

# Corruption and Cryptocurrency

## Blockchains as corruption tools

Adrianit Ibrahim, PhD Candidate  
South East European University, North Macedonia

Besa Arifi, Prof. Dr.  
South East European University, North Macedonia

### Abstract

Cryptocurrency has become ubiquitous and is evolving constantly. The question is if our legal framework is catching up with it. Therefore, this article analyzes the arguments on the legitimacy and legality of cryptocurrency in order to emphasize the relation between corruption and cryptocurrency. The research has enlightened some cogent arguments on the possibility of perpetrators committing corruption acts through cryptocurrency. These arguments basically refer to some of the unique characteristics of cryptocurrency such as the quick value fluctuation, the difficulties in tractability and the lacking current legislation.

The unique features of it may headline cryptocurrency as an immensely attractive environment for corruption activities. Hence the world has already faced some tangled scamming scandals with cryptocurrency specified herein. Therefore, the aim of this article is to highlight the possibility for corruption acts to be committed through cryptocurrency as a form of corruption unknown before.

**Keywords:** cryptocurrency; corruption; legal framework

### Introduction

In 2009 Bitcoin took place as the first cryptocurrency ever launched. Today we count more than 12,000 different blockchains of cryptocurrency (Lyle Daly, 2022) within over 300 million users around the world (TripleA, 2022). Also important are the constantly increasing curves of cryptocurrency. People are trusting cryptocurrency as a medium of exchange since over 18,000 businesses are already accepting cryptocurrency payments (TripleA, 2022). Transactions are being made easier, faster, directly, and without fees that lead to double spending and requiring no personal information of the transaction parties. This is possible because cryptocurrencies do not need a trusted third party as the central authority of control. All transactions are made within a decentralized peer-to-peer network through encryption algorithms and cryptographic techniques that safeguard the transactions (Conotoxia, 2022).

Such radical changes in the flow of our financial life need not only to be recognized but also to be adopted into the legal framework. Questions need to be answered as

well about the level of security, safety, and combat against possible criminal activities such as corruption and money laundering. The EU has already begun to address those issues, aiming to adopt proper legislation on cryptocurrency (European Commission, 2022). This paper includes but not limited to some scamming scandals with cryptocurrency where the damages incurred exceed hundreds of million dollars.

Cryptocurrency is very hard to be traced currently. This may mean not knowing to whom and where a particular transaction has been made. Multiple exchanges may be made fast and easy without being noticed because no personal data are requested and no central control exists (PYMNTS.com, 2022). Moreover, current legislation is relatively poor. People are still trying to conclude whether cryptocurrency is a currency, security, commodity, or something else (Kane Russell, 2021). So, how can we stop corruption acts in such an environment with so many question marks? More importantly, how can we identify, investigate and judge such corruption acts through cryptocurrency lacking proper legislation? It is indisputable that such dilemmas raised are leading us towards a new form of corruption with new *modus operandi*.

This article is structured in three (3) main parts. The first part refers to the legitimacy of cryptocurrency and intends to highlight the meaning, the main features and the role of cryptocurrency. This part is based on a desk research and statistical analysis of cryptocurrency. The second part of this article is about the legality of cryptocurrency and intends to emphasize the lack of legislation for cryptocurrencies in one hand and the need for such legislation in the other hand. This part is mainly based on comparative research of the legal regulations on cryptocurrency. The third part refers to the relations between cryptocurrency and corruption. This part intends to highlight the protentional usage of the cryptocurrency for corruption activities because of the main features of the blockchain technology. This part is based on desk research, case study and comparative analyses of the reviewed literature.

