ApexAfrica CAPITAL LTD
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The Crypto Hullabaloo

Given the heightened interest in cryptocurrencies from our investors, we've decided to issue a brief explanation of what the fuss is all about in the world of cryptocurrencies. Borrowing from the wisdom of Warren Buffet where he says to never invest in a business you don't understand, we advise our investors to approach cryptocurrencies with utmost caution. Consequently, we intend to shed some light on this crypto hullabaloo to help investors understand it. As such, any investment decision into this space will be backed by some level of understanding.

Cryptocurrencies, cryptography and blockchains; whoa, what are those?

Cryptocurrencies have captured the imagination of some, struck fear among others and confused the heck out of the rest of us. This jargon simply refers to virtual currency that uses cryptography for security.

Cryptography refers to the process of converting legible information into an almost uncrackable code, to track purchases and transfers. Born out of the need for secure communication in the second world war, cryptography has evolved in the digital era with elements of mathematical theory and computer science to secure communications, information and online money transfer.

Blockchain has been cited as the primary engine giving cryptocurrencies their power. Simply put, blockchain is an open and distributed ledger storing all transactions that have been conducted using cryptocurrencies. The data structure, being decentralized and distributed among a huge number of users, proves hard to manipulate seeing that all records have to be altered at the same time.

Inception of cryptocurrencies

Though the idea of cryptocurrencies was around since the nineties, the inception of cryptocurrencies as we know them today came about in 2009 when the first cryptocurrency, Bitcoin, was launched. Bitcoin was created by a person or group of people under the pseudonym Satoshi Nakamoto. Still unknown to date, the creator is rumored to have about 1M Bitcoins.

Bitcoin stands as the most prominent cryptocurrency with a total market cap of USD 198.6B (at the time of publishing) being about 56.0% of the entire market cap of cryptocurrencies. Retaining its popularity, bitcoin's daily trading volume is about USD 7.1B representing about 50.0% of the daily traded volume.

With the creator disappearing from the scene, other cryptocurrencies emerged trying to solve some of Bitcoins short-comings. These include Ethereum *(2015),* Bitcoin Cash *(August 2017),* Ripple *(2012),* Bitcoin Gold *(November 2017)* and Litecoin *(2011).*

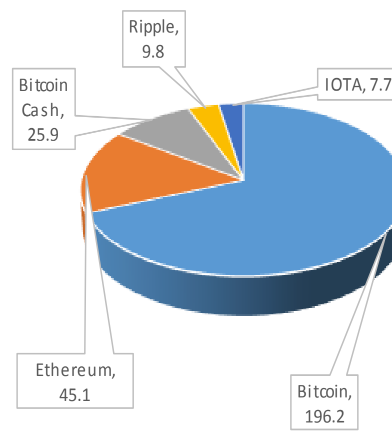
Features of cryptocurrencies

ℵ 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.

Bitcoin Statistics	
Bloomberg Ticker	**XBTUSD**
Current price (USD)	11,874
Market Cap (USD B)	198.6

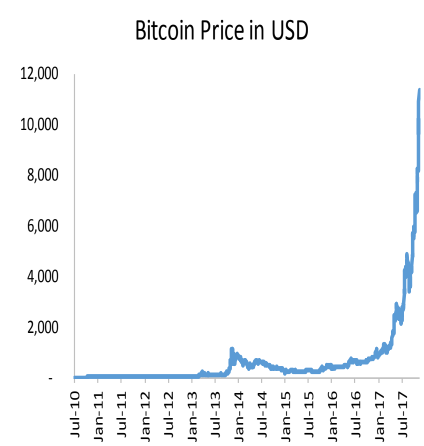
Source: Coin Market Capitalization

Top 5 Cryptos by Market Cap



Source: Coin Market Capitalization

Price Trend



Source: (Bloomberg)

Research Analyst

Harrison Gitau

hgitau@apexafrica.com

+254 (20) 760 2545

- ***Irreversible:*** After confirmation, a transaction can't be reversed. This implies that there is no safety net.
- ***Pseudonymous:*** Neither transactions nor accounts are connected to real-world identities. While it is usually possible to analyze the transaction flow, it is not necessarily possible to connect the real world identity of users with those addresses.
- ***Fast and global:*** Transactions are propagated nearly instantly in the network and are confirmed in a couple of minutes.
- ***Secure:*** Cryptocurrency funds are locked in a public key cryptography system. Only the owner of the private key can send cryptocurrency.
- ***Permission less:*** You don't have to ask anybody to use cryptocurrency. It's just a software that everybody can download for free. After you installed it, you can receive and send Bitcoins or other cryptocurrencies. No one can prevent you; there is no gatekeeper.
- ***Controlled supply**:* Most cryptocurrencies limit the supply of the tokens. In Bitcoin, the supply decreases in time and will reach its final number of 21M somewhere in around 2140. Currently, there are about 16.7M coins in supply with the subsequent creation of new coins being harder whenever new ones are mined.

