



The Hague Centre  
for Strategic Studies

# Next Generation Organised Crime

## Systemic change and the evolving character of modern transnational organised crime

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May 2023





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This research has been conducted by HCSS on behalf of the Dutch police as part of the multi-year Strategic Monitor Police programme. This programme aims to provide an 'outside-in' and future-oriented view and interpretation of relevant trends and developments to support the strategy creation process of the Dutch police.

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# Executive Summary

This multi-disciplinary report summarises the findings of a study examining strategic trends and likely trajectories in the evolution of transnational organised crime and organised crime groups (OCGs), situating these within the wider context of global systemic and structural change. The report introduces a new, simple framework for describing the main forces shaping modern organised crime. This framework captures various factors that come under five categories of analysis and the interrelationships between these categories: (1) the **goods and services** that underpin global criminal business; (2) the **people** involved in or sustaining criminal activity; (3) the **money**, financial systems and economic infiltration that underpin illicit trade; (4) **technology**, which increasingly permeates all forms of organised crime; and (5) the extent to which all these variables allow criminal actors to project (political) **power** and exert de-facto control over (new) territory. In addition, to enabling the analysis of specific developments within each of these categories, the framework has the potential to guide the monitoring of new developments as well as informing policy interventions.

Using this analytical approach, the study produced the following findings:

- 1. Organised crime in today's interconnected world consists of increasingly fluid, decentralised, technologically savvy and resilient trading networks.** These networks leverage a wide range of professional service providers and systemic enablers as part of their operations. Different players and entrepreneurs within the global criminal economy interact and transact, sometimes briefly, based on their business needs, value adding roles and access to or control over key functions or expertise. In a trend that amounts to 'marketisation', traditional in-house functions of criminal organisations such as accounting, logistics or (cyber) security are increasingly outsourced to third-party specialists servicing different customers and who now effectively amount to specialised transnational organisations in their own right.
- 2. Transnational organized crime increasingly relies on a shadow (or parallel) global illicit economy as well as clandestine transfer and investment vehicles, although these often intersect with and exploit the formal regulated financial system.** Criminal financial structures are erected using complex financial and corporate structures to conceal the true (beneficial) ownership of funds behind a veneer of legal commercial activity. Criminal networks around the world combine traditional methods of laundering funds, such as through small local cash-based businesses, with the large-scale acquisition of real estate and investment into sectors ranging from the construction, extraction and transport industries to waste management and renewable energy. The relationship between power and money can be described as symbiotic, with the latter offering a key lever through which to secure and expand criminal political and social control, infiltrate, co-opt and 'colonise' economies, carve out (micro) spheres of influence and erect parallel governance structures. Reciprocally, the consolidation of political economic power – to the extent that one can be separated from the other – is also conducive to greater profit, including by way of increased freedom of operation and/or closing off vital ground to potential business competitors.
- 3. Organised crime's social and economic embeddedness, as well as recruitment into criminal organisations, increasingly take place within the context of rapid demographic, technological and systemic change.** Migration and urbanisation are contributing to the proliferation of social breeding grounds and 'hotspots' of organised crime, which are often found amidst pockets of poverty and marginalisation and/or where formal governance

Supported and fuelled by rampant demand and political opportunities resulting from recent strategic shocks, organised crime networks have become increasingly resilient.

systems and key services are lacking. These ecosystems also constitute convergence points for different types of clandestine non-state actors, thus amounting to micro-economic and political bubbles of illicit activity. Supported and fuelled by rampant demand for illicit goods and services, criminal networks have also become increasingly adept at exploiting both technological solutions and structural shocks within the international system ranging from pandemics and climate change to conflict and instability to further their interests and secure strategic footholds in new territories.

4. **The activities of and markets available to OCGs are likely to further expand within the context of increased international multipolarity and geostrategic competition.** The international community's reinvigorated focus on state-on-state as well as existential (conventional and nuclear) threats is likely to result in a reduction in focus on sub-state forces and actors. The return of great power competition and renegotiation of spheres of influence will be felt most acutely within the context of governance vacuums and contested spaces, particularly in fragile and conflict-affected countries and regions. Here, criminal actors will also seek to secure strategic gains, either of their own volition or as proxy-agents of state patrons. As the international community retreats from globalisation, fragments and turns to tariff and trade wars, criminal systems, including shadow and illicit financial networks and systems, are also increasingly likely to be exploited by state actors seeking to avoid sanctions and/or undermine each other's financial influence through clandestine means.

Building on these findings, the study highlights an overall evolution towards what amounts to (at the very least) the fourth generation of crime (even though this study favours the less rigid term 'next' generation). This evolution saw a first generation of historical (circa 19<sup>th</sup> century) criminal groups capable of establishing localised illicit markets pave the way to a second generation, which largely grew out of the Prohibition era and post-war black markets. Third generation organised crime subsequently emerged within the context of modern transport and international trade from the 1970s onwards, featuring the trans-nationalisation of crime as well as (primarily narcotics-specialised) 'super' cartels, most famously in Latin America. The fourth or, indeed, 'next' generation of organised crime is characterised by devolved, distributed, cellular, efficient networks that are increasingly embedded within the societal fabric. This generation of organised crime also fuses and compresses the distance between different domains, functions, roles and services around the world. Here, structural opportunities, political and social vacuums, legal and regulatory loopholes, global financial solutions, criminal supply chains and retail markets are all invariably connected in what amounts to a complex, integrated, helixed and self-regulating (shadow) economic system. **In real terms, this has arguably led to a net amplification of the relative (political) power, economic clout and, correspondingly, overall threat posed by organised crime**, most significantly seen in the suffocation and distortion of licit economies and the erosion of formal governance systems and the 'rules-based international system' – which is already in rapid retreat at the state level.

This study highlights several implications for the **international community's response**. It first explains how the framework introduced in this study can be leveraged for the purposes of strategic and predictive multi-disciplinary analysis of organised crime developments and as an aid to formulating policy interventions. It then outlines some of the different types of interventions that can be brought to bear against the phenomenon, distinguishing between direct (such as criminal justice and law enforcement) responses and indirect (such as broader social or political) approaches that can be against the phenomenon, whilst emphasising the extent to which its complexity and fluidity make international cooperation imperative. Finally, it makes the case for encouraging the incorporation of crime-relevant provisions within post-conflict settlements and better reflecting the subject and study organised crime within the fields of international relations, international security and strategic studies given the increased propensity for OCGs to act as agents of influence and political change in the modern world.

# 1. Introduction

## 1.1. Study overview

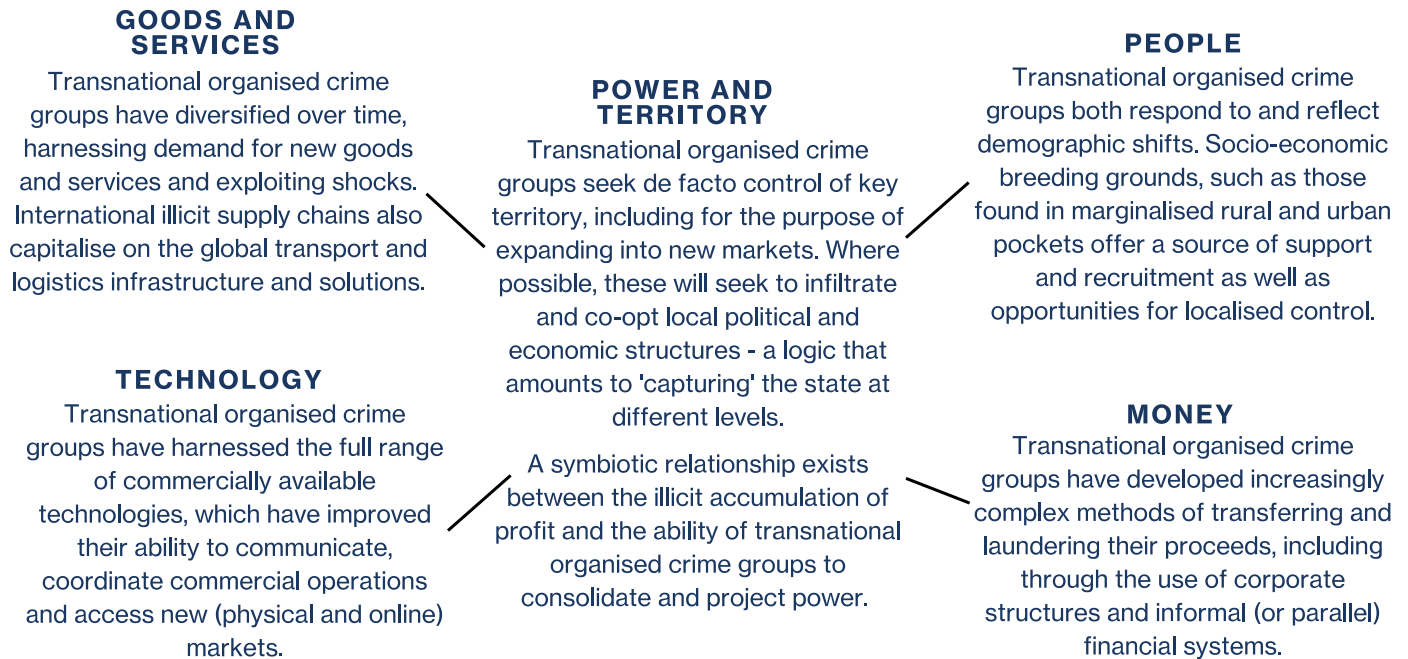
This foresight study examines strategic trends in the evolution of transnational organised crime, situating the phenomenon against the backdrop of global structural and systemic change. In doing so, it highlights the most observable trajectories in the conduct of criminal enterprise as well as the major forces shaping the morphology and character of illicit business. By extending beyond the relatively narrow confines of criminology and borrowing, *inter alia*, from political science and international relations theory, it also proposes a new framework for explaining how organised crime operates across international borders. In doing so, this study promotes the (admittedly ambitious) idea of 'staying ahead' of the problem, rather than simply reacting to new developments and tactics once these have already taken hold.

## 1.2. Conceptual framework

To a large degree the themes identified in this study are not limited to organised crime but instead reflect wider patterns in social behaviours and business activities. Indeed, attempts at streamlining operations, outsourcing core business functions, optimising commercial activities and harnessing new technologies are also standard features of licit enterprise. However, fundamental differences exist between licit and illicit enterprises insofar as licit businesses do not typically face the constant risk of arrest and interdiction; they do not routinely place the same emphasis on secrecy or engage in frequent acts of violence; and, by and large, these tend to accept and comply with legislative and regulatory frameworks. In turn, this study resists the temptation to apply conventional business assumptions and typologies to the object of study.

Moreover, conventional foresight research commonly employs comprehensive, category-based frameworks such as DESTEP (Demographic, Economic, Social, Technological, Ecological, Political) or the slight variant PESTLE (Political, Economic, Social, Technological, Environmental, Legal) as the basis for strategic analysis. Although these provide helpful starting points for describing macro-level developments, the study of a subject as complex as transnational organised crime calls for its own, more tailored, framework. Accordingly, this study introduces a new framework for conceptualising, categorising and brigading different trends and evolutions in the character and conduct of transnational organised crime. The framework highlights the relevance of five categories which directly shape the morphology of the phenomenon: people; money; technology; goods and services; and power and territory (see Figure 1).

Figure 1: Overarching conceptual framework



Situating organised crime within broader geopolitical and geostrategic developments, this study demonstrates the extent to which the phenomenon can only really be understood if examined through the lens of wider societal change. Such an approach also highlights the fluidity, complexity and multi-faceted nature of the phenomenon, as well as the extent to which it is shaped by a plethora of forces, opportunities and structural shifts within the international system.

### 1.3. Methodological approach

The findings in this study, as well as the framework within which these are situated, reflect the analysis of a combination of a wide range of primary material, such as law enforcement and judicial documents; and secondary material, including academic publications, government and non-governmental organisation reporting, media and press articles and credible third-party reporting (such as from the private sector). Moreover, the study employed the following source selection, data coding and synthesis approach.

**Selection of sources.** In the first stage, material drawn from over 350 sources were collated and assessed. Out of this initial sample, approximately 150 sources were selected based on their overall credibility, whether these could be corroborated, and the extent to which they offered tangible strategic or 'building block' insights relating to either macro-level trends and/or more specific examples (thematic or geographic) of how these same trends could be observed in different contexts around the world (these sources, which spanned between 2017 and 2023, are detailed in Annex A).



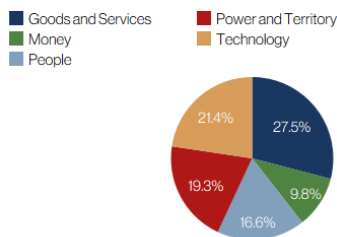
**Data coding process.** The contents of the selected sources were then labelled, reviewed and extracted into a bespoke database, thus allowing the identification of overarching thematic clusters, macro-level patterns and, ultimately, categories of analysis (ultimately forming the basis for the conceptual framework contained in this report). In effect, this 'coding' process provided the mechanism of turning unstructured sources into a structured dataset from which findings could be inductively extrapolated. From the 150 sources, over 300 data points (insights) were extracted and coded in this manner.

**Data synthesis.** The structured data set was then analysed and organised according to categories and sub-categories, thus allowing for the identification of recurrent themes and patterns in the reporting. This same process also helped to identify repetitions and overlap in the dataset, including between different categories of analysis. A detailed breakdown of the trends identified through this process are detailed in Annex B.

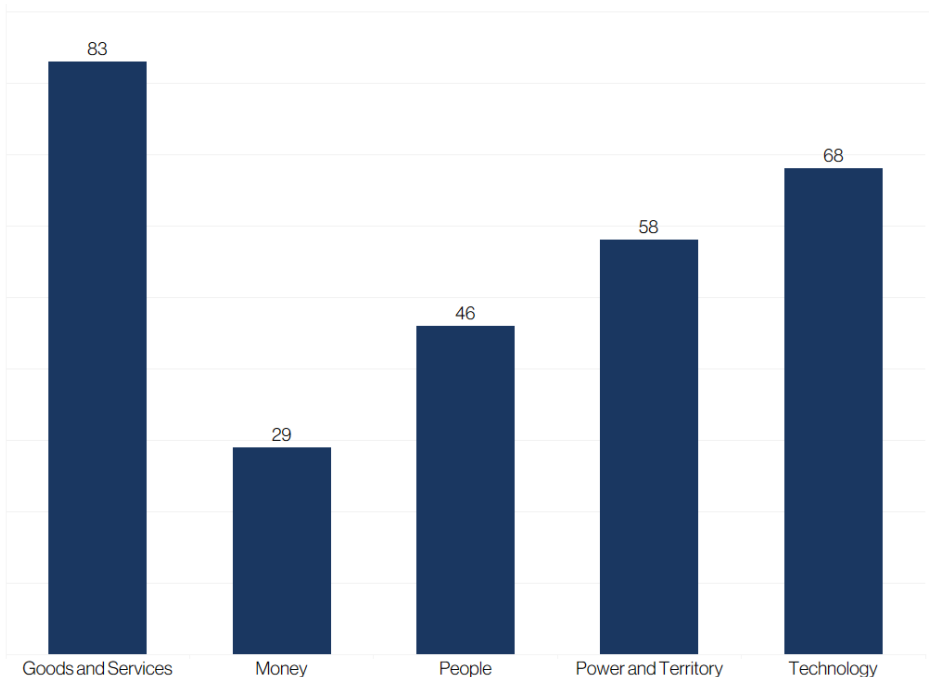
**Figure 2. Overall distribution of coded sources across framework categories**



#### Distribution of coded sources



#### Number of sub-category entries per category



## 1.4. This document

The conceptual framework provides the overall structure and blueprint for this report. Accordingly, the report summarises trends relating to the provision of goods and services in chapter 2 before turning to patterns relating to the people involved in criminal activities in chapter 3. Chapters 4 and 5 then turn to some of the key enablers of modern transnational organised crime, namely illicit finances (or 'money') and technology. Chapter 6 builds on these previous chapters, describing the role of power and territorial control in the pursuit of criminal enterprise. These thematic chapters also detail prominent (sub) themes and insights derived from the structured examination of sources. Cross-cutting findings are then further synthesised and explored in chapter 7, which also highlights (policy) implications for the response.

## 2. Goods and services

The provision of goods and services, which underpins global trade, has undergone significant transformation since the end of World War II. During this time, changes – some subtle, others more radical – have combined to shape modern transcontinental supply chains as well as connect production and retail centres around the world. Thus, the invention of the shipping container in 1956 significantly lowered the business costs of long-distance trade, whilst the period of relative peace and prosperity that followed the end of the Cold War spurred a move towards economic free trade zones, integrated global markets and investment by multilateral development banks.<sup>1</sup> By 2022, global flows of foreign direct investment (FDI) reached \$1.6 trillion, buoyed by loose financing conditions, booming merger and acquisition markets and major stimulus packages.<sup>2</sup> This investment has, inter alia, catalysed large infrastructure projects around the world – one of the growing features of geo-economics and great power competition. In a modern variation of the Silk Road, China's Belts and Road Initiative (BRI) has made significant inroads towards connecting China to the rest of the world via strategic corridors across Asia and beyond.<sup>3</sup>

Four decades after the introduction of online retail services, the online space has already revolutionised the way trade is conducted. Global e-commerce now constitutes around 22% of global sales, totalling somewhere around \$3.5 trillion and showing few signs of abating.<sup>4</sup> At the same time, the COVID-19 pandemic showed the extent to which markets remain volatile and vulnerable to strategic shocks, whilst the war in Ukraine triggered record commodity prices (see development of oil prices in Figure 3), disrupted both global shipping routes and supply chains and pushed tens of millions of people into poverty.<sup>5</sup>

Unsurprisingly, advancements and evolutions in global trade, retail and transport infrastructure have all had a direct bearing on modern organised crime, catalysing the rise of vast transnational criminal trading networks, offering access to new (illicit) consumer markets and enabling wide-ranging business connections. Supported and fuelled by rampant demand as well as political opportunities, these networks have become increasingly resilient, managing not only to weather, but also exploit, structural shocks. Some of the dominant and most observable patterns that form part of this evolution are outlined below.

1 By the 1970s, most shipping providers relied on the container for their business solutions See Jean-Paul Rodrigue, *The Geography of Transport Systems*, 2020.

