



Blockchain Assets

· Cryptoasset Managers · Est. 2017 ·

FINANCIAL TIMES

MONDAY 4 JANUARY 2021

WORLD BUSINESS NEWSPAPER

USA \$2.50 Canada C\$3.00

Venezuela dilemma

How Maduro has strengthened his grip on power — BIG READ, PAGE 15

Deep impact

Business world sizes up key figures, risks and trends for 2021 — PAGE 7



Soft sell

Rise of teetotalism forces brewers to mix their drinks — LEX, PAGE 18

High flyer Bitcoin value tops \$30,000

Bitcoin hit a record high over the weekend, reaching almost as high as \$35,000 yesterday before retreating.

The cryptocurrency's gains far outpaced mainstream asset classes in 2020. It rose 365 per cent last year, compared with the 16 per cent lift in Wall Street's S&P 500 stock index and gold's 25 per cent rally. But there are worries of a repeat of events three years ago, when a bull market collapsed.

Bitcoin's rally has been helped by signs that cryptocurrencies are becoming more integrated into the financial system. In October, PayPal said US customers would be given the option of holding bitcoin in their digital wallets. Full story page 6



Briefing

► **Tesla posts record vehicle deliveries**
Tesla has reported record deliveries of new vehicles that comfortably beat Wall Street expectations, coming within a hair's breadth of the half million target Elon Musk set earlier in the year. — PAGE 4

► **Airlines seek cut in Europe landing fees**
Carriers such as Ryanair, Wizz Air and easyJet are seeking lower fees but airports, which say they are in a "beauty contest", point to fixed costs such as air traffic control that cannot be cut. — PAGE 8

► **US gig worker earnings under pressure**
As employment is hit in restaurants, cinemas, shops and other parts of the US service economy, more people are turning to gig work such as delivery, putting downward pressure on earnings. — PAGE 2

► **ECB president prepares for climate fight**
Christine Lagarde is expected to make the European Central Bank a pioneer in battling climate change by slashing its purchases of bonds issued by fossil fuel companies. — PAGE 4



Dear Investors

This time last year I was writing about the impact of COVID-19 on our portfolio. I considered the macro investment implications and set out how I expected our portfolio to perform in such an environment. Across Australia we went into the first total lockdown in mid-March 2020. It was surreal experiencing streets and cafes empty or closed, we became a virtual ghost planet. Today the situation in Australia is better, but globally infection rates are worse than they were 12 months ago. WHO reports over 500,000 new cases/day, at the same time last year global rates were just 15,000 cases/day. Vaccines are offering some hope but there is no immediate end in sight and we have no idea what the new normal will look like or when it will come about....or perhaps it is already here.

In this newsletter I revisit the theme of macro investment environment and consider how our Fund fits within overall portfolio management theory. The second item of focus is the current hot topic in crypto,

Non-Fungible Tokens (NFT's). NFT's are only just getting started, they are quirky, fun, potentially highly valuable and are likely to become one of the most significant blockchain use cases.

But first...The Crypromarkets Summary

The value of our Fund increased by 175% over the past quarter. This is the most significant quarterly gain in our Fund's short history, our Assets Under Management raced past the AUD 10m and AUD 20m marks in the blink of an eye and finished the quarter at AUD 29.8m. The Unit Price of the Fund closed at AUD 4.5682 (up 1036% for the 12 months ended 31 March 2021).

I set out in my November 2020 News Bulletin, that I believe we are at the early stages of a significant bull market. My view has not changed, although we are further along than we were in November. The pace of institutional and corporate adoption, which started in 2020, is accelerating and this has been reflected in significant gains across all our assets. I am particularly encouraged by the increase in value of Hedera Hashgraph, which is up 493% from purchase price. Another highlight has been the continued growth of Polkadot which grew 376% over the quarter and is now 17.36% of our portfolio. Both Hedera and Polkadot have significant way to go before they are of comparable value to Ethereum.

