Wiston Capital

CHAINLETTER

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Bitcoin Isn’t Working

A discussion of why bitcoin's incorrect categorisation as "digital gold" is turning out to be highly problematic

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Bitcoin Isn’t Working

The recent, sudden and unexpected underperformance of bitcoin, not just relative to the broad world of other financial assets but also against other crypto assets, demands examination.

There have always been some aspects of how bitcoin works that have given cause for discomfort. There are aspects of just about everything that give cause for discomfort, but if they are minor enough and nothing seems amiss, we dismiss them. The problem is that it might be a single loose screw that causes the aeroplane to crash.

A small problem now could be a much bigger problem later.

Digital Gold Is A Category Error

So what’s the small problem with bitcoin? It started with a category error. It’s something mentioned in these pages many times before, which is the depiction of bitcoin as “digital gold”. I’ve always written about it as something that has irritated me, rather than regarded as problematic, but on reflection I wonder whether in fact it will turn out to be deeply damaging.

If we go back in time, it is true that Satoshi Nakamoto and others cited the properties of gold frequently to help explain bitcoin. Gold has certain properties which bitcoin mimics, such as scarcity and trustlessness. Furthermore, its value is largely derived from the shared human belief that it has value. If enough people think it’s money, it’s money.

The **key difference for bitcoin**, however, is that it can be moved around the world in any size and at any time, fairly much instantaneously, because **it has its own transmission network.** Indeed, Satoshi acknowledged the difficulty in categorising it, because it was a combination of digital coin, bank and network:

*“Writing a description for this thing for general audiences is bloody hard. There's nothing to relate it to. “- **Satoshi Nakamoto***

In other words, gold is an inert lump of rock, which we agree has monetary value. Bitcoin is a monetary network, with a native coin which enables value to be transferred. These are two separate things.

It Costs Money To Operate The Bitcoin Network

Gold requires no energy to maintain it. It just is. It is stored energy, the product of cosmic explosions billions of years ago. But it is cumbersome and energy consumptive to shift around, especially at scale and at speed, which makes it problematic for international settlement.

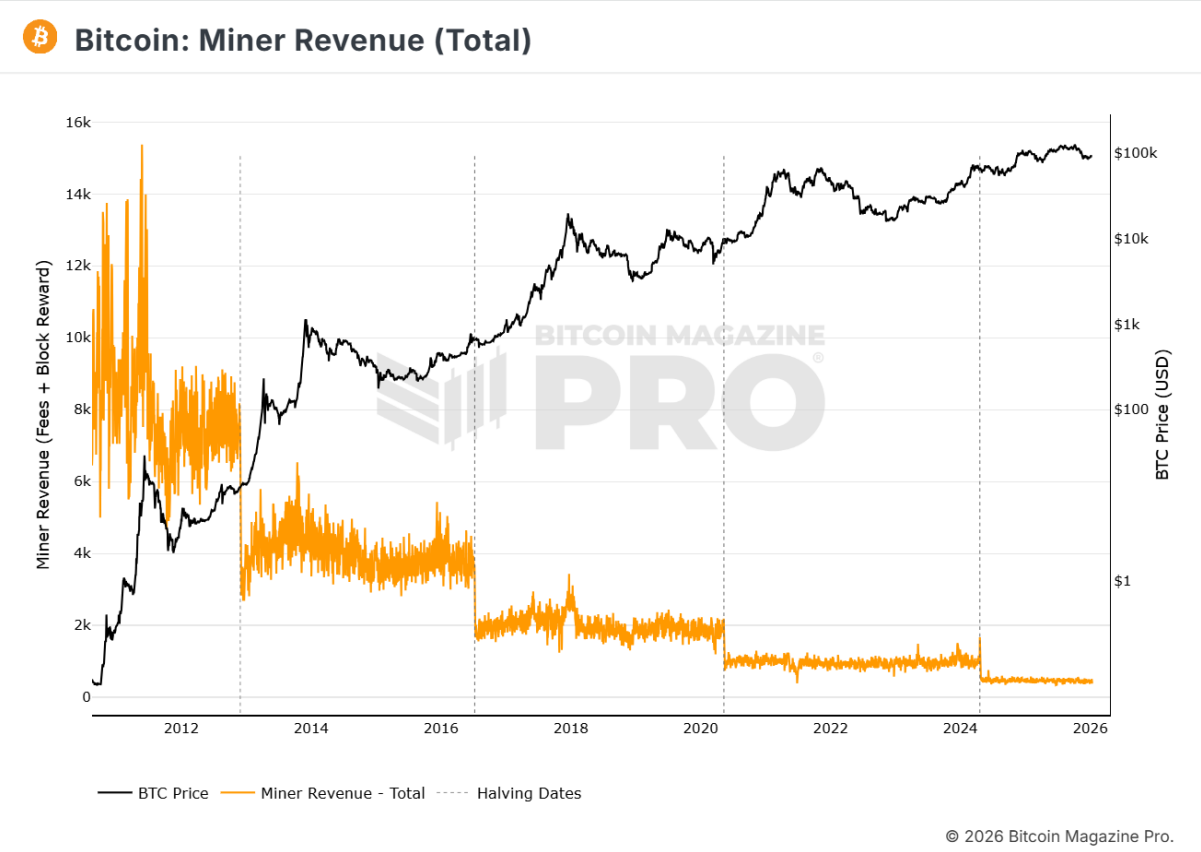
Bitcoin, by contrast, does need energy to maintain and secure it. That’s fine, because that’s what it is, a “peer to peer monetary network”. An owner of bitcoin owns both the monetary asset and is, to a greater or lesser degree, a part owner of the infrastructure as well.

