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Abstract | Cryptomarkets represent a growing component of the global illicit drugs trade. Australia is over-represented in the proportion of online vendors who use these platforms to reach drug consumers. Despite the growth in online drug trading, relatively little is known about people who use cryptomarkets to sell drugs. This study addresses the knowledge gap and provides qualitative insights into this new, and little understood, cohort of offenders.

The study found that vendors perceive less risk of violence and police intervention when selling drugs online and that the potential for profit exceeds that available when selling drugs offline.

How and why vendors sell on cryptomarkets

Rasmus Munksgaard and James Martin

Introduction

Since the launch of Silk Road in 2011, cryptomarkets—also known as anonymous online markets (Christin 2013; Soska & Christin 2015) or darknet markets (Broséus et al. 2016)—have become the subject of media attention and scholarly research. They have matured into a small, though no longer negligible, component of illicit drug markets in the 21st century. Despite intense transnational law enforcement efforts, with seizures, prosecutions and arrests around the world, including in Australia, cryptomarkets have continued to grow, showing considerable resilience and potential for lasting growth.

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Predominantly, research on cryptomarkets has taken a quantitative approach using data collected through automated processes to examine the frequency and volume of sales, origin, vendors and more (for an overview, see Martin, Cunliffe & Munksgaard 2019). Qualitative studies have examined in depth the behaviour and motivations of buyers through interviews (Bancroft & Reid 2016a, 2016b; Barratt et al. 2016; Van Hout & Bingham 2013), and functioning and practices through ethnographic analysis of open sources (Bakken, Moeller & Sandberg 2018; Ladegaard 2018; Moeller, Munksgaard & Demant 2017; Morselli et al. 2017). To date, only one study has involved interviews with vendors, with a total of 10 participants (Van Hout & Bingham 2014). Vendors are a critical component of the cryptomarket ecosystem, and the lack of research into vendors as a population suggests a significant research and knowledge gap. This study seeks to rectify this by conducting the largest qualitative study of this population to date.

Aims

While quantitative research has identified broad characteristics of the vendor population, studies invariably remark on the relative complexity of the subject and discuss some obvious caveats. Soska and Christin (2015) caution that their findings on the lifespan of vendors' profiles cannot detect whether a vendor has changed pseudonym (ie username), which could be a reasonable defence against law enforcement detection. Similarly, the findings from Tzanetakis (2018) and Paquet-Clouston, Décary-Hétu and Morselli (2018) do not concern the absolute revenue of vendors but only that which is observable on the cryptomarket through digital trace analysis. It might well be that, after developing some trust in each other, vendors and buyers move to other means and begin to transact outside the observable market system, escrow and commission, in what are known as 'direct deals' (Barratt et al. 2016). By extension, topics such as motivations for selling drugs online, dealers' careers, and perceptions and management of risk cannot be adequately examined quantitatively. In other words, there are aspects of cryptomarket drug distribution which quantitative research is simply not fit to study using current methods and approaches. Thus, while cryptomarket research has advanced significantly in past years, a key demographic—vendors—remains relatively under-studied. This suggests a critical gap in the current knowledge of cryptomarkets, because the behaviours and profiles of vendors are a key component of the cryptomarket economy: vendors supply the products, set the prices and are largely responsible for the positive and negative experiences of customers.

This study took an exploratory approach to understanding this population of offenders and was centred on the 'career trajectories' of vendors. Little is known about what motivates these individuals to operate on cryptomarkets to start with, and the study therefore addressed a basic question concerning motivation and attraction to this mode of drug dealing. From this, we extended into other related and more specific themes: vendors' relation and engagement in traditional drug markets, conceptions of risk and practical aspects of managing it, and practical aspects of starting up an operation and day-to-day business practices. This approach sought to allow sellers to articulate their motivations without restricting them to one particular frame (eg choosing cryptomarkets exclusively as a means of risk reduction), in recognition of the heterogeneity of drug dealing careers and motivations (Coomber 2006; Dwyer and Moore 2010; Sandberg 2012).

