



**GLOBAL  
INITIATIVE**  
AGAINST TRANSNATIONAL  
ORGANIZED CRIME

# THE FIFTH WAVE

ORGANIZED  
CRIME IN  
2040

Phil Williams

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# EXECUTIVE SUMMARY

In thinking about the future, it is essential to think first about the past and present. Only if we understand where we are and how we arrived there can we adequately think about future trajectories. Starting from this premise, this analysis examines the modern history and evolution of organized crime, assesses the current state of transnational organized crime globally, and considers how it might look some 15 years in the future.<sup>1</sup>

The discussion is inspired in part by David Rapoport's seminal work on the waves of terrorism.<sup>2</sup> Rapoport identified how terrorism evolved within the context of major political, economic and technological changes at both local and global levels. Although his thesis has been challenged and refined, it remains compelling.<sup>3</sup> The initial part of this report, therefore, seeks to do something similar for organized crime. After identifying the antecedents and the four waves of modern and contemporary organized crime, it delineates several powerful trends that will shape the fifth wave, one that seems likely to become a tsunami.

This report initially examines the history of 20th century organized crime, identifying four waves that are broadly demarcated but also overlapping. First, the development of mafia groups; second, the transnational trafficking of narcotics; third, the impact of globalization on illicit markets; and fourth, the emergence of cybercrime, enabled by increased accessibility to internet technology.

The report then explores the impact of four global megatrends, which almost invariably will provide new opportunities or additional resources for organized crime. These megatrends are geopolitical competition, global climate change, emerging and disruptive technologies, and the global crisis of governance. These are broad trends that will do much to shape the environment. Consequently, the paper then elucidates the environment within which criminal organizations will operate in 2040 and the attributes that these groups and networks are likely to have.

These include the exploitation of massive new opportunities; the use of safe havens provided by authoritarian states that support criminal organizations as part of geopolitical competition; the development of technologically empowered organized crime; the operation of organized crime in what is termed 'hybrid space'; the plasticity and dynamism of criminal networks; the emergence of murky markets, blurry boundaries and slippery slopes; the prevalence of hyper-connected hubs and super-hubs; and increasingly pervasive criminal governance.

Much of this, of course, is inevitably somewhat speculative, but is based on the premise that the changed context resulting from global megatrends will do much to shape criminal resources, behaviour and activities, and illicit markets.

## The antecedents of contemporary organized crime

In thinking about the past, there is always a danger of what has been termed 'retrospective coherence', in which analysts impose concepts and labels on activities that might have been seen differently in earlier eras.<sup>4</sup> Nevertheless, it is arguable that organized crime has been around for millennia, although it was only in the 20th century that it was labelled as such – and even then, the label was contentious in both law enforcement and academia.

Indeed, organized crime, albeit in rudimentary forms, is almost certainly one of the world's oldest professions. Greece had organized crime and, even in the halcyon days of the Roman Empire, politics and criminality were deeply intertwined.<sup>5</sup> The Viking raids on the British Isles and the payment of what became known as Danegeld represented the largest and most protracted protection racket ever. From the 10th century and well into the 11th, English kings paid an annual tribute to the Vikings, initially in silver and subsequently in coins.<sup>6</sup> Indeed, the practice of minting coins was a direct response to the extortion demands of the Vikings.<sup>7</sup>

Subsequently, bandits were a problem in medieval Europe, while maritime piracy – which in recent decades has been a major issue in the Straits of Malacca, the Gulf of Aden, waters off the Somali coast and in the Gulf of Guinea – had much earlier incarnations in the Mediterranean, South China Sea and the Caribbean. Moreover, in Elizabethan England, a government-sanctioned form of piracy known as privateering, or, as Britannica describes it, 'pirates with papers', was a forerunner of what is today defined as state-embedded organized crime.<sup>8</sup> English privateering initially targeted Spanish ships and subsequently those of Holland and France. In an ironic twist, during the War of Independence, American privateers – encouraged by patriotism and financial incentives, and protected by letters of 'marque and reprisal' – had a massive impact on the British economy, helping to secure the revolution.<sup>9</sup>

As scholar Peter Andreas has shown, the United States was a smuggler nation from its inception.<sup>10</sup> Yet it was far from the only smuggler nation. In 18th century Britain, smuggling of luxury goods from France became widespread.<sup>11</sup> Smuggling was equally pervasive in Spanish America and the Caribbean. Similarly, as Professor Eric Tagliacozzo noted, during the late 19th century in South East Asia, where the Dutch and British Empires were contiguous, cities became key spaces for contraband, with Singapore playing an outsize role.<sup>12</sup>

This was all part of a larger picture of emergent organized criminality and illicit global trade: almost anywhere there were borders, tax duties and asymmetries in commodity prices, there were arbitrage opportunities to be illegally exploited.



Captain William Kidd, a famed Scottish privateer – or 'pirate with papers' – greets visitors aboard his ship in New York Harbour, 1696. © PhotoQuest/Getty Images



## THE WAVES OF ORGANIZED CRIME

**M**any of the activities that now routinely come under the rubric of organized crime have been evident throughout history. They did not develop into waves of organized crime, however, until the late 19th century and the first half of the 20th century, when the first wave appeared in the form of ‘hotspots’ in different countries. In Italy, particularly Sicily, absentee landlords and a weak and distant state provided fertile ground for the growth of protection rackets.<sup>13</sup> Many Sicilians later emigrated to the United States, and at least some took their criminality with them, only to find their activities fuelled by the prohibition of alcohol.

In China, the triads, a secret society seeking to overthrow the ruling Qing dynasty and restore the Ming dynasty, devolved into criminality. In Japan, the Yakuza – which had been active since the 17th century – began to crystallize into a more cohesive set of organizations. During the US occupation of Japan after World War II, the Yakuza was able to provide black-market goods that were in short supply, while also acting as an additional bulwark against communism.

The second wave of organized crime centred on narcotics. It took off in the early 20th century but expanded enormously after World War II. It included widespread heroin trafficking from the Golden Triangle of South East Asia and, until the early 1970s, Turkey, as well as industrial-scale cocaine production in the Andes, particularly in Colombia. The early part of the wave extended from the late 1940s and through to the 1990s, when the Medellín and Cali cartels were dismantled, and the cocaine industry flattened.

