

Decrypting Cryptos



**SIMPL
CRYPTO**
Crypto currencies
simplified

Introduction to crypto currencies

Unlike the name and motive for which they were invented, crypto currencies are currently seen as investment assets and not as a medium of exchange. Crypto currencies have topped \$2.6 tn market value to become one of the top 10 investment assets of the world. This asset class is now too big to be ignored. We have covered the basics of crypto currencies, their need, blockchain technology, types of crypto currencies, and a brief about most popular crypto currencies in this report.

Emerging class of investment asset

There are many convincing reasons to include crypto currencies in investment portfolio. Cryptos are top performing assets; Bitcoin has beaten Nasdaq 100's annualized 10-year return by 20x. Crypto monthly trading values have significantly risen (5x-10x) over CY20 levels indicating rising trade volumes. Adoption of cryptos by investors and VC interest in this space is also increasing. Volatility is declining as the crypto currencies are maturing. Crypto currencies are uncorrelated with other investment assets - Great for diversification.

Industries most impacted by blockchain

Finance industry is leading the blockchain technology adoption. Payments, clearance & settlements, exchanges, lending & borrowing market places, insurance and crowd funding platforms are using blockchain technology. Other industries like healthcare, real estate, supply chain management, transportation, voting, entertainment, retail, education, art and advertising are also getting disrupted by the blockchain technology.

But there are considerable risks

Being nascent technology, there are some considerable risks associated with cryptos. Governments are skeptical about data privacy and environmental issues. Non-regulatory issues also pose risks – valuation challenge, non-standardization, slow transaction speed, cybercrimes, human intervention and 51% attack.

Should you invest in Cryptos?

We would strongly recommend allocating 2-5% of your portfolio in top crypto currencies as per your risk appetite. We would share a list of fundamentally good cryptos in our following reports.

8 November 2021

Sector report

Jinesh Pagaria, CA, CFA-L2
jinesh@simplycrypto.com

Akash Nainani, CA, CFA-L2
akash@simplycrypto.com

Akash Soni
akash.s@simplycrypto.com



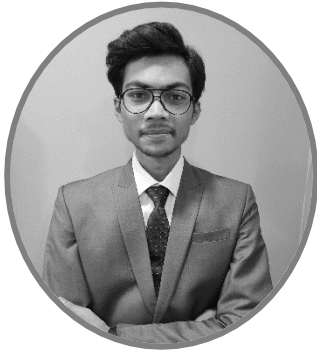
Table of Contents

About SimplCrypto.....	3
1. Introduction to Crypto currency	4
What is a crypto currency?.....	4
What is a blockchain?	4
Why are crypto currencies needed?	4
What are the most popular crypto currencies?	4
What are various types of crypto assets?	4
How big is the cryptocurrency market?	5
2. Emerging class of investment asset.....	7
Top performing asset class.....	7
Rising trading volumes	8
Increasing adoption.....	8
Increasing VC deal activity in the crypto space.....	9
Declining volatility.....	9
Uncorrelated with other assets	10
3. Industries most impacted by the blockchain technology	11
Finance.....	11
Healthcare.....	11
Real Estate.....	11
Supply Chain Management	11
Private Transport and Ride Sharing.....	11
Voting.....	12
Entertainment	12
Retail.....	12
Education.....	12
Art	12
Internet Advertising.....	12
4. Risks associated with crypto currencies.....	13
Regulatory risks	13
Non-regulatory risks	13
5. Appendix.....	14

About SimplCrypto

We, at SimplCrypto, aim to simplify crypto currencies for laymen. There are very few authentic sources from where you could gain information about various crypto currencies in the market. Also, the information available is dispersed. We aim to bring together authentic information at one place which is required before taking investment decisions in crypto currencies.

Firstly, we would like to introduce the team behind SimplCrypto:



Jinesh Pagaria, CA, CFA L-2

Jinesh is an Indian Chartered Accountant and has cleared two levels of CFA. He has worked in equity research profile with CLSA and SBI Cap Securities in the past. Currently, he's working on a recruitment venture HR Lab and crypto currency research venture, SimplCrypto. During his free time, he likes to listen to music and play badminton.

Happy to connect with you on [LinkedIn](#) or [Email](#).



Akash Nainani, CA, CFA L-2

Akash Nainani is an Indian Chartered Accountant and has cleared two levels of CFA. He has worked in equity research domain at Macquarie Group in BFSI space and was associated with one of top banking analysts of India. Currently, he is working as Strategic & Finance Lead with Founder/ Promoter of a UK listed company in Private Equity space. During leisure time, Akash prefers to read books, play cricket and listen to music.

Happy to connect with you on [LinkedIn](#) or [Email](#).



Akash Soni, B. Com

Akash is a B. Com Graduate and a technology enthusiast. Currently, he's working as Associate with HR Lab and SimplCrypto. During his free time, he likes to sketch and play table tennis.

