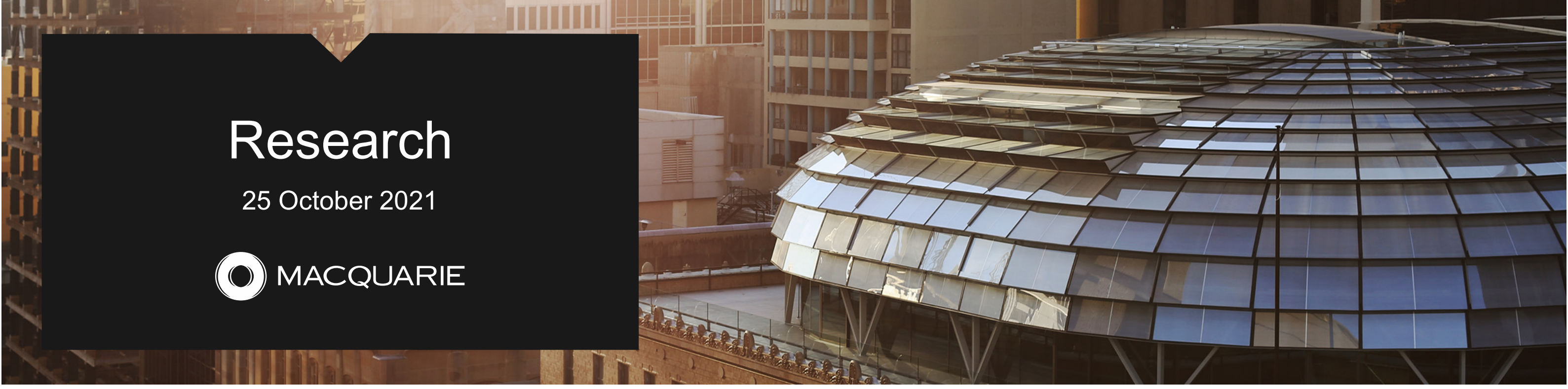


Research

25 October 2021

MACQUARIE

Investment Strategy Update #75

Bitcoin on the verge of becoming a more ‘mainstream’ investment option

- Like it or not, Bitcoin is back on the front pages of the financial press following a rebound in the share price to a new record high as fears of inflation push investors into safe-haven assets and the listing of the first Bitcoin ETF has pushed it into the realms of mainstream investors.

- However, Bitcoin (and crypto currencies) are young assets that are yet to be stress tested through time, high inflation environments and/or sustained risk-off periods. At this stage, we believe Bitcoin remains a highly speculative asset which will continue to exhibit extreme price volatility (having risen 112% this year but also suffering a 53% intra-year decline) as well as a positive correlation with risk assets. Additionally, Bitcoin raises numerous ESG-related ‘red flags’ given the amount of energy required to mine it.

- It is likely that last week’s listing of the US based Bitcoin ETF marks a turning point for broader retail acceptance, but cryptocurrencies are still early in their lifecycle, and it remains to be seen who the ultimate winners and losers will be, especially given the threat from regulation and central bank digital currencies (CBDC).

- In theory, Bitcoin does have certain characteristics that add diversification benefits to a traditional stock-bond portfolio (such as a fixed supply). But high price volatility, a positive correlation with risk asset performance and ongoing regulatory risk may work to undermine its benefits versus other more trusted diversification assets such as gold. If investors are searching for high potential returns, then Bitcoin may offer this, but if they are trying to diversify, we suggest more traditional options.

New ETF launches Bitcoin into the ‘mainstream’

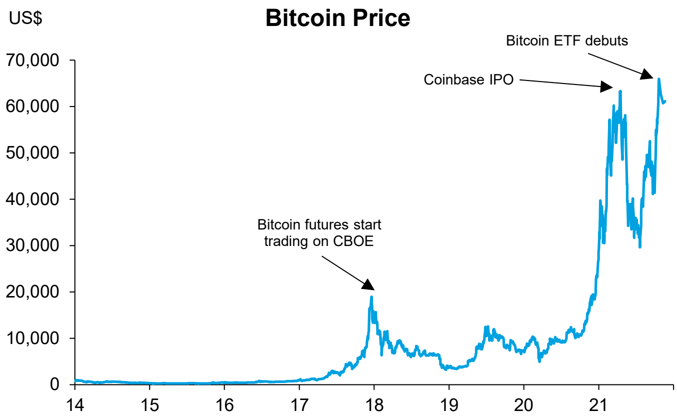
The price of Bitcoin has surged to a record high, following the launch on 20th October of the ProShares Bitcoin Strategy ETF (NYSE: BITO). The ETF (which gives exposure to Bitcoin futures contracts) reached US$1 billion in assets under management after the second day of trading, making it the fastest ETF to reach the US$1 billion mark.

