



Blockchain Assets

· Cryptoasset Managers · Est. 2017 ·



Dear Investors

30 June 2021 marked the 4th anniversary of our Fund's operation. In this newsletter I set out a summary of the main thesis of our fund, where we are at with that thesis and what we have to look forward to in the coming years. The main part of the newsletter is a review of Ethereum Improvement Proposal 1559 (EIP-1559), which some are saying is the most significant Ethereum upgrade we have seen to date.

But first - The Cryptomarkets Summary

During this quarter the value of our fund reached an all time high of AUD 6.20, it then pulled back to AUD 2.92 and finished the quarter at AUD 3.45. Overall for the year the fund is up over 470%. Whilst we expect this level of volatility, it still takes a bit of getting used to and I take this opportunity to provide some explanation.

As investors in this space we have always been aware of regulatory risk and it is regulatory headwinds that are driving most of the negative sentiment. The technology we are investing in is changing business, governance and even social models and it does not sit neatly within existing regulatory frameworks.

Some jurisdictions will be outright hostile to it, some will adopt it with open arms and some will be in between and we have seen this over the past months. The [China Bitcoin mining ban](#) is an example on the one hand, whereas the adoption of [Bitcoin as legal tender by El Salvador](#) is an example on the other. Most jurisdictions are unsure what to do but feel they need to do something so they come out with nonsensical statements or knee jerk announcements that mainstream media jumps onto in a negative light. Then we have the twitter one liners from Elon Musk and talk about the environmental impact of Bitcoin mining etc. We have had some outright scams, so called 'rug pulls' in the space ([Internet Computer for one](#)) and we have had some high profile pump and dump coins like Doge and Shiba Inu fueling unhelpful speculative behavior in the retail sector of the market. All of this creates Fear Uncertainty and Doubt (FUD) which drives negative sentiment in the markets.

On the bullish side of the market we have the technology itself which is getting better day by day and adoption which is increasing significantly, particularly relative to our main holdings. The listing of crypto exchange Coinbase on NASDAQ on 14 April at a market cap of AUD 98bn was if nothing else a very important indication that crypto is here to stay. Still in the US we have ARK Invest, Grayscale (with now over USD 50bn assets under management) and few others applying for ETF's, noting that Canada has already listed at least two Bitcoin ETF's.

Then in Europe we have the German Stock Exchange purchasing 2/3rds of Swiss regulated crypto exchange 'Crypto Finance AG' for a *'...moderate three-digit CHF million...'* amount. The German Govt also [just passed a law](#) that could theoretically prompt up to USD 415 billion to flow into crypto, the 'Fund Location Act', permits 'Spezialfonds,' or special funds, to invest as much as 20% of their portfolios in crypto. This is significant. In the same week however the UK FSA announced that they have banned Binance, the world's largest crypto currency exchange by volume. There is more to the headline than meets the eye because according to some the ban does not impact operations in the UK via their global exchange. In a tweet Binance advised that *'We are aware of recent reports about a FCA UK notice in relation to Binance Markets Limited (BML). BML is a separate legal entity and does not offer any products or services via the Binance.com website.'* These events are just examples of the speed with which things are changing and how contradictory much of headline news can be.

In Australian too there is increasing interest and pressure on regulators and traditional exchanges to seriously consider crypto based enterprise listings. In response to this, in June ASIC released a discussion paper calling for feedback on a set of regulatory proposals that would enable the listing of Ethereum and

Bitcoin via public exchange listed vehicles (ETF or LIC), this would open up these assets to the retail market, financial planners and other advisors. At retail level we also have major crypto currency exchanges sponsoring the AFL generally (BTC Markets) and the Melbourne Football Club specifically (Coinjar).



It is my job to cut through all this noise and see things as clearly as possible. The China mining ban FUD for example is not terrible news. The difficulty of mining Bitcoin adjusts up or down every 2 weeks, if there are fewer miners the difficulty drops (to encourage more to mine), if there are more miners the difficulty increases (to weed out unprofitable miners). You can watch the [Bitcoin difficulty adjustment dashboard here](#). So the reduction in China mining will lead to a reduction in the difficulty level, which should encourage more miners (elsewhere) to beef-up or start new mining operations. [‘Bitcoin is still not dead.’](#)

