# A Comparative Study of Bitcoin and Other Cryptocurrencies

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Abstract: The world of digital currencies is becoming popular day by day. A cryptocurrency is a digital or virtual currency that uses cryptography for security. It is a decentralized currency as it operates without a single administrator; the transactions take place directly between the users and intermediaries. Bitcoin is a distinct mode of exchange when compared to usual banks. The prices of bitcoins are volatile i.e. they can unpredictably increase or decrease over a period of time. Bitcoins are considered high-risk assets whose transactions can only be refunded and not reversed. The bitcoin came into existence in January 2009, with Satoshi Nakamoto mining the first block of bitcoins ever. Since then, a number of supporters engaged in transactions and received bitcoins. Countries around the world started accepting bitcoin as a legitimate way of currency. However, India hasn't legalized the use of Bitcoins due to a number of reasons. The objective of this paper is the comparative study between bitcoin and other cryptocurrencies.

Keywords: Bitcoin, Cryptocurrency, Digital

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## I. Introduction About Bitcoin

A cryptographic money is hard to fake due to this security include. A characterizing highlight of a digital currency, and ostensibly its most charming appeal, is its natural nature; it isn't issued by any focal specialist, rendering it hypothetically invulnerable to government obstruction or control.

Decentralized digital money is delivered by the whole cryptographic money framework all in all, at a rate which is characterized when the framework is made and which is freely known. In brought together keeping money and financial frameworks, for example, the Federal Reserve System, corporate sheets or governments control the supply of cash by printing units of fiat cash or requesting augmentations to computerized managing an account records. If there should be an occurrence of decentralized digital money, organizations or governments can't deliver new units, and have not so far gave sponsorship to different firms, banks or corporate substances which hold resource esteem estimated in it. The fundamental specialized framework whereupon decentralized digital forms of money are based was made by the gathering or individual known as Satoshi Nakamoto.

Bitcoin is an advanced money made in 2009. It takes after the thoughts set out in a white paper by the baffling Satoshi Nakamoto, whose genuine personality presently can't seem to be confirmed. Bitcoin offers the guarantee of lower exchange charges than customary online installment systems and is worked by a decentralized expert, not at all like official monetary forms. There are no physical bitcoins, just adjusts kept on an open record in the cloud that – alongside all Bitcoin exchanges – is checked by a huge measure of processing power. Bitcoins are not issued or upheld by any banks or governments, nor are individual bitcoins significant as a ware. Notwithstanding its not being lawful delicate, Bitcoin graphs high on prominence, and has set off the dispatch of other virtual monetary standards all things considered alluded to as Altcoins.

## **II. Review Of Literature**

**ChinmayA Vyas** The silence of the RBI on the regulatory status of bitcoins may prove to be damaging. An industry has grown around bitcoins in India- traders, exchanges and merchants who accept payments in bitcoins. Bitcoins have already gained wide acceptance around the world- hence banning them would not be an option in India. Instead, this industry would need to be regulated. The sooner this is done, the better.

**Peter D. DeVries** An individual who desires to purchase a large amount of bitcoin would not be unable to without affecting the current price (Kasiyanto, 2016). This is exponentially greater for other cryptocurrencies, who have a much smaller capacity. Cryptocurrencies do not seem to be a mature form of currency in its current market and state. Further growth in capacity and adoption would theoretically alleviate this problem.

## III. Objective Of The Study

• To analyse the comparative study between bitcoin and other cryptocurrencies.

# IV. Most Important Cryptocurrencies Other Than Bitcoin

Bitcoin has not quite recently been an innovator, introducing an influx of digital forms of money based on decentralized shared system, it's turned into the true standard for cryptographic forms of money. The monetary standards enlivened by Bitcoin are all things considered called altcoins and have attempted to introduce themselves as altered or enhanced renditions of Bitcoin. While a portion of these monetary forms are less demanding to mine than Bitcoin is, there are tradeoffs, including more serious hazard expedited by lesser liquidity, acknowledgment and esteem maintenance. Since Bitcoin costs are taking off new highs, we take a gander at six digital currencies, picked from more than 700 (in no particular request) that could be justified regardless of your while.