However, there is a cost to operating the network, and **unless the network is used, this is a vector of weakness.** In bitcoin's case that cost comes in the form of energy used by the miners to keep it updated, secure and decentralised. That energy has to be paid for, and that payment comes in two forms:

- the "block reward" (the bitcoins awarded to the miner who correctly "guesses" each block), and
- the "fees" generated by every transaction.

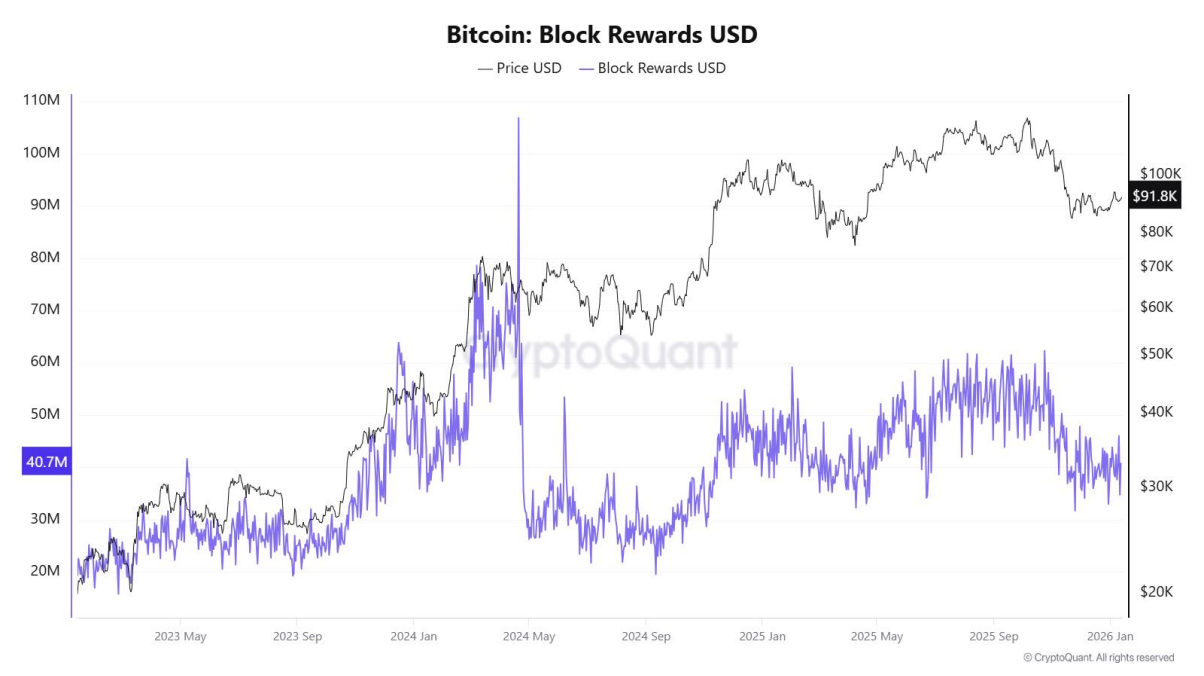
In its early days the block reward was always sufficient to keep the miners interested, because there were a lot of bitcoin's awarded for every block. But remember that the block reward halves every four years. So miner revenue halves every four years. That's a nasty business model if the bitcoin price isn't going up.