Mexico subsequently took over the mantle of smuggling cocaine into the US while also diversifying into methamphetamine and heroin. Colombia, Peru, Ecuador and Mexico all moved cocaine shipments to Europe via West Africa and occasionally North Africa. Prison gangs in Central America and Brazil also became increasingly involved in cocaine trafficking, while Afghanistan became the primary source of heroin and Myanmar moved from heroin to methamphetamine production. The widespread use and abuse of licit pharmaceutical opioids in the United States, followed by increased restrictions, prepared the way for synthetic opioids – most obviously fentanyl coming from China. This, in turn, created an unprecedented number of overdose deaths in the United States. The second wave remains strong, with a growing trend towards synthetics and increased prevalence of drug cocktails combining stimulants and depressants.

The third and partially overlapping wave was largely driven by globalization and neoliberalism. Indeed, globalization and free trade provided an environment in which illicit goods could easily be embedded and concealed in legitimate shipments. The emphasis on the speed and ease of global trade, the widespread use of inter-modal containers, and increasingly ubiquitous free trade zones provided new opportunities for smuggling and trafficking of all sorts of commodities. Neoliberalism restricted the role of the state to facilitate business, while the accompanying removal of social safety nets had profound and enduring implications for governance and the prevalence of weak states.

The third wave was also facilitated by the collapse of the Soviet Union and the end of the Cold War. This resulted in the global expansion and diffusion of criminal organizations, most notably post-Soviet Russian groups that zealously embraced ruthless and violent forms of capitalism. At the same time, the North American Free Trade Agreement and geographical contiguity enabled Mexican drug trafficking organizations to develop a widespread presence in the United States. Although cross-border crime was far from new, the emergence of transnational criminal organizations that operated from a home base and supplied illicit commodities through trans-shipment countries to a variety of host countries with lucrative markets was a direct consequence of globalization.

The third wave was also characterized by cooperation among criminal groups in different countries, and the diversification and expansion of illicit economies. The wave included apparent oddities, such as Vietnamese criminal organizations in the Czech Republic, Albanian criminals in Ecuador, and violent Moroccan criminal organizations in the Netherlands and Belgium. Criminality in this wave encompassed environmental crime, human smuggling and trafficking, large- and small-scale financial crime, money laundering and industrial-scale counterfeiting of commodities. Moreover, despite what some observers see as the advent of de-globalization, the third wave remains powerful. Although trade might become more regionalized and production more localized, other facets of globalization – such as communication and information systems, financial transactions and travel – will all remain robustly global.

***Criminal organizations have become more prevalent in more places than ever before, have infiltrated and corrupted governments, and have become increasingly violent.***

The fourth wave, which overlapped with and solidified globalization, came from the development and diffusion of the internet. The global spread of cyberspace, which can be understood as a new strategic domain, provides many benefits ranging from knowledge diffusion, cheap

and easy communication, global access to commodities and reduced transaction costs. At the same time, cyberspace created veils of anonymity and enabled criminals to target large populations through online fraud as well as develop ransomware attacks targeting businesses, public services and individuals. The internet also enabled criminals to collude with one another through encrypted communications, while illicit markets on the dark web mirrored and sometimes surpassed those in the real world, including illegal drug markets.

Scholar McKenzie O'Brien summed it up succinctly when noting that 'criminal organizations, true to their adaptive and adroit nature, have [...] co-opted the Internet to more easily, more safely, and more successfully provide services, expand their clientele base, and ultimately derive more profit'.<sup>14</sup> Cyberspace is highly criminogenic and has provided new incentives, capabilities and opportunities for organized crime. Although the upsurge of cybercrime represents the fourth wave, just like earlier ones this wave will extend well into the future, feeding into the fifth and most powerful wave of organized crime.

Such an analysis, inevitably, has several limitations. First, a focus on broad trends is invariably accompanied by an absence of granularity. Second, the concept of waves has all the virtues and vices of simplification. It suggests a clean narrative, but it is a messy world in which waves can move at different speeds in different places, can surge and then recede, or can reinforce and strengthen one another. Some readers are likely to take issue with the time, place and even the legitimacy of the wave idea. The key point here, however, is that the four waves of contemporary organized crime provide a baseline from which to assess current and future trends and developments that will help us to understand the drivers and major characteristics of the fifth wave – one that is becoming increasingly visible and could transform into a perfect storm.

As a result of these successive waves, criminal organizations have become more prevalent in more places than ever before, have infiltrated and corrupted governments, and have become increasingly violent. In effect, organized crime has become a wicked problem on a global level – one that is simultaneously a symptom and a cause of other social, economic and political problems, is highly complex and can only be managed rather than solved.<sup>15</sup> Policies designed to deal with wicked problems are sometimes counterproductive, with inadvertent and damaging consequences.

Moreover, organized crime can be understood as an active wicked problem in that the targets of law enforcement strategies and policies find ways to undermine and circumvent the intent of policymakers. Indeed, criminal organizations often prove more flexible and agile than enforcement agencies, winning the adaptation race and displaying what has been termed ‘pernicious resilience’.<sup>16</sup> In sum, organized crime is deeply embedded in economies and societies in many countries, is unlikely to diminish – let alone disappear – and its use of corruption and violence is highly corrosive.





## GLOBAL MEGATRENDS

**T**he future is inherently uncertain, but it is bounded by current trends and developments. The more powerful and pervasive of these trends are increasingly referred to as ‘megatrends’, which can be understood as broad drivers of change that determine the limits within which governments and societies – and organized crime – will have to operate.<sup>17</sup> The key megatrends identified and discussed here are geopolitical competition, global climate change, emerging and disruptive technologies, and the global crisis of governance. All four of these drivers will have an impact on the resources, incentives and opportunities available to organized crime. Consequently, they will do much to shape the fifth wave of organized crime – one that could well be larger and more consequential than any of its predecessors.

### Geopolitical competition

The resurgence of great-power geopolitical competition will have a profound impact on organized crime, especially if it is accompanied by irregular violence resulting from civil wars, insurgencies and terrorism. Unipolarity has now disappeared, and the liberal international order appears to be in terminal decline.

Russian power and assertiveness have contributed to that decline. Even more significant is China’s emergence as a great power, a peer competitor to the United States and a tacit ally of Russia. Indeed, it is highly likely that during the next 10 to 15 years the world will become starkly divided into two major blocs, with Russia, China, Pakistan, North Korea, Iran, Syria and Venezuela aligned against the United States, Europe, Japan, Australia, South Korea, Israel and possibly India, if it abandons its traditional stance of non-alignment.

