IOSR Journal of Economics and Finance (IOSR-JEF)
e- ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 9, Issue 2 Ver.1 (Mar-Apr .2018), PP 38-42
www.iosrjournals.org

Cryptocurrency: Its Risks And Gains And The Way Ahead

[1]Krishna Kumar Thakur, [2]Dr. G. G. Banik
[1]Research Scholar, Department of Business Administration, Assam Don Bosco University,
[2]Department of Accountancy, Gauhati Commerce College, (Gauhati Univeristy), Guwahati, Aassam.
Corresponding Author: Krishna Kumar Thakur

Abstract: *In present scenario, our life has become mostly digital or in other word we are living into a virtual world. At every stage of life, we need support of technology in either way. Almost all our transactions particularly related to the financial part has become electronic. Amongst all, a currency is in trend i.e. Crypto currency is not a new concept but it's into different form. It is available in the market from long in different form of digital currency but a little knowledge is there about its existence and function.This paper aims to study in-depth overview of cryptocurrencies.*

Keyword: *Crypto currency, Digital currency, World, India, Present, Future*

Date of Submission: 08-03-2018 Date of acceptance: 24-03-2018

I. Introduction

Cryptocurrency has become a global term; still not understood by most of the people, banks, governments and many companies. Very few people outside of the crypto-communities knew what they were and many thought it was just another fad that was bound to fail in a few years or so. The value of one bitcoin was just a few cents, just a few years back; hence it wasn't worth a lot. For this reason, it was ignored by the masses. In present scenario, Crypto currencies have become a common word but a very limited knowledge about it is available across the world. Even if someone is having knowledge about Crypto currencies, it not clear or in a blur state.

To make it clear in terms of layman's language, Crypto currencies can be explained as follows:

"If you have bitcoins, one needs not to physically purchase goods by handing notes or tokens to the seller. Bitcoins are used for electronic purchases and transfers. One can use bitcoins to pay to friends, merchants, etc. Every single purchase is immediately logged digitally (on computers) on a transaction log that tracks the time of purchase and who owns how many bitcoins."-NDTV profit.

In literal term, cryptocurrency can be defined as- "A cryptocurrency is a digital or virtual currency that uses cryptography for security purpose. A crypto currency is difficult to counterfeit because of its security feature. A defining feature of a cryptocurrency, and arguably its most endearing allure, is its organic nature; it is not issued by any central authority, rendering it theoretically immune to government interference or manipulation."- Investopedia

If all the myths around crypto currencies are removed and brought down to a simple definition, Crypto currencies can just be defined as limited entries in a database where change is not possible in the entries without fulfilling certain conditions.

Again to break down into simpler term and if it is compared to general banking, it is similar to entries done in a bank account after depositing notes or coins against a particular bank account in a particular bank. Thus, in a very simpler language, Bank notes and coins are not different than just a mere limited entry in a public physical data base that can only be changed, if the depositor matches the conditions and again that entry can be converted into notes and coins. Thus, Money is all about a verified entry in some kind of database of accounts, balances, and transactions.

Objective of the Study:

This study basically aims at:

a. To gain a basic knowledge about the Crypto currencies
b. To study the advantages and Disadvantages of Crypto currencies
c. To study the present scenario of Crypto currencies worldwide
d. To Study the future scenario of Crypto currencies

Research Methodology:
This study is based on secondary data obtained from different websites and news papers.

Evolution of crypto currency:

There are no literal or vast records available on the history of cryptocurrency. The history on cryptocurrency is really short. Before the introduction of cryptocurrency, Digital currencies were there. But, both are not the same. The digital currencies are centralised but cryptocurrency are not. Cryptocurrency were never intended to be invented as they are known as today. This actually all started with the now infamous bitcoin and a man named Satoshi Nakamoto. Nakamoto's goal in the beginning was to create nothing more than an electronic peer to peer cash system. People had for a long time been trying to create some kind of online digital cash system, but had always failed due to the issues with centralization. Bitcoin was invented by Satoshi Nakamoto in the year 2008, the very first decentralized form of digital cash that had no central governing or controlling body. Bitcoin was invented by satoshi Nakamoto back in the year 2008 and the value of bitcoin was just a little over cent. However, the value quickly grew and in the late 2009, it had already reached $27 for a single bitcoin. Now in 2017, a single bitcoin has a value of over $7500.

