

Submission to the Parliamentary Joint Committee on Law Enforcement Inquiry into criminal activity and law enforcement during the COVID-19 pandemic

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Update

In addition to the written submission on August 7, 2020 and subsequent attendance at the inquiry on August 28 2020 this update notes the following three key developments that involve the links between on-line black markets, Asian organised crime and the facilitation of the criminal opportunities enabled by the COVID-19 pandemic.

Blackmarket in COVID-19 Products

In December Interpol issued a global warning in respect to “unprecedented opportunistic and predatory criminal behaviour” in relation to the falsification, theft and illegal advertising of COVID-19 and flu vaccines, and that “criminal organizations are planning to infiltrate or disrupt supply chains” of COVID-19 vaccines¹.

Sales of purported COVID-19 vaccines *continue* to be made available on online darknet markets routinely monitored by the ANU Cybercrime Observatory². An apparent decline in PPE and treatments such as anti-malarial chloroquine and hydroxychloroquine is observed, however other re-purposed medicines such as Remdesvir and Dexamethasone are commonly available. Purported vaccines have also been offered for sale on Facebook, and WeChat³.

Bracci, Nadini, Aliapoulios et al (2021) recently confirmed the presence of COVID-19 products through 2020 (January 1- November 6 2020). They observed 30 darknet markets of which 10 sold such products. Two markets DBay (425/788) and Empire (94/788) sold two thirds of all 788 products found. Two hundred and fifty-two vendors sold products such as PPE (45%), medicines (29%), scamming guides (12.6%), web-domains (6.3%), tests (2.2%), medical frauds (4.3%), ventilators (n=2; 0.2%) and fake medical records (0.4%). The study showed the close link between media attention and the demand for COVID-19 products including scam and fraud tools, and “...how the online shadow economy has evolved during the COVID-19 pandemic and highlight the importance of a continuous monitoring...especially now that real vaccines are available and in short supply”⁴. Further funding to undertake systematic monitoring of online black markets in COVID-19 related products and scams is recommended.

¹ Interpol Orange Notice (Dec 2 2020) INTERPOL warns of organized crime threat to COVID-19 vaccines; <https://www.interpol.int/en/News-and-Events/News/2020/INTERPOL-warns-of-organized-crime-threat-to-COVID-19-vaccines>

² Broadhurst R, Ball M & Jiang C. 2020. Availability of COVID-19 related products on Tor darknet markets. *Statistical Bulletin* No. 24. Canberra: Australian Institute of Criminology. <https://www.aic.gov.au/publications/sb/sb24> - see screenshot November 13, 2020 appendix 2.

³ In the midst of stage 3 trials of the Sinovac SARS-VoV-2 vaccine – see Bang Xio (21 August 2020). Authorities warn against illegal COVID-19 vaccines and medication sold online: https://amp.abc.net.au/article/12581996?_twitter_impression=true

⁴ Bracci, Nadini, Aliapoulios et al. 2021. Dark web Marketplaces and CoCOVID-19: before the vaccine. *EJP Data Science*, Vol. 10:6; <https://doi.org/10.1140/epjds/s13688-021-00259-w>

Online Illicit markets

Police in the German city of Oldenburg arrested near the German-Danish border an Australian citizen in January 2021 who is the alleged operator of DarkMarket. Search warrants were subsequently exercised by the AFP in a number of Queensland locations associated with this alleged darkmarket operator. The investigation led by Koblenz Public Prosecutor's Office, allowed officers to locate and close the marketplace, and seize a massive amount of stored data in a repurposed NATO bunker. This will allow further investigation of other market operators, vendors, and buyers⁵.

Darkmarket supplied a relatively small proportion of COVID-19, however was a highly active omnibus market through 2020 with an estimated value of about \$A220 million and over 2,400 sellers and nearly a half a million buyers. The vendors "traded all kinds of drugs and sold counterfeit money, stolen or counterfeit credit card details, anonymous SIM cards and malware"⁶. The alleged involvement of an Australian operator reinforces the observation that Australian based vendors or markets have been among the early adopters of this new form of criminal enterprise.

Figure A: Screen shot of German police seizure of the DarkMarket and agencies involved.



Source Europol Press Release January 12, 2021

As noted in the previous submission several sources have reported that since the COVID-19 lockdown and border restrictions drug cartels (notably those operating in Mexico⁷) have begun to shift financial transactions to the darkweb and make greater use of cryptocurrencies. In addition an uptick in local manufacture and production of ATS and synthetic opioids have occurred also in response to border restrictions that impede the flow of finished synthetic opioids and ATS. In short the pandemic has changed the transaction model for organised crime groups helping to shift to online transactions, cryptocurrency payments and diversified supply chains.

Asian Organised Crime

The detention of Tse Chi Lop aka *Sam Gor* pending extradition to Australia from the Netherlands for alleged drug trafficking⁸ further illustrate the value of transnational policing. Tse was deported from Taiwan and was enroute to Canada when detained by Dutch authorities on an Interpol Red Notice. Tse allegedly held a key leadership role in a confederacy of triad syndicates involved in large scale trafficking of 'ice' and other prohibited drugs. It is unlikely that Tse arrest will have along term impact on the scale of ATS and opioid trafficking in the region but has exposed other players and aspects of the interdependency among organised crime groups.

⁵ Europol (12 January) 2021. Press Release DARKMARKET: WORLD'S LARGEST ILLEGAL DARK WEB MARKETPLACE TAKEN DOWN; <https://www.europol.europa.eu/newsroom/news/darkmarket-worlds-largest-illegal-dark-web-marketplace-taken-downHard by the Pandemic>

⁶ Europol 2021, *ibid*.

⁷ Fisher S & Kempel K (December 29) 2020. Hit Hard by Pandemic, Mexico's Drug Cartels Tweaked their Playbook, New York Times, <https://www.nytimes.com/2020/12/29/world/americas/mexico-pandemic-drug-trade.html>

⁸ ABC (January 24) 2021 Asia's El Chapo' Tse Chi Lop arrested at Amsterdam airport, Australian police to request extradition: <https://www.abc.net.au/news/2021-01-24/afp-seek-extradition-of-tse-chi-lop-asian-el-chapo-arrested/13086838>

An alleged key collaborator of Tse is the notorious Macau 14K triad leader Wan Kuok Kai (aka “Broken Tooth Wan”)⁹. Late last year US Treasury authorities identified Wan Kuok Kai as a person involved in organised crime and thus financial transactions and holdings associated with Wan’s extensive business empire are now subject to sanction. His involvement in the rapid expansion of Casinos in Cambodia and promotion of a casino in *Shwe Kokko*¹⁰ bordering Thailand and Myanmar also suggested united front like associations with the Chinese authorities¹¹. However given the dubious connection of Shwe Kokko with the PRC Belt and Road initiative this activity is more likely a front for long standing criminal activity with former armed groups of the Democratic Karen Buddhist Army such as the Kayin BGF.¹² Also Wan’s, Hong Kong-based *Dongmei Group*, World Hongmen History and Culture Association in Cambodia and the Palau China Hung-Mun Cultural Association are allegedly fronts for criminal enterprises providing the facilitation and logistical capabilities to move money and contraband across the region.¹³

In short while it is important to apprehend offenders, especially those with the reputation and capability of Sam Gor, the impact maybe short lived and can be readily replaced by wealthy criminal entrepreneurs with patriotic (if disputed) connections. However, many Chinese crime groups that have weathered the PRC’s, *saohei chu’e* campaign or “clearing out the underworld” and “sweep away the black and evil forces” crackdown remain active. The sustained focus on organised crime enabled by *saohei* between 2018 and 2020 focused on officials (protective umbrellas) that colluded with organised crime has led to the displacement of large-scale drug production away from China but may have had less effect on limiting illegal wealth. Engaging with the PRC policing agencies on effective transnational policing and cooperation in respect to fugitives and enhancing regional and bi-lateral mutual legal assistance should be a priority.

Introduction

A wide range of likely impacts from increased risks of domestic violence due to economic stress and ‘stay at home’ public health orders, business failure, police and emergency service fatigue, higher risks of infection in prisons amongst others are some of the many challenges wrought by COVID-19. This submission focuses on two issues in relation to transnational and serious organised crime and the impact of COVID-19 on underground online illicit markets and the convergence of organised crime groups across the Indo-Pacific region.

First concerns the role of illicit crypto-markets (‘darknets’) in the diversion and black market sale of medicines and products associated with the COVID-19 pandemic, and the adaption of these markets to the criminal opportunities presented by the pandemic. The role of darknets in the dissemination of ‘crimeware’ such as botnets, phishing and ransomware kits re-tooled to socially engineer opportunities around COVID-19 contributes to the scale of targeted attacks by techno-criminals. The emergence of online darknets involves novel criminal organisations that are increasingly interdependent with traditional mafia-like organised crime groups (OCGs) seeking new markets and safer distribution networks¹⁴. Close attention to these markets and their associated

⁹ Nick McKenzie, Chris Uhlmann & Joel Tozer (Jan 23 2021). Drug deals, dirty money and links to Beijing: Australian police bring down Asia’s ‘Mr Big’, Sydney Morning Herald: <https://www.smh.com.au/national/drug-deals-dirty-money-and-links-to-beijing-australian-police-bring-down-asia-s-mr-big-20210120-p56vk8.html>. For further background on links to Macau gambling links with triads and the persistence of Broken Tooth see Angela Leong, (2004) 'The "bate-ficha" business and triads in Macau casinos' In Broadhurst, R G (Ed.) Crime and its Control in the People’s Republic of China: Proceedings of the University of Hong Kong Annual Symposium 2000-2002; pp 241-253 (especially notes 32 & 34).

¹⁰ A Chinatown megatown project in Kayin Sate Myanmar under construction on the river Moei (a tributary of the Salween River) - bordering Thailand and Myanmar

¹¹ Litner, B. (Dec 12) 2020. Why the US bit back at China’s ‘Broken Tooth’, *Asia Times*; <https://asiatimes.com/2020/12/why-the-us-bit-back-at-chinas-broken-tooth/>

¹² Naw Betty Han (30 December) 2020. Shwe Kokko locked down as locals fear clashes between Tatmadaw, BGF, *Frontier*; <https://www.frontiermyanmar.net/en/shwe-kokko-locked-down-as-locals-fear-clashes-between-tatmadaw-bgf/>

¹³ Purbrick, M 2019. Patriotic Chinese triads and secret societies: from the imperial dynasties, to nationalism, and communism, *Asian Affairs*, 50:3, 305-322, DOI: 10.1080/03068374.2019.1636515

¹⁴ See for example: Leukfeldt ER, Kleemans ER, Kruisbergen EW & Roks RA 2019. Criminal networks in a digitised world: on the nexus of borderless opportunities and local embeddedness, *Trends in Organized Crime* 22: 324-345; Jian JS, Chen X, Luo T, et al. 2020. Organized Cyber-Racketeering: Exploring the Role of Internet Technology in Organized Cybercrime Syndicates Using a Grounded Theory Approach. *IEEE Transactions on Engineering Management*, doi: 10.1109/TEM.2020.3002784.

information hubs and forums offers a useful source of intelligence about trends in both digital crimeware and illicit drugs.

