



Blockchain Assets

· Cryptoasset Managers · Est. 2017 ·



Dear Fellow Investors

I hope you and your families are well and staying safe. This is quite a special newsletter. I have re-drafted it a number of times as events have unfolded over the past 8 weeks. I have been thinking carefully about the information I want to convey to you at this extraordinary time in history.

Typically I focus just on Cryptoassets in general and on our fund in particular. I assume that readers already have copious amounts of information on the global macroeconomic situation, the status of capital markets, money supply, commodity markets, geopolitics and global humanitarian situations.

For this edition of the newsletter I step away from that assumption and set out for you some of the main sources of information that I use to continually educate myself about these issues and the profound impact they have on the value of Cryptoassets. Our thesis for investing in Cryptoassets is based on a thorough understanding of how existing financial markets and the global economy works and how it is changing before our very eyes.

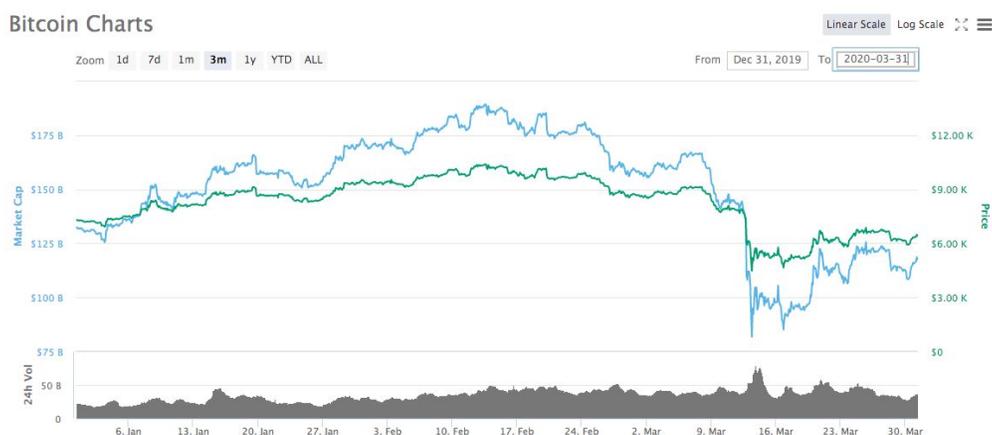
In Part 1 I set out the views of the 4 people I have learnt the most from relative to the macro investment environment. All these people come from the traditional financial markets sector and have come to the view that it is structurally unsound and that Bitcoin/Cryptoassets are a significant part of the solution.

In Part 2 I focus back on our portfolio. I set out the background to Bitcoin and why it is considered an ‘antifragile’ solution to the existing monetary system. I then provide an update on our three main holdings ETH, BTC and hBar. I also cover in Part 2 some of the more significant developments over the past three months and what we look forward to over the coming quarter.

Before diving into the newsletter I want to emphasize that, even though our investment thesis relies in part on an operational change in the financial system, I appreciate that the change happening now (even if temporary) is extremely brutal. It is having a devastating effect on the lives of millions of people. Nothing in this newsletter is meant to be seen as a criticism of the leaders at the central banks, the governments and corporations who are making difficult decisions. The issues they are dealing with are systemic, the choice of actions they can take are limited and in some ways their actions now are inevitable. The human cost of this also plays on my mind. I do all I can to educate friends and anyone who is prepared to listen about the benefits that Bitcoin and distributed systems can bring to humanity in general and the financial system in particular. This has included educating friends in the developing world who cope daily with a rubbish currency (the Myanmar Kyat) to friends involved in the existing financial markets, some of whom, I am pleased to say have chosen to invest at least some of their wealth in our fund.

