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Bitcoin and bitcoin

Introduction

There have been numerous requests since our research on OneCoin about the Islamic perspective on cryptocurrencies, especially bitcoin. Due to our many other commitments we have not been able to address that need until recently; having said that, we will present here a concise discussion and propose its compatibility or otherwise with Islamic principles. Firstly though a few key points need to be understood as this a novel, innovative and somewhat complicated area of finance and as a result there is much confusion and conflation. Bitcoin was the first cryptocurrency which was announced on 31st October 2008 by Satoshi Nakamoto; there have been several hundred other cryptocurrencies that have been subsequently announced and many 'pump-and-dump' non-existent cryptocurrencies. All are exploiting the huge rise in value of bitcoins; some legitimately and others fraudulently. The decentralised nature of the bitcoin technology is a key factor and in effect it regulates itself; however it is possble due to this lack of central regulation that if a group/individual had sufficient computing power then they could sieze control of the network. This is a problem due to the lack of protection of one's wealth. Also, due to the huge number of cryptocurrencies now available it makes bitcoin or any other currency probematic due to it not meeting the definition of money/currency. We will outline the key issues below.

Analysis & Discussion

The title needs to be understood in its literal sense and is not repetition for effect. There are two aspects to Bitcoin; Bitcoin the technology (capital B) and bitcoin the currency (b). We need to explore both as Bitcoin is used by individuals either as an investment or as a currency; however, the technology's legitimacy will impact the currency but not vice versa, in other words if the technology is found problematic then neither is the investment permissible nor the currency.

Bitcoin – the technology

There is no point in repeating what can be found in numerous books, papers and videos available on the subject matter as it will mean that this short text would have to be a book of a couple of hundred sides. It is essential that one is required to have a very good understanding of the topic before it can be assessed and judgements made. 'The Age of Cryptocurrency - How Bitcoin and the Blockchain are Challenging the Global Economic Order' by Paul Vigna and Michael J. Casey is an excellent book in both comprehensiveness and technical detail but discussed in a relatively simple way. Its details and other useful resources will be listed in the Bibliography.

We will now discuss the key fundamental issue.

When a transaction is conducted then the 'miners' will convert the information into an alphanumeric string of characters called a 'hash'. They will then need to add this 'chain' to the 'block', that is the blockchain ledger, in order for the transaction to be confirmed and allowed to move forward to verification. At this stage it becomes an issue based on chance. The bitcoin's core algorithm has decided what will be the 'winning' number for the current blockchain. This is not known to anybody. Miners will, based on their computing power, continuously generate hashes until it matches the block's winning number; this is completely based on chance as is described as a lottery by some. One would expect the ones with the powerful computing power to win all the time but that is not the case, as it is akin to buying lottery tickets; so even though the bigger operations have more lottery tickets, it increases their chances but does not guarantee success. (Vigna & Casey, 2016, p.130) The purpose of this is two-fold; one to apportion a cost to mining as the computer power required will use large amounts of electricity and require very expensive hardware; and two to incentivise miners to confirm the transactions otherwise the technology would fail as this is the very basis of its decentralised format.

Therefore, the transaction can only proceed based on an unknown third-party intervention which is brought about based on a lottery method of selection. Due to the above aspect upon which the technology is based as it is a decentralised platform there is clear gambling and uncertainty for the transaction to be confimed in order to be validated, which are not permitted by the sharīʿa.

Bitcoin – the currency

As a currency there are a number of characteristics required which it does not meet, for instance it is highly unstable because of past cyber theft and due to its very nature hence its store of value and relative consistency is seriously wanting. As an illustration bitcoin was around £600 in early 2014, then by autumn it was £300 and by January 2015 it had dropped to £150. Another point is there are a number of unnecessary risks associated with it which further destabilises and hence cannot be considered as a currency according to Islamic principles; however, that is academic based on the findings highlighted above with respect to the technology.

Conclusion

Due to the very nature of cryptocurrency, the fundamental fact that it has to be decentralised will mean that its current method of validating transactions which are based on gambling and chance will mean it is contrary to Islamic principles of business and hence not permitted to Muslims who choose to avoid transactions which go against their beliefs and practices.

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