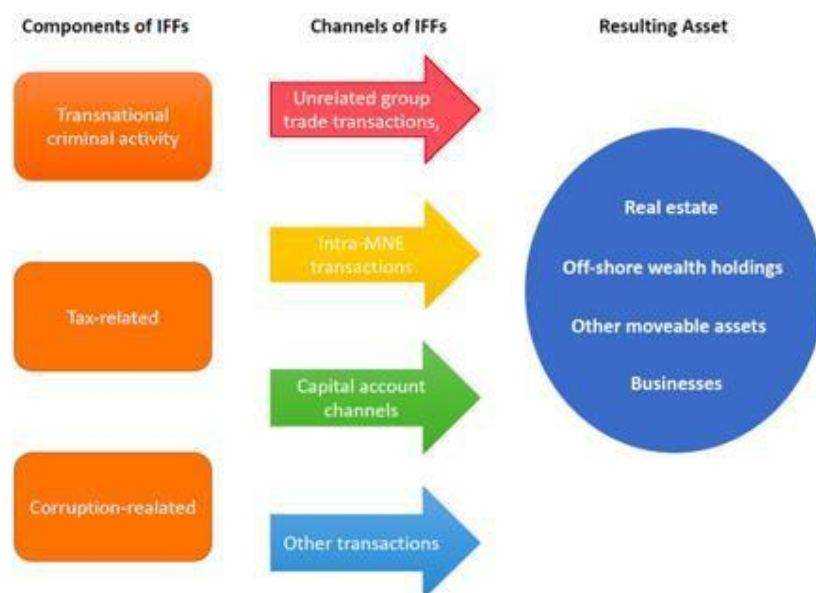


Figure III: Overview of common structures of IFFs (Authors' Work).

3.1 The Channels and Geographies of Illicit Financial Flows

Having addressed *what* IFFs are, and before elaborating on *why* IFFs go through certain hubs, it is important to address *how* IFFs function. The commodity trade is very globalized, creating competitive and fluid markets. Market research by KPMG (2015) stresses the importance of flexible cost structures and company flexibility. Concretely, this means there is a big incentive to avoid taxes, tariffs, and other levies. Actors can save billions by entering the gray, legally badly demarcated, zones of (ab)using specific tax or tariff regimes. Traders and companies are at the core of this, but they are not acting alone. Consulting and auditing firms can play key roles as ‘enablers’. Whereas there might never have been the intention of contributing to illicit activities, most big auditors offer services to aid in profit-maximizing/tax minimizing for multinational enterprises (MNEs). Much of this, such as lowering tax liabilities, is completely legal. However, this report focuses mostly on activities with a connection to illegality, as also recommended by the World Bank (2017).

It is important to stress the global context. From the interviews, a pattern can be deduced of multiple ‘levels’ of hubs along the commodity value chain (CVC), fulfilling different roles. Primary, very large volume CVC hubs (e.g. Dubai or London) are supplemented by secondary hubs which might be the pre-eminent hub for specific commodities or regions (e.g. Antwerp for diamonds, or St. Petersburg for Eastern Europe/Central Asia) but play a less ‘systemic’ role at large. At the tertiary level, there are local hubs, such as national capitals in resource-rich countries or smaller regional hubs (e.g. Accra/Vientiane as capitals of resource-rich Ghana and Laos, or Beirut as a smaller regional hub). This also pertains to the ‘cleanliness’ of certain IFFs: the more central the hub is in the CVC, the ‘cleaner’ flows tend to appear through mixing with more transparent trading methods. These are very broad-brush patterns, but they help in creating a sense of the structure: only rarely is a shipment of oil, cobalt or gold completely ‘illicit’, but it often has problematic elements.

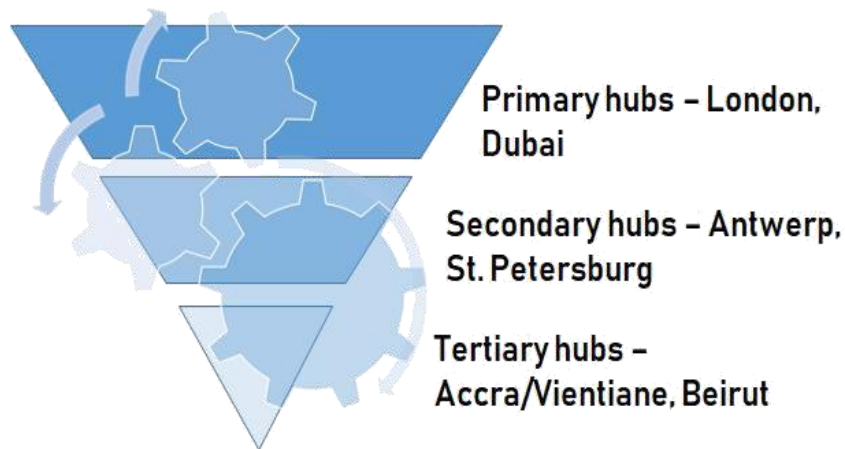


Figure IV: Visualization of three hub 'levels' (Authors' work)

3.2 Mispricing & Misinvoicing

Two specific practices play a central role in IFFs in general, and commodity trading specifically: transfer mispricing and misinvoicing (Forstater, 2016). These need to be discussed individually as they are so central to the problems of IFFs. Transfer (mis)pricing entails setting a price for a purchase of goods and services between controlled (or related) legal entities, affiliated companies or subsidiaries. Transfer mispricing occurs when there is manipulation of fraudulent transfer pricing; often to manipulate markets or to deceive/bypass tax authorities (see e.g. Hearson, 2014). An example of this is the use of shell companies based in tax havens to avoid the company paying taxes in the production country: a company might set up several subsidiaries to manage this and make use of artificial pricing to shift assets between them. As transactions take place within MNEs, it is difficult to oversee and identify its occurrence and thus facilitating an environment for IFFs.

Misinvoicing, on the other hand, concerns the misreporting of quantities and qualities (e.g. purity) to tax and customs authorities for various reasons. Highly dependent on the legal framework and the reason for misreporting, individuals and companies can have incentives to underreport (e.g. to decrease tariff levies/customs duties), or to overreport (to maximize possible tax breaks). Over 55% of the total misinvoicing concerns a handful of commodities, namely oil, precious metals and minerals,

ores, copper, and iron and steel (Forstater, 2018). The same study found that the second-largest source of alleged misinvoicing is the trade of gold, silver, and platinum. This adds to the importance of addressing trading hubs and their rather prominent role in enabling IFFs.

Chapter 4 - The Commodity Trade Hubs

Each of the three focus cities in this report fulfill prominent functions in the global pattern, with London having a traditionally more established position compared to Dubai and Singapore. In general, the three hubs occupy different positions. This section gives some general descriptions of the hubs' backgrounds and also describes the roles each of the three have in the global CVC, with a particular focus in the trading sector. Moreover, it will also specify the features which make the hubs so attractive for businesses. Section 5 on pull factors will go further in-depth as to how this relates to the presence of IFFs of commodity trading.

4.1 Dubai

Dubai, the largest city of the United Arab Emirates (UAE), is a newcomer in the top ranks of global commodity trade hubs. Its excellent infrastructure and geographical location with easy connections to consumers and producers in Africa, Asia, Europe, and the Middle East make it an attractive hub. This also increases its exposure to IFFs stemming from these regions. Dubai International Airport, the world's third-biggest airport by the number of passengers served (Airports Council International, 2019), plays a significant role in this. Gold and diamonds are the two most traded commodities, with gold being the most traded, in value surpassing the next eight competing commodities combined (UAE Federal Customs Authority, 2017). The establishment of Dubai as a key hub in the global commodity trade has been an explicit federal government goal, as part of an economic transition away from the UAE's historical dependence on oil.

Dubai has 30 free trade zones (FTZs), the largest being the Dubai Multi Commodities Centre (DMCC), which was established in 2002. The DMCC plays a major part in Dubai's economy, constituting 10% of its total GDP (fDi Intelligence, 2019). It recorded over 22 million trade contracts signed in 2018, with a combined value of approximately 476 billion USD (DMCC, 2018). It is also host to the Dubai Gold and Commodities Exchange (DGCX, founded in 2005), and the Dubai Diamond

Exchange (DDE, founded in 2004), which fulfill key market and transfer functions. The DMCC (2018) claims Dubai now accounts for 25% of the global gold trade, with some (e.g. Ellyard, 2015) claiming it accounts for up to 40%. A subsidiary of the Financial Times, fDi Intelligence (2019), has ranked the DMCC with its 16,000 registered companies and 60,000 employees as the world's leading FTZ for the fifth consecutive year in 2019.