Quarterly Market Summary

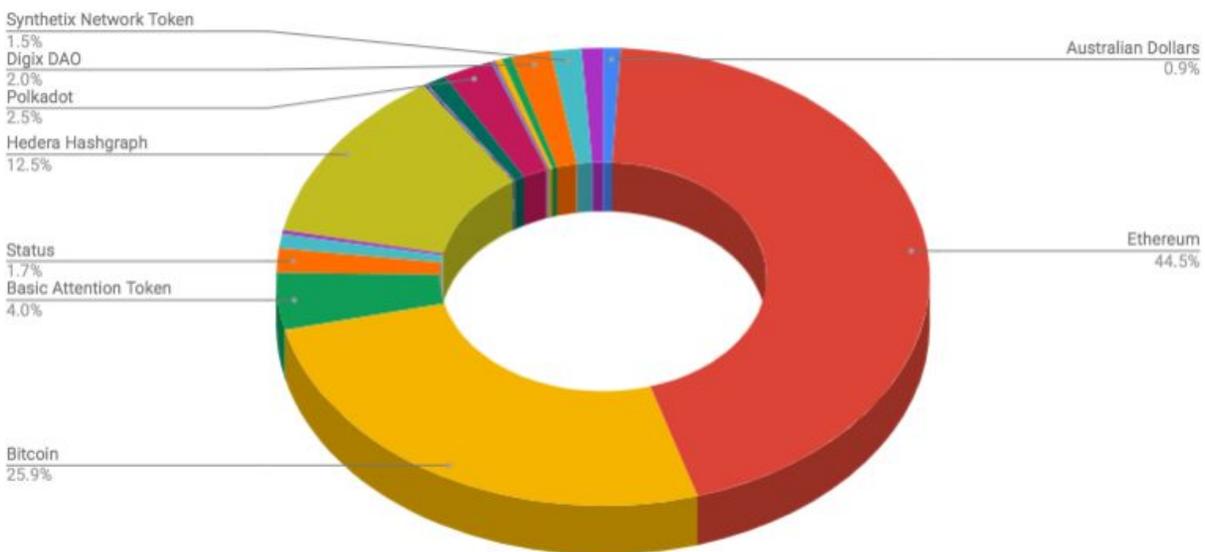
The screenshot of the market below shows that Bitcoin reached over USD 10,000 (from USD 7.2k on 31 December 2019) in the quarter but it ended slightly down over the period. Our fund unit price increased 12% over the quarter to close the quarter at AUD 0.4408.



Fund Assets and Key Metrics

Metric	30 September 2017	31 December 2017	31 January 2018	31 March 2018	30 June 2018
Unit Price	\$0.93	\$2.14	\$2.36	\$1.18	\$1.09
Return Since Last Valuation	-7.00%	130.11%	10.28%	-50.00%	-7.63%
Return Since Inception	-7.00%	114.00%	136.00%	18.00%	9.00%
Assets Under Management	\$1,166,062.70	\$3,459,592.39	\$5,028,329.29	\$2,417,802.58	\$2,516,518.55
Metric	30 September 2018	30 November 2018	31 December 2018	31 March 2019	30 June 2019
Unit Price	\$0.7480	\$0.4979	\$0.5178	\$0.5507	\$0.9501
Return Since Last Valuation	-31.38%	-33.44%	4.00%	6.35%	72.53%
Return Since Inception	-25.20%	-50.21%	-48.22%	-44.93%	-4.99%
Assets Under Management	\$1,768,920.85	\$1,445,669.37	\$1,842,159.60	\$2,211,850.52	\$3,918,854.71
Metric	30 September 2019	31 December 2019	31 March 2020		
Unit Price	\$0.5270	\$0.3937	\$0.4408		
Return Since Last Valuation	-44.53%	-25.29%	11.96%		
Return Since Inception	-47.30%	-60.63%	-55.92%		
Assets Under Management	\$2,153,195.44	\$1,608,380.84	\$1,889,123.39		

Blockchain Early Opportunities Fund - 31 March 2020



PART 1 - My Educators

I have selected just 4 of over 50 people I have learnt from over the past 4 years educating myself on everything from the history of money through to Modern Monetary Theory (I am not a fan of [MMT](#) by the way!), cryptoeconomics, distributed consensus algorithms and capital markets.