Since Nakamoto revealed his amazing innovation there have been dozens of other decentralized cryptocurrencies released by several parties. Some of the most popular and highly valued cryptocurrencies at this time include Bitcoin, Ethereum, Bitcoin Cash, Ripple, Litecoin, Dash, NEO, NEM, Monero, and many others. It is certainly an interesting and eventful history. Now that cryptocurrencies like Bitcoin have proven their value, their ability to operate in the real world, and have shown that they possess real purchasing power, more and more banks, investment firms, and trading organizations, as well as retailers, have begun to accept them as legit forms of currency and payment.

In the world of Cryptocurrency, Bitcoin is not the world's first Cryptocurrency, but it is the most successful. Many have come before it but all have failed. Virtual currency had an inherent problem and it was easy to double spend. With the increasing popularity of Bitcoin and the idea of decentralized and encrypted currencies catch on, the first alternative cryptocurrencies appear. These are sometimes known as altcoin and generally try to improve on the original Bitcoin design by offering greater speed, anonymity or some other advantage. Among the first to emerge were Namecoin and Litecoin. Currently there are over 1,000 cryptocurrencies in circulation with new ones frequently appearing.

Scams and theft

A currency (cryptocurrency) which has been designed keeping in mind the anonymity and lack of control in mind, it has become an attractive and lucrative target for the criminals. Mt. Gox, world's largest bitcoin exchange went offline in January, 2014 and it was never seen again by the owners of 85000 bitcoins. It is still being under investigation to know the reason, exactly what happened. Apart from the actual story, it was a loss of $450 million and at present the value of those lost coins are $4.4 billion (approx). Digicash was electronic money and it was founded by David Chaum in 1989. Due to a number of cryptographic protocols, Digicash transactions were unique in nature. In 1998 DigiCash declared, themselves bankrupt and subsequently sold its assets to ecash technologies which was another digital currency company and later on it was also acquired by Infospace in 2002. As the digicash was launched, it became the most researched area in the financial market worldwide and gave birth to several imitators of Digicash such as Russia's Webmoney and later on it sprang up in other parts of the world.

Pre-Cryptocurrency era:

As Digicash was making its way, new competitors came into scenario and one of them was e-gold. Digicash was founded by oncologist Douglas Jackson and attorney barry Downey in the year 1996 in the US. E-gold was a Florida based company. Their customers or users sent their old jewellery, trinkets and coins to e-gold's warehouse and in return they received digital e-gold. It was the unit of currency denominated in ounces of gold. E-gold were used were used for trading their holdings with other users, cash out for physical gold or exchange their e-gold for US dollars. The early success of e-gold, itself paved path for its demise from the market. E-gold's store of value and large user base made it a soft target of financial malware and phishing scams by increasingly organised criminals. 2001 was the year, when first phishing attack was made against the members of e-gold.

The attack technique was refined with attacks against the digital gold systems like e-gold and later used to attack other financial institutions starting in 2003. Also, by the mid of 2000s, much of e-gold's transaction activity were under scanner of authority on their legality. Its laid-back legal compliance policies made it attractive to money laundering operations and small-scale Ponzi schemes. The platform faced growing legal pressure during the mid and late 2000s and it finally it was shut down in 2009.

