

# Does Bitcoin have a place in a pension scheme portfolio?

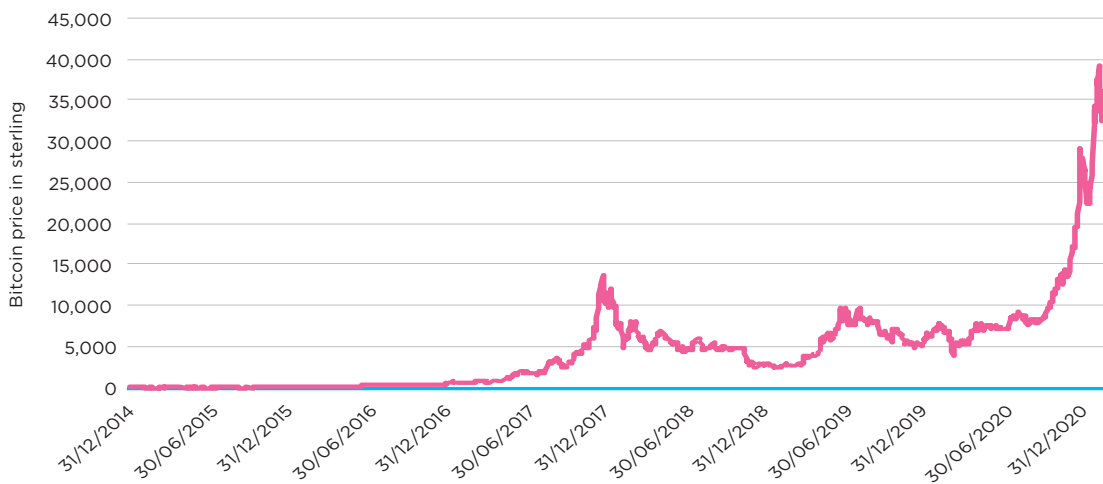


**Simeon Willis** explores how the popular cryptocurrency measures up against a four point test to consider if it has a part to play in a diversified pension portfolio.

**Bitcoin has emerged as one of the leading cryptocurrencies of our age.** Its popularity has been boosted recently with the endorsements of leading industry figures such as Elon Musk, meaning you could now use it to buy a new Tesla. With this popularity has come spectacular investment performance, 170% pa over the last 5 years. There are now examples of multi asset funds that are investing in Bitcoin on behalf of UK pension schemes. With such eye watering profits, trustees may wonder whether there is merit in making an allocation for their scheme?

To answer the question of whether Bitcoin has a role in a portfolio we need to know what it is and how it works. From there we can consider what purpose it might serve as an investment.

## The exponential growth of Bitcoin



Source: Refinitiv

## Key facts about Bitcoin:

Number  
in circulation

**18.7m**



Price of one Bitcoin  
as at 30 March 2021

**£42,150**

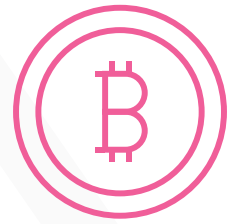


Worldwide  
users

**over 70m**



# Introduction to Bitcoin



Bitcoin, and cryptocurrency in general, is very similar to the concept of supermarket reward points in that the points earned are stored electronically and can be used to buy products and services that are priced in points rather than pounds.

A big difference is that cryptocurrencies have wider application. Once you have exchanged cash for Bitcoin you can trade them with other people, for services or goods from people that will accept them, or simply hold them with a view to trade them back to cash at some point in the future. Each Bitcoin is unique, they can be tracked and they cannot be copied.



## Blockchain

**Bitcoin, unlike conventional currencies, is not stored or traded using conventional bank transactions instead it uses a technology called Blockchain.** Blockchain is simply an accounting system, a record of transactions between different users.

What makes Blockchain technology different to a traditional bookkeeping system is that the log of transactions is in the public domain and visible to all. The calculations to update the records of transactions are not done by a single computer at a bank. Instead computers all across the world known as 'nodes' compete in a race against time to solve each series of transactions, known as 'blocks'.