The launch of this ETF means that a large range of investors who were previously locked out of the cryptocurrency market (e.g., institutional money managers who can’t buy Bitcoin for regulatory/compliance reasons) will now be able to access ‘Bitcoin-like’ returns.

Crucially, it debuted after the US Securities & Exchange Commission gave the green light, signalling the willingness of US regulators to tolerate cryptocurrencies as an asset class. This is being interpreted by some as a ‘watershed’ moment for the entrance of cryptocurrencies into the ‘mainstream’.

Closer to home, BetaShares has flagged the launch of an upcoming crypto-related ETF in Australia – the BetaShares Crypto Innovators ETF (CRYP) – which aims to provide investors with exposure to pure-play crypto companies i.e., those whose balance sheets are held at least 75% in crypto-assets, and diversified companies with crypto-focused business lines.

Bitcoin rises to a new record high



Source: CoinDesk, October 2021

Cryptos are ‘on a roll’ this year…

Bitcoin has risen 112% this year due to a combination of factors including increased institutional acceptance, a hedge against rising inflation concerns and rising retail interest. This has also come against a backdrop where increasingly institutions and governments are accepting Bitcoin as legal tender:

- In June El Salvador was the first country in the world to accept Bitcoin as legal tender.

- In September Twitter allowed the use of ‘tipping’ in Bitcoin through its app, making it the first major social network to encourage use of Bitcoin as a method of payment.

- Earlier this year Paypal allowed customers to use cryptocurrency to pay at PayPal's 26 million merchants.

- In April digital currency exchange Coinbase went public. Coinbase provides services not only for retail but also institutional cryptocurrency investors, including SEC-qualified custodia services.

…but not everyone is a believer

Bitcoin has had its share of detractors from the beginning, citing various problems or risks associated with it, or simply dismissing it as a ‘fad’, ‘scam’ or ‘Ponzi scheme’ of some sort. Nevertheless, Bitcoin has confounded its critics: The website 99Bitcoins.com tracks how many times a prominent pundit or website has declared the ‘death’ of Bitcoin. At the time of writing, Bitcoin has ‘died’ 432 times with the latest obituary having been issued by JP Morgan CEO Jamie Dimon, who said on 11th October "I personally think that Bitcoin is worthless". Bitcoin subsequently rose 20% in the days after the statement although at the time of writing is up 12%. It seems increasingly clear that Bitcoin is unlikely to 'die' anytime soon, and price action shows that despite its detractors, it can flourish.

So why has Bitcoin gained traction?

Aside from the recent news, there are fundamental reasons for the extraordinary price rise over the last few years (up over 10,000% over the last eight years at the time of writing) including:

- **A 'protest vote' against monetary debasement**. Bitcoin is a currency whose supply (or more accurately supply growth) is fixed, in contrast to 'fiat' currencies whose supply is at the whims of central bankers. This makes it analogous to gold (whose supply is ostensibly independent of central banks) and a useful hedge against the risk of 'monetary debasement'.

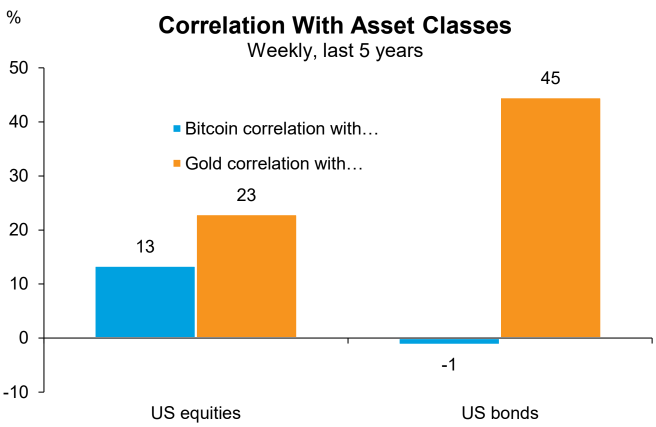
- **Rising inflation concerns**. Like gold, Bitcoin is also regarded as a hedge against inflation, given its fixed supply. While actual inflation has mostly been relatively low over the last few years in Western countries, this may not always be the case, particularly given recent fiscal stimulus.