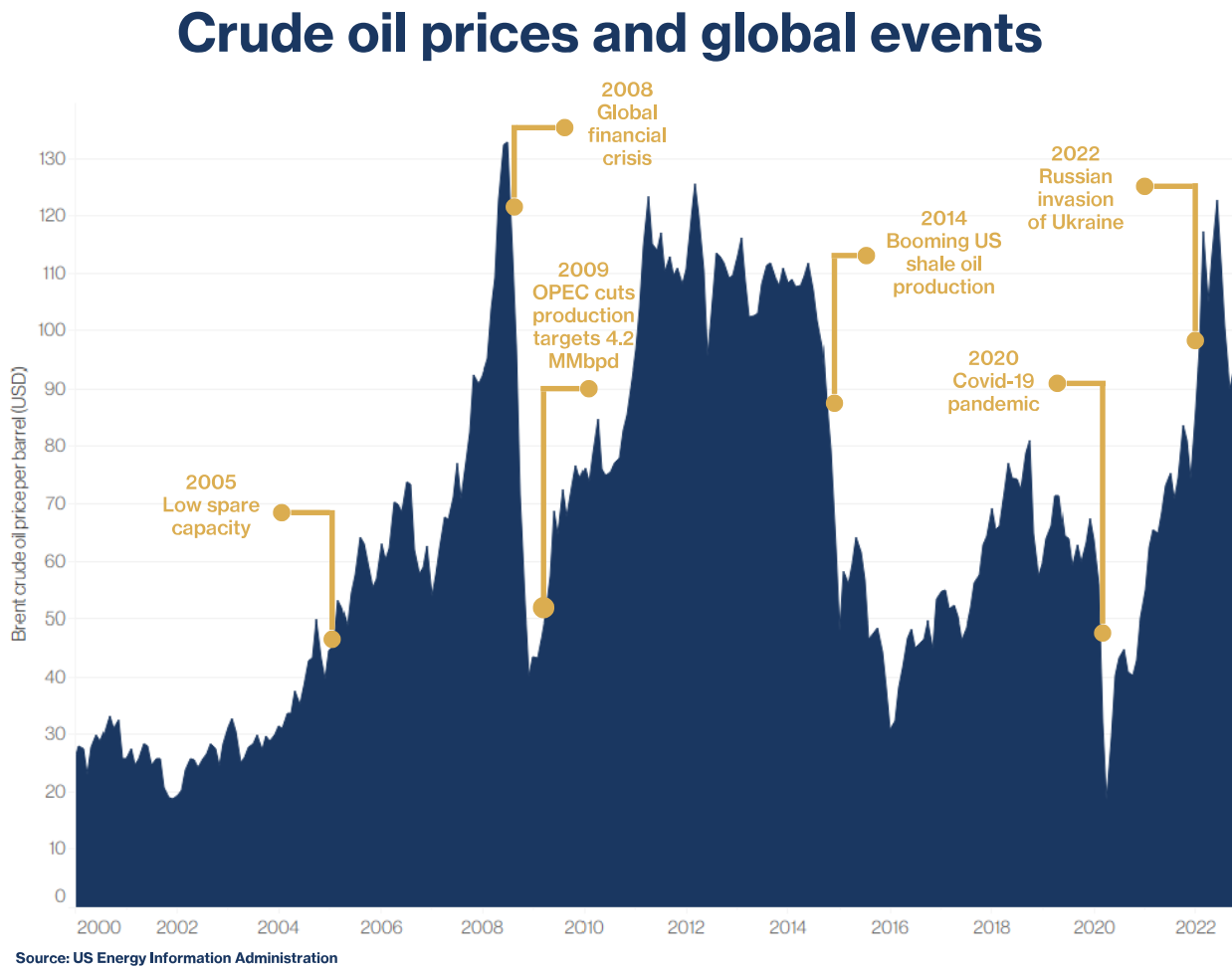
2 United Nations Conference on Trade and Development (UNCTAD), *World Investment Report 2022: International Tax Reforms and Sustainable Development*, June 2022.

3 Organisation for Economic Co-operation and Development (OECD), *China's Belt and Road Initiative in the Global Trade, Investment and Finance Landscape*, 2018.

4 Morgan Stanley, *Global Ecommerce Growth Forecast 2022*, June 2022.

5 See for example World Bank, *Commodity Markets Outlook: The Impact of the War in Ukraine on Commodity Markets*, 2022.

Figure 3. Oil prices and strategic shocks



## 2.1. New and established trends

As is often the case, the conduct of modern organised crime blends the new and the old. Strategic shocks and crises within the international system continue to offer a plethora of opportunities for OCGs around the world. Pandemics – as the COVID-19 outbreak demonstrated – are a fertile ground for such groups, who have proven adept at selling medical products on the black market, often at heavily inflated prices.<sup>6</sup> Climate change, which is becoming a central consideration within the international security and stability debate, is already being exploited by criminal networks seeking to secure everything from renewable energy to water distribution business contracts, all the while providing smuggling services to migrants attempting to leave increasingly arid regions in search of alternative economic opportunities and better prospects. Organised crime also exacerbates climate change through activities such as illegal deforestation and mining.<sup>7</sup>

<sup>6</sup> Europol, *European Union Serious and Organised Crime Threat Assessment, A Corrupting Influence: The Infiltration and Undermining of Europe's Economy and Society by Organised Crime*, 2021, p11.

<sup>7</sup> Interpol, *Crime, Law Enforcement, and Climate Change*, September 2022.

Always quick to identify new sectors, OCGs will inevitably recognise opportunities connected to existing pressures on primary commodities, such as oil and wheat. Inevitably, these pressures will be further exacerbated by rising demand from a growing global population and (once again) by the effects of climate change which, in effect, will reduce the overall amount of arable land available for agriculture. The outbreak of conflict may add further stress to this dynamic,<sup>8</sup> as the war in Ukraine has demonstrated. Continued demand for critical minerals from key production centres such as central Africa and Latin America will also continue to attract OCGs to the business of illegal mining and the extraction of natural resources, a sector that is particularly vulnerable to corruption.<sup>9</sup> Meanwhile, global marketing campaigns and demand for luxury goods and brands around the world will continue to fuel demand for counterfeit goods and products ranging from clothing to watches and cosmetics.<sup>10</sup>

At the same time, the analysis of current trends and patterns relating to the provision of goods and services points to a continued focus on established, tried and tested activities, most notably drug trafficking. Sustained levels of demand for cocaine, particularly in the west, underpin the highly organised transatlantic trafficking of multi-tone consignments of the substance, which is largely dominated by a few prominent players. Notably, a body of reporting describes the extent to which wholesale importation and distribution of cocaine within Western Europe has been increasingly monopolised by the 'Ndrangheta branch of the Italian Mafia and Albanian OCGs (both of whom have developed strategic partnerships with producers in Latin America) as well as connected Dutch OCGs (who occupy an important position along the supply chain given the country's position as an international cocaine import hub).<sup>11</sup> Meanwhile, heroin continues to be produced in large quantities in and around Afghanistan, despite a (partial) ban imposed by the ruling Taliban regime.<sup>12</sup>

However, even within the field of the drugs trade, OCGs have sought out new opportunities, including with respect to the development of New Psychoactive Substances and improved methods for producing popular synthetic drugs such as methamphetamine. Reporting thus points to the role of the Netherlands in the production of the latter, including through the OCG-backed construction of advanced, industrial-scale manufacturing facilities designed for high volume export (see Figure 4).<sup>13</sup> The use of technologically-enabled manufacturing and production techniques has also been witnessed in other sectors, such as in the case of high-yielding cannabis farms. High-volume production will likely further benefit from the proliferation of expertise and knowledge across different regions, as seen in the case of specialist cocaine and synthetic drug chemists offering their services to different OCGs around the world.<sup>14</sup>

8 Interpol, *Crime, Law Enforcement, and Climate Change*, September 2022.

9 Florida International University, *Global Americans: South America 2030*, 2018, p6.

10 Organisation for Economic Co-operation and Development (OECD), and European Union for Intellectual Property Office (EUIPO), *Illicit Trade: Trends in Trade in Counterfeit and Pirated Goods*, 2019.

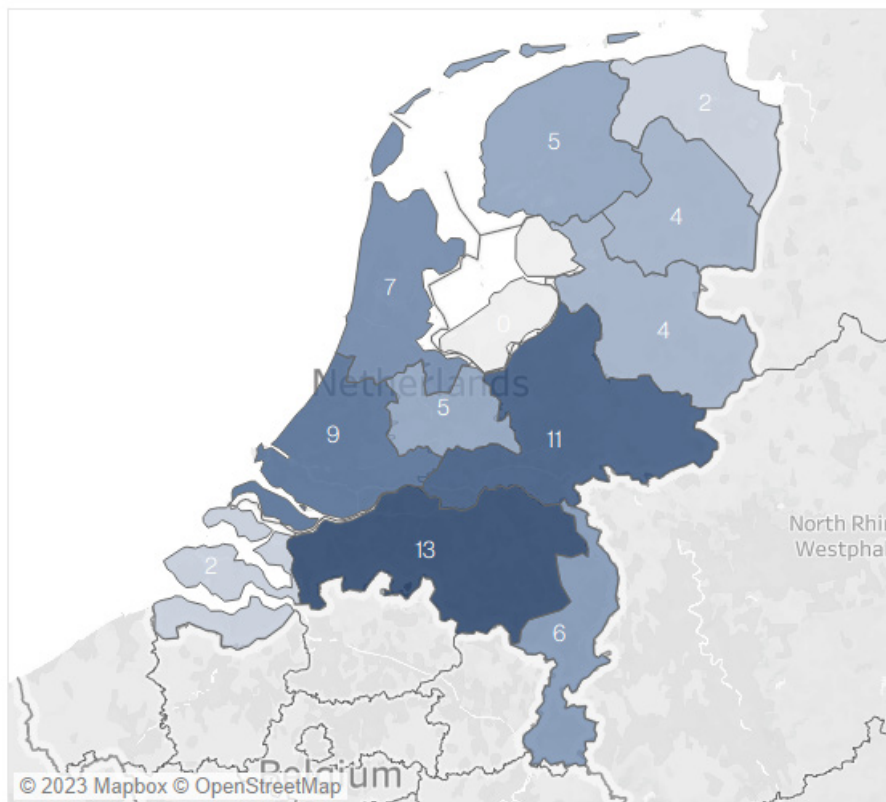
11 Sanne de Boer, *Mafiopoli: Een zoektocht naar de 'Ndrangheta, de machtigste maffia van Italië*, 2020; Mark Bridge, *Albanian gangsters flaunt drugs and guns on Instagram*, The Times, November 2018.

12 United Nations Office on Drugs and Crime (UNODC), *Opium Cultivation in Afghanistan: Latest findings and emerging threats*, November 2022, p4.

13 See for example Teun Voeten, *Field Report: The Netherlands as a Narcostate and the Emergence of a Methamphetamine Industry*, Small Wars Journal, May 2021.

14 Audrey Travère, and Jules Giraudat in Culiacán, *Revealed: how Mexico's Sinaloa cartel has created a global network to rule the fentanyl trade*, The Guardian, December 2020.

**Figure 4. Number of methamphetamine labs discovered per province in the Netherlands (2017-2022)**



## 2.2. The role of transport and logistics infrastructure

The movement of trafficked and smuggled goods, commodities and persons across supply chains and over increasingly large distances is enabled by globalised air, land and sea transport solutions and infrastructure. Bulk container shipping solutions, sprawling road networks and modern air travel offer a wide combination of options to OCGs seeking to connect production centres with retail markets – a trend that is likely to accelerate within the context of large infrastructure development projects such as China’s BRI. The sheer amount of freight and goods transported through commercial road haulage (the global road haulage market size and revenues are close to \$4,000 billion) provides ample opportunities for those seeking to smuggle contraband, weapons, migrants or drugs across borders.<sup>15</sup> Depending on the region, such movement is further enabled by economic free trade zones such as the EU or the Economic Community of West African States (ECOWAS), or by the existence of porous or unmonitored border crossings. In other contexts, overland smuggling amounts to little more than the continuation of a long historical tradition of moving goods along established trade routes and caravan trails.<sup>16</sup>

<sup>15</sup> Grand View Research, *Road Haulage Market Size, Share and Trends Analysis Report by Vehicle Type, by Application, by Region and Segment Forecasts, 2019-2025*, 2018.

<sup>16</sup> T. Wing Lo, Dina Siegel, and Sharon Kwok (eds.), *Organized Crime and Corruption Across Borders: Exploring the Belt and Road Initiative*, 2020.

In some cases, such as that of the Sahel, economic revenue from overland smuggling routes is interwoven within the political and social fabric, with subsequent generations of government actors and opposition groups tapping into the opportunities brought about by the illicit trade.<sup>17</sup> Overland transporters, including those carrying contraband, also frequently draw on logistical opportunities, protection and knowledge offered by borderland communities and diasporas. In other contexts, such as that of the tri-border region of Baluchistan connecting Iran, Afghanistan and Pakistan, such communities also have links to local authorities and security actors.<sup>18</sup> Those with such connections and, of course, capabilities (vehicles) are in turn able to mount profitable smuggling operations, transporting a range of products for multiple customers along trade corridors in what effectively amounts to a clandestine delivery system.

Maritime smuggling, meanwhile, has risen into the dominant means of moving high-volume contraband across borders. The millions of containers moving around the globe at any one time offer clear, low-cost opportunities for transnational organisations wishing to conceal illicit merchandise.<sup>19</sup> With roughly only 2% of cargo inspected at various stages of the journey, these provide a relatively safe way of moving goods such as narcotics or counterfeit merchandise concealed amongst licit consignments ranging from Latin American fruit boxes to Chinese electronics.<sup>20</sup> Reliance on container shipping within certain clandestine trades, such as bulk cocaine importation into Europe, has resulted in the criminal infiltration of key points of entry, including the large ports of Rotterdam, Amsterdam (see Figure 5) and Hamburg as well as other strategic locations such as the Montenegrin port of Bar and the Calabrian port of Gio Taure (over which the Italian 'Ndrangheta yields significant influence).

Figure 5. The low countries as central nodes in the cocaine trade

### The Transatlantic Cocaine Trade: Strategic Nodes



17 See for example Wolfram Lacher, *Organised Crime and Conflict in the Sahel-Sahara Region*, September 2012.

18 Sandhya Jain, *Balochistan: On the International Drugs Superhighway*, Strategic Analysis 42, 2018, pp545–53.

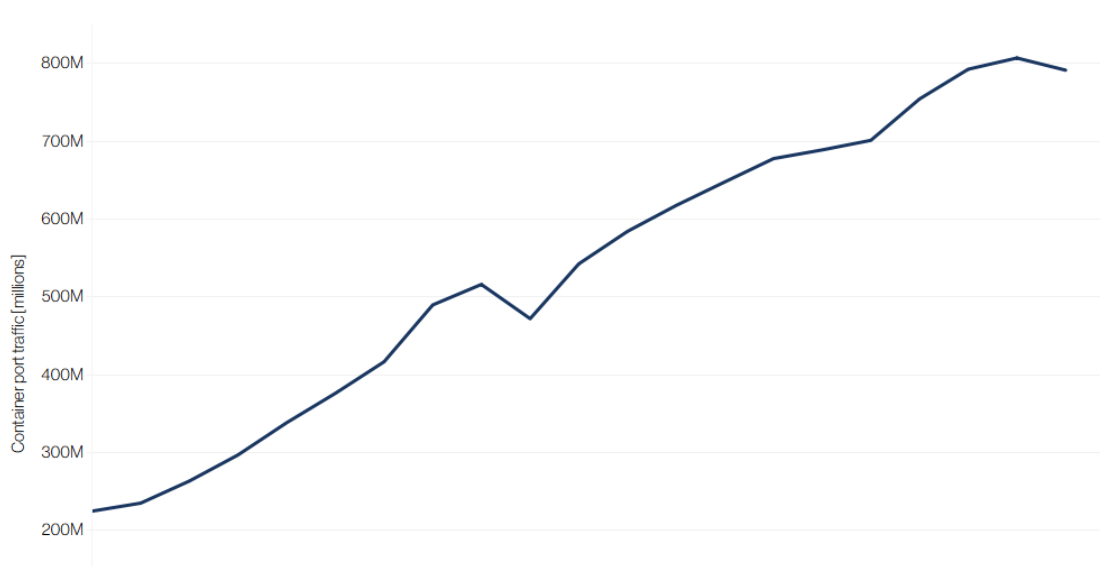
19 United Nations Office on Drugs and Crime (UNODC), *The UNODC-WCO Container Control Programme*, n.d.

20 United Nations Office on Drugs and Crime (UNODC), *The UNODC-WCO Container Control Programme*, n.d.

OCGs have also adopted more niche maritime transport solutions, such as the conveyor belt of dhows transporting heroin across the Indian Ocean from Pakistan's Makran coast to the east coast of Africa or (at times more informal) transatlantic cocaine trafficking routes connecting Latin America to the West Coast of Africa, including via transshipment nodes such as Cape Verde. Moroccan traffickers have similarly employed specialist professional smugglers operating high speed boats and jet skis to transport hashish across the Strait of Gibraltar into Spain.<sup>21</sup> Colombian drug cartels, meanwhile, have developed advanced nautical capabilities including self-propelled semi-submersible boats capable of moving below the ocean's surface and carrying loads of up to ten tonnes of drugs at speeds of around ten nautical knots (nineteen kilometres per hour).<sup>22</sup>

The maritime trafficking domain also reveals the use of innovative logistics systems, including the use of stamps to both certify the manufacturing origin of different drug bales as well as clarify the intended customers.<sup>23</sup> Such a method of tracking and pooling together different consignments at least conceptually resembles that of conventional postal and private courier services such as DHL or FedEx. Similarly, transporters ferrying Moroccan hashish across the Strait of Gibraltar have diversified by carrying migrants alongside drug orders to the coast of Andalucia.<sup>24</sup> This once again points to a wider trend in which professional service providers of various denominations have evolved to maximise their profits and draw on a combination of their expertise and capabilities to service a range of different customers. OCGs also benefit from the cost efficiencies associated with leveraging external suppliers. Moreover, in the case of the cocaine trade, the likely use of combined (i.e., pooled) loads by OCGs offers a hedging mechanism for OCGs, ensuring that seizures of, for example, one ton, might in real terms only represent a loss of around 200-300 kilogrammes by any given organisation.

**Figure 6. Container port traffic worldwide (2000-2020)**



21 Lorenzo Tondo, *One of World's Most Wanted Hashish Smugglers Arrested in Morocco*, The New York Times, December 2016.

22 Byron Ramirez, *Colombian Cartel Tactical Note No. 1: The Evolution of 'Narco-Submarines' Engineering*, Small Wars Journal, February 2014.

23 Such a trend is apparent in the cases of both heroin trafficked from southwest Asia and cocaine trafficked from Latin America. See for example: United Nations Office on Drugs and Crime (UNODC), *Drug Trafficking on the Southern Route and Impact on Coastal States*, October 2016, p27.

24 See for example European Observatory of Crimes and Security (EU-OCS), *Drug and people smuggling gang that trafficked tonnes of hashish from North Africa broken up in Spain*, March 2020.

## 2.3. Geographic hotspots of transnational organised crime

Geographic areas situated along key smuggling routes, including in border areas, where (criminal) non-state actors benefit from freedom of movement and the consent of the local population often effectively amount to 'hotspots' of illicit activity (the term was originally popularised within the context of neighbourhood policing). In localities such as these, different types of networks and service providers may converge, lured by economic opportunities and the prospect of relative safety and effectively creating micro-economic bubbles of illicit activity, sometimes referred to in geography as functional zones.<sup>25</sup> Illustratively, both money launderers and smuggling specialists may actively seek out and set up shop in criminal or insurgent operating hubs, safe in the knowledge that there would likely be a steady flow of demand for their expertise from a range of customers involved in trafficking and other illicit activities. This dynamic in turn helps to explain the tendency towards the geographic co-location of different clandestine transnational actors (criminal, terrorist, insurgent and so on) in specific centres. Such habitats can also breed secondary economies feeding off illicit markets. Casinos, hotels and restaurants may thus be built to launder criminal revenue; fuel stations may service smuggling operations; and shops may cater for the needs of various customers, such as by selling life jackets to migrants as is the case on the Libyan and Turkish coasts.<sup>26</sup>

Examples of these hotspots can be found around the world. Illustratively, the Venezuelan village of San Felipe situated in the north-western state of Zulia grew into a centre for narcotics facilitation, hosting a large cadre of Mexican cartel emissaries. Here, local villagers were also recruited to enlarge and reinforce makeshift airstrips, making them accessible to larger aeroplanes carrying both cash and drugs.<sup>27</sup> Similarly, Bahram Cha and Girdi Jangle, former refugee villages located on either side of the Afghanistan-Pakistan border, became favoured staging posts for both narcotics traffickers and Taliban fighters in hiding. These villages have long hosted large weapons and drugs bazaars (markets), arms caches and heroin processing laboratories, and represented key logistical staging posts along smuggling routes from Southern Afghanistan to Pakistan's Makran Coast.<sup>28</sup> Meanwhile, the city of Agadez, located at the intersection of road networks in central Niger, evolved from a trading centre for caravans to the "de-facto smuggling capital of the sub-Saharan region"<sup>29</sup> – a veritable Mecca for drugs, arms and, perhaps most infamously, human trafficking. The case of Agadez also demonstrates the connections between such trading centres – in this case its position on one of the direct routes to the Southern Libyan migrant and contraband smuggling hub of Sebha.<sup>30</sup>

25 In other words, a geo-systemic habitat where specific activities are focused in an area. Some useful insights can be gained from Vasile Zotic, and Diana Elena Alexandru, and Puiu Viorel, *Functional Zoning of the City/Village Area and Its Contribution to the Sustainable Development of Settlements*, *Journal of Settlements and Spatial Planning*, 1, no. 2, 2010, pp183-184.

