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How Did We Get Here?

DRIVERS OF THE POST–COLD WAR EXPANSION

Many explain the growth of illicit trade in the post–Cold War period as a consequence of globalization.[1] The term *deviant globalization* has been coined to suggest that illicit commerce grows faster than its legitimate counterpart.[2] Globalization, however, explains only part of the growth of illicit trade, as licit and illicit trade have co-existed for centuries. The illicit economy in recent decades has been fueled by many of the key indicators of the current wave of globalization—increasing global competition, the increasing mobility of goods, money, and people, and the decline of borders, combined with the new technology of the Internet and social media. These features of post–Cold War life have facilitated the rapid rise of both licit and illicit international trade.

The profound political instability and corruption in many locales in the contemporary world undermines legal commerce and makes the rise of illicit trade an ever more pervasive problem. For many of the world's inhabitants today, participation in the illicit economy is a means of survival, and a way out of a precarious situation.[3]

This instability results from the problematic transitions of Communist states; the rise of regional conflicts; the increasing role of nonstate actors, including criminals and terrorists; and the recent displacements of tens of millions of people.[4] The use of economic sanctions for political objectives has also contributed to the rise of illicit trade, as businesses in countries under sanctions engage in smuggling to evade controls.[5] Iran has smuggled oil, and Russia, under sanctions after its invasion of Crimea, has turned Crimea and the Donbas in Ukraine into smugglers' paradises. North Korea has partially financed its nuclear program and its state through state-sponsored smuggling of currency, drugs, wildlife parts, and cigarettes.[6]

The following case studies on Syria and the online marketplace known as Silk Road illustrate some of the major challenges posed by the illicit economy today. Conflict regions and cyberspace are two areas where the problem is most concentrated, but unfortunately, they are far from the only locales where this commerce is operating. The illicit economy is now present on every continent, with participants ranging from the elite of the corporate and financial worlds to the lowest economic levels—the farmers who grow drugs and the trafficked laborers who work in abusive conditions on commercial fishing boats—to the consumers who, both wittingly and unwittingly, participate in dark commerce by purchasing its products.

Syria: The Domino Effect from One Form of Illicit Trade to Many

The deadly crisis in Syria, in which an estimated 475,000 have been killed and 14 million have been wounded or displaced,[7] began with the Arab Spring of 2011, but was not just the rise of a population against an authoritarian leader. Rather, there was another important source of instability: a mass exodus from rural areas as a result of recurring drought and the decline of the famed Fertile Crescent of the Middle East.

In the 1970s, Hafez al-Assad, the father of the current president, Bashar al-Assad, launched an ill-conceived drive to have Syria

achieve agricultural self-sufficiency. "No one seemed to consider whether Syria had sufficient groundwater and rainfall to raise those crops," *Scientific American* explained recently. "Farmers made up for water shortages by drilling wells to tap the country's underground reserves."[8] As water became less available, people dug deeper wells in search of even less accessible supplies.

In 2005, to deal with the paucity of water, President Bashar al-Assad made it illegal to dig new wells without a license, which required the payment of a fee.[9] But in a highly corrupt environment, the digging did not stop: those with money for bribes continued to dig deeper. There was an illicit trade in water rights, aggravated by corruption. But the relief was not sustained even with the payment of bribes. The drought in the once-fabled Fertile Crescent continued, and any remaining water was so deep that it was no longer profitable to dig.

Seventy-five percent of Syria's wheat came from drought-affected areas.[10] In the absence of crops, desperation drove individuals living in desert agricultural areas to migrate en masse to the cities. Between 2002 and 2010, shortly after Bashar al-Assad assumed power, Syria urbanized at an incredibly rapid rate. Before the American invasion of Iraq in 2002, there were 8.9 million Syrian city-dwellers; in 2010, there were 13.8 million. Of this rural exodus of almost 5 million people, approximately 1.5 million were fleeing the drought.[11] In a decade, Syria became one of the most urbanized countries in the world.[12] But this population transition occurred in a corrupt and badly governed state that did not show concern for its citizens and their welfare.

Recent migrants to urban areas congregated in the illegal settlements that developed on the periphery of Syrian cities. Neglected by the Assad government, these communities were characterized by a paucity of infrastructure, high crime rates, an absence of services, and unemployment; ultimately, they "became the heart of the developing unrest" during the Arab Spring.[13]

The story of the Syrian drought refugees does not end with the beginning of the Arab Spring. Rather, that uprising was the beginning of a domino effect. The Syrians' departure from rural areas was the first leg of a longer journey that often took a more tragic

course, as these rural-to-urban migrants had to then flee civil war and destruction. Many left for Europe via precarious smuggling routes that crossed Turkey, and they also embarked on dangerous boats that traversed the tumultuous waters of the Mediterranean. A whole illicit industry has now arisen to facilitate this movement, or "trade," in people. Individuals sell their remaining valuables to pay the smugglers who can move their families to safety. A few without financial resources will even sell their kidneys to wealthy buyers to pay the fees to get their families to safety.[14] Others pay part of the fee in advance and then, still indebted to the smugglers on arrival, are often forced into work in slavelike conditions in Europe.

The prolonged conflict in Syria has resulted in great human suffering and massive loss of life and infrastructure. Like many others in the world, the Syrian conflict has been partly financed by illicit trade. The smuggling of drugs, humans, oil, and antiquities and the trafficking of cigarettes and other contraband have provided funds to buy weapons and sustain fighters on all sides, from President Bashar al-Assad's government forces to resistance and terrorist groups. Those profiting from the smuggling in Syria include government officials, criminals, and terrorists such as Al-Nusra and ISIS.[15] Illicit trade today, when conducted by nonstate actors or abusive authoritarian leaders like Assad, destroys the state as well as human lives and destabilizes regions. This is the ongoing reality of dark commerce at its worst in the contemporary world.

