

he 17th century was witness to the Dutch Golden Age, the leading global economic power at the time. It was also the period of what was soon after referred to as 'Tulip Mania' for what is considered the first recorded speculative bubble that collapsed in 1637. Many analysts find a stark similarity between tulip mania and the dramatic rise of cryptocurrency value in 2017. Tulip bulbs became fashionable status symbols, and although having weak fundamentals, reached exorbitant prices. Bitcoin's dramatic 1,500% increase in 2017 alone, attracted a significantly large group of speculative investors to benefit from what many see as an unhinged gamble on what has gained popularity, not only as decentralized ledger tokens but also with potential links to laundering activity. Most central banks and regulators have exercised caution by warning users of the high levels of risk but have conditionally legitimized its use. Some however, have banned it entirely1.

The pertinent question raised at forums and conferences recently is the Shariah legitimacy of cryptocurrency, as Muslim investors intend to take advantage of the unexplained increase in its value. This brief article reviews the mixed Shariah views on cryptocurrency. These views are expected to become more lucid once the fundamentals and practice of cryptocurrency are better understood.

What is Cryptocurrency?

Digital cash and payment through 'electronic' money has been around since computer systems became the mainstay of the typical banking environment. However, since this relies on a payment network, the infrastructure required to manage payments and avoid multiple spending using the same funds has always been costly and managed through a centralized banking network. A central server therefore, ensures that funds are spent only once. This also means that society must transact based on regulated or controlled precepts that some argue, may be used to manipulate the value of currencies and the wealth of individuals. If individuals were able to transact freely

between themselves through a 'peer-to-peer' network, this would allow society itself to determine the value of their currency. This would require a database that is able to record individual transactions with levels of encryption that would make it impossible to manipulate, steal, amend or erase. This has given rise to blockchain technology that achieves all these goals and more, providing argument for legitimacy of an instrument that can be recorded and recognized as a digital medium of exchange, a virtual currency or simply: cryptocurrency. Here, the 'crypto' refers to the encryption or cryptography that the instrument is built on and then added to a blockchain, whereas 'currency' is the recognition amongst its users as a medium of exchange or a store of value represented by the ownership of coins or tokens.

How are coins created?

Most cryptocurrencies restrict the total supply of tokens, however, accessing or creating new tokens requires a specific process. 'Mining' is the traditional method for creating Bitcoin, the most popular cryptocurrency to date. Since every transaction, once confirmed by the transacting parties, is broadcasted on the network, it still requires confirmation by the network to be added to the blockchain. Simply, if Ahmad transferred 10 Bitcoins to Ismail and both parties approved/confirmed it through a digital sign-off, then this would still need to be confirmed by the network so that it may be added to the global database (based on blockchain). However, only miners can confirm the transaction. Once confirmed by a miner, the transaction is added as a node to the blockchain and becomes a permanent, immutable record for all to see. 'Miners' are required to solve a cryptologic puzzle or an algorithm and are paid for their effort with tokens or coins. Bitcoin for example, uses the SHA 256 Hash algorithm that requires miners to find the output of a cryptographic function or a hash². Miners compete to solve the puzzle and successful miners build a block to add to the chain once completed, receiving a specific number of coins in exchange.

Period Doll	ar Change Pe	rcent Change
Jan 2018	-\$1,264.45	-7.82%
December 2017	+\$0.64	+0.00%
Previous 6 months	+\$12,542.09	+528.76%
Last 1 year	+\$14,000.52	+1,532.58%
Last 2 years	+\$14,464.90	+3,220.56%
Last 5 years	+\$14,900.28	+108,208.25%

¹ This list is not exhaustive, however: Bangladesh, Nepal, Kyrgyzstan, Ecuador, Bolivia and Algeria have prohibited the use of Bitcoin.

² This is referred to as 'Proof of work'.

Tracking Bitcoin's price movements over the last 5 years

Interestingly, articles in the Economist in December 2017 and January 2018 note that Bitcoin as a digital currency does not possess the trait of being a store of value due to its highly unpredictable nature (it is not uncommon for it to change up to 20% in value within an hour). The article reiterates the fears of laundering by regulators as Bitcoin can move across borders and currency controls with an internet connection, and the potential systemic risk to economies that it poses should something go wrong. This is not unfounded, especially since investigations are underway in the US on accusations that Bitfinex, a cryptocurrency exchange, has been manipulating the astronomical rise of Bitcoin using another cryptocurrency called Tether, creating an artificial bubble that has begun to burst (Bitcoin lost more than half its value by the end of January 2018). The same exchange was hacked in 2016, losing almost 200,000 Bitcoins in the attack.