26 Sarah Deardorff Miller, *Political and Humanitarian Responses to Syrian Displacement*, 2017, p85.

27 Mexican Cartels: Venezuela's Uninvited Guests Here to Stay, *Insight Crime*, April 2020.

28 See for example Gretchen Peters, *How Opium Profits the Taliban*, August 2009, p28.

29 Lucas Destrijcker, *Welcome to Agadez, smuggling capital of Africa*, *Politico*, October 2016.

30 See for example Peter Tinti, and Tom Westcott, *The Niger-Libya corridor: Smugglers' perspectives*, November 2016.



## 2.4. Implications for organised crime business models

The above dynamics reveal several implications relating to the morphology and characteristics of the organised crime business model. The sheer breadth of activities that OCGs have engaged in relating to the provision of goods and services highlights the agility with which these groups are able to adapt to both effective law enforcement intervention methods and new opportunities, including those that present themselves at times of crisis or geopolitical change. This flexibility is also enabled by the speed at which criminally oriented entrepreneurs can source or contract-in value added external expertise from specialists when seeking to pursue new ventures. One of the key implications of this trend, as illustrated by the example of specialist transport providers, is that the traditional enabling (sub)functions of criminal operations are themselves growing into outsourced standalone networks servicing a multitude of different actors (including by offering 'dual use' services that go beyond criminal networks), thus pointing to the 'marketisation' of the global criminal economy. The corollary of this dynamic is a pattern in which different OCGs with specific skills or access to different markets or sources of production interact as temporary, overlapping networks based on sometimes brief transactional encounters and/or the provision of specific services at various points along supply chains. An additional implication may be the extent to which specific functions – such as, once again, transport and logistics – are becoming poly-criminal in character, thus enabling multiple types of illicit retail activity.

Sub-organisations of organised crime groups growing into outsourced, standalone networks servicing multiple actors causes a gradual 'marketisation' of the global criminal economy.

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# 3. People

People are central to the business of transnational organised crime. Criminal networks rely on capable, willing and, increasingly, skilled individuals to carry out the tasks and fill the various roles required for the conduct of illicit enterprise. Depending on the context, and as we have seen, these range from professional financial experts and logistics planners to government officials providing conduits for the infiltration of political systems. Moreover, criminal organisations often exploit the basic human needs, vulnerabilities and desires of individuals to generate profit. The need for security, financial stability and status may thus provide the basis for support for and recruitment into OCGs, whilst other needs, such as cravings for particular illicit substances, provide these same groups with opportunities for financial gain.

Given the central role of people in the overall criminal business model, demographic shifts and pressures as well as migratory flows have a direct bearing on the evolving character of the phenomenon. Factors such as population growth, urbanisation, (forced) displacement and ageing all contribute to the evolving demand for certain (illicit) goods and services. For example, an ageing population may catalyse an increase in the demand for illegal drugs such as prescription painkillers, which can be sold at a high price on the black market in countries where these are not commonly available. Similarly, population growth in countries where economic and social mobility opportunities are limited can create demand for the services of human traffickers and migrant smugglers. Crises and shocks also exacerbate and accelerate demographic shifts, whilst creating further political, social and economic entry points for organised crime. The frequency of significant crises has increased in recent years, triggered by climate emergencies, extreme weather, economic collapse, civil war and pandemics. With these different perspectives in mind, several recurrent themes emerge from the structured analysis of existing reporting.

As people continue to have a central role in the criminal business model, demographic shifts and pressures like migratory flows directly affect the evolving character of organised crime.

## 3.1. Continued exploitation of forced displacement and diaspora communities

Economic and political hardship constitutes a common driver of migration and displacement. The global poverty rate has stagnated at around 9% in recent years, with few signs of improving. This contrasts with earlier periods such as the mid and late 2010s, when global poverty fell from almost 13% in 2012 to 8.6% in 2018. Latin America and the Caribbean as well as Europe and Central Asia have shown a significant increase in poverty in recent years, albeit at lower levels.<sup>31</sup> In 2021 alone, 9.3 million persons globally were forced to leave their homes because of conflict, violence, the fear of persecution and/or human rights violations. This is a

<sup>31</sup> R. Andres Castaneda Aguilar et al., *April 2022 global poverty update from the World Bank*, World Bank Blogs, April 2022.

significant increase from the 42.7 million persons who were forcibly displaced in the previous decade, and the highest number since World War II.<sup>32</sup>

Illustratively, in El Salvador, Guatemala and Honduras, high levels of poverty and violence, including gang-linked homicides, have driven many people to migrate to other countries. Central American migrants are often targeted by OCGs demanding payment in exchange for safe passage. A similar dynamic is at play in other regions, including North and Sub-Saharan Africa, Southern Asian and Syria. Some of the most prominent migrant trafficking routes – such as those crossing through Niger and Southern Libya – have witnessed the emergence of forced labour camps in which migrants are coerced to work to pay for the next leg of their journeys to Europe.<sup>33</sup>

Political instability and the chronic poverty in parts of the Caribbean have been further exacerbated by extreme weather and hurricanes. Such events have caused widespread damage and disruption and resulted in an increase in migration from the region. In addition to human trafficking, smuggling and extortion, OCGs have engaged in the illegal trade of goods and services, such as fuel, building materials and even food, all of which are in high demand following a crisis.<sup>34</sup>

More established, historical migratory patterns, including the rise of diaspora communities, provide OCGs with strategic footholds in territories that sit outside their immediate spheres of influence as well as opportunities for socially embedding themselves within new markets.<sup>35</sup> Europe provides a useful case-study for how OCGs operate within and project influence through such diaspora communities. Illustratively, networks based in Turkey are active and present throughout Europe, particularly in countries with large Turkish diaspora populations such as Germany, the Netherlands and the UK. These networks are heavily involved in illegal activities such as drug trafficking (particularly of heroin), illegal gambling, prostitution, human trafficking and extortion as well as connected to other groups, including Bulgarian criminal networks.<sup>36</sup>

Similarly, Albanian OCGs, which are characterised by interconnecting criminal organisations and family-like mafia groups, have leveraged sizable diaspora communities in – as well as (more recently) clandestine migration to – Western Europe as part of their criminal operations. Today, these mafia-style entities hold sway over the illegal trade in drugs, human trafficking and smuggling, having also branched out into public procurement and large-scale real-estate purchases. They maintain ethnic and business connections with criminal groups in Kosovo and Montenegro and have a significant presence in countries such as Belgium, the Netherlands and the UK. Youth participation in the daily operations of these criminal networks has also risen, fuelled by a blend of socio-economic factors and motivations.

32 United Nations High Commissioner for Refugees (UNHCR), *Global Trends Forced Displacement in 2021*, 2002.

33 Henry Kam Kah, "Blood Money", *Migrants' Enslavement and Insecurity in Africa's Sahel and Libya*, in *Africa Development* 44, no. 1, 2019, p29.

34 Organization for Economic Cooperation and Development (OECD), *Illicit Trade in a Time of a Crisis*, 2020.

35 As alluded to earlier in this report, cross-border diaspora communities can also play an instrumental role in the smuggling of illicit goods.

36 Ben Knight, *What you need to know: Europe's crime networks*, *Deutsche Welle*, May 2018.

By 2050, two-thirds of the world's population will be concentrated in cities, creating new challenges for managing crises, conflict, and crime within sprawling urban centres.

## 3.2. Urban, social and economic breeding grounds

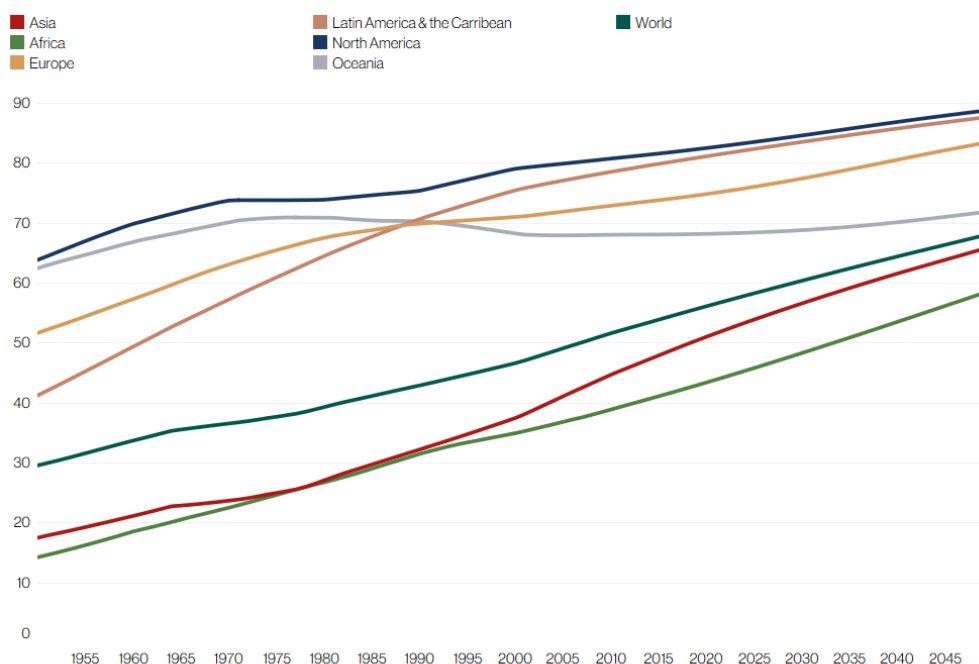
In 2017, the US National Security Council proffered that “[during] the next 15-20 years, as power becomes even more diffuse than today, a growing number of diverse state and non-state actors, as well as subnational actors, such as cities, will play important governance roles.”<sup>37</sup> By 2050, two thirds of the world’s population will be concentrated in cities,<sup>38</sup> creating new challenges for the management of conflict, crime and crises within sprawling urban centres.

While urbanisation patterns vary across different parts of the world (Figure 7), uncontrolled urbanisation is likely to result in the spread of informal urban settlements with weak (formal) governance that are ripe for exploitation by criminal actors. Existing informal settlements in or near cities such as Johannesburg, Lagos, Mombasa, Rio Janeiro and Karachi characterised by pockets of poverty and violence already feature varying degrees of control by criminal groups or gangs. Similar dynamics are at play to a lesser extent in Western city neighbourhoods, such as in Chicago, Naples, Marseilles and Malmö, to name only a few.<sup>39</sup>

Figure 7. Urbanisation rates around the world



### Annual percentage of population residing in urban areas By region (1950-2050)



Source: UN Population Prospects

<sup>37</sup> National Intelligence Council (NIC), *Global Trends: Paradox of Progress*, January 2017, p10.

<sup>38</sup> The most urbanised regions include Northern America (with 82% of its population living in urban areas in 2018), Latin America and the Caribbean (81%), Europe (74%) and Oceania (68%). The level of urbanisation in Asia is now approximating 50%. In contrast, Africa remains mostly rural, with 43% of its population living in urban areas.

<sup>39</sup> See for example Julien Quelen, *Marseille: Les narco-bandits, la nouvelle figure dominante du crime organisé*, Radio Television Luxembourg, July 2015; Tim Stickings, *Sweden at the forefront of Europe's battle with gangland violence*, The National News, October 2021.

Organised crime groups increasingly exploit the absence of state services, which could have severe consequences for the most vulnerable populations as these become dependent on illegal or monopolised supplies.

In many cities, including across Europe, the impact of technology and automation has been significant, changing the ways in which cities are planned and operate. On the one hand, technology and automation are enabling cities to optimise their resources and reduce waste, leading to a more sustainable urban environment. Additionally, the rise of e-commerce has altered the retail landscape, reconfiguring traditional retail spaces.<sup>40</sup> On the other hand, however, such changes in the economy are having a significant impact on the social fabric of urban communities, sometimes resulting in economic isolation, including because of the erosion of traditional small commerce and businesses and the social dynamics surrounding these.

Shifts in the job market, structural unemployment and social inequality have all contributed to the rise of social breeding grounds for organised crime. In the Andalusian city of Cadiz, which has suffered economically over the years, local traffickers have grown into role models, aided by demonstrations of wealth and the provision of jobs, including in the cross-Mediterranean hashish trade.<sup>41</sup> Elsewhere, including in Italy and Mexico, OCGs have used their financial clout to support struggling small businesses through grants and loans in exchange for direct or indirect control over these same businesses (this type of assistance would become a prominent feature of the COVID-19 pandemic).<sup>42</sup>

OCGs will also increasingly exploit (real or perceived) absences of state presence and services in both urban and rural strongholds to increase their legitimacy and control. They may achieve this, inter alia, by substituting formal state functions such as the provision of essential goods like water, medical supplies and/or basic services such as waste disposal and security. Climate change may exacerbate these issues, creating new opportunities for OCGs to control access to scarce resources such as (once again) water and food and, accordingly, increase their leverage over local communities. Such a trend could have serious consequences for the most vulnerable populations as these become dependent on illegal or monopolised supplies, perpetuating a cycle of exploitation and dependence.<sup>43</sup>

Similarly, transnational OCGs exploit political polarisation to secure political and social support, whilst aligning with or supporting certain political factions to further their own interests. They also use their access, capabilities and resources to influence political decisions and undermine the legitimacy of the government, as witnessed within the case of the extreme violence employed by Mexican cartels, the strategies of the Mafia in Italy or the influence of organised crime on local government in the Netherlands.<sup>44</sup>

40 Organisation for Economic Co-operation and Development (OECD), *Smart Cities and Inclusive Growth*, 2020.

41 Julien Quelen, *Marseille: Les narco-bandits, la nouvelle figure dominante du crime organisé*, Radio Television Luxembourg, July 2015

42 United Nations Office on Drugs and Crime (UNODC), *Research Brief: The Impact of COVID-19 on Organised Crime*, 2020.

43 European Parliamentary Research Service, *Understanding the EU's response to organised crime*, September 2022.

44 Vanda Felbab-Brown, *How Mexico's Cartel Jalisco Nueva Generación rules*, Brookings, May 2022.

### 3.3. Gender imbalance and inequalities continue to exacerbate social unrest

Gender dynamics, including imbalances, are directly relevant to the evolving character of organised crime. Currently, the Indo-Pacific population has 92 million more men than women. This ratio imbalance, whilst strongest in China and India, can also be felt in countries such as Azerbaijan, Armenia and South Korea. In turn, there is a considerable body of evidence that associates gender imbalances, for example in China, with increased criminal behaviour, including theft and drug trafficking. In other places around the world, the prospect of a wife (or the inability to pay marriage dowries) acts as significant motivation for young men joining both criminal and other armed groups, whilst men who are unable to find employment in saturated job markets may also be more likely to turn to criminal activity.<sup>45</sup> Women's migration and trafficking constitute additional and very real negative effects of this disequilibrium.<sup>46</sup> In addition, gender imbalances in the Indo-Pacific region may contribute to the demand for illegal activities such as human trafficking and prostitution, with men turning to these illegal activities to satisfy their desires for companionship or sexual activity amidst a shortage of women in the population. Although the gap between genders is projected to decrease to 65 million by 2050, the effects of this imbalance may impact social stability and catalyse the rise of new forms of organised crime, which will by then have taken hold.

A growing body of evidence associates gender imbalance with increased criminal behaviour.

### 3.4. Specialised services and skills

People offering special services and/or equipped with specialist skills or unique access are routinely consulted or employed by OCGs (see also §2.2 on port 'insiders' and §4.2 on professional money launderers). High-tech skills are particularly relevant to the evolving character of organised crime in so far as these are in high demand throughout society. High-tech skill shortages, prevalent in the current global labour market, are unlikely to be addressed in the coming decade, despite an overall rise in levels of education and advances in AI – see chapter 5).<sup>47</sup> Competition for qualified and/or highly skilled personnel resources will thus be considerable. OCGs are already active on social media platforms and online forums, advertising job openings for individuals with technical skills.<sup>48</sup> Organised crime groups may have an edge in recruiting skilled professionals as they can offer high salaries and benefits (often depicted in lifestyle expressions), falsely claim to be legitimate employers or even coerce individuals with high-tech skills into working for them. Additionally, there are concerns that criminal organisations may use the high demand for skilled workers in the high-tech sector to traffic people into forced labour or exploitation.<sup>49</sup>

45 Vanda Felbab-Brown, *How Mexico's Cartel Jalisco Nueva Generación rules*, Brookings, May 2022.

46 United Nations Office on Drugs and Crime (UNODC), *Global Report on Trafficking in Persons*, 2020, p19; Lisa Cameron, Xin Meng, Dandan Zhang, *China's Sex Ratio and Crime: Behavioural Change or Financial Necessity?*, in *The Economic Journal*, 2019, pp790–820.

47 See for example Borja Jerman Blažič, *Changing the landscape of cybersecurity education in the EU: Will the new approach produce the required cybersecurity skills?*, in *Education and Information Technologies*, 27, no. 3, 2022, pp3011–36; Rob Thomason, *Global skills shortages: The competition for skilled workers*, VETASSESS, October 2022.

48 See for example Steve Adams, *Money Mules: How Organized Crime Groups Recruit Via Social Media For Money*, SKOPENOW, n.d.

49 Rosie Monaghan, and Áine Clarke, *Tech supply chain workers vulnerable to forced labour*, Context, January 2023.

## 3.5. Implications for organised crime business models

As we have seen, organised crime's social and economic hold as well as recruitment into criminal organisations is increasing within the context of rapid demographic change, migration, new diaspora communities and the proliferation of social breeding grounds, including those emerging from pockets of poverty, marginalisation and/or where formal governance systems and key services are lacking. Criminal networks have also become increasingly adept at exploiting both technological advances and structural shocks within the international system ranging from pandemics and climate change to conflict and instability to further their interests and secure strategic (social and political) footholds in new territories. Whilst cities are becoming increasingly important today and are considered key drivers of economic growth and development, they will also provide opportunities for organised crime to take hold and flourish. Moreover, the trafficking in human beings and smuggling of migrants, which has been on the rise in recent years, will likely continue to be one of the largest and fastest growing criminal industries in the world, generating billions of dollars in profits for traffickers each year.

## 4. Money

Money sits at the heart of the organised crime business model, with financial profit constituting both an end and a means of consolidating power and expanding into new markets. The overall size and scale of global criminal financial flows are almost impossible to estimate given their opaque nature and the fact that these cannot easily be dissociated from wider illicit financial flows (which include the proceeds of corruption as well as the grey economy). Still, the United Nations Office on Drugs and Crime (UNODC) estimates that between 2-5% of the global Gross Domestic Product (GDP) is laundered each year, which amounts to somewhere in the region of €715 billion–€1.87 trillion each year.<sup>50</sup> Such a figure remains deliberately conservative, as indeed some estimates into the proceeds of various branches of the Italian mafia (probably the subject of the most detailed criminological research in Europe) place these somewhere between €8.5 and €13 billion.<sup>51</sup> As an indicator of scale, one money launderer apprehended in Spain in September 2022 was accused of laundering over €200 million per year on behalf of organised criminal groups.<sup>52</sup>

The fact that this profit moves largely unnoticed can partly be explained by the sheer volume of financial transactions within which illicit financial flows are concealed. For example, European Central Bank statistics place the number of credit transfers within the eurozone at around €25 billion annually, with a total value of around €185 trillion. Card transactions in Europe, meanwhile, can be placed somewhere around €57 billion.<sup>53</sup>

Together, the assets held by the world's top ten banks amount to close to \$30 trillion, larger than the GDP of the United States and double the GDP of China. The Hongkong and Shanghai Banking Corporation (HSBC), as only one example of a bank with global reach, has close to 40 million customers banking across branches located in 66 countries. At the same time, 2022 World Bank estimates on migrant remittance flows to low and middle-income countries place these around \$630 billion.<sup>54</sup> The scale and size of transfers through unregulated informal value transfer systems, which constitute the dominant form of banking in a number of countries around the world, is poorly documented but likely amounts to at least hundreds of billions of dollars a year.<sup>55</sup>

Clearly, these flows and volumes simplify the task of moving criminal proceeds, whilst complicating attempts at identifying suspicious transactions amongst billions of others, particularly as these increasingly involve digital transfers simultaneously conducted at an unprecedented scale across multiple jurisdictions. Even then, organised crime networks have become adept at adopting additional systems, processes and structures aimed at both further concealing their gains and maintaining healthy balance sheets.