Here's a chart of historic miner rewards (block rewards plus transaction fees):

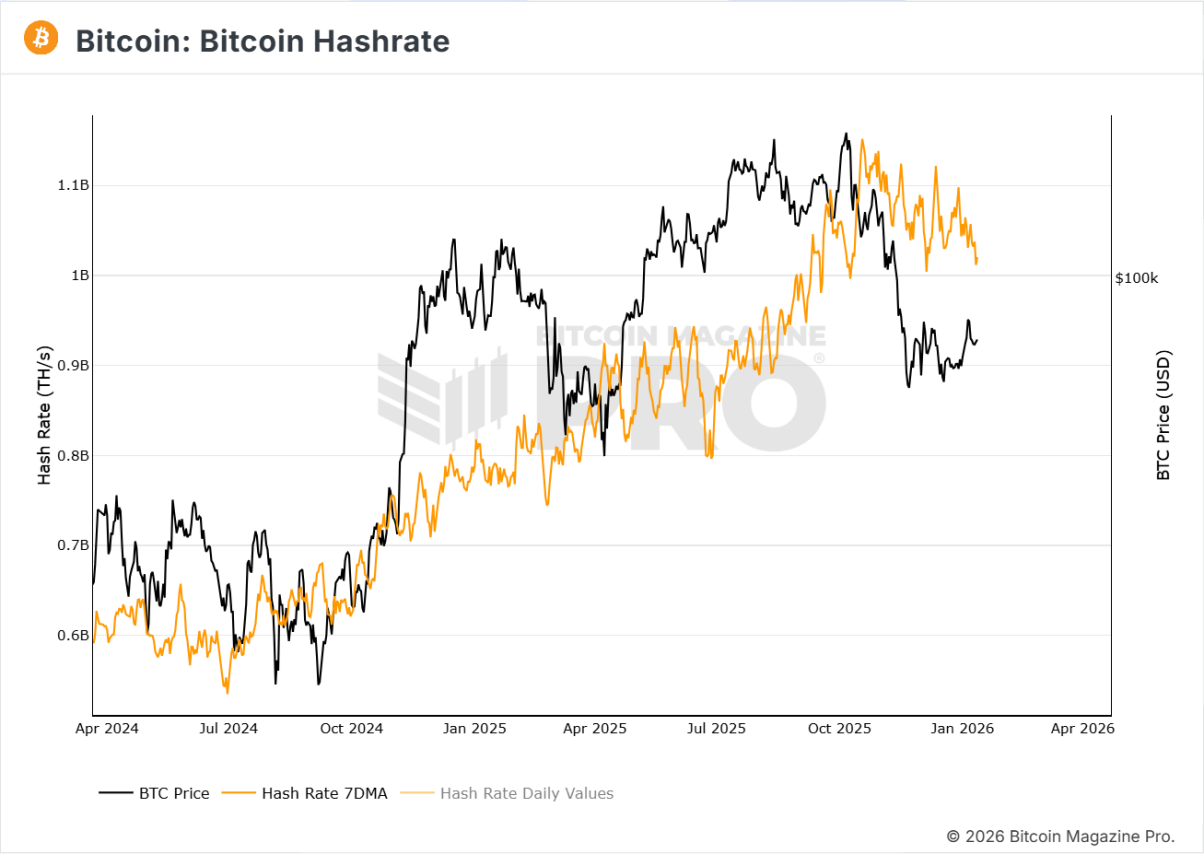


Don't forget the next halving is only around 29 months away.

Converted to US dollars, we can see that the miners are now making a similar amount of money as before the May 2024 halving, despite the price being ~38% higher. In dollar terms, **bitcoin mining has gone ex-growth.**



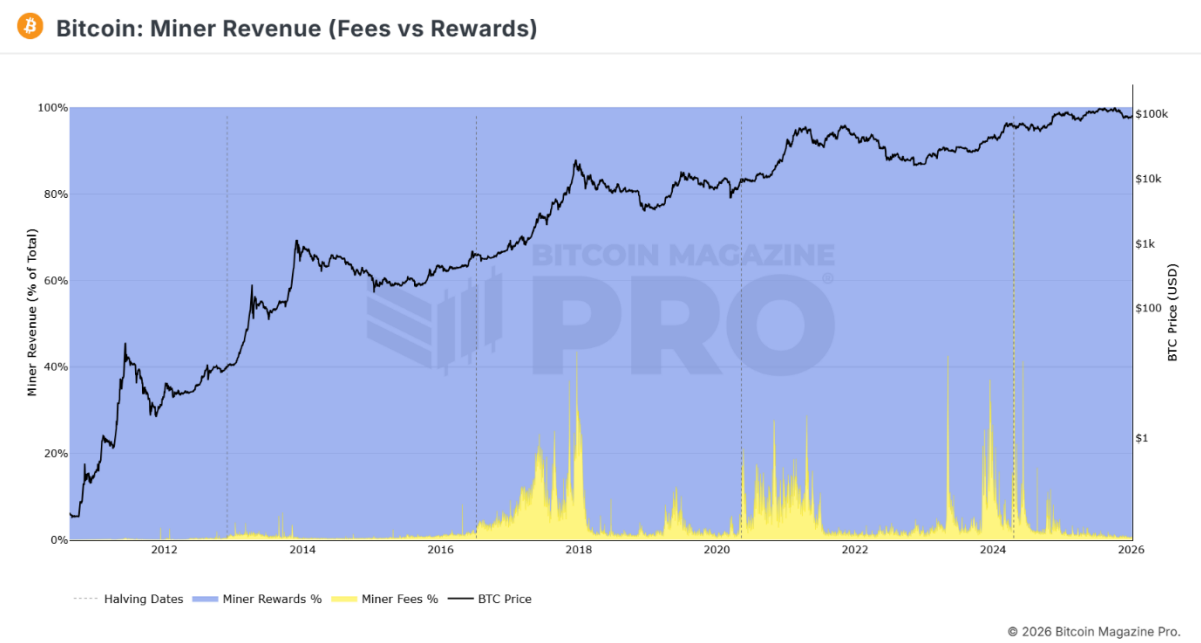
That is despite the growing investment going into the space, which we can see from the hashrate increase (yellow line).



A lot of the hashrate growth can be attributed to greater mining efficiency, and upgraded technology. Assuming a very low cost of electricity, the most modern mining machines will break even at lower prices, but in aggregate the maths for the miners starts getting pretty tight at a BTC price of US$85,000.

Furthermore, access to the newest ASICs (Application Specific Integrated Circuits, capable of the highest speeds) is increasingly confined to the largest buyers, those with the greatest purchasing power. Bitcoin mining long ago ceased to be a domestic hobby, and is increasingly in the hands of large companies with access to cheap capital.