Key Lessons of the Syria Case

This case is one of the worst examples of the growth of regional conflicts in the post–Cold War period. Illicit trade has funded many of the most important disputes and clashes of recent decades in the Middle East, Africa, Latin America, and Asia and the conflict between Russia and Ukraine.[16] Research indicates that greed, rather than grievance, prolongs these conflicts as the combatants become used to the profits generated by their smuggling and contraband sales.[17]

Conflicts may be started by resource scarcity, but they also have damaging environmental consequences. "Across the Middle East

and parts of North Africa, civil war, poaching to buy guns, and refugees' urgent need for food and firewood, are extinguishing relic populations of wildlife and wrecking habitats."[18] The arrival of ISIS in Syria led to not only the looting of antiquities but the killing of the last-known endangered Northern bald ibis.[19]

Resource depletion and climate change lie at the heart of the Syrian conflict and will continue to be key drivers of human displacement in the future. Individuals and families will continue to pay smugglers to move them illegally to unwelcoming lands. To cover their transport costs and ensure their survival en route and at their destination, many will participate in different elements of the illicit economy to survive. Often found at the lowest levels of the illicit economy, these participants bear the brunt of enforcement efforts.[20]

The consequences of climate change are becoming more evident as average global temperatures rise and climate conditions become more erratic. Climate change contributes to droughts, resulting in less available water for agricultural and human consumption; water scarcity, in turn, fuels illegal migration, such as the exodus of Syrians to Europe.[21]

In Africa, large numbers of people are literally marching out of the Sahel. Illegal migration and massive population displacement is also under way in the Bay of Bengal, ground zero for the impact of climate change.[22] There, rising seawater threatens low-lying land, and parts of Bangladesh and other areas in the region are already uninhabitable for parts of the year. As in the Sahel, inhabitants of inundated communities seek the aid of smugglers to move them to locales that can sustain life.

The identified crises in Africa and Asia help explain why displacement is being rapidly exacerbated. In 2018, the United Nations High Commission for Refugees (UNHCR) determined that there were 68.5 million refugees around the world (or 1 out every 113 people), up from 37.5 million a decade ago.[23] With significant growth from the preceding year, the world recorded an all-time high in the number of people displaced by conflict, persecution, and climate change.[24] Many refugees are housed in camps near their homes, where they are vulnerable to diverse forms of exploitation.

Many displaced persons now increasingly live in informal settlements, such as those seen in Syria. Poorly governed cities and megacities expand in the developing world, a consequence of the absence of arable land and potable water. People with no access to the basic elements to sustain life will be increasingly forced to rely on nonstate actors when the state does not deliver needed services. Water mafias that provide water to drink and for daily use have proliferated in Asian and Latin American urban environments, demonstrating that illicit trade arises in the absence of conditions conducive to human survival.[25]

The mass movement of desperate Syrian migrants to adjoining states and Europe has created major political and economic crises in the destination countries, which were not equipped to accept millions of displaced people. In reaction, the receiving states and many other countries in Europe have sought to curtail migrant smuggling, as they do not want to receive any more illegal migrants whose integration will pose serious economic, social, and political challenges. Yet the ongoing illegal migration is a harbinger of the mass population movements in store in the coming decades of the twenty-first century.

Technology and Illicit Trade

At the initiation of illicit trade in cyberspace, it was merely an online version of traditional illicit trade. Yet it shortly added previously unknown products to the repertoire of illicit commerce—intangible goods such as the previously cited malware, ransomware, and botnets, whose value depends only on the ingenuity of illicit entrepreneurs with cyber-skills. The new technologies have allowed illicit traders to communicate in encrypted forms, making it difficult to unravel their networks, learn of their scheduled deliveries, or follow the money.[26] The recent rise of cryptocurrencies has only added to the difficulties in unraveling criminal networks.[27]

Today, with approximately 7 percent of commerce online in the European Union and the United States and online shopping constantly growing, there are ample opportunities for criminals to

expand their activities rapidly.[28] Buyers can now purchase opioids, harmful pharmaceuticals and other counterfeits, and sexual services, all through the internet.

Another central hub of illicit trade is the Dark Net, the deepest part of the Internet, accessible only by special software such as Tor.[29] On the Dark Net, vendors seek to evade law enforcement detection and the most dangerous items are sold: narcotics; arms, child pornography; and malicious tools to undermine computer systems that allow users to hack into financial accounts; moreover, parts for nuclear devices and biological weapons are advertised for sale.[30] The harm is not confined to the developed world: the malicious products sold on the Dark Net have affected computers in almost all countries of the world.[31]

Many associate the misconduct in cyberspace with the cybercriminals of the Soviet successor states. But the ingenuity of the legitimate tech world in North America also has its counterpart in the Dark Net. Silk Road was initiated by an American, and the subsequent successful Dark Net site, AlphaBay, was created by a Canadian.[32]

Silk Road: Anonymous Online Markets and Cryptocurrencies

Key developers of illicit cyber-trade, like the American Ross Ulbricht, aka Dread Pirate Roberts (he took his pseudonym from a fictional character in the novel and film *Princess Bride*) developed the first mega-online market for illicit goods. Online sellers from developed countries often do not have criminal pasts.[33] In fact, Dread Pirate Roberts reached the highest Boy Scout rank of Eagle Scout, an achievement reached by few. Isolated from the world of drug traffickers and addicts, he could not imagine the suffering he was facilitating through Silk Road, his online marketplace for drugs.[34]

The managers and creators of illegal cyber-markets operate outside the constraints of society. Like many innovators in the illicit cyberworld, Ulbricht was a dropout from a physics PhD program who had a high technical capacity but whose capacity for human

interactions was less developed.[35] He might have been a failure in legitimate traditional commerce because of his lack of interpersonal skills, but in the anonymous, impersonal cyberworld, he could thrive temporarily.