### **The legitimacy of cryptocurrency**

A cryptocurrency is a new form of digital asset based on a network that is distributed across a large number of computers. The systems of cryptocurrencies allow for secure payments online which are denominated in terms of virtual “tokens”, being represented by ledger entries internal to the system (Jake Frankefield, 2020). The word cryptocurrency derives from the encryption techniques which are used to secure the network. “Crypto” refers to the various encryption algorithms and cryptographic techniques that safeguard these entries, such as elliptical curve encryption, public-private key pairs, and hashing functions. Blockchains, which are organizational methods to ensure the integrity of transactional data, are also an essential component of many cryptocurrencies (Jake Frankefield, 2020). The first blockchain-based cryptocurrency was

Bitcoin, which remains the most valuable, although today there are thousands of alternate cryptocurrencies with various functions and specifications.

In 2008 a white paper was published entitled “Bitcoin: A Peer-to-Peer Electronic Cash System”. This white paper was the document that fired the starting gun on the cryptocurrency movement - painting the compelling vision of a peer-to-peer electronic cash system. It was pseudonymously written by Satoshi Nakamoto, a cryptographic pioneer who demonstrated how digital currencies could mount a challenge to central banks. A few months later-in 2009, the genesis block was mined and Bitcoin transactions took place for the first time so the first cryptocurrency was launched (Decentralized Dog, 2020). There is a lot to be learned about Satoshi Nakamoto. Is the author, he or she, or a group of people (Decentralized Dog, 2020)? However, unmasking the creator of Bitcoin and cryptocurrency is not relevant for this paper. What matters is that Satoshi Nakamoto has concluded that we need an electronic payment system based on cryptographic proof instead of trust, allowing any two parties willing to transact directly with each other not necessarily to have a trusted third party - financial institution. Satoshi thought that transactions that are computationally impractical to reverse would protect sellers from fraud, and the routine escrow mechanisms could easily be implemented to protect buyers. Therefore, he also proposed a solution to the double-spending problem using cryptocurrency: a peer-to-peer distributed timestamp server to generate computational proof of the chronological order of transactions (Satoshi Nakamoto, 2008).

Cryptocurrencies have no central authority, meaning the survivability of cryptocurrency is held up by the community of users. In this peer-to-peer network, each user is a host and a node for the software. Therefore, cryptocurrencies are often defined also as “digital tokens used to anonymously transfer money instantly between individuals in a decentralized peer-to-peer network with minimal transactional fees” (UKEssays, 2020). Such definition has raised questions about their validity in the current market and if they are beneficial in facilitating market transactions (Jain, 2021, p. 1). In other words, the structural variations related to legal tender of cryptocurrencies operating across the world markets has been instable since their inception. The witnessed price volatility, supply, demand, and legislation are proving to be barriers to widespread adoption. Nevertheless, once those barriers have been overcome, cryptocurrencies have the potential to fundamentally change how the world’s financial system works (UKEssays, 2020).

To further understand the argument of the legitimacy of cryptocurrency, it is important to note that currently there are over 83 million blockchain wallets-cryptocurrency users in the world and this number is growing constantly (Blockchain.com, 2021). The value of cryptocurrencies fluctuates too quickly. Even though the market capitalization of Bitcoin is currently over 755 million\$. The market capitalization of Ethereum is over a 360 million\$ while Tether is over 82 million\$. More than eighty other cryptocurrencies

have a market capitalization of over one million dollars each while more than a hundred other cryptocurrencies have market caps with hundreds of thousands of dollars each (Coinmarketcap.com, 2021).

In different countries cryptocurrencies are known through different terms such as “*Digital Currency*”-Argentina, Thailand and Australia, “*Virtual Commodity*”-Canada, China, and Taiwan, “*Crypto-Token*”-Germany, “*Payment Token*”-Switzerland, “*Cyber Currency*”-Italy and Lebanon, “*Virtual Asset*”-Mexico and Honduras or “*Electronic Currency*”-Columbia (Global Legal Research Center, 2019, p. 1). Besides different terms, cryptocurrencies have become very promising to inherently change the current financial system in the world. Therefore, it is important to clarify also their legal stand.