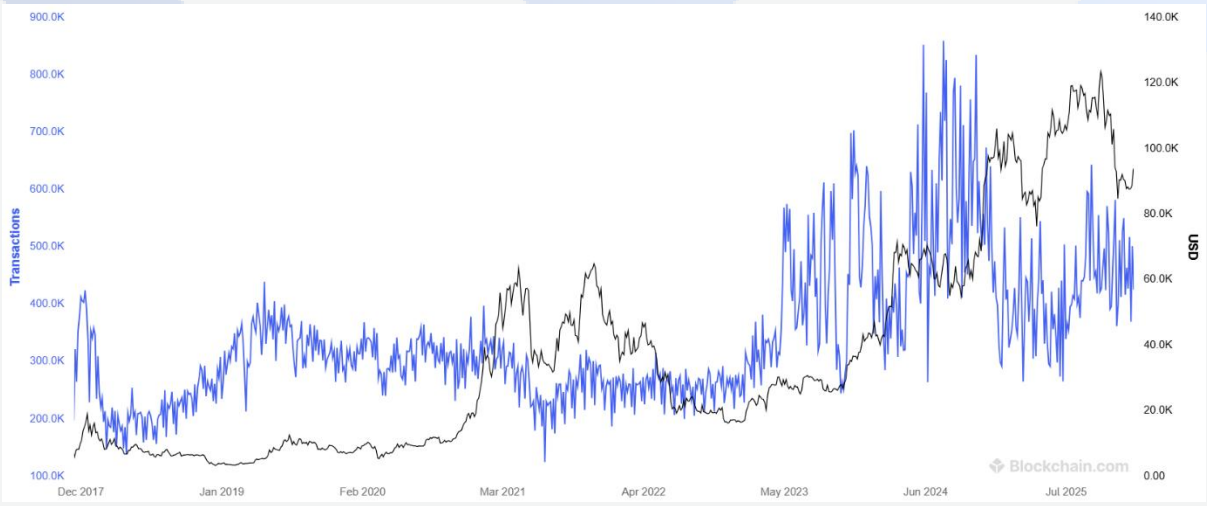
Shown below is the split between block rewards and fees. In 2025, fees made up a mere 1% of miner revenue versus 7% in 2024.



Source: Bitcoin Pro

So, the network needs to see a rising number of transactions, ideally in conjunction with a higher bitcoin price, to increase fee levels. Yet the number of transactions has shown only marginal growth over the last seven years.

