Digital drug markets and the pandemic: early indicators

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Executive summary

CCC COVID Briefing Papers are an ongoing series of short-form, open access reports aimed at academics, policymakers, and practitioners, which aim to provide an accessible summary of our ongoing research into the effects which the coronavirus pandemic (and government responses) are having on cybercrime.

In this report, we focus on illegal online drug markets. There is evidence of substantial disruption to a range of illicit supply chains from our data collections, especially to drug cryptomarkets which rely on the postal and shipping networks. This is producing conflicting impacts, causing a loss of income for many in these markets, but creating some limited opportunities for a few. Shipping delays have led to some suppliers being unable to source merchandise, with others being forced to offload supply in local markets. The knock-on effect of this (observed in markets for other illicit goods as well) is that it has provided many dealers with a credible excuse for scamming customers. Whereas previously the reputation systems used in these markets would allow customers to report non-delivery of goods, delays of up to three months above usual delivery times mean that scammers have substantial opportunities to make profits before being banned.

Shipping delays and online drug markets

The initial wave of COVID lockowns in China caused substantial disruption to international shipping, compounded by the subsequent lockdowns in the rest of the world. Despite their 'online' character, drugs cryptomarkets (online markets for legal and illegal drugs which are accessed securely through anonymity networks such as Tor) are reliant on the postal and shipping services for the delivery of drugs and precursors to suppliers and end users. We have observed, in our scraped datasets of illicit online forums and discussion boards, evidence of significant disruption of these pathways, and a range of effects on these illicit markets.

At the initial peak of lockdown measures, shipping times (especially in international routes which passed through China) were being routinely delayed by up to three months (as reported in cryptomarket discussions). This caused significant friction to international orders for postal drug delivery, with many dealers reporting that they were switching to orders within the same nation only, and others struggling to source supply.

"Yeah, 90%+ of UK vendors will not ship to USA at moment during covid as they are literally groundhogged. Think all those who go in store to buy products are buying them online now so postal services are screwed."

However, this has generated – for some fortunate suppliers with an excess of product – opportunities to offload in these local markets.

"I’m state side. Managed to get it in before covid came and fucked it up it all up for mail orders. No festivals, no raves, no clubs, now I am sitting on a gold mine. USA2USA only. I have been offering it at a gram at a time, however, since I have so much, may as well offer ounces. Loving the quarentined thing, where we’re are pretty much stuck to indulge in sacamaments whilst we wait for the world to catch up. The world is changing at a rapid pace pscychedelics are finally going to reign. Empathoegenics with it, and more. What a time to be alive, what a time to die so that to be reborn onto an awesome future."
Lockdown, push factors and demand

There is evidence that economic pressures resulting from widespread job losses are additionally forcing those in these markets to step up their involvement to make up for lost income:

“Due to the covid shitstorm I’m only able to clock 10 hours of work a week, so I’ve got etizolam en route. As well as Hep and Mdpep. I’ll make custom orders upon request.”

In addition, the demand for the services provided by online drug markets is booming due to lockdown. As large numbers of adolescents and adults have been forced to stay home, without school, work, or recreational activities outside the home, there have been massive increases in free time and boredom around the world. We find, in our wider forum collections, evidence that this is leading to an increase in recreational drug use.

“I bought weed BECAUSE of the corona virus. I’m literally sitting inside every single day. I bought Xans, 2c-b, Bud and edibles because of how f*cking bored I am.”

The combination of these factors suggest that despite the additional frictions to international shipping caused by the pandemic, the conditions exist for thriving local drug markets.

Trust, reputation, and scams

Although these illicit markets have been relatively quick to adapt, these delays to postal delivery have had the secondary effect of disrupting the trust and reputation systems which allow these markets to function. While drugs cryptomarkets have developed sophisticated systems for managing trust, with sellers accruing reputation over time and buyers able to provide ratings and feedback for transactions (and report disputes), shipping delays are providing facile excuses for scammers, who are able to point to the widespread disruption of international shipping and supply chains as an excuse for non-fulfilment. These delays allow them to spin disputes out for weeks or months, rendering reputation systems dependent on quick feedback far less useful.

Conclusions

Although these findings are nascent, and necessitate following up with detailed quantitative research, we identify evidence of a substantial reconfiguration of the economic geography of drugs cryptomarkets. The addition of friction and delay to international routes is altering the incentives for suppliers, and we predict that this will lead to, at least in the short-term, an increased ‘localisation’ of online drug supply, with dealers switching (even further) to local markets within their home countries. The drugs market appears to still be in the process of adapting to these new conditions – while these data generally refer to the peak of lockdown, these factors are only partly being alleviated by the lifting of restrictions, with substantial disruption to shipping still evident, mass unemployment a real issue across much of the world, and local lockdowns and second waves on the horizon.

At the Cambridge Cybercrime Centre we make our research data available to other academics, sometimes before we have looked at it ourselves! Researchers can be provided access to our ‘CrimeBB’ dataset of (26 and counting) underground cybercrime forums, our extensive collections of chat channel data, and our new collections of forums relating to online right-wing extremism and radicalisation. We can also share email spam and sensor data related to DDoS and IoT malware. All these collections are regularly updated and can be rapidly provided under license – for full details see: https://cambridgecybercrime.uk

The full set of CCC COVID Briefing Papers can be found at: https://cambridgecybercrime.uk/COVID

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