50 Europol, *Money Laundering*, 2022.

51 Francesco Calderoni, *Mythical numbers and the proceeds of organized crime: Estimating the mafia proceeds in Italy*, *Global Crime* 15, no. 1–2, 2014, pp138–63.

52 Europol, *One of Europe's biggest money launderers arrested in Spain*, September 2022.

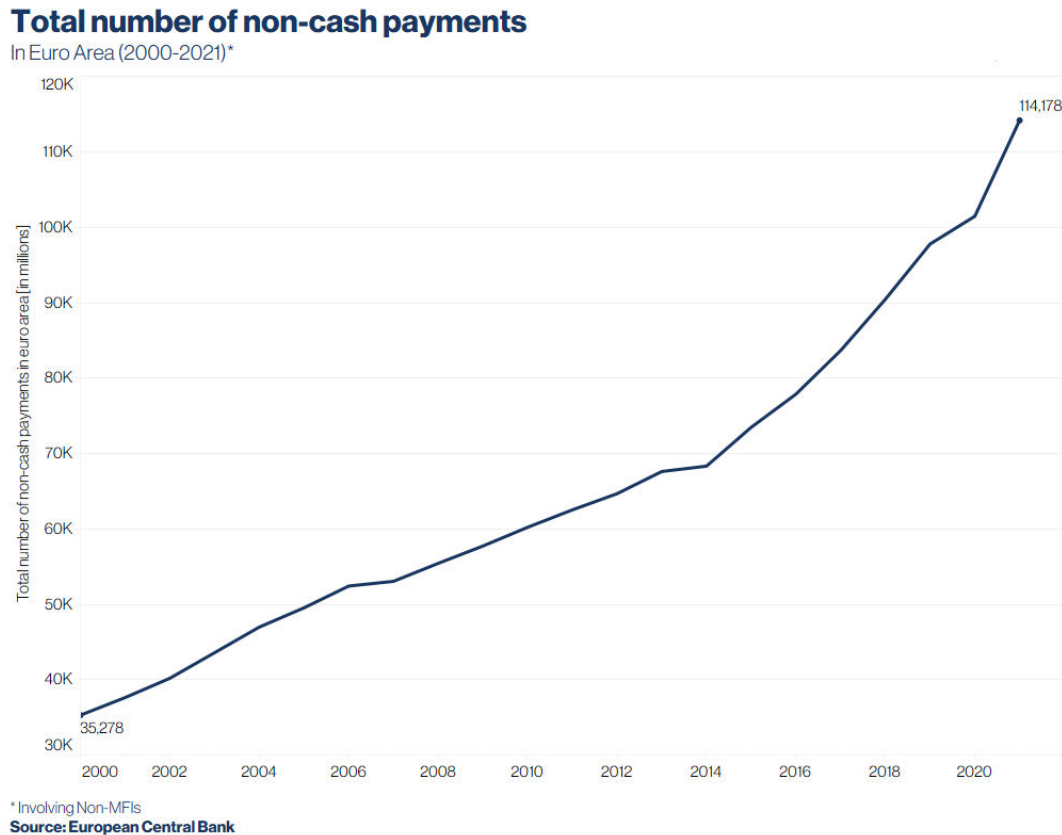
53 European Central Bank, *Payments statistics: 2021*, July 2022.

54 Rebecca Ong, *Remittances to Reach \$630 billion in 2022 with Record Flows into Ukraine*, World Bank, May 2022.

55 Anand Ajay Shah, *The International Regulation of Informal Value Transfer Systems*, *Utrecht Law Review* 3, no. 2, 2007, pp193-218.

Organized crime groups investing in renewable energy, including through EU funds, reflects the creative and longer-term logic guiding criminal spending.



**Figure 8. Total number of financial transactions worldwide**

## 4.1. Patterns in criminal finances

The process of money laundering – or concealing the source of illicit profits and reinvesting proceeds in a way that yields ‘clean’ returns – has formed the bedrock of the criminal toolkit for generations.<sup>56</sup> It is therefore unsurprising that many of the traditional methods and preferred systems for laundering funds are still used today. Cash flow rich businesses such as restaurants, beauty salons, shopping centres, casinos and hotels all remain favourite, tried and tested vehicles for converting criminal revenue into ‘bankable’ and justifiable profit. Examples of these trends range from Mafia controlled pizzerias, flower markets and ice cream parlours across western Europe, to hotels on the Albanian and Moroccan coast, to criminal owned restaurants on the Spanish Costa del Sol.<sup>57</sup>

Always quick to diversify their revenue streams, criminal syndicates around the world have also invested heavily in the real estate and construction sector over the previous three decades, sometimes aided by strategic shocks and political opportunities. Illustratively, a

<sup>56</sup> The traditional, three-step conceptual model of money laundering consists of the *placement* of illicit proceeds into the financial system (such as by paying small or separate sums into account); the *layering* of those proceeds, by way of moving them around the financial system to conceal their origin; and an *integration* stage in which money is made to look legitimate and where it can be withdrawn or reinvested in assets. See for example Yazid Mohd Bin Zul Kepli, and Nasir Maruf Adeniyi, *Money Laundering: Analysis on the Placement Methods*, in *International Journal of Business, Economics and Law* 11, no. 5, 2016, pp32-40.

<sup>57</sup> Nacho Carretero, and Arturo Lezczano, *A united nations of crime: How Marbella became a magnet for gangsters*, *The Guardian*, May 2021.

Organised crime groups use illicit capital to gradually infiltrate the licit economy and social fabric to secure and wield political power.

body of reporting highlights the ways in which different criminal organisations secured an economic foothold in East Germany during the period of privatisation that followed the end of the Cold War.<sup>58</sup> Other investments are more strategic in nature – including acquiring stakes into transport infrastructure of benefit to business operations as has been the case to varying degrees with the seaports of Bar in Montenegro and Gioia Tauro in Italy.<sup>59</sup> Furthermore, interest in renewable energy sector projects such as wind farms, including through securing EU funds and grants, reflects the creative and longer-term logic guiding criminal spending.<sup>60</sup> Other more niche investments accumulated by organised criminals over the years have ranged from film production companies, diamonds and mining concessions to art and vintage wine collections, football clubs and even universities.<sup>61</sup>

As alluded to earlier, the strategic logic of acquiring commercial holdings, business fronts and diversified investment portfolios is not simply limited to the concealment and generation of profit. For example, analysis of the Italian Mafia's four principal branches – the 'Ndrangheta, Camorra, Cosa Nostra and Sacra Corona Unita – reveals a pattern in which illicit capital is used as a means of gradually infiltrating the licit economy and social fabric to secure and wield political power. This approach, typically, involves the acquisition of local businesses and enterprises, sometimes through coercive means, and then undercutting and/or pricing out competitors, gradually taking over – or commercially 'colonising' – specific geographic areas, an approach made possible by the fact that such organisations are able to operate at a loss.<sup>62</sup> Similar examples of power consolidation can be observed in the Western Balkans, particularly in Serbia, Albania and Montenegro.

## 4.2. Illicit financial flows and the shadow economy

Despite these enduring trends, one of the most noticeable patterns, which appears to have accelerated in the 21<sup>st</sup> century, is the growth of a shadow (or parallel) global illicit economy, albeit one that often intersects with and exploits the formal regulated system. Here, criminal financial structures are erected using complex financial and corporate structures and trusts to conceal the true (beneficial) ownership of funds behind a veneer of legal commercial activity. Service providers in offshore centres such as the British Virgin Islands offer ready-made solutions including pre-registered companies and the bespoke drafting of company legal documents as well as bank account management services. Offshore jurisdictions of the likes of the British Virgin Islands, Cayman Islands, Barbados and the Seychelles tend to benefit from corporate secrecy laws and remain vulnerable to money laundering as indeed, their economies are not, on the whole, diversified beyond tourism and financial services.<sup>63</sup>

58 Guy Dinmore, *Mafia rushed through gap in Berlin Wall*, Financial Times, November 2009.

59 Zdravko Ljubas, *Montenegro Seizes Illegal Cigarettes Worth US\$3 Million*, Organised Crime and Corruption Project, September 2022.

60 Guy Dinmore, *Mafia rushed through gap in Berlin Wall*, Financial Times, November 2009.

61 Different classes of assets also offer distinct advantages depending on the customs and tax tariffs these are subjected to, whilst potentially providing an effective means of transferring value. Illustratively, Edmar Cid Ferreira, a Brazilian financier who converted embezzled funds into *Hannibal*, a painting by American artist Jean-Michel Basquiat. Whilst the painting had been valued by the art world at around \$8 million, Ferreira travelled through New York's Kennedy Airport in 2007 with shipping documents valuing the piece at a mere \$100. See Edward Ellis, *The Art of Money Laundering: How to Fight the Perfect Crime*, AML RightSource, December 2018.

62 See for example Mario Portnove et al., *Mafia and Organized Crime in Europe*, Il Fatto Quotidiano, n.d.

63 Think Tank European Parliament, *Offshore Activities and Money Laundering: Recent Findings and Challenges*, March 2017.

Moreover, investigations into criminal syndicates around the world have shed light on the role of informal value transfer systems including *casas da cambio*, *bureaux de change* and so-called 'Chinese banking' solutions. Whilst these vehicles are used by migrant and diaspora communities worldwide for the purposes of remittances and may even, depending on the country, constitute the dominant form of banking, they have also repeatedly been exploited by criminal actors wishing to remain below the regulatory radar.

One of the most widespread forms of this type of service is the *hawala* banking model, a trust-based system used across large parts of Asia and the Middle East, albeit with global reach. The *hawala* system, which in its earliest form can be traced back to 8th Century Southern Asia, involves the transfer of funds without the physical movement of money. This is achieved through a process of 'book balancing' in which unique receipts and payment references (which, today, may consist of a simple text message) are captured in ledgers containing meticulous notes on both credit and debit balances. *Hawaladar* bankers, in turn, typically operate in an internationally networked manner.<sup>64</sup> As with other remittance systems, *Hawala* is used extensively for the purposes of remittance and offers an expedient transfer solution, particularly in countries where access to formal banks is limited. The commissions levied on international payments effected through these services also tend to be lower.<sup>65</sup> So-called (illicit) 'black *hawala*' activities, in turn, are particularly hard to detect because of the informal nature of the system.<sup>66</sup>

### **A *hawala* case study – the Khanani Money Laundering Organisation (KMLO)**

In recent years, several high-profile cases involving clandestine non-state actors and *hawala* banks have emerged. For example, Altaf Khanani, the head of what became known as the Khanani Money Laundering Organisation (KMLO) which, in turn, controlled the United Arab Emirates-based Al Zarooni Exchange (essentially a mass-volume *hawala* bank) used such structures on an industrial scale to move hundreds of millions of dollars on behalf of drug trafficking and other clandestine organisations, including the Dawood Ibrahim organisation, Lashkar-e-Tayyiba, al Qaeda, Jaish-e-Mohammed and even Australian biker gangs.<sup>67</sup> His business partner, Atif Aziz Polani, was also designated under international sanctions. Illicit proceeds handled by the network were linked to remittance to and from the UAE, Pakistan, United States, Canada, United Kingdom and Australia amongst other countries, with various actors using the Al Zarooni Exchange in combination with general trading companies to mask the provenance of funds. Khanani's own commission for services rendered stood at around 3% of the total value of the laundered funds.<sup>68</sup> His son's holdings, which included over twenty Dubai-based properties worth around \$12 million, further demonstrated the lucrative nature of the organisation's business dealings.<sup>69</sup>

64 Julia Kagan, and Somer Anderson, *What Is Hawala? Money Transfer Without Money Movement*, July 2019.

65 See for example D.K., *How hawala money-transfer schemes are changing*, The Economist, October 2015.

66 Two *hawaladars* located in separate countries may conduct business with one another from the comfort of a small back office with little more than their ledgers and a mobile phone. Whilst these ledgers do offer a robust mechanism of tracking payments, customer details may consist of shorthand or coded entries rather than names, confusing the paper trail for anyone else than the *hawaladars* themselves. See Patrick Jost, and Harjit Singh Sandhu, *The Hawala Alternative Remittance System and its Role in Money Laundering*, Europol, 2013, pp12-13.

67 United States Department of the Treasury, *Treasury Sanctions the Khanani Money Laundering Organization*, November 2015. For the Australian biker gang connection see Linton Besser, *Money exchange with links to Dubai Government identified as hub for billion-dollar laundering empire*, ABC News, February 5, 2018.

68 Financial Action Task Force (FATF), *Professional Money Laundering*, 2018, p14.

69 Karina Shedrofsky, *Remittances and Trade-Based Money Laundering*, OCCRP, June 12, 2018.

High profile cases involving the use of informal value transfer systems, including *hawala*, reintroduce the themes of geographic hotspots, in this case the strategic role of the UAE – and Dubai in particular – as a pivotal money laundering hub within the international system. Whilst offshore jurisdictions offer a platform for shell company formation, the UAE offers distinct advantages as an interface between eastern (including *hawala*) and western banking models. Here, both licit and illicit enterprises benefit from favourable trading conditions as well as global transport links. Dubai offers a convenient venue for partners operating across the Indian Ocean as well as a centre point for associates located in Asia and Europe wishing to conduct (illicit) business. The plethora of venues, including high-end hotels and restaurants, also provides an excellent cover for such encounters.<sup>70</sup>

Established financial institutions are also exploited by criminal actors operating within the shadow economy, often as part of hybrid laundering systems that involve a range of vehicles and structures. In 2012 for example, HSBC was fined \$1.9 Billion after US Government investigations revealed links to Mexican drug cartels, North Korea and Iran – the subjects of financial sanctions – as well as the laundering of an estimated \$5.6 billion over the course of seven years.<sup>71</sup> This followed a similar investigation that uncovered the ways in which Wachovia Bank (later folded into the Wells Fargo group) had offered a range of services to Mexican cartels, including a ‘bulk cash’ courier service and the purchase of light aircraft.<sup>72</sup> More recently, the cases of Standard Chartered, who, in 2018, was found in breach of anti-terrorism funding regulations, and of Deutsche Bank and Danske Bank – both of whom were accused of being involved in a complex scheme involving the laundering of \$20.8 billion of Russian oligarch money – highlight the extent to which financial conduits may act as nexus points with other state and non-state transnational threats.<sup>73</sup>

The dynamics of networked money transfer systems, offshore centres, the exploitation of mainstream banks and specialist *hawala* bankers shines a light on the extent to which the laundering and transfer of illicit funds ultimately relies on complicit specialists and professional money launderers. The latter term, coined by the Financial Action Task Force (FATF), accounts for a range of financial experts and service providers whose main role consists of “disguising the nature, source, ownership, control and destinations of funds to avoid detection.”<sup>74</sup> Such individuals – who are also at times referred to simply as money laundering ‘enablers’ – operate either independently or as part of a network of contacts or associates across different countries and sectors. Professionals include accountants, tax advisers, notaries, lawyers (including contract experts and conveyancers), insolvency specialists, judges, business consultants, bankers (including insiders) and wealth managers, to name a few. Such specialists, as the case of the British Virgin Islands reveals, operate a variety of business models, ranging from ‘full service’ schemes involving an entire money laundering infrastructure, to more ‘menu’ type services tailored to individual client needs.<sup>75</sup>

70 The Emirate has been favoured by both clandestine groups and corrupt political elites over the decades. For example, a scandal involving Kabul Bank, Afghanistan’s largest private lender with links to the then-ruling Karzai family, exposed the way in which its chairman, Sher Khan Farnood chose Dubai as the location in which to invest the bank’s money (for his own personal gain of course). See Robin Wigglesworth, *Afghan elite enjoys high life in Dubai*, Financial Times, September 2010.

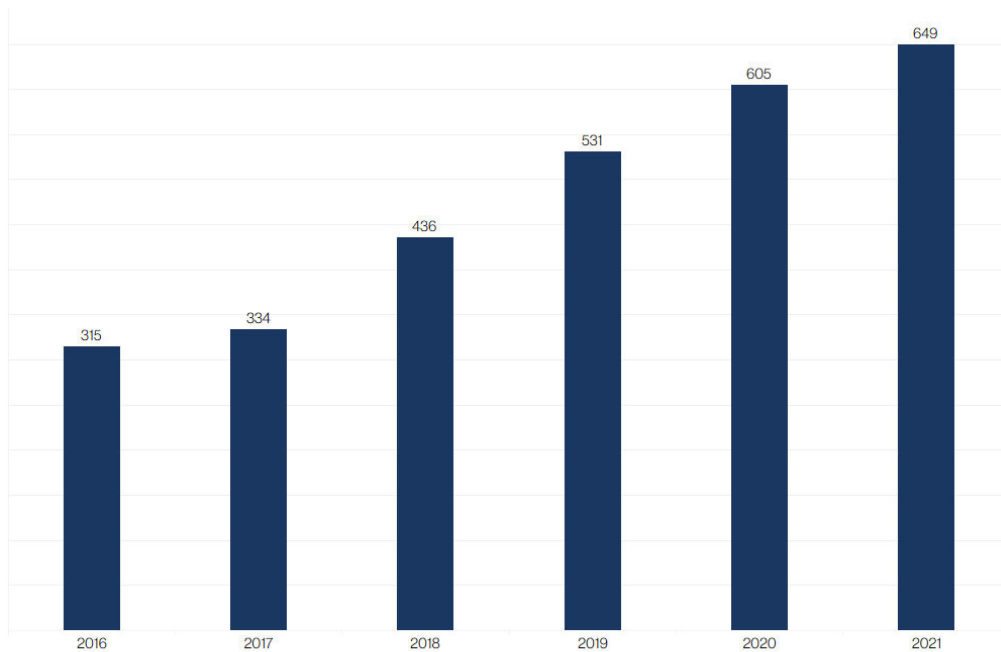
71 Holly Whitehead, *Top 5 Money Laundering Cases of the Last 30 Years*, International Compliance Association, July 2016.

72 United States Department of Justice, *Wachovia Bank Factual Statement (Exhibit A)*, 2012.

73 Helen Burggraf, *Singapore fines StanChartered entities for money-laundering breaches*, International Investment, March 19, 2018.

74 Financial Action Task Force (FATF), *Professional Money Laundering*, 2018, p16.

75 Financial Action Task Force (FATF), *Professional Money Laundering*, 2018, p7.

**Figure 9. Increase in registered money laundering cases at Eurojust (2016-2021)\***

\* The number of money laundering cases registered at Eurojust has steadily increased since 2016, representing 12–14 % of all registered cases.

Source: Eurojust

The specific activities conducted by these individuals are wide-ranging. As well as providing generic financial advice, they can assist with registering and structuring (trust) companies and legal entities, acquiring credit cards and false documents, moving and placing cash deposits, setting up a variety of different accounts, obtaining financing, purchasing and holding assets, record keeping and initiating court procedures.<sup>76</sup> Professional launderers also play an important role in setting up credible corporate fronts that can pass as legitimate business. This typically requires significant paperwork – balance sheets, tax returns, account summaries, bank statements, customer invoices, inventory lists – as the basis for financial and administrative audit trails. Indeed, the sophistication and geographical spread of the various components involved in each step of the money laundering process has increased over the years, complicating both financial investigations and regulatory efforts.<sup>77</sup>

### 4.3. Cryptocurrencies and the digital marketplace

As we will see later in this report, clandestine organisations operating across borders also increasingly leverage innovative as well as technology-enabled methods for transferring and laundering funds. Cryptocurrencies in particular offer a mechanism through which to

<sup>76</sup> Financial Action Task Force (FATF), *Professional Money Laundering*, 2018, p15.