Caitlin Long

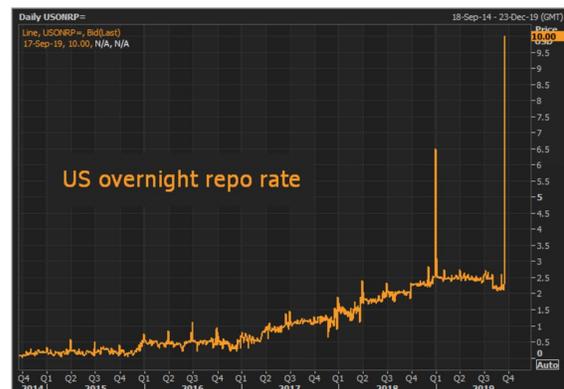
Caitlin is a 22 year Wall Street veteran who first came to study Bitcoin in 2012. Caitlin is leading the charge in her home State of [Wyoming to become the leading State in Cryptoasset](#) adoption. She is founder of the USA's first Cryptobank, [Avanti Bank](#).

Caitlin has educated me about the issues with fractional reserve banking and rehypothecation ([see excellent video here](#)). In short these issues have allowed Banks to lend out far more money than they have and then have collateralised those loans with assets that have been pledged more than once. In other words the same assets have been used to secure multiple loans. Even more bizarrely, the same assets are recorded on the balance sheets of multiple companies. The result is an illiquid banking system, under collateralized loan portfolios and

corporate balance sheets that do not properly reflect true asset ownership.

The other area of her focus which caught my attention is the US overnight asset repurchase interest rates, so called 'Repo Rates'. Repo Rates refers to the interest rate that the US Federal Reserve charges banks for overnight short term loans. Usually the rate is very low as it is low risk lending and it is only overnight. In September 2019 Caitlin observed that Repo Rates had spiked significantly, this indicated that there was more demand for overnight loans than is normally the case, which in turn indicated that the Banks were having unexplained short term liquidity issues.

The graph below is showing the spike in September 2019 Repo Rates.



Since then the repo market has gone from bad to worse. From September 2019 to the end of 2019, the Fed financed USD 500 billion in repo operations. By 12 March 2020, the Fed

announced it would conduct USD 1.5 trillion in repo. On 20 March 2020, it announced it would be offering **USD 1 trillion in daily repo loans until the end of the month**. That's a trillion dollars every day the US Fed is pumping into the repo market to cover the demand.

Caitin's tweets over the past weeks have started to sound very concerning. I set out below some of her more significant tweets.



On Bitcoin Caitlin says ‘...the current financial system has price stability (in theory) but is

systemically unstable, whereas cryptographically based systems, like Bitcoin have (for now) price instability but are systemically stable...’. Caitlin is bullish on Bitcoin and distributed cryptographically based systems.

Raoul Pal

With a background in global finance Raoul Pal is a Co-Founder & CEO - [Real Vision Group](#) which he describes as the Netflix for capital market professionals. He is an economist, investment strategist and publisher at The Global Macro Investor.

Raoul has educated me about the global debt and asset price bubbles. His thesis is that over the past 3 decades the central banks have progressively been reducing interest rates. Each time there is a slowing of the economy, a rate cut is used to stimulate growth, the theory being that corporations will borrow to invest in production, this creates growth and jobs.

One of the problems with the theory is that in many cases (over the past decade) corporations have used a low interest rate environment to borrow funds to buy back their own stock. Executive compensation is often linked to Earnings Per Share or Total Shareholder Return performance indicators. Share buybacks in theory leads to higher EPS etc. and thus there

has been strong incentive to do share buybacks. This is good for shareholders and share prices have risen to the highest levels ever seen. The problem is, when a downturn comes, the debt remains but asset prices fall, this creates a liquidity problem at the corporate level. In this way the central banks have essentially created a debt trap from which they cannot escape. If they raise rates (to control inflation, when the economy improves) borrowers straddled with debt cannot afford the higher rates.

In the current environment, the asset price collapse is leading to stretched balance sheets and possibly one cause of the Repo Rates issues mentioned above. This is leading to potential bailouts in all industries, the airlines being just the first of many to come.

On top of this, interest rates have nowhere to go now so they have no impact on creating economic stimulus. Central banks are looking at other measures such as printing money and buying Government and Commercial bonds, and even equities (so called Quantitative Easing).