Cryptocurrencies can work with systems other than Blockchain, but being such a transparent system addresses the primary risk of a digital currency, namely the risk that whoever controls the accounting system will steal or print money and devalue everyone's holding.



## Mining

**Solving the Blockchain is the equivalent of a massive game of Countdown with Rachel Riley where the contestants compete to be the first to calculate the right answer to a mathematical sum.** As reward the first node to solve the transaction earns commission in the form of new Bitcoin which are created from thin air according to a defined schedule. This is confusingly known as 'mining'. When the calculation is solved the other nodes check it is correct – an inherently easier job than solving the sum in the first place.



## Buying Bitcoin

**Bitcoin can be acquired through any number of platforms and exchanges.** In order to hold Bitcoin you need to have a Bitcoin address and a 'private key'. Anonymity is maintained in the publicly available Blockchain as no personal information is stored in relation to an address, making it popular with criminals. This means that in the event of a person forgetting their address and private key there is no means to recover their Bitcoin. There are stories of individuals having lost millions of dollars as a result of losing their login details.

# Does Bitcoin function successfully as a currency?

**There is a long list of features that a currency needs to fulfil but at its simplest it needs to be:**

- **Uniform** – standardised units with a value
- **Widely accepted** – can be used to buy products and services
- **Divisible** – can accommodate different size transactions
- **Secure** – resistant to counterfeiting
- **Scarce** – limited supply to avoid systematic devaluing

Bitcoin has these features to some extent with the exception of not being widely accepted (yet). In order to become a dominant currency it is competing with other established conventional currencies which fully satisfy all these criteria and many more (such as high speed and efficiency of transactions). An advantage that a conventional currency has is having a captive audience as a result of being legal tender for a given jurisdiction. The scope for users' loyalty to Bitcoin to wane is therefore far greater than for a conventional currency. **Further, there are now over 4,000 cryptocurrencies vying for market share, so this is a crowded marketplace.**

## Why does Bitcoin have value?

It is often challenged that Bitcoin shouldn't have any value because there is no central bank limiting the supply. This is probably one of the least valid challenges levelled at Bitcoin. There is a prescribed formula that determines the number of Bitcoin that will exist, linked to the number of times the Blockchain has been recalculated or solved after each series of transactions. This, combined with the transparent Blockchain system that underpins Bitcoin, means the constrained supply is relatively straightforward to validate.

However just because something is limited in supply doesn't give it any value. Bitcoin has value because it serves a purpose and therefore people choose to pay to own it. **In order to utilise a currency you need to hold some inventory, the pounds in your pocket.** The larger and more frequent the transactions you plan to use it for, the more you need to hold at any one time, driving the price up. Bitcoin's value can therefore be sustained long term by a continuous demand to use it for transactions. However, in absence of this it has no fundamental value.

## Is Bitcoin secure?



**Whilst the Blockchain avoids manipulation at the currency level, there is still scope for intermediaries to defraud Bitcoin owners.**

Frauds and failures of Bitcoin exchanges have resulted in material losses, for instance Mount Gox in 2014 where Bitcoins worth hundreds of millions of dollars were parted from their owners. Similarly there are examples of cryptocurrencies that have simply lied about the technology that underpins them. **'OneCoin'** a fraudulent cryptocurrency retold in a BBC podcast series **'The missing cryptoqueen'** is one such example.

# Is Bitcoin a suitable investment for a pension scheme?

**Functioning as a currency and functioning as an investment are two very different things. To be an investment opportunity an asset must satisfy at least one of the following attributes:**

1. Store of value
2. Source of interest
3. Source of expected capital growth
4. Risk hedge

Test  
#1

## Is Bitcoin a store of value?

Bitcoin is not pegged to any currency and indeed one of the main attractions is how its price has changed (i.e. appreciated) relative to conventional currencies. Unfortunately the price has also fallen considerably over sustained periods. As such Bitcoin cannot be argued to be a reliable store of value given its price is so volatile.