Method and data

We conducted 13 semi-structured qualitative interviews between March 2017 and March 2018 with cryptomarket vendors, the largest cohort of vendors in the literature. There is only one other study in which vendors are interviewed (Van Hout & Bingham 2014). The semi-structured approach was chosen in recognition of the differentiation in motivations which we expected to observe. Recruitment was aided by gatekeepers to the community—namely, the unofficial news website for the cryptomarket community, DeepDotWeb, and the author of the book *Silk Road*, Eileen Ormsby (Ormsby 2014). Both posted a call for participants that included a description of the research team and previous work. All participants were offered compensation of A$40 in Bitcoin or Monero, but the majority donated this reciprocity payment to a charity of their choosing. Only two respondents took the $40 for themselves, whereas the remainder declined, donated to a charity or wanted it sent to a third party.

Paquet-Clouston, Décary-Hétu and Morselli (2018) use a classification of vendors in which 90 percent, nine percent and one percent represent small-, medium- and large-scale vendors. We used an ad hoc classification of our sellers, in which those with a yearly revenue above $100,000 were considered large scale, those above $10,000 were considered medium scale and those remaining were small scale. We discussed this classification with vendors, and two were comfortable being classified as 'large scale'. While we did not seek to elicit background information, only one interviewee presented as female, whereas the remainder to a greater or lesser extent presented as male. With the exception of one vendor, all mentioned operating out of Western countries, congruous with the patterns of supply and demand on cryptomarkets (Tzanetakis 2018). Seven of the 13 vendors revealed a history of having dealt offline, through social supply, retail or larger quantities. While the cohort of respondents contained large-, medium- and small-scale vendors from the most active regions in the cryptomarket drug trade, the recruitment strategy is likely to have privileged some segments of the population—namely, those who follow the media used for communicating the call for respondents and those who are proficient in English.

To ensure the safety of participants, we followed practices for encrypted communications used in previous research interviewing cryptomarket buyers and vendors (see Barratt et al. 2016; Van Hout & Bingham 2014), improving slightly on some aspects (namely, the use of an amnesiac operating system by the research team). In practice, we established multiple avenues of communication (email, asynchronous chat and private messages) over which informants could contact the research team and kept all data (transcripts, passwords and logins) on an isolated operating system with full disk encryption. Further, we instructed interviewees not to discuss operational details such as their packaging methods ('stealth') or money-laundering methods in a manner that could jeopardise them. Interviews were conducted using the medium preferred by the interviewees, whether asynchronous communication (eg email or private message) or synchronous solutions (eg instant messaging). Originally, the estimated length of interviews was one to two hours, but the synchronous interviews often became significantly longer, as vendors would be doing their job at the same time (eg packaging, talking to customers and handling complaints). Often, these chats would take place over several days so as not to interfere too much with vendors' business.

Interview questions were framed under a notion of career trajectories and covered vendors' careers chronologically, taking detours into themes such as risk from law enforcement and malicious peers, practical aspects of their organisation, and interactions and relationships with customers, while the crux of each interview was the motivations for selling drugs on cryptomarkets.

Ethical concerns for this research centred on the maintenance of anonymity for research participants. As noted above, the research team went to significant lengths to ensure this. Ethics approval for this project was granted by the Macquarie University Human Research Ethics Committee in December 2016.