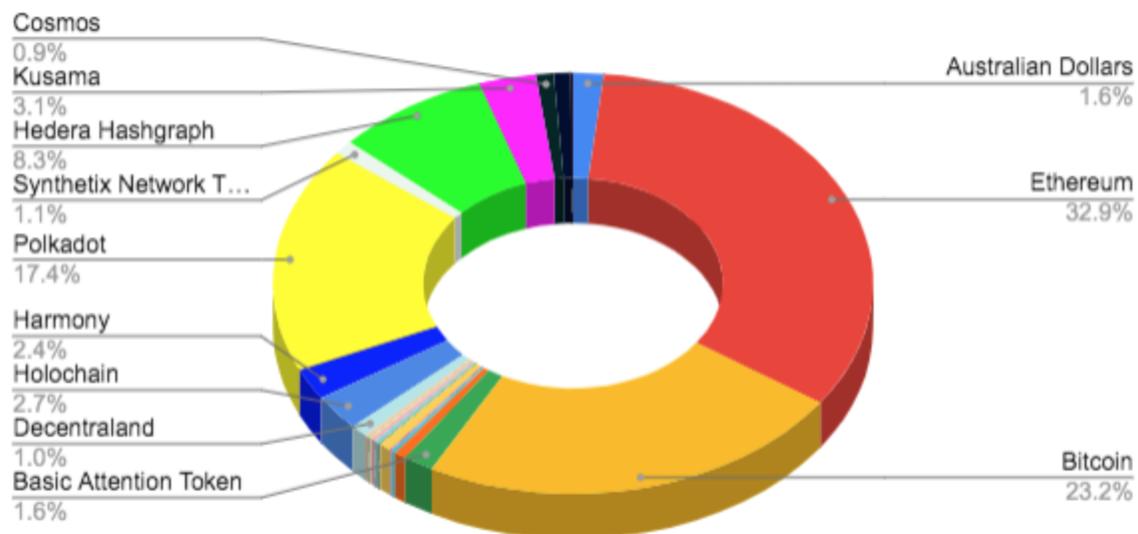
The total value of cryptomarkets topped ~ USD 1.8 trillion in the quarter and bitcoin is now worth ~ USD 1.0 trillion. If bitcoin was a stock it would be the 6th most valuable in the world (Apple being #1 at USD 2.0 trillion). Quite remarkable for a 12 year old asset that has no CEO, Board of Directors, Office Space or Marketing Budget (and by the way... my view is that Ethereum is even more valuable than Bitcoin!).

| Asset Name | Symbol | Market Cap | Price |
|--|---------|---------------------|-------------|
|  Apple | AAPL | \$2,037,906,973,440 | \$121.39 |
|  Saudi Aramco | 2222-AB | \$1,874,338,600,000 | \$9.37 |
|  Microsoft | MSFT | \$1,774,230,837,029 | \$235.24 |
|  Amazon | AMZN | \$1,548,829,186,987 | \$3,075.73 |
|  Alphabet A | GOOGL | \$1,386,683,466,071 | \$2,045.79 |
|  Bitcoin | BTC | \$1,078,132,851,071 | \$57,751.95 |

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 | |
| Unit Price | \$0.9449 | \$1.6575 | \$4.5682 | |
| Return Since Last Valuation | 56.60% | 75.42% | 175.61% | |
| Return Since Inception | -5.51% | 65.75% | 356.82% | |
| Assets Under Management | \$4,266,576.98 | \$8,534,312.16 | \$29,863,745.69 | |

Blockchain Early Opportunities Fund - 31 March 2021



‘How to Grow and Protect Wealth for 100 Years’

This heading comes from a paper on that subject prepared by Artemis Capital Management (January 2020). The paper ([here](#)) uses an allegory of ‘the hawk and the serpent’ to understand the generational cycle of wealth creation, destruction and rebirth.

I was drawn to this paper because I was interested to see if they consider Bitcoin and if so where that would fit within their portfolio. I will get to that later, but firstly I set out below a summary of the hawk and serpent allegory.

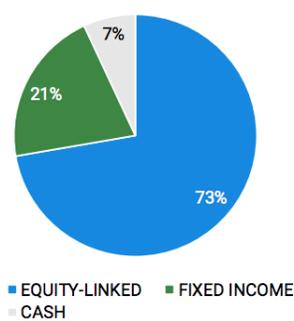
The General Thesis

The paper uses quantitative analysis, mathematics and empirical data to analyse portfolio strategies going back to 1928.