The second issue is the scale and acceleration of illicit drug production, notably of synthetic opioids, novel psychoactive substance (NPS) and amphetamine type stimulants (ATS) in Southeast Asia and the convergence of criminal (network) interdependencies between Chinese ‘black societies’ (triads) and their collaborators. A concern here is the potential for the ‘weaponisation’ of highly potent fentanyl analogues as well as the corrupting power of the vast illicit wealth accumulating in the hands of a re-invigorated Asian criminal underworld. This decade long development of a new highly efficient illicit drug and contraband economy warrant a review of our law enforcement goals in Southeast Asia. Degrading transnational organised crime groups requires investments in regional cooperation and an appreciation of the historical circumstances that gave rise to their formation and evolution.

Two research briefs published by the UNODC in July 2020 provide a broad overview of the emerging threat landscape arising from the pandemic noting both increased illegal activity on the surface and deep web in *Report on COVID-19-related trafficking of medical products as a threat to public health*¹⁵. The second report addresses the criminal opportunities related to *The impact of COVID-19 on Organized Crime*¹⁶ and stresses the heightened risk that ‘cashed up’ organised crime groups may more easily infiltrate legitimate business as many struggle with the economic recession and become vulnerable to loansharking and extortion. We turn first to the illicit market in scarce medical and PPE supplies and in particular the role of ‘darknets’ or illicit crypto-markets, which was also touched on by both UNODC reports on the impact of COVID-19 on criminal activity.

The illicit sale of COVID-19 products, medicines and personal protective equipment (PPE)

The inquiry will no doubt receive many submissions that stress the increased use of the Internet during the pandemic and a consequential greater risk of cybercrime. A ‘lifting all boats’ boost in Internet use is underway that will accelerate both licit and illicit use of digital technologies beyond the pandemic. During the pandemic more work, retail shopping and education activities dependent on the Internet are undertaken from home and this offers criminal opportunities as larger numbers of new (and often naive) users, become vulnerable to these predatory activities. Legacy software, unpatched and out of date operating systems and applications as well as vulnerable wireless networks, amongst others, attract techno-criminals as the gaps in cybersecurity arise.

Cybercrimes either focused on the trespass or hacks on vulnerable digital devices, (i.e. the target is the computer or device – e.g. data theft) and technology enabled crimes (e.g. fraud scams, phishing) that have quickly adapted to the ‘social engineering’ opportunities the pandemic offers – from touting COVID-19 cures to targeted phishing and ransomware attacks around COVID-19 fears. Tor and other hidden service malware traders sell tailored phishing, ransomware, exploit ‘kits’, and rent DDoS botnets (distributed denial of service) to extort vulnerable services such as hospitals. Darknet drug vendors (dealers) stealth package ‘discounted’ pandemic sales of illicit drugs concealed in PPE. While online illicit drug trading was initially hampered by logistical delays in the delivery of illicit drugs no such constraints applied to the sale of malware. Although large scale botnet malware delivery services can be disrupted effects may be temporary as in the takedown of Emotet responsible for the distribution of scaled ransomware attacks¹⁷.

In short this expansion widens the ‘attack surface’ for techno-criminals and highlights the need for a further re-appraisal of the resources deployed by Australia’s law enforcement agencies (LEAs) to detect, investigate and deter these cybercriminal activities, especially the need target the hidden criminal services provided by a variety of crime groups on Tor (a widely used anonymity network) or similar platforms.

¹⁵ UNODC (a). 2020. *Report on COVID-19-related trafficking of medical products as a threat to public health*, Research Brief, UNODC Vienna https://www.unodc.org/documents/data-and-analysis/covid/COVID19_Research_brief_trafficking_medical_products.pdf

¹⁶ UNODC (b) 2020. *The impact of COVID-19 on Organized Crime*. Research Brief, UNODC Vienna; https://www.unodc.org/documents/data-and-analysis/covid/RB_COVID_organized_crime_july13_web.pdf

¹⁷ Greenberg, A (27 Jan) 2021. Cops Disrupt Emotet, the Internet’s ‘Most Dangerous Malware’: A global operation has taken down the notorious botnet in a blow to cybercriminals worldwide. *Wired*; <https://www.wired.com/story/emotet-botnet-takedown>

The UNODC report on COVID-19 medical products identified the pandemic as a catalyst for a ‘...global market for the trafficking of PPE not seen before’¹⁸ but other substandard and falsified medical products had yet to show similar signs of increased availability. However, this early assessment is unlikely to hold as the pandemic deepens and shortages particularly of treatments will offer opportunities for diversion to black markets online and offline. The report urges strengthening international collaboration, especially to assist states with limited capacity to regulate sub-standard and fake medical products and concludes with the following key points:

- It can be expected that a viable treatment and a preventive vaccine will be the subject of falsification, theft and diversion by organised criminal groups.
- An increase in cyber attacks correlates with the spread of COVID-19. Such attacks are expected to continue despite declarations by some cybercriminals that they will not attack the public health infrastructure.
- The absence of an effective, comprehensive and enforceable regulatory framework in many countries to address substandard and falsified medical products, in particular medical devices, has life-threatening consequences and is a challenge for the global community.
- The absence of international coordination in addressing the manufacturing and trafficking of falsified medical products hinders a cohesive approach to responding to this type of crime which impacts individual and public health both locally and on a global basis.
- The absence of international coordination in addressing the manufacturing and trafficking of falsified medical products hinders a cohesive approach to responding to this type of crime which impacts individual and public health both locally and on a global basis. ^[11]_[SEP]The international community needs to bring order to the individual efforts of relevant stakeholders to develop effective systems acceptable to all¹⁹.

Availability of COVID-19 related products on Tor darknet markets

The UNODC a report concluded that the six darknet markets it visited in April ‘...did not exhibit significant transactions involving products directly related to COVID-19’²⁰ but recommended long term monitoring of transactions on these markets. The UNODC brief provides few details of the method used to capture darknet listings but provides some details of the few products it found available for sale²¹. However, in a systematic survey funded by the Australian Institute of Criminology the Australian National University (ANU) Cybercrime Observatory investigated the presence of COVID-19 products on 20 Tor darknets – 12 were identified as selling such products. This provided a snapshot of the illicit market for COVID-19 related products on April 3, 2020²² and a more detailed picture of their availability on darknets.

A European study of the presence of COVID-19 products on 23 Tor darknets also found significant amounts on some markets monitored between January and July 2020 (see Bracci, A. Nadini, M. Aliapoulos, M. et al (August 6, 2020) The COVID-19 online shadow economy [ArXiv] preprint – see Appendix 2).

Table 1. Summary of COVID-19 related products available on 12 Tor Darknets, April 2020

Products	Unique listings n (%)
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¹⁸ UNODC a: *Report on COVID-19-related trafficking of medical products as a threat to public health*, p. 20

¹⁹ UNODC a: pp 20-21.

²⁰ UNODC a: pp 23.

²¹ Six Tor markets were inspected in the UNODC report: Empire Market, Dark Market, Versus, White House Market, Monopoly and Tor Market. Two of these markets (White House Market, Monopoly) prohibited the sale of COVID-19 related products and other large (omnibus) markets surveyed by the ANU Observatory such as Agartha, and DarkBay were not included.

²² Broadhurst R, Ball M & Jiang C. 2020. *Availability of COVID-19 related products on Tor darknet markets*. Statistical Bulletin No. 24. Canberra: Australian Institute of Criminology. <https://www.aic.gov.au/publications/sb/sb24>

PPE (Personal Protective Equipment)	99 (44.6)
Tests/diagnostics/ thermo-scanners	19 (8.5)
Vaccines/antidotes	22 (9.9)
Repurposed medicines	74 (33.3)
Ventilators	1 (0.5)
Other (COVID19 Handbook; 3D masks app)	7 (3.2)
Total	222 (100)

Note: Percentages may not total 100 due to rounding. Source: Broadhurst, Ball & Jiang (2020:5).

COVID-19 Related Products	Unique listings n(%) April 2020 ANU	Unique listings n(%) January-July 2020 Alan Turing Institute
PPE (Personal Protective Equipment)	99 (44.6)	343 (66.2)
Tests/diagnostics/ thermo-scanners	19 (8.5)	10 (1.9)
Vaccines/antidotes (medical frauds)	22 (9.9)	31 (6.0)
Repurposed medicines	74 (33.3)	132 (25.5)
Ventilators	1 (0.5)	2 (0.4)
Other (COVID19 Handbook; 3D masks app)	7 (3.2)	<i>Not reported</i>
Total	222 (100)	518 (100)

Note: Percentages may not total 100 due to rounding.
Source: Broadhurst, Ball & Jiang (2020:5) & Bracci, Nadini, Aliapoulios et al. (2020)

Table 1 summarises the findings of the ANU Cybercrime Observatory darknet survey of COVID-19 related products on April 3, 2020. This shows that although the numbers of unique listings (after the removal of duplicates) was a fraction of listings for illicit drugs and digital products, the range of products was more extensive than noted in the UNODC report. Eight of the 20 markets surveyed did not sell any COVID-19 related products, however three markets dominated the sale of these products. Agartha one of the largest comprised about a third (35%) of all unique listings, followed by DarkBay (31%), Empire (19%) and nine other markets (16%) made up the remainder. The anti-malarial chloroquine and hydroxychloroquine then widely touted as potential treatments for COVID-19 made up most of the re-purposed medicines. A few listings of the anti-viral Favipiravir and a single listing of the anti-retroviral Lopinavir and Ritonavir were observed. The antimicrobial Azithromycin was also found as well as purported cures, antidotes, convalescent plasma and vaccines. A handful of vendors dominate listings and a screenshot of some relevant *Agartha* listings by three vendors is illustrated in Figure 1²³.

In June 2020 the Australian Commission on Safety and Quality in Health Care listed over 30 potential treatments of COVID-19²⁴. Some of these were detected in the April 3 survey and additional re-purposed medicines have also subsequently been detected in routine but not systematic observations of these markets notably the anti-viral Remdesvir and the corticoid Dexamethasone – both newly approved treatments. Peripheral vasodilators such as





²³ 110 vendor handles or pseudonyms were active in the listing of COVID-19 products and a small number of these (n=8) operated across more than one market.

²⁴ Australian Commission on Safety & Quality in Health Care, 2020. *Potential medicines to treat COVID-19*. TRIM: D20-13824. 19 June 2020.

Sildenafil have also been observed but are commonly available on darknets but some vendors now also advertise these medicines as COVID-19 treatments. Personal protective equipment (PPE), testing kits and purported cures and vaccines also continue to be available but PPE listings appear to be more often available in bulk quantities than previously reported. Illustrative screenshots of COVID-19 related products are compiled in the appendix.

