CRYPTOCURRENCY SERIES: So, the bitcoin bubble is bursting – what next?

CAPCO

INTRODUCTION

In less than four months, the Bitcoin price has crashed 65% from its all-time high in December 2017. If history is anything to go by, the price is likely to experience further downward pressure in 2018.

The largest crashes in history have seen asset prices retrace 80-100%. And after a large crash, history suggests a period of slow price recovery or stagnation, coupled with asset consolidation and government regulation. This was certainly the case with bubbles relating to mass technological change which promised to change the world, as the hype around Bitcoin and the wider cryptocurrency market would suggest. We only need to look at the price activity of the Dotcom Bubble, 1840s Railway Mania and the 2008 Sub-prime Mortgage Crisis to verify this.

If the dramatic fall in the Bitcoin price is symptomatic of a wider crypto-currency malaise, here's what we can possibly expect in 2018 and beyond.

2018-19: A PERIOD OF REGULATION

In 2018 we are seeing government regulation, or the threat of government regulation, dominate the cryptocurrency landscape and this should continue into 2019. This is having a negative impact on price across the market.

The **Chinese government crackdown** on cryptocurrencies in 2017 and early 2018 has resulted in the banning of cryptotrading and initial coin offerings (ICOs), ordering exchange closures and denying market participants access to social media sites. The government is now even targeting offshore trading accessed by Chinese nationals. To counter this, two of China's largest crypto exchanges (Huobi, OKEX) have moved their operations to Hong Kong and have purportedly been able to circumvent the rules, resulting in surging trader demand. Continuing signs suggest that despite the government's hardline stance, the underlying appetite from the general population for cryptos has not waned.

To understand the Chinese government's motives, it is important to look at the threat cryptocurrencies and the wider digital economy poses to their monetary policy. The government's main purpose with these initiatives is to protect their own interests through central control. They are doing everything in their power to protect the value of the Renminbi (the official currency of the People's Republic of China) and external influences. The Chinese government's belief in the technology is still very much present, with plans underway to develop their own national digital currency¹, potentially using Blockchain.

REFERENCES ¹The Finder, March 2018

2018-19: A PERIOD OF REGULATION CONTINUED

South Korea will continue to resemble a state of disparate muddle when it comes to cryptocurrency regulation. Confusing or mixed signals were common earlier this year when the government announced a ban on ICOs, only to about-turn and not enforce it. Expect clearer policy to emerge later in the year now the market has cooled.

Similarly, **The European Union** hasn't been clear on its intentions when it comes to cryptocurrency regulation. No direction has yet been agreed, though the proposed regulatory focus appears to be prioritising anti-money laundering and criminal activity. This would suggest that transaction anonymity and tax evasion will be their initial focus, which should then set the tone for a more robust governance framework.

The **G20 summit** in March 2018 agreed the need for a regulatory framework which includes a global **taxonomy**. The world's leading economies also clarified that cryptocurrency was better classified as an asset rather than a security or currency.

The U.S. Securities and Exchange Commission (SEC) is leaning towards regulating cryptocurrencies as a security and its stated mission is to protect investors. The SEC's principle focus to date has been on ICOs.²

The UK government is expected to introduce tighter laws to protect the public and investors around cryptocurrencies. Expect to see cryptocurrency exchanges fall in line with existing financial regulations that include 'know your customer' guidelines. Also expect to see further crackdowns on ICOs, transaction anonymity and money laundering.

The Winklevoss twins, famous for owning \$1.3 billion Bitcoin, announced that they were proposing a selfregulating **Virtual Commodity Association**³ to help govern cryptocurrency.

Both **Google** and **Facebook** have now banned cryptocurrency advertisements and ICO promotional material.