The analysis shows that the period from 1984 - 2007 is an outlier compared to any other period in economic history and that many fund managers erroneously treat this period as normal and base their allocation decisions on data from just this outlier period. This practice is referred to as ‘Recency Bias’. The proposition in the paper is that recency bias has created significant systemic risk.

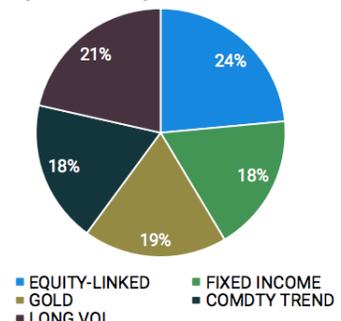
In order to manage this risk, to thrive over the next 100 years, the authors proffer a portfolio construction that can perform when stock and bonds collapse and advise to boldly hold a wider range of assets regardless of short term performance. They refer to this as the ‘dragon’ portfolio.

MEDIAN U.S. PENSION SYSTEM PORTFOLIO



Sources: Milliman 2018 Public Pension Study

BALANCED RISK ("DRAGON") PORTFOLIO



Sources: Artemis Capital Management LP

What is the Serpent

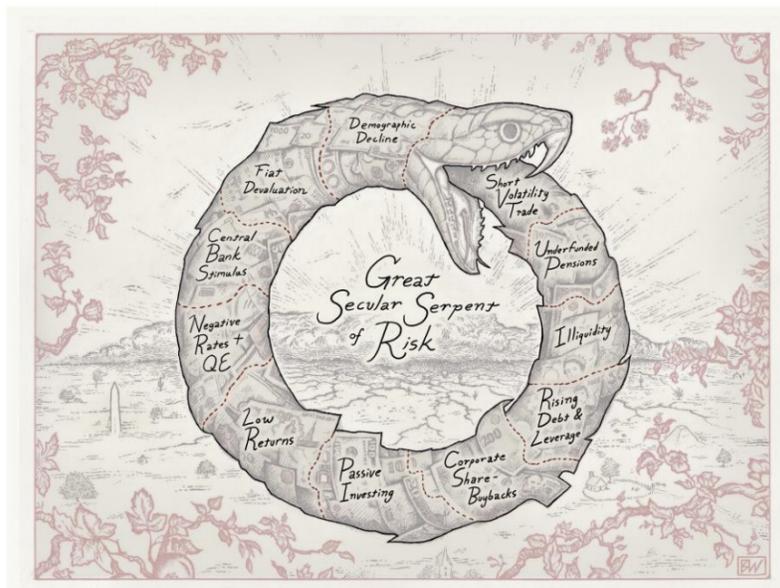
The serpent represents a period of secular growth, perhaps what we call the business/financial cycle. The growth cycle begins with a combination of favorable demographics, technology, globalisation and economic prosperity. As the secular boom matures, it is corrupted by greed, as fiat devaluation and debt expansion replace fundamentals as the driver of asset price gains. The allegory of the serpent eating its own tail

into oblivion is used by the authors to help understand this 'secular growth' cycle.

Secular Decline?

Is what we are seeing now the emergence of Hawk type secular decline? The authors of the paper believe so.

Considering the left wing of the Hawk they note that World debt levels are at an all time high (and remember this paper was prepared in January 2020, before the COVID19 spending packages). The debt trap faced by central banks is



THE ALLEGORY OF THE HAWK AND SERPENT

What is the Hawk

The Hawk signifies the secular forces (like inflation, deflation) that will ultimately destroy the corrupted growth cycle of the Serpent. The left wing of the Hawk represents deflation, an ageing population, faltering growth, a financial crash and then debt default. The right wing represents inflation, fiat default and helicopter money. Neither path is mutually exclusive, the pattern is as old as money itself.



that in the event of withdrawal of capital (banks stop lending etc.), loss of confidence (consider COVID) or higher interest rates will cause problems in servicing debts which could lead to a deflationary collapse as people choose to save and not spend.

The right wing of the hawk is also alive with inflationary forces emerging as policymakers print money to buy assets while at the same time distributing helicopter money to individuals in the trillions of dollars.