Test  
#2

## Is Bitcoin a source of interest?

Holding Bitcoin itself doesn't earn interest but this is no different to pound notes in your wallet not earning interest. Interest is earned from lending money and some platforms do offer interest bearing accounts with promises of between 8%-12% pa. On the face of it interest at this level may seem appealing, but when viewed in the context of the price volatility it is somewhat overshadowed. There are also issues around interest bearing deposits being unsecured and involving undiversified exposure to the chosen platform.

A source of diversified interest could result from the emergence of a lending market in Bitcoin. But it is hard to imagine such a market developing whilst the price is so volatile. Since the start of 2021 the price has increased by 195% which would make a debt very difficult to pay back.



Some would argue that Bitcoin is a defensive asset, but this is difficult to justify given it does not generate cashflow and in 2018 its price fell 50% in the space of one month.

**Simeon Willis**  
Chief Investment Officer

Test  
#3

## Is Bitcoin an expected source of capital growth?

**The future value of Bitcoin ultimately depends on increasing adoption of it as a digital currency. The daily volume of transactions is what fundamentally drives the value of the currency. There will need to be sufficient growth in transaction-driven users to compensate for the portion of current Bitcoin owners who are transient speculators that will at some point leave the market.**

Comparisons can be drawn with commodity markets – whose primary function is to facilitate supply chains, rather than deliver a long term return to investors. That said, some knowledgeable active managers make long-term returns by taking advantage of short term imbalances in demand and supply. Whilst the same might be argued of Bitcoin, the average investor is unlikely to generate long term returns from trading commodity derivatives. On top of this the factors at play in the Bitcoin market are arguably even more abstract and unpredictable.

Test  
#4

## Is Bitcoin a risk hedge?

**It has been argued that Bitcoin protects against inflation from central banks printing money.**

This assertion is at best incomplete. Inflation arises from a number of sources. In theory Bitcoin, or indeed any non-sterling currency, could protect you from inflation resulting from sterling depreciation. Holding Bitcoin could in theory also protect from collective devaluing of currencies resulting from loose monetary policy. But it does not necessarily protect you from other forms of inflation. Where inflation results from higher raw materials costs or expansionary policy leading to a surge in demand, this can plausibly increase prices in all currencies. Further in owning Bitcoin you are exchanging modest inflation risk of Sterling for substantial price volatility of Bitcoin.

## Environmental failings



**It is estimated that solving the transactions of the existing Bitcoin market consumes more electricity than the United Arab Emirates.**

This all stems from the inefficient competitive approach to solving the Blockchain. This waste of energy is going in the opposite direction to carbon reduction strategies of global governments and will only get worse if the adoption rates rise.

# Conclusion

**We've established that there are some legitimate arguments to explain Bitcoin's current value. There is scope for Bitcoin's success to continue if it becomes more widely adopted, and scope for its price to fall if that growth in adoption does not exceed current expectations.**

In terms of being an investment opportunity, currently Bitcoin is:

- **Not a reliable** store of value;
- **Does not offer** interest on a scale sufficient to justify the price risk;
- **Does not offer** a compelling case for continued price appreciation; and
- **Does not serve** as a hedging asset.

Without these fundamentals the only remaining possible role could be as a short term tactical position. However with such indecipherable drivers of fundamental value it is difficult to believe that anyone truly understands how much it should be worth – making this a game of pure chance.

This may not always be the case. More widespread and deeply engrained usage of Bitcoin could lead to more reliable assessments of value and less price volatility.

But for now, **Bitcoin resides in the same category as race horses and fine art** – a fascinating subject of conversation and possibly a place for a trivial flutter, but not a credible institutional investment opportunity.



**There is scope for Bitcoin's success to continue if it becomes more widely adopted, and scope for its price to fall if that growth in adoption does not exceed current expectations.**

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