The ANU Cybercrime Observatory has undertaken several studies describing online illicit markets²⁵. The Observatory captures data from key active omnibus or ‘High Street’ darknets and these currently include: Agartha; Apollon²⁶; ASEAN; Cypher; DarkMarket; Empire; Monopoly; Square; Versus; White House; and Onion Pharma. Some markets observed in early April are no longer active (e.g. DarkBay) and in the appendix a screenshot illustrates the products observed on August 4, 2020.

Figure 1: Screenshot of COVID-19 related products listed on Agartha (April 3 2020)

	Name	Price	Vendor	Place
	complete order free shipment COVID19 VACCINE Wickr...maker24 Wickr...maker24 whatsApp...+1 707-297-9981 COVID-19 is new and scientists understand litt...	A\$ 658.52 (0.064483 BTC)	makershop From: 100.000, 100 - 500 deals	From: United States To: Worldwide
	free shipment COVID19 thermometer scanner Wickr...maker24 Wickr...maker24 whatsApp...+1 707-297-9981 The Best temperature gu'n for \$79, with Free E...	A\$ 823.15 (0.080604 BTC)	makershop From: 100.000, 100 - 500 deals	From: United States To: Worldwide
	TOP QUALITY covid-19 FACE MASK WE OFFER - Best quality of products. - Great and affordable prices. - Very fast and Reliable delivery-tracking ava...	A\$ 24.69 (0.002418 BTC)	LAcartel From: 100.000, 100 - 500 deals	From: United States To:
	Corona Virus Test / Covid-19 Test Kits (500Pcs) Condition: 100% brand new & high quality Material: electrostatic br /> Weight: 40g Warning This product is on...	A\$ 3292.58 (0.322416 BTC)	ENIGMAPLUGSSUPPLY From: 99.840, 5000+ deals	From: United States To: Worldwide

Source: Broadhurst, Ball & Jiang (2020:2).

Darknet markets can be a litmus test of trends in illicit drugs. The diversion of anti-malarial and anti-viral/retroviral drugs to these underground online markets suggests that significant theft and diversion is already underway. The presence of re-purposed medicines as well as monoclonal anti-bodies and trial vaccines on some of these platforms also indicates that some vendors who sell illicit pharmaceuticals are able to access these scarce medicines. Shortages of hydroxychloroquine occurred early in the pandemic and were available at inflated prices on Agartha and Empire. The need for further monitoring is warranted because:

“...in-depth analysis of vendor behaviour on Dark Web marketplaces may offer insights into the ways in which the COVID-19 pandemic is influencing illicit online sales of goods such as medical devices and equipment and licit pharmaceutical medicines. Studying the long-term impact of COVID-19 on online narcotics sales will be of equal importance, as buyers may face obstacles in meeting dealers face-to-face and as a result may turn increasingly to online sources to purchase illicit drugs”²⁷.

²⁵ See: Broadhurst R, Foye, J, Jiang CX & Ball M 2021. Illicit firearms and weapons on darknet markets, *Trends and issues in Criminal Justice*, Australian Institute of Criminology, *in press*; Broadhurst R, Ball M, & Trivedi H, 2020. Fentanyl availability on darknet markets. *Trends & issues in crime and criminal justice* 590, Canberra: Australian Institute of Criminology. <https://www.aic.gov.au/publications/tandi/tandi590>; Broadhurst R, Lord D, Maxim D, et al. 2018. *Malware trends on 'darknet' crypto-markets: Research review*. Report of the Australian National University Cybercrime Observatory for the Korean Institute of Criminology, Canberra; DOI: 10.13140/RG.2.2.36312.60168; Broadhurst R, Ball M, Jiang J, Wang J, & Trivedi H. 2020. *Impact of darknet Seizures on opioid availability*, Research Report, Australian Institute of Criminology, *in press*.

²⁶ Apollon’s status as an active market is uncertain, and a number of other Tor markets are on the Observatory’s watch list.

²⁷ UNODC (a): 23

Darknet markets still play a relatively minor role in the trafficking of narcotics, however the shift to the supply and consumption of *low mass – high value* potent opioid synthetics such as fentanyl makes them attractive to criminal enterprises. Small quantities shipped by post ('ants moving house') are an effective option. Given these advantages online darknet markets will grow and more rapidly due to pandemic travel and border restrictions - restrictions that may be required for months if not years.

The sale and distribution of malware and crime-as-a-service is driven by hidden services such as Tor and VPNs. Crimeware tools such as ransomware and phishing pass cross international borders without the risk of interdiction that face the shipping of physical products such as narcotics. Darknet markets combined with cryptocurrencies are now one of the main engines of the industrialisation of cybercrime. These hidden services have been adopted by mafia-like groups and play an increasing role in their communication and finances (along with hawala money transfers) facilitating convergence and interdependencies previously hindered by distance and poor communications.

This paper also shows how the online shadow economy has evolved during the COVID-19 pandemic and highlight the importance of a continuous monitoring of DWMs, especially when real vaccines or cures become available and are potentially in short supply.

"Listing prices correlated with both variations in public attention and individual choices of a few vendors. Median price experienced a sharp increase in March 2020, probably due to speculation, and then decreased in April due to the choice of a single vendor responsible for 91 listings, named "optimus." The vendor sold a large quantity of PPE at 1 USD only, which constituted the 37% of active PPE listings in April 2020. Finally, we observed an increase in the percentage of all listings citing delays in shipping and sale offers, which peaked in March, April, and May 2020. Similar to a prior work that found Wikipedia page visits of a given drug to be a good predictor for its demand in DWMs (Miller et al 2020), we provide further evidence that the DWM ecosystem is embedded in our society and behaves organically to social changes. The DWM ecosystem swiftly reacted to the pandemic by offering goods in high demand, and even tried to fulfill desires through evident scams, for example by offering vaccines already in March 2020, when no tested vaccination existed." (Bracci et al 2020: 12) – see appendix 2

Countermeasures

Cybercrime is the quintessential transnational crime because the usual elements of an offence (victim, offender, proceeds of crime) are typically located across different jurisdictions hampering investigation. LEA darknet market seizures and arrests show that at least three criminal actors are required to manage an omnibus darknet for any length of time. Thus, darknet market networks of administrators, and vendors of prohibited products, such as fentanyl and other opioids, provide a virtual market for organised crime²⁸. Many darknet market operators and traders meet the definition of an organised crime group specified in the United Nations Convention against Transnational Organized Crime (or Palermo Convention: UNTOC, 2000)²⁹. The UNTOC covers a broader spectrum of criminal activities in addition to the illicit drug trade (e.g. arms and human trafficking) and importantly provided cross-border mechanisms for the tracing of the monetary proceeds of crime.

The trading and advertising of illicit or controlled drugs and other contraband via darknet platforms are serious and organised crimes that evoke the special powers of the *Australian Crime Commission Act*. This enables Australian LEAs to undertake controlled operations, specialist surveillance, witness protection, unexplained wealth investigations and asset forfeiture³⁰. These powers are also essential in the suppression of conventional

²⁸ Leukfeldt, et al. 2019. Criminal networks in a digitised world: on the nexus of borderless opportunities and local embeddedness; Broadhurst et al. 2020. *Law Enforcement Seizures of Tor Darknet Markets and the Availability of Opioids*.

²⁹ United Nations Convention against Transnational Organized Crime defined an organised crime in Article 2 as "...a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit"; <https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html>

³⁰ Ayling J, & Broadhurst R, 2014. Organized Crime Control in Australia and New Zealand, in Paoli L [Ed] *The Oxford Handbook of Organized Crime*. Oxford: Oxford University Press: 612–633.

organised crime and transnational crime (see below). Darknet markets are also transnational crimes that incur Australia's international mutual legal assistance obligations as a signatory of the 2004 Council of Europe Convention on Cybercrime (Budapest Convention³¹) and the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances implemented by Australia's 1990 *Crimes [Traffic in Narcotic Drugs and Psychotropic Substances] Act*³².

Australian LEAs will need to resource and sustain costly transnational policing operations of the type undertaken by the US-European Joint Criminal Opioid and Darknet Enforcement (J-CODE) if these novel illicit online markets are to be disrupted. J-CODE a transnational task force of both European and US LEAs focused on the darknet trade in opioids, in particular fentanyl. Australian LEAs have participated in these transnational operations and have the capability to lead as shown by the effectiveness of the Australian Centre to Counter Child Exploitation (ACCCE) in the investigation of the criminal conspiracies exploiting child sex abuse images³³. Measures that assist in the deciphering of encryption by crime groups have been enacted by *The Telecommunications & Other Legislation Amendment (Assistance & Access) Act* of 2018, which provides additional capacity and technical assistance in respect to encrypted communications³⁴. Together these measures provide an investigative framework and capability that could help detect, disrupt and suppress the worst forms of online criminality.

Australia's most recent Cyber Security Strategy 2020 updates the previous 2016 strategy and clearly recognises the role of darknet markets in the amplification of cybercrime. "The dark web enables cyber criminals to broadcast child sexual exploitation and abuse, trade in stolen identities, traffic drugs and firearms, and plan terror attacks. These platforms make committing serious crimes at volume, and across borders, easier than ever before"³⁵. The additional funding earmarked for investigating cybercrime and enhancing intelligence collection and analysis will need to draw from a broad range of expertise outside the cybersecurity sector to target organised crime. A model to do so is outlined in the Australian Academy of Social Sciences review of the role of the social sciences in supporting national intelligence assessments including those involving cybersecurity '...through development of tools and technologies for human use and human-machine interaction'³⁶.

J-CODE like operations will be essential in suppressing darknets, particularly markets and vendors that pose serious threats to human security. Concerted and co-ordinated effort to increase the certainty of arrest of the techno-criminal actors involved is essential if deterrence is to occur on any scale. Increasing the risk avoidance of darknet market operators could also help steer these 'High Street' markets to prohibit the listing of the most harmful of illicit products as many already do in respect to child sex abuse images, murder-for-hire, firearms and

³¹ The Budapest Convention harmonises national laws and furthers international police and judicial cooperation and provides for the extradition of suspects, the disclosure and preservation of computer and traffic data, real time traffic data collection, and trans-border access to stored computer data. The Convention has been influential and has been adopted by 67 states including those outside Europe such as Australia, Japan, USA, and Canada. China, the Russian Federation and India remain outside the convention framework. Brazil and several other South American jurisdictions are on the cusp of becoming parties to the Convention.

³² The purpose of the Convention is to '...promote co-operation among the *Parties* so that they may address more effectively the various aspects of illicit traffic in narcotic drugs and psychotropic substances having an international dimension'. The Convention provides for mutual legal assistance in investigations (i.e. the taking of evidence, execution of searches and seizures), prosecutions and judicial proceedings related to drug offences.

³³ The ACCCE's predecessor Taskforce Argos was able to undertake 'controlled' undercover operations due to the unique legislation enacted in Queensland: see Broadhurst R. 2020. Child Sex Abuse Images and Exploitation Materials, in Leukfeldt R & Holt T. Eds. *Cybercrime: the human factor*, Routledge also available at SSRN: <https://ssrn.com/abstract=3384499>

³⁴ Despite fears of misuse, the Act appears to be functioning as intended by Parliament. The ninth report of the Acts' independent monitor however does suggest further strengthening of independent authorization, definitional adjustments and examples as well as the extension of the Act's special measures to anti-corruption bodies; see Renwick, J. 2020 Independent National Security Legislation Monitor Report: Review of the *Telecommunications and Other Legislation Amendment (Assistance and Access) Act 2018* and related matters.