What is the Islamic perspective on cryptocurrencies?

There are three particular dimensions that most Shariah verdicts have considered:

The nature of the underlying instrument: Is Cryptocurrency Maal (wealth) Passing the Shariah filter of permissibility The view of the Maqasid al Shariah (objectives of the Shariah)

In the first, the nature of the underlying instrument, jurists have offered verdicts contemporary primarily based on their recognition or definition of cryptocurrencies from a Shariah categorization perspective. This is logical as Islamic law has specific rulings for the way currency or money may be treated. For cryptocurrency to be considered valuable wealth/ property or maal mutaqawwam, the jurists argue that it should be permissible (halaal)3, recognized through societal consensus as a store of value. To define its nature as maal, it would need to fulfil the following attributes:

Having commercial value⁴
Capable of being owned and possessed;
Ownership must be transferable;
Capable of being stored;
Beneficial/valuable in the Shariah.

We now briefly consider the opinions issued by contemporary scholars on cryptocurrency and Bitcoin in particular.

South African Scholars including Mufti Taha Karaan (Mufti of the Muslim Judicial Council) have deliberated on whether Bitcoin is an acceptable form of maal and whether it falls into the category of goods (urud) or currency. The conclusion by most is that it has already been accepted as maal through general social concurrence, irrespective of regulatory acceptance. The fatwa-issuing body of the well-known South African Islamic seminary, Darul Uloom Zakariyya, concurs with

the position that Bitcoin is maal and hence permissible for trade. Another prominent South African Mufti - Siraj Desai - also submits that Bitcoin is valid for trade as it represents real money. His argument is that real money was used to purchase the coins and they are again redeemable into cash, making them permissible for ownership and trade. The Scholars at the Majlis al Ulama (South Africa) however, reject the notion of Bitcoin being recognized as money and categorically emphasize that it is not currency at this stage, although it may be in the future. In support of their view, they quote UBS Executive Axel Weber who stated: "In my opinion, bitcoins are not money,". The Majlis submit that currency in Shariah is only that which is recognized by government as legal currency5. They subsequently prohibit the owning and trade, as according to them, it is gambling.

A fatwa issued by Professor Monzer Kahf considers Bitcoin specifically, a legitimate medium of exchange. He states: "Like any other currency it is money within its community and exchanging it with other currencies is definitely subject, in my opinion, to same conditions of exchanging currencies." 6. However, he also explains that "until it becomes traded in the open market chances of manipulation are high and my confidence in it is low." It should be noted that this opinion was provided in 2014, long before Bitcoin's dramatic rise.

With respect to the second and third dimensions, passing the filter of Shariah permissibility and fulfilling the objectives of the Shariah, the instrument is tested against the basic prohibitions pertaining to the law of transactions and its overall benefit to society. This includes the prohibition of riba (interest), gharar (uncertainty) and maysir (gambling). The majority of the views applying these filters are that of prohibition:

A fatwa from Turkey's leading religious authority, Diyanet, in November 2017, declared Bitcoin un-Islamic, stating:

"Buying and selling virtual currencies is not compatible with religion at this time because of the fact that their valuation is open to speculation (excessive gharar), they can be easily used in illegal activities like money laundering and they are not under the state's audit and surveillance." 7

This was followed by a fatwa in December 2017 by a well-known Saudi Scholar, Assim Al-Hakeem who banned digital currencies in Islamic law due to their ambiguous (gharar) nature. In a similar vein, the Grand Mufti of Egypt, Shawki Allam, issued a fatwa in January 2018 banning the trading of Bitcoin as it causes harm to individuals, groups and institutions. He compared the trade in cryptocurrency to maysir or gambling which is prohibited in Islam. His fatwa considers virtual currency as impermissible since it is not accepted by legitimate bodies as an acceptable interface of exchange. He also stated that the "currency's risk as well as its high profit potential undermines Egypt's ability to maintain and

³ It is generally accepted that prohibited items such as alcohol and pork do not hold value