<sup>77</sup> This trend was further reviews in the wake of the so-called the 2015 Panama Papers – an umbrella term for a huge data leak from the law firm Mossack Fonseca.

circumvent many of the regulatory barriers associated with more traditional currencies and central banks. Blockchain technology offers both zero transaction cost and is essentially akin to a digital version of the *hawala* ledgers, albeit shaped to the 21<sup>st</sup> century technological architecture.<sup>78</sup>

The use of Bitcoin in criminal business became somewhat of a cause célèbre when news emerged of the existence of Silk Road, an ‘eBay for drugs’ and other contraband accessed via the dark web.<sup>79</sup> Here, users could simply browse goods by category or photos (in a similar way to eBay and Amazon) before making a payment via their cryptocurrency wallets and being sent their purchased goods via conventional postal services.<sup>80</sup> Whilst there is some debate as to the extent to which cryptocurrencies can replace cash (which remain the preferred modality within the criminal underworld), the Australian Transactions and Analysis Centre recently argued that these had become “a standard part of the money-laundering toolkit” that had been harnessed by both OCGs worldwide and Russian paramilitary groups soliciting donations to fund their operations in Ukraine.<sup>81</sup>

More conventional social media and online platforms also provide vehicles for a wide range of illicit financial schemes. For example, 2018 research revealed that many popular services such as Uber and Airbnb were used to move illicit funds. Similarly, trading and online market websites such as Amazon and eBay have been heavily exploited for the purposes of selling counterfeit goods, with criminal proceeds generated through the exploitation of these services estimated at \$1.5 trillion.<sup>82</sup> Online casinos and gambling platforms offer variations on established money laundering techniques – a vehicle through which money can be hidden within the fog of wider transactions.<sup>83</sup> Furthermore, Jean-Loup Richet, a researcher at Harvard University, points to the phenomenon of micro-laundering within the context of multi-player online games such as World of Warcraft and Second Life.<sup>84</sup>

While cryptocurrencies allow for the circumvention of regulatory barriers, cash remains the preferred modality of the criminal underworld.

78 Goldman Sachs, *Blockchain: The New Technology of Trust*, n.d.

79 Customer identities were further concealed using a ‘tumbler’ process in which payments were made via a series of dummy transactions. See Marie-Helen Maras, *Inside Darknet: The Takedown of Silkroad*, Criminal Justice Matters, 2014, pp22-3.

80 Certainly, the profit-making opportunities and lure of Silk Road appealed to many: a US Secret Service Agent involved in the law enforcement operation against the website was himself accused of the theft of hundreds of thousands of dollars-worth of Bitcoins during the investigation. See Stan Higgins, *US Prosecutors Believe Ex-Secret Service Agent Stole More Bitcoin from Silk Road*, CoinDesk, February 2016.

81 Henry Belot, *Cryptocurrency becomes mainstream option for money laundering and funding of terrorism, Austrac says*, The Guardian, December 2022.

82 Anthony Cuthbertson, *Cyber criminals earn \$1.5 trillion through Amazon, Facebook and Instagram exploitation*, The Independent, April 2018.

83 One such approach consists of depositing a large amount of funds into an online betting account, placing a few symbolic bets for the purposes of appearance, and then emptying the entire account. Alternatively, a group of accomplices seeking to move criminal or even terrorist funds from different geographical regions may arrange to play an online poker game, deliberately losing to the player whom they wish to transfer the money to. See Brooke Keaton, *How Money Laundering Really Works & Why It's A Problem In The Gambling Industry*, casino.org, November 2021.

84 Here, criminals first purchase credit (known as ‘gold’) through prepaid cards loaded with illicit proceeds before establishing dedicated online retail services through which they sell the credit to other gamers, thus ‘cleaning’ the original funds. See United Nations Office on Drugs and Crime (UNODC), *Laundering Money Online: a review of cybercriminals’ methods*, June 2013, pp11-4.

## 4.4. Implications for organised crime business models

Overall, the analysis of evolving trends in the laundering of criminal capital highlights the extent to which criminal transactions combine traditional as well as informal methods with new platforms and solutions for the purpose of transferring their illicit gains. These various mechanisms, which often intersect with the formal financial sector, aggregate to what amounts to a global scale, shadow (or parallel) economic system. Moreover, in a similar vein to specialist transporters and logisticians, it is likely that money laundering experts have been able to establish their own networks, catering for a wide variety of clients within the global shadow economy. This once again points to a general devolution of criminal networks towards a horizontal and distributed model involving different transactional relationships. In addition, the role of key geographic hotspots and strategic nodes again emerges from the analysis, as demonstrated by the cases of offshore jurisdictions and convergence centres such as Dubai. However, as this chapter has demonstrated, the task of identifying even sizable illicit transactions within the ocean of wider global financial flows remains one of the most significant challenges facing law enforcement agencies and regulators.

Identifying even sizable illicit transactions within the ocean of global financial flows remains one of law enforcement's most significant challenges.

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# 5. Technology

The previous examples of crypto-currencies and online marketplaces introduce the theme of technology, which today permeates all aspects of human life and is at the centre of the political, health, economic and regulatory debate. It was once the case that most cutting-edge innovations, including the internet, were catalysed by the military. Today, it is private and commercial innovation that sets the standard.<sup>85</sup> The pace and impact of technology is only likely to increase further, transforming and improving human experiences and commerce around the world. Spin-off technologies will be available for rapid adoption by businesses, lowering production and distribution costs as well as barriers to entry for new entrants. Inevitably, its impact is also reflected on the evolving character of organised crime around the world, with criminal groups benefiting from access to advanced 'off the shelf' solutions to support and conceal their activities.<sup>86</sup> In turn, analysis of existing sources points to more granular themes that warrant further elaboration.

## 5.1. Hyperconnectivity increasing the scale and reach of organised crime

Global connectivity, also called 'hyperconnectivity', has had a deep impact on the conduct of political, social and commercial affairs.<sup>87</sup> The number of websites and digital media users connected via broadband, fibre or mobile has grown exponentially since the public introduction of the Internet in the early 1990s.

With the spread of the Internet of Things, devices, networks and services are increasingly interdependent, operating on sophisticated and shared network infrastructure.<sup>88</sup> Together, these developments have reduced the significance of physical distance and offered a more direct pathway between supply and demand signals as well as a means of identifying lower cost labour markets. They have also increased both the scalability and diversity of commercial operations, whilst offering access to larger target groups, markets and niche services.<sup>89</sup>

85 William J. Lynn III, *The End of the Military-Industrial Complex: How the Pentagon Is Adapting to Globalization*, in *Foreign Policy*, 2014, pp104-10.

86 NATO, *Regional Perspectives Report on the Indo-Pacific: Strategic Foresight Analysis*, 2022, p40.

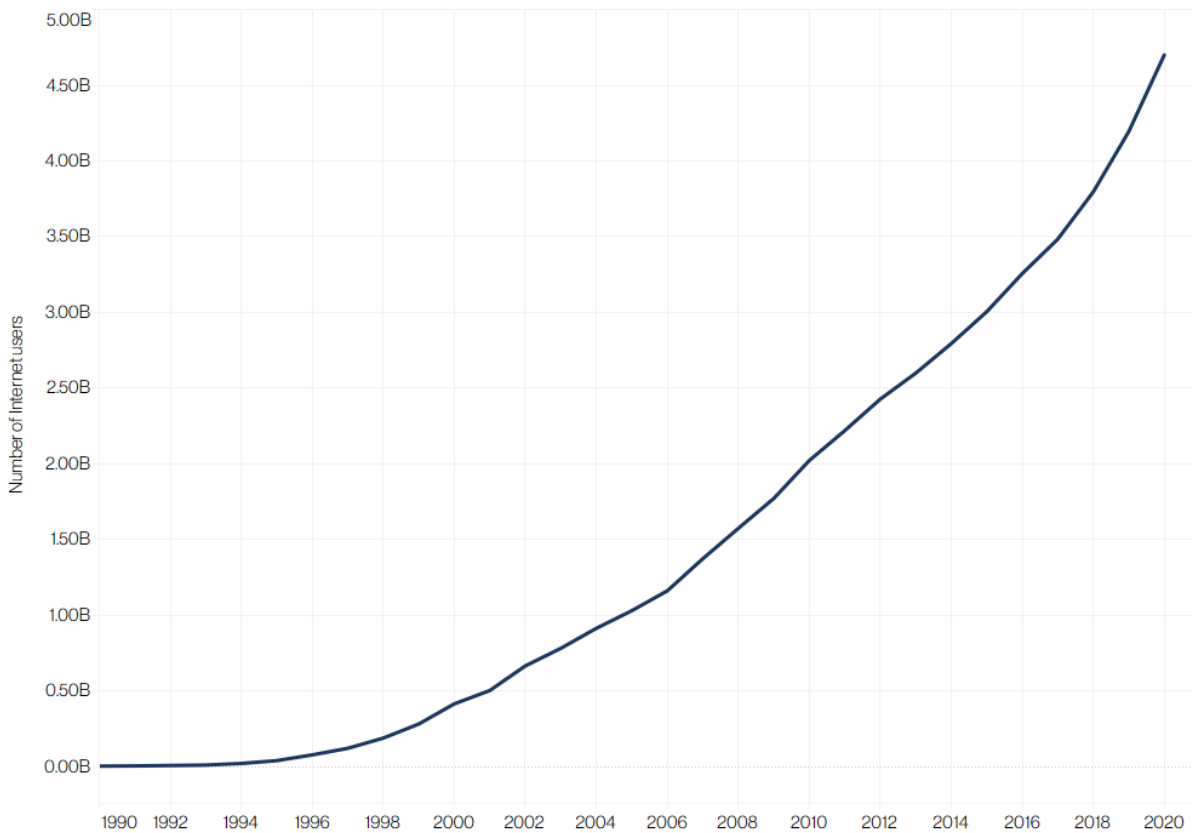
87 World Economic Forum (WEF), and University of Oxford, *Cybersecurity, Emerging Technology and Systemic Risk: Insight Report November 2020*, November 2020, 18-25.

88 Europol, *Do Criminals Dream of Electric Sheep? How Technology Shapes the Future of Crime and Law Enforcement*, 2019, p18.

89 Organisation for Economic Co-operation and Development (OECD), and European Union Intellectual Property Office (EUIPO), *Global Trade in Fakes: A Worrying Threat*, 2021.



**Figure 10. Exponential growth in total number of digital media users**  
(Source: Our World in Data, 2020)



Source: Our World in Data

As much as legitimate commerce has become digital, connected and global, so have criminal markets, including existing ones such as the illicit drug trade, and newer ones such as 'online crime-as-a-service' (CaaS) models. As already alluded to earlier in this report, connectivity has also introduced new distribution modes and low-cost opportunities to enter foreign markets, enabling OCGs to broaden and diversify the range of illicit goods and services sold online as well as distribute these to customers located around the world via digitally tracked postal and express freight services. In this respect, the internet has further increased the cross-border reach of organised crime.<sup>90</sup>

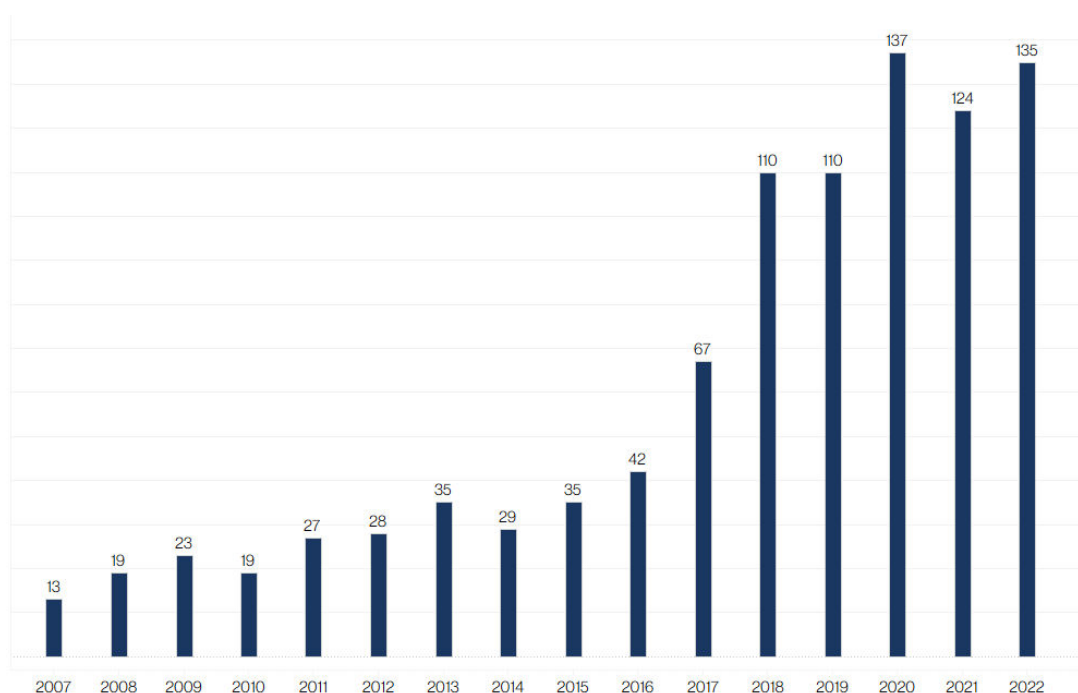
<sup>90</sup> United Nations Office on Drugs and Crime (UNODC), *Transnational Organized Crime in Southeast Asia: Evolution, Growth and Impact*, 2019, p6; Organisation for Economic Co-operation and Development (OECD), and European Union Intellectual Property Office (EUIPO), *Global Trade in Fakes: A Worrying Threat*, 2021, p61; Europol, *Internet Organised Crime Threat Assessment (IOCTA)*, 2021, p23; p61; National Intelligence Council (NIC), *Global Trends 2040: A More Contested World*, 2021, p50.

## 5.2. (Big) data as an enabler for organised crime, corruption, coercion and extortion

The so-called ‘datafication’ of society – or the collection and (cloud) storage of vast sets of data-points relating to human and/or machine activity and the interaction between them for analytical and commercial purposes – has also offered criminal opportunities, including the theft of personal information and identities (not least for the purpose of committing further crimes).<sup>91</sup>

Databases with confidential personal and commercial information are a goldmine for the purposes of corruption, coercion, extortion and criminal market research.<sup>92 93</sup> As such, these have also become a central feature of cyber-dependent crime, defined by EUROPOL as “any crime that can only be committed using computers, computer networks or other forms of information communication technology (ICT).” It includes such activity as the creation and spread of malware, hacking to steal sensitive personal or industrial data and denial-of-service (DoS) attacks aimed at causing financial and/or reputational damage.<sup>94</sup> Although the full scale of this activity is hard to estimate, available data suggests that there were in excess of 15 million victims of identity theft in 2021 in the US alone.<sup>95</sup>

Figure 11. Significant cyber incidents worldwide (2006-2022)\*



\* Significant cyber incidents are considered to be cyber attacks on government agencies, defense and high tech companies, or economic crimes with losses of more than a million dollars.

Source: CSIS

91 Ulises A. Meijas, and Nick Couldry, *Datafication*, Internet Policy Review, 2019.

92 National Intelligence Council (NIC), *Global Trends 2040: A More Contested World*, 2021.

93 CrowdStrike, *2022 Global Threat Report*, 2022, p12.

94 Europol, *Internet Organised Crime Threat Assessment (IOCTA)*, 2017.

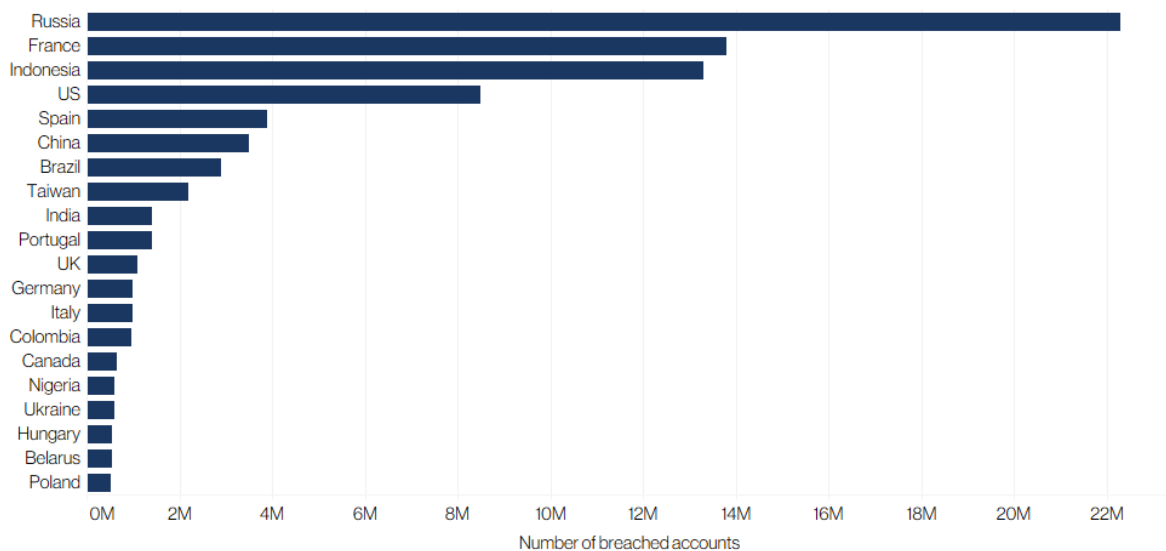
95 Jacob Roach, *Identity Theft Statistics, Facts and Trends You Need to Know in 2023*, Cloudwards, November 24, 2021.

Despite these trends, there is currently little evidence that criminal organisations are using big data analytics and aggregated datasets themselves (such as combining stolen datasets) to identify new and/or vulnerable targets, although this cannot be discounted in the future.

### 5.3. Conflicts, shocks and competition as testing grounds for (criminal) technology

The Russia-Ukraine war has demonstrated a continued propensity for the of established criminal activities by state actors, such as in the form of Russian-backed phishing attacks against email addresses of European and US-based businesses as well as attacks against critical infrastructure, some of which have been outsourced to proxy criminal actors.<sup>96</sup> This follows an uptick in cybercrime during the COVID-19 pandemic, despite improvements in the security of ICT.<sup>97</sup> Moreover, disinformation campaigns conducted by one state to interfere in another's politics and society are becoming increasingly common, as was experienced in the 2016 and 2022 US presidential elections, including through the employment of criminal networks, such as within the context of the European Parliamentary elections of 2019.<sup>98</sup> Amongst advantages, OCGs with global technological reach provide states with a method of concealment and non-attribution (a theme that will be examined in more detail later in this report), with serious implications for international relations and political stability.<sup>99</sup>

Figure 12. Most breached countries in the third quarter of 2022\*



Source: Surfshark, Global data breach stats

<sup>96</sup> Europol, *Pandemic Profiteering: How Criminals Exploit the COVID-19 Crisis*, December 2021, pp4-5.

<sup>97</sup> Europol, *Internet Organised Crime Threat Assessment (IOCTA)*, 2021, p8.

<sup>98</sup> See for reporting on this: Mark Scott, and Laurens Cerulus, *Russian groups targeted EU election with fake news*, says European Commission, Politico, June 2019.

<sup>99</sup> See CrowdStrike, *2022 Global Threat Report*, 2022, p5.