Findings

Material and non-material motivations

In discussing their motivations for either beginning to sell on cryptomarkets or switching from an offline to an online setting, vendors articulated material motivations, increased security and potential profits, as well as non-material attractions in the form of autonomy and ethical–political convictions. Of the 13 respondents, seven had previously sold substances offline in a professional sense, though only two continued to engage in this. Asked about their initial motivations for setting up shop, vendors stressed significant economic benefits and/or a lower risk of encounters with law enforcement. To this, some added a lower risk of violence from other market participants. Generally, economic benefits were the primary motivation articulated by vendors. As one respondent explained when asked what prompted his switch from buying on cryptomarkets to reselling on them:

> Interviewee 4: I bought for a couple of years before I basically switched roles entirely. Only buying never selling… One of the main reasons I made the switch was because I saw the potential bitcoin had. And I simply had a desire for money more than I did for drugs. Simple as it sounds… Saw an opportunity to make an extra buck essentially. (Small-scale vendor)

These financial benefits proved larger under some circumstances, particularly for vendors who were able to position themselves in 'arbitrage' or broker positions, leveraging the fact that they could purchase substances cheaply and sell at a significant profit, exploiting the skewed price setting in different drug markets (Reuter & Caulkins 1998), or through having privileged access to low-cost or high-quality product. Prime examples of how these economic structures presented unique benefits from selling on a cryptomarket were provided by two vendors, who each sourced prescription medicine offline from users with prescriptions and then resold it on cryptomarkets at a significant mark-up. A more traditional 'arbitrage' position was similarly created by the low price of cryptomarket MDMA from the Netherlands, which opened up a market for domestic resellers in North America. As one vendor detailed:

> Interviewee 12: Then I found I can buy Molly [MDMA] for $4G and sell for $60 a gram. (Medium-scale vendor)

In other cases, vendors were able to reach a large audience for substances which would have been hard to sell offline. Financial incentives to begin selling on cryptomarkets were continually brought up in interviews as implications of the particular organisation and structure of the cryptomarket, which can cater to a global, domestic or regional audience (Demant et al. 2018). Consequently, by setting up shop on a cryptomarket, vendors gained access to a hitherto unavailable pool of customers within a broader geographical region. In some cases, this increased potential profits because vendors with access to low-cost supply could sell at a higher mark-up to buyers without access. In other cases, it allowed them to reach more customers for specialised, niche drugs.

Alongside the potential for material gains as a cryptomarket vendor, normative, social and cultural elements also had a certain attraction (for further discussions of these aspects, see Aldridge & Décary-Hétu 2014; Maddox et al. 2016; Martin 2014; Munksgaard & Demant 2016). While there is no formalised code, ideological program or value set for cryptomarkets, vendors continually made reference to such non-material factors as part of their motivation. The previously cited vendor, who 'saw an opportunity to make an extra buck', further added:

> Interviewee 4: I always looked to Ross [founder of Silk Road] as well. His story has always been motivating and enlightening. (Small-scale vendor)

In another example, a large-scale vendor of psychedelics and MDMA explained how his introduction to the scene came through researching the medicinal benefits of substances like ketamine and MDMA for disorders like PTSD. Several vendors also voiced a norms-based attraction, arguing that cryptomarket norms of transactional conduct were a significant motivation for selling there. These threads of non-material motivations were disparate, however, and we observed no coherent ideological framework but rather a diverse set of factors or interests which piqued the prospective individual curiosity of vendors. One theme which bridged the financial and rational self-interest and these non-material motivations, and which was discussed by nearly all vendors, was autonomy or self-sufficiency. This emerged in a variety of forms. One interviewee, who was part of a larger team working remotely from a different country, explained how his choice of career was both intellectually fulfilling and a way to escape his social conditions:

> Interviewee 8: I was born in a poor poor country with almost no abilities to apply my intellect… it [working] affords to continue life as if it's all good. (Team member of large-scale operation)

Several vendors mentioned this autonomy—both financial autonomy and being 'one's own boss'—as an upside to the job. While some vendors would stress the financial benefits of setting up shop on a cryptomarket and others would discuss harm reduction and proper drug use at length, each vendor presented a mix of attractions which they argued led them to sell on cryptomarkets. In these narratives, financial benefits were a given but these did not preclude a vendor from having an admiration of, or fondness for, the community of users and their norms or from having some form of autonomy that exceeded what was possible in legal employment.