# 1. Litecoin (LTC)

Litecoin, propelled in the year 2011, was among the underlying digital currencies following bitcoin and was frequently alluded to as 'silver to Bitcoin's gold.' It was made by Charlie Lee, a MIT graduate and previous Google design. Litecoin depends on an open source worldwide installment organize that isn't controlled by any focal specialist and utilizations "scrypt" as a proof of work, which can be decoded with the assistance of CPUs of shopper review. In spite of the fact that Litecoin resembles Bitcoin from multiple points of view, it has a quicker square age rate and henceforth offers a speedier exchange affirmation. Other than engineers, there are a developing number of shippers who acknowledge Litecoin.

#### 2. Ethereum (ETH)

Propelled in 2015, Ethereum is a decentralized programming stage that empowers Smart Contracts and Distributed Applications (ĐApps) to be assembled and kept running with no downtime, misrepresentation, control or impedance from an outsider. During2014, Ethereum had propelled a pre-deal for ether which had gotten a staggering reaction. The applications on Ethereum are kept running on its stage particular cryptographic token, ether. Ether resembles a vehicle for moving around on the Ethereum stage, and is looked for by for the most part designers hoping to create and run applications inside Ethereum. As indicated by Ethereum, it can be utilized to "classify, decentralize, secure and exchange pretty much anything." Following the assault on the DAO in 2016, Ethereum was part into Ethereum (ETH) and Ethereum Classic (ETC). Ethereum (ETH) has a market capitalization of \$41.4 billion, second after Bitcoin among all cryptographic forms of money.

# 3. Zcash (ZEC)

Zcash, a decentralized and open-source digital currency propelled in the last piece of 2016, looks encouraging. "On the off chance that Bitcoin resembles http for cash, Zcash is https," is the means by which Zcash characterizes itself. Zcash offers protection and specific straightforwardness of exchanges. Subsequently, similar to https, Zcash cases to give additional security or protection where all exchanges are recorded and distributed on a blockchain, however points of interest, for example, the sender, beneficiary, and sum stay private. Zcash offers its clients the decision of 'protected' exchanges, which consider substance to be scrambled utilizing progressed cryptographic system or zero-information evidence development called a zk-SNARK created by its group.

#### 4. Dash

Dash (initially known as Darkcoin) is a more shrouded form of Bitcoin. Dash offers greater namelessness as it deals with a decentralized mastercode arrange that makes exchanges untraceably. Propelled in January 2014, Dash encountered an expanding fan following in a limited capacity to focus time. This cryptographic money was made and created by Evan Duffield and can be mined utilizing a CPU or GPU. In March 2015, 'Darkcoin' was rebranded to Dash, which remains for Digital Cash and works under the ticker – DASH. The rebranding didn't change any of its innovative highlights, for example, Darksend, InstantX.

# 5. Ripple (XRP)

Swell is an ongoing worldwide settlement organize that offers moment, certain and ease universal installments. Swell "empowers banks to settle cross-outskirt installments continuously, with end-to-end straightforwardness, and at bring down costs." Released in 2012, Ripple money has a market capitalization of \$1.26 billion. Swell's accord record - its strategy for adaptation - needn't bother with mining, an element that goes astray from bitcoin and altcoins. Since Ripple's structure doesn't require mining, it decreases the utilization of processing power, and limits arrange inertness. Swell trusts that 'disseminating esteem is a great method to boost certain practices' and in this manner right now intends to circulate XRP essentially "through business improvement bargains, impetuses to liquidity suppliers who offer more tightly spreads for installments, and pitching XRP to institutional purchasers inspired by putting resources into XRP."

### 6. Monero (XMR)

Monero is a safe, private and untraceable money. This open source digital currency was propelled in April 2014 and before long spiked incredible enthusiasm among the cryptography network and aficionados. The advancement of this digital money is totally gift based and network driven. Monero has been propelled with a solid spotlight on decentralization and adaptability, and empowers finish protection by utilizing an exceptional procedure called 'ring marks.' With this system, there shows up a gathering of cryptographic marks including no less than one genuine member – yet since they all seem legitimate, the genuine one can't be separated.