The corollary is that organized crime will increasingly be used as an instrument of geopolitical competition by the countries in this Beijing–Moscow-led axis. This is not to claim that organized crime is absent in countries such as the United States or in Europe. Nor is it to ignore the fact that during the Cold War the US also used criminal and drug trafficking organizations as proxies – such behaviour seems to have ceased.<sup>18</sup> However, this accentuates the current divide between countries that combat organized crime, and those that seek to exploit and manipulate organized crime for geopolitical purposes.

In this connection, Putin, it has been argued in a paper published by an eminent think tank, has transformed Russian organized crime from a threat to the state to an instrument of statecraft.<sup>19</sup> Russian intelligence agencies use criminals as cut-outs and assassins while cybercriminals are protected so

long as their activities are directed at external targets, especially Russia's enemies. These activities have increased since Russia began its war in Ukraine.<sup>20</sup> China is, in some respects, less overt, and since late 2023 has clamped down on fentanyl trafficking directly to the United States. Nevertheless, Chinese companies have continued supplying chemical precursors for fentanyl and methamphetamine to Mexican drug trafficking organizations. Moreover, China is a major player in global counterfeiting products, ranging from luxury goods and fashion to electronics and pharmaceuticals. China is also a major market for wildlife trafficking, and the primary culprit in illegal and unregulated fishing.

Other members of this authoritarian axis are already adept at using organized crime agents as proxies – as Pakistan has done with criminal syndicate D-company.<sup>21</sup> For its part, North Korea has established Office 39, a state body dedicated to organized criminal activities to help fund the regime.<sup>22</sup>



Vladimir Putin pictured with Xi Jinping in Beijing, October 2023. Great-power competition is set to influence organized crime amid the decline of the liberal world order. © Sergei Gunev/POOL/AFP via Getty Images

The Kim regime has also produced heroin and, more recently, methamphetamine, widely distributed counterfeit dollars and permitted units of the Reconnaissance General Bureau to exploit cyberspace for criminal gain.<sup>23</sup> The regime also protects the Lazarus Group, which was responsible for the Sony attack in 2014, the theft of US\$81 million from the Bank of Bangladesh in 2016 and the release of the Wannacry ransomware in 2017.<sup>24</sup> North Korean hackers have also been successful in robbing cryptocurrency vaults.<sup>25</sup>

Iran's Islamic Revolutionary Guard Corps has been directly involved in the trafficking of heroin while also using Iranian hackers for theft and disruption in cyberspace.<sup>26</sup> In a commentary in November 2024, security consultancy The Soufan Group noted that Iran was increasingly using criminal organizations as proxies in Europe – particularly in Sweden – and in Latin America. The regime was providing funding for these organizations to engage in intelligence activities and assassinations, while also integrating them into its drugs and arms trafficking activities.<sup>27</sup> Another member of this axis, the Assad regime in Syria, has become a major player in the production and distribution of captagon.<sup>28</sup>

As these states become even more closely allied, it is likely that they will not only provide safe havens and support for criminal organizations, but also collaborate on more far-reaching criminal ventures. Sovereign protection of criminal organizations will contribute to criminal impunity. It will also make global cooperative efforts to tackle organized crime impossible. Members of the authoritarian coalition might formally accept global norms and collective measures to combat organized crime, but this will be accompanied by deviation, defection, dissent and obstruction. An increasingly stark division will

emerge, therefore, between states that seek to contain organized crime and those that seek to exploit it for geopolitical objectives.

Furthermore, in a context of resurgent geopolitical competition, even the states most committed to combating organized crime are likely to focus their attention and resources on the military and technological dimensions of security at the expense of non-traditional threats. For countries in the Western coalition facing increasing problems of national debt, constrained public expenditure and sustained austerity programmes, combating organized crime will be low on their list of national priorities. In sum, intense geopolitical competition will create an increasingly permissive and even protective environment for state-supported organized crime.

Geopolitical competition is also likely to be accompanied by civil wars, insurgencies and ethnic, sectarian and resource conflicts, as well as by political turmoil and instability. All of this will provide multiple and lucrative opportunities for organized crime, including extensive criminal exploitation of natural resources. Myanmar, Venezuela, Colombia, the Central African Republic and the Democratic Republic of Congo, to name a few countries, have violent armed groups engaged in extensive illegal mining of gold, green metals and minerals. Violent conflicts can lead to humanitarian crises and irregular migration – as seen in countries such as Syria, Libya and Sudan. In 2023, almost 40 000 people – many from Senegal – were driven by violence and the ravages of climate change to embark on the perilous voyage to Spain's Canary Islands. Many of them did not make it.<sup>29</sup> In 2024, fuelled by war and famine, refugees from Sudan were the largest migrant group seeking to cross the Channel from France to Britain.<sup>30</sup>

Conflicts also offer opportunities for war profiteering, especially through arms supplies. They attract predatory outsiders, such as Russia's Wagner Group, which has supported military coups in Africa, engaged in massive pillaging of natural resources, and is both a pioneer and potential prototype for what can be considered a new form of colonialism.<sup>31</sup>

Large-scale geopolitical competition will provide a new level of state protection and support for organized crime, while subnational violence and instability will create opportunities for criminal groups to exploit. Unfortunately, even greater criminal opportunities will emerge from global climate change.

## Global climate change

The world is becoming hotter and wetter, with increasingly profound and damaging consequences. Discussions about the rate of warming have become almost irrelevant given the alarming increases in temperature. These will be accompanied by a rise in sea levels – with major consequences for people living in coastal regions and on small islands – and an increase in highly damaging extreme weather events that lead to flooding, drought, hurricanes and cyclones.

Organized criminal groups contribute to climate change through their involvement in a wide range of environmental crimes, including illegal logging, illicit mining, wildlife trafficking and the trade in hydrofluorocarbons.<sup>32</sup> In turn, climate change provides opportunities for organized crime, the consequences of which are already having a profound impact in many countries, especially those in the global south.