Happy to connect with you on [LinkedIn](#) or [Email](#).

In this first report of SimplCrypto, we have tried to simplify the basics of crypto currencies and tried to make a case why you shouldn't miss them in your investment portfolio. This report will be followed by a series of reports on most popular crypto currencies which are available to invest in. These reports will help you understand about the crypto currencies before investing in them.

You can join our SimplCrypto community by filling this form <https://bit.ly/simplcryptoreg>. Please note that currently we are opening this community only to first few new entrants. In case you miss the opportunity, you may join sometime later.

Connect with us:



**SIMPL
CRYPTO**
Crypto currencies
simplified

8 November 2021

Page 3 of 14

Website: <https://bit.ly/SimplCryptoWeb>

1. Introduction to Crypto currency

As a warm up, let's start with some basics about crypto currency:

What is a crypto currency?

Cryptocurrency is a digital currency in which transactions are verified and records are maintained by a decentralized system using cryptography, rather than by a centralized authority like a central bank.

What is a blockchain?

A blockchain is a digital record (ledger) of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. We shall discuss in detail more about block chain in our future reports.

Why are crypto currencies needed?

Crypto currencies are incentives which are used to pay the transaction fees and also compensate miners, or the users who verify transactions in the blockchain.

What are the most popular crypto currencies?

Bitcoin is the first and the most popular crypto currency accounting for 44% of the total market value of all publicly traded crypto currencies. Bitcoin was invented with a view to act as a mode of payment but currently it is seen as a store of value like other investment assets such as gold, stocks, etc.

Ether (native coin of Ethereum blockchain) is the second most popular crypto currency after Bitcoin. Ethereum blockchain created a generalized platform powered by smart contracts, enabling the development of hundreds of applications that could transform finance, insurance, legal, real estate and many other industries.

Currently, there are more than 13,000 crypto currencies which are publicly traded.¹

What are various types of crypto assets?

Crypto assets can be categorised in following categories:

- **Blockchain currencies:** These are the currencies which are native to their blockchains like Bitcoin, Ether, etc. These currencies act as incentive to people to verify the transactions on the blockchain.
- **Non-fungible tokens (NFTs):** Unlike bitcoins which are divisible and all divided units are similar, NFTs are unique and non-divisible. An NFT is a blockchain-stored certificate of authenticity for unique digital or physical assets.
- **Stable coins:** Stable coins are digital assets pegged to another asset class such as a fiat currency (like the US dollar), a commodity (like gold), other digital assets or a combination of assets with the goal of maintaining a stable value.
- **Central Bank Digital Currencies (CBDCs):** A CBDC is an electronic record or digital token of a country's official currency. As such, it is issued and regulated by the nation's monetary authority or central bank.

¹ As per Coinmarketcap as on 31 October 2021

How big is the cryptocurrency market?









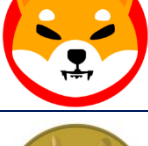

Exhibit 1: Bitcoin and Ethereum are amongst top 15 assets in terms of market cap. Bitcoin is more valuable than Tesla and Facebook whereas Ethereum is more valuable than JP Morgan Chase and Visa.



Source: Companiesmarketcap, SimplCrypto Research

Which are the top 10 crypto currencies?

As on 31 October 2021, Bitcoin and Ether cover about 63% of the total market cap of \$ 2.6 tn of all the crypto currencies whereas, top 10 cryptocurrencies cover about 81% of the total market cap.

Rank	Crypto currency	Symbol	Code	Market Cap (Bn \$)	% of total market cap	Cumulative market cap %
1	Bitcoin		BTC	1,170	44%	44%
2	Ether		ETH	510	19%	63%
3	Binance		BNB	86	3%	67%
4	Tether		USDT	70	3%	69%
5	Cardano		ADA	65	3%	72%
6	Solana		SOL	59	2%	74%
7	Ripple		XRP	51	2%	76%
8	Polkadot		DOT	42	2%	78%
9	Shiba		SHIB	36	1%	79%
10	Doge coin		DOGE	35	1%	81%

Source: Coinmarketcap, SimplCrypto Research

Connect with us:



**SIMPL
CRYPTO**
Crypto currencies
simplified

8 November 2021

Page 6 of 14

Website: <https://bit.ly/SimplCryptoWeb>

2. Emerging class of investment asset

Cryptocurrencies are seen as emerging class of investment asset. There are numerous reasons which advocate inclusion of crypto currencies in investment portfolio:

Top performing asset class

Bitcoin is the top performing asset over last 10 years beating stock market, bonds, gold and other commodities' returns by vast margin.