### **The legality of cryptocurrency**

The absence of a proper legal framework on cryptocurrency creates uncertainty both for users and governments worldwide (Mandjee, 2016). The European Commission has also recognized the importance of legal certainty and a clear regulatory regime in areas of blockchain-based applications. The EU strongly supports a Pan-European framework and hopes to avoid legal and regulatory fragmentation. Therefore, they adopted a comprehensive package of legislative proposals for the regulation of crypto-assets, updating certain financial market rules for crypto-assets, and creating a legal framework for regulatory sandboxes of financial supervisors in the EU for using blockchains in the trading and post-trading of securities (European Commission, 2021). One of the main regulations proposed is proposal no. 2020/0265 (COD)-COM (2020) 593, Brussels 24.09.2020. Referring to this proposal, the definition of the term “*crypto-asset*” should be “*a digital representation of value or rights which may be transferred and stored electronically, using distributed ledger technology or similar technology*” (European Commission, 2020, p. 35). Further on referring to this proposal “*Member States shall designate the competent authorities responsible for carrying out the functions and duties provided for in this Regulation*” (European Commission, 2020, p. 84). The “*competent authority*” foreseen in this proposal is as decisive as the proposed definition for “*crypto-assets*”. This is because the uniqueness of them is exactly described as a decentralized peer-to-peer network without central control. On the other hand, article 83 of this proposal has foreseen a large number of powers of those competent authorities such as “*to prohibit the provision of crypto-asset services where they find that this Regulation has been infringed*” or “*to suspend, or to require a crypto-asset service provider to suspend, the provision of crypto-asset service*” (European Commission, 2020, p. 104).

From our point of view, such regulation sounds grinding as long as they are intending to create a central control for a decentralized network. However, it seems that this proposal is not conclusive enough also pertaining to measures to prevent fraud and

irregularities. Based on this proposal, *“for the purposes of combating fraud, corruption and any other illegal activity, the provisions of Regulation (EC) No 1073/1999 of the European Parliament and of the Council of 25 May 1999 concerning investigations conducted by the European Anti-Fraud Office (OLAF) shall apply without any restrictions”* (European Commission, 2020, p. 154). Nevertheless, this proposal is an attractive theme for discussion as one tingling initiative of the EU to take the lead in the blockchain-based applications. From this point of view, the EU framework is very important in the field since the EU regulations may affect the regulations in other countries as well.

Cryptocurrency must not be only a subject of civil law and financial law but also criminal law (Eveshnie Reddy, 2018, p. 86). This is because cryptocurrencies can be listed as very attractive subjects for criminal activities such as corruption and money laundering (Anna Irrera, 2020). Unfortunately, numerous countries have no legislation for cryptocurrency yet (Cao, 2020, p. 331). Most countries which have already adopted domestic laws on cryptocurrency are only intending to raise the awareness of people on the risk and threats related to cryptocurrency (Cao, 2020, p. 331). Countries such as Algeria, Bolivia, Morocco, Nepal, Pakistan, and Vietnam have even banned any activity involving cryptocurrencies (Global Legal Research Center, 2019, p. 2).

Other countries such as Bangladesh, Iran, Thailand, Lithuania, Lesotho, China, and Colombia, have not banned investing in cryptocurrencies but imposed indirect restrictions by barring financial institutions within their borders from facilitating transactions involving cryptocurrencies (Global Legal Research Center, 2019, p. 2). Only a few countries such as Australia, Switzerland, Japan, Denmark, and Canada have enacted laws to bring cryptocurrency transactions and institutions that facilitate them under the ambit of money laundering and counter-terrorist financing laws (Global Legal Research Center, 2019, p. 5).