In Bangladesh, the salinization of coastal areas has hampered agriculture and created health risks, forcing communities to move inland, while those who remain have little choice but to resort to illicit activities for subsistence, especially illegal logging and catching shrimp fry.<sup>33</sup> In addition, while Dhaka has become a haven for many climate refugees, the city is vulnerable and could become a humanitarian disaster as sea levels continue to rise.<sup>34</sup>

In Nigeria, issues plaguing communities are not only floods and droughts but also food insecurity. Pastoralists have been forced to move south, which has provoked conflicts between farmers and herders. Climate change and environmental degradation have exacerbated existing ethnic and tribal tensions, and contributed to emerging conflicts over scarce land and water resources.<sup>35</sup>

Additional opportunities for organized crime will be inadvertently created by policy responses such as increased reliance on wind turbines and green energy, which will increase the demand (and price) for certain minerals and metals. Indeed, as early as 2009, it was reported that the Sicilian mafia was infiltrating Italy's renewable energy sector. This was facilitated by corrupt officials, with mafia-supported or mafia-owned companies obtaining necessary permits while their competitors' applications were typically stalled or rejected.<sup>36</sup> As countries that suffer from pervasive corruption and state-embedded organized crime develop wind-powered and solar energy, the likelihood is that the nexus between criminals, bureaucrats and businesses that developed in Italy will be replicated elsewhere.



**Wind turbines in Sicily, Italy, where the 2010 seizure of nearly €1.5 billion from a Sicilian businessman put a spotlight on mafia involvement in green energy.** © *Marcello Paternostro/AFP via Getty Images*

Another potential opportunity for organized crime centres on the minerals and metals needed for emerging green technologies and designed to mitigate climate change. Some of these minerals and metals have wide applicability in the burgeoning green metal sector, while others are specific to one kind of requirement.<sup>37</sup> Both, however, are essential for the transition to green energy.<sup>38</sup> These include cobalt, lithium, rare earth elements, nickel, chromium, molybdenum, graphite and copper.<sup>39</sup> Unfortunately, as the demand for green minerals and metals increases, organized crime will become involved not only in their extraction but also in critical segments of the supply chain. This will be facilitated by the prevalence of what might be termed 'dual status commodities', lacking any indications of whether they were mined legally or illegally.

In sum, global climate change and the transition to renewable energy will offer enormous opportunities for organized crime, as discussed further below.

## Emerging and disruptive technologies

The technological revolution has brought benefits to society, but at the same time will lead to technologically empowered organized crime. Almost all technological innovation creates significant opportunities for misuse, and it is ironic that some of the emerging and disruptive technologies used by law enforcement to counter organized crime will be exploited by criminal networks to outsmart governments.

For example, 5G technology is a new global standard for wireless that will create higher data speeds, enhanced reliability and eliminate communication delays.<sup>40</sup> It will connect multiple devices that will drive the transition from the internet to the Internet of Things, thereby creating hybrid spaces. The most important hybrid spaces will be smart cities, which will have extensive attack surfaces and create huge opportunities for cybercrime.

Another attraction for organized crime is the development of autonomous vehicles, including drones, driverless cars and submersibles. Supply chains will become more adaptable and efficient, but also more vulnerable. In addition, reliance on big data and cloud-based services could increase the vulnerability of transportation and logistics systems to high-tech hijacking, enabling criminals to steal high-value goods from afar.<sup>41</sup> These developments are likely to lead to two trends: the emergence of specialized criminal organizations that offer high-tech crime as a service, and the recruitment of cybercriminals to provide expertise for criminal organizations.

Organized crime could also exploit robotic weapons, especially if there is leakage from the military sector. More immediately, however, global manufacturing will be increasingly automated, displacing large number of workers with access to few alternative sources of income. This will create a ready pool of recruits for organized crime. 3D printing could have similar consequences for the workforce while also facilitating production of weapons and ammunition. On the positive side, however, 3D printing, together with biotechnology, could eventually result in the production of synthetic organs that would undermine the trade in trafficked organs.



A member of an insurgent group in Myanmar displays a rifle partially constructed with components produced by a 3D printer. © Thierry Falise/LightRocket via Getty Images

Biotechnology could also be exploited by organized crime, particularly as it is increasingly dependent on cyberspace.<sup>42</sup> One future-oriented analysis identified multiple potential crime types, including 'cyber-biocrime, bio-malware, biohacking, at-home drug manufacturing, illegal gene editing, genetic blackmail, and neuro-hacking'.<sup>43</sup> The combination of nanotechnology and biotechnology could also pose unknown risks. Given the highly specialized nature of nanotechnology, it seems less obviously suitable for exploitation by organized crime. However, as nanochips and tiny sensors become more widely available, they could be used in cybercrime. It is also possible that nanotechnologies could be used to make drugs – legal and illegal – more potent.

## The global crisis of governance

The global crisis of governance is a more nebulous driver than climate change or technology. In many countries, however, established norms, institutions and processes of governance are increasingly challenged. Weak states abound, corruption is endemic and even in some well-established democracies there are distinct authoritarian impulses. In addition, state-embedded organized crime appears to be a growing problem and one that strikes at the heart of good governance. The crisis of governance, created in part by neoliberalism, is not only highly pernicious but also makes it more difficult to respond to the wicked problems of crime and corruption.

The erosion of state power and authority seems to be an increasingly common phenomenon. Yet states still claim traditional prerogatives and powers, and regard governance as a zero-sum game. Non-state actors providing governance are deemed both usurpers and threats. States claim exclusive authority even while lacking the capacity to extract and to provide. In contrast, strong and effective states able to extract resources through taxation use these resources to provide public goods such as security, welfare and effective management of the economy. States that focus on extraction without provision, in contrast, are typically regarded as exploitative and score low in terms of legitimacy. This is especially true of rentier states in which proceeds of natural resources centralized at the state level become an attractive target for corrupt politicians.



The Amuay oil refinery in Venezuela. Rentier states often face legitimacy challenges, as the concentration of natural resource wealth makes them prime targets for corruption and exploitation by organized crime. © Betty Laura Zapata/Bloomberg via Getty Images

On the other hand, states with few natural resources or limited extractive capacity are inherently weak. Moreover, capacity gaps almost invariably result in functional holes that render the state unable to fulfil responsibilities that are both normal and expected. This can provide opportunities for criminal organizations to become proxies for the state, carrying out state functions in localized areas and often developing popular support. Alternatively, criminal actors exploit functional holes as opportunity spaces where they can act with impunity.