Ulbricht's goal was to create a market for drugs that would result in their legalization. His libertarian philosophy made him seek to develop a trade model outside state control, avoiding taxation and regulation.[36] Dread Pirate Roberts thought he provided a better marketplace, one where risks were lower, drug quality was higher, and the violence associated with drug trafficking was less prominent. Unfortunately, purchasers died from drugs bought from Silk Road. Ulbricht eventually ordered multiple murders to make his operations profitable (although it is not clear that these killings ever took place), and law enforcement investigating his activities went to the dark side as well.

Large-scale online child pornography developed early in cyberspace, but large online illicit marketplaces, like Silk Road, were not launched for over fifteen years after the founding of Amazon and eBay.[37] Dread Pirate Roberts launched The Silk Road in February 2011, after working for months writing code to establish his site in the Dark Net.[38] With no prior experience in marketing anything, he launched Silk Road with an internet blog post, announcing its existence to drive customers to the Dark Net, where there are no advertisements or search engines.[39] Dread Pirate Roberts watched his business grow exponentially, diversify its drug products, as well as expand into arms sales and software products harmful to financial and computer systems (Trojans, spyware, and malware apps).[40] At the height of Silk Road's operations, 600,000 messages were exchanged monthly between buyers and sellers. Ulbricht received a commission on sales through the Silk Road site. Processing $1.2 billion in transactions in a little over two years through the cryptocurrency Bitcoin, he netted $80 million—unimaginable wealth for a person who had lived at the fringes of society.[41] Regrettably for him, he was never able to enjoy his newly obtained wealth, as Silk Road was taken down in July 2013 after long and laborious effort by law enforcement. Unfortunately, there are risks of large-scale illicit

commerce in the cyberworld for criminals who operate in countries with well-functioning law enforcement. Silk Road products were delivered by post and left a trail that could be followed, one element that helped lead to Ulbricht's capture. Dread Pirate Roberts and many of his employees who helped run the site around the world were arrested by police in many different developed countries.[42]

A harsh fate awaited Dread Pirate Roberts. As the sentencing judge explained, he might be a libertarian by philosophy, but his conduct was no different from that of any large drug dealer.[43] She sentenced him to two life sentences, plus forty years without parole, a sentence that has been upheld on appeal.

The judge was correct in characterizing his behavior. Ulbricht did not create a less violent world in which to sell drugs, but he himself became violent in his years as a drug seller. He used Bitcoin to hire multiple hit men in an attempt to kill rivals and people who he thought had stolen cryptocurrency from him.[44]

Moreover, Silk Road did not escape the corruption that accompanies organized crime. Two federal agents from the US Secret Service and the Drug Enforcement Administration (DEA) are now serving seven-year prison sentences. Seeing the intense wealth generated by Silk Road sales and the anonymity of the payment system, one agent stole Bitcoins from Dread Pirate Roberts. This DEA agent provided Ulbricht with inside information on the investigation, helping him evade detection, for which the law enforcer received large Bitcoin payments.[45] This may be the first investigation in the virtual world where federal investigators went to prison for serious acts of corruption. This case affirms that corruption can travel from the real to the virtual world. As humans transfer their modes of conduct into cyberspaces like illegal online marketplaces, corruption will not disappear.

Central Themes

The patterns of criminal behavior associated with the Silk Road site resemble the crime we know in the real world. Cybercrime operates in many familiar ways because it is committed by real-world

criminals operating by means of new technology. They simply transfer their criminal and corrupt practices to a new domain.

Silk Road has received much attention because it was the first cyber-supermarket for narcotics, arms, and other illegal commodities, but it has been followed by even larger websites. Going after crime kingpins such as Dread Pirate Roberts does not always eliminate the crime problem. Rather, taking out these major players may provide growth and promotion opportunities for other criminals. Since Silk Road's closure in 2013, transactions for illicit drugs on markets in cyberspace have tripled and revenues have doubled.[46] Once taken down by law enforcement, Silk Road was replaced in about a month by Silk Road 2.0—an indication of the speed at which complex programming can be done when there is a strong financial motivation.[47] Silk Road 3.1 was broken into during the summer of 2017. Each generation of the illicit online marketplace is more active than the past one. AlphaBay, another site that operated from 2014 to its mid-2017 takedown by law enforcement, had 350,000 listings for illegal drugs, goods, and services—more than twenty times greater than the 14,000 listings on Silk Road at the time of its closure.[48] The extraordinary growth of the illicit online marketplace makes its products and services more widely available to consumers around the world.

Cybercriminals, as we will discuss in chapter 5, also sell and rent new products, such as malware, a newly created virtual product that exploits computer systems and harms the accounts of individuals connected to the internet. Cybercriminals are not just traders in information and goods but also creators of a range of new products that can do massive harm. Just as legitimate technology companies are staffed by computer programmers who create new software and products to sell, smart techies in the parallel illicit world, like Dread Pirate Roberts, exploit their advanced knowledge of computers and programming to create harmful new businesses. They are not just traders of goods and information but *illicit entrepreneurs* who start, launch, and run criminal businesses.

As a consequence of illicit entrepreneurship, an estimated 17.6 million Americans in 2014 (or one in six of those age sixteen or older) had their identities stolen. Trade in victims' stolen personal

information facilitated lucrative financial crime as their bank accounts were emptied.[49] Another group of cybercriminals operating out of Estonia, a high-tech center, were sentenced in 2016 for infecting four million computers, in one hundred countries, with malware in a multimillion-dollar fraud scheme.[50] These cases reflect the asymmetric harm made possible by technology: a small group of criminals can have a negative impact on millions of lives around the world.