Treatment of cryptocurrencies

Though they bear the name currency, the cryptos are not treated as currencies as they lack all the salient features of currencies. National currencies are geographically attached to a state, chosen by a central authority and are created by debt; all of which Bitcoin does not satisfy. Where recognized by the national Governments, cryptocurrencies are treated as assets mainly for tax purposes where a rally in the value is taxed under capital gains. However, the cryptos may be treated as currencies as they are used as medias of exchange.

Cryptocurrencies are legal in most countries except for **Iceland** and **Vietnam** with the former being largely due to the freeze on foreign exchange. **China** has banned financial institutions from handling Bitcoins and has also banned Initial Coin Offerings (ICOs) while **Russia** is still coming up with regulations to permit the use of cryptos.

The parliament of **Japan** recognized Bitcoins as a form of payment while **Finland** and **Belgium** have exempted Bitcoins transactions from VAT. The **Swedish** tax authority has accepted Bitcoins as a form of settlement. The **Central Bank of Kenya** has put a caveat on cryptocurrencies though it has acknowledged the potential benefits of blockchain.

Where do the cryptos get their value

Having started trading at cents to the US Dollar, Bitcoin has surged in price since inception to hit USD 11,000 levels in 2017. The huge rally in price came in 2017 with the currency galloping 1,095% YTD from levels sub USD 1,000 at the beginning of the year. The question then begs, where do cryptocurrencies get their value?

- They have limited supply coupled with rising demand largely from speculative trades.
- Highly secure backed by blockchain technology which makes it almost impossible to corrupt the ledger seeing that information is shared and continually reconciled by millions of computers.
- It gains its value from utility as more companies and Governments continue recognizing cryptos as forms of payment.
- With Bitcoin serving as the "gold standard" for cryptos, a rally in the price of Bitcoins has a direct relationship with other cryptos, *ceteris paribus.*
- With the media and other channels increasing focus on cryptos, the market has had an influx of interested persons raising the demand as well.
- Some hedge funds, venture capital and private equity firms are using cryptos to hedge against their current portfolios given the cryptos have zero correlation with the traditional assets.
- With no centralized systems and basically no trading rules, cryptos are susceptible to pump and dump trading malpractices which may artificially inflate the price of the cryptos.

Future avenues for growth in value

Given the huge influx of new "investors" in cryptocurrencies, where will they get their new value or lose it altogether going forward?

- The huge untapped potential of cryptos is the blockchain technology which may solve various issues such as online voting, crowdfunding and lower transaction costs.
- With the crypto market being susceptible to pump and dump malpractices, new currency issues are likely to be exposed to these and die upon inception given that they

are little known with little/no confidence in the market.

- Backlash from the Government and banking institutions as they realize that this invention has the potential to limit their control over money.
- The value of cryptos depends on the confidence of the traditional systems. When the confidence falters, the value of cryptos may rise as people may prefer them over the traditional systems. If the confidence rises, the cryptos may suffer.
- The cyclical effect of the belief that crypto tokens have value creating massive utility which in turn fuels the conviction that cryptos have value.

Recent developments in cryptos

- Chicago Mercantile Exchange plans to launch Bitcoin futures on December 18th while Chicago Board Options Exchange (CBOE) has set a date of December 10th (both 2017). NASDAQ plans to introduce these futures in 2Q18. In addition, there are plans to also commence shorting of Bitcoins. The two measures are anticipated to curtail the volatility of Bitcoin and other cryptos. With relative stability, the cryptos can gain acceptance as forms of payment.
- Betting firms have started offering Bitcoins as winnings to the winners as well as accepting Bitcoins as a method for making deposits.
- Some universities and schools have began accepting Bitcoins as a form of payment for tuition fees.
- A number of big companies have started to accept Bitcoins as a form of payment; Microsoft, Dell, WordPress, Wikipedia, Bloomberg, Lionsgate Films, Rakutan, T-Mobile Poland, PWC and Ernst & Young.
- With the parliament of Japan recently recognizing Bitcoins as a form of payment, some 300,000 stores in Japan are poised to commence accepting Bitcoins as currency.
- Liberland, the third smallest country in the world, uses Bitcoins as its national currency.
- If cryptocurrencies get widespread acceptance, monetary transactions could potentially reduce the use of banks. However, some banks are anticipated to remain ahead of the curve with some banks reportedly experimenting with blockchain technologies in monetary transfers.