³⁵ Australia. 2020. *Australia's Cyber Security Strategy 2020*, Commonwealth of Australia; <https://www.homeaffairs.gov.au/cyber-security-subsite/files/cyber-security-strategy-2020.pdf>

³⁶ Academy of the Social Sciences in Australia Inc., 2019. *Social Science Research and Intelligence in Australia*, p 8; <https://socialsciences.org.au/publications/social-science-research-intelligence-in-australia/>

poison listings³⁷. Research by the ANU Cybercrime Observatory³⁸ shows that although resource intensive such transnational police operations do impact on these markets, albeit often short-lived but can be effective when targeting particular highly harmful illicit products (e.g. illicit firearms, NPS, opioids, CBNR) and high value vendors.

These international legal measures help restrict OCGs to ever fewer desirable safe havens. Cashed up OCGs prefer jurisdictions with safe banking and modern communication systems and LEAs vulnerable to rent seeking. Thus cross-border LEA operations designed to suppress cybercrime will be more effective if they are also integrated with operations against OCGs given the convergence with digital technology. The measures noted above are also highly relevant to the suppression of transnational crime groups discussed next.

The impact of COVID-19 on organized crime

Turning now to the resurgence of organised crime in Asia and its likely impact on Australia the UNODC report on *The impact of COVID-19 on Organized Crime* provides a broad overview of how COVID-19 may restore the influence of organised crime groups (OCGs). The UN report focuses on “governance-type” organised crime groups that operate with immunity in many countries around the world³⁹. Examples are given of OCGs (e.g., Camorra, Cosa Nostra, Yamuguchi-Gumi) stepping up in the absence of effective government and enforcing pandemic lockdowns and providing sustenance and relief to distressed communities in places where OCGs are well established. Although not new phenomena the UN report notes several examples of how:

‘OCGs acted to boost their reputation as “bona fide” protectors during the first weeks of lockdown by delivering aid packages to underprivileged families. In southern Italy, known mafia affiliates began distributing food in late March. Cosa Nostra members directly distributed food to the population in Palermo, and Camorra families in Naples provided basic necessities to people through fake charity organizations, according to media reports. Criminal organizations in Mexico followed the same route’⁴⁰.

In summary the risks identified by the UNODC are broadly as follows:

- Organized criminal groups are targeting legitimate businesses that are struggling because of the crisis; [SEP]
- New markets in medical equipment (PPE) and pharmaceuticals are being exploited by OCGs; [SEP]
- In some cases, governments have failed to enforce COVID-19 restrictions, allowing OCGs to step in; [SEP]
- OCGs have increasingly sought out opportunities to commit various forms of cybercrime⁴¹.

These risks are not new but have scaled to the opportunities presented by the pandemic and are poised to exploit weaknesses in fragile states and gaps in international mutual legal assistance and cooperation. Australia’s police liaison, training, and cross-border task force operations will need to be strengthened and broadened. Further investment in technical resources, personnel and research will be required along with the budgets to sustain joint transnational policing operations with capable regional partners.

Background

Growing Asian economies and their new middle classes have helped to drive consumer demand for licit and illicit products. However, this market builds on a long history of the use of opium and stimulants by the working poor. Illicit markets readily cater for counterfeit ‘Main Street’ fashion brands, pharmaceutical products, as well as scarce timber and wildlife products. The distribution of such contraband also links with the logistics of an established illicit drug market. Armed criminal groups form to protect these lucrative black markets. The profitability of criminal groups allows the rapid accumulation of capital and further expansion into both licit and

³⁷ Ladegaard I, 2020. Open Secrecy: How Police Crackdowns and Creative Problem-Solving Brought Illegal Markets out of the Shadows. *Social Forces*. <https://doi.org/10.1093/sf/soz140>

³⁸ Broadhurst et al. 2020. *Law Enforcement Seizures of Tor Darknet Markets and the Availability of Opioids*.

³⁹ UNODC b 2020. *The impact of COVID-19 on Organized Crime*, p 5.

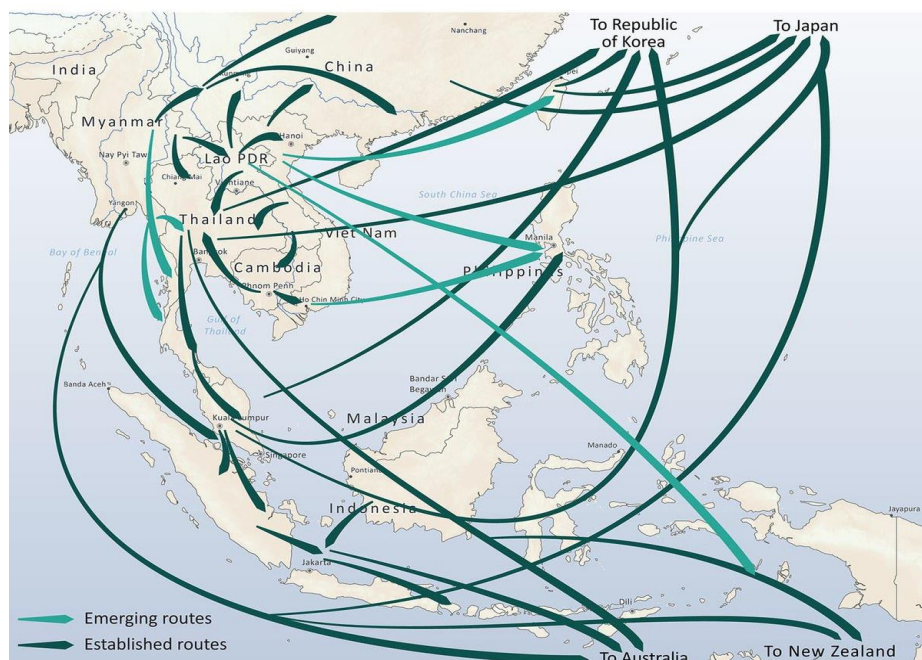
⁴⁰ UNODC b 2020: p 23.

⁴¹ UNODC b 2020: p 7.

illicit markets. This wealth may corruptly subvert the security of a state and undermine the traditional state's monopoly of violence and the means to protect state revenue⁴².

In Southeast Asia the scale and diversity of transnational organized criminal activity has been revitalized by the opening up of the region's economy and boosted by the profitability of synthetic opioids, NPS (especially MDMA, synthetic cannabis) and amphetamine type stimulants (ATS). The illicit traffic in opiates (heroin and opium) has also been reshaped and in relative decline compared to ATS and synthetic opioids (e.g. fentanyl analogues). Heroin production is still significant based on the regions opium fields in northeast Myanmar-Thai-China border region (Golden Triangle) and supplies the East and Southeast Asian and Australian market. However, the global supply of heroin is now centred in Afghanistan and trafficked to Europe and North America through the 'southern route' via East Africa and ports such as Mombasa in Kenya and Dar-es-Salaam in Tanzania. This has created in its wake a significant heroin abuse problem in East and Southern Africa and quickened the trade of wildlife and non-renewable resources to Asia.⁴³ A striking illustration of the rise of ATS relative to opium are reports in the tri-state Golden Triangle region that opium buyers in Shan and Wa partly pay farmers with 'yabba' pills (methamphetamine but of usually low quality). This is indicative of the general trend away from plant based illicit drugs to synthetics has gained momentum over the past decade and accelerated with widening global trade and shifts in recreational drug use.

Figure 2A: New and Old Trafficking Flows of "Ice" in East and Southeast Asia 2019



Source: UNODC 2020c: 14. Note 'One Belt One Road' includes a maritime silk road upgrading ports such as Sihanoukville

Figure 2B: The Scale of "Meth" Flows and Sources (circa 2015-2017) ⁴⁴

⁴² Cockayne J, 2016. *Hidden Power: The Strategic Logic of Organized Crime*. UK: Oxford University Press; McCoy AW 2019. 'Searching for significance among drug lords and death squads: the covert netherworld as invisible incubator for illicit commerce, *Journal of Illicit Economies and Development*, 1(1): 9-22.

⁴³ UNODC 2013. *Transnational Organised Crime in East Africa: A Threat Assessment*. UNODC: Nairobi and Vienna; Haysom S, Gastrow P, & M Shaw 2018. *Heroin coast: A political economy along the eastern African seaboard*, Research Report No 4, June 2018, ENACT, Global Initiative: <https://globalinitiative.net/wp-content/uploads/2018/07/2018-06-27-research-paper-heroin-coast-pdf.pdf>

⁴⁴ Chalmers J. 2016. Bad Chemistry: Meth gangs of China play star role in Philippines drug crisis, Reuters: <https://www.reuters.com/investigates/special-report/philippines-drugs-china/>



The People’s Republic of China’s (PRC) New Silk road or ‘One Belt One Road’ infrastructure initiative is also transforming the distribution of illicit drugs and other contraband. Both China and India have large but poorly regulated pharmaceutical industries that are capable of supplying the precursors needed to manufacture all kinds of illicit drugs as well as research chemicals and novel psychoactive substances (NPS)⁴⁵. These chemicals are traded across the Pacific (and Indian Ocean) by Chinese, Japanese and other transnational organized crime groups engaging and trading with Mexican cartels such as the Sinaloa, Gulf Cartel, the remnants of Los Zetas, or Brazil’s PCC (*Primeiro Comando da Capital*) amongst others⁴⁶. In return cocaine, ATS, arms, endangered wildlife and marine species (e.g. fish bladders from the endangered *Totoaba* valued at over \$US20, 000 a kilogram) cross the Pacific to East Asia.

Figure 2A roughly illustrates the re-shaping of ‘ice’ trafficking routes in our region, however, it does not capture the displacement of ‘ice’ production from southern China 2014-2016 to the Philippines and the Golden Triangle nor track the movement of precursor chemicals from China. Figure 2B describes these trafficking routes including via Melanesian and Pacific Island countries where Chinese crime groups often follow Chinese businesses. Conflicts and insurgency in Southern Thailand, Southern Philippines, and sub-state conflicts in Myanmar also drive the need for illicit revenue to contest the state as well as putative rivals. Links between organized crime and violent extremists (i.e. the crime-terror nexus) such as the Abu Sayaf and the New People’s Army in the Philippines raise funds via criminal activities is also a further dimension of TOC.

