## Virtual money- the regulation of bitcoin literature review sample

Economics, Currency



Bitcoin is term that was not well known in the last four years. It was a term that was only used by few people over the internet. With time it is the term that the world has come to know as the first world's completely decentralized virtual currency (Buttyan & Hubaux, 2001). This currency has become the largest economy compared to some of the economies of the smaller worlds. Bitcoin also abbreviated as BTC reached its high note in 2013 April with a value of \$260 just from pennies in the previous years. Currently, the market value of BTC is valued to be more than \$ 1 billion. There is great interest by both small and large businesses in integrating BTC platform into their traditional businesses. This means that they are interested in offering bitcoin services in the economy. There is also a growing interest from the from the business ventures in the process investing in this fast growing market. BTC is one of the internet discoveries and technologies that have

grown and become successful of the recent years (Hauspie & Simplot-Ryl, 2006).

BTC is decentralized and it can be misused by many users. BTC can be used for illegal activities because of its decentralization. This has resulted into actions by the regulators to ensure that it is used for the common good. There are key issues that need to be addressed when it comes to regulations of the bitcoin. Since it is payment systems that enable users to carry out their transactions virtually, it can also be used to evade tax obligations, money laundering activities and trade illegal goods (Brandel & Schellie, 1980). There is regulation of the virtual money which includes BTC released by the Financial Crime enforcement Network of US from the department of finance and treasury (Calvery, 2012). There is guideline o task compliance by those transacting in virtual currencies. There is a government accountability office established to deal with virtual money. There have been further regulatory interests from the Commodities Future Trading commission on Bitcoin, they were evaluating to see if BTC fall under their jurisdiction. Apart from the overlapping mandates from the government agencies, it is clear that Bitcoin is set for bigger growth in the coming years because it is a unique financial platform.

This paper will look at virtual currency with more focus on Bitcoin network. The paper will evaluate the properties, operations and unique characters of Bitcoin. What will be the benefits of giving Bitcoin an enabling environment to flourish? Another key aspect of this report is to look at the concerns of the customers, policymakers and regulators. It will explore the currency regulatory scheme and look at other possible regulations that could be enacted.

Bitcoin is a peer-to-peer and an open source virtual currency. This is a virtual currency platform that is completely decentralized hence the first decentralized money system. The concept of decentralization of the virtual system may seem to be complicated. However, it is not a complex system. There was a need to have a third party in making online transactions who can be trusted by both parties. This meant that money had to go through another platform before the two parties can complete a transaction (Feuerwerker, 1978). Paypal and Mastercard are example of the parties that were and are being used by many over the internet. A transaction is completed by a third the accounts of the respective clients. These results into double spending were transaction fee is charged to both the parties.

Satoshi Nakamoto a programmer in 2008 sought to overcome this challenge by coming up with Bitcoin (Nakamoto, 2008). It is a means of transaction that removes double spending over internet transactions. It has also eliminated the need for a third party before a transaction can be completed. Each Bitcoin user has a ledger that they use at a peer-to-peer level in making the transactions. Every transaction that is carried out in the ledger or the account of the user is recorded in the public distributed ledger referred to as block chain. The block chain is used to counter check the new transactions to avoid double spending. There is a global peer-to-peer connection of millions of users that transact without use of third party such as Paypal.

Transactions in Bitcoin platform are denominated in Bitcoin and not in dollars, Euros or Yens. This makes Bitcoin a virtual currency that is decentralized money platform. The virtual currency is not based on any given country. The value of Bitcoin currency is not based on the government value or the value of gold but that which people assign to it. The value of Bitcoin in dollars is determined by the market demand just like world currency exchange rates.