The illicit entrepreneurs of the tech economy—who, like their counterparts in the legitimate economy, are overwhelmingly male and often youthful—represent a new security challenge. During the Cold War era, mature individuals were behind the buttons determining whether there would be a nuclear attack. Today, by contrast, it is often unsupervised and testosterone-driven teenagers or young adults who undermine global security by launching devastating cyberattacks.[51]

Yet not all the illicit traders operating via the new technology are pursuing personal profit. Some states, including Russia and China, are directly employing or engaging criminal actors to engage in cybercrimes that undermine the financial and political health of other countries, their elections, their companies, and their citizens. Hacking into the computer systems of innovative companies to steal intellectual property or personal information is another example of new forms of illicit commerce with important financial implications.[52] An estimated half a billion personal records were stolen in 2015, not only by criminals but also by state-sponsored hackers. This figure may even be understated, as many companies do not want to reveal breaches of their computer systems.[53]

The Drivers of the Growth of Illicit Commerce in the Post–Cold War Period

The two case studies of epicenters of illicit trade in the post–Cold War period—Syria and the online Silk Road—highlight just some of the reasons that illicit commerce has escalated dramatically in the last three decades. Other important changes of the last thirty years, apart from the technological revolution, have also profoundly transformed illicit trade and contributed to its growth: continuing

population growth, including the youth bulge; rising income inequality; the enormous expansion of the middle class, particularly in Asia; continuing gender inequality; the transformation of Communist states; and the rise of nonstate actors such as transnational criminals and terrorists.

POPULATION GROWTH

Population growth has been concentrated in the developing world, where corruption is high and the funds needed for development are often stolen and moved offshore. In Africa, Latin America, the Middle East, and South Asia, there is a youth bulge (a large under-thirty population). The large numbers of young people often lack the needed education to obtain the limited legitimate employment. Often they can find jobs only in the illicit economy.[54] Such work may be even more difficult, however, because workers lack job security and benefits and may be exploited. Moreover, because they work outside the legal system, workers face possible punishment from the state. Despite all these negative factors, work within illicit economies for an organized crime group or network is still attractive because it may offer ready cash and a sense of belonging, motivations that also drive youth to join terrorist groups.

INCOME INEQUALITY AND THE RISE OF A MIDDLE CLASS

Income inequality has increased dramatically in recent years, both within and between countries. In many countries since 1980, much of the world's newly generated wealth is concentrated in the hands of the top 1 percent, with even greater concentration in the top 0.1 percent.[55] To put this in more accessible terms, the eight richest people in the world have as much wealth as the world's poorest 50 percent.[56] Since the economic crisis of 2008, the trend toward income inequality has only accelerated. Over half of the 103 countries for which data are available have become less equal in recent years.[57]

This disparity in wealth has political as well as economic consequences. As societies become more polarized, citizens strike back at existing power structures. This was visible in 2016 when the

displaced and often struggling middle class in the United States largely voted against the existing political order. Significant protests against corruption have also been seen in Brazil, Russia, and South Africa.[58]

While many of the world's billions live in extreme poverty and insecurity, at the end of 2016 there was a global middle class of 3.2 billion, a figure growing annually by 140 million. Most of this growth is in Asia, primarily India and China.[59] Middle-class consumption enhances demand for many items, including better food, urban homes, and household furnishings. Unfortunately, the scale of this increased demand is putting intense pressure on natural resources—for example, existing fish stocks that should not be depleted to satisfy increased consumption demands, or trees in protected forests that should not be cut down to meet the demand for new housing and furniture.

In the increasingly economically polarized world, a mega-elite often engages in conspicuous consumption, buying up products that were once the possessions only of maharajas, emperors, and kings. In Asia, they want ivory and rhino horns that were once the status symbols of royalty. Asian elites' quest for traditional medicines and other products to improve well-being is driving rhinos, abalone, and wild Appalachian ginseng to extinction.[60] In other regions of the world, the rich want private zoos filled with endangered animals, or the diamonds that may be funding conflicts.[61]

GENDER INEQUALITY AND ILLICIT TRADE

The exclusion of women from positions of power and authority is a problem in the illicit as well as the licit world. Women rarely assume leadership positions in the dark economy: if they play a role, it is a supporting one. They become drug mules, couriers of illicit profits, and front people for money laundering. The only area where women are visible is human trafficking: some women, once trafficked themselves, assume leadership and facilitating roles in the recruitment and exploitation of other women and girls. According to UN data, from 2010 to 2012, 28 percent of convictions for human trafficking were of women, whereas women represented only 10 to 15 percent of those found guilty for other serious offenses.[62]

The increased of trafficking of women from the former Soviet Union brought unprecedented attention to human trafficking in the early 1990s, but the phenomenon is now recognized as a much broader global problem.[63] Women and girls are trafficked not just into sexual exploitation but also into domestic servitude, forced marriage, and labor. In some developing societies, the sale of girls helps families pay for familial needs—food, the education of male children, and medical care needed by family members.[64] The marketing of women and girls through the internet, the Deep Web, the Dark Net, and social media has facilitated the surge in human beings as a trade good.[65]

Women are often exploited in factories, especially in free economic zones, where existing labor protections are absent or ignored.[66] This statement does not begin to capture the misery of the women confined in these facilities. A case in American Samoa—the largest American human trafficking case ever prosecuted—reveals the suffering that these women endure. The textile factory owner, Kil Soo Lee, and his managers used food deprivation, beatings, and threats to increase production at his Daewoosa plant. The owner retaliated against workers who tried to obtain food from the local community by confining them in the fenced compound then ultimately organized a mass beating of the Vietnamese women workers.[67] This criminal conduct resulted in a forty-year prison sentence for Kil Soo Lee.[68]

THE TRANSFORMATION OF COMMUNIST SOCIETIES

Prior to the 1990s, eastern Europe, the Soviet Union, Mongolia, China, parts of Africa, South East and South Asia, and Latin America were governed by Communist parties that maintained one-party rule, centrally planned economies, and limited private property ownership. All shared a common absence of consumer goods. In most of these societies, black markets, rule-breaking, and getting around the system lay at the heart of daily survival. This consciousness remains, even after the collapse of the Communist system in eastern Europe and the Soviet Union.