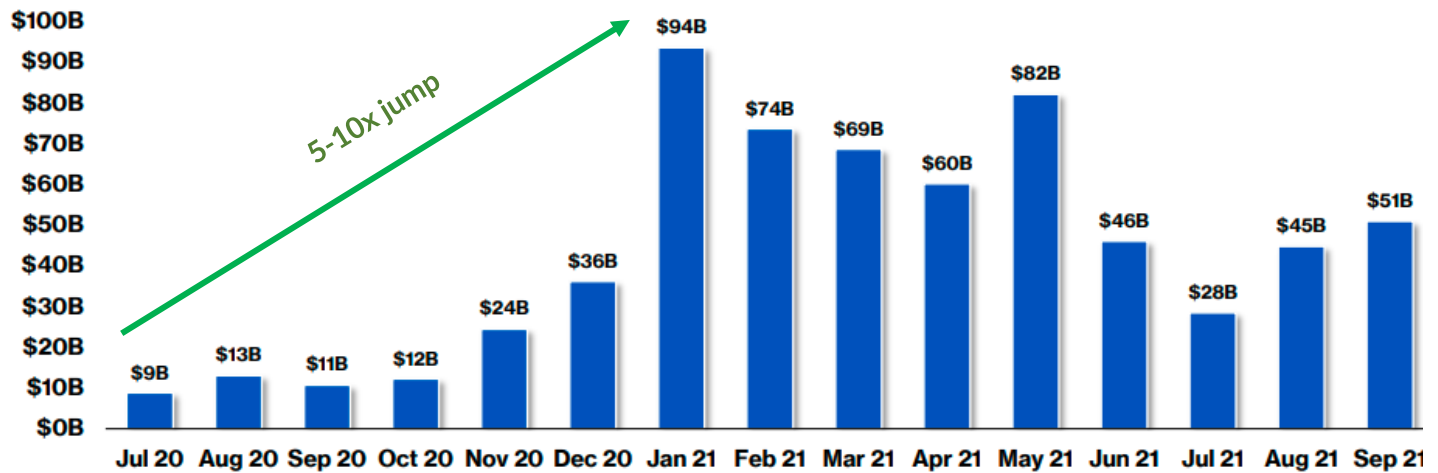
Exhibit 2: Bitcoin's annualised return over one decade beat US Nasdaq 100's return by 20x.

@CharlieBilello		Asset Class Total Returns over Last 10 Years (as of 3/13/21)											Data Source: YCharts	
ETF	Asset Class	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 YTD	2011-21 Cumulative	2011-21 Annualized
N/A	Bitcoin (\$BTC)	1473%	186%	5507%	-58%	35%	125%	1331%	-73%	95%	301%	109%	20037142%	230.6%
QQQ	US Nasdaq 100	3.4%	18.1%	36.6%	19.2%	9.5%	7.1%	32.7%	-0.1%	39.0%	48.6%	0.5%	541.3%	20.0%
SPY	US Large Caps	1.9%	16.0%	32.2%	13.5%	1.2%	12.0%	21.7%	-4.5%	31.2%	18%	5.4%	282.4%	14.0%
IWM	US Small Caps	-4.4%	16.7%	38.7%	5.0%	-4.5%	21.6%	14.6%	-11.1%	25.4%	20.0%	19.1%	244.7%	12.9%
VNQ	US REITs	8.6%	17.6%	2.3%	30.4%	2.4%	8.6%	4.9%	-6.0%	28.9%	-4.7%	7.9%	147.7%	9.3%
TLT	Long Duration Treasuries	34.0%	2.6%	-13.4%	27.3%	-1.8%	1.2%	9.2%	-1.6%	14.1%	18.2%	-13.5%	88.7%	6.4%
PFF	Preferred Stocks	-2.0%	17.8%	-1.0%	14.1%	4.3%	1.3%	8.1%	-4.7%	15.9%	7.9%	-0.6%	76.3%	5.7%
EFA	EAFE Stocks	-12.2%	18.8%	21.4%	-6.2%	-1.0%	1.4%	25.1%	-13.8%	22.0%	7.6%	4.6%	76.3%	5.7%
HYG	High Yield Bonds	6.8%	11.7%	5.8%	1.9%	-5.0%	13.4%	6.1%	-2.0%	14.1%	4.5%	-0.2%	71.0%	5.4%
LQD	Investment Grade Bonds	9.7%	10.6%	-2.0%	8.2%	-1.3%	6.2%	7.1%	-3.8%	17.4%	11.0%	-6.4%	69.4%	5.3%
EMB	EM Bonds (USD)	7.7%	16.9%	-7.8%	6.1%	1.0%	9.3%	10.3%	-5.5%	15.5%	5.4%	-5.8%	62.4%	4.9%
TIP	TIPS	13.3%	6.4%	-8.5%	3.6%	-1.8%	4.7%	2.9%	-1.4%	8.3%	10.8%	-2.1%	40.3%	3.4%
EEM	EM Stocks	-18.8%	19.1%	-3.7%	-3.9%	-16.2%	10.9%	37.3%	-15.3%	18.2%	17.0%	4.5%	39.8%	3.3%
BND	US Total Bond Market	7.7%	3.9%	-2.1%	5.8%	0.6%	2.5%	3.6%	-0.1%	8.8%	7.7%	-3.7%	39.5%	3.3%
GLD	Gold	9.6%	6.6%	-28.3%	-2.2%	-10.7%	8.0%	12.8%	-1.9%	17.9%	24.8%	-9.5%	16.4%	1.5%
BIL	US Cash	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.1%	0.7%	1.7%	2.2%	0.4%	0.0%	4.8%	0.5%
DBC	Commodities	-2.6%	3.5%	-7.6%	-28.1%	-27.6%	18.6%	4.9%	-11.6%	11.8%	-7.8%	18.5%	-34.9%	-4.1%
Highest Return		BTC	BTC	BTC	VNQ	BTC	BTC	BTC	BIL	BTC	BTC	BTC	BTC	BTC
Lowest Return		EEM	BIL	GLD	BTC	DBC	BIL	BIL	BTC	BIL	DBC	TLT	DBC	DBC
% of Asset Classes Positive		65%	94%	41%	65%	41%	100%	100%	6%	100%	88%	47%	94%	94%