CONFIRMED TRANSACTIONS PER DAY

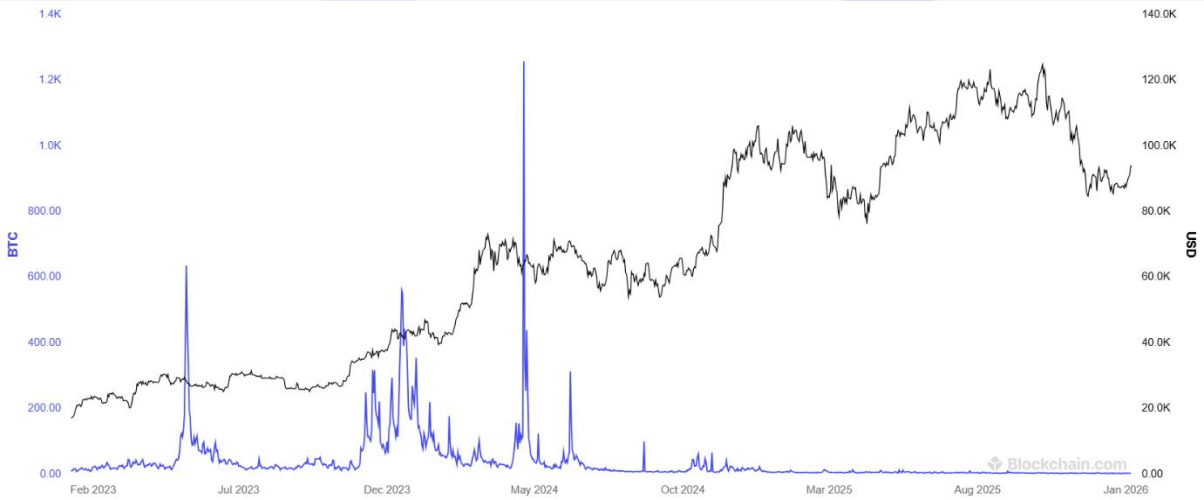


Source: Blockchain.com

The best business models have predictable, recurring revenue (which is the reason why the bitcoin miners form themselves into “mining pools”, whereby the “wins” are spread amongst the members). Because of the four-yearly decline in the block reward, in future that has to come in the form of high fee income, a result of growing usage of the network.

Yet, this is the picture of fee income over the last three years (blue line). It’s a wasteland.

TOTAL TRANSACTION FEES (US$)



Source: [Blockchain.com]

Why is it so low? First, because the technology has been improved to reduce congestion (Segwit in 2017, Taproot in 2021). But more importantly, its usage as a payments network has barely grown.

Looking at the chart below, the value transacted on the bitcoin network has been flat since early early 2024 (when spot bitcoin ETFs were first permitted in the US) despite a 50% increase in the price.

ESTIMATED TRANSACTION VALUE (US$)

Source: [Blockchain.com]

The Problem With Digital Gold

This brings us back to “digital gold”.

Although aspects of bitcoin had been likened to gold historically, largely by way of analogy to help people understand the value of scarcity, the digital gold narrative was really given wings in the 2020-21 period by Michael Saylor, CEO of MicroStrategy.

As interest rates were taken to zero in the Covid period, Saylor quite rightly identified fiat cash as the worst place to preserve wealth. Lighting upon bitcoin as a novel and largely undiscovered alternative, Saylor has been an incredible mouthpiece for its role as a treasury savings asset. He has cajoled and persuaded great swathes of the corporate world as to its efficacy - and inevitability - as digital gold.

Michael Saylor: Bitcoin is Digital Gold: https://www.youtube.com/shorts/LEiAYRbmRCs

This approach has driven a hoarding rather than an owning and spending mentality. Indeed, the drive to institutionalise bitcoin has driven the lion’s share of new buying (ETFs, holding companies) into cold wallets, **effectively down a financial cul-de-sac.** These buyers are relying on the energy of others to drive the utility, and thus the value, of the network.

That looked like a sensible plan until three things happened. First, **stablecoins provided an alternative solution to global peer-to-peer transaction and settlement.** Second, **the gold price took off as a safe harbour.** Third, **gold has itself been tokenised, creating, er, “digital gold”.** This is now a US$4.66bn market with stablecoin giants Tether leading the way, as shown in the chart below.

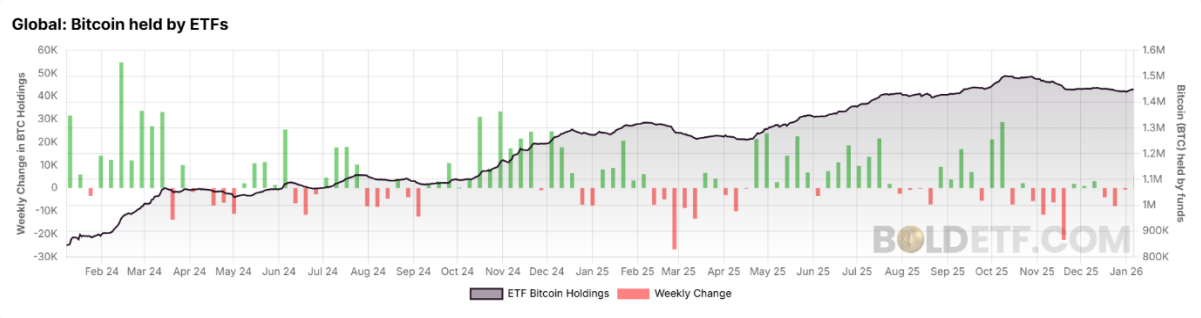
Source: Coingecko

You might argue that digitised gold means you don’t own the actual thing, but the same accusation can be levelled at bitcoin when held in holding companies or ETFs.