In 2014 an Ernst & Young (EY) whistleblower revealed extensive customs fraud and conflict mineral laundering, leading to a large scandal (Bowers, 2014). This happened through accepting non-traced gold and cash payments for large gold transactions with unknown traders. Moreover, traders reportedly often evade customs altogether or misreport imports, but the government remains mostly inert. A recent Reuters report found large differences (going well over \$10 billion) between UAE reported imports and African countries' reported gold exports, with large streams from Libya and Mali, but also Sudan and Ghana (Lewis, McNeill, & Shabalala, 2019). The most notable pull factors that helped Dubai become an appealing location for commodity trade, aside from geography and infrastructure, appear to be its tax structure, its banking system, and relatively lax enforcement.

4.2 London

London has been one of the most prominent international trade and business hubs for centuries through its history as the capital of the British Empire. This historical prominence stretches to the present-day, with London being one of the world's biggest trading hubs for bonds, futures, foreign exchange, and insurance (UNCTAD, 2019). More than three-quarters of all transactions in futures for non-ferrous metals happen at the London Metal Exchange (LME), which is, together with London Platinum and Palladium Market (LPPM), a key holder in the world's commodity trade. The names offer an insight into the main commodities circulating in the market: gold, crude petroleum, platinum, silver, coffee, and aluminum. In contrast to the other trading hubs in this study (and similar to Switzerland), the majority of London traded commodities do not at any point enter UK soil.

London's geographical location is not a major factor in its current status as a commodity trading hub from a physical transport perspective. Still, its geographical location does play a central role: overlapping business hours with the Middle East, the Americas, and Asia make it ideal as a trade hub. However, other practical factors, such as favorable legislation and regulatory environment (see Chapter 6) are arguably more important

The UK has a business-friendly environment, with low barriers to market entry regardless of businesses falling under domestic or foreign ownership. Because of high-quality (higher) education and London's economic opportunities, it enjoys the benefits of a clustered skilled workforce. This further adds to London's appeal as a trade hub. It needs to be noted that, even though the ongoing Brexit discussions add uncertainty to London's future role in the global economy, this does not directly negate the pull factors for IFFs to London established in this report.

4.3 Singapore

The city-state of Singapore has a long history as one of the foremost trade hubs in Southeast Asia, partially owing to its favorable geography adjoining the busy Singapore Strait. The commodity exchanges of ICE Futures Singapore and the Singapore Exchange helped Singapore achieve around 20 billion USD in local business spending and saw more than 15,000 more professionals hired in 2018 alone (Khoo, 2018). The most traded commodities are crude oil (15%), metals (20%), and grains (20%) (Swiss Federal Council, 2013). Similar to Dubai, Singapore has proximity to both physical assets and access to trading peer groups, which has given it an advantage in commodity trading (Oliver Wyman, 2017). It also has strong midstream infrastructure, such as ports and capacity for bulk re-handling. The Singaporean government maintains a clear pro-business environment. Singapore benefited from the recent trend of increased volumes of commodity trading due to the growing customer base and business in Asia (Oliver Wyman, 2017).

Although Singapore scores high on rankings that measure its ability to address financial crimes and protect human rights, it is not immune to the effects of IFFs (Swiss Federal Council, 2013). As a financial center with offshore jurisdiction, Singapore is a critical international link that facilitates IFFs through its formal system, its shadow economy, and other corporate vehicles such as import and export companies (Lain et al., 2017). A recent example of this would be the misinvoicing of copper exports from Zambia for \$272.1 million (Ndikumana, 2016). The commodity trade sector in Singapore has been identified as a particularly weak area that requires more focus on upholding integrity and curbing illicit activities (Oliver Wyman, 2017). For instance, in a study on trade misinvoicing in Tanzania, Singapore and Switzerland are allegedly responsible for 67% of import misinvoicing for 2002-2011 (Baker et al., 2014). It has been estimated that Singapore has an average of illicit funds, both inflow and outflow, of around USD 17 billion annually (Prakarsa, 2016). Notable pull factors drawing IFFs to Singapore include its FTZs, tax environment, banking secrecy, ease of registering companies, and the absence of anti-money laundering/counter-terrorism financing (AML/CTF) measures for precious stones and metal dealers (PSMDs) (FATF, 2016; UNECA, 2015).

Chapter 5 – Pull Factors

The main purpose of this report is to discuss what pull factors and categories of pull factors are the main determinants of IFFs passing through certain hubs. This chapter addresses this question head-on: what pull factors are there, and how do they draw IFFs to the commodity trading hubs? Pull factors are subdivided into five main categories: governance challenges and enforcement practices, regulatory structure and FTZs, tax practices, the financial sector, and infrastructure as well as network functions. The report bases these subdivisions on general trends deduced from literature and interviews. It should be stressed that trade hubs are competitors but are also complementary in enabling capital flows and the surrounding factors. Whereas hub-level discussions of different policy regimes help understand these IFF flows, there is an equal need to step back and analyze the macro level, taking into account CVCs and the supply-chains. The global infrastructure which enables these flows and their recycling (e.g. round-tripping profits) provides space that entities can use across multiple hubs to their benefit.

Figure VII. Definition of Round-tripping / round-trip transactions

Round-tripping / round-trip transactions
A form of trade/exchange involving a company selling an unused asset to another company, but also agreeing to buy back the same/similar asset at approximately the same price

5.1 Governance and Enforcement Practices

A first key pull factor for hubs is their governance environment and the extent to which there is (strict) enforcement of laws considering trade-based money laundering (TBML) that would have an impact on IFFs. This directly connects to what extent hubs interact with the global stage and the institutions that play a role in developing global financial transparency measures. There are very big differences between the three hubs here: the list of human rights regulations, business integrity

initiatives and environmental protections in Dubai and Singapore are alarmingly short compared to those in London and Switzerland (Oliver Wyman, 2017, pp. 36–37). Whereas London and Switzerland have instituted 8 and 15 (respectively) new initiatives on human rights and business integrity since 2011 alone, Dubai and Singapore have none. Another major part of the governance environment is the presence of non-governmental organizations (NGOs) and the pressure from civil society organizations (CSOs) on local actors to conform to certain practices and norms. The three hubs have seen widely diverging trends in terms of multi-stakeholder initiatives and the engagement of the public with the many issues surrounding commodity-based IFFs and IFFs in general. Various CSOs, NGOs, and media outlets have increased the pressure on London-based companies to conform to high business integrity standards. This numbs its attractiveness as an IFF hub, compared to Singapore where this is still developing, or Dubai where CSOs and NGOs play a relatively minor role in the entire governance picture.

Comparison Business Integrity Regulations in UAE, UK, Singapore and Switzerland	
Switzerland (for reference)	<ul style="list-style-type: none"> • UN Guiding Principles on Business and Human Rights • OECD Guidelines for Multinational Enterprises • OECD Responsible Business Conduct in the Financial Sector • Background Report on Commodities of the Federal Council • Transparency directives of the Federal Council in line with EU directives • CSR Position Paper (specifically, A.1.17, A.1.19 and B.2.10) • National Action Plan to implement the UN Guiding Principles on Business and Human Rights (specifically, A.1.18 and A.1.2) • Public Eye's reports and campaigns on Swiss traders and financial flows, e.g. Gunvor in Congo • National initiative, e.g. No Speculation on Food • Swiss national legislation ('Criminal penalties for corruption') • Supporting country of EITI Standards and initiator of a multi-stakeholder working group on EITI and commodity trading
UK	<ul style="list-style-type: none"> • UN Guiding Principles on Business and Human Rights • OECD Guidelines for Multinational Enterprises • OECD Responsible Business Conduct in the Financial Sector • EU Accounting and Transparency directives • UK Open Government National Action Plan 2016-18 • UK Bribery Act • Member of EITI
Singapore	<ul style="list-style-type: none"> • UN Guiding Principles on Business and Human Rights
Dubai	<ul style="list-style-type: none"> • UN Guiding Principles on Business and Human Right

Figure VIII. Table showing business integrity regulations across various hubs (Oliver Wyman, 2017, pp. 36–37) The enforcement practices of existing rules influence the efficiency in curbing IFFs.

Supervision of the commodity trade sector is carried out through various regulatory bodies. As outlined below, Dubai and Singapore in particular, suffers from an apparent lenient enforcement of commodity

trade rules. In Dubai, the independent Security and Commodities Authority (SCA) is joined by the Financial Intelligence Unit (FIU) of the Central Bank of the UAE, which has an Anti-Money Laundering and Suspicious Cases Unit (AMLSCU). In the UK, Her Majesty's Revenue and Customs (HMRC) holds significant responsibility, along with the National Economic Crime Centre (NECC). In Singapore, this responsibility is mostly with the Commercial Affairs Department (CAD) of the Singapore Police, in cooperation with Singapore Customs and the Ministry of Law. There is widespread agreement in both literature and among interviewees that integrity and/or lenient enforcement are a big problem in Dubai (Lewis et al., 2019; Oliver Wyman, 2017; Rooijendijk, 2018; Tax Justice Network, 2018b), as also showcased in the Ernst & Young whistleblower case (Bowers, 2014). DMCC and UAE government officials were unavailable for, or unresponsive to, requests for more information, and multiple interviewees confirmed this being the norm.