The troubled transitions from Communist rule have contributed significantly to the extent of and the threat from contemporary illicit

trade. The political power vacuum, the pervasive corruption, the absence of border controls in post-Soviet states, and the rise of powerful crime groups were conducive to the proliferation of diverse forms of illicit trade in the 1990s.[69] Of greatest concern has been the trade in WMDs (weapons of mass destruction): the former Soviet Union had a large stockpile of nuclear and radiological materials and biological weapons, and they pose an existential security challenge if they fall into the wrong hands.[70] The theft and trafficking of nuclear materials and radioactive waste improperly safeguarded have remained a recurrent problem in the decades since the collapse of the Soviet Union.[71]

Other forms of disturbing illicit trade originated in Communist states in transition. Today massive quantities of counterfeit goods originate from China, now the factory for the world. In Russia, a new kleptocratic elite lacking an environmental conscience (one consequence of long-term state ownership of land and resources) plunders the great forests of Siberia for profit.[72] Much cybercrime originates from eastern Europe and the former Soviet Union, partly because, with corporate raiding (discussed more in chapter 5) and limited technological entrepreneurship, owners with successful businesses lose them through violence and abuse of the legal system.[73]

Countries in transition from communism are sources not only of illicitly traded goods but also of consumers of these products. Chinese and Vietnamese customers display their new affluence by consuming endangered species and displaying the horn and ivory of the increasingly endangered rhino and elephant.[74]

THE RISE OF NONSTATE ACTORS: CRIMINALS AND TERRORISTS

Transnational Criminals

Transnational criminals and corrupt officials have been among the major beneficiaries of globalization, accelerating the growth of illicit trade internationally. This is not just a phenomenon popularized by the mass media.[75] Organized criminals have entered the political process in many countries not only by bribing government officials and legislators and financing politicians but also by running for office

themselves at the state, local, and national levels.[76] In some countries, there is an extra incentive to enter politics, as officials acquire immunity from prosecution.[77]

Traditional organized crime groups, such as the Italian *Mafia* and *Camorra*, the Japanese *Yakuza*, and the Chinese *triads*, have rapidly adapted to the possibilities of the globalized world, moving goods and money transnationally with alacrity and facility. Yet there are also many newer transnational crime groups that have excelled in these skill sets from their inception.[78] Post-Soviet groups have been leaders in deviant global commerce, especially in human trafficking and cyberspace.

The rise of transnational crime in post-Soviet states was rapid. These groups and their corrupt associates accumulated substantial capital with the massive privatization of state resources, which allowed them to acquire government property at bargain prices and embed themselves within the economy.[79] Their ascendency was not unique. Conflicts in recent decades in Afghanistan, the Balkans, and North Africa, to name just a few notable examples, have contributed to the rise of powerful new organized crime groups.[80] Indeed, criminalized power structures have served as enemies of peace.[81] In Afghanistan, a massive drug trade tied to the national leadership made an illicit crop a core element of the economy.[82] At its height, drugs represented approximately 30 percent of Afghanistan's gross national product (GNP).[83]

Crime groups cooperate in ways that licit actors do not. For example, Jamaicans and Turks have collaborated in the narcotics markets of London.[84] Russians have traveled to Colombia to build submarines to help drug lords, establishing and maintaining their relationships there in a strip club near the Miami, Florida, airport.[85] Collaboration among such diverse criminal groups might seem too unrealistic for a Hollywood film, but they prevail in reality.

Terrorists

Since 2000, terrorism has been an increasing global problem. A "new terrorism," unlike its state-supported predecessor, has been responsible for larger-scale attacks with more victims.[86] New terrorists, using false documents and identities to cross borders, rely on illicit commerce to support their organizations.[87] Terrorists equipped with sham papers commit mass murder.[88]

Objects traded far from their point of origin may fund terrorists. Illicitly acquired Syrian antiquities such as coins, cuneiform tablets, rings, and sculptures are subsequently sold in art galleries in Europe, at auction, and online, reflecting the ever-present links between the licit and illicit economies.[89] Heroin sold in Russia, Europe, and elsewhere funds terrorism in Afghanistan.

ISIS and Al-Nusra taxed the transit of commodities and people crossing territory they controlled. According to a retired high-ranking Jordanian military official, these two terrorist groups fought in the morning and then declared afternoon cease-fires to extort money from the human smugglers and refugees departing from the war-torn territory.[90] The extraction of financial resources from vulnerable migrants took precedence over battlefield objectives. According to documents obtained from ISIS, their rate of taxation on goods and services ranged from 10 to 30 percent.[91] Taxed trade goods included counterfeit cigarettes, pharmaceuticals, cell phones, antiquities, and foreign passports obtained from arriving foreign fighters.[92]

In Europe, ISIS recruits funded themselves through small-scale illicit trade and criminal activity.[93] Petty illegal commerce is particularly attractive to terrorists because there is less market saturation, less regulation, reduced competition, and more limited law enforcement than for arms and narcotics trafficking. A high proportion of identified terrorists and members of their networks have criminal records.[94] German analyses revealed that two-thirds of German foreign fighters had prior convictions for property and violent crime, and nearly one-third had been sentenced six or more times, reflecting their serious criminal pasts.[95] In the Netherlands, almost half of identified foreign fighters had prior convictions.[96] Similar patterns have been identified in other European countries.