⁴ Mejelle, Art 126

⁵ http://www.themajlis.info/21923/bitcoin-not-currency

⁶ http://lightuponlight.com/blog/fatwa-on-bitcoin-by-monzer-kahf/

⁷ http://www.ensonhaber.com/din-isleri-bitcoin-caiz-degildir-dedi.html

stabilize its own currency". It seems that the Mufti has recognized Bitcoin as a currency but with high risk that lacks any state supervision, hence the prohibition. In a separate ruling the Mufti's counsellor Magdy Ashour, added that the currency is used to directly fund terrorists. He also stated that since Bitcoin had no rules defined, the pillars of an Islamic contract were not upheld, making it impermissible. This is supported by Darul Iftaa of Deoband, a leading fatwa-issuing body in India, including a total of nine major scholars in the UK.

The verdict of abstention rather than outright prohibition is expressed by Shaikh Abdus Sattar Abu Ghuddah, the Chairman of the Shariah Board of the Albaraka Banking Group.

Those that have prohibited it have relied primarily on the nature of uncertainty and high levels of risk in value, tradability and security of cryptocurrencies. Others argue that these attributes can be afforded to any fiat currency, although not even fiat currency can boast the levels of the safety and transparency offered in the blockchain environment.

Conclusion

In summary, the understanding of cryptocurrency, its mining, tradability, security and systemic impact is

evolving, and verdicts are expected to be more informed as cryptocurrency is better understood. Scholars serve as guides to the Muslim community and the responsibility of providing well-researched opinions is something that any sincere Scholar appreciates. This appreciation also extends to the implications of haram (prohibition) verdicts over those that suggest exercising caution or abstention.

The technology that most cryptocurrencies are based on-blockchain-however, may be considered a boon to the Shariah requirements of transparency and disclosure and enhance the notion of trust in exchange transactions and transfers. Perhaps it is blockchain then, that requires significantly more research rather than a Shari' deliberation on one of its by-products alone.

Finally, if we accept cryptocurrency as an asset/wealth/ maal, then its implications on zakat and inheritance require Shariah deliberation as well.

For the success of cryptocurrencies as an alternative to major fiat currencies, it would have to prove itself through wider Shariah and conventional acceptance, application and regulation. Inevitably, time will provide the buffer for more informed verdicts on crypto-mania.

Fatwa/Opinion Issued by	Verdict	Reasons for Verdict
Taha Karaan (Mufti) (South Africa) Darul Iftaa, DUZ (South Africa) Monzer Kahf (Professor) Siraj Desai <i>(Mufti)</i> (South Africa)	Permissible (Mubah)	Based on <i>istilah</i> (social concurrence) and <i>ta'amul</i> (common usage) that it is <i>maal</i> , allowing owning, trading, etc. However, not necessarily currency.
Darul Ihsan (South Africa)	Abstain until further clarification acquired (Mamnoo')	May be linked to a pyramid scheme; Even if determined as currency, should not be a means of one's livelihood as jurists allow trade of currency as necessity only.
A S Abu Ghuddah (Shaikh) (Syria)	Abstain/impermissible (Mamnoo') but not outright prohibition	Excessive uncertainty (gharar); Security risk (khatar); It is unlike currency which is regulated, legal tender.
Diyanet (Turkey)	Un-Islamic at this time (Mamnoo')	Excessive gharar; Can easily be used in illegal activity.
Majlis al Ulama (South Africa) Wifaqul Ulama (UK) (8 Scholars of the United Kingdom) Haitham al Haddad (Shaikh)(UK) Darul Iftaa, Deoband (India) Shawki Allam (Mufti) (Egypt) Magdy Ashour (Egypt) Assim al Hakeem (Saudi Arabia)	Prohibited (Haram/Tahreem)	Not currency since it is not legal tender; Current decentralized validation (mining) based on gambling (Wifaqul); Highly unstable, making it too risky; Trading digital currency is like trading trades (Deoband) Funds terrorists (Ashour).

Summary of Shariah verdicts by end January 2018

⁸ http://english.ahram.org.eg/NewsContent/3/12/286399/Business/Economy/Bitcoin-trading-is-unlawful-pursuant-to-Islamic-Sh.aspx

⁹ https://www.alaraby.co.uk/english/news/2018/1/4/egypts-grand-mufti-issues-fatwa-against-bitcoin