## 5.4. Social media as organised crime recruitment and advertising ecosystems

In a trend that builds on earlier analysis, online as well as digital networking platforms – and social media in particular – have enabled social and economic interactions between multiple, distinct sets of users. Since its inception in 1996, social media has now reached more than half of the people in the world. Social network platforms almost tripled their total user-base in the last decade, from 970 million in 2010 to over 4.48 billion in July 2021. Out of these users, 99% access websites or apps through a mobile device, with only 1.32% accessing platforms exclusively via desktop computers. The average social media user engages with an average of 6.6 different platforms, whilst the average time a person spends on social media a day around the world is 2 hours 24 minutes.<sup>100</sup>

OCGs harness social media in various ways. Firstly, they exploit various platforms for the purposes of target selection (e.g., focusing on vulnerable or wealthy persons) and market research (e.g., collecting background and economic information).<sup>101</sup> Secondly, social media platforms provide opportunities for organised crime to recruit new members, advertise services and communicate amongst each other. Key functions of the trafficking of human beings, such as recruiting victims and advertising smuggling services, have moved almost entirely to the online domain.<sup>102</sup> In 2019, a Facebook employee disclosed the findings of an internal investigation into a cross-border human trafficking operation that utilised Facebook to sell and sexually exploit at least 20 potential victims. The network, which utilised over 100 fake Facebook and Instagram accounts, recruited female victims from different nationalities and employed the company's Messenger and WhatsApp services to arrange their transportation to Dubai.<sup>103</sup>

OCGs advertise services on the social media feeds of people living in specific, targeted geographical areas – a trend that is most (but not solely) observable in Sub-Saharan Africa and Asia.<sup>104</sup> For example, by using sophisticated algorithms and data analysis, human traffickers and migrant smugglers can identify individuals who are likely to be interested in migration services and overseas (illicit) work opportunities and target them with relevant ads or posts. Additional services such as different transportation packages (small boats, cargo ship, air travel) as well as forged documentation, arranged marriages and formulas that promise study or work permits are also advertised and accessible through these platforms.<sup>105</sup> Further reporting indicates that some migrant smuggling networks in Europe have developed their own mobile apps to provide clients with the latest information related to travel and weather conditions, law enforcement checks and other news related to smuggling journeys.<sup>106</sup>

100 See Brian Dean, *How Many People Use Social Media in 2022?*, Backlinko, October 2021.

101 Eamonn Noonan, and Diana Ecaterina Borcea, *Organised Crime in Europe: Emerging Trends and Policy Challenges*, March 2022, p1.

102 Europol, *Serious and Organised Crime Threat Assessment (SOCTA)*, 2021, p13.

103 Clare Duffy, *Facebook, Instagram almost banned from App Store in 2019 over human trafficking content*, CNN Business, October 25, 2021.

104 Council of Europe, *Online and technology-facilitated trafficking in human beings*, 2022.

105 United Nations Office on Drugs and Crime (UNODC), *Migrant Smuggling in Asia and the Pacific: Current Trends and Challenges*, 2018.

106 Europol, *European Migrant Smuggling Centre 6th Annual Report*, 2022.

Like licit enterprises, organised crime groups use sophisticated algorithms and data analysis to enhance production processes, optimise supply chains, and automate content distribution.

Meanwhile, the drugs market (including both narcotics and pharmaceuticals) still constitutes the largest criminal market on the Dark Web, making up approximately two-thirds of all illicit transactions.<sup>107</sup> Moreover, both the Dark Web and (open) 'Surface Web' provide forums and resources for sharing and/or accessing expertise, best practices and technological advancements (see below example of deep fakes).<sup>108</sup> Encrypted communications provide further opportunities for criminal coordination, as seen in the cases of the Encrochat and Sky ECC secure mobile devices.<sup>109</sup>

## 5.5. OCGs' use of emerging technologies

Recent years have witnessed significant public and private investment into programmes focusing on micro and nano electronics, nanotechnology, industrial biotechnology, advanced materials, photonics and advanced manufacturing technologies. Furthermore, the US and China have funded the development of Quantum Computing and Artificial Intelligence (AI).<sup>110</sup> Unsurprisingly, criminals have started to adopt such technologies to perform small and large-scale cyber-attacks, including via autonomous offensive malware, ransomware and spyware capabilities.<sup>111</sup>

OCGs have harnessed AI to conduct targeted, personalised phishing operations on a much larger scale, whilst deepfake technology has enabled the circumvention or 'tricking' of security measures,<sup>112</sup> including for the purposes of perpetrating extortion and fraud, falsifying online identities, manipulating electronic evidence and disrupting financial markets.<sup>113</sup> One illustrative example demonstrating the application of such technology is that of criminals using deepfake audio to impersonate the CEO of a company instructing employees to transfer \$35 million.<sup>114</sup>

In a similar vein to its application in the legitimate (licit) domain, AI has the potential to improve and even transform the business operations of OCGs, including with respect to drug production, the optimisation of supply chains and the automation of malicious content distribution.<sup>115</sup> As a general-purpose technology, AI enables and supports other emerging technologies, such as immersive virtual environments, referred to as 'virtual worlds', and the 'metaverse' (see below). As the technology matures and becomes more widely accessible over the next few years, the malicious use of AI will almost certainly accelerate and increase in sophistication.

107 United Nations Office on Drugs and Crime (UNODC), *In Focus Trafficking over the Darknet: World Drug Report 2020*, 2020.

108 *Taking on the Dark Web: Law Enforcement Experts ID Investigative Needs*, National Institute of Justice, June 2020.

109 United Nations Office on Drugs and Crime (UNODC), *In Focus Trafficking over the Darknet: World Drug Report 2020*, 2020.

110 Paul Smith-Goodson, *Quantum USA Vs. Quantum China: The World's Most Important Technology Race*, Forbes, October 2019.

111 Europol, *Do Criminals Dream of Electric Sheep? How Technology Shapes the Future of Crime and Law Enforcement*, 2019.

112 Recorded Future, and Instinkt Group, *The Business of Fraud: Deep Fakes, Fraud's Next Frontier*, 2021, pp2-3.

113 Europol, *Facing Reality? Law Enforcement and the Challenge of Deepfakes*, 2022, p10.

114 Tony Ho Tran, *Bank Robbers Steal \$35 Million by Deepfaking Boss's Voice*, Futurism, October 2021.

115 Europol, *Do Criminals Dream of Electric Sheep? How Technology Shapes the Future of Crime and Law Enforcement*, 2019.

## Immersive environments: The Metaverse

Immersive environments combine the features of the physical and virtual world and provide realistic experiences relating to communication and experimentation. Amongst their potential benefits are supporting advancements in education, healthcare, manufacturing, banking, marketing and entertainment. Whilst such an integrated and complex version of an immersive environment has yet to be fully built, the technologies that will serve the building blocks of the Metaverse (virtual reality, augmented reality, blockchain technology, crypto currencies and non-fungible tokens) are already in place.<sup>116</sup> Investors worldwide are investing billions in the development of the technology, particularly in the wake of the COVID-19, which drove human activity further within the online realm.<sup>117</sup> Thus far, this investment has resulted in many (imperfect) manifestations that tend to focus on particular themes, like gaming or trading, as is the case with RobotEra and Meta's Horizon Worlds.<sup>118</sup>

Immersive environments promise to generate significant economic activity as marketplaces where people use virtual avatars to buy virtual real estate, services, clothing, or artwork that have real-world value. This raises issues pertaining to intellectual property rights, taxation as well as (for the purposes of this study) criminal activity, including through such activities as identity theft, money laundering, the targeting of digital assets and 'virtual physical and emotional abuse'.<sup>119</sup>

At the same time, quantum computers will demonstrate an advantage over classical computers in solving a range of computational and modelling problems and presenting new risks to conventional security measures, including to widely adopted asymmetric cryptography. Moreover, in a theme that is consistent with that of state actor uses of cyber-criminal groups as proxies, advanced data harvesting by criminal actors, the so-called 'harvest now, decrypt later' approach, could also be conducted on behalf of states in the future by using this technology.<sup>120</sup>

In the past twenty years, unprecedented technological progress has been made in the fields of molecular biology and genetics, which has enabled genome editing.<sup>121</sup> As biotechnical engineering is increasingly becoming a mainstream skill, more people can acquire DNA and data knowledge and other associated expertise online. This offers various opportunities for 'bio crime', defined as "the exploitation of vulnerabilities in biological tools, data/databases, devices, or techniques for criminal purposes."<sup>122</sup> The many illicit activities involved in this domain may also include experimentation with bioweapons, altering biometric data and trading DNA codes.

116 Shamani Joshi, *What Is the Metaverse? An Explanation for People Who Don't Get It*, Vice, March 2022.

117 Sam Shead, *Serious crime in the metaverse should be outlawed by the U.N., UAE minister says*, CNBC, May 2022.

118 Eric Ravenscraft, *What Is the Metaverse, Exactly?*, Wired, April 2022; Anna Maria Collard, *Crime in the metaverse is very real. But how do we police a world with no borders or bodies?*, World Economic Forum, August 2022.

119 Julie Green, and Marc van Weert, *A virtual tax haven? VAT and the metaverse*, Baker Tilly, n.d.; Europol, *Policing in the Metaverse: What law enforcement needs to know*, 2022.

120 Kevin Townsend, *Solving the Quantum Decryption "Harvest Now, Decrypt Later" Problem*, Security Week, February 2022.

121 Ronit Langer, *The Blessing and Curse of Biotechnology: A Primer on Biosafety and Biosecurity*, Carnegie Endowment for International Peace, November 2020.

122 Mariam Elgabry, Darren Nesbeth, and Shane D. Johnson, *A Systematic Review of the Criminogenic Potential of Synthetic Biology and Routes to Future Crime Prevention*, Frontiers in Bioengineering and Biotechnology, 2020, pp1-18.

Drone technology, also commonly referred to as Uncrewed Aerial Vehicles (UAVs), is increasingly being used by OCGs to further their criminal activities. The small size and remote-controlled nature of drones make them ideal tools for smuggling drugs, weapons and other illegal items across borders, as well as for conducting surveillance and reconnaissance activities.<sup>123</sup> In 2019, for example, Mexican drug cartel members used drones to drop drugs into a prison yard in the state of Sonora. In a separate incident, smugglers used drones to fly drugs across the U.S.-Mexico border. Similarly, the Italian police disrupted a criminal network that was using drones to smuggle cell phones into a high-security prison and prevented an inmate connected to the Neapolitan mafia from smuggling in a firearm by drone to shoot a fellow inmate. In a further variation on this theme, in 2022 the Spanish police seized underwater drones designed to carry drug consignments of up to 200 kilograms across the Strait of Gibraltar (see Figure 13).<sup>124</sup>

Applications of drone technology for the purposes of illicit activities is also likely to draw on lessons learned from the military domain, including in Ukraine. Accordingly, one example of a tactic that may be employed in the future is the use of lead, surveillance drones aided by advanced navigation technology clearing the route for follow-up 'carrier' drones, the latter of which may also be protected by weaponised escort drones (which have already been used by terrorist groups such as the Islamic State in Iraq and Syria).

**Figure 13. Submersible drones seized by the Spanish Police in July 2022**



<sup>123</sup> Natalie Klein, and Rob McLaughlin, *Narco-drones' are the newest form of drug trafficking. Our laws aren't yet ready to combat them*, The Conversation, July 2022.

<sup>124</sup> Sam Jones, *Spanish police seize underwater drones designed to carry drugs*, The Guardian, July 2022.

Finally, 3D- and 4D-printed materials represent a major advancement in the field of materials science and have the potential to revolutionise the design and manufacturing of products. For example, in architecture, 4D-printed materials could be used to create structures that respond to environmental changes, such as walls that can adjust their insulation properties in response to temperature changes. While 4D-technology is still in its early stages of testing and development, it is highly likely that some of its applications will be harnessed for the purpose of criminal enterprise.<sup>125</sup> For example, OCGs could employ it to produce counterfeit weapons and goods, currencies, identification documents and other materials aiding illicit operations.

## 5.6. Implications for the organised crime business model

Technology has created many new and additional opportunities for OCGs. Hyperconnectivity, including online and social media platforms, has allowed unprecedented (illicit) market access and penetration as well as the means to reach new customers and recruits. Readily available commercial solutions ranging from encrypted communications and Virtual Private Networks to navigation tools and drones also offer OCGs with the means of operating securely and in new ways across borders. Technology not only represents an enabler but also a 'packageable' and re-sellable product in its own right, as seen in the case of tech-enabled 'crime-as-a-service' solutions, which are offered on a global scale to both private persons and governments. In turn, this dual role of technology as both an enabler and product is likely to continue and, indeed, accelerate in the future as a result of further advancements and global connectivity, also allowing new criminal partnerships to be forged across the world.

Organised crime groups' dual use of technology as both an enabler and a product is likely to continue.

<sup>125</sup> Aamir Ahmed et al., *4D Printing: Fundamentals, Materials, Applications and Challenges*, Polymer 228, no. 123926, 2021.



## 6. Power and territory

The international political system has experienced significant change in the last four decades. The period of unipolarity and American hegemony that followed the end of the Cold War has gradually yielded to multipolarity, including through the rise of non-western powers such as China, India and Russia. At the same time, an increased emphasis on protectionism, sovereignty and national interests have made international collaboration harder, as seen through the example of Brexit. Non-state actors such as Facebook, Apple, Google and Amazon (and their Chinese equivalents) have become more prominent, albeit also under increasing scrutiny from state regulators. So-called hybrid and 'grey zone' tactics have re-emerged against this backdrop of increasing geo-strategic competition and contestation, including through the combined application of multiple, and usually deniable, state and non-state levers activities ranging from election tampering and the destabilisation of financial markets to the dissemination of fake news.<sup>126</sup>

Parallel to, and intersecting with, these same geo-strategic dynamics, OCGs around the world are also increasingly looking to flex their political and economic muscle and project power in their own ways. Indeed, a growing body of evidence highlights the extent to which the pursuit of power, including de facto control of territory, local economies, governance systems and political institutions underpins the logic of organised crime.<sup>127</sup> Financial profit alone does not fully explain the behaviours, motivations and dynamics driving the expansion and consolidation of criminal interests around the world. Rather, the relationship between power and money can be described as symbiotic, with the latter offering a key lever through which to secure and expand political and social control, carve out (micro) spheres of influence and erect parallel governance structures. Reciprocally of course, the consolidation of political and/or social power (to the extent that one can be separated from the other) is also conducive to greater profit, including by way of increased freedom of operation and/or by closing off vital ground to potential business competitors.

Understanding the choices, decisions and activities of large criminal syndicates through the lens of power helps to explain why and how these players interact with peers, engage in strategic alliances and promote their interests in both established and new markets. This outlook also sheds additional light on how competition for market share, power and territory can result in turf wars and spikes in violence, especially when new actors emerge on the scene and attempt to alter the criminal status quo. Conversely, a lack of violence may not necessarily account for an absence of organised crime in a particular context but instead reflect monopolistic control by one group or an 'elite deal' (or so-called 'Pax Mafiosa') between different major players.<sup>128</sup>

<sup>126</sup> See for example The Hague Centre for Strategic Studies (HCSS), *Grote Bewegingen, Grote Impact: Eerste verkennende studie naar belangrijke trends en maatschappelijke vraagstukken voor de politie*, 2017.

<sup>127</sup> See for example James H. Mittelman, and Robert Johnston, *The Globalization of Organized Crime, the Courtesan State, and the Corruption of Civil Society*, *Global Governance* 5, no. 1, 1999, pp103–26; Stathis Kalyvas, *How Civil Wars Help Explain Organized Crime – and How They Do Not*, *The Journal of Conflict Resolution*, 2015, pp1517-1540; H. Richard Friman, *Caught Up in the Madness? State Power and Transnational Organized Crime in the Work of Susan Strange*, *Alternatives: Global, Local, Political*, 2003, pp473–89; Gilles Favarel-Garrigues, *Competition and Confusion in the Discourse on Organized Crime in Russia*, *Alternatives: Global, Local, Political*, 2003, pp423–57.

<sup>128</sup> Emma Disley, Shann Hulme, and Emma Louise Blondes, *Mapping the Risk of Serious and Organised Crime Infiltrating Legitimate Businesses: Final Report*, 2021, p123.

As geostrategic dynamics continue to evolve, organised crime groups increasingly look for ways to flex their political and economic muscle and project power.

The strategic value of territorial control to OCGs is at least fourfold. Firstly, territory provides organisations with bases for planning and coordinating (illicit) business operations with a degree of impunity and protection, particularly where and when local institutions and security sectors have been co-opted or infiltrated. Secondly, it offers a mechanism for establishing strategic footholds in new markets and social habitats located further afield, including (as we have seen) urban areas, which, even in the developed world, can offer the combined advantages of localised governance vacuums and business-critical infrastructure such as international ports or airports. Thirdly, control of territory allows OCGs to extract resources and ‘rent’ from the local population as a sovereign state actor might do. Fourthly, this same control offers a means of influencing government policies and decisions, increasing net criminal power dividends. Clearly, the increased prominence of cyberspace and the digital realm as an operating domain (see chapter 5) implies that the very concept and definition of what constitutes territory and ‘vital ground’ may also have evolved.

## 6.1. Increasing opportunities for OCGs in (post) conflict spaces

Conflicts, war economies and (more specifically) post-conflict settlements offer key conduits and petri dishes for embedding criminal networks, even if OCGs tend to prefer a degree of stability which, in turn, is more favourable to conduct of illicit business.<sup>129</sup> Moreover, OCGs with control over or access to strategic territory within fragile and contested contexts are increasingly being courted and harnessed as deniable proxy actors by state actors at a time of heightened geopolitical competition.<sup>130</sup> This phenomenon, which rose to prominence at the time of the Cold War through, inter alia, US provision of support to anti-communist narco-traffickers in Laos and elsewhere, is today observable in the Euro-Atlantic neighbourhood, including in Crimea, the Donbas, Transnistria and Western Balkans.<sup>131</sup>

To be sure, state actors and transnational OCGs interact in a variety of ways. In some cases, and as hinted at above, governments use criminal organisations to gain advantages over (peer) competitors and further their foreign policy goals, gather intelligence, alter existing balances of power, disrupt economies and/or carry out covert infiltrative and non-linear operations. Examples here include that of Victor Bout – the Dushanbe-born arms dealer who for years delivered weapons worldwide for a number of different governments – and Russian government connections to cyber hacking groups, the Luhansk branch of the Night Wolves motorcycle gang and a Donetsk counterfeit vodka baron known as the *Chort* (or devil) reported as having been involved in operations in Mariupol.<sup>132</sup> Iran and North Korea have similarly reportedly harnessed criminal organisations to circumvent international sanctions, acquire weapons and conduct offensive cyber operations.<sup>133</sup>

129 See for example Eric Scheye, *Organised Crime in Stabilisation Contexts*, 2016.

130 Jack Thompson, Danny Pronk, and Hugo van Manen, *Geopolitical Genesis: Dutch Foreign and Security Policy in a Post-COVID World*, 2021, p23.

131 Uğur Ümit Üngör, *Paramilitarism: Mass Violence in the Shadow of the State*, 2020.

132 Paul Stronski, and Annie Himes, *Russia's Game in the Balkans*, 2019. David Klein, *In Crimea and the Donbas, Organized Crime Reigns Supreme*, July 2022.

133 As explored in the previous chapter, state actor exploitation of cybercrime groups for the purpose of intelligence gathering and offensive operations is only likely to increase in the future. For instance, Iranian government-sponsored hackers compromised the U.S. Merit Systems Protection Board, exploiting the log4shell vulnerability. After breaching the network, hackers installed cryptocurrency-mining software and deployed malware to obtain sensitive data.

State actors looking to gain an advantage over their adversaries increasingly court and harness OCGs with control over strategic territory.

## Trends in state actor uses of criminal organisations

**Increasing use of cybercrime groups.** With the growing importance of the internet and digital technologies, governments increasingly use criminal organisations that specialise in cybercrime to gather intelligence and/or carry out covert operations. For instance, Iranian government-sponsored hackers compromised the US Merit Systems Protection Board, exploiting a log4shell Java library vulnerability.<sup>134</sup> After breaching the network, hackers installed cryptocurrency-mining software and deployed malware to obtain sensitive data.<sup>135</sup>

**Greater use of criminal organisations in covert operations.** As the world becomes increasingly complex and multipolar, governments may find it more difficult to carry out covert operations using traditional 'overt' means. The use of substate actors, including criminal groups, as proxy fighters in irregular and 'grey zone' warfare strategies will likely continue, weakening the state's monopoly on violence in many parts of the world. As aggressive states arm individuals and groups in regions they seek to destabilise or annex, weaker states will have difficulty containing the ensuing violence.<sup>136</sup> OCGs (including hackers) may also be used as part of economic warfare campaigns aimed at destabilising financial systems.<sup>137</sup>

Separately, governments – and, typically, the ruling elite – may use organised crime elements alongside criminal gangs as a mechanism through which to intimidate their opponents (including opposition parties) and/or secure or purchase votes in the lead-up to elections, as seen widely across the Western Balkans and Sub-Saharan Africa. In Haiti, moreover, criminal gangs routinely act on behalf of government and opposition figures to control key urban areas by suppressing dissent through assassinations, kidnappings and massacres; influencing the outcome of elections through bribery and intimidation; and disrupting political opponents by fomenting protests and destroying polling stations in districts where their candidate is set to lose.<sup>138</sup>

Post-conflict contexts and settlements similarly provide opportunities for criminal elements to exploit weak governance structures and/or secure control of resources, illicit rent and criminal revenue streams. Peace processes also offer an avenue through which criminal actors can legitimately enter the political fold, sometimes under the cover of amnesty provisions, as seen to varying extents in Mali, Syria, Libya, Colombia and across Central America and the Western Balkans. The war in Ukraine thus risks the emergence of an increasingly entrenched war economy in which organised criminal and non-state armed actors increasingly control black markets and local economies with the aim of subverting political processes both during and after the conflict.