The Extent and the Impact of Contemporary Illicit Commerce

In 2014, the United Nations Office on Drugs and Crime (UNODC) estimated annual revenues of transnational crime at $1.6 trillion to $2.2 trillion.[97] The total figures were far above estimates from a couple of years earlier, when the global economy was still in recession

and cybercrime had not yet escalated to present levels, but its share remains steady. At that time, UN specialists commented, "These immense illicit funds are worth more than six times the amount of official development assistance, and are comparable to 1.5 per cent of global GDP, or 7 per cent of the world's exports of merchandise."[98] These figures may be understated, however, since corruption can undermine the accuracy and extent of reporting: border guards and custom officials who are complicit in the smuggling of goods across frontiers may fail to report the trade. Another reason cybercrime often remains underreported is that companies do not choose to share data on their losses, as such reports would undermine their reputation and could erode their customer base.

The illicit economy is not evenly distributed. It is most pervasive in the developing world, while dark commerce in cyberspace is particularly prominent in the more developed countries. Because the commodities of the illicit economy often converge—following the same trade routes, being transported by the same people, and providing economies of scale for the traders—it can be difficult to differentiate the profits for individual categories of illicit trade.

Examining only the revenues of illicit commerce understates its cost. The transfer of hundreds of billions to criminals, terrorists, insurgents, and corrupt officials enhances the wealth and power of individuals without concern for the welfare of societies, democratic principles, or sustainable economic growth. This trade destabilizes global and regional stability and threatens our future. More concretely, dark commerce operates as an asymmetric threat. It increases corruption and reduces governmental revenues, and corporate losses to dark commerce cut into the funds needed for innovation. Purchases of narcotics and inferior or dangerous pharmaceuticals also have significant health costs, and the planet loses species and biodiversity through the illicit trade in environmental products.

Thus, any such figures must be viewed with some skepticism, as many of those combating illicit commerce have an inherent interest in illustrating the severity of the problem to ensure financial support and attention to their issues. Twenty years ago, the UN estimated

global drug revenues at $400 billion (or 8 percent of global trade, larger than the international trade in iron, steel, and motor vehicles).[99] But present-day estimates place revenues at $320 billion, and a much-diminished share of global commerce, despite the fact that an estimated 5 percent of the world's population has tried narcotics in recent years.[100] Both increased competition and better data reporting could explain the revenue decline.[101] It is more likely, however, that the heightening of the menace of the drug threat twenty years ago increased the constituency for the United Nations Convention against Transnational Crime, then under development.

Estimating profits and victimization for the three other highly criminalized forms of illegal trade—human trafficking, smuggling, and the arms trade—is also highly problematic. The International Labour Organization's new index on forced labor suggests that 25 million are victimized. The ILO figures include but do not estimate human trafficking.[102] Revenues for human trafficking are appreciably lower in developing countries in Asia, Africa, and Latin America than in western Europe and the United States, where traffickers achieve the highest profits from sex trafficking.[103] Greater profits in developed countries do not indicate the presence of more victims, but rather the superiority of the proceeds from human exploitation in wealthier societies.

Proceeds from organ trafficking, which is often considered a subset of human trafficking, were estimated at $840 million to $1.7 billion in 2014.[104] These high figures for illegal organ transplants reflect the high cost of the procedure, not the volume of operations.

There are no reliable global estimates of the profits of human smuggling, but at the height of the refugee crisis in 2015, Europol estimated that European smugglers generated between 4.7 billion and 5.7 billion euros, with an estimated 50,000 criminals involved in the trade.[105]

Small arms and light weapons trafficking generates less in profits than other major transnational crime activities: revenues in 2014 were estimated to be $1.7 billion to $3.5 billion, or 10 to 20 percent of the legal arms trade.[106] In a repurposing of the smuggling routes of the Ottoman period, the weapons used in European terrorist attacks

travel some of the same Balkan routes as drugs.[107] Estimates suggest that 90 percent of the weapons in the illicit weapon markets in Belgium are of Balkan origin.[108]

Online sales portals also facilitate the weapons trade. Investigations of the terrorists behind French and Belgian attacks from 2014 to 2016 have revealed that some of them purchased their weapons online from Eastern European suppliers.[109] Gun parts sold on the internet in Europe allow criminals and terrorists to reconstruct deactivated weapons.[110]

Underpoliced criminal activity is a major component of illicit trade. Counterfeit goods represent the largest component of illicit commerce. According to the OECD, the global trade of counterfeit and pirated products, often referred to as "fakes," represents up to 2.5 percent of world trade; sales of fakes totaled $461 billion in 2013, a sharp increase from five years previously, when annual global sales were estimated at $200 billion, or 1.9 percent of worldwide imports.[111] In contrast, in Europe, where customs has low rates of corruption and efficient performance, up to 5 percent of 2013 imports—worth as much as 85 billion euros (or $116 billion)—were counterfeits. The OECD estimates may considerably understate the global problem, because they rely on customs data compiled by agencies, many in the developing world, noted for high levels of corruption.[112] Officials in the customs services of many developing countries routinely sell positions for high prices. Employees can then profit from bribes for allowing illicit commodities to enter and exit their countries.