## Bitcoin Vs Litecoin, Ethereum, Ripple And Dash

Bitcoin is the most established and most prevalent computerized cash in the market. In any case, there are more than 1000 other computerized monetary standards (known as "altcoins") that can be additionally obtained and held as a speculation. In this guide, we'll think about four of the most mainstream altcoins with bitcoin, so you can get comfortable with other potential advanced cash venture openings.

#### **Bitcoin Vs Litecoin**

Features	Bitcoin	Litecoin
Use	Peer-to-peer payments	Peer-to-peer payments
YTD Performance	1500%	6000%
Total Supply	21,000,000	84,000,000
Public Awareness	High	Low
Community	Very Large	Large
Rank (According to Market Cap)	1	5

#### **Bitcoin Vs Litecoin (Ltc)**

At the point when Litecoin first propelled in 2011, it was said that "if bitcoin is advanced gold, at that point litecoin is computerized silver". For quite a while, that was the situation. Litecoin immediately rose as the second biggest computerized money after bitcoin, as estimated by showcase capitalization. The altcoin even encountered a level of shipper reception in its initial years.

Its notoriety blurred to some degree as the Ethereum task and its local advanced cash, ether, turned into the second biggest computerized money in 2016. In any case, when it was reported in mid 2017 that litecoin would embrace the purported "SegWit" overhaul for its blockchain, which addresses blockchain scaling issues, the cost of litecoin shot up from its 2-year exchanging scope of \$3 to \$5 to achieve another untouched high of over \$366 on December 19, 2017.



(Chart by WorldCoinIndex)

Litecoin has turned into an extremely prominent advanced money since it has every one of the advantages of bitcoin however has quicker exchange times and lower exchange expenses. This is the reason numerous computerized cash specialists trust it can possibly challenge bitcoin as the go-to advanced money without bounds. This conviction is shared by numerous advanced cash speculators, which may clarify why the cost of litecoin has revived by more than 6000 percent year-to-date.

On the off chance that you trust that worldwide selection of litecoin (LTC) will surge since its exchanges are quicker and less expensive than bitcoin, at that point adding litecoin presentation to your portfolio could be the correct move

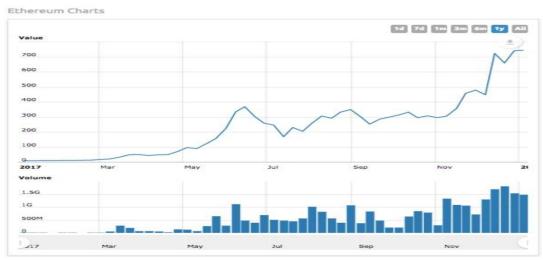
## **Bitcoin Vs Ethereum**

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Features	Bitcoin	Ethereum		
Use	Peer-to-peer payments	Smart Contracts with Embedded Payments		
YTD Performance	1500%	7500%		
Total Supply	21,000,000	No Cap		
Public Awareness	High	High		
Community	Very Large	Very Large		
Rank (According to Market Cap)	1	2		

## Bitcoin Vs Ethereum (Eth)

Ethereum's ether is the second greatest advanced money in the market with a market capitalization of over \$75 billion. Ether is the advanced cash of the Ethereumblockchain, which is an open source blockchain stage that considers the formation of alleged "savvy contracts".

Keen contracts are PC conventions that make computerized contracts which are expected to encourage, check, and authorize legally binding understandings between two gatherings. These agreements can likewise incorporate self-executing installments when certain authoritative assentions are met. The money for these installments is ether.



## (Chart by WorldCoinIndex)

The Ethereumblockchain has accumulated significant enthusiasm from money related establishments and enterprises that trust that the capacity to safely store and exchange information utilizing blockchain innovation joined with self-executing keen contracts will diminish operational expenses and streamline business forms later on. Therefore, Ethereum has developed into the second biggest blockchain and its cash ether has aroused to wind up the second most important computerized money in the market. On the off chance that you

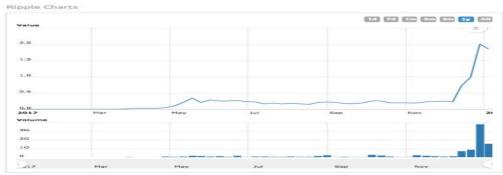
trust that keen contracts will assume a fundamental part in business later on, at that point including Ethereum's computerized money ether (ETH) to your portfolio could be the correct play.