Source: Ycharts

Rising trading volumes

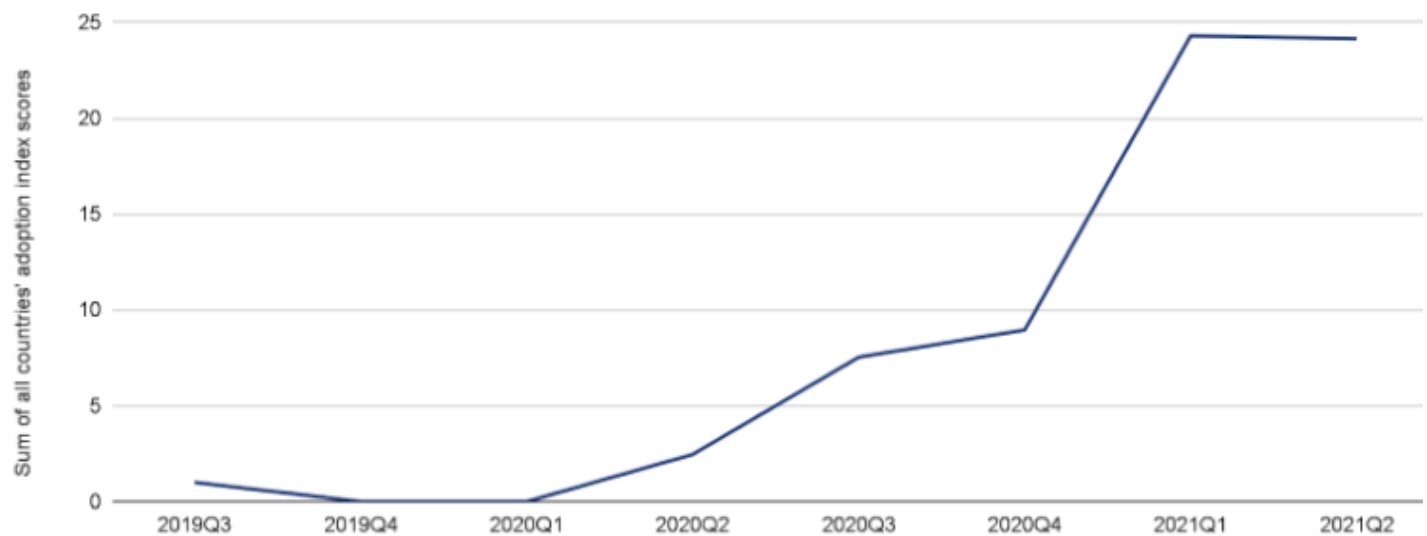
Exhibit 3: Bitcoin USD monthly trading value has risen significantly in 2021 roughly 5-10x from CY20 level. This shows increased adoption of the crypto currencies. Although, one of the reasons is of this spike is the rising price of bitcoin.



Source: CoinDesk

Increasing adoption

Exhibit 4: According to Chainalysis's Global Crypto Adoption Index, global adoption has grown by over 2300% since Q3 2019 and over 881% in the last year.