The global smuggling of cigarettes is estimated to cost countries billions of dollars. Not all of this illicit trade is a subset of counterfeiting: some is the trade in diverted cigarette products, and some is the trade in illicit whites (cigarettes legally produced in one country with the intent of being smuggled to another). In Europe alone, the annual turnover in illicit cigarettes is estimated at between 7.8 billion and 10.5 billion euros. Total revenues might be less, but rates of growth for the illicit tobacco trade are higher in the Middle East, Africa, and Australia.[113] New technology facilitates this trade, providing online access to products, and the new social media allows illicit traders to communicate easily on Facebook and Twitter as well as

through encrypted social media such as WhatsApp. Even drones have been used, by Ukrainians, to deliver cigarettes.[114]

As competition increases for scarce resources, they become the currency of crime groups that capitalize on that scarcity for their advantage. Therefore, environmental and natural resource crimes are among the fastest-growing forms of illicit trade. The United Nations Environment Program (UNEP) and Interpol (the international police organization) estimate the value of illicit trade in fish, timber, wildlife, minerals, and waste at $91 billion to $258 billion in 2016. These offenses are increasing by 5 to 7 percent annually, or two to three times the rate of the global economy.[115] Destruction by war and the commodification of natural resources to fund conflict have been particularly damaging. "Many of the world's conflicts since World War II have occurred in biological hotspots, defined as regions with at least 1,500 endemic plant species (0.5% of the estimated 300,000 world total), and these valuable locales have lost 70% or more of their original vegetation."[116] The increasing trade in these products is damaging planetary sustainability.[117] It is one of the defining elements of the new illicit economy, and a prime reason why it threatens our future.

Sales of timber and minerals are the most lucrative forms of illicit trade in environmental products. Illegal timber logging, undertaken by corporations, corrupt individuals, and crime groups, generates revenues of between $30 billion and $100 billion annually.[118] The illicit charcoal trade, a funding source for Al-Shabaab (discussed in chapter 7), contributes to soil erosion because trees are removed. The costs of the trade in timber illegally logged in rainforests with great biodiversity are not just the sums generated from the wood, but also the loss of species that cannot survive outside the deforested regions—such as the massive die-off in the last decade of Borneo's orangutans, a species that shares 97 percent of its DNA with humans.[119]

Illegal mining, including the mining of gold, is the next most lucrative category, with revenues estimated in the $12 billion to $48 billion range.[120] Proceeds are so great that before the 2016 peace accords in Colombia, the terrorist group FARC (Revolutionary Armed Forces of Colombia) made more from the illegal gold trade than from narcotics, once its core revenue generator.[121] The United

Nations has reported that gold mined in the Democratic Republic of the Congo (DRC) and routed through Dubai helps fund terrorism.[122]

Diamonds, perhaps the world's best-known precious stones, became known as "blood diamonds" because of their important role in funding conflicts in Angola, Sierra Leone, and the Congo.[123] The Kimberley Process, a combined effort by governments, civil society, and industry to curb the flow of conflict diamonds, was initiated in 2000 in order to provide controls over the supply chains for diamonds and ensure that they do not provide significant funds for rebels.[124] The Process has not achieved the results sought: groups still engaged in conflict have received authorization to export diamonds. Moreover, systems for tracking individual stones remain inadequate.[125]

The abusive working conditions associated with the mining of coltan, a key element in the production of cell phones, has prompted some to ask, "How do I find a smart phone not soaked in blood?"[126] Coltan miners in Colombia have been coerced by FARC into working the mines, and in the DRC children and trafficked laborers are often forced into this work by rebel forces.[127] Having inadequate food, African miners looking for coltan in the forests hunt and kill rare and endangered primates, such as gorillas, to survive.[128] Consequently, illicit mining of one commodity leads to the extinction of another of the earth's irreplaceable resources.

In making an estimated $7 billion to $23 billion annually, illegal wildlife traders contribute to the mass extinction of species presently under way across the planet—the problem I referred to in the introduction as "dysfunctional selection."[129] Illegal, unreported, and unregulated (IUU) fishing is estimated to generate $10 billion to 23 billion annually. Most damage results from the illegal fishing conducted by corporate-owned fishing fleets, or even state-owned fishing companies in China. If present fishing practices continue, 86 percent of global fish stocks are at risk of being overfished, a problem discussed further in chapter 7.[130]

Illegal waste disposal gained notoriety in the early 2000s through the American television show *The Sopranos*, about a US mafia family. Tony Soprano's family, who provide a case study of social mobility, strong-armed their way to upper-middle-class prosperity through

the garbage disposal business. Today revenues from illegal, unreported, and unregistered trafficking in toxic waste and e-waste (the waste from unwanted electronic equipment, such as computers and televisions), estimated by the UN at $18.8 billion annually, transcends the scope of even ambitious organized crime families such as the Sopranos.[131] These harmful products are often dumped in the developing world, leading to other pernicious consequences. For example, data left on the computer hard drives dumped in West Africa are exploited by local cybercriminals to perpetrate scams and other online criminal acts.[132] This illustrates the *domino effect* at work: one criminal activity leads to another.

Energy resources are also highly profitable elements of illicit trade and often associated with conflict. At the height of its territorial control, ISIS generated $500 million annually from oil sales by smuggling oil through neighboring states.[133] Efforts since 2015 to counter this trade by bombing ISIS-controlled oil storage facilities, particularly following the Russian entry into the conflict, has caused severe and enduring ecological harm, borne primarily by civilians.[134] Therefore, the costs of this trade should not be measured just in monetary terms.