# **Bitcoin Vs Ripple**

Features	Bitcoin	Ripple
Use	Peer-to-peer payments	Interbank Payments
YTD Performance	1500%	30,000%
Total Supply	21,000,000	100,000,000,000
Public Awareness	High	Low
Community	Very Large	Small
Rank (According to Market Cap)	1	4

## Bitcoin Vs Ripple (Xrp)

Ripple is as of now the fourth biggest computerized money with a market capitalization of \$50 billion. It is the computerized cash of the Ripple Interbank Payment Network, which means to give a rapid, minimal effort installment system for budgetary foundations over the globe. As of now, in excess of 50 banks in Europe, Asia, Australia, and the U.S. have actualized the Ripple installment framework, while more than 100 banks have occupied with a preliminary of Ripple's installment arrange in endeavors to execute this inventive new cost-decreasing installment innovation.



## (Chart by WorldCoinIndex)

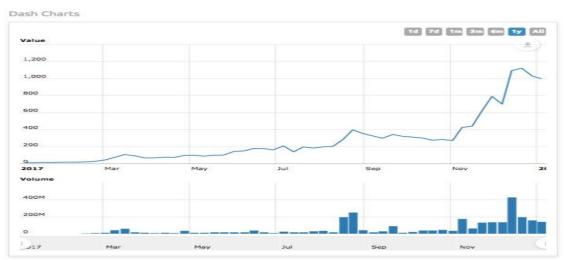
#### Bitcoin Vs Dash

Features	Bitcoin	DASH
Use	Peer-to-peer payments	Anonymous Peer-to-peer payments
YTD Performance	1500%	10,000%
Total Supply	21,000,000	18,900,000
Public Awareness	High	Low
Community	Very Large	Medium
Rank (According to Market Cap)	1	8

# Bitcoin Vs Dash (Dash)

DASH, which remains for computerized money, is as of now the main secrecy driven advanced cash. It has a market capitalization of \$10 billion and is the eighth biggest advanced cash in the market. Broad

communications routinely guarantee that bitcoin is unknown. Notwithstanding, that is really inaccurate, as all exchanges can be openly seen on the bitcoin blockchain and every exchange is connected to a bitcoin wallet address. While bitcoin wallet addresses don't contain individual data of the wallet proprietor, different examination strategies have been made that permit wallet delivers to be connected to IP delivers to deanonymize bitcoin holders and their exchanges.



(Chart by WorldCoinIndex)

Hence, mysterious advanced monetary standards, for example, DASH, have picked up ubiquity as computerized money clients are progressively esteeming security when making budgetary exchanges. DASH not just enables clients to execute secretly, it likewise enables clients to make moment exchanges with bring down exchange charges than bitcoin. These three highlights joined have been the key drivers behind DASH's expansion in notoriety and market esteem.

## V. Conclusion

Each new money needs to confront a difficult task legitimately and in fact. In spite of the fact that the bitcoin is a colossal advance towards decentralized computerized cash however it's anything but a fiat money. Any money on the planet has government or its organizations backing which the bitcoins needs. The estimation of bitcoins is exceptionally unpredictable in nature as it has diminished from \$20000 roughly to \$6000 (The Guardian). The new leader of the Bank for International Settlements, AgustínCarstens, likewise said bitcoin debilitated to undermine open trust in national banks and represented a danger to money related soundness, and he flagged a worldwide clampdown. In India the fund Minister amid his spending discourse on February 01, 2018 has cleared that the digital forms of money are not perceived as legitimate delicate in India. In addition the different government has issued charge notification to the financial specialists of the cryptographic forms of money and has additionally cautioned its kin to know while interests in computerized monetary forms. In this manner the bitcions are not lawful delicate in India.

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