One often ignored reason for state weakness is neoliberalism. A doctrinaire prescription for small government and big business, the proponents of neoliberalism, according to one scholar, 'proclaim the apotheosis of the unfettered market and private property while fighting against the state and demanding the far-reaching curtailment of its economic intervention, budgetary redistribution, and social policy'.<sup>44</sup> In effect, the state exists simply to promote business. More traditional notions of enhancing public good, strengthening civil society and increasing citizen welfare are jettisoned because they interfere with the market. In short, neoliberalism has encouraged states to relinquish responsibility for the welfare and safety of their citizens.

It is not coincidental – although it is counter-intuitive – that neoliberalism has been accompanied by increased corruption. As scholar Sarah Chayes has argued:

In a range of countries around the globe, corruption is the system. Governments have been repurposed to serve an objective that has little to do with public administration: the personal enrichment of ruling networks. And they achieve this aim quite effectively. Capacity deficits and other weaknesses may be part of the way the system functions, rather than reflecting a breakdown.<sup>45</sup>

Indeed, even supposedly weak states are often highly adept when it comes to the extraction of rents and corruption payments for government services that are supposedly free.

This is closely linked to what the Global Organized Crime Index terms 'state-embedded organized crime'.<sup>46</sup> The 2023 Index revealed how many states score highly on this dimension of criminality, with 112 ranked 6 or above on a 10-point scale. North Korea and Syria both receive a 'perfect score' of 10, which is entirely appropriate for two countries in which the regime's survival depends on criminal activities. Eritrea, Iran and Lebanon are next highest, with a rating of 9.50. Those who score 9 include Afghanistan, the Democratic Republic of Congo, Mozambique, Nicaragua, Turkey and Venezuela. Brazil, Chad, Guinea-Bissau, Honduras, Libya, Myanmar and Russia are among those at 8.50 in terms of state-embedded organized crime. The group of 20 states that are ranked together at 8 includes Egypt, Iraq, Paraguay, Philippines and Serbia, while those at 7.50 include Indonesia, Malta, Nigeria and South Africa.<sup>47</sup>

All this reveals how common state-embedded criminal actors have become. Moreover, these actors can also exert the levers of power and influence to provide high levels of impunity. In sum, the global crisis in the institutions and systems of governance, combined with their infiltration by criminal interests, will provide fertile opportunities for organized crime, making the fifth wave a formidable challenge.



# THE TSUNAMI TO COME: THE FIFTH WAVE

**O**ver the next 15 years, organized crime will become more pervasive and powerful than it is today. The transformation that is likely to occur is best understood as a dynamic and complex mix of external pressures and opportunities, and emergent characteristics of illicit markets and criminal networks. Against this background, the analysis below considers eight characteristics of organized crime that are likely to be increasingly prominent in 2040.

## Expanded opportunities

Organized crime will have an ever-expanding portfolio of products and services in response to new opportunities driven by the trends elucidated above. Indeed, it is likely that organized crime will enter a new 'golden age' with the emergence of both scarcity markets resulting from the impacts of climate change and the efforts to combat it through renewable energy.

In this connection, Professor Lucia Tiscornia has articulated how climate change will act as an 'exogenous shock that can produce market distortions leading to criminal capture of scarce resources'.<sup>48</sup> She argues that there is a 'relationship between climate-driven stress and the expansion of organized crime to new markets' and that 'price increases resulting from climate-driven scarcity create incentives for criminal groups to capture new markets', including legal markets.<sup>49</sup>

Past examples include criminal infiltration of the supply chain of legal goods such as cheese in Honduras, avocados in Mexico and abalone in South Africa. This phenomenon will become more widespread as water and food supplies become more tenuous and prices rise accordingly. With continued and intensifying climate change scarcity, price increases will persist. Consequently, as Tiscornia states, 'opportunities for capture will only become more prevalent. Because climate shocks affect commodities on a global scale, the potential for criminal involvement grows exponentially'.<sup>50</sup> In sum, organized crime will be one of the few beneficiaries of scarcity markets.

Organized crime will also be a major beneficiary of the massive population displacement caused by rising sea levels, floods or droughts, something that will initially exacerbate and subsequently dwarf flows of conflict refugees. By 2040, rising sea levels will be creating large-scale displacement from littoral states in both South East Asia and South Asia. New flows of boat people will be accompanied by massive migrant flows from Africa, where droughts, floods, and food and water scarcity will drive people north towards Europe.





As climate change drives resource scarcity, criminal groups are seizing new opportunities in legal markets, with commodities like abalone becoming prime targets for exploitation. © Shaun Swingler

Moreover, geopolitical tensions will make it impossible to provide a collective global response to the irregular migration challenge. Smuggling people across borders will not only provide increased opportunities for existing criminal organizations but will also encourage market entry by opportunistic individuals and groups with access to transportation conveyances. The market in moving people is likely to increase exponentially but with little quality control, rendering migrants increasingly vulnerable. Indeed, by 2040, human smuggling will be the major growth industry of the 21st century, with human trafficking also expanding.

For organized crime, additional opportunities will come from exploiting detention facilities and migrant reception camps. Migrants in these facilities will be hugely vulnerable to coercion into forced labour or prostitution, while government funds will be at risk from fraudulent schemes designed to fill criminal coffers. This is not new, but will continue at an unprecedented scale.

## Protective states and criminal safe havens

A second consideration is that organized crime will thrive in a world where some states provide umbrellas of protection.<sup>51</sup> Indeed, concomitant to the use of organized crime by the axis of authoritarian states is that these states will provide multiple safe havens or sanctuaries. Consequently, state supported criminal organizations and networks will enjoy increased resilience. One prototype here is D-Company, which has largely proved untouchable by India because of Pakistani support and protection. Another is Russia's Wagner Group, which has been adept at extracting resources in Africa. It is also worth noting that Chinese state involvement in Africa and more broadly through the Belt and Road Initiative has tended to be accompanied by a mix of corrupt and criminal activities.<sup>52</sup> By 2040, therefore, mutually beneficial symbiotic relationships between authoritarian states and criminal organizations are likely to be the norm, making both the state and non-state actors more formidable.



Demonstrators in Bangui, Central African Republic, show Russian support amid growing influence of state-backed organizations like Russia's Wagner Group, March 2022. © Carol Valade/Getty Images

State-sponsored, state-supported and state-protected criminal organizations with domestic safe havens will be difficult to contain. In this regard, the author has previously argued that the major global divide of the 21st century would stem from clashes between states that uphold law and order and those that are dominated by criminal interests and criminal authorities.<sup>53</sup> The divide between the China–Russia authoritarian axis and the United States and its allies is not a perfect fit for this forecast, but it is not far removed. The axis states might not be run by criminal authorities in the strict sense, but they are run by authoritarian leaders who use criminal organizations and networks as instruments of foreign policy.