The UAE Securities and Commodities Exchange Law mandates that all commodity transactions are reported daily (UAE Federal Government, 2000, article 22). Although this means the government should have a detailed view of possible problematic transactions in its jurisdiction, there are no known public cases in which this was addressed. Multiple interviewees indicated that it is exactly this ambiguity that makes Dubai an attractive destination for IFFs.

Although Singapore has been credited with being strong on financial crime, strong in audit and reporting standards, with a low level of perceived corruption (Oliver Wyman, 2017), the enforcement of TBML by the Singaporean government still has certain inadequacies. For instance, as a key transshipment jurisdiction, Singaporean has a higher TBML risk as transshipped consignments were found to be uninspected (Sullivan & Smith, 2012). As a transshipment hub, Singapore's FTZs have been exploited and used for illicit trade in goods and commodities (i.e. illicit tobacco or counterfeit goods) (OECD, 2018).

An important aspect of the UK's governance regime is its continued adherence to EU standards with regulatory pressure from 'above'.⁴ Compared to Dubai and Singapore, the UK is also subject to much more pressure from 'below' in the form of NGOs and CSOs. Perhaps more importantly, it maintains many links to other British territories: eight of the ten jurisdictions with the highest corporate tax haven scores for enabling corporate tax avoidance are UK-linked: the British Virgin Islands, Bermuda, the Cayman Islands, the Isle of Man, Turks and Caicos, Anguilla, Jersey, and Guernsey (Mansour, 2019). This is interconnected with the role of tax incentives as pull factor. The UK government, at first sight, offers a strong-armed policy move towards a more transparent financial system by introducing a beneficial ownership (BO) register and actively engaging with the OECD base erosion and profit-sharing (BEPS) projects, but many of its dependencies are governed otherwise, creating a somewhat misleading perception of governmental efforts in curbing IFFs in general, with the IFFs arising from commodity trading included

5.2 Regulatory Structure and Free Trade Zones

A second key pull factor is the role of national regulations, their implementation and whether they comply with international best practices. In particular, regulations of AML/CTF in the commodity sector are key as illicit flows often go out of developing countries via the commercial financial system. AML/CTF regimes are effective tools that can prevent illicit funds from being held, received and transferred by major financial institutions (OECD, 2014). Yet, the adequacy of the regulatory framework varies a lot across the hubs. One particular challenge is that of FTZs, which can be difficult to monitor (Neale, 2019). This way, the presence of large numbers of FTZs (which is especially the case for Dubai and Singapore) becomes a magnet for IFFs as FTZs provide opportunities for unregulated and virtually unmonitored trading platforms. Already a decade ago, the

⁴ At least until the end of the Brexit transition period on 31 December 2020.

FATF (2010) warned for the regulatory challenges posed by FTZs and their vulnerability for TBML. FTZs can avoid the direct supervision of (inter)national and local AML/CTF mechanisms. These large regulatory gaps severely curb the influence of possible regulatory crackdowns in, for instance, Dubai on IFFs (US Department of State, 2019).

Singapore has 9 FTZs as part of the Singaporean government's effort to facilitate entrepot trade (Singapore Customs, 2017). Dubai has 30, and, while London itself has no FTZs, its close links with various British-linked jurisdictions (e.g. the Cayman Islands) gives it access to multiple *de facto* FTZs. Problems with monitoring and oversight in FTZ-based warehouses and firms have been documented relatively extensively in Singapore (See Kit, 2018; The Economist Intelligence Unit, 2018; Todayonline, 2016), even though the Singapore government claims to conduct regular, targeted random checks (See Kit, 2018; Singapore Customs, 2015).

Even outside of FTZs, regulations can be very lacking, as, for instance, the commodity trading sector in Singapore was largely unregulated up until April 2019. Different sectors had their own licensing and registration authorities responsible for AML/CTF regulations. There were no designated authorities over dealers of precious stones and metals except for pawnbrokers, and the Singapore Precious Metals Exchange (SGPMX) was unregulated also (FATF, 2016). The only set of rules applicable to PSMDs was a cash reporting regime. Moreover, there was very little regulation on continuity of ownership, customer due diligence (CDD) or background checks. Stimulated by scandals such as the laundering of over 8 million USD (\$\$ 11.3m) through gems by a Singapore lawyer (Leow, 2019), the Singapore government proposed new regulations. The "Precious Stones and Precious Metals Dealers (Prevention of Money Laundering and Terrorism Financing) Act" entered into force on 10 April 2019, requiring traders to register with the ministry and file Suspicious Transaction Reports, Cash Transaction Reports and perform CDD for cash transactions over \$20,000 (FATF, 2016; Singapore Ministry of Law, 2019). As this act only entered into force in April 2019, it is unclear what the law's effect has been so far.

In contrast to Singapore, Dubai has a relatively extensive regulatory regime. The FATF during the last evaluation judged AML measures in UAE to be largely basic but satisfactory, making specific notes about the relative lack of reported suspicious transactions, limited CDD obligations, divergences in AML/CTF implementation between FTZs, only voluntary registrations for the informal Hawala sector and noted the absence of meaningful statistics (FATF, 2008). Serious legal changes have since been implemented, explicitly linked to the FATF evaluation scheduled to take place in the last months of 2019 (Dubai Financial Services Authority, 2018). These have been received positively by various private observers (Gibbon, McCart, Wood, & Porter, 2019; Pagoni, 2018; Whitehead, 2019), although the presence of FTZs and numerous shell companies remains a contention point (Wolstenholme, 2019). The SCA offers substantial guidelines on AML, including reference to regulatory requirements surrounding UBO, CDD and obligatory reporting of suspicious transactions to the FIU (UAE Securities and Commodities Authority, 2019). The FIU has information-sharing agreements with some of the biggest FTZs, as well as with the SCA and the Federal Customs Authority. There are a variety of relevant regulations and laws in place, the most relevant of which are listed in appendix III.

Even in the less FTZ-fragmented jurisdiction of London, the HRMC is facing challenges within the commodity trade of luxury goods. A 2015 national ML risk assessment saw weak AML/CTF compliance in high-value commodity trade, leaving it vulnerable to ML and TF (HM Treasury, 2015). Apart from regulatory inadequacies, it has been suggested that there is also a lack of awareness of AML and TBML compliance. Transparency International UK (2015) stressed that the available evidence indicated a “general lack of awareness of AML obligations” in the luxury goods sectors, together with “lack of information from the supervisor”. The FATF (2016) has similar findings concerning Singapore, pointing out that there is only a basic awareness of risks and risk-mitigating measures in the DNFBP sector, and that awareness of AML/CTF in Singapore needs to be raised.

5.3 Tax Incentives

It is very difficult to overstate the importance of taxes in IFF patterns. On a global basis (not limited to commodity trade) the UNODC & UNCTAD estimate an annual loss of tax revenue ranging between \$100 billion and \$660 billion due to aggressive tax planning and profit shifting (Cobham & Janský, 2017). The tax structures of the three hubs unsurprisingly bear big resemblances. While strategic tax planning across different tax jurisdictions enables IFFs, the practice itself is in most instances not defined as illegal. This, in addition to each jurisdiction's sovereign ability to set its own tax regime, creates a hurdle to curb IFFs.

Dubai exemplifies this, levying no personal income tax and entitling FTZ entities to renewable tax exemptions ('tax holidays') ranging from 15 to 50 years from business founding dates (FTZs usually offer 50). The same tendencies exist in Singapore, particularly in the sector of commodities like precious stones and metals (Oliver Wyman, 2017). In October 2012, the Singaporean government exempted investment grade precious metals from goods & services taxes (previously 7%) in the hope of raising Singapore's share in the global precious metals market from 2% to 10-15% within a decade (Soh, 2017). The tax exemption resulted in an increase in physical gold trade by 94% year-on-year to \$28 billion (Bloomberg News, 2014). Moreover, special no-tax measures are given to gold trading and local exchange markets of precious metals such as the SGPMX (FATF, 2016).

There is no doubt that favorable tax rates are a pull factor for businesses, but it is not necessarily the decisive factor. Tax exemptions also mean minimal to no documentation, benefiting those who would like to keep insight into their business structure to the minimal. This means that even though the UAE is part of the Common Reporting Standard (CRS) and has begun enhancing information (Burggraf, 2016), there is still little information to be shared. Even then, information on how individuals and private entities plan their taxes is not enough, as the UK/London show: even with more information there are still loopholes.