Raoul has also educated me on the trillions of dollars deficit in US pensions schemes. Unlike Australia, many pension funds in the US are Defined Benefit (vs Defined Contribution...like our Superannuation). These DB schemes get funded based on a whole host of assumptions,

including growth in asset values, retirement ages, growth in salaries etc. If one assumption is out, even by a small amount, the whole funding model does not work. This is what has happened in the US, there are now millions of people coming into retirement expecting $\frac{3}{4}$ of final salary until death (or similar), but there is not sufficient capital (they are trillions dollars short) to fund the pensions. This will lead to reduced consumption by retirees and equity sell offs to fund living costs etc.

America's multi-trillion dollar pension hole

Public pensions are woefully underfunded

The crunch point is coming soon

MANY WORKERS in the private sector no longer have them. But most public-sector employees in America are still entitled to a valuable benefit: a pension linked to their final salary. A long-standing problem is that states and cities, which fund their plans differently from the federal government, have been lax about putting aside enough money to cover these promises.

[Raoul is long on USD Bonds and Bitcoin.](#) The very best interview I have seen with him can be found here .

<https://www.youtube.com/watch?v=Y5Sq1nFac60>



Crescat Capital (Kevin Smith and Tavi Costa)

Crescat Capital was the second highest performing macro hedge fund in 2018 with a return of 40.5%. It's macro models analyse a number of macro economic market indicators and sets out a trading strategy based on the analysis. They have what they call the 'Trade of the Century'. This trade has three planks :

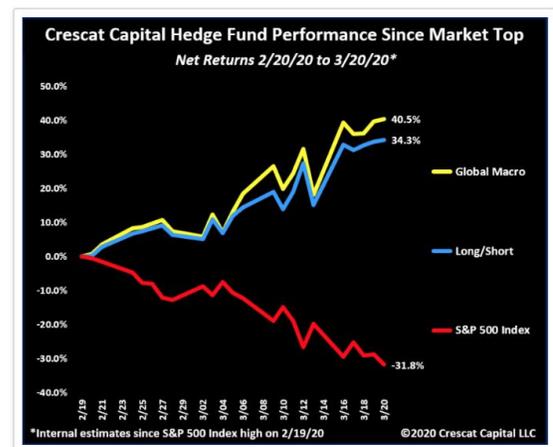
1. They believe values in the US equities market are far too high and out of scale to the underlying values. They have both long and short positions.
2. They believe the Chinese Yuan and Hong Kong Dollar is overvalued (even though the HKD is pegged, they believe the peg could break) and that they will go into a full blown crisis at some point. They have short positions.
3. They are bullish on precious metals and on Gold in particular. They have long positions.

In November 2019 they advised that it is a good time to accumulate Bitcoin. They have stated that *'...Bitcoin is limited in supply like precious metals and in that sense could be a valuable call option on inflation...'* they have a holding in Bitcoin but also cautioned to not allocate too heavily to Bitcoin at this stage.

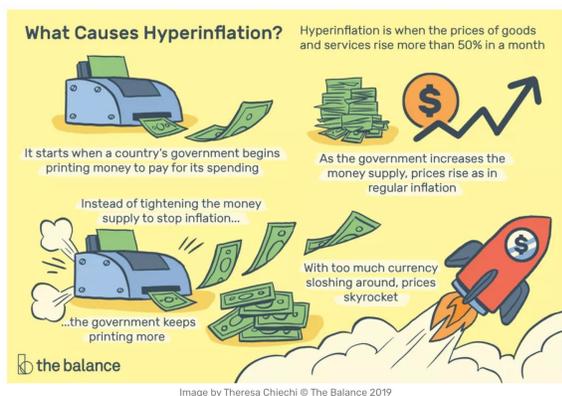
Crescat Capital taught me the benefit of long term thinking and patience. Their thesis has been in the making for a number of years, they have stayed on course even though at times it would seem that their trade would not play out as expected. A video explanation of their 'Trade of the Century' is set out here.

https://www.youtube.com/watch?v=BFg_RTAgmQk

Part of their trade is starting to play out. A chart of their performance over the past 2 months is set out below.



