International Research Journal of Management and Commerce
ISSN: (2348-9766)
Impact Factor 5.564 Volume 4, Issue 12, December 2017
Website- www.aarf.asia, **Email** : editor@aarf.asia , editoraarf@gmail.com

Bitcoins – A new age currency-Virtual or real - A conceptual study

Dr R Parvathi
Principal, VET First Grade College,
Bangalore

B Rammya
Asst.Prof,VET First Grade College
Bangalore

Abstract:

Bitcoins is an innovative payment network which is cryptocurrency and first digitalised currency. There is no central authority or bank to regulate it. This concept is of recent origin introduced in the year 2008. As of today, nearly half of the targeted coins i.e. 21billion coins. This study is a secondary data based study to understand the concept of the new terminologies in bitcoins. The researcher has made a sincere effort to understand the meaning, mining process, security aspects, regulation mechanism, benefits and problems associated with bitcoins. The data has been compiled by collecting information from internet, newspapers etc. It can be concluded that the phenomenon is quite new and lacks regulatory measures and also that it is declared not legal in India and that the regulatory authorities - RBI, SEBI and Government of India are prepare a framework for safeguarding the interest of gullible and vulnerable investors. As of now it is not a legal currency in India.

Key words: Bitcoins, mining, regulation, benefits and problems

Introduction:

The word bitcoin first occurred and was defined in the white paper that was published on 31 October 2008. It is a compound of the words bit and coin. Bitcoin is a new kind of money that was created in the year 2009. It is an innovative payment network which is cryptocurrency and first digitalised currency. There is no central authority or bank. It is abbreviated as BTC or XBT. It is more like a commodity that is being purchased or invested or traded in unorganised markets. Bitcoins are electronic currency, otherwise known as 'cryptocurrency'. Bitcoins are a form of digital public money that is created by painstaking mathematical computations and policed by millions of computer users called 'miners'. There are no physical bitcoins, only balances kept on a public ledger in the cloud, that – along with all Bitcoin transactions. Bitcoins are electricity converted into long strings of code that have money value.

Bitcoins are completely virtual coins designed to be 'self-contained' for their value, with no need for banks to move and store the money. The current market capitalisation of bitcoins as of Dec 2017 is around USD 20000 crores.

Review of literature:

David Yermack (2014)suggest that no effective way exists to hedge bitcoin against the value of other currencies, and the absence of any swap, forward, or other derivative markets for 17 bitcoin exacerbates this problem. Bitcoin transactions also are risky due to the absence of basic consumer protection, such as the provision of refunds that result from disputes between merchants and customers. While local laws may provide ground rules for resolving such disputes, because a government has no legal way to foreclose and take possession of bitcoins, it ultimately has little ability to step in and enforce its laws.

Satoshi Nakamoto has proposed a system for electronic transactions without relying on trust. He started with the usual framework of coins made from digital signatures, which provides strong control of ownership, but is incomplete without a way to prevent double-spending. To solve this, he proposed a peer-to-peer network using proof-of-work to record a public history of transactions that quickly becomes computationally impractical for an attacker to change if honest nodes control a majority of CPU power.

Need for the study:

Since the concept is new and emerging, the researcher felt the necessity to have basic knowledge about the bitcoins and pass the benefits even to the academic community at large. Also it is most talked about concept of payment and investment opportunity for few aggressive investors.

Scope:

The scope of this paper is to understand the nuances of bitcoins which is of recent origin. Effort has been made by the researchers to look into the technicalities of bitcoins.

Objective of the study:

1. To understand and present the concept of bitcoins.
2. To understand the mechanism of working of bitcoins
3. To evaluate and analyse the utility and profitability of investing in bitcoins.

Methodology:

This paper is atheoretical paper and the researchers want to understand and present the concept of bitcoins, procedure for securing it, its utility and its profitability. The data has been collected using secondary source from articles, newspaper, websites like wikipedia, investopedia etc.

Stock of Bitcoins: There are more than two billion dollars' worth of bitcoins in existence. Bitcoins will stop being created when the total number reaches 21 billion coins, which will be sometime around the year 2040. As of 2017, more than half of those bitcoins had been created.

Regulation:

Bitcoin currency is completely unregulated and completely decentralized. There is no national bank or national mint, and there is no depositor insurance coverage. The currency itself is self-contained and un-collateral, meaning that there is no precious metal behind the bitcoins; the value of each bitcoin resides within each bitcoin itself.

Uses:

The following are the places where the bitcoins can be utilised.

- It can be exchanged for other currencies.

- It can be exchanged for Products and services.
- Can be used in hotels and bookings.
- Can also be used as the mode of payment.
- It can also be held as investment.

Process:

- Download the bitcoin wallet.
- Create an account.
- Mining of bitcoins (through solving math problems).
- Buying bitcoins between individual and exchange.
- Then can be used as medium of exchange.

Created by the process of mining, Bitcoins are traded from one personal 'wallet' to another.A wallet is a small personal database that can be stored on computer drive, on smartphone, on tablet, or somewhere in the cloud.