New sources of wealth and revenue for Asian organised crime

According to the most recent United Nations Office on Drugs and Crime (UNODC) assessment for Asia “...methamphetamine has become cheaper, reaching its lowest price points in the last decade in East and Southeast Asia...while prices of methamphetamine have decreased substantially, purities remain high” and

⁴⁵ Pardo B, Kilmer B, & WJ Huang, 2020. *Contemporary Asian Drug Policy: Insights and Opportunities for Change*, Santa Monica, Calif.: RAND Corporation: https://www.rand.org/pubs/research_reports/RR2733.html

⁴⁶ Arias ED, 2017. *Criminal Enterprises and Governance in Latin America and the Caribbean*, Cambridge University Press: New York; Broadhurst R. 2017. Transcontinental Express: Asia’s law enforces face synthetic drug proliferation, *Jane’s Intelligence Review*, Vol. 29 (8): 41-44; Garcia NM 2020. *Mexico’s Drug War and Criminal Networks: The Dark Side of Social Media*. Routledge; Felbab-Brown V 2019. *Mexico’s out-of-control criminal market*, Washington, DC: Brookings Institute; Grillo, M. 2011. *El Narco: Inside Mexico’s Criminal Insurgency*, Bloomsbury.

“...organized crime groups have been able to provide better quality methamphetamine products at cheaper prices, indicating reduced production costs and a change in the business model”⁴⁷.

Based on the scale of seizures the production of crystalline methamphetamine in clandestine laboratories located in the ‘Golden Triangle’ and close to Chinese sources of precursor chemicals is the main driver of these changes. Seizures of MDMA, Ketamine are also on the rise. Cocaine usually destined for East Asia has also been detected in relatively small but increasing amounts transiting through Cambodia, Laos-Vietnam⁴⁸ and the Philippines.

Between February and April 2020, Myanmar security forces seized in North Shan (Kaung Kha and Lwe Kham), 193.55 million tablets (equivalent to 17.4 tons of methamphetamine), over 500 kilogram (kg) of crystal methamphetamine and 630 kg of ephedrine; 3,748.5 litres of 3-methylfentanyl⁴⁹; 292 kg of heroin, 588 kg of opium and 49 kg of morphine; 6.8 kg of ketamine; and various precursor and pre-precursor chemicals totalling 35.5 tons and 163 thousand litres⁵⁰. Thai authorities also report the seizure of over 11 tonnes of crystalline methamphetamine (‘ice’) since the beginning of the year, in one case on the Mekong River near Bang Sai Noi (Northeast Thai/Laos border) a long tail boat with five crew abandoned 542 kg of methamphetamine pills contained in fertilizer bags. The pills labelled “Guan Yin Wang”⁵¹ were headed to either Bangkok or Phnom Penh for export. In another case three Thai men were arrested escorting a truck carrying 1,199 kg of ‘ice’ hidden under cow dung en route for export abroad. They had driven from the northwest Thai-Myanmar border and were arrested in Surat Thani in Southern Thailand⁵².

The potency of 3-methylfentanyl, a fentanyl analogue, seized in Myanmar had a dose equivalence of a staggering three thousand tons of morphine. A seizure, in terms of potency that likely exceeds the massive August 2019 23,368-kg shipment of fentanyl originating in Shanghai and destined for the Sinaloa crime cartel seized by Mexican customs and naval authorities at the port of Lázaro Cárdenas⁵³. Fentanyl is often used to lace low quality heroin (‘China White’) or as a substitution. Highly potent analogues of fentanyl (e.g. carfentanil, 3-methylfentanyl) have the potential to be weaponized by crime groups or violent extremists⁵⁴. Recent seizures of heroin also found the significant presence of fentanyl and deaths from fentanyl overdoses have risen in Thailand. The increase in the scale of seizures is likely the result of stockpiling due to logistical delays as a result of COVID-19 border closures and supply disruption following a breakdown in the temporary COVID-19 ceasefire between the Myanmar Army engaged in ‘drug control’ operations against the Shan State Army and other armed groups (e.g. United Wa State Army [UWSA], Ta’ang National Liberation Army, Kachin Independence Army).

⁴⁷ UNODC. 2020c. *Synthetic Drugs in East and Southeast Asia: latest Developments and Challenges: Global Synthetic Monitoring: Analyses, Reporting and Trends (SMART)*, Bangkok: xiv; UNODC. 2019. *Transnational Organized crime in Southeast Asia: Evolution, Growth and Impact*. Bangkok, Thailand: UNODC Regional Office for Southeast Asia and the Pacific.

⁴⁸ Luong HT, 2019. *Transnational Drug Trafficking Across the Vietnam-Laos Border*, Palgrave.

⁴⁹ Fentanyl is 50-100 times more potent than morphine and the analogues 3-methylfentanyl 400-6000 and carfentinal 10,000 times more potent than morphine. Heroin is 2-4 times more potent than morphine but may also be substituted with fentanyl. The amount of 3-methylfentanyl relative to fentanyl potency would be 4-60 times the weight equivalence: i.e. 15,000-225,000 kilograms.

⁵⁰ Ankit Panda (May 19,2020). Myanmar Police Seize 18 Tons of Narcotics, Related Materials in Asia’s Biggest-Ever Drug Bust, *The Diplomat*, <https://thediplomat.com/2020/05/myanmar-police-seize-18-tons-of-narcotics-related-materials-in-asias-biggest-ever-drug-bust/>

⁵¹ Literally related to the Buddhist deity of compassion but also slang for pick of the crop. ‘Guan Yin Wang’ ice pills have been seized across the region including Sumatra, Malaysia, and the Philippines – their production is linked to the *Sam Goh* black society.

⁵² Bangkok Post, (July 12 2020). Suppression in Myanmar drives ‘ice’ into Thailand, <https://www.bangkokpost.com/thailand/general/1950692/suppression-in-myanmar-drives-ice-into-thailand>; Bangkok Post, (July 13 2020). ‘Three arrested with 1,199kg ‘ice’’: <https://www.bangkokpost.com/thailand/general/1950152/three-arrested-with-1-199kg-ice>

⁵³ Morgan R 2019. Mexican Navy seizes 25 tons of fentanyl from China in single raid. *American Military News*, 27 August. <https://americanmilitarynews.com/2019/08/mexican-navy-seizes-25-tons-of-fentanyl-from-china-in-single-raid/>

⁵⁴ Carfentanil (combined with 3-methylfentanyl) aerosols were deployed by the Russian Security Services (FSB) to end the Chechen terrorist hostage siege of Moscow’s Melnikov Theatre on 23 October 2002. The aerosol dispersal of carfentanil was effective in incapacitating all 33 Chechen fighters, however the anesthetic also caused the death of 125 of the 800 hostages (Riches JB, Read RW, Black RM, et al. 2020. ‘Analysis of Clothing and Urine from the Moscow Theatre Siege Casualties Reveals Carfentinal and Remifentanil Use’, *Journal of Analytical Toxicology*, 36:647-656).

Note precursor chemicals sourced from China, India, Vietnam and Thailand of Douglas, J. UNODC

“While Mexican production of fentanyl is believed to have been disrupted by coronavirus lockdowns in the West, Shan syndicates tend to stockpile precursor ingredients and do not appear to be facing supply shortages”, Mr. Douglas said.

Hannah Beech H, & Saw Nang (May 19), 2020 Raids Reveal Massive Fentanyl Production in Myanmar China’s crackdown on makers of the drug, which has fueled the U.S. opioid crisis, may have simply created opportunities for crime syndicates elsewhere, *New York Times*: <https://www.nytimes.com/2020/05/19/world/asia/myanmar-drug-raid-fentanyl.html>

International Crisis Group 2019. *Fire and Ice: Conflict and Drugs in Myanmar’s Shan State*. Asia Report N°299 | 8 January 2019: <https://www.crisisgroup.org/asia/south-east-asia/myanmar/299-fire-and-ice-conflict-and-drugs-myanmars-shan-state>

Shan lies adjacent the Wa sub-state and along with Kachin remain the centre of much of the opiate and ATS production in Asia⁵⁵. These armed groups dominate the borderlands and control the trafficking of precursors from China and transport the products of numerous clandestine laboratories through China, Thailand, Cambodia, Laos and Myanmar. Long association with triad-like groups dating back to the Chinese Communist Party’s victory in China and the retreat of Lt Gen Li Mi’s *Kuomintang* (Nationalist) Army into Northern Burma underpin this trade. These Chinese irregular forces devolved over time into quasi-state armed groups dependent on their main source of revenue – opium⁵⁶. Their links originally with the Shanghai Green gang (and their skilled chemists) shifted in the 1950s to the Hong Kong and Taiwanese triads and now another generation of criminal entrepreneurs. It is these valuable long term social, linguistic and cultural links with the producers of industrial scale illicit narcotics – the Wa and Shan that have again become the engine for innovation and, convergence as triad-like groups span the supply and distribution chain from Chinese sourced precursor chemicals, production in the Myanmar-Thai-Laos borderlands and transport to the profitable markets in East Asia, Australasia and beyond.

The UNODC estimated the value of the most lucrative illicit drugs in our region was US\$71.7 billion in 2018 (see Table 2)⁵⁷. The UNODC also estimated that counterfeit goods, excluding fraudulent medicines, generated annual revenues of approximately US\$34.3–US\$37.5 billion. Around half a million migrants mainly from Myanmar, but also from Cambodia and Lao PDR, are estimated to be smuggled to Thailand each year, generating annual illicit revenues of between US\$132 and US\$196 million. However, these estimates do not include lucrative contraband such as non-renewable natural resources. Estimates for prohibited wildlife, sand mining and timber markets were near \$US20 billion and e-waste about \$US4 billion per annum in 2012 but more up to date estimates were not available. Nor are estimates of the small arms and light (SALW) weapons trade available. The value of the non-renewable resources illicit market and illegal waste in general would be considerably more valuable in 2020. The estimates exclude gambling but the report also notes the rapid growth of casinos in Cambodia, Laos and elsewhere following the PR China’s tightening of gambling and money laundering practices in the Macau – the casino state. The Financial Action Task Force (FATF) noted Cambodia along with Myanmar for their deficiencies in anti-money laundering operations.

Money Laundering

Professor Levi recently reviewed anti-money controls (AML) in Asia and elsewhere and the evidence available to assess their effectiveness. He observed a disconnection between FATF activity and the actual impact on the criminal activity that generate criminal revenues⁵⁸. In other words the busy work of the FATF was not matched by its impact on money laundering and the crime that generates unexplained wealth. He argued:

⁵⁵ Rakhine state has also emerged as a trafficking route and source of ATS following the suppression of the minority Rohingya from 2016 on.

⁵⁶ Gibson RM, & WH Chen, 2011. *The Secret Army: Chiang Kai-shek and the Drug Warlords of the Golden Triangle*, Wiley & sons: Singapore.

⁵⁷ UNODC 2019. *Transnational Organized crime in Southeast Asia: Evolution, Growth and Impact*. Bangkok, Thailand: UNODC Regional Office for Southeast Asia and the Pacific.