Why own Bitcoin in a portfolio?

A source of uncorrelated returns…

Aside from the perception that Bitcoin offers very high potential returns, Bitcoin is also increasingly being seen as a legitimate addition to a portfolio, in part due to its returns being uncorrelated with the returns of other major asset classes. In fact, over the last five years, Bitcoin's weekly returns have been less correlated than gold with US equities and US bonds.

Bitcoin is less correlated than gold with equities/bonds

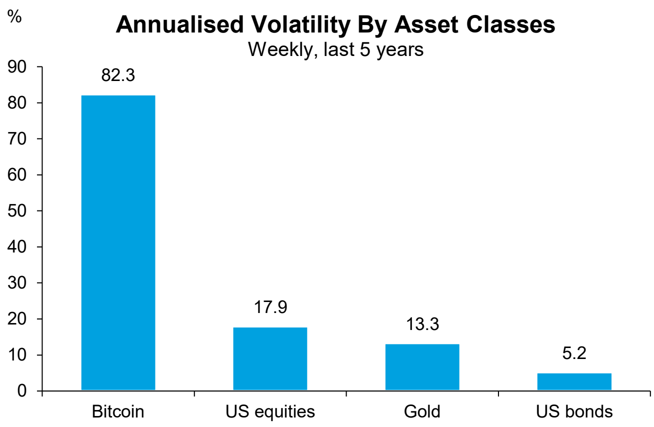


Source: Factset, MWM Research, October 2021

…but it is extremely volatile

Bitcoin is significantly more volatile than other asset classes. Over the last five years the weekly volatility of Bitcoin has been ~5x that of US equities, ~6x that of gold and ~16x that of US Government bonds. As recently as this year Bitcoin fell 53% from its April peak to July low: Bitcoin remains a highly speculative asset.

Bitcoin is MUCH more volatile than other asset classes

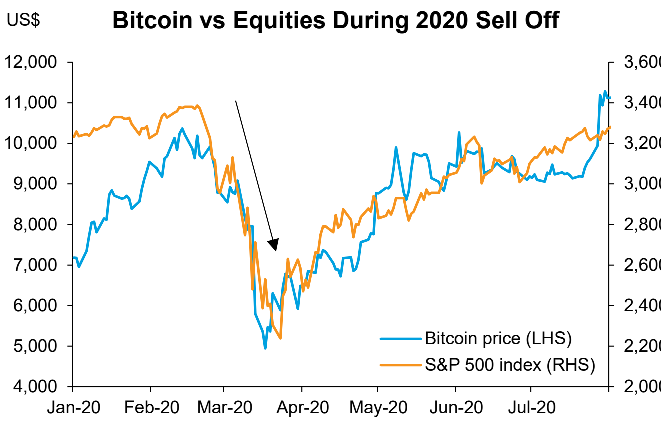


Source: Factset, MWM Research, October 2021

Because Bitcoin supply growth is fixed by a computer program, its supply is not impacted by its price (i.e., a higher price does not create more Bitcoins). This is a key difference with gold (& other commodities), where an increase in price will likely drive an increase in supply (as miners are incentivised to extract more gold) and vice versa. ***This implies that the price of Bitcoin will always be substantially more volatile than gold***.

Also, while Bitcoin is notionally less correlated than gold with equities, in significant 'risk off' periods there is reason to believe Bitcoin trades like a 'risk asset': In the COVID-induced sell-off in March/April last year Bitcoin sold off heavily in line with equities – unlike gold. So, in other words, Bitcoin failed to provide diversification at a time when investors needed it most.