Most recently I read the above book, which is about the collapse of the monetary system in Germany/Austria in 1923. Many things caused this collapse but the one thing we have seen time and time again is that once money becomes less scarce, it has less value and this leads to hyper-inflation, the most recent example being Venezuela.



Comments in the last weeks by the US Federal Reserve about an ‘...unlimited...’ money supply could have been lifted from the pages of this book. Things of course today are very different, but also they are the same and the thing that is the same is that printing unlimited amounts of money results in certain destabilisation of that money as a store of value and in the end it fails also as a means of exchange.

See here for an interview with US Fed Chairman Powell on 26 March 2020, I am sure it will become historic.

<https://www.youtube.com/watch?v=WjCAoPYefQ4>

PART 2 - Our Portfolio

Bitcoin

The very first Cryptoasset, Bitcoin, is much more than just ‘A peer to peer Electronic Cash System’. It was launched at the time of the 2008/09 GFC as an antidote to the existing financial system which, as we saw then and we are seeing again now, has significant systemic issues.

It is attractive as an alternative system because it is not controlled by a central party, transactions cannot be censored, records are immutable and it is cheap to use. The below front page of The Times was included in the first block of Bitcoin as a pointer to its raison d'etre.



Bitcoin is considered an ‘antifragile’ and deflationary asset because of its limited supply (21 million coins) and the reducing supply schedule, which ends in the year 2140.

Bitcoin is a phenomenal success by any measure. Bitcoin is the best performing asset for the past decade by a significant margin. The total value of the network today is USD116 billion and there are over 300k transactions per day on the network. It can be used to purchase anything at all and despite continuous attacks it has never failed, it is called the ‘honey badger’ because it just refuses to die. Each day more and more people are doing their own research and discovering for themselves why there is great value and promise in Bitcoin.

These days however we are seeing some of the limits in the base layer of the technology. Many early adopters now consider Bitcoin to be more of a ‘store of value’ due to its scarcity than a currency for everyday use.

Moving on from Bitcoin

Bitcoin solved a computer science problem that had stumped the industry for many years, that problem being how to achieve distributed consensus. Or to put it simply, how to get a bunch of people who don’t know each other in widespread locations agree on the same thing at the same time (the Byzantine Generals

problem). Once this problem was solved it became possible to send money from one person to another directly with the record of that transfer being recorded on thousands of computers around the world at the same time. So there is one source of truth about balances but that truth is held on thousands of computers at the same time.

After Bitcoin there was a flurry of copycat projects launched, all trying to do something slightly different, some of these still exist today and have significant utility value, Litecoin and Monero are two examples. But none will ever be as valuable as Bitcoin and we are not invested in these types of cryptoassets.

The next big thing - Ethereum

In 2011 a 17 year old Russian/Canadian called Vitalik Buterin started getting interested in Bitcoin, he founded Bitcoin Magazine and started writing code for the Bitcoin blockchain. Soon after he tried without success to use the Bitcoin blockchain to transfer other types of assets (aside from cash). After a while he found that the structure of the Bitcoin blockchain was not sufficiently flexible to achieve his objectives and he started to think about an alternative chain. In late 2013 Vitalik proposed a new blockchain called Ethereum. It took hold and a few others (Gavin Wood, Joseph Lubin and

others) joined him to develop Ethereum, which was officially launched on 30 July 2015.

The initial Ethereum tokens (called Ether) were issued in 2014 at USD 0.30c each, the USD 18 million raised went to the Ethereum Foundation, which is based in Switzerland.

Ethereum is a much more functional blockchain than Bitcoin, hundreds of enterprises have joined the Ethereum Enterprise Alliance (EEA).

The Reserve Bank of Australia is experimenting with Ethereum and the Perth Mint has issued a gold backed token using the Ethereum platform.

Ethereum has by far the largest share of brain power, there are many thousands of developers working on the blockchain. The list of significant updates and roadmap is incredibly impressive.

Just one industry that has seen significant growth on Ethereum is finance. Referred to as Decentralised Finance (DeFi). These projects are building out the existing financial services such as lending, borrowing, derivatives etc. in the crypto world. The amount of value collateralised in the DeFi world has experienced exponential growth over the past couple of years, yet the overall amount is tiny compared to the same number in the existing financial system. Each transaction in the DeFi world

needs to be paid for using Ether, it is possible to see the potential upside with the use and therefore value of Ether.