Becoming a darknet drug vendor

Paquet-Clouston, Décary-Hétu and Morselli (2018) suggest that the barriers of entry for cryptomarket vendors may be higher than those associated with the offline drug trade, because the required skillset may be more difficult to attain. We found that a range of competences and skills were required for vendors, which came almost naturally for some, while for others the process of growing their business was fraught with trial and error. To grow their business, vendors had to create a reputation through the reputation system and word of mouth on forums. Having attained this, vendors gained access to a population of customers who would then have evidence of their trustworthiness and reliability. Ladegaard (2018) shows that free samples on cryptomarkets are both prevalent and socially constructive, in the sense that they build trust. We observed that some vendors were aware of this and used samples to establish themselves through building reputation. As a medium-scale vendor summarised, 'It's just like legit business, if your products and service stand out, you'll grow rapidly and do well.' Vendors who reported awareness of these business and marketing strategies tended to experience more rapid growth in their dealing enterprises than those who did not.

In addition to these business aspects, vendors also had to concern themselves with their own security from law enforcement, both online and offline. Cryptomarket usage necessitates a basic familiarity with and knowledge of cryptocurrencies: namely, Bitcoin, the PGP (Pretty Good Privacy) encryption protocol and Tor. To properly use these, vendors first need to familiarise themselves with them. This came easily for those who had started out as buyers and had grown accustomed to the required encryption and transactional technologies. For those who had no experience, this process could be intense and time consuming. One vendor, who already had above-average technical literacy, having engaged in semi-legal IT services before, had to be instructed by a business partner:

> Interviewee 11: He had to spend hours showing me—over the phone—how set up Tor, a Bitcoin wallet, and (I think) Kleopatra. (Small-scale vendor)

This vendor's offline relation to a mentor was, however, the only case of offline mentorship that the interviewees reported. More typically, vendors detailed how they learned the ins and outs of technology through internet forums and their experiences as buyers. The forums associated with cryptomarkets therefore took on a critical role as information sources for newly started vendors or those who were about to start. One vendor, whose business has since grown to become large scale, summed up this development:

> Interviewee 8: It was a few months for sure, I was just browsing and starting to grasp proper OPSEC and working my head around PGP encryption and buying bitcoin…everything would be completely self taught, I spent a lot of time on forums reading guides etc. It was no time before I was running better OPSEC than the vendors at the time… I would be using WHONIX or TAILS, hard drives would be encrypted with all the fail safes needed. (Large-scale vendor)

In addition to staying technologically secure, vendors had to ensure the safe arrival of their packages, because improperly packaged or concealed substances could result in seizures and negative reviews, thus imposing both risk and financial loss. Some vendors we interviewed would go to great lengths when concealing drugs, referred to as 'stealth', hiding them in other products and presenting the package as a standard online purchase, whereas others would just use flat envelopes. One small-scale vendor elaborated on how he was currently struggling with properly concealing pills while still satisfying his customers:

> Interviewee 12: The pills I sell come in strips of 10… Shipping the pills in strips I haven't mastered just 'cuz they rattle no matter what you do. I've considered trying to vacuum seal them to see if that helps… I tried taking them out of the packs and putting them in mylar bags but my customers weren't fond of that 'cuz they're not marked. (Small-scale vendor)

Vendors drew on a variety of information sources when designing stealth: forums, experiences as buyers, buys from other vendors, and their customers. We found that it was not uncommon for vendors to receive unsolicited advice on packaging from customers, even information on their competitors' stealth, through these interactions. In some cases, vendors even discussed this with each other. Similarly, no vendor taught themselves how to use PGP encryption or use Tor properly immediately. Instead, familiarisation with these technologies was a long-term endeavour, involving reading on forums, trying software and practically applying one's knowledge. Often, vendors learnt these skills via social relations with other vendors and buyers.