Source: Chainalysis

Connect with us:



**SIMPL
CRYPTO**
Crypto currencies
simplified

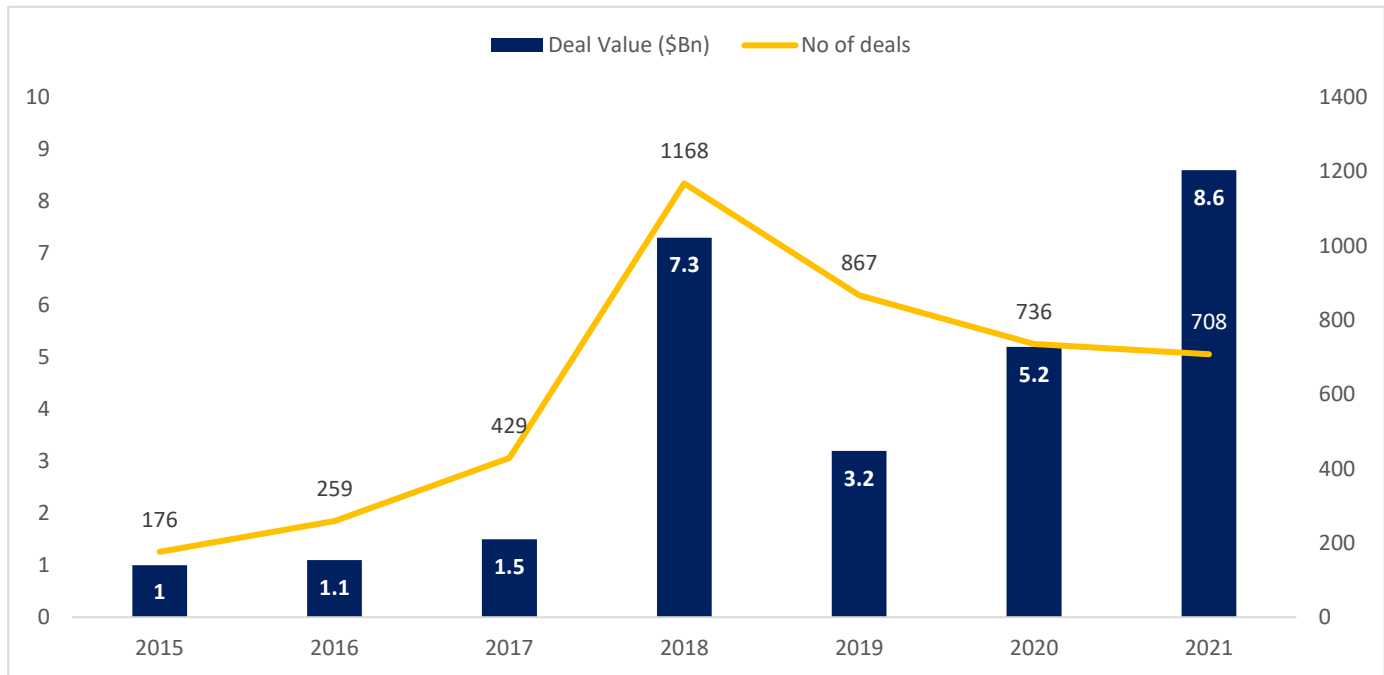
8 November 2021

Page 8 of 14

Website: <https://bit.ly/SimplCryptoWeb>

Increasing VC deal activity in the crypto space

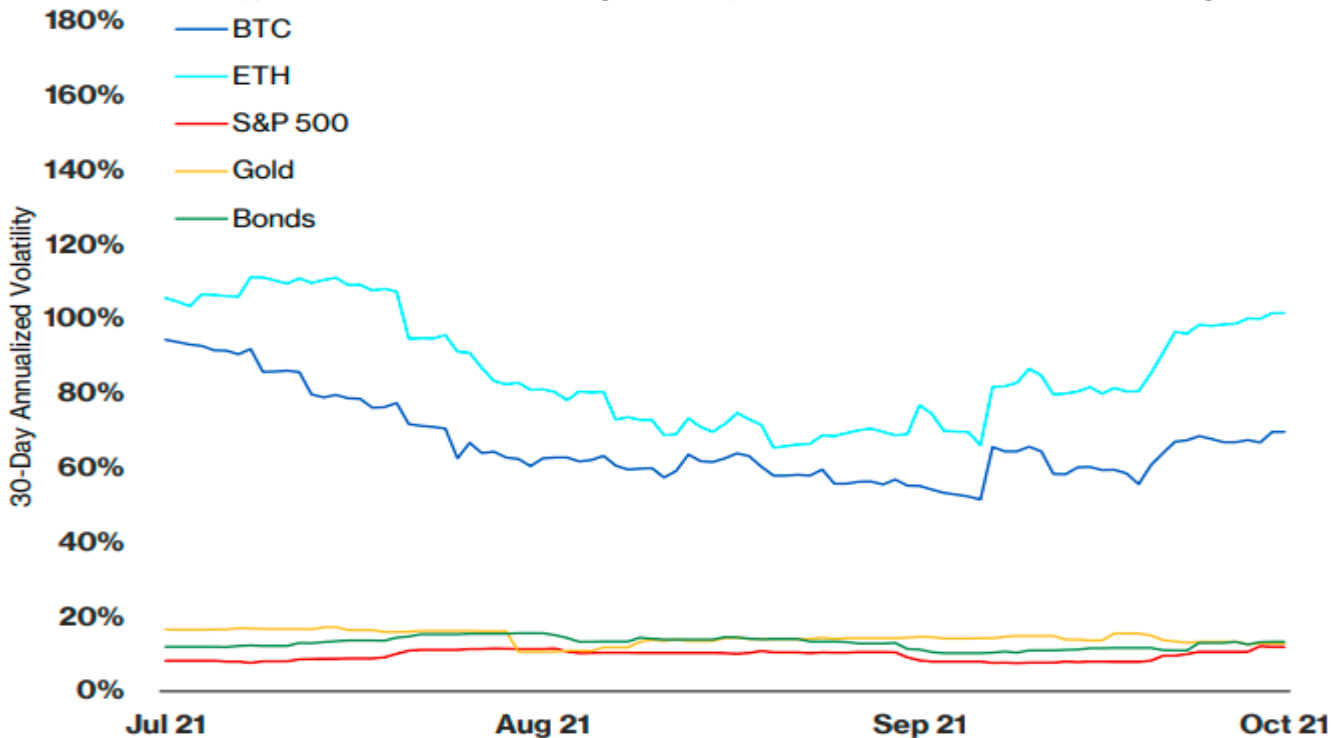
Exhibit 5: Venture capital investment in crypto assets reached \$8.6 billion between January and July 2021, surpassing the combined total of the previous two years. Since 2015, venture capital funding to build out the of cryptocurrency/blockchain ecosystem has increased almost 760%.