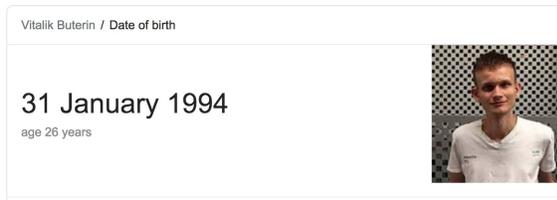
Total Value Locked (USD) in DeFi



Today Ethereum is valued at USD 132.00, it is the second most valuable cryptoasset with a total value of USD 14 billion. In my opinion and that of many others the price of Ethereum lags the value of the technology by a significant margin. Our thesis is that Ethereum will become more valuable than Bitcoin and not because of a reduction in value of Bitcoin, we are still bullish on Bitcoin. We believe Ethereum is more likely to be adopted by enterprises and indeed by governments.

This year is the most important Ethereum has ever faced. The change from Proof of Work to Proof of Stake promises significant upside if it works but huge downside if it does not. I would not say this is a make or break year for Ethereum, but it is certainly a year where we will see more clearly if this platform is going to realise its full potential. Vitalik is now 26 years of age, Ethereum is just 5 years old, our fund has been an investor for less than 3 years. We

have everything to look forward to with the growth of this asset. I am not worried at all by high volatility, I expect this to continue for many years on it's path becoming one of the world's most valuable assets.



Next generation blockchain - Hedera Hashgraph

If Bitcoin is our 'blue chip' investment and Ethereum is our 'disrupter start-up', Hedera Hashgraph (HH) is our 'moon shot' investment.

HH is referred to as the next generation of distributed consensus technology. It is NOT a blockchain, but it does achieve the same thing as a blockchain, only better. It is faster, cheaper, it achieves finality, it has better time stamping, data storage and more services.

It is considered enterprise ready. One of its strengths (also considered by many crypto enthusiasts as a 'deal breaker') is it's Governing Council. Bitcoin is arguably the most distributed of the blockchain projects, Ethereum is less so because of the Ethereum Foundation (which does very little). Distributed systems is one of the core principles of the Bitcoin idea. But the

reality is that governance in a distributed system is much less clear and Bitcoin has suffered as a result of it's distributed governance approach.

To me distributed governance is a question of balance and timing.

The approach taken by HH is unique. They have a Governing Council made up of 39 members who are diverse across industries and geographies and are time limited in their appointment. HH argues that the structure of the Council will prevent some of the common issues of centralised governance and that over time the system itself will become more distributed and secure as a result.

The first big news for HH this quarter was the announcement that Google is joining the Governing Council.



The second big news was the announcement that Wipro is joining the Governing Council. Wipro is one of India's largest information technology and business processing outsourcing companies. It's client list includes the world's top multinational and 'fortune 500' corporations. We expect that Wipro will

integrate HH into their client service offering and that their clients will embed HH throughout their operations.



The 12 current list of Council members is set out below, 27 members are still to be announced. We are excited to see who they will include.



The 12 February 2020 Google announcement triggered a spike in the price of Hedera. Although for us our average cost is around USD 0.06c, the increase in Hbar price is most welcome and an indication of how fast this lower cap token can move. The current price of Hbar is USD 0.03c and the market cap is USD 125m making it the 40th most valuable project in the cryptoasset market.

The other very important development at HH is a change to the tokenomics of hBars. A full

(and complex) report on the change in structure is set out [here](#). In brief they have deferred the release of hBars for existing holders in return for the granting of additional hBars for affected holders.

The result for holders like us is :

1. A delay in the release of existing hBars by two months; and
2. A conditional issuance of additional hBars (up to the value of AUD 500k (equivalent to our total investment amount)) in the years to come as the utilization and value of the HH platform increases.

As a long term investor in HH I am very happy with this change in tokenomics.