<sup>134</sup> Log4shell is a popular Java library for logging error messages in applications. The vulnerability was discovered at the end of 2021 and affected millions of organisations.

<sup>135</sup> Center for Strategic and International Studies (CSIS), *Significant Cyber Incidents since 2006*, 2023.

<sup>136</sup> Forest E. Morgan, Raphael S. Cohen, *Military Trends and the Future of Warfare: The Changing Global Environment and Its Implications for the U.S. Air Force*, 2020.

<sup>137</sup> Nicholas Mulder, *Geo-economic Puzzle: Policymaking in a More Fragmented World*, June 2022.

<sup>138</sup> Henry Shuldiner, and Chris Dalby, *Haiti Gangs Embrace Political and Police Chaos*, InSight Crime, January 2023.

## 6.2. Governments' inability to respond adequately to global and local challenges

In what will by now be a familiar theme, governments that struggle to respond adequately to local security challenges and governance 'black holes', particularly, but not solely, in fragile and conflict-affected states, are more likely to face an existential challenge from organised crime. As highlighted in various sections of this report, this can include the failure to provide basic services or include marginalised political constituencies in (post-conflict) political deals and/or elite bargains.<sup>139</sup> Thus, in the Northern Triangle countries of El Salvador, Honduras and Guatemala, criminal gangs have filled governance vacuums by providing social services and protection, whilst enforcing lockdowns and distributing food and other supplies to people in their communities.<sup>140</sup>

During the COVID-19 pandemic, as already observed, OCGs ranging from the Italian Mafia to Mexico's Sinaloa and Jalisco New Generation cartels similarly distributed food and/or provided financial assistance to local communities as a way to gain public legitimacy. In Brazil, gangs in various favelas in Rio de Janeiro imposed curfews and social distancing on residents and local shops, while also handing out sanitation items, medical supplies and food. In short, any disequilibrium between public demands and governments' ability to deliver security and economic opportunities will likely result in an erosion of trust in government institutions that can play in the hands of criminal elements, assuming they are able to capitalise on such opportunities.<sup>141</sup>

## 6.3. Implications for the organised crime business model

The activities of and markets available to OCGs are set to expand further within the context of international multipolarity and increased geostrategic competition. The international community's reinvigorated focus on state-on-state, existential (conventional and nuclear) threats is likely to result in a reduction in focus on sub-state forces and actors, particularly after three decades of expeditionary 'wars of choice' against international terrorism and, to a lesser extent, organised crime (efforts against the latter featured heavily in the support packages provided by the international community to Colombia and Afghanistan). This will likely provide OCGs with increased freedom of movement as well as the opportunity to expand their operations in new territories. The return of great power competition and renegotiation of spheres of influence will inevitably be felt most acutely in fragile and contested spaces. Here, criminal actors will also seek to project their power, either of their own volition or as proxy-agents of state patrons. As the international community retreats from globalisation, fragments and turns to tariff and trade wars, criminal systems, including shadow and illicit financial networks and systems, are also increasingly likely to be exploited by state actors seeking to avoid sanctions and/or undermine each other's financial influence through clandestine means.

<sup>139</sup> National Intelligence Council (NIC), *Global Trends 2040: A More Contested World*, 2021.

<sup>140</sup> Amelia Cheatham, and Diana Roy, *Central America's Turbulent Northern Triangle*, Council on Foreign Relations, June 2022.

<sup>141</sup> José Miguel Cruz, and Brian Fonseca, *How Transnational Crime Is Mutating in the Age of COVID-19 in Latin America*, Americas Quarterly, January 2021.

During the COVID-19 pandemic, organised crime groups filled governance vacuums by enforcing lockdowns and providing supplies to gain public legitimacy.

# 7. Cross-cutting considerations and policy implications

## 7.1. Overarching patterns

Describing the evolution of warfare, the Prussian strategist Carl von Clausewitz famously argued that while the character of war might evolve over time, its nature (or fundamental essence) remained unchanged. Similarly, the general theoretical consensus on the direction and morphology of modern criminal networks holds that the basic logic and characteristics of organised crime remain broadly constant, even if the phenomenon is evolving and morphing to exploit new structural, economic, technological, legal, social and political opportunities around the world.<sup>142</sup> This study largely supports that notion, while highlighting the extent to which criminal networks are increasingly moving towards horizontal, devolved networks connecting via different functional nodes that interact across international borders. The analysis of transnational organised crime contained across this report also points to the following additional, cross-cutting strategic patterns.

Building on the above, study highlights the extent to which organised crime in today's modern, interconnected world increasingly consists of fluid, decentralised networks that amount to a distributed clandestine architecture and parallel – or 'shadow' – economic system (albeit one that often intersects with and exploits the formal economy and financial system). At the same time, partnerships and strategic alliances across international narcotics and illicit goods supply chains also bring together larger players who interact based on their access to production centres, control over distribution hubs and ability to reach end customers.

Accordingly, the analysis of the trends detailed in this report also reveals several additional insights relating to the specific organisational structure and design of organised crime groups. These include:

- The propensity for OCGs to focus on particular value adding roles and functions such as production, distribution or transport. This marks a departure from vertically integrated business models such as cartels (although some examples of multi-functional OCGs do exist amongst the larger players). In today's age of hyperconnectivity and global-level (illicit) trading activity, service providers and enablers such as illicit financial experts and logisticians effectively amount to specialised criminal networks in their own right (albeit focussed on supporting functions), catering for a wide range of different customers.

<sup>142</sup> See for example Paolo Campana, *Explaining Criminal Networks: Strategies and Potential Pitfalls*, 2016, pp1-10.

Although organised crime groups quickly adapt to emerging structural, economic, technological, legal, social, and political opportunities, organised crime's basic logic and characteristics remain constant.

- The extent to which cellular structures built around common organisational identities and/or ethnicities offer a means through which to project power and expand operations in new markets in a devolved manner, all the while maintaining a degree of structural cohesion (such as in the case of the Italian 'Ndrangheta and several Albanian OCGs). Such cell-based decentralisation also offers OCGs with the means of absorbing disruption, such as that caused by law enforcement activity.<sup>143</sup>

Although beyond the scope of this report, analysis reveals the extent to which the functions and services that make-up the 'backbone' of the transnational criminal economy is likely to be harnessed by a wider cast-list of clandestine and violent non-state actors, including terrorist organisations, subversive groups and insurgencies. These so-called 'dual enablers', which range from financial expertise to professional hackers and document counterfeiters, to specialist transport providers, act as strategic and logistical 'force multipliers' for a plethora of players wishing to project power and pursue financial and economic interests. Similarly, actors of various denominations draw strength from common 'breeding grounds', typically characterised by governance vacuums and the absence of formal (state) institutions.

OCGs, moreover, routinely exploit shocks, pockets of instability as well as politically, economically and socially marginalised constituencies and structural opportunities (including geo-strategic shifts in the international system) to establish footholds in new markets, recruit new members and/or expand their operations. Their access and influence have not gone unnoticed to state actors, who are increasingly turning to criminal actors as deniable levers of proxy influence in a multipolar world.

The analysis contained in this report points to the emergence and strategic significance of geographic 'hotspots' of organised crime, often – but not solely – located in areas benefiting from lower state reach, such as borderlands. Here, multiple functions and services ranging from drugs and weapons markets to illicit financial solutions may converge in what amounts to criminal and/or clandestine ecosystems.

Knowledge and expertise are also migrating at an accelerating pace, allowing for the conduct of increasingly complex criminal operations. Technology, often readily available via commercial solutions, advancements in transport, logistics and infrastructure and tactics trialled within the warfighting domain are all being harnessed and combined by OCGs, providing them with capabilities that were once only accessible to states.

OCGs therefore increasingly pose a challenge to the conventional Weberian paradigm that states have monopoly over the use of violence as well as functions of government. While this challenge isn't new, there are more instances of where this taking place. Indeed, OCGs have demonstrated the ability to secure and project power as well as act as political, social and economic agents of change, co-opting or even supplanting formal government institutions. Accordingly, the social and macro-economic impacts of organised crime can be felt around the world, including via the distortion of (licit) economies and by undermining the legitimacy of the state.

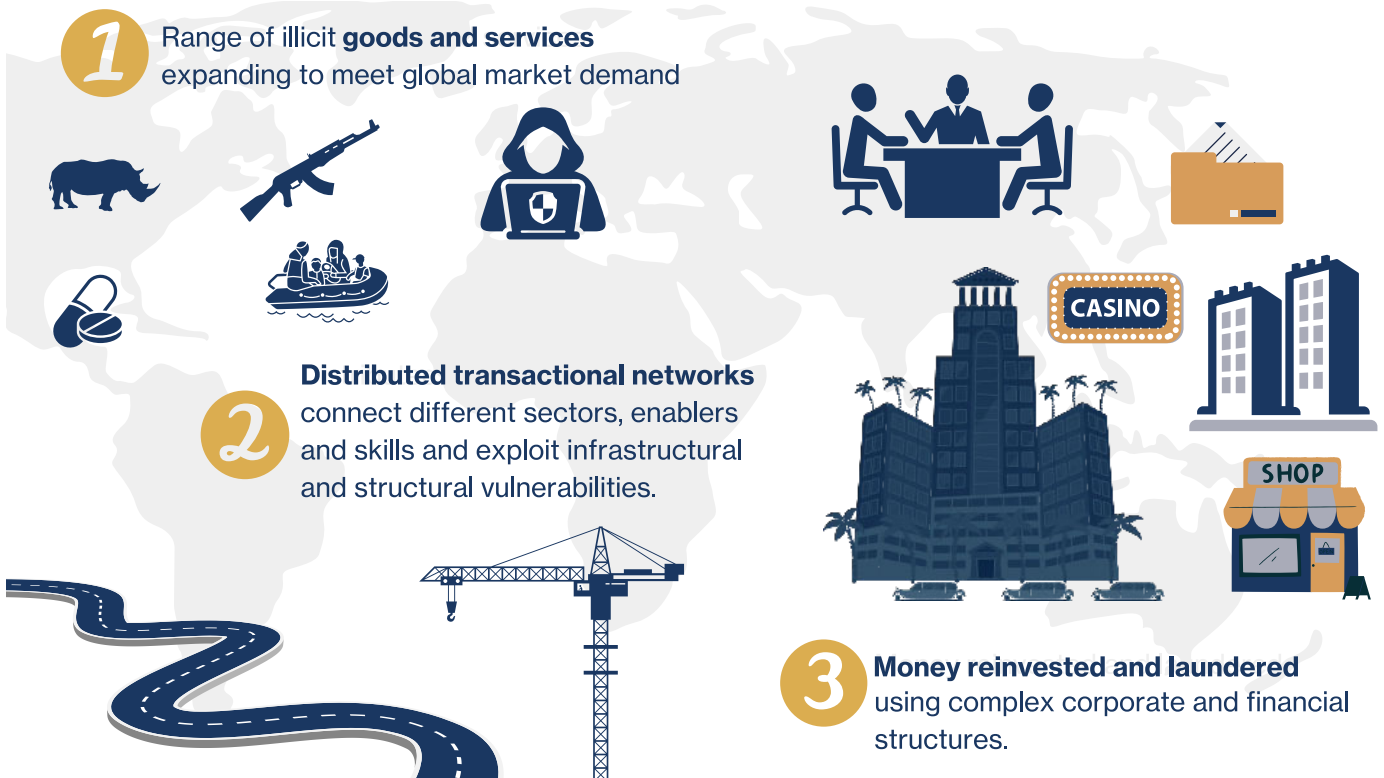
The move towards fluid transnational networks, combined with the widespread incorporation of information technology within criminal activity points towards the rise of what could be broadly labelled as 'fourth generation' or, indeed, 'next generation' organised crime (here this

<sup>143</sup> More tightly integrated networks are conversely prone to disruption and dismantlement.

Organised crime groups increasingly challenge the conventional paradigm that states have a monopoly over the use of violence and government functions.

study adds to previous attempts at cataloguing the evolution of the phenomenon).<sup>144</sup> In the first generation, which can be traced at least to the 19th and possibly as far as privateers of the 17th century, criminal entities (such as, most famously, early Mafia groups) demonstrated the ability to both establish illicit markets and exploit structural opportunities on a limited scale. The second generation of organised crime grew out primarily of the American Prohibition, during which the reach, scale and (political) influence of gangsters and bootlegging operations expanded significantly, to include the establishment of cross-border supply chains (such as alcohol supply routes from Canada). The third generation saw the increased trans-nationalisation of the phenomenon from the 1970s onwards, aided by modern transport solutions as well as the rise of ‘super’ cartels capable of directly challenging the authority of the state (most famously in Latin America).

**Figure 14. Characteristics of ‘fourth generation’ transnational organised crime**

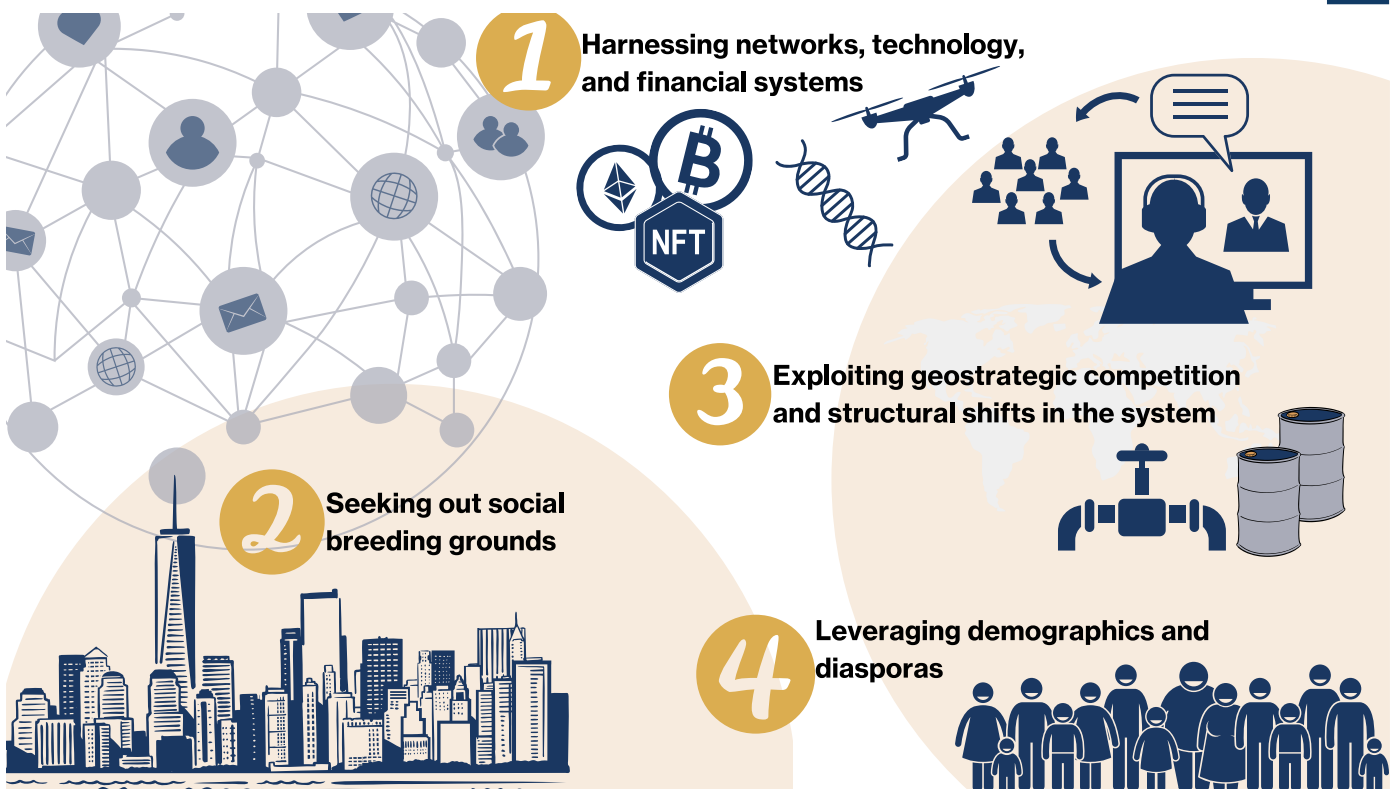


In this fourth (or ‘next’) generation – and shaped by a combination of decades of law enforcement action, technological advancements and hyperconnectivity – organised crime has (as highlighted throughout this study) become more devolved, distributed, cellular, efficient and embedded within the societal fabric. ‘Next’ generation organised crime also fuses and compresses the distance between the different domains, functions, roles and services as well as breeding grounds underpinning criminal business. Structural opportunities, political and social vacuums, legal and regulatory loopholes, global financial solutions, criminal supply chains and retail markets are all invariably connected in what amounts to a complex,

<sup>144</sup> BAE Systems, *Detica Research Report on Organised Crime*, 2012.

integrated, helixed and self-regulating economic system. In real terms, this has arguably led to a net amplification of the power, economic clout and, correspondingly, potential risks of organised crime, most significant of which is the suffocation and distortion of (licit) economies and the erosion of (formal) governance systems. The fluidity of the phenomenon has also increased its corresponding ability to absorb shocks, whilst complicating attempts at containing its reach and hold.

Figure 15. Components of ‘fourth generation’ transnational organised crime

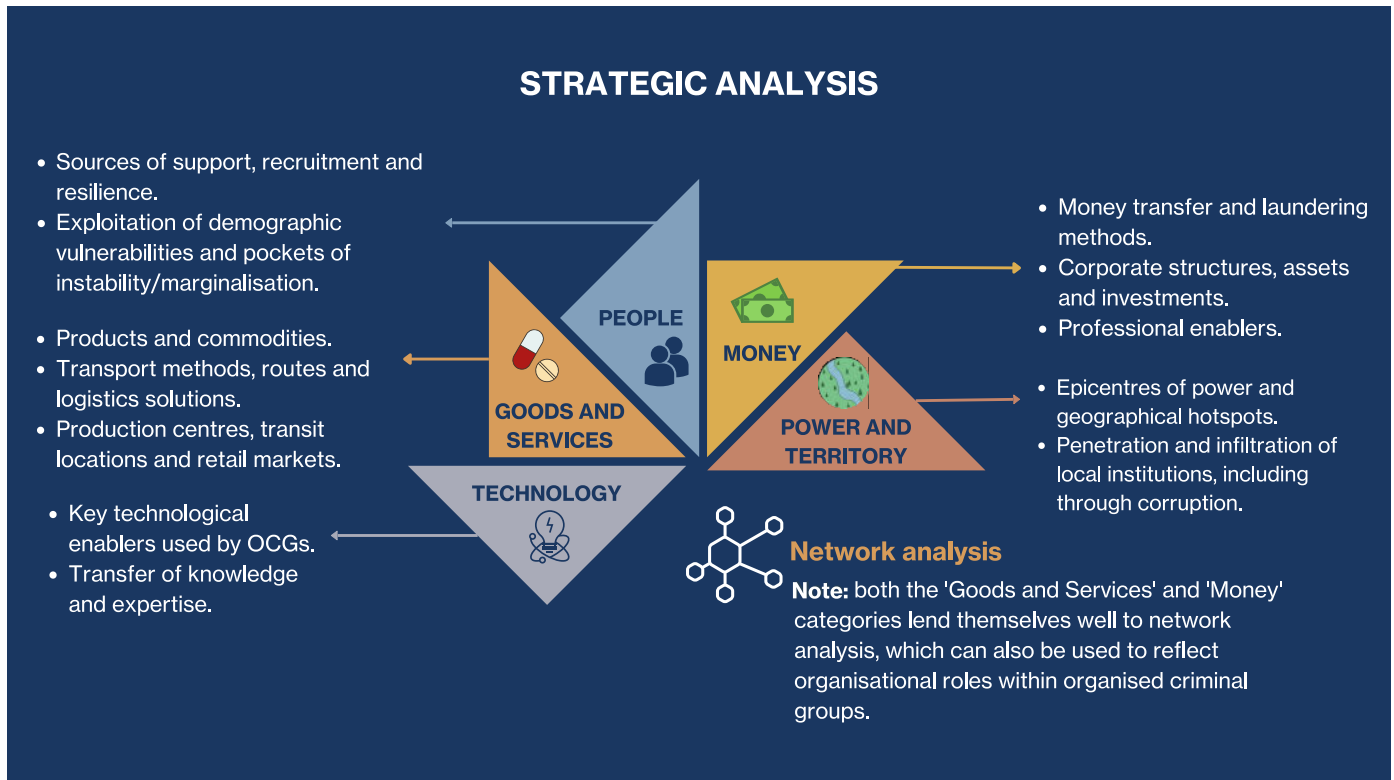


## 7.2. Implications for the international response

In keeping with the ethos of this foresight study, strategic and (to the degree that it is possible) *predictive* analysis will continue to form an integral part of the overall response to transnational organised crime – the means through which to identify emerging threats and *modi operandi* at an early stage. In turn, the overall framework provided in this study provides a general starting point for the main categories and sub-categories that ought to be covered by such analysis. These are further illustrated in Figure 16, which provides a handrail for the analysis of organised crime in any given context. This study also underpins the importance of multi-disciplinary intelligence analytical units (including within Law Enforcement) bringing together criminologists, political scientists, economists and strategic studies experts.