⁵⁸ Levi M, 2020. Evaluating the Control of Money Laundering and Its Underlying Offences: the Search for Meaningful Data. *Asian Journal of Criminology* – online May 2020 DOI 10.1007/s11417-020-09319-y; Levi also observes that law enforcement

“It may be time for us to devote more sceptical attention to claims about how money is laundered, to claims about the efficiency of AML processes and the likely effects on crime of efforts to combat laundering and the financing of terrorism. This should include attention to the possible counterproductive impacts (Grabosky 1995⁵⁹) of some AML control measures on social welfare. This includes the impact of extra financial transparency on the efficiency of extortionate ‘rent seeking’ by officials and on the suppression of political opposition...Even disregarding the impact that the COVID-19 pandemic will have on resources and priorities around the world, in the final analysis, we need to decide how much investment of resources in both public and private sectors AML efforts merit, and this requires a more critical and detailed analysis than has been common to date”⁶⁰.

Halliday, Levi & Reuter (2020⁶¹) also reflect on the complex outcomes of transnational anti-money laundering controls that attempt to suppress to use of financial systems “... to make the fruits of specific crimes (“predicate crimes”) appear to be legitimate”, and “... as a way of suppressing domestic crimes for gain (particularly drug dealing and to a lesser extent financial crimes) and threats from national and international organized crime groups” (Halliday et al 2020: 53). They also stress the gap between formal compliance and programme effectiveness and outcomes as well eclectic and potentially conflicting objectives reliant on poor quality, crime displacement effects and incomplete data or proper account for the cost burdens of financial investigation units (Halliday et al 2020: 60-63⁶²). Perhaps more importantly AML laws may enhance executive powers of surveillance attractive to authoritarian leaders and regimes (Halliday et al 2020: 77).

Table 2: The ATS (‘Meth’) and Heroin Market in Asia Pacific (high-end estimates)

Country/Region	\$US billions Meth/ATS	\$US billions Heroin
Australia & New Zealand	11.1	0.9
Bangladesh	5.5	Not Available
East Asia (excluding China)	8.9	0.3
Southeast Asia	25.7	2.9
Greater China*	10.3	6.3
Total	61.4	10.3

Source: UNODC 2019. * includes Hong Kong, Macau, and Taiwan.⁶³

The transformation of Asian organised crime groups

There are many criminal groups active in the region, however for the purposes of this submission the focus is on Chinese crime groups, who arguably dominate the regional trade in precursor chemicals, ATS and opioids. Nevertheless the *yakuza*, Far East Russian *mafia* and other groups have notable impact and collude with other crime groups. Thai *jao pho* and *red Wa* are crucial links in the narcotics trade and have long associations with Chinese crime groups. Outlaw Motorcycle Gangs (OMCGs) based in Australia and New Zealand with ties to Canada, USA, and Scandinavian countries also operate as importers and financiers of the illicit drug trade. Australian OMCG engage with Thai, Filipino, Chinese, and Indonesian crime groups. They are implicated in the distribution of illicit drugs (including steroids), protection, prostitution, fraud and large-scale smuggling of tobacco into Australia from Indonesia and the UAE. Agents of the Democratic People’s Republic of Korea’s (DPRK) are also

and regulatory expenditures on AML are relatively modest compared with private sector expenditures, and often have been viewed as marginal additions rather than as a substitute for other forms of policing.

⁵⁹ Grabosky PN, 1995. Counterproductive regulation. *International Journal of the Sociology of Law*, 23(4): 347–369.

⁶⁰ Levi M 2020: p 19; Halliday T, Levi M, & Reuter P, 2020. Why do transnational Legal Orders Persist?.

⁶¹ Halliday T, Levi M, & Reuter P, 2020. Why do transnational Legal Orders Persist? The Curious Case of Money-Laundering Controls, in Shaffer G & E Aaronson, *Transnational Legal Ordering Of Criminal Justice*, Cambridge University Press: 51-83.

⁶² Halliday T, Levi M, & Reuter P, 2020. Why do transnational Legal Orders Persist? They add, although “mystery shopping,” by which an investigator simulates a money-laundering transaction to see if financial institutions respond appropriately, has been shown to provide useful information (van der does de Willebois 2011), it has never been used in any FATF MER (Mutual Evaluation Report). See van Duyn, Harvey, and Gelemerova (2019), for a strident methodological critique of the application of and evidential basis for AML

⁶³ Cited in Broadhurst R. 2020. Transnational crime and illicit markets in Asia: the Philippine’s response, *Beyond Politics and Spectacle: Crime, Drugs and Punishment*, University of Manila Press, *in press* – available on request.

involved in counterfeit currency and fake goods, small arms trafficking, cybercrime, and illicit drug manufacturing⁶⁴. It is important to stress that PR China unlike the DPRK is not in any way dependent on criminal revenue but like many other states makes use of underworld services for espionage and matters of national security.

Chinese ‘black societies’ are involved in protection services but also any black market activity, including vice and loansharking⁶⁵. So called ‘Red-Black’ crime groups capture key local posts in the Chinese Communist Party and seek to exploit the protection collusion can offer for illicit markets especially drug distribution and gambling. The Chongqing experiment and Wang Lijun incident of 2012 exposed these Red-Black connections⁶⁶. Hong Kong triads (e.g. *Sun Yee On*, 14K, *Wo Shing Wo*)⁶⁷ are also involved in money laundering and have been implicated in stock market manipulation. Hong Kong, Macau and Taiwanese triads (i.e. Bamboo Union, Four Seas, *Sung Lian* and the indigenous *Tien Dao Meng* [Celestial Way]) are also implicated in the financing and supervision of large drug shipments, providing the role of lender and insurer of last resort. Elements of these Hong Kong and Taiwanese triads also re-located to Mainland China in the 1990s establishing ‘Red-Black’ ties⁶⁸. Connections with Central and Southern American crime groups, as well as close ties with the Chinese diaspora in Canada, the Philippines, Thailand and elsewhere, diversify the reach of triad-like crime groups. Mainland-based Chinese criminal groups (e.g. Big Circle Boys or *Dai Heun Jai*)⁶⁹ have also dispersed across the Chinese diaspora and are also engaged in large-scale ATS production and export and link with other crime groups in East and Southeast Asia. Taiwanese, Hong Kong and Macau triads (e.g. Sun Yee On) are regarded as patriotic forces and have been involved in the ‘united front’ strategies of PR China at various change-points or crisis⁷⁰. For example triads have been tasked to insure peaceful transitions from colonial to Chinese control in Hong Kong and Macau and recently to confront and intimidate civil protests in Hong Kong⁷¹.

Professor Letizia Paoli a leading mafia scholar, recently argued that five mafia organizations long regarded as the core of organized crime: the American Cosa Nostra, the Italian Cosa Nostra and ‘Ndrangheta, Chinese black societies (triads), and Japanese yakuza share seven characteristics⁷². These common features are:

- longevity and premodern roots;
- male-only membership (with rare exceptions);
- able to muster significant manpower;
- complex formalized internal structure and revenue sharing;
- elaborate cultural capital and rituals that generate new identity, lifelong commitment, and fictive kinship ties;
- multi-functionality and diversity of criminal enterprise;
- seek political dominion and capacity to provide governance services; and
- long-standing popular legitimacy and power sharing with local state authorities.

⁶⁴ Broadhurst R, 2020. Transnational Crime in Asia: Illicit Markets and Innovation. In Lo TW, Siegel D & Kwok SI (Eds.). *Organized Crime and Corruption Across Borders: Exploring the Belt and Road Initiative*. London: Routledge.

⁶⁵ Broadhurst R. & KW Lee, 2009. The Transformation of Triad ‘Dark’ Societies in Hong Kong: The Impact of Law Enforcement, Socio-Economic and Political Change. *Security Challenges*, 5(4): 1-38.

⁶⁶ Broadhurst R, 2013. The Suppression of black societies in China, *Trends in Organised Crime*, Vol 16:95-113; Wang Peng 2017. *The Chinese Mafia: Organized Crime, Corruption, and Extra-Legal Protection*. Oxford University Press.

⁶⁷ The English translation of *Sam Ho Wu* but referred to as dark or black societies in Cantonese.

⁶⁸ Lintner B, 2004. Chinese Organised Crime. *Global Crime*, Vol 6: 84-96; Broadhurst R. & Lee KW. 2009. The Transformation of Triad ‘Dark’ Societies in Hong Kong.

⁶⁹ Chung A, 2008. The Big Circle Boys: Revisiting the Case of the Flaming Eagles’, *Global Crime*, Vol. 9 (4): 306-31.

⁷⁰ Lo TW, 1999. The Political-Criminal Nexus: The Hong Kong Experience, *Trends in Organized Crime*, Vol. 4 (3): 60-80; Broadhurst R & Farrelly N 2014. Organized Crime ‘Control’ in Asia: Examples from India, China and the Golden Triangle, In *Oxford Handbook of Organized Crime*, Letizia Paoli [Ed.] Oxford University Press: p. 634-654; Broadhurst R. 2020. Transnational Crime in Asia: Illicit Markets and Innovation.

⁷¹Lo, TW, Cora Hui, Sharon Kwok & Gabriel Lee. 2019. Tolerance of Triads, Police Legitimacy and Self-help amidst the Umbrella Movement. *Australian and New Zealand Journal of Criminology*, 52 (4): 516-533; Hui, Cora Y.T. 2020. *Securitization of the Umbrella Movement in Hong Kong: the Rise of a Patriotocratic System*. New York: Routledge.

⁷² Paoli L 2020. What Makes Mafias Different? *Crime and Justice*, 49(1), on-line; see also Jacobs J 2019. The Rise and Fall of Organized Crime in the United States, *Crime and Justice*, available at <https://doi.org/10.1086/706895>

She also argues that these core groups have mostly been in decline in recent decades, due in part to their adherence to pre-modern structures and worldview, and an apparent decline in the willingness of communities to tolerate their methods⁷³. A pre-modern history applies to both Japanese yakuza and Chinese triads who share a common origin in late 19th and early 20th century as mutual aid movements including providing private enforcement of contracts and conflict resolution among casual labourers and stevedores. Both criminal groups proffer an alternative life-style as blood brothers outside the normal world and their origin myths serve similar purposes⁷⁴. In turn this feeds the romanticism of triads and yakuza depicted in popular culture that help serve to bind members to a fictive family of blood brothers⁷⁵.

Paoli's review does not suggest organised crime is on the wane but rather its more visible forms have become hidden and methods have changed as criminal enterprises adapt to socio-technological change. The central role of violent actors and elimination contests between criminal groups crucial to the success of criminal enterprises in the 19th and 20th century has given way to more subtle and hidden forms of violence and competition as transnational illicit markets demand corporate like transactions to build not just networks of criminal actors but networks of interdependence.⁷⁶ The glue of interdependencies among criminal groups and across networks of criminal actors in various roles has become more complex, spans borders and has become harder to suppress. These changes offer greater opportunities for illicit wealth and funds for the rapid adoption of technological innovation notably the tools of the techno-criminals and their hidden services. Elimination contests between Chinese black societies are now relatively infrequent, however this is not the case in Latin America and elsewhere⁷⁷.