Aggressive tax planning is directly connected to governance and the regulatory framework. Commodity trading in, for instance, London, tends to facilitate these IFFs. Many MNEs operate through shell companies and maximize profit through global schemes which ensure annual reports end in jurisdictions with little to no taxation. This plays a key role in enabling and inciting transfer pricing practices. UK based companies through various schemes can do their business in London but file their taxes in other jurisdictions, such as Jersey.⁵ This adds another aspect to the salience of tax incentives: the lack of international regulations on this factor. This also connects it to the pull factor below, the financial sector. For an insightful overview of the grey zones which tax planning and tax incentives occupy, please see annex IV.

5.4 Financial Sector

Whereas the other identified pull factors are all relatively straightforward and often-identified enablers of IFFs, the availability of a sophisticated financial sector and the regulations under which they fall are less commonly emphasized. Consequently, most efforts to curb IFFs tend to focus on tax regulations and related topics yet dedicate less attention to the surrounding financial environment. In the case of Dubai, its unique financial environment plays a critical role in the development of its position in the global IFF structure. Dubai harbors a peculiar banking system which has a very large role for the so-called *hawala* system. This system was mentioned as a key pull factor amongst others by several experts' interviews throughout the project. A Tax Justice Network (2018b) report appears to confirm this, and many others (e.g. Boels et al., 2014) have written on the TBML potential of the hawala system. The former explicitly makes the connection with TBML, in particular, connected to drug production in South and Southeast Asia, and conflict gold. It is a centuries-old system of informal banking, based on trust, often also used to work around capital controls. Local contacts

⁵ As outlined in the sections on governance and regulations.

function as intermediaries, and through these intermediaries' senders can reach receivers without formal procedures. This allows financial transactions which are virtually completely off the record, defying regulation and avoiding transparency (Shedrofsky, 2018). The hawala system has been the subject of terrorism financing concerns from the US Department of State, the EU Counterterrorism Coordinator, and the FATF, and the US Drug Enforcement Administration has arrested individuals functioning within the framework of this system for assisting in laundering billions of dollars (Shedrofsky, 2018). Illicit commodity flows play a central role in this laundering process, functioning as one of the exchange mediums ('counter-valuations') within the hawala system (US Department of State, 2019). TBML through gold and diamond exchanges is explicitly mentioned as a vulnerability in the UAE by the US Department of State's Bureau of International Narcotics and Law Enforcement Affairs in 2019.

There have recently been several changes in the context of beneficial ownership (BO) in Dubai. In late 2018, the Dubai International Financial Centre (DIFC), the leading financial sector FTZ (and thus a separate jurisdiction) in Dubai, saw new and stricter UBO regulations come into force, the functioning of which was further clarified in early 2019 after some unclarities had arisen (Majid et al., 2019). However, these regulations differ a lot between different FTZ jurisdictions themselves as well. What is perhaps more central to the issue is that the lack of taxation means there are relatively few to no records of the transactions taking place, with consequently less attention to possible problems of transfer pricing and/or misinvoicing.

Similar to efforts of Dubai in stepping up in beneficiary ownership, since 31 March 2017, Singapore has adopted a BO registrar following FATF's defined threshold (FATF, 2019b). A lack of transparency is a major factor in Singapore as well, in particular, its banking secrecy. Banking secrecy in Singapore is governed by Section 47 of the Banking Act, which prohibits banks incorporated in Singapore or foreign banks with branches in Singapore to disclose customer information to any other persons except those expressly provided by the Act's Third Schedule, such as courts or police officers

(Saulnier & Jumabhoy, 2016). These laws have come under criticism because of strong US pressure, and Singapore's commitment to the Automatic Exchange of Information initiated by the OECD (Saulnier & Jumabhoy, 2016; OECD, 2018 S). However, infringing banking secrecy remains punishable by up to three years in jail (Tax Justice Network, 2018a). By some estimates, stringent bank secrecy laws have drawn \$1.1 trillion in foreign funds to Singapore (Gough, 2017).

Out of all three hubs, London's financial sector is by far the largest and allows for speculation and broad engagement on the commodity market. It creates an opening for round-tripping capital within the commodity trade business, making it very difficult to follow individual and MNE profits. It is reinforced by the lack of a BO register. Slightly outside the direct scope of the commodity trade, it should still be mentioned that the secrecy of beneficiaries in the UK real estate structure is a factor here too. It is recognized as a 'safe deposit box' for transnational wealth, which gives fortunes made from IFFs a safe storage method.

5.5 Infrastructure and network functions

The last key enablers in both regular and illicit commodities trade are infrastructure and the accompanying network functions. This pertains to several different issues, ranging from the physical capacity for commodity refining (e.g. oil or gold refineries) to both physical and legal (visa) accessibility and more simply to the ease of finding buyers and sellers. All these are somewhat endogenous: trade hubs almost per definition are well connected. Good infrastructure and networks for commodity trading may indeed facilitate the premises for IFFs, but this is not necessarily the case. It is a pull factor on the merits of how the current infrastructure and network functions of the hubs play into IFFs patterns. This particularly pertains to the commodity sector, where the infrastructure could sometimes plays a key role, e.g. gold refining industry, which used to be a virtual Swiss monopoly; Switzerland still processes up to 70% of the world's mined unrefined gold (Francioli, 2019). In recent years it has become much more competitive, as, for instance, Dubai has built up its refining capacity in the last

two decades. With this in place, gold can be processed directly in Dubai rather than being exported to Switzerland for processing prior trading, which makes Dubai a lot more significant and interesting for both regular and illicit gold. Multiple interviewees in this context mentioned hand-carried gold as one of the most prevalent methods of bringing untraced gold into Dubai. The many direct flights from across the African continent to Dubai certainly help in this, as well as a relatively lenient visa policy compared to that of the UK and/or Switzerland.

Chapter 6 - Policy Recommendations

Having established the pull factors driving commodity trade-related IFFs into prominent commodity trading hubs in the above sections, this section will address possible policy solutions to respond to these challenges. The policy suggestions tend to cut across the various pull factors, and especially link with pull factor 1 (governance & enforcement) and pull factor 2 (regulatory structure & FTZs). The suggestions are of different sizes and while some may offer a more general approach, others offer more of a bottom-up or top-down approach. Some are well-published and commonly offered solutions in the field of IFFs which also pertain to the commodity sector, others are more specific to the commodity trading sector alone. Regardless, the aim is to illustrate how a complex matter such as IFFs can be tackled with a variety of interests in mind. All policymakers, irrespective of their geographic position and role in the wider commodity trading sector, should be able to derive some benefits from taking these recommendations into account.

6.1 Expand beneficial ownership (BO) programs

The anonymity or lack of transparency behind who ultimately benefits from transactions is an important obstacle for law enforcement authorities (IDB & OECD, 2019). Although its benefits extend to other industries, the corruption problems surrounding intermediaries in various commodity industries would be directly addressed by this. The oil industry is a very good example in this, including the challenges surrounding sanction regimes (e.g. Iran) or terrorism-financing (e.g. Islamic State oil sales). As identified under the pull factor section, anonymity also enables aggressive tax planning. A BO-register will add to a regulatory framework that can challenge the way many commodity traders operate today. The FATF together with the Egmont Group (2018) documented 106 cases where the suppression of BO information facilitated the flow of illegal money. This report backs the FATF (2019a) suggestion of promoting a multi-pronged approach to identify the BO of legal entities. This method relies on requiring companies to maintain information on BO and shareholders. When

countries ensure the availability and timely information sharing capacities of BO information, authorities can gain significant ability to monitor IFFs. According to the FATF (2014a) standard, BO can ultimately only be a natural person. Following this interpretation, a legal entity (e.g. a company) is no BO and must be examined to determine the ultimate BO.

BO can be an important tool in increasing transparency and curbing commodity trade-related IFFs operating under the guise of anonymity. A good policy example of this would be the EU's 5th AML Directive, which requires all BO registers to be made public, access to which is no longer dependent on having "legitimate reasons". This directive also applies to London as a hub (while the final outcome of the Brexit procedure remains unclear) and means Westminster has also mandated the collection of BO information that has to be open to the public (Kumar, 2019).

6.2 Expand whistleblower programs

The role of whistleblowers in exposing IFFs cannot be underestimated, and their protection is a major measure in addressing governance and regulatory gaps which function as pull factors. As part of a Human Rights Council-led (2016) study on IFFs, a specific recommendation was also made on a multilateral protection of whistleblowers, which this report strongly endorses. There have been several high profile whistleblower cases related to IFFs, both in general as well as for some of the hubs specifically, such as the EY case concerning the Dubai Multi Commodities Centre and the gold trade (Bowers, 2014). The case of Swiss whistleblower Rudolf Elmer on a Swiss private bank's connections with the Cayman Islands is another example of this (Srivastava, 2017). Whistleblower programs, whether backed by the international community or through governments, are crucial to the mounting of a genuine effort to curb IFFs, and specifically can address the facilitating function that hubs play in this scheme. Encouraging individuals to step up and address business integrity violations and illicit practices in the private sector could have a huge impact.