We now have to watch the behaviour of those who invested in bitcoin purely as a savings asset. If you own bitcoin in an ETF (which in aggregate now contain 1.45m BTC worth around US$132 billion), you are not interested in its usefulness as a form of payment, or its function as a form of money that

sits outside traditional finance. You're not even interested in its ability to be used as collateral. **You simply want it to go up in price.**

This suggests that if it fails that test, you'll get rid of it. At which point the virtuous cycle turns vicious.



Source: [the BOLD Report]

Institutional adoption of the asset has always been a case of "be careful what you wish for".

Never in history has an asset's value been so dependent on its price. That's a deliberate truism by the way, but you get the point. Without strong recurrent income in the shape of fees, bitcoin's success is utterly dependent on its price action. It needs to keep rising to attract adoption, firstly because its two principal use cases can be replicated elsewhere, and secondly because the economics of maintaining the bitcoin network, the block rewards, demand it.

Where Is Adoption Going To Come From?

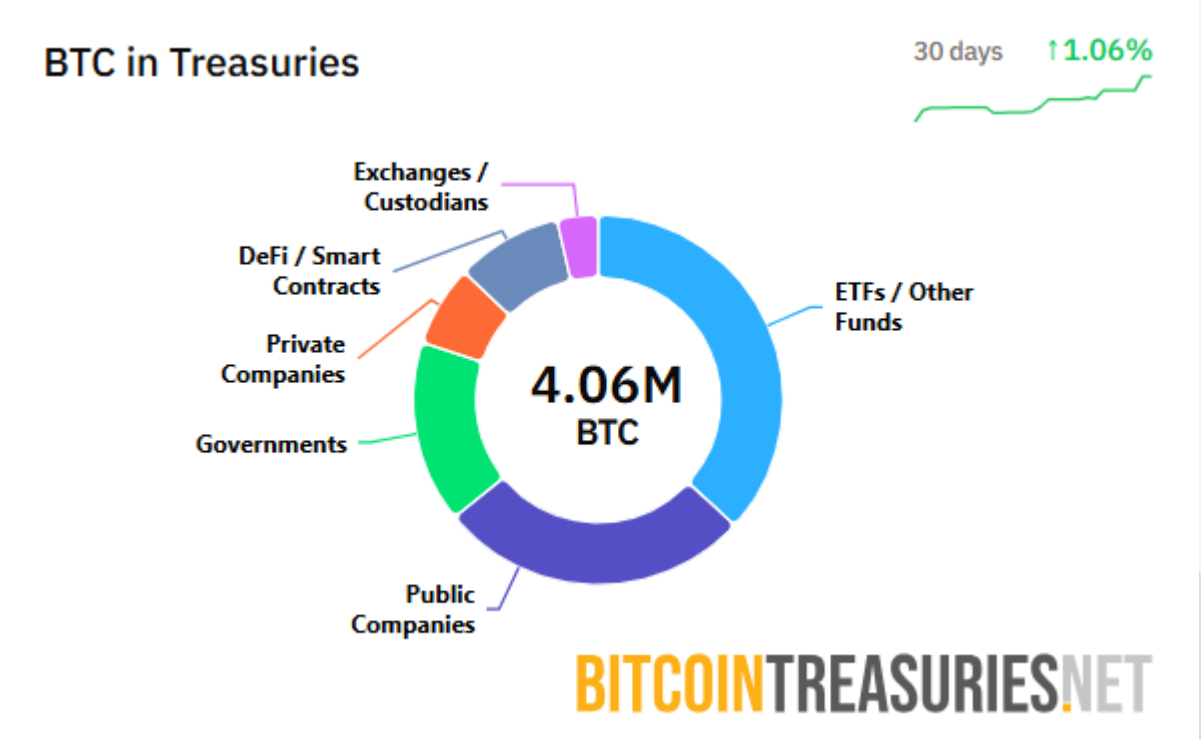
We therefore have to ask where demand is going to come from. At a price of US$91,000 bitcoin has a market capitalisation of around U$1.9 trillion. At that size, retail investment on its own is not going to move the needle, at least not on a scale to make it interesting. If it's a ten-bagger you're after, there are more prospective places to speculate.