Source: PitchBook data, SimplCrypto Research

Declining volatility

Exhibit 6: As the crypto currencies are maturing, volatility of Bitcoin and Ethereum is declining.



Source: CoinDesk

Connect with us:



**SIMPL
CRYPTO**
Crypto currencies
simplified

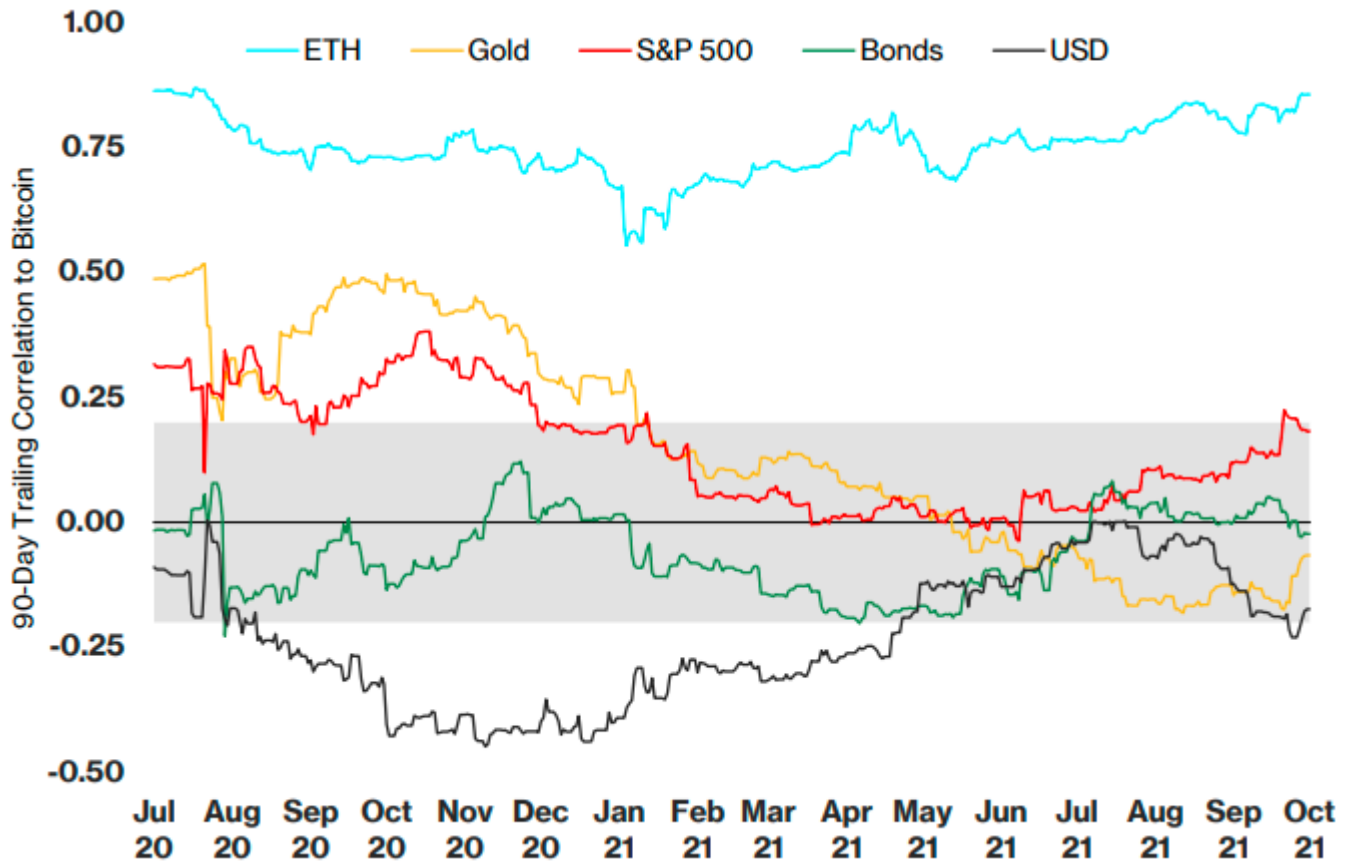
8 November 2021

Page 9 of 14

Website: <https://bit.ly/SimplCryptoWeb>

Uncorrelated with other assets

Exhibit 7: All other major investment assets remained uncorrelated with Bitcoin. This enforces the case of including crypto currencies in investment portfolio. However, Bitcoin is highly correlated with Ethereum suggesting that Bitcoin's price is an important indicator for crypto investors even if they don't have direct exposure to Bitcoin.



Source: CoinDesk

3. Industries most impacted by the blockchain technology

Finance

When it comes to blockchain adoption, finance sector is leading the change. The invention of Bitcoin was to solve the problems associated with current financial system. Decentralisation is the main theme around which most of the blockchain projects are currently working.

Decentralised finance (DeFi) is an ecosystem that allows users to utilize financial products and services, such as lending, borrowing, insurance and trading, without relying on a traditional financial institution. The goal is to “disintermediate” finance, using software to eliminate the need for trust and middlemen from transactions.

Defi can be sub divided in to following sub sectors which are being impacted by blockchain technology:

- i. **Payments:** Blockchain has the capability to securely execute transactions in seconds as against 2-3 days taken by traditional financial system. Companies like BitPesa, Bitpay, Airfox, etc are working in this space.
- ii. **Clearance and settlement:** Major giants like JPMorgan Chase, Goldman Sachs, Credit Suisse and Citigroup are constantly working on blockchain technology to stay relevant in this changing space.
- iii. **Exchanges:** Two types of exchanges are gaining popularity – Centralised exchanges (like Binance, Coinbase and Huobi) and Decentralised exchanges (like dydx, Uniswap and PancakeSwap).
- iv. **Lending and borrowing:** Alternative lending using blockchain technology offers a cheaper, more efficient, and more secure way of making personal loans to a broader pool of consumers.
- v. **Insurance:** Most blockchain applications in the insurance industry today are focused on ways to drive down costs, increase speed to market, and provide better customer experiences.