Traditional Portfolio Management

The authors of the paper are of the view that most modern portfolios are well-intentioned and perform excellently during periods of growth, however, they are not well suited to and can collapse entirely during a period of secular decline. 'The Classic 60/40 Equity-Fixed Income, Risk Parity and Passively Managed Portfolios suffer from recency bias and are highly reliant on assumptions derived from a once in a century bull market in Stock and Bonds.'

The underfunding of US retirement plans

Some background. The US State Pension System has 'Defined Benefit' schemes, that is they payout based on a defined benefit of say x% of Base Salary until the age of x. The managers of state pension schemes are under significant pressure to earn yield/return so that they can fund the liabilities as and when they fall due. At present there is an assumption that they will earn ~7.25% on plan assets. This is a highly questionable assumption in today's environment. If returns are just -2% per annum

lower, the average pension falls from 70% funded to under 50%. This is a liability expansion from USD 1.4 trillions to USD 3 trillion. The authors of the paper feel that this systemic risk '...could collapse the entire financial system given current savings levels.'

But why does this matter from a portfolio management perspective? Well for a start, in the desert of yield, it increases the level of risk portfolio managers are prepared to take (or need to take) in order to produce the required returns to fund their liabilities. This increased risk, at a systemic level, has led to the government propping up stock markets, which is essentially what the US Govt. has done with the first two COVID-19 stimulus packages. While we have not yet seen Govt buying equities directly, we have seen them buy corporate bonds. The purchase of equities in the secondary market is just one small next step, but as Armstrong said 'one small step...'

'Today there is a dangerous assumption that risk assets are immune to any form of price instability because central banks will always be willing and able to contain market stress.' Don't bet against the Fed...Mmmm.

Liquidity Risk

Again, in the desert of yield, fund managers seek to diversify, with increasing risk, into

Private Equity and Venture Capital and also by encouraging corporates to embark on leveraged buy-back programs. These measures do not diversify risk, they add secular risk. 'Passive investing has evolved into a crowded 'liquidity momentum' trade driven by once in a generation capital flows from retirement savings, that will reverse in the next decade as retirement ages are reached and drawdowns commence.'

Think outside the paradigm of the last 40 years

The authors state that 'If you own a portfolio dominated by growth and funded by economic and debt expansion, you are a snake eating your tail without realizing it.'

On the other hand there is the overly defensive Hawkish portfolio, heavily weighted in gold, cash (fiat) and portfolio insurance. This type of portfolio appears conservative but is highly fragile when standing still, particularly in periods of fiat debasement.

The secret to a portfolio that stands the test of time is diversification over a century, not a decade. The authors allegory for this is that mythical creature, the Dragon. 'The most effective century-long portfolio seeks equilibrium between the juxtaposed forces of the Hawk and the Serpent; principally assets

that perform during eras of secular change (Hawk), versus those that perform best during economic stability and growth (Serpent)'. They go on to say that '...The key to superior portfolio returns is to make surprisingly large allocations to alternative assets that perform when Stock and Bonds do not.'

TO THRIVE OVER 100 YEARS, BALANCE ASSETS THAT PROFIT FROM SECULAR GROWTH WITH THOSE THAT PROFIT FROM SECULAR DECLINE



So where does Bitcoin and other Cryptoassets fit within this 'Hawk and Serpent' thesis?

The authors of the paper say : 'Cryptocurrencies such as Bitcoin have similar characteristics to Gold as there is a limited supply, they exist outside the system, and in theory, can be valued using a stock-to-flow model. Despite this fact, while gold has outperformed over the past 4,000 years, the verdict is still out on Bitcoin or

other currencies like it. There are substantial questions regarding custody, security, regulations, and liquidity, but the benefits outweigh the risk when sized appropriately. The prudent investor may consider owning Cryptocurrencies speculatively and sized appropriately to the high risk.'

These comments about Bitcoin by Artemis are significant. Not so long ago if Bitcoin was mentioned at all it would have been dismissed as unworthy of serious consideration. Many portfolio managers in the US are now considering Bitcoin and crypto more widely as an important emerging asset class.