Arguments for cryptocurrencies

- Successful use of cryptos may supplant gold as the main store of value in the world given that mining of new coins is deemed as hard (at times harder) than the mining of gold.
- Blockchains have the potential to revolutionize inter-bank settlements, international settlements, fundraising and IPO processes.
- The launch of futures and short-trading of Bitcoins and other cryptos may reign in on the volatility of these currencies, raising the confidence as they gain stability.
- Strict currency outflows from certain countries may make cryptocurrencies more popular as people seek to make international payments.
- Cryptocurrencies share user effect with other older systems such as the telephone, the web, social media and other e-commerce platforms. With these systems, the more the users they draw, the more valuable they become for the current users and the higher incentives there are for potential users to start using them.
- With cryptocurrencies being infinitely divisible (currently down to 8 decimal places after the dot), they can be used to make micro-payments. This could be a nifty feature that could be employed by media and other companies to charge content per article or video.
- Low transaction fees in remittances could attract more users raising the utility of the cryptocurrencies.
- Cryptos are considered to be democratic currencies free from any Government manipulation. They're limited in supply and are a self-stabilizing currency which may enhance global trade.
- Given the zero correlation between cryptos and other traditional assets, more financial institutions and investors may begin using the cryptos as hedging and/or diversification strategies.

Arguments against cryptocurrencies

- They are largely volatile which works against their use as a medium of exchange seeing that such media need to have some level of stability.
- Though hacking is close to impossible, some cryptocurrencies have been hacked. This represents lost value seeing that these cryptos are fixed in supply and the issuers of these currencies are unlikely to release new currencies to

compensate the hacked ones.

- The death of the newly created cryptocurrencies can work against confidence in the market by the users.
- Lack of widespread acceptance as currency dents their utility.
- They are fairly complex to comprehend which limits the number of users.
- The threat of national Governments issuing their own cryptocurrencies with most of the features of the traditional cryptos. The newer currencies would lack anonymity and be under the oversight and control of national Governments. They could get wide acceptance and may be implemented faster than the traditional cryptos.
- Being largely volatile with no backing of tangible assets or debt, cryptos lack real intrinsic value which further deters users.
- The threat of adverse legislation as Governments fight to retain monetary control and/or curtailing the funding of illegal activities as well as tax evasion.
- Cryptocurrencies generally lack legal tender and can't be legally used as currencies in most jurisdictions.
- They still retain the negative affiliation to black market activities.
- The break-away currencies (forks) from Bitcoin could see the largest crypto lose its position as a market jewel. In 2017, these forks have resulted in Bitcoin Cash *(3rd largest crypto)* and Bitcoin Gold *(7th largest crypto).*
- The transactions cannot be reversed with errors in transmission being permanent. This may put-off would be users of these currencies.

Parting shot

Similar to all the new investment/speculative ventures that exist, we advise investors to remain cautious of investing in cryptocurrencies. In addition, we hold close to heart the advise passed on from Buffet as stated at the beginning of this report; investment in cryptos should be left to those who have some level of understanding in them.

Cryptos have no intrinsic value apart from what the buyer is willing to buy. They are susceptible to monumental price swings at any point in time and with no regulations, they're exposed to market malpractices. Thus, they may not be an appropriate venture for the risk averse investors who make a bulk of the investors.

Some of the significant short-comings of using cryptocurrencies may be resolved in the foreseeable future and some exposure in them might prove profitable to risk-seeking investors. With the number of firms and countries accepting and recognizing cryptos set to rise, the utility of cryptos (especially Bitcoins) is expected to increase and with it the price.

The upside is limited to Government's regulation surrounding cryptos. Favourable regulation will spur utility while adverse regulation may have a negative effect on the tokens.

In conclusion, exposure to the cryptos is to be carried as any other speculative feature. According to doomsayers, cryptos have shown all features exhibited by previous bubbles. It's prudent to have exposure that one can afford to lose if the cryptos go burst. If they sustain the growth momentum, the small exposure could grow exponentially diversifying ones returns.

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ApexAfrica Capital Ltd
A The Riverfront, 1st Floor, Prof. David Wasawo Drive, Off Riverside Drive | P.O. Box 43676-00100 | Nairobi | Kenya |
T: +254-20-2226440 | Fax: +254-20-2319092 | Cell: +254-723-420204| **W** : www.apexafrica.com