Other nonstate groups profit from illicit oil sales, often sustaining conflicts.[135] Crime groups working with corrupt officials in the rich and conflict-ridden Niger Delta of Nigeria profit from oil smuggling, and rebels have also caused major ecological damage by tapping into oil pipelines for revenue generations.[136] Militants bombing multiple Agip pipelines in early 2016 "caused thousands of barrels of oil to pollute waterways, farms and fishing grounds in Nigeria's southern Bayelsa state."[137]

Illicit trade in coal from Donbas and in oil and fuel from Russia has played a key role in the conflict following Russia's invasion of Ukraine. Crime groups in the region have exploited the conflict in eastern Ukraine to profit significantly through fraud and illicit energy sales.[138] Los Zetas, a major militarized Mexican crime group, is increasingly linked to oil sales as they siphon off production for sale.[139] Gas smuggling within Libya foments conflict as revenues are used to fund combatants, and illegal oil exports have destabilized Tunisia.[140]

Smuggled gold and precious stones are also funding sources for strife. The conflicts of the Kachin, a Christian minority in mostly Buddhist Myanmar, have been funded by a corrupt and often illicit jade trade flowing to China, controlled by the military junta, drug lords, and companies associated with the military.[141]

Dark commerce harming the environment is most closely connected to conflict and consumer demand. But trade detrimental to the environment can also result from global competition and corporate efforts to increase profits by ignoring regulations to forestall climate change.

For example, Volkswagen is now faced with a criminal case for deliberately toying with the software to control emissions in its cars. Investigations revealed that top corporate officials deliberately concealed high levels of carbon emissions from VW vehicles—almost "40 times the permitted levels of nitrogen oxides"—so that they could sell vehicles in the United States. The former CEO of Volkswagen has been charged by the US Justice Department with fraud.[142] The problem of VW's deliberate sales of defective vehicles was even more pronounced in Europe, where 8.5 million cars of VW's total global sales of 11 million were concentrated. Mortality rates in Europe are likely to increase as a result of these sales.[143] An $18 billion fine was imposed on VW in the United States, and its top leadership was removed.[144] Arrests and a guilty plea followed; this was a more severe penalty for corporate misconduct than is often imposed.[145]

Dark commerce also deprives the earth of its man-made resources and its historical record. The illicit trade in cultural artifacts was identified as a funding source for terrorism by the UN Security Council in 2014.[146] ISIS's involvement in antiquities smuggling has given visibility to the phenomenon, but many others have illegally traded in ancient objects, even within Syria, both before ISIS got involved and now in tandem with the terrorist organization.[147]

The illicit antiquities trade was not pioneered by terrorists. The Mafia has profited from this business, and criminals in Turkey, Greece, South Asia, and Latin America have also benefited. Many stolen and smuggled items have been sold by top dealers in recent decades and have also featured in many legal cases in American and other courts.[148]

The antiquities trade is estimated at $1.2 billion to $1.6 billion annually.[149] Both real and fraudulent antiquities are traded on the internet, making it difficult to accurately value the revenues derived from this sector. Also, such sales are often not investigated because the elite art world is hard for law enforcement to penetrate.[150]

Conclusion

In recent decades, the illicit economy has grown and now represents a notable share of the global economy. Often intersecting with the licit economy, it is less visible and can tap into global distribution networks. This trade has expanded exponentially in cyberspace, which makes the products and services of the illicit economy more widely available. Many participate in this trade because they have no viable economic alternatives. Increasing economic disparity, combined with the absence of legitimate employment, has forced many into the illegal economy. Participants are doing more than smuggling contraband. the illicit economy these days has expanded to a wide range of environmental commodities, the production, transport, and sale of large amounts of counterfeits, and the new malicious products of the cyberworld. Cyber-enabled crimes, the new criminal products of the cyberworld, and the theft of intellectual property by hacking and other cyber-activities—all developments of recent decades—affect citizens, corporations, and the state. These new activities have contributed greatly to the tragic trajectory of illicit trade and will only grow in the future.

The rise in conflicts, mass human displacement, and the globalization of terrorism have all increased human insecurity. For many illicit traders, their profession is not simply a profitable activity, or a form of resistance, as seen in previous historical periods, but rather a means of survival. Consequently, the absence of licit alternative ways to make a living makes it difficult to counter the rise of illicit trade.

Exclusion from the legal economy, which is particularly widespread in the developing world, is also a significant problem in immigrant and marginalized communities in the developed world. Communities with high rates of unemployment and high rates of

participation in the illegal economy are prone to urban violence. Elements of the illicit economy in Europe have also contributed to the funding of terrorist attacks in that region in recent years.

The global population is at an all-time high, with many billions inhabiting the planet, placing strain on the Earth's limited resources. With increasing urbanization, people mass in the largest cities of the world, placing ever-greater strains on urban life as they seek potable water to drink and try to eliminate waste in dense urban areas where waste disposal is not readily available. In the absence of effective states, ordinary citizens often have only nonstate actors, or actors linked to corrupt officials, available to deliver costly basic services.

Illicit trade is also a significant problem at the other end of the income scale: some individuals consume large quantities of natural resources illegally obtained from the sea and the land. Corporations aggravate these consumption problems as companies like Volkswagen deliberately circumvent emissions controls and fishing corporations overfish waters. Consumers therefore are not always conscious participants in illicit trade, but their desire for goods helps fuel global illegal commerce.

Illicit trade is a consequence of the most destabilizing conditions in the world, and a key facilitator of their growth. The perpetuation of deadly conflicts, the proliferation of arms and weapons of mass destruction, and the propagation of environmental degradation are some of the most significant developments of illicit trade in recent decades. These developments undermine both weak and strong states and create enormous economic resources for criminal nonstate actors.[151] As the dark economy grows, there are fewer opportunities for a viable licit and inclusive economy. Illicit trade, executed by transnational criminals who no longer need the state or terrorists who seek to destroy the state, is a powerful force in the destruction of the existing order.