6.3 Move towards international collaboration on tax competition

Tax incentives probably present the most difficult pull factor to tackle. They represent a myriad of economic and often also political interests which go far beyond commodity-based IFFs. Whereas it is clear that low, or no, taxes on either personal income or specific commodity sectors attract both licit and illicit business, it is difficult to recommend a (viable) policy to address this beyond very ambitious multilateral cooperation initiatives. Even in highly cooperative environments such as the EU, tax competition remains difficult to tackle, and it appears rather utopian to suggest a similar policy at a global scale.

Nevertheless, there is a clear collective action problem in tax practices. Commodity hubs face the possibility that they can be locked into a race to the bottom if they do not follow the extremely low taxes offered by hubs like Dubai and Singapore. At the same time, existing hubs with low or non-existing (corporate) taxes can end up in a situation where the state essentially ‘subsidizes’ industries by providing public goods without levying taxes. Although individual hubs can change their taxing policies, it can be costly to do so when alternative low-tax hubs are available, as appears to be the case for Dubai and its VAT-hike on gold. Rather than directly aiming for a comprehensive international agreement however, prominent hubs and national authorities could more concretely explore possibilities for cooperation in commodity-related taxing on a sector-by-sector basis.

6.4 Adopt a risk-based approach concerning AML/CTF in trade finance

A risk-based approach means that countries, authorities and financial institutions identify, and assess their ML/TF risks they are exposed to and take AML/CTF measures commensurate with those risks. This is particularly relevant in the discussion of IFFs arising from commodity trade, which as identified in this report, has been inadequately regulated. This directly addresses the pull factors relating to governance/enforcement, the regulatory structure, and also involves the financial sector directly. A risk-based approach is identified by the FATF (2014b) as an “essential foundation” of the AML/CTF

framework and an overarching requirement in all relevant FATF recommendations. The Monetary Authority of Singapore (2015) for instance requests banks to adopt their guidance on AML/CTF in a risk-based approach. This means that banks should conduct a risk assessment (e.g. customer base, geographical locations, products offered) at the company level to identify risk areas in their financial activities and see if existing controls are enough. This is particularly important in combating TBML, where the commodity trading sector has been identified as a weak spot. Such an approach aims to strike a balance between requesting institutions to better understand their vulnerabilities to ML/TF activities on the one hand, and not overburdening the financial sector and regulators on the other. It offers banks the flexibility to focus on higher risk activities, so they can adapt to newly emerging ML/TF methods (FATF, 2007). It is important to build a culture of compliance in this regard, starting from top management, where risk should be approached seriously (Dohlman & Neylan, 2015). Additionally, this can also lower confusion amongst financial firms and provide a coordinated approach of supervision with clear assigned responsibilities.

6.5 Decreasing the number of intermediaries

One of the most IFF-vulnerable stages in the global CVC is the intermediary stage, between production and consumption/utilization, where commodities often go through a variety of middle persons. Exploiting gaps in the regulatory structure as pull factor, as well as lacking enforcement, the sequence of intermediaries creates manifold opportunities for misinvoicing, transfer mispricing and other channels for IFFs. Infrastructure (or rather the lack thereof) can also play a key pull factor role in ‘inviting’ these intermediaries: a lack of local food processing plants or oil refineries will per definition mean other actors get involved. Decentralized (or centralized but non-transparent) or network-based markets can obscure what happens with commodities from production to consumption. This cuts across various commodities, with oil being a particularly vulnerable commodity in terms of absolute value, but equal risks exist for agricultural commodities. Decreasing

the number of intermediaries would both increase the ability of end consumers to control for price markups, as well as for authorities to better monitor the ‘illicitness’ of the flows.

One suggestion offered by two interviewees is encouraging cooperation with adaptations of the model used by the Ethiopian Commodities Exchange (ECX). The ECX was established in 2008 and was part of an attempt by the Ethiopian government to increase direct market access for small scale farmers, rather than the traditional route through various intermediary traders. This is common for agricultural commodities across the developing world, famously well-documented in the case of Indian onions (The Economist, 2013). The ECX (2019) notes that small-scale production accounts for 95% of Ethiopian output, emphasizing the problem of lacking market information and access. Though its success in addressing this is disputed (The Economist, 2017), it offers valuable insights into initiatives that can cut out intermediaries vulnerable to illicit activities. More research on (adaptations of) such models could yield significant advancements in encouraging more direct trade links. Cutting out more intermediaries would also limit TBML-vulnerable shell companies’ involvement, so often used in the oil trade sequence, from the CVC process. These could all potentially be major steps towards a more easily regulated global commodities trade environment.

6.6 Stricter controls on small volume precious metals trade

Although the size of small volume precious metals trade remains very difficult to measure, it is very clear that there exist significant flows of precious metals being brought into trading hubs without initial reporting at customs. This is a very direct example of a situation where lacking enforcement functions as a pull factor for IFFs. Small volume precious metals smuggling is also a particularly salient issue in Dubai concerning hand-carried illicitly mined gold (a pull factor that pertains to hubs’ network functions), but the issue is certainly not limited to either. If hub regulators want to gain control over

the largely unseen flows of often hand-carried valuable small commodities (e.g. diamonds & gold), it is a necessity that measures be introduced which stem, or at least attempt to control, the largely unregistered flow of small quantities of precious metals carried by individuals. These are sold to traders, refineries or other intermediaries, and can that way slowly be introduced into regularly registered flows. Various measures could achieve such results. Many lessons can be drawn from the Kimberley Process for conflict diamonds in this regard about more rigorous tracking of production origin. Another, more concrete solution would be to introduce much stricter customs regulations on registering hand-carried precious metals. Import duty hikes in this regard seem to push gold away from hubs, with the introduction of a recent 5% import duty in the UAE proving very unpopular and declining its competitive position vis-à-vis South Asia (Nair, 2018).

6.7 Expand and enhance origin verification and due diligence schemes

The Due Diligence Guidance published by the OECD (2016) has been used as a key source by both governing authorities and companies to base guidelines and due diligence obligations on. These schemes have the potential to address the pull factor of lacking governance as identified in Chapter 5. Origin verification can be a means to support hubs willing to transition to stricter governance and integrity regulations without necessarily foregoing business. Moreover, said schemes can stimulate higher business integrity standards and function as *de facto* civil society by giving consumers a clearer voice. Although London, through the UK's continued adherence to EU regulations⁶, is also part of some of these discussions, this is true to a lesser extent for Dubai and Singapore as we have identified in Chapter 5. Hubs can even benefit from expanding and encouraging verification schemes. The LME announced in October 2019 an expanded responsible sourcing mechanism, and similar systems have long existed and been promoted by for instance the LBMA with

⁶ At least until the end of the Brexit transition period on 31 December 2020.

its (2019a) Good Delivery List. Over the past two decades, there has been considerable proliferation of such mechanisms, including due diligence initiatives from the Dubai Multi Commodities Exchange, such as the Dubai Good Delivery (DGD) standard (DMCC, 2017).

These initiatives still face various challenges. Several interviewees expressed their skepticism about such initiatives' genuineness and credibility, and there is a trust-based element to these initiatives given consumers' inability to verify these claims. There is also the risk of a negative bias wherein newer entrants in the market (e.g. refineries in Dubai or Uganda) are automatically held in lower esteem than older established market actors (e.g. refineries in London or Switzerland). Various measures could be taken to enhance this; hubs should cooperate in establishing and/or extending internationally acknowledged due diligence schemes for various commodities. Another option would be for governments to cooperate more closely with OECD guidelines on due diligence, and through that enhance legislation and obligations for enterprises in their jurisdiction to promote stricter verification of origin. This, again, could benefit from looking at the Kimberley Process.

6.8 Increase data availability and collection

As this report has outlined in Chapter 2 Methodology and Chapter 5 Pull Factors, a central part of a sustained effort to curb IFFs in trade hubs is to properly map the exact size and makeup of these flows, without which policymakers will inevitably to some extent be working in the dark. Consequently, increased availability of data is a prerequisite. At the moment, there is not enough good data available on trade statistics and customs to start building a more detailed understanding and a better estimate of the size and makeup of IFFs. This is usually twofold: on the one hand, many governments, especially in non-OECD countries, do not have sufficient capacity (or will) to thoroughly monitor trade flows and collect data on them. On the other hand, governments appear reluctant to share what information they have. These dynamics were also outlined in this report's short discussion on methodological challenges. Better policy on IFFs needs better data.