Uzbekistan has announced that it will legalise Bitcoin and electronic money⁴. **Sweden** has announced its desire to become a cashless economy⁵ and **Dubai** has ambitiously said it wants to become a smart city and will use the **2020 Dubai Expo**⁶ as a template. They plan to digitally connect all visitors at the event (through internet connectivity and the Internet of Things) which promises to enrich the customer journey and provide an unprecedented digital experience. Dubai is proposing to use digital money, smart food ordering, dynamic crowd management (which eliminates queues) and generally offer smart solutions at each customer touchpoint.

REGULATORY CHALLENGES

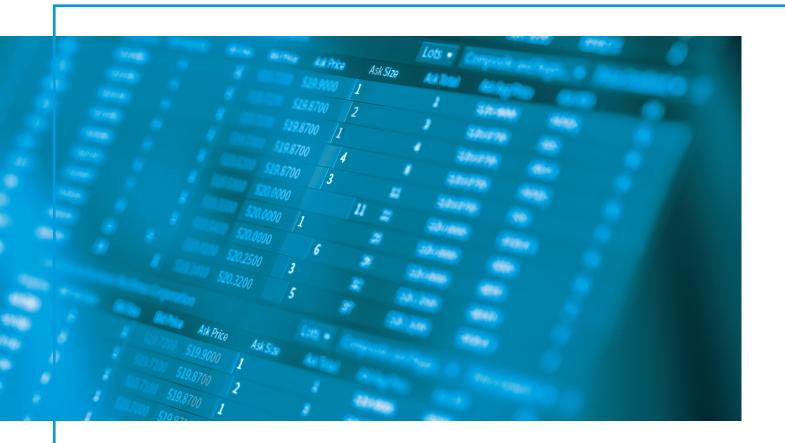
It's important to appreciate that regulating cryptocurrency comes with many challenges.

It is inherently difficult to regulate an environment which runs by itself, without interference. Blockchain and cryptocurrency are predominantly designed to work as a decentralised, trustless operating model. For example, a fiat currency transaction in the real world, passes through a financial intermediary such as a bank, which can be monitored and regulated by a government or regulatory body. No such financial intermediary exists in cryptocurrency or within a public blockchain network. The government has little control over how a cryptocurrency network runs or operates, past the point of access. By this, I mean the government can only really regulate the access points to a cryptocurrency public blockchain network - the crypto exchanges, the miners, and ICOs. Other attempts to regulate the market have seen governments denounce cryptocurrency as legal tender. And as of January 2018, eight countries, including Russia, Germany, China and India have gone a step further by banning Bitcoin altogether7.

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²Medium, April 2018
³ETH news, March 2018
⁴Bitcoin.com, February 2018
⁵BBC News, September 2017
⁶Arabianbusiness.com
⁷99Bitcoins, January 2018

UNIVERSALLY ACCEPTED CRYPTOCURRENCY TAXONOMY



Activities are underway to develop a common cryptocurrency **taxonomy** or financial standard for the treatment of digital assets. Deciding on whether cryptocurrencies behave like a currency, commodity, equity or a form of hybrid asset, has been difficult to universally agree upon to date.

The **Bank of International Settlements (BIS)** has tried to classify cryptocurrency within a money taxonomy. It introduced the concept of a **Central Bank Cryptocurrency (CBCC)** in its 2017 whitepaper⁸, as illustrated below.

Brave New Coin, a respected news website has developed a global classification for four asset classes, which identify payment crypto assets, platform crypto assets, side chains and application tokens.

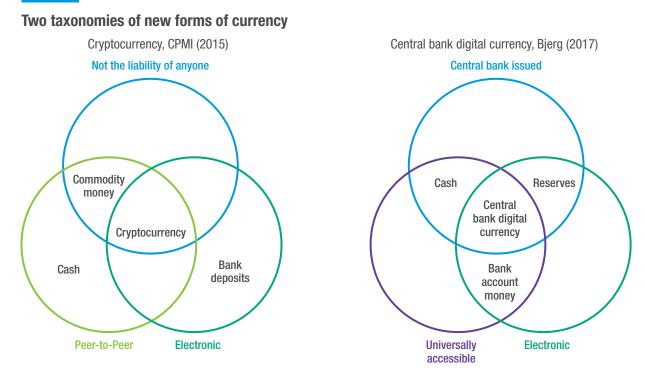
The Winklevoss twins view Bitcoin as a commodity like gold⁹, as opposed to a currency.