- vi. **Crowdfunding:** The crowdfunding industry emerged to “disintermediate” capital formation by giving backers (aka “pledgers”) or individual investors the ability to directly fund creators and entrepreneurs.

We will be covering all aspects of Defi in detail in a future report.

Healthcare

Use of blockchain technology could allow hospitals, payers, and other parties in the healthcare value chain to share access to patient past records in their networks without compromising data security and integrity.

Real Estate

Real estate blockchain applications can help record, track, and transfer land titles, property deeds, liens, and more, and can help ensure that all documents are accurate and verifiable.

Supply Chain Management

With blockchain technology, transactions can be documented in a permanent decentralized record, and monitored securely and transparently. This can be used to monitor costs, labour, and even waste and emissions at every point of the supply chain.

Private Transport and Ride Sharing

The blockchain can be used to create decentralized versions of peer-to-peer ridesharing apps, allowing both car owners and users to arrange terms and conditions in a secure way without third party providers. Start-ups working in this area include Arcade City and La’Zooz.

Voting

Blockchain technology can be used for voter registration and identity verification, and electronic vote counting to ensure that only legitimate votes are counted, and no votes are changed or removed.

Entertainment

Several start-ups are coming up with ways for musicians to get paid directly from their fans, without giving up large percentages of sales to platforms or record companies. For eg Audius is an online platform for artists to upload their music and earn directly from the fans eliminating intermediaries like YouTube.

Retail

Start-ups like OpenBazaar are developing decentralized blockchain utilities to connect buyers and sellers, without a middleman (like Amazon, Alibaba, etc) and the associated charges. OpenBazaar operates as an open-source, peer-to-peer network offering merchants no fees and no restrictions on what can be sold.

Education

By nature, academic credentials must be universally recognized and verifiable. Deploying blockchain solutions in education could streamline verification procedures, thereby reducing fraudulent claims of unearned educational credits.

Art

The art industry has already begun adopting blockchain and tokenization as a way to increase global access to the art market and reduce transaction costs. In the digital art world, nonfungible tokens, or NFTs, are being used to certify the ownership of individual works of art.