6.9 Initiate (higher) punitive fines to strengthen enforcement

This policy recommendation cuts across the pull factors of lenient enforcement, inadequacies in regulations in AML/CTF and the finance sector. An important aspect of curbing IFFs relies on cooperation from banks, financial institutions, the DNFBP sector and other traders involved in the industry. Aside from improving the regulatory structures and launching more inspections, an effective measure could be to initiate higher punitive fines for non-compliant institutions. For instance, Tanzanian mining company Acacia was fined \$190 billion after under-reporting revenues and avoiding taxes, leading to a 14% share drop (Hodgson, 2017). These are serious signals to private actors to take IFFs seriously. The US also started to fine banks for assisting in the spreading of IFFs, exemplified by a \$102 million fine in a money laundering case by Lebanese banks totaling \$480 million (UNECA, 2014). This policy option is one of the most common ones offered by interviewees and is a returning topic in IFF-literature as well. It provides a strong deterrent against non-compliance with the existing legal framework.

Chapter 7 - Concluding Remarks

The report aimed to identify and examine pull factors for IFFs in prominent commodity trading hubs, and the most obvious takeaway remains how a lot of the current practices enabling IFFs are not necessarily illegal per se, but rather thrive in a legally gray zone. The findings in the report raise important questions about the viability of predominantly nationally organized regulatory systems versus the globally structured commodity trade. The findings of the study complement those of earlier studies; there is a need for international regulations adapted to today's MNEs and their business structure. Adding to this, the findings also illustrate how besides a framework around trading itself, there is a need for more attention to the enablers surrounding IFFs. While the report offers ten policy recommendations to the identified challenges, there remain several unanswered questions. Even with stricter measures in place, curbing IFFs will remain a global challenge. The report attempts to contribute to the understanding of the intersection between commodity trade, hub regulations, IFFs, and the international economic system surrounding it. The authors hope that further research can use it as a building block for further research into this topic, and in particular into the actors, both those directly and indirectly involved, in the field of commodity trading and IFFs.

References

Airports Council International. (2019, January 8). 2017 Passenger Summary—Annual Traffic Data.

Retrieved 20 October 2019, from ACI World website: <https://aci.aero/data-centre/annual-traffic-data/passengers/2017-passenger-summary-annual-traffic-data/>

Baker, R., Clough, C., Kar, D., LeBlanc, B., & Simmons, J. (2014, May). *Hiding in Plain Sight: Trade Misinvoicing and the Impact of Revenue Loss in Ghana, Kenya, Mozambique, Tanzania, and Uganda: 2002-2011*. Global Financial Integrity.

Berne Declaration, T. (Ed.). (2012). *Commodities: Switzerland's Most Dangerous Business (Berne Declaration)*.

Zürich, Switzerland: Salis-Verl.

Bloomberg News. (2014, June 25). Singapore Seeks Gold Hub Role With China on Demand

Shift. Retrieved 22 November 2019, from Bloomberg News website:

<https://www.bloomberg.com/news/articles/2014-06-25/singapore-to-start-kilobar-gold-trading-as-demand-shifts-east>

Boels, D., Bisschop, L., Kleemans, E., & Vijver, K. V. der. (2014). *Illegale en informele economie*.

Apeldoorn, Netherlands: Maklu.

Bowers, S. (2014, February 25). Billion dollar gold market in Dubai where not all was as it seemed. *The Guardian*.

Retrieved from <https://www.theguardian.com/business/2014/feb/25/billion-dollar-gold-market-dubai-kaloti>

Burggraf, H. (2016, December 14). UAE banks to expats: 'We'll be sharing your bank details from

2018'. Retrieved 30 October 2019, from International Investment website:

<https://www.internationalinvestment.net/internationalinvestment/news/3504000/uae-banks-expats-%E2%80%98%E2%80%99-sharing-bank-details-2018%E2%80%99>

- Carbonnier, G., & Mehrotra, R. (2019, January). *Abnormal Pricing in International Commodity Trade: Empirical Evidence from Switzerland*. Geneva, Switzerland: Graduate Institute Geneva.
- Cobham, A., & Janský, P. (2017). *Measurement of Illicit Financial Flows* [Background Paper]. Geneva, Switzerland: UNODC-UNCTAD.
- DMCC. (2017). *DMCC Rules for Risk Based Due Diligence in the Gold and Precious Metals Supply Chain* (1.1). Dubai, UAE: DMCC.
- DMCC. (2018). *Annual Report 2018*. Dubai, UAE: DMCC.
- Dohman, E., & Neylan, T. (2015). *Policy Coherence in Combating Illicit Financial Flows: PCSD Thematic Module (Draft)*. Paris, France: OECD.
- Dubai Financial Services Authority. (2018, October 3). Mohammed bin Rashid Enacts DIFC Regulatory Amendment Law: Media Release. Retrieved 20 October 2019, from Dubai Financial Services Authority website:
<https://www.dfsa.ae/MediaRelease/News/Mohammed-bin-Rashid-Enacts-DIFC-Regulatory-Amendme>
- ECX. (2019). How ECX Works. Retrieved 5 November 2019, from Ethiopia Commodities Exchange website: <http://www.ecx.com.et/Pages/AboutUs.aspx>
- Ellyard, L. (2015). Dubai, United Arab Emirates: A trading legacy. In *Clarity on Commodities Trading* (pp. 21–23). Switzerland: KPMG.
- Ernst & Young. (2010, December). *Point of view—European Commission Green Paper, Audit Policy: Lessons from the Crisis*. Ernst & Young.
- European Commission. (2010). *Green Paper—Audit Policy: Lessons from the Crisis*. Brussels, Belgium:

European Commission.

FATF. (2007). *Guidance on the Risk-Based Approach to Combating Money Laundering and Terrorist Financing:*

High Level Principles and Procedures. Paris, France: Financial Action Task Force.

FATF. (2008, April 9). *Mutual Evaluation Report Anti-Money Laundering and Combating the Financing of Terrorism: United*

Arab Emirates. Paris, France: Financial Action Task Force.

FATF. (2010, March). *Money Laundering vulnerabilities of Free Trade Zones*. Paris, France:

Financial Action Task Force.

FATF. (2014a). *Transparency and Beneficial Ownership* (p. 48). Paris, France: Financial Action Task

Force.

FATF. (2014b, October). *The Banking Sector: Guidance for a Risk-Based Approach*. Paris, France:

Financial Action Task Force.

FATF. (2019a). *Best Practices on Beneficial Ownership for Legal Persons* (p. 82). Paris, France: Financial

Action Task Force.

FATF. (2019b). *Singapore's progress in strengthening measures to tackle money laundering and terrorist financing*.

Paris, France: Financial Action Task Force.

FATF & Egmont Group. (2018). *Concealment of Beneficial Ownership*. Paris, France: Financial Action

Task Force & Egmont Group.

fDi Intelligence. (2019, October 14). FDI's Global Free Zones of the Year 2019 – the winners [FDi

Intelligence]. Retrieved 20 October 2019, from

[http://www.fdiintelligence.com/Locations/Middle-East-Africa/UAE/fDi-s-Global-Free-](http://www.fdiintelligence.com/Locations/Middle-East-Africa/UAE/fDi-s-Global-Free-Zones-of-the-Year-2019-the-winners)

[Zones-of-the-Year-2019-the-winners](http://www.fdiintelligence.com/Locations/Middle-East-Africa/UAE/fDi-s-Global-Free-Zones-of-the-Year-2019-the-winners)

Financial Action Task Force. (2016). *Anti-money laundering and counter-terrorist financing measures:*

Singapore. Paris, France: Financial Action Task Force.

Forstater, M. (2016). *Illicit Flows and Trade Misinvoicing: Are we looking under the wrong lamppost?* (No. 5).

Bergen, Norway: Chr. Michelsen Institute.

Forstater, M. (2017, September 1). Illicit Financial Flows and Trade Misinvoicing: Time to Reassess. Retrieved 11

November 2019, from Center For Global Development website: <https://www.cgdev.org/blog/illicit-financial-flows-and-trade-misinvoicing-time-reassess>

Forstater, M. (2018). *Illicit Financial Flows, Trade Misinvoicing, and Multinational Tax Avoidance: The Same*

or Different? (No. 123; p. 35). Washington DC, USA: Center for Global Development.

Francioli, R. (2019, January 8). The shady origins of gold refined in Switzerland. Retrieved 20

October 2019, from Swissinfo.ch website:

https://www.swissinfo.ch/eng/business/multinationals_the-shady-origins-of-gold-refined-in-switzerland/44621040

Gibbon, R. J., McCart, K., Wood, B. D., & Porter, C. W. (2019, October 1). United Arab Emirates Issues New

AML Law in Context of FATF Evaluation. Retrieved 21 November 2019, from The National Law

Review website: <https://www.natlawreview.com/article/united-arab-emirates-issues-new-aml-law-context-fatf-evaluation>

Gough, N. (2017, May 12). Singapore, a Rising Home for Quiet Money, Comes Under Pressure. *The*

New York Times. Retrieved from

<https://www.nytimes.com/2017/05/12/business/singapore-bank-secrecy-1mdb.html>

Hearson, M. (2014). *Tax-motivated illicit financial flows: A guide for development practitioners* (No. 2; p. 72).