With relationships between organized crime and states ranging across a spectrum from stark confrontation at one extreme to symbiosis at the other, collective efforts to deal with common problems such as climate change will be impossible. State protection for organized crime will also undermine the progress made since the signing of the United Nations Convention against Transnational Organized Crime in 2000. In a world increasingly dominated by geopolitical tensions, information exchanges, mutual legal assistance treaties and extradition will become far more difficult. Even if a successor to the convention were to be established by 2040, compliance with its obligations is likely to be superficial, with many states formally or informally withdrawing from the global governance framework aimed at combating organized crime.

## Hybrid spaces

By 2040, the virtual world and the physical world will be more blurred, overlapping and intersecting in multiple ways. Organized crime in 2040 is likely to operate in hybrid spaces – the quasi-convergence zones of the virtual and the real – and the multiple portals and access points that connect them. Ubiquitous connectivity through the Internet of Things and smart cities will blur the distinction between cybercrime and traditional crime. As one analysis noted, with the evolution of cyberspace and encrypted

communications, there are already few obstacles to contacting 'capable co-offenders and enablers' even if they are not in proximity.<sup>54</sup> This removes traditional constraints and limitations on criminal cooperation, and facilitates the emergence of more dispersed and diverse criminal groups and networks.

This trend is likely to continue as our digital society has an increasingly profound impact on the way criminals conceive, plan and execute their crimes.<sup>55</sup> As a result, more and more crimes will involve both offline and online activities, in effect having physical and virtual dimensions.

Various typologies have already been developed to reflect these developments. One study distinguished between traditional organized crime without an information technology (IT) component, traditional organized crime with IT innovation, organized low-tech crime and organized hi-tech crime.<sup>56</sup> Another identified three types of organized criminal activity related to the virtual world: cyber-dependent organized crime (i.e. crimes that can only be committed in cyberspace); cyber-enabled organized crime, such as fraud schemes that have been scaled up because of accessibility, digital connectivity and low transaction costs; and cyber-assisted organized crime, which is traditional crime facilitated by activities in cyberspace.<sup>57</sup>

Although these distinctions can be helpful, they are likely to become increasingly blurred as the real and virtual worlds overlap and intersect in hybrid spaces. By 2040, supported by 5G (and even later-generation) technologies, the Internet of Things will be fully woven into the fabric of many people's lives, making them more convenient and efficient. However, such developments will create dependencies and inevitable vulnerabilities, offering convenience but also incurring high levels of risk.

## Technologically empowered organized crime

Criminal organizations have already benefited from a wide range of technologies, including GPS systems, burner phones, encrypted communications, the dark web and cryptocurrencies. The merger of criminal intent and artificial intelligence (AI), however, promises to be a force multiplier for organized crime.

***AI will 'amplify existing threats, introduce entirely new threats, or completely alter the characteristics of threats'.***

More complex malware designed to overcome security measures, increasingly sophisticated cyberattacks and industrial-scale social engineering are just some examples of AI-enhanced crime. Moreover, the exploitation of AI by criminal networks will become more prevalent and more effective.<sup>58</sup> Similarly, AI will increasingly be used to create deep fake audios and videos that can be exploited for massively ambitious fraud schemes. AI could also take the illicit drug trade into a new realm. If AI can develop new pharmaceutical drugs to overcome antibiotic-resistant bacteria, then it may also develop new psychotropic substances that are highly addictive but present a low risk of overdosing.

AI and associated technologies also present opportunities for carrying out what might be termed 'crimes at a distance'. While this has long been the case in cyberspace, the criminal use of autonomous vehicles, drones and submersibles for smuggling drugs, weapons and even people significantly reduces the risks criminals face. Containers have long offered a low-tech variation of smuggling at a distance, but autonomous vehicles offer even more flexibility and are likely to reduce risk of detection and interdiction. As one scholar put it, AI will 'amplify existing threats, introduce entirely new threats,

An autonomous vehicle in San Francisco. Such vehicles, along with drones and submersibles, could facilitate the smuggling of illicit goods. © Justin Sullivan/ Getty Images



or completely alter the characteristics of threats' in ways that will require imaginative and innovative responses.<sup>59</sup>

As well as being an instrument, however, AI can also be a target.<sup>60</sup> Criminals could remove ethical guardrails imposed on AI, enabling them to exploit the technology in the pursuit of criminal interests. In this regard, it is also important to think about science and technology as a service. A rogue scientist who has become a disillusioned and disgruntled employee, for example, could be tempted to bring their skills to organized crime. So too could the AI scientist with an established gambling habit and large unpaid debts. Some scientists might also be vulnerable to blackmail or coercion. In other words, the idea of recruiting a pool of AI scientists might not be as preposterous as it initially appears. Organized crime has proved extremely adept at hiring lawyers and accountants, and at corrupting law enforcement and government officials, and it is not clear why scientists and technologists should be immune. Nor is it inconceivable that an ambitious criminal organization with large liquid assets and highly professional associates could create a legal AI start-up designed to attract highly qualified AI specialists

In 2040, technologically enabled criminal networks will pose an unprecedented challenge to law enforcement. Criminals' capacity to adapt and innovate suggests that they will be early adopters of emerging technologies. Law enforcement agencies will have to contend not only with AI-enhanced criminal organizations, but with forms of AI that have been designed specifically to thwart enforcement and interdiction. The other likely result is that AI will enable small criminal organizations to punch well above their weight. Small but highly ambitious criminal networks will become difficult to distinguish from their larger counterparts, making it problematic for law enforcement to determine priorities.

## The plasticity and dynamism of criminal networks

A key characteristic of organized crime in 2040 will be its plasticity. Just as brains have neural networks that can adapt, reshape and rearrange neurological pathways, criminal organizations in 2040 will be dynamic and flexible.