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⁸<u>The Bank of International Settlement, September 2017</u> <u>9</u><u>City AM, March 2018</u>

UNIVERSALLY ACCEPTED CRYPTOCURRENCY TAXONOMY CONTINUED

Figure 1



Source: Bank of International Settlements, Quarterly Review, September 201

Figure 2	Capital Assets Provide ongoing source of value, and can be priced on the basis of the net present value of its expected returns.	Consumable / Transformable Assets Raw meterial/building blocks that serve as inputs into finished products. It has economic value but does not yield an ongoing stream of value.	Store of Value Assets Cannot be consumed, nor can it generate income. Nevertheless, it has value as it is a store of value asset.	Cryptographic Asset It can function simultaneously as Capital Consumable/ Transformable, and Store of Value Assets thanks to their permission-less distributed, and cryptographically secure nature.
Equities	x			
Bonds	x			
Income producing real estate	x			
Commodities		x		
Precious metals		x	x	
Currency			x	
Fine art			x	
Payment crypto assets	x	x	x	x
Platform crypto assets	x	x	x	x
Side chains	x	x		x
Application tokens	x	x		x

Source: Brave New Coin, 8 Feb 2018, Cryptocurrency Taxonomy

SO 90% OF CRYPTOCURRENCIES WILL BE GONE IN THE NEXT FEW YEARS? More likely 50%...

Currently, there are over 1,500 cryptocurrencies¹⁰, with more launching each day. Ethereum founder, Vitalik Buterin believes that **90% of all ICOs will eventually fail**¹¹. The Cointelegraph¹² back in 2015 suggested that 90% of all coins would cease to exist within the next 24 months. And it was reported in February this year that **nearly half of all ICOs launched in 2017 have already died**.¹³

And if the Dotcom Bubble is anything to go by, research carried out and reported in the New York Times in 2008¹⁴

suggested that 52% of dotcom companies founded since 1996 were no longer around by 2004, some four years after the NASDAQ peak.

Whichever way you look at it, expect the market to consolidate at some point. The number of coins and tokens on the market today is simply unsustainable in its current form. Eventually money will run out to fund developer salaries and grow the coins. And this will be exacerbated if prices continue to be depressed in H2, 2018.

FEWER ICOS

As a result of fewer coins and available funds, there will be less incentive for people to part with their hard-earned cash. Investors will be far more wary of investing into new technology if there is a large market crash.

MORE COMPETING TECHNOLOGIES WILL EMERGE

Expect to see a number of interrelated technologies emerge around the Internet of Things, smart cities, entanglement, Blockchain, Al and Big Data. Coins like IOTA are proposing to remove the dependency on mining and Blockchain altogether by using entangled technology. How these evolving technologies impact and shape cryptocurrencies in the future is yet to be properly understood. But we can assume with a degree of confidence that digital currencies will survive in some shape or form.

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- 10https://coinmarketcap.com/
- ¹¹Futurism, October 2017
- ¹²Coin Telegraph, 11th February 2015
- 13 Fortune, 25th February 2018
- ¹⁴The New York Times, November 2008

RETAIL ADOPTION AND INSTITUTIONAL MONEY



Retailers will start to accept cryptos more and more as transaction costs come down and speeds increase. Right now, it's uneconomical to buy a cup of coffee using Bitcoin due to high transaction fees and slow transaction times (10 minutes to two hours). For the time being, expect to see the faster coins like Bitcoin Cash, Litecoin, Ripple and Dash take over from Bitcoin when servicing micropayments.