## **Blockchains as corruption tools**

Criminals are usually among the first adopters of any novel technology that works. Blockchains may become just another example where criminals use new technologies to commit old crimes (Jason Weinstein, 2019). In this regard, since the existence of cryptocurrency enough incidents have been raised not only among the biggest scamming scandals but turned out also as corruption affairs and other criminal activities such as:

- *“Silk Road”*: In 2013 the FBI has arrested Ross Ulbricht – the former operator of the darknet ‘Silk Road’, also pseudonymously known as “Dread Pirate Roberts”. Ulbricht has been charged with engaging in a money laundering and narcotics trafficking conspiracy as well as computer hacking. The indictment said the

site had generated over 9.5 million bitcoins in sales revenue and over 600,000 bitcoins in commissions for its owner (Tim Hume, CNN, 2013).

- *"BitConnect"*: In 2018, the Indian police arrested Divyesh Darji - the owner of BitConnect who has been accused of siphoning \$12.6 billion (880 billion Indian Rupees) from investors in India through a "Ponzi Scheme" (Charlie Osborne, 2018).
- *"Crypto Queen"*: In June 2016, a 36-year-old businesswoman called Dr. Ruja Ignatova walked on stage at Wembley Arena (London) in front of thousands of fans. She told the cheering crowd that 'OneCoin' was on course to become the world's biggest cryptocurrency "for everyone to make payments everywhere". All over the world, people were already investing their savings into 'OneCoin', hoping to be part of this new revolution. Between August 2014 and March 2017 more than €4billion have been invested in dozens of countries. In 2017, the "crypto queen" just disappeared together with all these investments (BBC News, 2019).
- *"Bitclub network"*: In 2019, U.S. Attorney Craig Carpenito (District of New Jersey - USA) announced that three men were arrested in connection with a cryptocurrency mining scheme *that defrauded investors of \$722 million*. The defendants Goettsche, Balaci, and Weeks *et.al* have been charged with conspiracy to engage in wire fraud in connection with their roles in "BitClub Network". From April 2014 through December 2019, the "BitClub Network" was a fraudulent scheme that solicited money from investors in exchange for shares of purported cryptocurrency mining pools and rewarded investors for recruiting new investors into the scheme (U.S. Attorneys, District of New Jersey, 2020).

Recognizing the shared interest in combating this phenomenon, international organizations are already working for wider mobility on this topic. For instance, different international organizations have found the "Blockchain Alliance" as a public-private forum to help combat criminal activity on the blockchain (Blockchain Alliance, 2020). Worth noting is also that the United Nations Office on Drugs and Crime has launched several training programs to tackle criminal activities related to cryptocurrency (UNODC, 2017). Nevertheless, the effective combat of criminal activities within (cyber) corruption through cryptocurrency might require much more attention given the fact that cryptocurrency has become ubiquitous (Jason Weinstein, 2019, p. 7).

Its distinctive characteristics of decentralization and pseudo-anonymity are also attractive to criminal actors in general (Brown, 2016, p. 327). There are at least three (3) current characteristics of cryptocurrencies that make them vulnerable and attractive for criminal activities: 1) *Almost intractability*; 2) *Value fluctuation* (Conotoxia, 2022) and 3) *Lack of legislation* (European Commission, 2022). The first two characteristics (almost intractability and value fluctuation) derive mostly because cryptocurrencies are

decentralized peer-to-peer networks while the lack of legislation might derive because cryptocurrency is a new industry still growing and yet to be understood.

So, if there is an almost intractable currency-like tool with a quickly fluctuating value and without proper legislation, what criminal activities can be possibly conducted including those tools? The answers may be much more variable but some of the forms of criminality that fit in such vulnerability of cryptocurrency are not only corruption but also money laundering, tax evasion, and financing terrorism (William Buchanan, 2018).

