# A Review on Existence of Crypto Currency in a Societal Ecosystem

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**ABSTRACT**
In the current era, many countries have made great strides in their efforts to go cashless. Citizens including Government has envision and persist of living in a future world where physical currency is a thing of the past for any transactions.At the same time, there is also an increasing awareness among citizens with regard to decreasing amount of privacy in their lives. The potential hazards of cashless societies pose to financial privacy may incentivize citizens to hold some of their money in independent cryptocurrencies.Crypto-currency trading is a rapidly growing form of behaviourcharacterized by investing in highly volatile digital assets based largely on blockchain technology.The paper intends to provide a review upon the problems of the bitcoin cryptocurrency market in a societal perspective. The paper also dwells on the need to analyze the prospects for the development of the bitcoin and other crypto-currencies marketbased on the huge interest of both the scientific community and the citizens of the world.
**Keywords**: Blockchain Technology, Bitcoin, Cryptocurrency, Cashless-Society

## I. INTRODUCTION

Majority of the countries have made great strive in their efforts to go cashless economy. On contrary there is also an increasing awareness among citizens of the decreasing amount of privacy in regard to their cashless account. This promptedthe hazards of cashless societies pose to financial privacy incentivized with citizens to hold some of their money in independent cryptocurrencies.

The use of new technologies in the sphere of money circulation, in particular blockchain technology leads to the emergence of new types of currencies – cryptocurrencies. Blockchain technology is the basis of the Bitcoin cryptocurrency.Blockchain burst onto the scene with a paper published by the pseudonymous Satoshi Nakamoto in 2008 and was subsequently incorporated as part of the architecture of the cryptocurrency bitcoin in the following year. Blockchain, which is an open, distributed ledger that can efficiently record transactions between two parties in a verifiable and permanent way and which can also be programmed (via so-called smart contracts) to trigger transactions automatically (Iansiti and Lakhani, 2017).

### Cryptocurrency-a virtual Money

Cryptocurrencies completely changed people's perception of what money is meant to be. Currency in the usual representation of a person is a paper banknote or a metal coin issued by the Central Bank of a particular country. Cryptocurrency is a completely different currency. This virtual money exists in the user network or, in other words, it is a computer phenomenon that exists in the user network.The main property of virtual money is its decentralization, anonymity, a nongovernmental structure ownership and the possibility of its use at the discretion of the owner. Based on these properties, virtual money can have a significant impact on social relations in society.

Crypto-currencies rely on cryptography to facilitate and record transactions on a set of electronic ledgers – databases of financial accounts. Crypto-currencies have no tangible existence, rather they are electronic signals and records that keep track of transactions mediated with the currency. Given their electronic representation, crypto-currencies are also referred to as 'digital' or 'virtual' currencies, though distinctions can be made between all three.

In modern economies, most transactions are conducted via e-payments rather than physical currency. Most e-payments are electronic transfers from deposit and credit accounts facilitated by financial institutions such as commercial banks and credit card companies. These financial institutions use private electronic networks and their own private account ledgers to record account balances that keep track of individuals' purchasing power.

The present articleprovides a review for governments in cashless societies to keep firm control over their money supply and also suggest for stronger privacy law protections for its citizens to decrease the mitigation of financial privacy.

**Bitcoin-The First Cryptocurrency**

Bitcoin, the first cryptocurrency, was created in 20098 and since then a myriad of other cryptocurrencies have been launched in bitcoin's wake (Charles Bovaird, 2017). Bitcoin would rely on cryptography rather than central banks, law enforcement, and anticounterfeiting measures to ensure security (Narayanan et al., 2016).

Bitcoin and other cryptocurrencies share three common principles: decentralization, pseudo-anonymity, and transparency. They are decentralized in that, rather than being governed by any single institution, they are administered via a peer-to-peer network, the majority of which must agree on which transactions and branch of a distributed digital ledger (the 'blockchain') are valid. They are pseudo-anonymous because, instead of usernames or account numbers, Bitcoin uses hashes of public keys to identify users, forming a system of 'decentralised identity management' decoupled from real-world identities. Cryptocurrencies are considered only pseudo-anonymous (rather than fully anonymous) due to the transparent nature of their transactions, despite not being explicitly connected with particular individuals and companies (Meiklejohn et al., 2016). Transparency results from the fact that all transactions that have ever occurred are recorded on the publicly available blockchain.

While Bitcoin was the first cryptocurrency, and is the prototypical example of the concept, a range of alternative coins and services have subsequently been created for cryptocurrency users who desire more anonymity. For example, Monero obscures wallet addresses and transactions (Keller et al., 2021). Individuals may also use 'mixers' or 'tumblers' to further obfuscate the origin of their funds. (Möser et al., 2013).

Bitcoin's market capitalization has grown significantly since its implementation in 2009, and currently stands at $668 billion (CoinMarketCap, 2021). Bitcoin's creation has sparked thousands of other cryptocurrencies which share similar tenets and technology; the total cryptocurrency market capitalisation is $1.6 trillion (CoinMarketCap, 2021)

The process used to issue new bitcoins is called "mining". The bitcoin mining is the process of using energy-consuming equipment and computer resources to process transactions, to ensure network security, to maintain all users in the system being synchronized with each other. It can be perceived as a bitcoin data center. Bitcoin mining was designed to be fully decentralized with those who perform mining in all countries. No person personally has control over the network. The price of bitcoin is described by the demand and supply model.

**Why to go for cashless society?**

Cryptocurrencies are different than traditional government regulated currencies because governments do not issue them or control them. This lack of government oversight might become increasingly attractive to citizens living in a cashless society where their every financial transaction could conceivably be susceptible to recording and monitoring by government agents. Privacy in a cashless society might become increasingly valuable to citizens— especially given the emphasis being placed on privacy in today's virtual world.