Bergen, Norway: Chr. Michelsen Institute.

HM Treasury. (2015, October). *UK national risk assessment of money laundering and terrorist financing*.

London, UK: Home Office.

Hodgson, C. (2017, July 25). Shares in Acacia Mining plummet after being hit with a huge \$190 billion fine. Retrieved 22 November 2019, from Business Insider website:
<https://www.businessinsider.com/acacia-mining-tanzania-fines-company-200bn-for-alleged-unpaid-taxes-2017-7>

Human Rights Council. (2016, January 15). *Final study on illicit financial flows, human rights and the 2030 Agenda for Sustainable Development of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of all human rights, particularly economic, social and cultural rights*. Geneva, Switzerland: Human Rights Council.

IDB, & OECD. (2019). *A Beneficial Ownership Implementation Toolkit*. Washington DC, USA: Inter-American Development Bank.

Inter-Agency Task Force on Financing for Development. (n.d.). Illicit Financial Flows. Retrieved 22 May 2019, from United Nations website: <https://developmentfinance.un.org/illicit-financial-flows>

Khoo, L. (2018, May 17). Singapore's commodity trading hits new S\$28b high in local business spending. Retrieved 22 May 2019, from The Business Times website:
<https://www.businesstimes.com.sg/asean-business/singapores-commodity-trading-hits-new-s28b-high-in-local-business-spending>

KPMG. (2015). *Commodities Trading: Transforming with agility*. Switzerland: KPMG International Cooperative.

Kumar, L. (2019, June 12). Anonymous companies—A way forward « Global Financial Integrity.

Retrieved 22 November 2019, from Global Financial Integrity website:

<https://gfintegrity.org/anonymous-companies-a-way-forward/>

Lain, S., Campbell, H., Nouwens, V., Moiseienko, A., & Sofia de Oliveira, I. (2017). *Illicit Financial Flows and Corruption in Asia*.

LBMA. (2019a). LBMA - Good Delivery. Retrieved 7 November 2019, from London Bullion Market Association website: <http://www.lbma.org.uk/good-delivery>

LBMA. (2019b, October 21). LBMA - Precious Metals Prices. Retrieved 22 October 2019, from London Bullion Market Association website: <http://www.lbma.org.uk/precious-metal-prices>

Leow, A. (2019, October 26). No stone left unturned: The burden of compliance in fighting money laundering. Retrieved 20 November 2019, from The Business Times website: <https://www.businesstimes.com.sg/brunch/no-stone-left-unturned-the-burden-of-compliance-in-fighting-money-laundering>

Lewis, D., McNeill, R., & Shabalala, Z. (2019, April 24). Gold worth billions smuggled out of Africa. Retrieved 2 May 2019, from Reuters website: <https://www.reuters.com/investigates/special-report/gold-africa-smuggling/>

LME. (2019, October 25). LME sets out responsible sourcing requirements. Retrieved 7 November 2019, from London Metal Exchange website: <https://www.lme.com/en-GB/News/Press-room/Press-releases/Press-releases/2019/10/LME-sets-out-responsible-sourcing-requirements>

Majid, M., Wilson, H., & Gmati, A. (2019, March 12). DIFC clarifies certain requirements around the new UBO Regulations and sets informal grace period for compliance by DIFC registered entities. Retrieved 30 October 2019, from Lexology website:

<https://www.lexology.com/library/detail.aspx?g=6988001b-f5ea-43d8-a9b7-ccf7dd6cc4d2>

Mansour, M. B. (2019, May 28). New ranking reveals corporate tax havens behind breakdown of global corporate tax system; toll of UK's tax war exposed. Retrieved 14 November 2019, from Tax Justice Network website: <https://www.taxjustice.net/2019/05/28/new-ranking-reveals-corporate-tax-havens-behind-breakdown-of-global-corporate-tax-system-toll-of-uks-tax-war-exposed/>, <https://www.taxjustice.net/2019/05/28/new-ranking-reveals-corporate-tax-havens-behind-breakdown-of-global-corporate-tax-system-toll-of-uks-tax-war-exposed/>

Marur, S. (2019). *Mirror-Trade Statistics: Lessons and Limitations in Reflecting Trade Misinvoicing* (No. R4D-IFF-WP08-2019). Geneva, Switzerland: Graduate Institute of International and Development Studies, Geneva.

Mehrotra, R. (2018). *Trade-related Illicit Financial Flows: Conceptual Framework and Empirical Methods* (No. R4D-IFF-WP01-2018; p. 26). Geneva, Switzerland: Graduate Institute of International and Development Studies, Geneva.

Metals Focus Ltd. (2019, August). *MF Dore Flows Service*. Metals Focus Ltd.

Monetary Authority of Singapore. (2015). *Guidance on Anti-Money Laundering and Countering the Financing of Terrorism Controls in Trade Finance and Correspondent Banking*. Singapore: Monetary Authority of Singapore.

Musselli, I., & Bonanomi, E. B. (2018). *Illicit Financial Flows: Concepts and Definition*. Geneva, Switzerland: Graduate Institute Geneva.

Nair, M. (2018, March 5). UAE's jewellers hope for a rethink on 5% import duty. Retrieved 7 November 2019, from Gulf News website: <https://gulfnews.com/business/retail/uaes-jewellers-hope-for-a-rethink-on-5-import-duty-1.2182823>

- Ndikumana, L. (2016, July). *Trade misinvoicing in primary commodities in developing countries: The cases of Chile, Côte d'Ivoire, Nigeria, South Africa and Zambia*.
- Neale, D. (2019, October 7). Free trade zones: A Pandora's box for illicit money. Retrieved 20 October 2019, from Global Financial Integrity website: <https://gfintegrity.org/free-trade-zones-a-pandoras-box-for-illicit-money/>
- OECD. (2016). *OECD due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas* (3rd ed.). Paris, France: OECD Publishing.
- OECD. (2018). *Governance Frameworks to Counter Illicit Trade*, Paris, France: OECD Publishing.
- Oliver Wyman. (2017). *The Swiss Commodity Trading Sector: Competitiveness and Integrity*. Zurich, Switzerland: Marsh & McLennan Companies.
- Pagoni, K. (2018). *Anti-money laundering readiness benchmarked*.
- Prakarsa, P. (2016). *Calculating Illicit Financial Flows to and from Indonesia: A Trade Data Analysis, 2001–2014* (p. 113). Jakarta, Indonesia: Prakarsa.
- President of the UAE. *Federal Decree-law No. (20) of 2018 on Anti-Money Laundering and Combating the Financing of Terrorism and Financing of Illegal Organisations.*, Pub. L. No. 20/2018 (2018).
- Rooijendijk, L. (2018, June 15). Dubai 'de stad van goud' walhalla voor witwassen en veilige haven voor corruptie. Retrieved 20 October 2019, from Transparency International Nederland website: <https://www.transparency.nl/nieuws/2018/06/dubai-stad-van-goud-walhalla-witwassen-en-veilige-haven-corruptie/>
- Saulnier, B. F., & Jumabhoy, A. (2016, July 5). Singapore's Banking Secrets—Not So Secret Anymore. Retrieved 13 November 2019, from K&L Gates website:

<http://www.klgates.com/singapores-banking-secrets---not-so-secret-anymore-07-05-2016/>

See Kit, T. (2018, June 7). Singapore ranks 24th in fight against illicit trade, needs better governance in free trade zones: Report. Retrieved 20 November 2019, from CNA website:
<https://www.channelnewsasia.com/news/business/singapore-ranks-24th-in-fight-against-illicit-trade-needs-better-10400370>

Shedrofsky, K. (2018, June 12). Remittances and Trade-Based Money Laundering. Retrieved 20 October 2019, from Organized Crime and Corruption Reporting Project website:
<https://www.occrp.org/en/goldensands/remittances-and-trade-based-money-laundering>

Singapore Customs. (2015). *Enforcement within Free Trade Zones* (No. 35). Singapore: Singapore Customs.

Singapore Customs. (2017). *Keeping Singapore's Free Trade Zones in check* (No. 45). Singapore: Singapore Customs.