Cryptocurrencies allow parties to a corruption-tainted contract to transfer a bribe (or more generally, a benefit received by a corrupted agent or a person related to that agent) in a relatively highly anonymous manner (Lánský, 2021, p. 696). Cryptocurrencies thus extend the possibility for corruption to the situations which, until now, had posed the risk that the bribe would identify the parties to the corruption-tainted contract and expose their corruption behavior (Lánský, 2021, p. 696). If fiat money is used as a bribe, handing over such bribe in cash is associated with the risk of loss or the risk that counterfeit bills will be used for the bribe. In bank transfers, it is nowadays relatively easy to identify both the payer and the beneficiary. Other forms of bribes often require a personal meeting between the corrupting agent and the corrupt agent or other persons representing them (Lánský, 2021, p. 696). Cryptocurrencies reduce those risks at least partially. Although the corrupting agent must still find a suitable person who will violating its duties in favor of the corrupting agent, this search can nowadays take also place online (Lánský, 2021, p. 696). Consequently, cryptocurrencies together with the online environment reduce the transaction costs of corruption, making contact between the parties to a corruption-tainted contract easier. All of this can result in the expansion of corruption practices (Lánský, 2021, p. 696). Anonymous exchange is also possible using Bitcoin ATMs, which do not require identification for exchange transactions up to EUR 1,000. Nevertheless, one can also carry out multiple exchange transactions within a period of time or use a number of different Bitcoin ATMs (Lánský, 2021, p. 696).

It is also important to address some of the main challenges and obstacles for incriminating corruption and other criminal activities involving cryptocurrency. For instance, countries in Western Balkans still have no legislation on blockchains of cryptocurrency. Based on this fact, the question is how can perpetrators be prosecuted for taking bribes in bitcoin, if bitcoin is very hard to be traced (in person or territory)? This may mean to take the bribe in any country without exactly knowing to whom and where the bribe has flown. Furthermore, cryptocurrency can easily and multiply be converted into any other cryptocurrencies and its value can fluctuate drastically within hours. Transactions can be made also easily and all those actions are not recorded from any central authority because such authority does not exist. The most concerning issue certainty is that for all those actions there is no proper legislation yet. In other words, beyond the financial revolution and the benefits of cryptocurrency that may

derive, currently, they can also be considered as a call out for every corrupted person. To successfully fight this phenomenon, awareness but also a wide mobilization may be required from countries and international organizations for adopting proper legislations in the domestic criminal laws as well as in the international criminal law (CMI U4, 2022).

## **Conclusion**

Cryptocurrency has the potential to change the financial system in the world because its market capitalization is growing constantly since 2009. It is unique and very different compared to regular fiat currencies. Regular fiat currencies are mostly in physical paper and controlled by a central authority as a trusted third party for every transaction. On the other hand, cryptocurrency is a decentralized electronic network controlled by no central authority but from its users who are hosts and nodes for the blockchain software. Such characteristics lead us to the conclusion that cryptocurrency might be not only a revolution from the financial point of view but also very vulnerable from the legal point of view.

Cryptocurrency is currently very hard to be traced, its value fluctuates too quickly and the legislation is not nearly sufficient. It may be beneficial for the financial world, but it might be also considered as a call out for perpetrators of corruption or other criminal activities.

Corruption through cryptocurrency is more complex because it is new and not explored enough yet criminal activity. Because cryptocurrencies are hard to be traced, it is very difficult to conclude where the bribe was given or taken. This basically means not to know exactly to whom and where the bribe has flown. Furthermore, cryptocurrency can easily and multiply be converted into any other cryptocurrencies and its value can fluctuate drastically within hours. This feature of cryptocurrencies allows perpetrators to get involved in money laundering since transactions can be made very easily and all those actions are not recorded from any central authority because such authority does not exist. Although the most concerning issue certainly is that for all those actions there is no proper legislation yet. Nevertheless, we are left with no alternatives other than to figure out how to combat corruption and other criminal activities using blockchain technology as a tool. Therefore, countries should consider adopting proper legislation for cryptocurrency in order to overcome these challenges and obstacles.