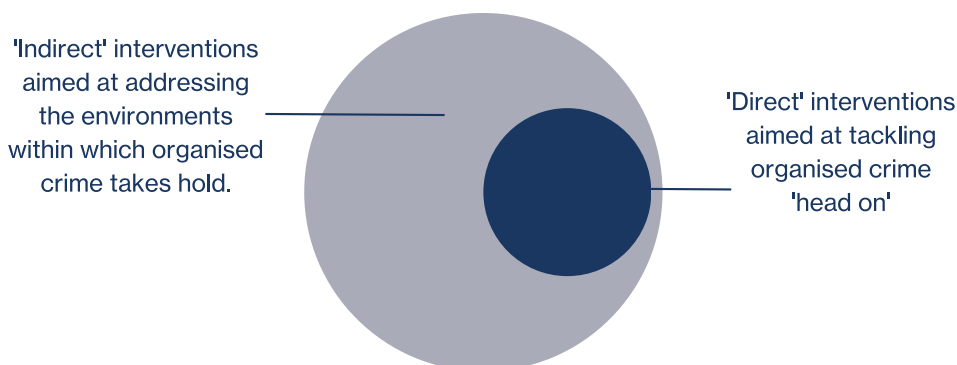


Figure 16. A handrail to strategic analysis



Analysis of organised crime and the various contexts within which it takes hold, points to a differentiation between interventions, namely 'direct' interventions (such as arrests and prosecutions) and more social and political 'indirect' interventions (see Figure 17). Indeed, the multi-sector and multi-faceted character of modern organised crime highlights the importance of extending the response beyond criminal justice solutions and regulatory approaches, as well as of understanding the political economy of the phenomenon. In doing so, one of the greatest challenges (and opportunities) will be to leverage and harness the expertise of the private and financial sectors as part of the overall response, including by 'crime proofing' supply chains.

Figure 17. Differentiating between direct and indirect responses



The analysis contained in this study similarly points to the importance of addressing strategic 'hotspots' of organised crime within which different core clandestine functions and services coalesce (including in urban centres and borderlands). These centres also tend to be characterised by a low presence of (formal) institutions. Such environments, as this study has demonstrated, constitute thriving ecosystems with their own criminal political economies. Moreover, the social and economic character of organised crime breeding grounds logically underscores the relevance of international development activity as part of the overall response, including efforts focussed on strengthening local (including community-level) governance, tackling corruption and ensuring the provision of basic services. Development theories of change should be calibrated around promoting social cohesion, closing pathways into criminal groups and improving the visibility, credibility and legitimacy of governments, particularly those in fragile and conflict-affected states (whilst noting that some governments lack legitimacy to the point of making such efforts almost futile).

In a similar vein, the response should seek to increase the resilience of economies and financial systems to organised crime actors, the latter of whom have become adept at exploiting and harnessing complex corporate structures to conceal their profit. Such efforts should also be aimed at identifying the extent to which these same actors have already infiltrated the economy as well as sectors that are particularly vulnerable to money laundering within any given context or jurisdiction (e.g., real-estate, hospitality and so on).

Incorporating crime-relevant provisions within post-conflict settlements, mediation and peace-building work and recognising the extent to which criminal interests tend to take hold within fragile periods of political transition may also yield dividends. At the same time, engaging in direct dialogue with some criminal organisations which de facto control the ground in these contexts may be inevitable. Similarly, shifts in the international system as well as the revival of great power rivalries carry implications for both the study of organised crime and for potential responses. The various ways in which OCGs may be increasingly harnessed by governments as proxy levers of influence should be reflected in assessments of irregular and 'grey zone' warfare. At the same time, countering organised crime in less contested environments may paradoxically offer common ground for powers seeking areas of potential consensus as well as entry points for diplomatic cooperation. Regardless, the analysis contained in this study makes the case for better reflecting organised crime within the fields of international relations, international security and strategic studies given the increased propensity for OCGs to act as agents of influence and political change in the modern world.

As organised crime groups play increasingly significant roles as agents of influence and political change, the subject should receive more attention from international relations, international security, and strategic studies.

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# Annex A:

## Overview of sources

Source category	Organisation	#
Intergovernmental organisations	United Nations Office on Drugs and Crime (UNODC)	10
	Organisation for Economic Co-operation and Development (oecd)	6
	European Union Intellectual Property Office (EUIPO)	3
	World Economic Forum (WEF)	3
	European Parliament	3
	World Bank	2
	NATO	2
	European Strategy and Policy Analysis System (ESPAS)	2
	International Monetary Fund (IMF)	2
	United Nations High Commissioner for Refugees (UNHCR)	2
	Council of Europe	1
	Standing Group on Organised Crime (SGOC)	1
	United Nations Interregional Crime and Justice Research Institute (UNICRI)	1
<b>Total</b>	<b>38</b>	
International police organisations	EUROPOL	8
	INTERPOL	7
	<b>Total</b>	<b>15</b>
Governmental organisations	National Intelligence Council (NIC, United States)	8
	Wetenschappelijk Onderzoek- en Documentatiecentrum (WODC, The Netherlands)	5
	Ministerie van Justitie en Veiligheid (The Netherlands)	1
	Ministry of Defence (United Kingdom)	1
	Politie (The Netherlands)	1
	Stabilisation Unit (United Kingdom)	1
	National Crime Agency (United Kingdom)	1
<b>Total</b>	<b>18</b>	

Source category	Organisation	#
Non-governmental organisations (think tanks, consultancy, civil society)	Global Initiative (GI)	7
	RAND Corporation	5
	Global Initiative against Transnational Organized Crime (GI-TOC)	3
	ENACT	3
	Centre for Strategic Studies (CSS)	2
	Marshall Centre	2
	Insight Crime	2
	Atlantic Council	1
	Centre on Illicit Networks and Transnational Organized Crime (CINTOC)	1
	The Hague Centre for Strategic Studies (HCSS)	1
	CrowdStrike	1
	Clingendael Institute	1
	Elliptic	1
	Organized Crime and Corruption Reporting Project (OCCRP)	1
	Stockholm International Peace Research Institute (SIPRI)	1
<b>Total</b>	<b>32</b>	
Academia (reports and articles)	Individual academic articles	13
	Florida International University	3
	Leiden University	1
	<b>Total</b>	<b>17</b>
Magazines and newspapers	VICE	10
	The Guardian	6
	The Economist	5
	America's Quarterly	2
	The Independent	2
	BBC	2
	La Via Libera	1
	TIME	1
	CNN World	1
	<b>Total</b>	<b>30</b>
	<b>Grand total</b>	<b>150</b>

# Annex B:

## Global Trends and opportunities for OCGs

Category	Global trend	Opportunities for TOC	Examples of exploitation
Goods and services	Pandemic	Growing market for medical supplies	Selling (counterfeit) medical products on the black market
	Climate change-induced migration and reduction of arable land	Smuggling migrants and refugees; Exploiting emerging scarcities (water, produce)	Worldwide climate change-human trafficking nexus; Controlling access to scarce resources
	War and conflict	Exploiting emerging scarcities (water, produce) and markets (mercenary services, arms, medical supplies); Smuggling migrants and refugees	Arms trade and refugee smuggling in Ukraine
	Armistices and conflict resolution	(Re-)emerging markets in transitional societies; (local) Power vacuums	Resurge of heroin production in Afghanistan following withdrawal of international troops
	Global population growth	Exploiting emerging scarcities (water, produce)	"Water mafia" controlling drinking water supply in overpopulated regions in India and Pakistan
	Increasing demand for Critical Raw Materials	Extracting illegally; Controlling supply routes	Illegal mining activities in Central Africa and Latin America
	Advancements in global transport; Free Trade Zones (FTZ)	Improving connections, supply chains and smuggling routes	Entrepreneurs with ties to OCGs investing in the Chinese Belt and Road Initiative
	Peaking Foreign Direct Investments (FDIs)	Increasing amount of large infrastructure projects improving connections and supply chains	Port expansions due to Chinese investments (e.g., Mombasa) being a key trafficking hub for illicit commodities
	Increasing wealth in specific areas	Growing and emerging drug markets	Growing cocaine market in Western Europe and United States
	Innovations in medicinal chemistry and drug design	Pushing new products on existing markets and infrastructure; Creating new markets	Growing market for 3-MMC designer drug after 4-MMC ban
	Emergence of e-commerce	Copying practices; Using licit services and infrastructure to illicit ends	Diversification from the range of counterfeit goods and spare parts sold online
	Increasing waste generation	Exploiting high demand for waste management	Waste trafficking

Category	Global trend	Opportunities for TOC	Examples of exploitation
People	Global ageing crisis	Increasing demand for skilled workers and scarce (subscription) drugs	China's ageing population
	Growing gender imbalance	Growing job scarcity; Decreasing marriage prospects; Increasing demand for sex workers	Unsatisfied men turning to crime; Women's trafficking; Forced prostitution
	Continued diaspora	Exploiting international networks and cultural ties	Culture-based crime networks of e.g., Turkish and Albanian migrants in e.g., Netherlands, Germany, Belgium, UK
	Uncontrolled urbanisation and growing amount of informal settlements	Playing into poverty, insecurity and lack of governmental oversight	Johannesburg, Lagos, Mombasa, Rio de Janeiro and Karachi, characterised by pockets of poverty and violence, already feature varying degrees of control by criminal groups or gangs; also visible in Western city neighbourhoods, such as in Chicago, Naples, Marseilles and Malmö
	Increasing occurrence of extreme weather and natural disasters	Forced migration, high demand for basic resources such as fuel, building materials, food and water	After cyclone Sidr, criminal networks began to operate in disaster-affected regions in Bangladesh, preying on widows and men desperate to cross the border to India to find employment and income
	Increasing poverty due to economic and political hardship	Migration, displacement; Search for ways to make money	Income inequality in Mozambique drives poaching trends
	Continued human need for security; Demand for goods and profit	People fleeing from violence and extortion	In countries such as El Salvador, Guatemala and Honduras, people forcefully displaced due to gang violence are being helped by other OCGs to migrate
	Political polarisation	Social tensions; Political figures seeking support	OGCs in Mexico and Italy aligning with political figures and providing them with local support in exchange for more local influence/autonomy
	Lack of state control	Continued human need for security, goods and profit	OGCs providing basics in security, food, water and future prospects of wealth and stability where governments cannot
	Increasing digitization	Increasing demand for high-skilled tech workers; Small non-digital business owners in need of financial/political support	Increased human trafficking; OCGs have used their financial clout to support struggling small businesses through grants and loans in exchange for direct or indirect control over these same businesses, e.g., to support money laundering practices (this type of assistance would become a prominent feature of the COVID-19 pandemic)
Increasing inequality in education and trade due to digital divide	Unemployed/uneducated youths seeking prospects of better futures	In Cadiz, which has suffered economically over the years, local traffickers have grown into role models, aided by demonstrations of wealth and the provision of jobs, including in the cross-Mediterranean hashish trade	

Category	Global trend	Opportunities for TOC	Examples of exploitation
Money	Increasing volume of financial transactions	Ability to move profit largely unnoticed	In the Eurozone alone, the total number of cash payments in 2022 increased by 12.5% to 114.2 billion, where the total value increased by 18.6% to EUR 197.0 trillion
	Increasing role of transfers through unregulated Informal Value Transfer Systems	Poorly documented form of banking allowing for unnoticed illicit money flows	Unregulated informal value transfer systems (IVTS) constitute the dominant form of banking in a number of countries around the world
	Ever continuing offer of new business models	Ongoing supply of new money laundering opportunities	Use of Uber and Airbnb to move illicit funds
	Emergence of blockchain technology and cryptocurrency	New payment and money laundering methods	OGCs providing customers with the opportunity to browse goods on an e-commerce platform, after which they can purchase the goods using cryptocurrency, which are then shipped using conventional postal services; Crypto tumblers
	Continued relevance and efficiency of established and traditional laundering methods	Continued opportunity to stay off the radar in times of digital surveillance	Hawala system; Cash flow-rich businesses such as restaurants, beauty salons, shopping centres, casinos and hotels all remain favourite, "tried and tested" vehicles for converting criminal revenue into "bankable" and justifiable profit. Examples of these trends range from Mafia-controlled pizzerias, flower markets and ice cream parlours across western Europe to hotels on the Albanian and Moroccan coast to criminal-owned restaurants in the Spanish Costa del Sol
	Continued relevance of real estate markets	Diversification of revenue streams and investment portfolio	Acquiring/investing in real estate (projects)
	Emergence of online entertainment and social media platforms	Online, relatively closed-off platforms for trade and recruitment	Counterfeit goods sold on Amazon and eBay; Online casinos used to launder money; Multiplayer online games such as World of Warcraft and Second Life used for "micro-laundering"
	Advancements in global transport and trade	More room in infrastructure networks to acquire power and control	Cases in the seaports of Bar in Montenegro and Gioia Tauro in Italy, where OGCs acquired stakes in local transport infrastructure to benefit business operations
	Accommodating national and international regulations	Specific regions allowing for unnoticed criminal activities	Offshore jurisdictions of the likes of the British Virgin Islands, Cayman Islands, Barbados and Seychelles tend to benefit from corporate secrecy laws and remain vulnerable to money laundering as, indeed, their economies are not, on the whole, diversified beyond tourism and financial services
	Continued diaspora	Overseas money laundering possibilities due to international ethnic network	Increasing volume of overseas remittances gives opportunity to laundering

Category	Global trend	Opportunities for TOC	Examples of exploitation
Technology	Shift of cutting-edge technology development from military to commercial realm	Widely available off-the-shelf technology to support and conceal criminal business	Uncrewed underwater vehicles trafficking drugs across the Strait of Gibraltar; uncrewed aerial vehicles dropping goods in prison courts
	Reduced significance of physical distance due to hyperconnectivity	More effective supply and demand signals; New means to identify and enter new markets	CaaS models; OCGs providing in parts or in whole cyberattacks (e.g., ransomware; malware; DDoS)
	Digitalisation of society	New possibilities for identity theft for further criminal activity	SIM swapping
	Datafication of society	Growing total amount of databases with confidential personal and commercial information, which are a goldmine for corruption, coercion, extortion and criminal market research	Double-extortion methods, where criminals combine ransomware with data exfiltration, using the threat to publish personal data to force compliance with ransom demands
	Digitalisation of work environments following COVID-19 stay-at-home policies	Explosion of the amount of vulnerable and valuable networks and databases	Ransomware groups taking advantage of teleworking-explosion by scanning potential targets' networks for insecure Remote Desktop Protocol (RDP) connections and keeping an eye on disclosed Virtual Private Network (VPN) vulnerabilities
	Increasing use of disinformation campaigns during national elections	Political entrepreneurs using OCGs to facilitate and manage campaigns	European Parliamentary elections of 2019, 2016 and 2022 US-elections
	Increasing use of social media platforms	Target selection; Recruitment; Covert communication; Advertisement of products and services	Key functions of the trafficking of human beings (recruiting victims; advertising services) moved to the online domain; Facebook's Messenger and WhatsApp used to sell and sexually exploit at least 20 potential victims in Dubai; Migrant smuggling networks in Europe developing their own mobile apps to provide clients with the latest information related to travel conditions, weather conditions, police checks and other news related to the smuggling journey
	Emergence of Artificial Intelligence	New means for identity theft; Phishing; Supply chain optimisation	OCGs using deep fake video to impersonate the CEO of a company instructing employees to transfer USD 35 million; Using personalized phishing campaigns resembling services like Google Ads
	Emergence of cryptocurrencies	New objects for theft; New ways to transfer and launder money	Crypto theft; Cryptocurrency tumblers; Cryptocurrencies used to purchase illicit goods
	Progress in molecular biology and genetics	Genome editing; Experimentation with bioweapons; Altering biometric data; Trading DNA codes	Terrorist organisation using ricin to build a do-it-yourself explosive device to commit a biological attack
	Emergence of immersive environments	New opportunities for identity theft, money laundering, the targeting of digital assets and "virtual physical and emotional abuse"	
	Future large-scale emergence of quantum computing	Advanced mining, harvesting and decryption	
Future large-scale availability of 4D printing	Producing counterfeit weapons and goods		



Category	Global trend	Opportunities for TOC	Examples of exploitation
<b>Power &amp; Territory</b>	Weak institutions and inadequate government response	Power vacuums; Opportunity to provide stability where governments cannot	Criminal gangs in El Salvador, Honduras and Guatemala filling governance vacuums by providing social services and protection (enforcing COVID lockdowns; distributing food and medical supplies); Italian Mafia, Mexico's Sinaloa and Jalisco New Generation cartels distributing food and providing financial assistance to local communities to gain public legitimacy; Brazilian gangs imposing curfews and social distancing and handing out sanitation items, medical supplies and food in favelas
	Power competition in a multipolar world	Profiting from competition and economic instability by filling demand vacuums and pursuing and displaying power	Mexican Knights Templar cartel infiltrating and exploiting iron ore mines whilst interacting with Chinese brokers in the mining industry
	War and conflict	Exploiting emerging scarcities (water, produce) and markets (mercenary services, arms, medical supplies); Smuggling migrants and refugees; Providing stability to recruits and victims	If the Ukrainian war economy becomes entrenched, there is a risk that it transfers into the post-conflict phase in the form of a "shadow economy", where organized criminal and non-state armed groups rely on wartime patterns to control the market and subvert political elites
	Rise of remote methods of warfare by advanced militaries worldwide	Acting as proxy forces; Filling power vacuums	Today observable in the Euro-Atlantic neighbourhood, including in Crimea, Donbas, Transnistria and Western Balkans
	Armistices and conflict resolution	(Re-)emerging markets in transitional societies; (local) Power vacuums	International actors complicating resolution efforts: overlapping internal, regional and geopolitical tensions are likely to continue and complicate efforts to stabilize ongoing conflicts in Libya, Syria and Yemen
	International sanctions	Offering governments ways to circumvent sanctions using illicit networks and infrastructure	Iran and North Korea harnessing criminal organisations to circumvent international sanctions, acquire weapons and/or conduct offensive cyber operations
	Increasing importance of cyber security coupled with scarcity of high-skilled workers	Launching offensive cyber operations for governments	Iranian government-sponsored hackers compromising the US Merit Systems Protection Board by exploiting a log4shell Java library vulnerability: after breaching the network, hackers installed cryptocurrency-mining software and deployed malware to obtain sensitive data



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