Internet Advertising

Google and Facebook capture a lot of our personal data and charge hefty sums from advertisers. Ads also add tons of mobile data usage to loading web pages, and both advertisers and consumers suffer from any lack of protocols. Brave, crowdfunded \$35M in 30 seconds during its Basic Attention Token (BAT) ICO, eliminates middleman like Google and Facebook. Advertisers list directly on the Brave's Blockchain based browser and users who allow ads get paid in BAT.

4. Risks associated with crypto currencies

Before investing in an asset, it is equally important to be aware of the risks associated with the asset. Crypto currencies also have some inherent risks which you should be aware of before investing.

The risks associated with crypto currencies can generally be categorized in 2 baskets – Regulatory risks and Non – Regulatory risks.

Regulatory risks

Since blockchain technology is at nascent stage, governments have not yet set appropriate regulations in place till now. Government itself is in the process of understanding the blockchain technology's impact and repercussions. Cryptocurrencies are surrounded by following risks are from regulatory perspective:

- **Still unregulated:** Cryptocurrencies are still not regulated in most of the countries. A clear law is a must in any jurisdiction to onboard investors (especially institutional investors). However, we believe it's just a matter of time when regulators will rein in and regulate the crypto market. Banning cryptos seem very unlikely in the long term and at the same time thinking that crypto currencies will replace fiat currencies seems far-fetched. We believe cryptos will stay as investment assets just like gold, bonds, etc.
- **Data Privacy Legislation:** One of the main features of public blockchain is although all the details are public, identity of users is not revealed. Whereas, Governments would want to know identity of users to prevent unethical transactions. Government could ban organizations/ projects which do not abide by KYC, Anti Money Laundering and other norms.
- **Environmental issues:** Proof of work blockchains involve a lot of computing process and thus, electricity. Governments may ban mining of crypto currencies in order to save electricity consumption and resultant carbon emission.

Non-regulatory risks

- **Poor valuation of crypto currencies:** Cryptocurrencies can see high jumps that are beyond any investors guess. This also means that the prices can drop sharply, leaving a lot of investors empty-handed.
- **Underdeveloped Standards:** The wide variety of frameworks means that there is a lack of standardization. ICOs are suffering the most from the lack of standardization. The investors have no proper protection against the investment, which makes ICOs a big gamble.
- **Transaction Speed:** One of the touted features of the blockchain networks is the time they take to settle down transactions. If we take the example of Bitcoin, it can take anywhere between ten minutes to a few hours for a transaction to get completed.
- **Risks with Private and Public Key:** The whole idea of blockchain or distributed ledger technology relies heavily on the public and private keys. Hackers try to get the keys by attacking the weakest point, i.e., the system that is used by the user. It can be a mobile device or a personal computer. If private key is lost, there is no means by which the account can be recovered.
- **End point vulnerabilities:** Even though blockchain is completely decentralized, it still has to interact with humans to work correctly. For example, any business who wants to interact with the blockchain system needs to do it either through a computer or automated systems. When a user interacts through a computer, at that point, there is a chance of credentials to access the systems can be stolen or compromised.
- **51% attacks:** Blockchains have consensus rules based on a simple majority. This would mean a group of miners controlling more than 50% of the mining computing power can influence what transactions are validated and added (or omitted) from the chain.

5. Appendix

Planning to start investing in cryptos?

You may use any of the below most popular exchanges if you're in India. Click to register:



Please note that we do not have any financial interest in promoting any of the above exchanges except for the referral bonus which may accrue to us when you sign in. You may use any other exchange as per your preference. SimplCrypto or its team should not be held liable for any damages arising out of using services of any of the exchanges.

References

Wikipedia.com

Investopedia.com

CB Insights

All Rights Reserved

SimplCrypto reserves all the rights to publish, reproduce, disseminate and transfer whole or any part of this document. No content of this document may be reproduced, downloaded, disseminated, published, or transferred in any form or by any means, except with the prior written permission from the authors at info@simplcrypto.com.

Disclaimer

This report has been prepared by SimplCrypto and is solely for information of the recipient only. The report must not be used as a singular basis of any investment decision. The views herein are of a general nature and do not consider the risk appetite or the particular circumstances of an individual investor; readers are requested to take professional advice before investing. Nothing in this document should be construed as investment advice. Each recipient of this document should make such investigations as they deem necessary to arrive at an independent evaluation of an investment in any asset referred to in this document (including merits and risks) and should consult their own advisors to determine merits and risks of such investment. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. SimplCrypto is not obliged to update this report for such changes. SimplCrypto has the right to make changes and modifications at any time.

SimplCrypto team and its associates may; from time to time, have a long or short position in the assets mentioned herein. SimplCrypto team and its associates do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of assets, changes in the currency rates, etc.

Connect with us:



**SIMPL
CRYPTO**
Crypto currencies
simplified

8 November 2021

Page 14 of 14

Website: <https://bit.ly/SimplCryptoWeb>