Perceptions and management of risks

The cryptomarket literature has continually highlighted the potential security benefits that vendors and buyers may gain if they move their activity online (Barratt, Ferris & Winstock 2016; Martin 2018). For vendors, these benefits are increased security from law enforcement and from buyers or other dealers with malicious intent. When discussing their motivations for trading online and the benefits of doing so, vendors continually stressed both, though the reduction in risk from law enforcement was generally the most central benefit. Asked about the benefits of moving online, a cocaine vendor explained that the reduced risk of drug market-associated violence was a huge benefit:

> Interviewee 2: Yes, no more death threats lol… Let me tell you first hand, I have been beat and robbed just like the movies, drugs get crazy. (Small-scale vendor)

Unlike the offline drug markets in which he had previously operated, online trading afforded this vendor anonymity and additional security. However, this did not completely remove any potential for violence, as the vendor reported being subject to threats from 'crazy resellers…who threaten to hunt me down and kill me and even hire hackers to find me'. Another vendor similarly reported being subject to violence at gunpoint while sourcing the drugs he was selling online. Therefore, the violence associated with offline drug markets was seen as a motivation to trade online, though vendors still reported such acts, even if these were rare. Regardless, vendors remained vocal in stressing the reduction of violence as a central benefit of the online drugs trade.

Not all vendors discussed the risks from drug market violence, which could be attributed to them operating in relatively peaceful circumstances offline (eg social supply). However, the reduced risk of law enforcement intervention was a common thread in respondent discussions. Interestingly, we found that, beyond the baseline of what is needed to use a cryptomarket (eg Bitcoin, Tor or PGP), vendors did not share similar security practices. At one end of the continuum of security practices online, one vendor would only access his accounts through 'TAILS with cracked Wi-Fi on [apartment] 0.5 miles from my location', while others talked daily with customers on instant messaging applications. One vendor, who had taken up the roles of buyer, offline reseller and vendor, nonchalantly explained how a visit from law enforcement prompted by the seizure of a quarter of a pound of marijuana and three to four more packages had him '[lie] low for a while' but did not change his behaviour in the long term. Generally, however, vendors primarily saw the risk from law enforcement as associated with the physical dimensions of their work (eg shipping, packaging and sourcing). This was where they perceived detection was most likely to occur and thus where efforts were made to further secure themselves. One vendor explained how simple precautions and outsourcing of labour reduced this risk:

> Interviewee 5: As a vendor you have to stay alert all the time. Simple precautions such as checking what cars are parked, and what kind of people are in the cars, especially when dropping off in a mailbox, wearing gloves etc all that stuff. If you do that—and outsource the in store shipping to someone else—you're pretty much set. Of course, there are risks but they can be minimal. (Medium-scale vendor)

Again, the precautions taken by vendors ranged from extreme to minimal, as in the above example, where detection did not result in a long-term behavioural change. A large-scale vendor took more drastic steps and explained how he 'used to wear a balaclava to the sparse meetings [offline]' and the extremely methodical approach he took to shipping packages:

> Interviewee 2: Using a maximum of 10 packs per blue bin, and using the same return address only 10 times before changing the name, then swap names, hit a new zip code with a maximum of 50 packs dispersed over a couple mile radius, and then make sure you drive 15-30 miles and rinse and repeat. Make sure you switch it up every time, different blue bins, different times, different towns, different zip codes, make sure that there is no way you're leaving a discernible trail. (Large-scale vendor)

(While this quote does contain some operational details, we judge this method as being sufficiently established among vendors as not to pose a security risk.)

Thus, while there was agreement among vendors that cryptomarkets reduced the risk of violence from other offenders and reduced the risk of law enforcement detection, we found that the extent and efficiency of these were closely related to the actual behaviour and precautionary steps taken by vendors. There was no clear-cut formula or prescription for these issues, but reducing interaction with offline markets and improving offline practices (eg shipping and packaging) were how vendors reduced risk.