Bitcoin is partly anonymous currency which is not backed by any government or any other legal entity (Reid& Harrigan, 2013). There has been a great deal of concentration on the issue of anonymity on Bitcoin transaction. There has been great confusion when it comes to this issue with the currency use. There has been no anonymity with the other online money transactions such as Paypal. This is because the details of those who are transacting over the third party are known (Reid & Harrigan, 2013). Bitcoin is in between anonymity and transparency of the user identity. Bitcoin are also like money where once you have send to someone you no longer posses them. On the other hand once the transaction takes place, in the Bitcoin system it is recorded to the chain blocks and it can be seen by everyone. While the public key can be seen by everyone in the network, it is not directly connected to any identity of the members in the peer-to-peer network. This is like a transaction in parties where people can transact cash without revealing their identities. The Bitcoin address can be traced hence Bitcoin is not anonymous but pseudonymous (Reid & Harrigan, 2013). It is not difficult to connect the Bitcoin address to the identity of the Bitcoin users. It is very difficult to remain anonymous in the Bitcoin network

although many have referred to this system as anonymous.

There are many benefits that the money platform brings about to its members. Bitcoin system is not a replacement of the traditional methods of monetary transactions. However, it is just a new method of money transaction. The first benefit that will be realized in the use of Bitcoin is low transaction costs. This is because the third party is eliminated from the transaction cycle. This has proven to be an easy and quick means of transactions. This has enabled micropayments possible because users are able to make small purchases and transactions that could not be possible through third party. Bitcoin is seen at the best alternative to the process of internet money transfer because it has lower rates compared to others. Bitcoin can also act as a stimulus program of financial innovation in the society via the internet. Bitcoin protocol program offers chances of coming up with systems that are useful in the financial and legal services those developers. Bitcoin can also be used to do other transactions such as the stocks, bets and sensitive information. This is because the system is secure and uses data packets and the encryption system to make transactions. There are many challenges that the system faces such as volatility. New members are also at a high risk of losing their Bitcoin either by improper securing or deleting them accidentally. Hacking is also another key issue that is of great concern about this system. There have been price adjustments of the Bitcoin since 2011. There was speculative move as a result of media focus on Bitcoin. This is resulted into over investment into the system. The value and the price of Bitcoin reduced drastically after it reached its peak. The volatility is very high such that many think it is the end of Bitcoin while others believe the storm will be controlled and things will stabilize. It becomes meaningless to store wealth in Bitcoin if the price is not stable and unpredictable.

The security breach is also another issue at hand that greatly concerns the Bitcoin system. It is possible to misplace or even to delete Bitcoin from your account. Once the digital records are lost all the money is lost (Schellie, 1979). There is need to protect the private Bitcoin address because it is possible that another person can gain access to it and use the Bitcoin from the account. Encryption is used to protect the Bitcoin wallet but the user is the one who decides if it should be activated or not. If it is not encrypted, it can be stolen. There has been series of security breach on the Bitcoin platform. For instance, in 2012 about 24, 000 BTC which was valued at \$250, 000 were stolen by a hacker in the transaction process. There is another concern that criminals can use this platform for their activities. There is no law and regulation that deal with virtual money hence regulation of virtual money such as Bitcoin is not envisioned on the law. This is more complex situation because this type of transaction is decentralized and it is not regulated by the government or any legal body. Bitcoin does not fit into the current financial regulatory or institutions which makes it difficult to apply the law. This technology gives as a perspective of many other technology innovations such as Voice over Internet Protocol (VIoP). During the early days of VoIP discovery, there were no regulations from the Communication Act and the Federal Communications FCC regulations. The law had only envisioned communication of voice through traditional channels. There is no clear law up to date concerning the VoIP. There is a clear path though of achieving the laws and regulations for the VoIP. The question now lies with the policymakers about Bitcoin. Deep Web is an example of illegal activities. It is a black-market site referred to as Silk Road which takes advantage of the anonymizing network software and the pseudonymous property of Bitcoin to transact illegal products such as drugs and other illicit wares.