How Cryptocurrency works:

When a transaction is being made in the world of cryptocurrency, the most critical thing in this process is confirmation of the transaction. Cryptocurrency transaction is all about confirmation. The transaction can be

forged till confirmation is not received or it's in the pending status. Whenever a transaction is initiated, its information is received by the whole network. As soon as the confirmation of a particular transaction is being received, it gets set in stone. Once transaction is being made and confirmation received of that transaction, it can't be reversed at any cost and it becomes non forgeable. It becomes a part of an irretrievable record of historical transaction of the so called block chain. Here, in the world of cryptocurrency, miners are of vital aspect and importance, their job is all about to confirm the transactions. In the network of cryptocurrency, transactions are received by miners; to confirm legality of the transaction and to spread them in the network. Every node has to add to its database, as soon as the transaction is confirmed by the miner.
The work process in Cryptocurrency is shown below:

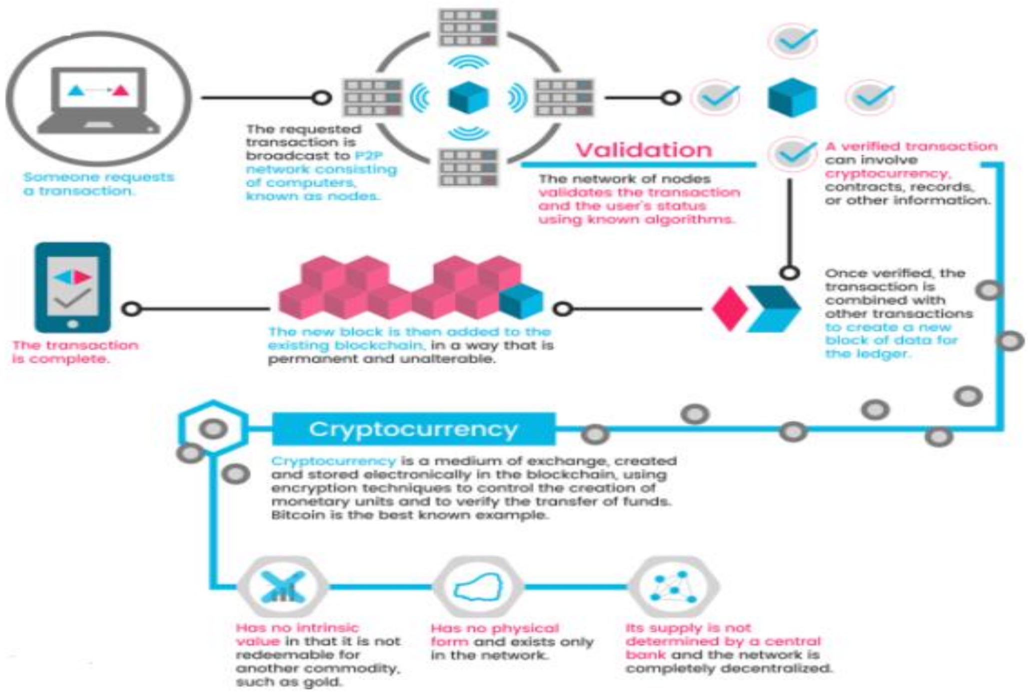

Image source: Blockgeeks

Status of Cryptocurrency worldwide:

Country to country the legal status of crypto currency varies and still there is no defined rule or the rules are changing in different countries. Whereas most of the country has not given legal status to the usage of Cryptocurrency. The status of cryptocurrency as money or commodity varies, with different regulatory implications. While some of the countries has explicitly allowed its uses and trade under certain circumstances whereas others have banned it or restricted its uses. Different status has been given by different government agencies, departments and courts have classified this currency differently. There are certain countries which have given legal status to Cryptocurrency and are as below:

The United States

A positive approach has been taken by United States towards the acceptance and uses of bitcoin. In the mean time several government departments of U.S., is working towards preventing or reducing the use of bitcoin for any illegal transactions. Dish network, has already started accepting payments in bitcoin. The bitcoin has also made its way to U.S. derivatives markets, which is a prominent proof of its increasing legitimacy.