Singapore Ministry of Law. (2019, April 8). Commencement of Precious Stones and Precious Metals Dealers (Prevention of Money Laundering and Terrorism Financing) Act on 10 April 2019 [Singapore Ministry of Law]. Retrieved 20 November 2019, from
<https://www.mlaw.gov.sg/news/press-releases/commencement-of-pspmd-act1>

Soeriaatmadja, W. (2017, May 22). Banking secrecy a 'thing of the past'. Retrieved 22 November 2019, from The Straits Times website: <https://www.straitstimes.com/asia/se-asia/banking-secrecy-a-thing-of-the-past>

Soh, A. (2017, June 5). Singapore's gold hub strategy bears fruit as imports, exports rise. Retrieved 12 November 2019, from Enterprise Singapore website: <https://ie.enterprisesg.gov.sg/Media-Centre/News/2017/6/Singapore-s-gold-hub-strategy-bears-fruit-as-imports--exports-rise>

- Srivas, A. (2017, August 4). The business of secrecy has become even more lucrative, says whistleblower. Retrieved 11 November 2019, from Swissinfo.ch website:
https://www.swissinfo.ch/eng/business/rudolf-elmer_the-business-of-secrecy-has-become-even-more-lucrative-says-whistleblower/43387894
- Sullivan, C., & Smith, E. (2012). *Trade-based money laundering: Risks and regulatory responses* (No. 115). Canberra, Australia: Australian Institute of Criminology.
- Swiss Federal Council. (2013). *Background Report: Commodities—Report of the Interdepartmental Platform on Commodities to the Federal Council*. Bern, Switzerland: Swiss Federal Council.
- Tax Justice Network. (2018a). *Financial Secrecy Index 2018: Narrative Report on Singapore*.
- Tax Justice Network. (2018b). *Financial Secrecy Index 2018: Narrative Report on the UAE (Dubai)*.
- The Economist. (2013, December 14). Lords of the rings. *The Economist*. Retrieved from
<https://www.economist.com/business/2013/12/14/lords-of-the-rings>
- The Economist. (2017, February 2). Ethiopia's state-of-the-art commodity exchange. *The Economist*. Retrieved from <https://www.economist.com/finance-and-economics/2017/02/02/ethiopias-state-of-the-art-commodity-exchange>
- The Economist Intelligence Unit. (2018). The Illicit Trade Environment Index 2018. Retrieved 12 November 2019, from Illicit Trade Index website: <http://illicittradeindex.eiu.com/>
- Todayonline. (2016, October 13). Singapore scores poorly in ability to prevent illicit trade. Retrieved 12 November 2019, from TODAYonline website:
<https://www.todayonline.com/singapore/singapore-scores-poorly-ability-prevent-illicit-trade-0>

Transparency International UK. (2015). *Don't Look, Won't Find: Weaknesses in the Supervision of the UK's*

Anti-Money Laundering Rules. London, UK: Transparency International UK.

UAE Federal Customs Authority. (2017). *Foreign Trade Report of the Year 2017*. Abu Dhabi, UAE:

UAE FCA.

UAE Federal Government. Federal Law No. 4 of 2000 Concerning the Emirates Securities & Commodities Authority and Market. , Pub. L. No. 4, Securities and Commodities Authority (2000).

UAE Securities and Commodities Authority. (2019, June 23). *Anti-Money Laundering and Combating the Financing of Terrorism and Illegal Organisations: Guidelines to Financial Institutions*.

UN Economic Commission for Africa. (2014). *Illicit Financial Flows: Report of the High Level Panel on Illicit Financial Flows from Africa*. Addis Abeba, Ethiopia: African Union & UN Economic Commission for Africa.

UNCTAD. (2019, April 16). General Profile: United Kingdom. Retrieved 22 May 2019, from UNCTADstat website: <https://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/926/index.html>

United Nations. (2018). Sustainable Development Goal 16. Retrieved 2 May 2019, from UN Sustainable Development Goals website: <https://sustainabledevelopment.un.org/sdg16>

United Nations Economic Commission for Africa (UNECA). (2015). *Impact of Illicit Financial Flows on Domestic Resource Mobilization: Optimizing Africa's Mineral Revenues*. Addis Abeba, Ethiopia: United Nations Economic Commission for Africa.

US Department of State. (2019, March). *International Narcotics Control Strategy Report Volume II: Money Laundering*. Washington DC, USA: US Department of State.

Wahlberg, M. S., & Marthinsen, M. (2019). *Rødt lys: Det store skatteranet—Og hvordan vi kan stoppe det*.

Oslo, Norway: Cappelen Damm.

Whitehead, H. (2019, October 7). United Arab Emirates: The rapid pace of regulatory change.

Retrieved 21 November 2019, from International Compliance Association website:

<https://www.int-comp.org/insight/2019/october/united-arab-emirates-the-rapid-pace-of-regulatory-change/>

Wolstenholme, F. (2019). *The Secret Lives of UAE Shell Companies* (No. 291). Tacoma, USA: Middle

East Research and Information Project: Critical Coverage of the Middle East Since 1971.

World Bank. (2017, July 7). Illicit Financial Flows (IFFs). Retrieved 21 November 2019, from

World Bank website: <https://www.worldbank.org/en/topic/financialsector/brief/illicit-financial-flows-iffs>

World Customs Organization. (2018). *Illicit Financial Flows via Trade Mis-invoicing* [Study Reports].

Brussels, Belgium: World Customs Organization.

Appendix

Appendix I: Example Interview Question List

- Explanation, introduction
- Oral consent voice recording & only anonymized quotes (depending on circumstances), written confirmation post-interview

Subject-related:

- Can you tell us a little bit more on what factors draw [commodity] to be traded in certain places and not in others?
- What would have to change in trade hubs for the inflow of illicit [commodity] to be curbed or stopped?
- What do you think is the role of intermediaries in the trading patterns of [commodity]?
- What role do trade hubs play in defining the global pattern of IFFs, in your perspective?
- To what extent, if at all, do you think hubs' regulations and pull factors influence illicit commodity flows, rather than the unregulated environment of certain origin countries?

What are the key factors within these pull factors? What do traders focus on?

- What would you hypothesize would happen to these IFF patterns if much stronger regulations came into play in the hubs?
- [if relevant] How accessible are private individuals in sharing information about their work within [commodity] sector? What influences this?
- What policies could trade hubs implement to curb the prevalence of IFFs?
- What, in your opinion, are key parties and questions in mapping out the patterns, size and makeup of these flows?
- Do you have any personal opinions as to the role and capacity of local authorities in these hubs to curb IFFs?
- To what extent do you think hubs' pull factors define IFF patterns, rather than the (lack of) regulations in origin countries?

[Specific questions dependent on expertise, location, publications, etc.]

Conclude with affirmation on consent & ability to preview document before submission

Appendix II: Relevant Commodity Trade and IFF Regulations UAE

The list of (federal) regulations is based on the list provided by Federal Decree Law no. (20) of 2018 (President of the UAE, 2018)

- Federal Law no. (6) of 1985 on Islamic Banks, Financial Institutions and Investment Companies;
- Federal Law no. (4) of 2000 on the Emirates Securities and Commodities Authority and Market and its amendments;
- Federal Law no. (4) of 2002 on the criminalization of money laundering and combatting of the financing of terrorism and its amendments;
- Federal Law no. (8) of 2004 on the Financial Free Zones
- Federal Law no. (13) of 2004 on the Supervision of Import/Export and Transit of Rough Diamonds and its amendments;
- Federal Law no. (6) of 2010 on the Credit Information;
- Federal Law no. (11) of 2015 on the supervision of trading and stamping of precious metals and stones
- Federal Law no. (7) of 2017 on Tax Procedures
- Federal Decree-law no. (20) of 2018 on Anti-Money Laundering and Combating the Financing of Terrorism and Financing of Illegal Organizations

Appendix III: illustration legally gray zone IFFs related to tax planning

Based on work by Alex Cobham and Petr Janský (2017).

Legal Category	Origin of assets	Behavior type	Result when transferred abroad
Legal	Legally generated profits, capital gains and income	Tax Compliance	Licit: Legally generated, fully tax compliant and legally transferred assets abroad
		Lawful tax avoidance	Illicit? Lawfully tax avoiding assets abroad
Unlawful		Unlawful tax avoidance	Illicit: Legally generated, but unlawfully tax avoiding assets abroad
		Market/regulatory abuse	Illicit: Circumvention of regulations via hidden (offshore) ownership for unlawfully earned profit at home/abroad
Criminal		Illicitly transferred, and/or transferred for illicit purpose	Illicit: Legally generated but violating regulations for cross-border transactions such as evading currency controls, or transferred to fund illegal activities (including terrorism)
		Tax evasion	Illicit: Legally generated, but criminally tax evading assets abroad
	Proceeds of corruption	Bribery; Grand corruption; Illicit enrichment; Embezzlement	Illicit: Corruption-related illegal assets transferred abroad
	Proceeds of theft/related crime	Theft; Extortion; Kidnapping; Fraud; Bankruptcy	Illicit: Theft-related illegal assets transferred abroad
	Proceeds of illegal markets	Drug trafficking; Counterfeiting; Firearms trafficking; Trafficking in persons; Smuggling of migrants; Wildlife trafficking	Illicit: Illegal assets (from illegal economic activities)