Conclusion

In this paper we have highlighted three central themes surrounding career trajectories among the 13 cryptomarket vendors we interviewed. With only one exception, all vendors strongly emphasised financial motives for beginning to sell. Some vendors observed that selling on cryptomarkets would yield significant financial rewards because they were able to take on positions of arbitrage and brokerage (Morselli 2001). These positions came out of social circumstances which had given them access to superior product in terms of quality, price or both. Consequently, by moving onto cryptomarkets they could in some cases multiply their profits, exemplified in a vendor who sourced MDMA from the Netherlands for the United States using cryptomarkets, after which he resold it at more than 10 times the price. Reuter and Caulkins (1998) observed that drug prices vary extensively even within small geographical areas, opening a niche for arbitrage, and we observed that some vendors exploited this structural characteristic of drug markets. At the purely financial level, several vendors therefore argued that they were motivated to sell online through the particular structure offered by cryptomarkets, which allowed them to take such positions. However, profits were not the exclusive motivation for vendors. Reduced risk from customers or other vendors was articulated as a significant benefit, while it was simultaneously acknowledged that such risk management was an active process one could dedicate more or less effort to.

However, while vendors remained up-front and honest about material motivations, the reduction of risk and the potential profits, they were also enticed by vaguer, non-material motivations. Themes of autonomy and commitments to a certain vague ethos were similarly evoked (see also Maddox et al. 2016; Martin 2014; Munksgaard & Demant 2016). Martin (2018: 797) has suggested the 'gentrification hypothesis': that cryptomarkets 'facilitate this shift and reduce systemic violence by ensuring anonymity and physical separation between drug buyers, sellers, and other offenders'. We found that several vendors posited this 'gentrification' as a motivation for operating on cryptomarkets: the social norms were more attractive and they could insulate themselves from the facets of drug markets which they found unattractive, particularly violence. More broadly, the importance of these social norms as a motivation for economic behaviour shows that, at least for interviewees, important aspects of their behaviour were not reducible to mere economic rationality and profit motivation (Dwyer & Moore 2010; Sandberg 2012).

References

URLs correct as at May 2020

Aldridge J & Décary-Hétu D 2014. Not an 'Ebay for drugs': The cryptomarket 'Silk Road' as a paradigm shifting criminal innovation. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.2436643

Bakken SA, Moeller K & Sandberg S 2018. Coordination problems in cryptomarkets: Changes in cooperation, competition and valuation. *European Journal of Criminology* 15(4): 442–460. https://doi.org/10.1177/1477370817749177

Bancroft A & Reid PS 2016a. Concepts of illicit drug quality among darknet market users: Purity, embodied experience, craft and chemical knowledge. *International Journal of Drug Policy* 35: 42–49

Bancroft A & Reid PS 2016b. Challenging the techno-politics of anonymity: The case of cryptomarket users. *Information, Communication & Society* 20(4): 497–512. https://doi.org/10.1080/1369118X.2016.1187643

Barratt MJ, Ferris JA & Winstock AR 2016. Safer scoring? Cryptomarkets, social supply and drug market violence. *International Journal of Drug Policy* 35: 24–31. https://doi.org/10.1016/j.drugpo.2016.04.019

Barratt MJ, Lenton S, Maddox A & Allen M 2016. 'What if you live on top of a bakery and you like cakes?'—Drug use and harm trajectories before, during and after the emergence of Silk Road. *International Journal of Drug Policy* 35: 50–57. https://doi.org/10.1016/j.drugpo.2016.04.006

Broséus J, Rhumorbarbe D, Mireault C, Ouellette V, Crispino F & Décary-Hétu D 2016. Studying illicit drug trafficking on Darknet markets: Structure and organisation from a Canadian perspective. *Forensic Science International* 264: 7–14. https://doi.org/10.1016/j.forsciint.2016.02.045

Christin N 2013. *Traveling the Silk Road: A measurement analysis of a large anonymous online marketplace.* Proceedings of the 22nd International Conference on World Wide Web: Rio de Janeiro: 213–224. https://doi.org/10.1145/2488388.2488408

Coomber R 2006. *Pusher myths: Re-situating the drug seller.* London: Free Association Books