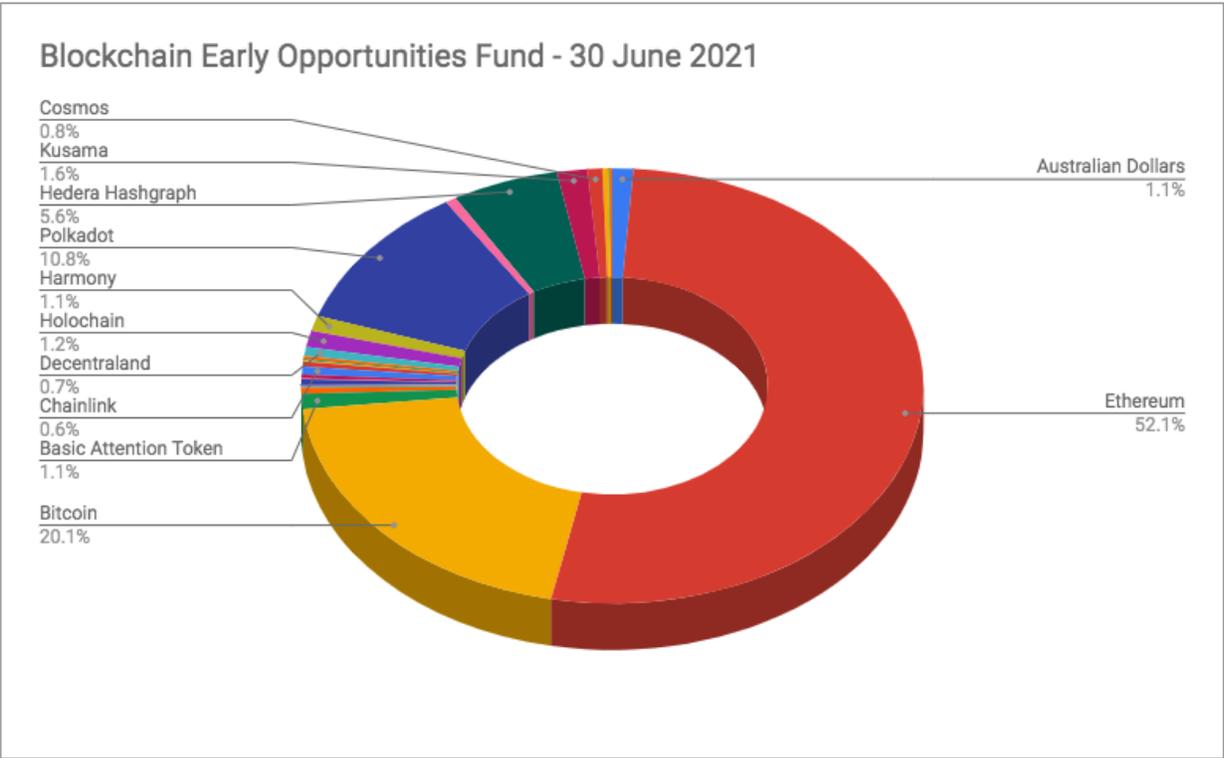
The environmental impact FUD gleefully spread by mainstream media is full of misinformation. For a start, Proof of Stake chains (soon to be Ethereum and Hedera and Polkadot) are energy consumption lite (99% less energy usage). But even when considering Proof of Work chains like Bitcoin, reporters fail to mention that a substantial share of all mining is already being powered by renewables, estimates range from 35%-75%. The International Renewable Energy Agency is of the view that cryptocurrency mining will accelerate the shift to renewables, see article [here](#). The Bitcoin Mining Council released their first report on sustainable Bitcoin mining [here](#), which concludes that member of the Council are currently utilizing electricity with a 67% sustainable power mix.

Over the past 3 months we have had more than the usual level of mainstream news coverage of crypto developments. Mainstream news is mainly negative, but even this is changing. It is very pleasing to see for example some very good crypto journalism by the Australian Financial Review and indeed they are hosting a [Crypto Summit](#) on 21 July in Sydney which will be a great event.

The conflicting news stories and events will continue for the foreseeable future and this will impact the markets. But my real focus is on the technology developments and enterprise adoption and I see no reason why the next 12 months will not be as productive as the past 12, in fact I see increasing acceleration going forward and I fully expect this will drive the long term value of the assets we hold.