I am not referring here to hedge fund managers who are paid to take such risks, I am referring to conservative historical institutions such as New York Life and Massachusetts Mutual who have allocated small amounts to Bitcoin. In the case of MassMutual, it has never in its 169 year history failed to meet its liabilities. Yet today they are facing a declining yield environment, which if not addressed, may lead to defaults. As set out above under the discussion of pension fund liabilities, it is companies like MassMutual who have the most risk on the table. If there is a significant downturn in equity asset prices and the reduction in yields continues they will be

significantly exposed. For this reason they have to look at Bitcoin seriously and this is what they have done. Not only have they made a small portfolio allocation, they have invested in a Bitcoin institutional service provider New York Digital Investment Company (NYDIG). Other investors in NYDIG include Soros Fund Management, New York Life and Morgan Stanley. For the balance of this year and beyond



we will see one institution after another make announcements about investments in Bitcoin. In Australia, I expect the uptake to be slower, but when it does come there will be a flood of interest and announcements.

Non Fungible (digital) Tokens

Non-Fungible Tokens (NFTs) have become the latest hot topic in the crypto world. What are they ? How are they being used ? and how is our fund investing in this aspect of the crypto ecosystem?

What are they?

The best example of an analogue fungible token is a \$0.20 cent piece...they all look the same, they are fungible. A non-fungible example would be a human being, each one is unique. When you think about it, most things in life are non-fungible.

In the digital world, prior to blockchain technology, anything created, for example a photo, was fungible because they are easily duplicated and distributed. There is no recorded original version. For example, my copy of the photo you took and sent to me is the same as the one you still hold on your phone. The concept of digital scarcity or a digital original did not exist.

Blockchain technology changed all this with the creation of the Bitcoin blockchain, bitcoin is digitally scarce. It is the world's first digitally scarce asset. However it is not considered rare, rare implies the item is an 'extreme of it's kind'.

The Black Swan Stamp is an example of a rare asset in the analogue world. NFTs are rare digital assets and already they are being sold at Christie's Auction House. On 11 March 2021 American artist Beeple became the first to sell a purely digital piece of artwork (below) at auction, fetching more than USD 69.3m for 'Everydays – The First 5000 Days', a collage of

artwork he created every day for the past 13 years.

Think about this...would you pay USD 69.3m for a work of art knowing that there is no official hardcopy/physical version of the artwork. All you essentially own is a digital image, to be fair, it is a verifiable one off original digital image (a NFT), but it is still just a digital image? What does the purchaser of this piece of art know that we don't?



If you want to know more about this artist and how he got into crypto I set out [here](#) a great interview podcast where he speaks with crypto journalist Laura Shin. Even more interesting is [this interview](#) with the guy who bought the artwork, why did he buy it? What is his grand plan? Does he even have one, these questions

are put to him in this podcast, again by the wonderful Laura Shin.

A cambrian explosion of NFT applications

We are at day one of this multi-decade tsunami of new asset creation. Already we have NFTs in Sports, Music, Fashion, Gaming and Movies. There are platforms for showcasing the collectibles and there are marketplaces for buying and selling them, all of this in the digital form only. I set out [here](#) a fascinating documentary covering the current status of the NFT ecosystem. If you don't have an hour to watch the doco, I set out below just two of the better examples of NFT developments.

National Basketball League - 'Hot Shot Moments'

This project takes existing marketing tricks and tactics to create scarce and rare collectibles. Nothing new in this type of methodology. The new piece is the type of asset. Instead of Baseball Cards, Signed Balls or physical memorabilia the assets are video clips of 'top shots', the clips are wrapped in a visually pleasing package with details and statistics of the player, the game etc and the clips are limited in number. I set out below the most valuable clip to date. But to appreciate it properly watch the video [here](#).



I know what you are thinking, why would someone pay USD 250,000 for a NFT of a video clip when that same video clip can be watched for free on TV?

The answer to that is the same answer to the question of the value of owning original art....there are plenty of good copies of the Mona Lisa but there is only one original and that is the only one of any significant value.

Does the concept of a one off original item translate to the digital world? Beeple's digital art and USD 69m says...yes it does!

The world of NFTs is the world of rare collectibles and common sense seems to leave the room when we are talking about rare collectibles. In the 6 months since 'Top Shot Moments' was launched over USD 400m worth of Top Shot Moments have been sold.

The Gaming World + Blockchain and NFTs

Imagine if you could buy a small ownership stake in the board game Monopoly when it was first launched by Parker Brothers in 1935!