Costs of Bitcoins

There are very small fees to use bitcoins. However, there are no ongoing banking fees with bitcoin and other cryptocurrency because there are no banks involved. The owners of some server nodes will charge one-time transaction fees of a few cents every time money is sent, and online exchanges will similarly charge when bitcoins are cashed in for dollars or euros. Additionally, most mining pools will either charge a small one percent support fee or ask for a small donation from the people who join their pools. While there are nominal costs to use Bitcoin, the transaction fees and mining pool donations are much cheaper than conventional banking or wire transfer fees.

Bitcoin Production Facts

Bitcoins can be 'minted' by anyone in the general public who has a strong computer. Bitcoins are made through a very interesting self-limiting system called cryptocurrency mining and the people who mine these coins are called miners.

It is self-limiting because only 21 million total bitcoins will ever be allowed to exist, with approximately 11 million of those Bitcoins already mined and in current circulation.Bitcoin mining involves commanding home computer to work around the clock to solve 'proof-of-work' problems (computationally-intensive math problems). Each bitcoin math problem has a set of possible 64-digit solutions. For a single personal computer mining bitcoins, there is an earning of 50 cents to 75 cents USD per day net of electricity costs.For a very large-scale miner who runs 36 powerful computers simultaneously, that person can earn up to $500 USD per day, after costs.

It is not actually suitable for a small-scale miner with a single consumer-grade computer, as it is likely that people may spend more in electricity that they will earn mining bitcoins. Bitcoin miningis only profitable if run on multiple computers, and join a group of miners to combine the hardware power. This very prohibitive hardware requirement is one of the biggest security measures that deters people from trying to manipulate the Bitcoin system.

Bitcoin Security

They are as secure as possessing physical precious metal. Just like holding a bag of gold coins, a person who takes reasonable precautions will be safe from having their personal cache stolen by hackers. The offline method is more hacker-resistant and absolutely recommended for anyone who owns more than 1 or 2 bitcoins.

More than hacker intrusion, the real loss risk with bitcoins revolves around not backing up the wallet with a failsafe copy. There is an important.dat file that is updated every time the bitcoin is received or sent, so this .dat file should be copied and stored as a duplicate backup every day bitcoin transactions are done.

Findings:

The researchers through the secondary data found that there is a lot of controversy around bitcoins which include the following:

1) **Its difficult to understand and requires sound knowledge of computers and computer terminologies.**

2) **Bitcoins are not created by any central bank, nor regulated by any government.**
3) There is a possibility of fraudulent activities due to lack of any regulators.
4) There is possibility of security threat and also huge financial risks.
5) They completely bypass banks as it is transferred through peer to peer network between individuals.
6) They are irreversible and do not carry the benefit of being insured which is available in conventional payments.
7) Since it is cryptocurrency, there is a possibility of data being hacked.
8) Also there is apossibility of exploitation of the vulnerable investing community due to ever surging rise in prices

Bitcoin-Indian and World Scenario:

The bitcoin price in India has crossed Rs 11 lakhs. The monetary authority in India has earlier cautioned the users about the virtual currency. The IT authorities have conducted surveys on brokers of bitcoins across the country to find the tax evasion if any. The RBI, SEBI and government of India are planning to prepare a framework for safeguarding the interest of gullible and vulnerable investors.

China has also clamped down the bitcoin operations and asked its two major platforms namely BTCC and OKCoin, to stop all trading operations. Bitcoin hit another all-time peak on 12th December 2017, two days after the launch of the first-ever bitcoin futures on a US exchange and ahead of the start of another futures contract looking forward, as investors grew optimistic that the $20,000-mark is within reach. Extraordinary surge in Bitcoin prices has caught the fancy of the public.

Conclusion:

It can be concluded that Bitcoins are a new phenomenon and requires more understanding of the concept and requires knowledge of the computers. Though it has many advantages, country like ours need more time to understand the flow of the phenomenon as the public find their comfort in the areas they are aware off. Business houses are accepting bitcoins which includes Microsoft and tiger direct and many airlines are using it and many professionals are also providing services in exchange for Bitcoin.Bitcoin, a virtual currency, is not regulated in India and its circulation has been a cause of concern among central bankers the world over. As of now Bitcoins are not recognised as legal currency in India and that a strict framework is required for its regulation and control.

Limitation:

The study is entirely based on secondary data and hence the data suffers from all the limitations of secondary data like lack of control over the quality of data, inappropriateness of data, reliability of information etc.

Scope for Further research:

There is a scope to conduct primary research on bitcoins to find out the awareness level of respondents and its utility and profitability among them and also the legality of the same.

References

- David Yermack (2014), Is Bitcoin a Real Currency? An economic appraisal, The National bureau of economic research – a working paper
- Nakamoto, Satoshi, 2008, "Bitcoin: A Peer-to-Peer Electronic Cash System," unpublished manuscript, retrieved at http://pdos.csail.mit.edu/6.824/papers/bitcoin.pdf
- blockchain.info: Bitcoin market capitalization. http://blockchain.info/charts/market-cap. Accessed December 2017
- http://www.independent.co.uk/topic/bitcoin accessed on 14/12/2017
- economictimes.indiatimes.com accessed on 14/12/17
- economictimes.indiatimes.com/news/economy/policy/bitcoin-triggers-ponzi-fear-govt-in-a-huddle-plans-crackdown/articleshow/62064820.cms accessed on 14/12/2017
- Wikipedia.
- Google.
- Investopedia.