Canada

A bitcoin friendly environment preavails in Canada. Whereas they are having a strong vigil on ensuring the cryptocurrency is not used for money laundering. Canada Revenue Agency (CRA) has given the status of commodity to bitcoin. The income generated is termed as business income and transactions are viewed as barter transactions. The taxation also depends whether the individual has a buying-selling business or is only concerned with investing.

Australia

The Australian Taxation Office (ATO) considers bitcoin transactions barter arrangement subject to appropriate taxes depending upon the use and user. Australia allows entities to trade, mine, or buy bitcoin.

The European Union

European Union (EU) has not issued any official decision on legality, acceptance. Individual EU countries have developed their own bitcoin stances, as there is not any clear guidance about cryptocurrency. Bitcoin has been allowed by some of the countries under EU,while others are either undecided or issuing warnings.

Germany

Bitcoin is a unit of account and can be used for the purpose of tax and trading in the country, meaning that purchases made with it must pay VAT as with Euro transactions. It is not classified as a foreign currency or e–money but stands as private money which can be used in multilateral clearing circles.

France

The operation of virtual currency professionals, exchanges, and taxation is legal in France.

Countries That Say No to Bitcoin

Vietnam

Since the inception of Cryptocurrency (bitcoin), the government of Vietnam and its state bank have maintained that bitcoin is not a legal tender or legitimate method of making payment. The use of bitcoin, Vietnam made it illegal for both financial institutions and citizens to deal in bitcoin. It links the cryptocurrency to criminal activities such as money laundering.

Kyrgyzstan

Using bitcoin and altcoin as a payment form is illegal in Kyrgyzstan.

Ecuador

Bitcoin and other cryptocurrencies were banned in Ecuador by a majority vote in the national assembly. However, the nation has plans to create its own cryptocurrency in the future.

Russia

In earlier days, in Russia, the status of cryptocurrency was not clear or it can be said that,the legality of bitcoin in Russia was disputed. As of now, Ministry of Finance, Government of Russia is hoping to pass a law to legalize bitcoin by the end of March, 2018.

China

Trading of bitcoin by individuals in china is legal. There are no clear rules or announcement from Peoples bank of China (PBoC), ministry of Industry of any other regulatory bodies on the issue of legality of cryptocurrency.

South Africa

In South Africa, bitcoin has no legal status or regulatory framework.

Japan

In Japan, bitcoin and digital currencies has been legalised since April, 2017

Status of cryptocurrency in India:

In the recent 2018-2019 union budget, bitcoin has been legalised in India. It has also been emphasised by the finance minister, that there will strong vigil on any illegitimate activity by using crypto-asset.

Benefits and Drawbacks of Cryptocurrencies:

Some of the benefits and drawbacks of cryptocurrencies are listed as below:

Benefits:

a. It's easier to transfer funds between two parties in a transaction.
b. The processing fee is minimal, which allows users to avoid the high fees charged by most of the banks and other financial institutions.
c. The settlement is immediate in the transaction of cryptocurrencies.
d. Push mechanism is used during the process of cryptocurrency transaction, that allows the cryptocurrency holder to send exactly, what he or she wants to send to the merchant or recipient without further information.
e. The transactions are most secured transactions, as it uses NSA created cryptography. It is most impossible task for anyone other the owner of the wallet to make any payment from the wallet, unless they were hacked.
f. There is no involvement of any third party.
g. The transactions are decentralised which means the network operates on a user to user (or peer to peer) basis.

Drawbacks:

a. Cryptocurrencies are virtual and do not have a central repository, a digital cryptocurrency balance can be wiped out by a computer crash, if back up copy of the holdings does not exists.
b. The prices are based on supply and demand; the rate of exchange of a cryptocurrency with another currency can fluctuate widely.
c. Cryptocurrency are not immune to the threat of hacking.
d. Cryptocurrencies are very difficult to understand. People, who don't have clear knowledge about cryptocurrency, end up investing and lose money to something they didn't learn about.
e. Acceptance is a major issue worldwide. Some of the country of territory accepts where as some of not. Even there are several online stores, who do not accept Cryptocurrency.
f. Once the payment is made, reversal of the payment is not possible.