Other Developments during the Quarter and the Quarter to come

Central Bank Digital Currency

I have mentioned before that 2020 will be the year of an arms race to create a Central Bank Digital Currency (CBDC). It is unclear how the recent events will impact this race, but it is clear that the race is still underway.

In the US it has been reported that the crisis may help precipitate adoption of novel forms of money. COVID-19 relief legislation in the US led

to questions about the best way to get much-needed cash into American pockets. According to a Senate bill, using a central bank digital currency (CBDC), the federal government could send direct payments to citizen's wallets held by the Federal Reserve, called FedWallets. Many in the crypto community see this as validation of both an asset class and a set of ideas about the future of the financial system.

Already our main asset, Ethereum, has been used by the central banks of South Africa, Singapore and Australia for experimentation as a settlement layer for CBDC. The adoption of CBDC will bring about the need for a common benchmark, and for that benchmark to not be a nation state currency (which is on the roll of the USD at the moment). Our thesis is that in the long term Bitcoin or Ethereum could perform this role. Even if not, we believe CBDC adoption is a pathway for Cryptocurrency adoption, in time people will have a choice between government controlled money or money that is controlled by a computer program.

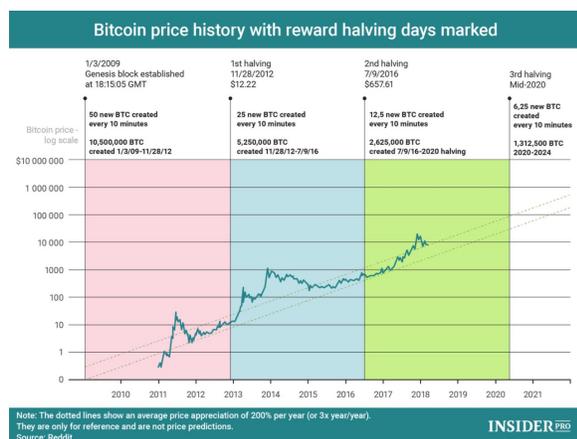


Bitcoin Halving Event

I mentioned earlier in the newsletter the deflationary aspect of Bitcoin. I refer here to the distribution schedule which is locked into the software. The distribution schedule provides that every 10 minutes or so a set number of new Bitcoins are released. Initially the number released was 50 Bitcoins every 10 minutes. The number released halves every 4 years, so in 2012 the number released reduced to 25 Bitcoins every 10 minutes, again in 2016 it halved again to 12.5/10 minutes. This will go on until 2140 when the last Bitcoins will be released, by this time the release number will be miniscule.

At each halving date the price of Bitcoin in theory goes up as there are now less being issued, this is by design a deflationary asset. A higher price means it is more valuable relative to the price of goods whereas an inflationary asset becomes less valuable relative to price of goods, it takes more dollars to buy the same goods.

The timing for the next halvening is estimated to be May 2020. I set out below a graph showing the price impact of the past two halvenings.



Observing the halvening in May will be particularly interesting as it comes at a time when the supply of fiat currencies is being multiplied (think QE). The contrast between a deflationary and inflationary money could not be clearer, only time will tell if the difference will be obvious in May 2020 or later.

I hope that the dire forecasts that we are seeing about both the COVID-19 and the economic situation prove to be overestimated and that the pre-virus environment, or something like it, returns soon. The success of our investment thesis does not depend on the collapse of the

financial system and a humanitarian crisis. The technology we are invested in will achieve its objectives with or without such a crisis and frankly the technology thrives in a strong global economic environment.

Once again I hope you and your families are well and staying safe. Thank you for your patience as an investor, we are in this together and we are perfectly placed to participate in the significant upside to come.

As always, please do not hesitate to contact me on 04 5090 0151 or at ian@bca.fund if you have any questions.

Best Regards



Ian Love
March 2020

To the extent that any of the information which we have supplied to you may be deemed to be "general advice" within the meaning of the Corporations Act, we draw your attention to:- (a) in preparing, supplying or conveying such advice, we did not take into account your investment objectives, financial situation or specific needs; and (b) (before acting on the advice) the need to consider, with or without the assistance of an authorised representative, the appropriateness of the advice having regard to your investment objectives, financial situation or specific needs and any relevant Information Memorandum.