Demant J, Munksgaard R, Décary-Hétu D & Aldridge J 2018. Going local on a global platform. *International Criminal Justice Review* 28(3): 255–274. https://doi.org/10.1177/1057567718769719

Dwyer R & Moore D 2010. Understanding illicit drug markets in Australia: Notes towards a critical reconceptualization. *British Journal of Criminology* 50(1): 82–101. https://doi.org/10.1093/bjc/azp065

Ladegaard I 2018. Instantly hooked? Freebies and samples of opioids, cannabis, MDMA, and other drugs in an illicit e-commerce market. *Journal of Drug Issues* 48(2): 226–245. https://doi.org/10.1177/0022042617746975

Maddox A, Barratt MJ, Allen M & Lenton S 2016. Constructive activism in the dark web: Cryptomarkets and illicit drugs in the digital 'demimonde'. *Information, Communication & Society* 19(1): 111–126. https://doi.org/10.1080/1369118X.2015.1093531

Martin J 2018. Cryptomarkets, systemic violence and the 'gentrification hypothesis'. *Addiction* 113(5): 797–798. https://doi.org/10.1111/add.14029

Martin J 2014. *Drugs on the dark net: How cryptomarkets are transforming the global trade in illicit drugs.* Basingstoke, UK: Palgrave Macmillan

Martin J, Cunliffe J & Munksgaard R 2019. *Cryptomarkets: A research companion.* Bingley, UK: Emerald Group Publishing

Moeller K, Munksgaard R & Demant J 2017. Flow my FE the vendor said: Exploring violent and fraudulent resource exchanges on cryptomarkets for illicit drugs. *American Behavioral Scientist* 61(11): 1427–1450. https://doi.org/10.1177/0002764217734269

Morselli C 2001. Structuring Mr Nice: Entrepreneurial opportunities and brokerage positioning in the cannabis trade. *Crime, Law & Social Change* 35(3): 203–244

Morselli C, Décary-Hétu D, Paquet-Clouston M & Aldridge J 2017. Conflict management in illicit drug cryptomarkets. *International Criminal Justice Review* 27(4): 237–254. https://doi.org/10.1177/1057567717709498

Munksgaard R & Demant J 2016. Mixing politics and crime: The prevalence and decline of political discourse on the cryptomarket. *International Journal of Drug Policy* 35: 77–83. https://doi.org/10.1016/j.drugpo.2016.04.021

Ormsby E 2014. *Silk Road.* Melbourne: Palgrave Macmillan Australia

Paquet-Clouston M, Décary-Hétu D & Morselli C 2018. Assessing market competition and vendors' size and scope on AlphaBay. *International Journal of Drug Policy* 54: 87–98. https://doi.org/10.1016/j.drugpo.2018.01.003

Reuter P & Caulkins J 1998. What price data tells us about drug markets. *Journal of Drug Issues* 28(3): 593–513

Sandberg S 2012. The importance of culture for cannabis markets: Towards an economic sociology of illegal drug markets. *British Journal of Criminology* 52(6): 1133–1151. https://doi.org/10.1093/bjc/azs031

Soska K & Christin N 2015. *Measuring the longitudinal evolution of the online anonymous marketplace ecosystem.* Proceedings of the 24th USENIX Security Symposium. Washington DC: USENIX: 33–48

Tzanetakis M 2018. Comparing cryptomarkets for drugs. A characterisation of sellers and buyers over time. *International Journal of Drug Policy* 56: 176–186. https://doi.org/10.1016/j.drugpo.2018.01.022

Van Hout MC & Bingham T 2014. Responsible vendors, intelligent consumers: Silk Road, the online revolution in drug trading. *International Journal of Drug Policy* 25(2): 183–189. https://doi.org/10.1016/j.drugpo.2013.10.009

Van Hout MC & Bingham T 2013. 'Silk Road', the virtual drug marketplace: A single case study of user experiences. *International Journal of Drug Policy* 24(5): 385–391. https://doi.org/10.1016/j.drugpo.2013.01.005

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