Well, the next 'Monopoly' is not going to be a board game, it will be a digital game. Already the Global video game revenue is over USD 180 billion a year. According to the International Data Corporation, the video game industry is a bigger moneymaker than the global movie and North American sports industries combined.

The combination of NFT technology and video games is going to take an already very lucrative market and set it alight with new potential. I want to illustrate this by using the example of a new game called '[My Neighbor Alice](#)' (MNA).

Readers may be familiar with a popular 'virtual world' game called '[Second Life](#)' and the native currency of that game, [Linden Dollars](#).

MNA, is the next generation of virtual world multiplayer builder games. It is very similar to the hugely popular game 'Animal Crossing', which is a life simulation game developed and published by Nintendo.

MNA could be thought of as an enhanced combination of Second Life and Animal Crossing because blockchain and NFT technology allows players to contribute to the development of the

game, build, own and sell assets within the game and bring real world physical products and experiences (concerts, sport events for example) into the game.

The game is centered around the world of Alice and features a complex of islands on which anybody can buy and develop plots of land by filling it with their creations. You can get an idea of the game at [this youtube clip](#).

The 'ALICE' token is the native currency in the game. It allows token holders to play, invest and also be part of the game. There is a fixed supply of ALICE tokens.

The tokens have 4 functions :

1. purchase assets and land in the game;
2. Staking is a way to lend a currency, and receive interest in return. Token holders could participate in staking and earn rewards as a certain percentage of platform revenues will be given out as staking rewards. For instance, the gaming platform would have revenues from plot sales, asset sales, transaction fees etc. and that a fixed proportion would be distributed to the staking pool;
3. Owning Alice enables the player to participate in the governance process through a decentralized organisation,

with proposals and voting structures. There are issues related to the platform operations and development that could be decided based on the preference of the token holders. In order to encourage users to participate in the voting process, there will also be rewards for voters; and

4. There are a proportion of the tokens reserved for user incentives. By completing quests in the game, players could earn ALICE tokens. This design is to encourage user participation in the game and to maintain traction.

The ALICE tokens are a bit like monopoly money in so much as you need them to play in the game. But unlike monopoly there is limited money supply, there is only one board, millions of people play the game at the same time, the game runs 24/7, the prices of the assets on the board increase with market value, new assets (limited only by imagination) can be added to the board and the ALICE is convertible to Bitcoin or other cryptos or indeed to fiat.

The success of Monopoly is that it crudely but somewhat accurately mimics real life situations. Virtual world builder games, now with blockchain and NFTs, can do this much better, they can bring the digital virtual world closer to the analogue physical world. There was a time when 'bricks and mortar' businesses thought it

novel to have a website and an on-line shop front. Now it is standard practice, so too it will become the case that real world businesses will need to have virtual stores in games like MNA.



How is our Fund Investing in this Space?

One of the most attractive aspects of the strategy of our Fund is that most of our investments are at the protocol layer generally and Ethereum in particular. The thesis is that as these protocols get used (for things like NFTs), value will accrue to the native tokens of the protocol, the more use the more value.

The original NFT standard (ERC 720) is an ethereum based token. The first example being the hugely popular game '[cryptokitties](#)'. Since then many NFT projects have been built on ethereum. So as NFTs grow so too will the value of ethereum.

But ethereum is not the only blockchain used to build NFTs and also there is value in owning

directly some tokens in the NFT space. Considering this our fund has small holdings in the following assets :

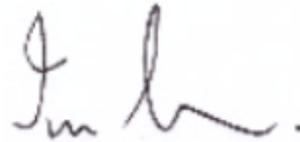
1. The FLOW blockchain is a NFT specific blockchain built by Dapper Labs, who are the team behind cryptokitties and NBA TopShots;
2. We have MANA which is the native currency of Decentraland which is one of the first virtual world platforms and heavily invested in by the Digital Currency Group;
3. We have a small allocation to the ALICE token.
4. We hold Harmony One tokens. This is a faster and cheaper blockchain than Ethereum and has great potential for use in the NFT space. We are staking

these tokens and earning 10% yield on the value of tokens staked.

As I see opportunity I will be adding to our NFT related holdings, but I will do so on a conservative basis and not at the expense of our ethereum, bitcoin or hedera holdings.

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

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.