There was a tarnished image of Bitcoin because of their association with the Silk Road. This was after the activities of this company were published on an article. There were calls from senators Charles and Manchin on the crackdown of the Silk Road, Bitcoin and anonymizing software Tor. Terrorism activities can also be funded through Bitcoin by money laundering companies. It is also a means of collecting ill acquire finances by many people. This is informed by the recent activities that lead to the closure of Liberty Reserve. Bitcoin is facing challenges that money other organizations that deal with money are facing. Regulators should be aware that over regulating of the financial institution is not a good idea. If for instance Bitcoin is banned there are many legitimate businesses that will be affected. Since Bitcoin has the same characteristics as the electronic money transfer. This means that there is a need for careful scrutiny of the work. One of the key question that need to be paused if private money is legal or not. There has been monopoly when it comes to legal tender by the federal government. Bitcoin is not regulated or licensed by the government. According to the constitution of the USA it is forbidden for the state from coining the money but private issuance is not forbidden. This means that Bitcoin are legal and they can be issued out in the local economies. There are several alternatives to currencies that have been designed in the process of improving the local economies.

There is only restriction on the type of currencies that private parties can issue. The currency should not resemble the US money. There is no confusion between the US dollar and the Bitcoin hence they do not resemble. There is another aspect of the law and regulation that needs to be examined. This is about money transaction laws. It states that if a business is about transfer of money from one person to another then it must have a license in order to operate. The Bank Secrecy Act is a regulation that needs to be implemented for Bitcoin. According to USA PTRATRIOT Act is it a crime to operate business that deals with money without a license. The need to license the money transaction businesses by the organization is to ensure that clients are protected. It becomes risky if the person who is supposed to forward the money does not do that. Bank Secrecy Act was enacted to ensure that money laundering or funding terrorist activities does not occur. There is a regulation that requires all money transmitters to register with the financial regulation body. This ensures that anti-money laundering programs

are implemented.

However, we cannot say that Bitcoin is a money transmitter but a network of peer-to-peer. It is not possible to put the players in the Bitcoin system into the category of money transmitters. We can only say that Bitcoin is an exchanger where Bitcoin are exchanged for currency and currency for the Bitcoin. This means that Bitcoin should obtain a license as an exchanger according to FinCEN'S regulations.

It is possible to categorize bitcoins as either commodities or currency. It has been defined as synthetic-commodity money. This means that Commodity Futures Trading Commission (CFTC) had a regulatory mandate of bitcoins. CFTC have expressed interest in regulating bitcoins. However, the key question is under what category will bitcoins fall? Will it be commodity futures or foreign exchange? Electronic Fund Tranfer Act (EFTA) is another possible law that can be used to regulate bitcoins. This law is aimed at ensuring that there is responsibility and accountability to the consumer by the financial institution. In this law just like other financial laws, there is no a provision that deals with decentralized money. This regulation is about financial institution. This means that EFTA will not be considered for regulation bitcoins. There is another regulation from the Consumer Financial Protection Bureau (CFPB). This law wants transparency by making it mandatory for the exchangers to inform the consumers about the exchange

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rate and the transactions fee. There is also another issue allowing the consumer to reverse the transaction within 30 minutes. However, transactions in Bitcoin system are irreversible.

After the evaluation of several regulations Bitcoins does not suite or fit into the currency regulations. Bitcoins is a very powerful tool that users on a network are becoming associated with daily. It is a technology that holds great benefits on the market. Just like any other technology designed for a common good. There are those who exploit the system to commit crimes and fraudulent activities over the internet. There is a need to ensure that the gains and potential benefits of Bitcoin system should be closely monitored by yhr authority. This means they should be able to come up with policies that ensure consumers are protected but at the same time access the system. According to me, Bitcoin system should not be restricted nor banned by the regulators. This is virtual money that many illicit entities are using to advance their activities. The authority should only put in place many regulations to ensure that such people are dealt with according to the law. There is a need to ensure that the gains and potential benefits of Bitcoin system should be closely monitored by the authority. This means they should be able to come up with policies that ensure consumers are protected but at the

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