Fund Assets and Key Metrics

Metric	30 September 2017	31 December 2017	31 March 2018	30 June 2018
Unit Price	\$0.93	\$2.14	\$1.18	\$1.09
Return Since Last Valuation	-7.00%	130.11%	-44.86%	-7.63%
Return Since Inception	-7.00%	114.00%	18.00%	9.00%
Assets Under Management	\$1,166,062.70	\$3,459,592.39	\$2,417,802.58	\$2,516,518.55
Metric	30 September 2018	31 December 2018	31 March 2019	30 June 2019
Unit Price	\$0.7480	\$0.5178	\$0.5507	\$0.9501
Return Since Last Valuation	-31.38%	-30.78%	6.35%	72.53%
Return Since Inception	-25.20%	-48.22%	-44.93%	-4.99%
Assets Under Management	\$1,768,920.85	\$1,842,159.60	\$2,211,850.52	\$3,918,854.71
Metric	30 September 2019	31 December 2019	31 March 2020	30 June 2020
Unit Price	\$0.5270	\$0.3937	\$0.4408	\$0.6034
Return Since Last Valuation	-44.53%	-25.29%	11.96%	36.89%
Return Since Inception	-47.30%	-60.63%	-55.92%	-39.66%
Assets Under Management	\$2,153,195.44	\$1,608,380.84	\$1,889,123.39	\$2,719,351.56
Metric	30 September 2020	31 December 2020	31 March 2021	30 June 2021
Unit Price	\$0.9449	\$1.6575	\$4.5682	\$3.4543
Return Since Last Valuation	56.60%	75.42%	175.61%	-24.38%
Return Since Inception	-5.51%	65.75%	356.82%	245.43%
Assets Under Management	\$4,266,576.98	\$8,534,312.16	\$29,863,745.69	\$23,117,618.24



Our Investment Thesis

There are two main planks to our Fund's thesis. The 'Fat Protocol thesis' and the 'Flipping thesis'.

The Fat Protocol Thesis

This thesis was first articulated by Joel Monegro of Union Square Ventures in August 2016 ([see original paper here](#)). It was also adopted by Olaf Carlson-Wee of Polychain Capital ([excellent video interview here](#)) and many others in the crypto fund management business.

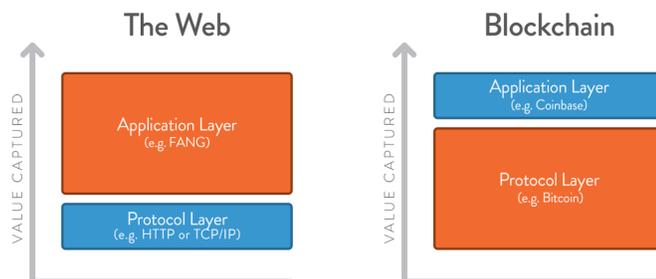
The basic idea of the thesis is that the greatest value will accrue at the lower (protocol) layer of the technology stack. Let me explain.

Consider two different ecosystems, the Internet (Web 2.0) and the Blockchain (Web 3.0).

The opportunity for investment exposure to protocol layer (think the plumbing of the City) of the Internet ecosystem was limited or non-existent. It was possible to invest in telcos and other infrastructure providers that support the internet, but it was piecemeal and not necessarily direct. As a result most value accrued at the business application layer, the FANG stocks.

The investment opportunity in the Blockchain ecosystem is at all levels (protocol, platform and application) but the thesis is that the greatest value will accrue at the protocol layer because all businesses will run on these new protocols. These protocols will be worth trillions of dollars, they are already on the way to this type of value. The only way to have investment exposure to value these protocols will capture is to own the native currencies of the protocols.

Fat protocol thesis diagram below



In our fund Protocol layer investments include our 4 biggest holdings : Bitcoin, Ethereum, Polkadot and Hedera Hashgraph. The thesis is that these holdings will underpin substantial investment returns. But this does not mean that other assets, higher up the stack at platform (think buildings in the City) or application layer (think businesses in those buildings) will not have significant value. Assets like Basic Attention Token, Decentraland, Status,

Ox and Yearn Finance, which are included in our smaller allocation pool are platform or application layer assets.

The fat protocol thesis is playing out as predicted, Bitcoin is now valued at over USD 643bn and Ethereum is valued at USD 257bn. It is still early days for this thesis, I expect that there will be a rapid acceleration of value over the next 5 years as the rate of adoption accelerates. Increased Adoption = Increased Protocol Value.

The Flipping

A second plank of our thesis is the so-called 'flipping'.