## Bibliography

1. Anna Irrera. (2020, December 09). Criminals getting smarter in use of digital currencies to launder money. (J. Stonestreet, Ed.) Retrieved March 18, 2021, from <https://www.reuters.com/article/crypto-currencies-criminals-idUSKBN28J1IX>
2. BBC News. (2019, 11 24). Cryptoqueen: How this woman scammed the world, then vanished. *Cryptoqueen: How this woman scammed the world, then vanished*. London, England, UK: BBC News. Retrieved January 27, 2021, from <https://www.bbc.com/news/stories-50435014>
3. Blockchain Alliance. (2020). A Public-Private forum to help combat criminal activity on the blockchain. Retrieved March 19, 2021, from <https://blockchainalliance.org/>
4. Blockchain.com. (2021, January 16). Retrieved January 16, 2021, from [www.blockchain.com: https://www.blockchain.com/charts/my-wallet-n-users](https://www.blockchain.com/charts/my-wallet-n-users)
5. Brown, S. D. (2016). Cryptocurrency and criminality: The Bitcoin opportunity. *Police Journal: Theory, Practice and Principles, Vol. 89*(No. 4), 327-229. doi:10.1177/0032258X16658927
6. Cao, S. K. (2020). The rise of popularity of cryptocurrency and associated criminal activity. (G. S. University, Ed.) *International Criminal Justice Review, Vol. 30*(No. 3), 325-344. doi:<https://doi.org/10.1177/1057567719827051>
7. Charlie Osborne. (2018, August 20). Alleged head of BitConnect cryptocurrency scam arrested in Dubai. *Alleged head of BitConnect cryptocurrency scam arrested in Dubai*. India: ZD Net. Retrieved January 27, 2021, from <https://www.zdnet.com/article/alleged-bitconnect-head-arrested-in-dubai/>
8. Coinmarketcap.com. (2021, January 16). (cainmarketcap) Retrieved January 16, 2021, from [www.coinmarketcap.com: https://coinmarketcap.com/all/views/all/](https://coinmarketcap.com/all/views/all/)
9. Decentralized Dog. (2020, September 04). [www.coinmarketcap.com](https://www.coinmarketcap.com/alexandria/article/who-is-satoshi-nakamoto). (Alexandria) Retrieved January 14, 2021, from Alexandria: <https://coinmarketcap.com/alexandria/article/who-is-satoshi-nakamoto>
10. European Commission. (2020, 09 24). *Financial services – EU regulatory framework for crypto-assets*. Retrieved January 24, 2021, from European Commission: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12089-Financial-services-EU-regulatory-framework-for-crypto-assets>
11. European Commission. (2021, January 21). *European Commission*. (D. I. F.3, Producer, & European Commission) Retrieved January 24, 2021, from