Despite the persistence of hierarchical structures, most criminal organizations are horizontal and self-organizing. Some organized crime is not far removed from 'disorganized' crime. A study of organized crime in the Netherlands in the 1990s, for example, found that criminal organizations were

small, loosely connected networks, highly dynamic in membership and characterized by organizational fluidity.<sup>61</sup> There was constant turnover, no permanent organizational structure and little loyalty or attachment once the criminal activity was completed. This model could become even more salient. According to a report focusing on the European Union, organized crime will be 'increasingly dominated by loose, undefined and flexible networks made up of individual criminal entrepreneurs' who act as freelancers with no long-term affiliation to a larger network.<sup>62</sup> These criminal entrepreneurs will come together for 'project-based criminal endeavours'.<sup>63</sup>

Another important group of individuals can be understood as criminal service providers, who create false documents and identities or offer technological expertise. These specialists provide invaluable services, but for the most part do not engage in criminal activities outside their area of expertise. The same is true of the accountants, lawyers and bankers who play an important role in integrating criminal proceeds into the licit economy. Chinese facilitators in the United States and in Mexico, for example, have become the launderers of choice for Mexican drug trafficking organizations. These kinds of key individuals will gain more influence as they continue to act as brokers, fixers and facilitators. Some brokers arrange the group's finances, others ensure that illicit cargoes are well concealed, and others act as facilitators to move cargo at the intended destination with minimum risks. All of this reflects a modular approach in which the movement of illicit goods and their proceeds pass through several distinct, self-contained stages that are loosely linked. In the event of seizures and arrests, the modular nature of these transactions limits the damage that can be done to the wider criminal network.

## **Murky markets, blurry boundaries and slippery slopes**

A sixth characteristic of organized crime in 2040 is that the line between legal and illegal markets will become increasingly blurred. According to one study, the illegality of a market can be divided into five types.<sup>64</sup> The first involves prohibited goods or services, such as drugs, child sexual abuse material, nuclear materials, and human smuggling and trafficking. The second includes stolen goods, such as cars and other valuables. It can also include industrial products that are stolen, diverted and then sold on domestic black markets or exported illegally. As suggested above, green metals and minerals are also likely to be illegally mined and subsequently integrated into licit supply chains. The third type is counterfeit goods, including aircraft and automobile parts, pharmaceuticals, cigarettes, luxury goods and textiles. A fourth type encompasses legal commodities, such as diamonds or gold, that are traded illegally. Finally, there are regulated markets where legal products, such as cultural goods, are traded in violation of regulations.<sup>65</sup>

While this typology is useful, it overlooks markets that involve services rather than goods, including protection rackets. Complications also arise from legal inconsistencies between jurisdictions and sanctions on specific countries and companies. Moreover, illegal markets are dynamic, often shifting between legal and illegal status depending on the time and the place. This volatility will be a defining characteristic of organized crime, as market transactions 'shift in and out of illegality'.<sup>66</sup>

In some markets, such as the psychotropic drugs trade, where prohibition has traditionally provided clarity, there is growing uncertainty and ambiguity. Some drugs, particularly cannabis, are increasingly being decriminalized to varying degrees, while harder drugs remain prohibited. In the world of synthetic drugs, innovation is outpacing regulation, creating opportunities for unregulated exports and dangerous substances.<sup>67</sup>



A pop-up cannabis dispensary in Brooklyn, New York City, advertises edibles and other cannabis-related products, November 2022. © Andrew Lichtenstein/Corbis via Getty Images

The emergence of new synthetic drugs is just one example of a trend towards what can be called 'grey markets'. Historically, illicit markets have largely involved illegal goods and services, the proceeds of which were then laundered to appear to be legitimately earned. In the increasingly murky world of grey markets, however, the illicit commodities themselves are laundered into legitimate supply chains, and it seems likely that commodity laundering will become a central focus of these grey markets. Such markets are likely to be accompanied by 'grey actors', i.e., legitimate companies engaging in illicit behaviour and cooperating with criminal organizations. As Professor Yulia Zabyelina noted:

In the pursuit of higher profits, legal business owners may act like organized criminals themselves. Thus, they may evade financial and legal controls, abuse safety standards and labor requirements [...] manufacture faulty or dangerous products, and practice intimidation and physical violence against consumers or regulatory agencies. Criminal conduct may also extend to illegal acquisition of other private sector companies, bid rigging, and procurement-related crimes.<sup>68</sup>

The traditional distinction between licit and illicit enterprises is already blurred and will become increasingly so by 2040. If, as seems likely, economic progress and development are disrupted by periodical financial crises, more and more licit organizations might see illicit activities as the only means of remaining viable.

## Criminal hubs and superhubs

In 2040, criminals throughout the world will be connected through a series of hubs and superhubs that facilitate flows and act as criminal entrepôts. Criminal hubs already exist but will take on increasing importance in the geography of transnational organized crime. Drawing on analyses of hubs by Europol, scholar Sandy Gordon and writer Patrick Keefe,<sup>69</sup> it is possible to differentiate three distinct kinds of hub: concentration of crime hubs, logistical hubs, and superhubs where multiple, powerful criminal organizations operate.



**Dubai, a hotspot for a wide range of criminal activities, has become a global superhub of crime.** © Francois Nel via Getty Images

Recent studies by the Global Initiative Against Transnational Organized Crime and George Mason University's Terrorism, Transnational Crime and Corruption Center highlight that hubs exist at multiple levels and are highly scalable.<sup>70</sup> It is possible, for example, for a country to be a crime hub and a major city within that country to be a superhub. One of the most obvious superhubs of crime is Dubai, where criminal activities such as counterfeit cigarette production, human trafficking, gold smuggling, arms trafficking, environmental crime, drug trafficking and money laundering are endemic.<sup>71</sup> As one study noted, 'all roads [or smuggling routes] lead to Dubai'.<sup>72</sup>

In the future, criminal hubs and superhubs will increasingly be connected to one another. There are currently strong linkages among criminals in Marbella (Spain) and Dubai. According to one report, at least 113 criminal groups representing 59 different nationalities operate in the Costa del Sol with Marbella at the centre.<sup>73</sup> Moreover, as two Spanish journalists noted, 'Marbella is inextricably linked to Dubai by crime. Most of the area's criminal groups live between these two cities'.<sup>74</sup> The Kinahan crime family, for example, operated in both cities, with members moving easily from one to the other. This is a foretaste of things to come.