In my view, Ethereum is to Bitcoin what a smartphone is to a programmable calculator. The flipping refers to the situation whereby the value of Ethereum exceeds that of Bitcoin. To give readers an idea of what that would look like, Ethereum would have to be worth circa USD 10,000 today if it was to flip Bitcoin. The gap to Bitcoin is not insurmountable. In June 2017 the gap between the two was just 7%, (today it is 31%) but many feel that the price of Ethereum has been lagging relative to other assets during this current bull market and there are a number of improvements to Ethereum which will be launched within the next twelve

months. The flipping is tracked on many websites, [here](#) is one of the best.

When the flipping happens I expect it will be 'front page above the fold' headlines in global financial newspapers and Ethereum will pick up the momentum and brand recognition of Bitcoin, but it will do so without the (unjustified) baggage of Bitcoin.

Our Portfolio Tactics

We also have a tactical approach with our portfolio.

Firstly, as the value of the protocol layer investments grow so too will the number of projects being built on the protocols. Profits from the protocol investments will be used to invest in these new projects as they emerge. Ultimately the goal is to have a diversified portfolio with exposure to the best assets in the ecosystem. But this will be a careful and slow process. Many projects will fail and the very best projects have probably not yet been dreamt up, I spend much of my time researching the hundreds of projects that are emerging on a weekly basis.

One illustration of this tactic is Polkadot, which went from 2% to 10% of the portfolio over a period of 3 years. We are now earning 12%pa yield by staking our DOT's. With the income from this staking I have invested in Cosmos

blockchain and Flow blockchain projects. So in short, the profit on our Poladot is being invested at 12%pa and the income from that investment I have used to purchase new assets.

Another tactic is allocation of small amounts to assets in different market segments such as DeFi, NFT and DAO space. I am very selective with these investments but the relative exposure we have could become quite significant if these projects scale in the way we expect.

Distributed Autonomous Organisations (DAO's) in particular are an area of focus at the moment and I will be doing a write-up of developments in the DAO space for next quarterly newsletter.

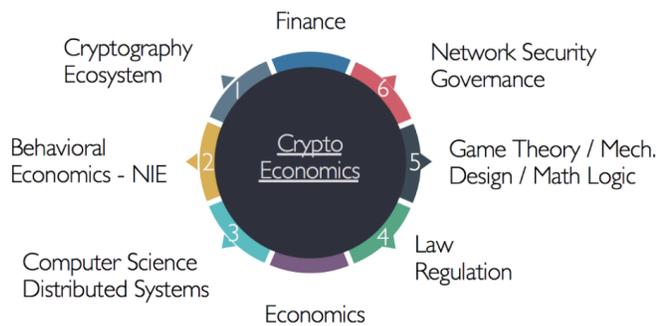
Ethereum EIP 1559

Cryptoeconomics

Before we can understand EIP 1559 we need to understand the economics of blockchain technology in general, this is referred to as cryptoeconomics.

Blockchains are maintained by a series of interlinked computers. The computer operators are called miners and they operate what is called a node. They typically provide two services, they create new blocks (pages in the ledger) and they validate transactions in the

ledger. For these services they get paid a block



fee and a transaction fee. The miners will be profitable if the cost of running their computers is less than the fees they collect.

The ultimate client of miners are everyday people and businesses who use applications that have been built on the particular blockchain. If it becomes unprofitable to mine the blockchain will ultimately fail. This is one aspect of securing the blockchain network. This is basic microeconomics, incentives drive behavior and it is vital to get the incentives right.

At a more macro level, each blockchain has it's own native cryptocurrency. Bitcoin for the Bitcoin blockchain, Tezos for the Tezos blockchain and Ether for the Ethereum blockchain. The amount of cryptocurrency issued, the rate at which it is issued and to whom it is issued forms the basis of the monetary policy of blockchains. Every blockchain has a different monetary policy and

such policies dramatically impact the value of the currency. We know about Bitcoin's 21 million coins for example, but what about Polkadot, Hedera Hashgraph and Ethereum?

A third aspect of cryptoeconomics is designing a system so that transaction fees are affordable for clients, the cheaper the better of course.

First proposed by Vitalik Buterin in April 2019 EIP 1559 ([see here](#)) considers these three aspects of cryptoeconomics to ensure that : miners are profitable; the value of Ether is not debased; and that the fees are affordable for users.

There is great optimism in the community that EIP 1559 will be a significant improvement to Ethereum generally and to the value of Ether in particular.