Cashless society would force people to use government regulated virtual money, which is more traceable by the government.  Cash transactions provide anonymity in transactions and help people "conceal their activities from the government" to "avoid laws and paying taxes. Any government would be eager to go cashless for the sake of rooting out any untaxed wealth and the proceeds of illegal activity (Black money). The second reason why a government might want to go cashless concerns its ability to successfully implement its own monetary policy

Although cash remains the highest used payment method in the United States (32% of all transactions in 2015), purchases made with debit and credit cards account for 48% of transactions made in 2015. In contrast, cash transactions account for only 2% of all payments made in Sweden in 2015. (Patrick Gillespie, 2015). On November 8, 2016, Indian Prime Minister Narendra Modi officially declared that 86% of the cash in circulation in India to "no longer be legal tender."(Murali Krishnan, 2017). For a country that is about 90% cash reliant, this posed significant problems, but it is one example of how some governments are deeply committed to going cashless.

**Implementation of Monetary Policy**

The time when central bank determines that inflation is increasing at a high rate, it will reduce the supply of money in order to bring inflation down to a more acceptable level. The

central bank of the country, sought to substantially decrease long-term interest rates and ease the overall financial conditions of the country.

One proposed measure of central banks could implement in the next financial crisis is negative interest rates (Ann Saphir, 2017). Negative interest rates would mean that people would have to pay banks to keep their money in a bank account or other financial institution. Citizens would rather store their money at home than to face the potential threat that their banks may start to charge them for saving money in a bank account. This fear has become a reality for wealthy depositors at two major German banks, fueling demand for safe deposit boxes.

With cashless society, citizens could turn to something more traditional—like gold—or they could opt for the more modern alternative: independent cryptocurrencies.

## Independent Cryptocurrencies can undermine Governments' Objectives of a Cashless Society

Cryptocurrencies remain largely unregulated as governments struggle to determine how to even begin to regulate them. Even if societies become cashless, independent cryptocurrencies would still exist. However, the very existence of cryptocurrencies could serve to thwart governments' goals of severely curtailing the use of 'black money' and successfully implementing negative interest rates.

Cryptocurrencies could limit the government's ability to stamp out 'black money' in a completely cashless society because their unregulated status make them highly resistant to censorship. This is because while it is possible to observe a bitcoin transaction in process, it is not possible to stop it—and this is what makes cryptocurrencies different from conventional banking.

## Cryptocurrencies a heaven for cybercrime and drug trading

Even if a government is successfully able to transition into a completely cashless society, criminal elements could put their illicit gains in cryptocurrencies to evade government scrutiny.

Cryptocurrencies could also limit a central bank's ability to successfully implement negative interest rates by taking the place of paper currency as an alternative to storing money in a government regulated bank or other financial institution

## Independencyof Digital Currencies

The seemingly beneficial independence of these digital currencies could also be its biggest drawback. The value of these digital currencies can be very volatile and the lack of regulation deters most mainstream investors, including regular, everyday bank depositors, from delving into this new market.Having every financial transaction go digital would mean having every single financial transaction recorded somewhere, either by banks or other third parties. This information could prove a coveted target for storage, collection, and surveillance for national security agencies, similar to what the internet has become which could push more people into using independent cryptocurrencies.

## Online Sports Betting and Day Trading

The online sports betting and day trading has similarities and also several important differences (Delfabbro, P., 2021). These include the continuous 24-hour availability of trading, the global nature of the market, and the strong role of social media, social influence and non-balance sheet related events as determinants of price movements. The current global population of crypto-currency (crypto) buyers and sellers is now estimated to be over 106 million (Crypto.com, 2021). Growth in retail investors (from the general population) is paralleled by growth in the cryptocurrency market itself. Total market capitalisation (total coins x market price) has now reached 1.75 trillion \$US in February 2021 after having been \$550 billion in December 2020 and \$275b in June 2020.

Cryptocurrency trading has much in common with modern trading on the share-market (Granero et al., 2012). It attracts both experienced and less experienced investors; both large institutional investors as well as small retail investors and is subject to market fluctuations. Trading is heavily automated, with buy and sell orders set by digital trading systems.

## Frauds Involving Cryptocurrencies

In recent years, governments have reported an increase in frequency and scale of frauds involving cryptocurrencies.Most sources portrayed cryptocurrency frauds as cyber-enabled frauds. Cyber-enabled crimes involve perpetrators using information and communication technologies to magnify the scale and reach of offences that could also be committed offline (McGuire & Dowling, 2013). In describing cryptocurrency frauds, researchers often refer to traditional financial frauds like Ponzi schemes (Bartoletti et al., 2018; Reddy &Minaar, 2018; Securities & Exchange Commission, 2013), market manipulation, and pump-and-dump schemes

(Anderson et al., 2019; Chen et al., 2019a, 2019b, 2019c, 2019d)

## II.    CONCLUSION

In recent years, governments have reported an increase in frequency and scale of frauds involving cryptocurrencies. Crypto currency needs to continue to gain in price to attract investors, but also to lessen in volatility to attract people who would like to hold it for general purposes of payment. For a cryptocurrency with a fixed supply, like Bitcoin, these two forces may sometimes be in tension. Cryptocurrency fraud has become a growing global concern, with various governments reporting an increase in the frequency of and losses from cryptocurrency scams. Despite increasing fraudulent activity involving cryptocurrencies, research on the potential of cryptocurrencies for fraud has not been examined in a systematic study.

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