The perspective shows the conditions that foster or suppress organised crime as modernity and globalisation re-shape trade, cultures and behaviours and re-define the reach of states to contest the power of organised crime. The processes that create and sustain the formation of large criminal networks and groups, and in turn their role in state and sub-state formation hinge on the capacity of states to monopolise the means of violence and to govern with legitimacy. Conflicts that arise in the political economy of weak states in turn shape the functions of the armed criminal groups that makes up the backbone of organised crime and transnational illicit markets. Thus the power of organised can be amplified by fragile state responses and associated problems of wealth diversion and the corruption of state officials. TOC groups are also potentially players in the hybrid wars of superpowers or as proxy armed groups in inter-state and sub-state contests in addition to their key role in the protection and exploitation of black markets⁷⁸. TOC groups, for example provide plausible deniability for states that use these groups in the furtherance of strategic objectives and can play a role in the destabilising of state and economy⁷⁹.

Collaborative criminal enterprises or 'companies' such as *Sam Goh* (literally older brother No 3 in Cantonese) have emerged from the broader changes and opportunities wrought by globalisation and socio-technological change while leveraging off deep connections in PR China and the Golden Triangle. Criminal enterprise on this

⁷³ Paoli 2020. What Makes Mafias Different?

⁷⁴ Morgan WP 1960. *Triad Societies in Hong Kong*, Hong Kong: Government Printer; see also ter Haar BJ 2000. *Ritual and Mythology of the Chinese Triads: Creating an Identity*, Leiden: Brill; Wakeman F 1995. *Policing Shanghai 1927-1937*, Berkley: University of California Press; Martin BE 2005. Eating Bitterness: Du Yuesheng and Guomindang Politics in Shanghai, 1945-49, *East Asian History*, vol. 29, pp. 129-52

⁷⁵ Bolton K, Hutton C, & Ip PK, 1996. The Speech-Act Offence: Claiming and Professing Membership of a Triad Society in Hong Kong, *Language and Communication*, vol. 16 (3): 263-90.

⁷⁶ Chu YK 2000. *The Triads as Business* London: Routledge; Chin KL 2003. *Heijin: Organised Crime, Business and Politics in Taiwan* New York: M.E. Sharpe; Lintner B 2002. *Blood Brothers: Crime, Business and Politics in Asia*, Allen & Unwin, Sydney

⁷⁷ Arias ED, 2017. *Criminal Enterprises and Governance in Latin America and the Caribbean*

⁷⁸ Miroiu A, 2020. *Political Theory of Armed Groups: Social Order and Armed Groups*, Springer Briefs.

⁷⁹ Grabosky P, 2019. Sympathy for the devil: state engagement with criminal organisations in furtherance of public policy. *International Journal of Comparative and Applied Criminal Justice*, 43(3), 189-205; Cherney A, O'Reilly J, & Grabosky P, 2006. Networks and meta-regulation: Strategies aimed at governing illicit synthetic drugs. *Policing & Society*, 16(4), 370-385; Dupont B, Grabosky P, & Shearing C 2003. The governance of security in weak and failing states, *Criminal Justice*, 3(4), 331-349; Braithwaite J, & Wardak A. 2013. Crime and war in Afghanistan: part I: the Hobbesian solution. *British Journal of Criminology*, 53(2), 179-196; Wardak A, & Braithwaite J 2013. Crime and war in Afghanistan: Part II: A Jeffersonian alternative? *British Journal of Criminology*, 53(2), 197-214.

scale are usually considered unlikely given the fragmentation and network morphology of disorganised crime⁸⁰ but this overlooks the transformative utility of secure and safe communications (i.e. hidden internet services and VPNs) and money transfer in combination with corruption and intimidation in the furtherance of criminal conspiracies. Four financially and technically savvy Cantonese triads the *Sun Yee On*, 14K, *Wo Shing Wo*, and *Dai Heun Jai* along with the Taiwanese Bamboo Union are able to pool resources and synergies to comprise a loose confederacy that ensures the wealth and power of Sam Goh: allegedly the most active crime group in the region profiting from the opioid, ATS-Ketamine-MDMA trade integrating production, trafficking and wholesale distribution in the pursuit of both monopolies and monopsony⁸¹. The ‘company’ has strong links with Chang Ch’i-fu (Khun Sa – Shan State Army) the Shan State Army/UWSA and other armed groups in Myanmar as well as Australian and North American OMCs as noted but its key connections are those forged in the PRC among rent seeking elements of state/party county or commune level bureaucracies, especially the Public Security Bureau and People’s Armed Police. Although the profit from narcotics drives the revenue of this criminal confederacy it is only one of the many contraband products and grey business that their wealth, hidden power and influence can draw upon.

Overall these developments pose difficult questions. First, have the massive wealth of organized crime groups endangered the prospect of good governance in Southeast Asia and undermined prospects for effective institutional and collaborative efforts to suppress their impact on economic and social development? Second, has regional geo-political rivalry between the PR China and the USA combined with the pandemic undermined LEA cooperation and heightened the threat posed by organized crime in vulnerable and/or conflict prone regions including the Pacific Island states? More broadly given the role of narcotics in generating illicit wealth has the half-century long War on Drugs’ initiated by US president Nixon in 1971 morphed to another kind of war? Apart from using drug profits to wage war, have drugs, especially synthetic narcotics, emerged as weapons of war?

Responding to the Challenge of Transnational Organised Crime

Cross-border movement of licit and illicit products into and out of East and Southeast Asia, notably via China, has greatly increased as a consequence of the establishment of free trade agreements with ASEAN countries as well as the massive upgrade of the region’s infrastructure and connectivity now underway. The One Belt One Road Initiative, India-Myanmar-Thailand Trilateral Highway, and Trans-Asian Railway Network (e.g., the Singapore-Kunming Rail Link) along with new financial infrastructure (e.g., Asian Infrastructure Investment Bank) have quickened the pace of change and development. Yet a UNODC assessment noted:

“Since 2009, the ASEAN Ministerial Meetings on Transnational Crime + China was held twice, resulting in a four-year Memorandum of Understanding on cooperation of organized crime. However, a fully operational framework on tackling cross-border crime does not exist. By contrast, there are already fully operational and thriving networks of cross-border criminals”⁸².

The overall lack of effective action against illegal drugs, counterfeiting, and wildlife extraction reflects ASEAN’s relatively weak integration in respect to common security problems.⁸³ The Kuala Lumpur Declaration in

⁸⁰ Reuter P, 1983. *Disorganized Crime: The Economics of the Visible Hand*, Cambridge: MIT Press; Chin KL & Zhang S 2003. The Declining Significance of Triad Societies in Transnational Illegal Activities: A Structural Deficiency Perspective, *The British Journal of Criminology*, Vol. 43: 69-88;

⁸¹ Allard T. (October 14, 2019) Exclusive: Police chase suspected kingpin of vast Asian meth syndicate, Reuters, <https://www.reuters.com/article/us-asia-crime-syndicate-exclusive/exclusive-police-chase-suspected-kingpin-of-vast-asian-meth-syndicate-idUSKBN1WT1JH>. The alleged Brother No. 3, fugitive Tse Chi Lo, is a Chinese Canadian migrant whose background as a former Big Circle Boy with convictions for drug trafficking and connections in Taiwan, Macau, Hong Kong and Thailand appears to have a curriculum vitae that symbolises the interdependence the Sam Goh represent.

⁸² UNODC. 2016b. *Protecting Peace and Prosperity in Southeast Asia: Synchronizing Economic and Security Agendas*. Bangkok, Thailand: UNODC Regional Office for Southeast Asia and the Pacific: p 12.

⁸³ Unrealistic aspirations and work plans for a drug free region by 2015 (later re-set to 2020) set out in the 7th ASEAN Ministerial Meeting on Transnational Crime in 2009 is an example; see ASEAN. 2012. “Joint Statement of the 7th ASEAN Ministerial Meeting on Transnational Crime 7th ASEAN Ministerial Meeting on Transnational Crime.” November 17. Retrieved from: https://asean.org/?static_post=joint-statement-of-the-7th-asean-ministerial-meeting-on-transnational-crime-ammtc-siem-reap-cambodia-17-november-2009-joint-statement).

Combating Transnational Crime endorsed by 10th ASEAN Ministerial Meeting on Transnational Crime in 2015 undertook further commitments to cooperate on the suppression of transnational crime in the region. Importantly the agreement presses forward on commitments to a full ASEAN treaty on mutual legal assistance. This included expanding the scope of cooperation beyond illicit drugs and terrorism to include illegal wildlife and timber extraction, people smuggling, cybercrime, the development of regional legal arrangements and the harmonisation of national laws addressing cross-border crime. The 13th ASEAN Ministerial Meeting on Transnational Crime in November 2019 continues to expand this program particularly emphasising regional border cooperation and furthered the potential for improved policing cooperation with ‘dialogue partners’ China, Europe, USA, Australia, Canada and Russia⁸⁴.

The ASEAN Plus Three forum (Japan, China, and Republic of Korea) could have a significant role in the suppression of organized crime through cooperation on non-traditional security matters although blunted by current strategic tensions. The potential for regional and international cooperation in the suppression of multi-faceted transnational organised crime remains to be fully developed. And until there is a real sense that the ASEAN is a community of shared fate, effective coordination to suppress organized crime will be limited and jurisdictional gaps open to exploitation by organised crime groups.

Policy Reform: ‘War on Drugs’ or War on Organised Crime?

The key question is how to degrade the power and influence of TOC. Economic development has been prioritized by Southeast Asian governments and has generally trumped concerns about illicit trade, cross-border and organized crime. This under-investment in policing and social defence across the region contributes to the under-performance of LEAs, widespread corruption, and limited regional cooperation that in turn enable organised crime groups to flourish (UNODC 2019: 21). Politics and economics—notably the protection of state revenues—generally drive anti-crime and corruption efforts. These campaigns are often short-lived and ‘grey’ businesses and dual-role entrepreneurs can outsource and outlive such ‘crackdowns’ on crime and continue to profit from the black market nexus between the underworld and upper-world.

A focus on supply disruption, increased expenditure on law enforcement, and a prioritization on deterrence have been the principal approaches over the past 50 years but has led to little sustained reduction in illicit drug markets⁸⁵. Civil society and state responses to the ‘drug problem’ range from punitive populism, public health or harm reduction approaches through to decriminalisation and legalisation. Contrasting approaches to the drug problem are illustrated by Thailand’s shift to harm reduction and the Philippines ‘War on Drugs’. The violent suppression of the drug problem in the Philippines left untouched the traditional source of corruption and political funding – illegal gambling such as *jueteng* – although no longer a dominant source of profit in the black economy. Overtaken by more profitable *shabu* the moral economy of Philippine politics has succumbed to “brutal violence, amoral actors and escalating police brutality”⁸⁶.