Future of Cryptocurrencies:

"Bitcoin & other cryptocurrency have as much of a future as the Internet itself."- Christine Lagarde, MD, IMF

The market of cryptocurrencies is fast and wild. Cryptocurrencies's philosophy is to break all borders and barriers, atleast associated with finance and trade. Since the inception of cryptocurrency, thousand of coins have been launched and are competing with each other even though it is in early stages of blockchain development. Every cryptocurrency which gets launched in the market comes with a unique promise that may turn the world around. In future there may be a single leader while others are rendered superseded, or there may be only 3-4 coins which will define the entire payments, lending, trading and banking infrastructures globally. Within the next few years, it is expected that cryptocurrencies will be popular enough among mainstream to adopt blockchain-based apps. It will be a new world, in a new light, in a new era.

II. Conclusion

Cryptocurrency is still, into its nascent stage but it is gaining popularity on daily basis. Most of the countries still don't have any clear regulation or system which can check, curb, regulate or ban the use of cryptocurrency. Decentralized and anonymity are the two main characteristics of cryptocurrency, which has become a challenge for the governments to curb its uses use in criminal activity or transactions and how to allow a legal status to it. Most countries are still analyzing ways to properly regulate the cryptocurrency. Cryptocurrency is in a grey area as the technological leap has left the lawmakers far behind. However, cryptocurrencies have a long way to go before they can replace credit cards and traditional currencies in use, which is being used as a tool for commerce across the globe. In the world of Cryptocurrency for a savvy investor- Patience, decisiveness and scepticism are the most important tools in their toolkit.

References

[1] https://blockgeeks.com/guides/what-is-cryptocurrency/
[2] https://medium.com/koinex-crunch/a-brief-history-of-cryptocurrency-889fed168555
[3] https://www.investopedia.com/terms/c/cryptocurrency.asp
[4] https://en.wikipedia.org/wiki/History_of_bitcoin
[5] https://blockgeeks.com/guides/what-is-cryptocurrency/
[6] https://www.moneycrashers.com/cryptocurrency-history-bitcoin-alternatives/
[7] http://empirica.io/blog/different-types-cryptocurrency/
[8] https://blockgeeks.com/guides/what-is-cryptocurrency/
[9] https://www.quora.com/Is-cryptocurrency-legal-in-India-What-are-the-issues
[10] https://www.ndtv.com/business/bitcoins-what-rbi-arun-jaitley-other-authorities-said-about-digital-currencies-in-india-1788602
[11] http://www.livemint.com/Money/uQIHZ7521LBgHClnuP66YM/Bitcoin-regulations-in-India.html
[12] https://inc42.com/buzz/arun-jaitley-bitcoin-cryptocurrency/
[13] https://www.investopesdia.com/articles/forex/041515/countries-where-bitcoin-legal-illegal.asp
[14] https://en.wikipedia.org/wiki/Legality_of_bitcoin_by_country_or_territory
[15] https://blogs.thomsonreuters.com/answerson/world-cryptocurrencies-country/
[16] http://profit.ndtv.com/news/your-money/article-bitcoin-explained-in-laymans-terms-376029
[17] https://successresources.com/cryptocurrency-history/
[18] https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/2/#56719acf533c
[19] https://en.wikipedia.org/wiki/E-gold
[20] https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/3/#26f506b261c7
[21] https://coinpupil.com/altcoins/advantages-disadvantages-of-cryptocurrency/
[22] https://www.huffingtonpost.com/ameer-rosic-/7-incredible-benefits-of-_1_b_13160110.html

Krishna Kumar Thakur "Cryptocurrency: Its Risks And Gains And The Way Ahead"IOSR Journal of Economics and Finance (IOSR-JEF) , vol. 9, no. 2, 2018, pp. 38-42.