Bitcoin traded like a 'risk' asset during the 2020 sell off



Source: Factset, MWM Research, October 2021

Don't forget regulatory risk

Regulatory risk is, and always has been, one of the biggest risks hanging over Bitcoin and other cryptocurrencies. This was very clearly illustrated recently with China's blanket ban on all cryptocurrency transactions, with the People's Bank of China announcing, "virtual currency-related business activities are illegal financial activities". The price of Bitcoin fell sharply immediately after the announcement. Other countries have also outright banned cryptocurrencies, including Algeria and Bolivia, while many more have imposed restrictions of various kinds. As it becomes more mainstream we would expect to see a rise in the regulatory backdrop – including Australia, where the recently released Final Report from the Select Committee on Australia as a Technology and Financial Centre announced a series of recommendations aimed at regulating crypto assets.

And don't ignore the risk from rival CBDCs

A central bank digital currency (CBDC) is the virtual or digital form of a country's fiat currency. Like fiat currency, this digital money is 'centralised' as it is backed by the full faith and credit of the government, as opposed to cryptocurrencies, which are 'decentralised'. According to the Atlantic Council, 81 countries (representing over 90 percent of global GDP) are now exploring a CBDC, with five currently operational and another 14 (including Korea and Sweden) in the pilot stage and preparing a possible full launch.

CBDCs are effectively state-backed rivals to cryptocurrencies such as Bitcoin and consequently represent a threat. Indeed, some commentators have drawn a link between China's cryptocurrency crackdown and the upcoming rollout of its Digital Currency Electronic Payment (DCEP) – a digital payment and processing network run by the Central Bank of China – and its digital currency, the digital yuan (e-CNY).

And then there are the ESG risks

Bitcoin (and Bitcoin mining) raises a number of 'red flags' in respect of Environmental, Social and Governance (ESG) considerations:

1. Environmental concern: 'excessive' energy use

Bitcoin 'mining' uses vast amounts of electricity – currently equivalent to the electricity consumption of Poland (population 38 million) according to Digiconomist. This 'excessive' energy usage was cited by the Chinese province of Inner Mongolia as a reason to shut down all cryptocurrency mining to meet its energy-saving targets

2. Environmental concern: 'excessive' carbon emissions

This electricity consumption in turn produces carbon emissions – currently equivalent to the carbon footprint of Bangladesh (population 165 million) according to Digiconomist. Indeed, in May 2021 Tesla CEO Elon Musk announced that Tesla would no longer accept Bitcoin as payment due to concerns over the environmental impact of Bitcoin mining.

3. Environmental concern: 'Excessive' e-waste

Less well known is that Bitcoin mining produces e-waste (i.e., discarded and obsolete IT equipment) each year equivalent to the annual e-waste produced by The Netherlands (population 17 million) according to Digiconomist, who also estimated that computers involved in Bitcoin mining have an average lifespan of only 1.29 years.

4. Social & governance concerns: Illicit transactions

Cryptocurrencies have been flagged as being particularly vulnerable to money laundering, tax evasion and usage in illicit transactions. In 2019 Sean Foley, Jonathan Karlsen and Talis Putnins published "Sex, drugs, and bitcoin: How much illegal activity is financed through cryptocurrencies?" which found that "approximately one-quarter of bitcoin users are involved in illegal activity…[and] that around $76 billion of illegal activity per year involve bitcoin (46% of bitcoin transactions), which is close to the scale of the U.S. and European markets for illegal drugs".

Bitcoin has a place, but understand the risks…

For those investors wishing to add Bitcoin to an investment portfolio, it remains an untested asset and with portfolio benefits that are significant in theory, but which in practice are yet to be seen. We think digital currencies will continue to grow as an investment option and as a means of exchange (legally), but the regulatory environment will need to catch up to this growth and that will create a cloud over unbridled return potential. Additionally, Bitcoin raises a lot of ESG 'red-flags' which runs counter to the fastest growing investment trends across the world. Investors should understand that Bitcoin, while steadily becoming a 'mainstream' asset class, remains a speculative investment that is in its infancy.

The report was finalised on 25 October 2021.

Recommendation definitions (Macquarie Australia/New Zealand)

Outperform – return >3% in excess of benchmark return

Neutral – return within 3% of benchmark return

Underperform – return >3% below benchmark return

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