Policy pivots to harm reduction strategies and alternatives to penal sanctions for illicit drug use as well as reducing the reach of prohibition policies are on the table as the lesser evil, if priority is given to the disruption of organized crime profits and influence. However, broad consensus on which harm reduction policies must be pursued has not materialised. Investment on crime prevention, public health strategies, and the treatment of addiction would help to undercut the profits of criminal groups. Steps to undermine the tolerance of consumers in the sustainability of illicit markets in general, and new approaches to the reduction of demand are needed⁸⁷. The capacity of TOC groups to create demand through cheap prices and supply an affordable and effective

⁸⁴ Joint Statement of the 13th ASEAN Ministerial Meeting on Transnational Crime, Bangkok, Thailand, 27 November 2019; <https://asean.org/joint-statement-thirteenth-asean-ministerial-meeting-transnational-crime-13th-ammtc/>

⁸⁵ McLean K, 2018. A Kind of Peace: Tracking the Reflexive and Resilient Drug War. *International Journal of Drug Policy*, 51: 117-120; Kleiman M, Caulkins J, & Hawken A, 2011. *Drugs and Drug Policy: What Everyone Needs to Know*. Oxford, UK: Oxford University Press; Coyne CJ & AR Hall (April 12) 2017. Four Decades and Counting: The Continued Failure of the War on Drugs, *Policy Analysis* No. 811. <https://www.cato.org/publications/policy-analysis/four-decades-counting-continued-failure-war-drugs>

⁸⁶ McCoy 2019:14.

⁸⁷ Pardo, et al. 2020. *Contemporary Asian Drug Policy: Insights and Opportunities for Change*.

product however should not be underestimated. A pragmatic approach could prioritize the disruption and suppression of organized crime and promote policies that undermine their profitability and influence.

A focus on reducing the harm of black markets invites a reassessment of the policies that fuel unproductive pseudo-drug wars: drug wars that, in yet another iteration in the Philippines, impact on the most vulnerable, undermine the rule of law, overwhelm judicial and correctional institutions, and do little to degrade the power of organized crime. Australian lawmakers would do well to consider the longer-term impact of the rise of highly capable international crime groups and continue to support Australia's forward policy of crime prevention so carefully built up over the past two decades. Despite the likelihood of a deep pandemic led economic recession and heavy demands on the public purse increasing funds to strengthen our police liaison network and UNODC agencies as well as supporting transnational police operations along with further investment in training and research will be necessary. Investment in regional crime prevention will ultimately save Australian taxpayers additional expenditure on domestic harm reduction and law enforcement.

Appendix: Compiled screenshots of COVID-19 related products listed on Agarth (August 4 2020)

Image	Name	Price	Vendor	Place
	azithromycin 250mg, 500mg, corona treatment Azithromycin is used to treat a wide variety of bacterial infections. It is a macrolide-type antibiotic. It works by ...	A\$ 2527.55 (0.158117 BTC)	sonibrto44 100.000, 25 - 50 deals	From: Germany To: Worldwide
	Buy Chloroquine for coronavirus treatment 1000 tab email -manaion@protonmail.com Product Description Drug Name CEEQUIN Dosage Form Tablet Packaging Type Strips T...	A\$ 2560.59 (0.160184 BTC)	teethbattered 99.208, 100 - 500 deals	From: Austria To: Worldwide
	SAY bye bye to COVID19 = CHLOROQUINE PHOSPHATE A research trial of coronavirus patients in Brazil ended after patients taking a higher dose of chloroquine, one of t...	A\$ 281.32 (0.017599 BTC)	Legitsales 98.636, 5000+ deals	From: Italy To: Worldwide
	Corona Non Woven Waterproof Full Protective Anti Virus Lab Coat CPE Isolation Gown Corona Te-W1 Human Body Temperat...	A\$ 7033.06 (0.439968 BTC)	Legitsales 98.636, 5000+ deals	From: United States To: Worldwide
	CORONA CORONA FOR SAFTY AND CURE Chloroquine please safe your self amunsbren is here to help you out off(covid-19) Chloroquine is a medication primarily used T...	A\$ 281.32 (0.017599 BTC)	Legitsales 98.636, 5000+ deals	From: United Kingdom To: Worldwide
	Corona Virus Test , Covid-19 Test Kits (2000Pcs) Condition: 100% brand new & high quality Material. electrostatic br /> Weight: 40g Warning This product is on...	A\$ 7033.06 (0.439968 BTC)	ENIGMAPLUGSSUPPLY 99.830, 5000+ deals	From: United States To: Worldwide
	Get Corona Virus TREATMENT & influenza Coronavirus disease (COVID-19) is an infectious disease caused by a new virus. ... You can protect yourself by puttin...	A\$ 421.98 (0.026398 BTC)	Perfectsales 96.407, 1000 - 3000 deals	From: Italy To: Worldwide
	get Corona Virus TREATMENT & influenza Coronavirus disease (COVID-19) is an infectious disease caused by a new virus. ... You can protect yourself by puttin...	A\$ 421.98 (0.026398 BTC)	Perfectsales 96.407, 1000 - 3000 deals	From: United Kingdom To: Worldwide
	High Quality Best Price Favipiravir (CAS 259793-9) High qality favipiravir cas259793-96-9 Coronavirus cure cas 259793-96-9 Name favipiravir Appearance White pow...	A\$ 421.98 (0.026398 BTC)	Perfectsales 96.407, 1000 - 3000 deals	From: United States To: Worldwide










anarthaourmnhq3.onion/item/6755523668909339289

Image	Name	Price	Vendor	Place
	Dexamethasone Tablets for COVID19 Welcome to kaiserplug.We sell only the highest quality medications for your moderate and severe pain (Real Pharmacy G...	A\$ 422.92 (0.026399 BTC)	kaiserplug 97.989, 1000 - 3000 deals	From: Spain To: Worldwide
	Dexamethasone Tablets for COVID19 Limited Quantity Dexamethasone Tablets, 4mg, 100 Tablets Non-Returnable and Non-Cancelable. For Fast and Easy Comm...	A\$ 422.92 (0.026399 BTC)	Legitsales 98.636, 5000+ deals	From: United States To: Worldwide
	Remdesivir antiviral Remdesivir, also known as GS-5734, inhibits murine hepatitis virus (MHV) with an EC50 of 30 nM, and blocks SARS-CoV a...	A\$ 493.4 (0.030798 BTC)	tonyplug 98.182, 1000 - 3000 deals	From: United Kingdom To: Worldwide
	Remdesivir antiviral Buy Remdesivir for COVID19 Welcome to kaiserplug.We sell only the highest quality medications for your moderate and severe pain (Real Pharmacy G...	A\$ 422.92 (0.026399 BTC)	kaiserplug 97.989, 1000 - 3000 deals	From: United States To: Worldwide
	Remdesivir antiviral Remdesivir, also known as GS-5734, inhibits murine hepatitis virus (MHV) with an EC50 of 30 nM, and blocks SARS-CoV a...	A\$ 563.89 (0.035198 BTC)	tonyplug 98.182, 1000 - 3000 deals	From: Netherlands To: Worldwide
	Remdesivir (250 bottles for \$1500) covid-19 drug we got inside in one of the lab presently carrying out a sample of these drug and it works. It is currently being bou...	A\$ 2114.58 (0.131993 BTC)	Legitsales 98.636, 5000+ deals	From: United Kingdom To: Worldwide

Appendix 2 Summary data reported by Bracci, et al The COVID-19 online shadow economy [ArXiv]

Name marketplace	Days crawled	Listings All	Listings COVID-19 specific	Observations All	Observations COVID-19 specific
Black Market Guns	163	18	0	2,934	0
CanadaHQ	94	21,853	3	145,202	53
Cannabay	119	1,074	0	1,303	0
Cannazon	100	2,760	0	4,606	0
Connect	179	476	2	13,579	23
DarkBay/DBay	127	105,921	421	554,535	6570
DarkMarket	92	32,272	19	37,742	20
Darkseid	189	8	0	1,512	0
ElHerbolario	186	13	0	1,430	0
Empire	107	26,010	33	93,163	46
Genesis	188	216,792	0	2,174,217	0
Hydra	189	297	0	37,665	0
MEGA Darknet	135	754	0	1,596	0
Plati.Market	189	11,678	0	17,214	0
Rocketr	189	460	0	7,843	0
Selly	91	462	0	1,523	0
Shoppy.gg	189	8,412	0	486,819	0
Skimmer Device	189	12	0	2,268	0
Tor Market	130	634	0	25,328	0
Venus Anonymous	177	84	0	14,644	0
White House	96	21,377	5	320,360	118
Willhaben	189	14,626	0	45,774	0
Yellow Brick	117	6,379	33	97,583	329
Total	> 90	472,372	518	4,088,840	7,159

Screenshot of typical COVID-19 products available on Agartha November 13, 2020.

Name	Price	Vendor	Place
 <p>Buy Pfizer COVID-19 vaccine The doses of the COVID-19 vaccine has been developed by Pfizer and BioNTec. We can deliver in any country.</p>	AS 1818.0 (0.079862 BTC)	williamsharry464 97,143, 10 - 25 deals	From: United States To: Worldwide
 <p>Chloroquine vaccine an "tablet" for coronavirus I'M A RELIABLE AND TRUSTWORTHY VENDOR WHOSE SOLE AIM IS TO SATISFY THE NEEDS AND WANTS OF ALL MY PRODUCTS TO @ALL MY ...</p>	AS 694.03 (0.030487 BTC)	baileythom 99,433, 1000 - 3000 deals	From: United States To: Worldwide
 <p>T3 Liothyronines Sodium (Wickr: evilgenius101) Buy High quality Cytomet (Liothyronine Sodium) in Tablets, Powder & vaccine form All Mileage available For Fas...</p>	AS 368.6 (0.016192 BTC)	EviGenius 98,849, 3000 - 5000 deals	From: United Kingdom To: Worldwide
 <p>CORONA VIRUS VACCINE 50 20ML please can you contact me here for fast and easy communication before you placed your order contact my phone or w...</p>	AS 694.03 (0.030487 BTC)	bestdealer 98,693, 100 - 500 deals	From: United States To: Worldwide
 <p>CORONA VIRUS VACCINE 50 20ML please can you contact me here for fast and easy communication before you placed your order contact my phone or w...</p>	AS 694.03 (0.030487 BTC)	bestdealer 98,693, 100 - 500 deals	From: United States To: Worldwide
 <p>CORONA VIRUS VACCINE 50 20ML please can you contact me here for fast and easy communication before you placed your order contact my phone or w...</p>	AS 694.03 (0.030487 BTC)	bestdealer 98,693, 100 - 500 deals	From: United States To: Worldwide
 <p>CORONA VIRUS VACCINE 50 20ML please can you contact me here for fast and easy communication before you placed your order contact my phone or w...</p>	AS 694.03 (0.030487 BTC)	bestdealer 98,693, 100 - 500 deals	From: United States To: Worldwide
 <p>HELLO buy fast... CORONA-VIRUS VACCINE is out now Wickr...maker24 Wickr...maker24 whatsapp...+1.707.297-9981.As they race to test an experimental coronav...</p>	AS 416.42 (0.018292 BTC)	makershop 98,049, 1000 - 3000 deals	From: United States To: Worldwide
 <p>CORONA VIRUS VACCINE 50 20ML please can you contact me here for fast and easy communication before you placed your order contact my phone or w...</p>	AS 694.03 (0.030487 BTC)	bestdealer 98,693, 100 - 500 deals	From: United States To: Worldwide