Ethereum Improvement Proposal 1559 (EIP-1559)

There are some issues with the current cryptoeconomics of Ethereum. Most notable among them is the uncertainty of the supply dynamics. Unlike Bitcoin, Ethereum's money supply is not fixed. Currently there is an issuance rate estimated to be 4.5% per year. This has led to some criticism relative to Bitcoin and it is very probably one of the reasons Ethereum has not already flipped Bitcoin.

Another issue is high transaction fees in times of high transaction volume. A third issue is the inefficiency of the 'first price auction' system whereby the highest bidder sets the price for transactions, this can be highly inefficient and lead to overpayment of fees and delays. EIP 1559 addresses these issues.

Very briefly the changes split transaction fees into two parts, a base fee and an inclusion fee (sometimes called a 'tip'). The base fee component operates like a consumable commodity. The base fee is burnt, in the same way that coal is burnt to produce energy, the base fee is burnt to record transactions. Many transactions will have just the base fee component. In times of high congestion the inclusion fee can be paid, this will be at the discretion of the party wishing to transact, this fee is paid to the validators.

In addition to the two types of fee the block size has the flexibility to double in size. These two dynamics (fees and block size) work together to act like a shock absorber which ensures fee costs do not become prohibitive for users but are sufficiently motivational for validators. Aside from improving the cryptoeconomics of Ethereum this will increase transaction speed by reducing congestion.

For those interested in diving deeply into this a comprehensive analysis is set out [here](#), or if you prefer to listen to a podcast [this one](#) with Crypto journalist Laura Shin is recommended.

Potential Price Impact of EIP-1559

According to many reports, the implementation of EIP-1559 will have a number of positive implications for the Ether price .

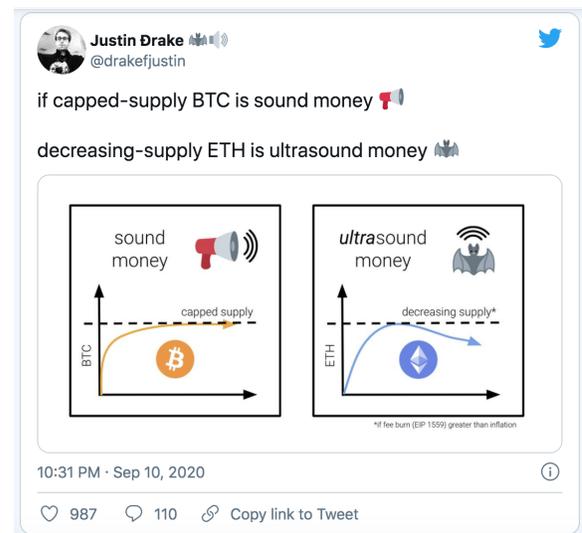
First, the burning of the base fee turns Ether into a consumable asset, the consumption of an asset reduces it's supply and in theory it can become a deflationary asset.

Under EIP-1559 the fees must be paid in Ether. This was not previously the case, it was possible to pay for fees on the Ethereum blockchain with other digital assets, this is something not widely known. Obviously making Ether the only currency that can be used on the Ethereum blockchain (for fee payment) will increase demand and is another positive feedback loop in the system.

A third positive with EIP-1559 comes hand in glove with the transition to Ethereum 2.0. Under ETH 2.0 holders of Ether will be able to generate staking income, this turns Ether into an income generating asset, a Capital asset. Validators on the Proof of Stake network would receive the 'tip' portion of the transaction fees,

this will be a passive form of income for Ether holders who choose to stake their holding with validators.

For further understanding I refer you to [Justin Drake](#) who studied mathematics at Cambridge University and is now a researcher at the Ethereum Foundation and is leading the charge of applied cryptography to the Ethereum network. Justin has proposed that Ether will become ultrasound money. In [this podcast](#) interview Justin discusses Ethereum's economic engine and how its design decisions (EIP-1559, Proof-Of-Stake, Issuance, etc.) emerges as an incredibly bullish evolution of sound money: Ultra Sound Money.



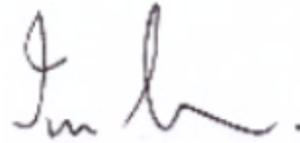
If you don't have 2 hours spare and would like something less technical I refer you to [this video](#).

When EIP-1559 and Ethereum 2.0?

We are dealing here with complex software and timelines are always rubbery, but the estimates are that EIP-1559 will be implemented in late July or August and that ETH 2.0 will be Q2 2022.

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
Founder and CEO

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