As the world becomes more urban, with an increasing number of megacities of over 10 million people, it is likely that the number of cities that become criminal hubs and superhubs will also increase. Indeed, by 2040, hyperconnectivity and consolidated illicit flows among criminal hubs and superhubs will be ubiquitous and operating on a global scale. These hubs will exhibit eigenvector centrality whereby nodes with a high number of connections and a high level of importance are connected to other nodes with the same attributes. In other words, in 2040, when it comes to criminal hubs and superhubs, it will be an eigenvector world.

## Criminal governance

Given the crisis of governance highlighted above, it is likely that by 2040 the parallel forms of governance provided by criminal organizations will have expanded considerably amid a continuing epidemic of corruption and a plethora of fragile and autocratic states. So long as governments fail to provide basic services for their citizens and continue to see the state apparatus as a resource to be pillaged by well-connected elites, criminals who offer protection will enhance their legitimacy in the community as alternative service providers.

There is nothing new about this. In the 1980s and early 1990s, drug lord Pablo Escobar developed a housing programme in Colombia called 'Medellín without slums'. More recently, Joaquín 'El Chapo' Guzmán took steps to support communities in Sinaloa, Mexico. This kind of paternalism is not unique to Latin America. The Yakuza, for example, was not only quicker than the Japanese government in providing aid to victims after the Kobe earthquake in 1995 but also assisted with the clean-up of the Fukushima nuclear power plant after the 2011 earthquake and tsunami. The implication, however, is that if governments throughout much of the world increasingly fail to meet the needs and expectations of their citizens, then it is highly probable that, by 2040, in some countries at least, criminal governance will be seen not only as an alternative form of governance, but as a preferential one.

**A building overturned by the 2011 earthquake and tsunami in Miyagi, Japan. In times of crisis, criminal groups like the Yakuza have stepped in to provide aid, highlighting the growing role of criminal organizations as alternative service providers. © The Asahi Shimbun via Getty Images**



Another governance issue is the challenge of state-embedded organized crime. It is possible that public scrutiny will lead to much needed purges of criminals from within governments. The difficulty, however, is that once organized criminals are deeply embedded in state structures, they are not easy to identify – let alone eradicate. State structures and institutions are complex and highly opaque, with multiple opportunities for access to and exploitation of state assets. Criminal activities can be subtle, carefully orchestrated, concealed and plausibly denied, particularly where there is little oversight and investigations from civil society. It is also worth noting that many state-embedded criminal organizations will gradually exert increasing control, thereby creating what has been described as 'criminally possessed' states that are manipulated and controlled by criminal interests.<sup>75</sup>



## CONCLUSION: RIDING THE WAVE

**T**he world of 2040 may well be a very positive one for organized crime, with business expansion, diversification and consolidation of political power. Scarcity markets will be one of the consequences of climate change and the efforts to combat it. Criminal networks will dominate these markets, and play an increasingly important role in the provision of food, water and other basic commodities and services. Criminal organizations will also facilitate the movement of migrants fleeing conflict and the consequences of climate change. Some criminal organizations will be state-supported and state-protected, while others will work closely with licit businesses as part of an emerging criminal–private sector nexus. In addition, the adoption of new technologies will empower criminal organizations of all shapes and sizes.

The result is that criminal proceeds will significantly expand. Illicit flows will move through criminal hubs and superhubs while criminal organizations will exhibit enormous variation in structures and strategies. Markets will be murky, and traditional distinctions between the licit and the illicit will be less discernible. Legal businesses and criminal enterprises could become indistinguishable from one another. Some governments will act like organized crime and some criminal organizations will act like governments, offering protection and even provision of services.

But one thing is certain: organized crime in 2040 will be strengthened, fuelled by climate change, geopolitical competition, poor governance and new technologies. The result could well be a scenario that can best be described as a criminal nirvana and democratic dystopia. Is there anything that can be done to forestall or limit such a possibility? The answer is, unfortunately, not much. Even so, there are several recommendations that can be made to mitigate organized crime's impact on people and the planet.

***It is critical to recognize that organized crime has become an instrument of geopolitical competition for some countries.***

First and foremost is to transform how we think about criminal organizations and to focus far less on constraining them but on limiting the opportunities they have available. One of the key themes of this analysis is that the opportunities available to organized crime will expand enormously by 2040. Inhibiting or mitigating this expansion requires thinking differently about policy domains, which are no longer separate silos. Instead, they are interwoven challenges with complex interdependencies that can all too easily lead to what political scientist Thomas Homer Dixon termed 'negative synergies'.<sup>76</sup>

Limiting or alleviating such synergies, for example, requires efforts to prevent criminal exploitation of the processes and the consequences of climate change. One way to do this would be a collective

initiative to orchestrate a more permissive yet orderly approach to irregular migration while also seeking to dampen the impact of climate change as a push factor for migration. This requires local efforts to mitigate the most serious consequences of rising temperatures and extreme weather events.

In terms of emerging technologies, it is essential that law enforcement and intelligence agencies engage in early and widespread adoption of AI, quantum computing and other innovations to develop and maintain a competitive edge over criminal exploitation of these same technologies.

Law enforcement agencies should focus much of their attention on criminal hubs and superhubs, aiming to degrade, disrupt and dismantle them. They should also work on destroying the connectivity among these hubs and reducing eigenvector centrality.

In addition, it is critical to recognize that organized crime has become an instrument of geopolitical competition for some countries and therefore needs to be treated as such, and acknowledged by others as a national security challenge rather than simply a law-and-order problem. Given geopolitical rivalries and the use of criminal organizations as proxies, the states upholding traditional laws and regulations should seek to highlight criminal safe havens, emphasize their illegitimacy, and where possible impose appropriate and meaningful sanctions.

Strenuous efforts must be made to improve and enhance state governance, thereby reducing opportunities for alternative forms of governance, most especially criminal governance. To accomplish this, it might be necessary to establish a global body that can provide periodic assessments of governance, highlight shortcomings and deficiencies, provide recommendations and create incentives for states to meet them. One place to start would be to focus attention on the countries that have the highest rankings within the Global Organized Crime Index in terms of state-embedded organized crime. Naming and shaming these countries would be a start, but should be accompanied by efforts to dislodge and eradicate these infiltrated organizations and individuals.

Finally, neither prevention nor mitigation can wait until the 2030s – they must begin now and be implemented with a sense of urgency. Time does not favour efforts to combat organized crime. Law enforcement has always been trying to catch up with organized crime and, unless dramatic action is taken, and quickly, it will only fall further behind.

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