Japan are proposing to enable 260,000 retailers to accept Bitcoin as payment this year.¹⁵

Right now, very little institutional money is entering the cryptocurrency market. Expect this to change as regulation increases, a universal taxonomy is agreed, markets stabilise,

and the roadmap becomes clearer. Fund managers, such as pension funds, will be forced to get onboard if governments sanction digital currency as legal tender. Bitcoin is still not recognised as legal tender in the majority of countries.

Bloomberg¹⁶ reported in December 2017 that **Goldman Sachs** are planning to open a crypto trading desk to support growing client demand. And, they recently announced the appointment of Justin Schmidt, as Head Cryptocurrency trader.¹⁷

REFERENCES

¹⁵Bitcoin.com, April 2017
¹⁶Bloomberg, December 2017
¹⁷ZeroHedge, 23rd April 2018

FURTHER FUTURES ADOPTION

Expect to see an expansion of Bitcoin futures and the adoption of Ethereum, Litecoin, Bitcoin cash and Ripple futures contracts. The futures market could well expand to 20 coins in years to come. So far, the US regulators have given a green light to the **Chicago Mercantile Exchange (CME)**,

the **CBOE Futures Exchange** and the **Cantor Exchange**. **Nasdaq** is also expected to launch Bitcoin futures this year as well.

NATIONAL GOVERNMENTS WILL ATTEMPT TO DEVELOP THEIR OWN DIGITAL CURRENCY

Expect to see countries try to develop their own digital currency, with emphasis on traceability, control, governance and transparency. Though this will present a whole new set of challenges for governments.

Central to their challenges will be the issue of **Blockchain control**. As Blockchain is a decentralised ecosystem, built on a global network of nodes, central control is not required, nor will it be welcome by cryptocurrency or blockchain communities.

The utility of Blockchain means that it removes the need for an intermediary to control the transactional relationship of money. Countries known to be developing their own digital currency include **UK**, **USA**, **China** and **Sweden**. In what form they choose to adopt Blockchain technology remains to be seen. If governments sacrifice Blockchain decentralisation to achieve network control, it could mean that they will be operating in an environment which is little more than a very hackable and insecure database.

BITCOIN COULD STILL GO TO £100K+

It was reported on April 14, 2018 by CCN¹⁸ that Tim Draper, the billionaire angel investor in SpaceX predicts that **Bitcoin will reach \$25,000 in 2018 and \$250,000 by the end of 2022.** For that to happen Bitcoin will need to overcome its scaling problems and remediate some of the widely reported technological limitations around transaction speeds and costs. However, speed problems might potentially be resolved if the **Lightning Network**¹⁹ is successful. There have been wild claims that speeds of up to a million transactions per second²⁰ could be possible under the Lightning Network. It is a technology which uses smart contracts and sits as an application on the Blockchain. To give you an idea, VISA can process up to 60,000 transactions per second. Currently, Bitcoin can only process between three and seven transactions per second! Ethereum has similar plans to get to a million transactions per second with the development of its **RAIDEN**²¹ **network**.

REFERENCES

¹⁸CCN, April 2018
¹⁹The Lightning Network, transactions for the future
²⁰Finder, January 2018
²¹Steemlt, November 2017

SUMMARY

2017 was a watershed year for cryptocurrency, with Bitcoin reaching its all-time high, South Korean investors going crazy for it and China doing everything in its powers to slow down global momentum.

In 2018-19 expect to see Japan and the United States lead an economic recovery of cryptocurrencies (with Japan expected to have up to 260,00 retailers accepting Bitcoin by year end) and regulation will be at the forefront of government thoughts. Regulation or the threat of regulation will ensure that the market doesn't overheat again and irrational investor exuberance common in 2017 is unlikely to be repeated.

Expect to see legislators prioritise investor protection and crackdown on criminality, by shifting the regulatory spotlight to ICO fraud and transaction anonymity. And of course, moving forward won't be possible until regulators can agree on a universal crypto taxonomy. This will be no easy feat. The Lightning Network could also be a game changer in 2018-19, so it's worth watching closely.



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