- European Commission: <https://ec.europa.eu/digital-single-market/en/legal-and-regulatory-framework-blockchain>
12. Eveshnie Reddy, A. M. (2018). Cryptocurrency: A tool and target for cybercrime. *Acta Criminologica*, 31(3), 71-92. Retrieved March 20, 2021, from <https://journals.co.za/doi/10.10520/EJC-14d902942d>
  13. Eveshnie Reddy, A. M. (2018). Cryptocurrency: A tool and target for cybercrime. *Acta Criminologica*, 31(3), 71-92. Retrieved March 20, 2021, from <https://journals.co.za/doi/10.10520/EJC-14d902942d>
  14. Global Legal Research Center. (2019, June). *Law Library of Congress*. (S. o. Directorate, Ed.) Retrieved January 17, 2021, from Law Library of Congress - Global Legal Research Center: <https://www.loc.gov/law/help/cryptocurrency/cryptocurrency-world-survey.pdf>
  15. Jain, P. B. (2021). Lawful Sequence of Events and Cryptocurrency Anomalies: An Empirical Investigation. (F. I. Business, Ed.) *FIIB Business Review*, 1-18. doi:10.1177/231971452111042438
  16. Jake Frankefield. (2020, May 05). *www.investopedia.com*. (M. Sonnenshein, Editor, investopedia.com, Producer, & investopedia.com) Retrieved January 14, 2021, from [www.investopedia.com](https://www.investopedia.com/terms/c/cryptocurrency.asp): <https://www.investopedia.com/terms/c/cryptocurrency.asp>
  17. Jason Weinstein, A. C. (2019). *Promoting innovation through education: The blockchain industry, law enforcement, and regulators work towards a common goal*. Global Legal Insights, The Blockchain Alliance. London/UK: Rory Smith. Retrieved January 26, 2021, from [https://www.acc.com/sites/default/files/resources/vl/membersonly/Article/1489775\\_1.pdf](https://www.acc.com/sites/default/files/resources/vl/membersonly/Article/1489775_1.pdf)
  18. Kane Russell, C. L. (2021, November 09). United States: Is Crypto a Currency Or Security? Litigation Involving The SEC May Provide Guidance. (J. Novel, Ed.) *Mondaq - Connecting knowledge & people*. Retrieved April 18, 2022, from <https://www.mondaq.com/unitedstates/fin-tech/1129220/is-crypto-a-currency-or-security-litigation-involving-the-sec-may-provide-guidance>
  19. Lánský, P. W. (2021). Cryptocurrencies and Corruption. *Ekonomický časopis/ Journal of Economics*, Vol. 69(No. 7), 687-705. doi:<https://doi.org/10.31577/ekoncas.2021.07.02>
  20. Lyle Daly. (2022, February 25). *The Motley Fool*. (TMFLyleDaly, Producer) Retrieved April 15, 2022, from <https://www.fool.com/investing/stock-market/market-sectors/financials/cryptocurrency-stocks/how-many-cryptocurrencies-are-there/>
  21. Mandjee, T. (2016). Bitcoin, its Legal Classification and its Regulatory Framework. *Journal of Business and Security Law*, 15(2), 160. Retrieved

- January 24, 2021, from <https://digitalcommons.law.msu.edu/cgi/viewcontent.cgi?article=1003&context=jbsl>
22. Satoshi Nakamoto. (2008, November 01). Bitcoin: A Peer-to-Peer Electronic Cash System. *Bitcoin.org*, 1-9. Retrieved January 14, 2021, from <https://bitcoin.org/bitcoin.pdf>
  23. Tim Hume, CNN. (2013, 10 05). How FBI caught Ross Ulbricht, alleged creator of criminal marketplace Silk Road. *How FBI caught Ross Ulbricht, alleged creator of criminal marketplace Silk Road*. San Francisco, San Francisco, USA: CNN. Retrieved 01 27, 2021, from <https://edition.cnn.com/2013/10/04/world/americas/silk-road-ross-ulbricht/index.html>
  24. U.S. Attorneys, District of New Jersey. (2020, July 16). *U.S. Attorneys, District of New Jersey*. Retrieved January 27, 2021, from U.S. Attorney's Office: <https://www.justice.gov/usao-nj/bitclub>
  25. UKEssays. (2020, February 08). *UKEssays*. (UKEssays) Retrieved January 16, 2021, from UKEssays pro - Trusted by students since 2003: <https://www.ukessays.com/essays/finance/the-legitimacy-of-cryptocurrencies.php>
  26. UNODC. (2017, May 08). UNODC launches training to tackle cryptocurrency-enabled Organized Crime. (U. N. Crime, Ed.) United Nations Office on Drugs and Crime. Retrieved March 19, 2021, from <https://www.unodc.org/unodc/en/frontpage/2017/May/unodc-launches-training-to-tackle-money-laundering-and-bitcoin-banking-fraud.html>
  27. William Buchanan, S. D. (2018). The Challenges of Investigating Cryptocurrencies and Blockchain Related Crime. *JBBA*, 1(2), 1-6. Retrieved March 20, 2021, from <https://jbba.scholasticahq.com/article/5779-the-challenges-of-investigating-cryptocurrencies-and-blockchain-related-crime>