Sustained appreciation has to come from institutional adoption.

Are institutions going to buy? When we ask professional investors who attend our crypto education courses, the standard answer seems to be, not for 1-3 years. That sounds about right, given the administrative and reputational hurdles that need to be surmounted. That's in the UK, so perhaps we're behind the curve compared to other jurisdictions. While there is undoubtedly an appetite to discover more, it is nonetheless guarded and early stage.

For a professional investor, responsible for managing other people's money, it's a large conceptual and mental leap to add bitcoin, which is an entirely new form of monetary asset. Bitcoin is the most straightforward crypto in some respects, but in others it is the hardest to grasp. What is this thing which you tell me is money but I can't touch and can't spend? However compelling the concept and the technology, it's a major decision to invest when you don't see your peers doing the same.

Consequently, **unless we see some sort of adoption at a state level, it's hard to see where that institutional buying comes from at scale,** although of course there will be isolated buyers. It will be even harder if bitcoin falls through important price levels, namely the marginal cost of mining (estimated between US$70,000-85,000) and MicroStrategy's average buying price (~US$74,000). MicroStrategy owns around US$62bn (BTC 687,410), so alongside the ETFs is systemically important.



Source: bitcointreasuries.net/

What are the Bitcoin Miners Doing?

Evidence suggests that miners are either positioning for tougher times, or in some cases tip-toeing away from bitcoin altogether. The cause of this is the enormous growth in data centres, and the competition they bring for power.

In terms of positioning for tougher times, Riot Platforms and Cleanspark recently announced sales of bitcoin, which, admittedly, is not unusual in a bear market. Meanwhile, Cleanspark and others are building flexibility into their models to incorporate AI and data management.

Bitfarms has gone the full distance and announced that it would be exiting the bitcoin mining business altogether to focus entirely on AI infrastructure.

This is rational commercial behaviour. It is also a shift that is rewarded by the stock market, understandably if you examine the metrics below.

Metric	Bitcoin Mining	AI / HPC Hosting
Revenue per Megawatt	~$0.07 – $0.09 per kWh	**$0.25 – $0.35 per kWh**
Operating Margins	~40–50% (Volatile)	**80–90% (Stable)**
Contract Style	Zero (Daily "Spot" Hashing)	**5–10 Year Fixed Contracts**
Valuation Multiple	~$3M per Megawatt	**~$6M+ per Megawatt**

Sources: JPMorgan, Bernstein, IREN, Core Scientific, Ciphen Mining, Needham & Co, Morgan Stanley - collated by Gemini AI

It begs the question of who are going to be the miners of the future? What are the incentive structures to attract large scale bitcoin mining when the revenue outlook is less and less certain and data management presents a more compelling alternative?

Is Grid Management The Answer?

A possible answer lies in grid management, where bitcoin mining can be switched on or off for grid balancing purposes. This is a path already pursued in Texas, for example. When there is a surge in normal demand, bitcoin miners can rapidly switch off, while turning on at times of demand weakness (when their cost of purchasing electricity might be low to negligible).

However, even here the data centres can provide the solution, because they can operate off storage batteries when required. The table below summarises the variables.

Feature	Bitcoin Mining	Standard Data Center (AI/Cloud)	Other Controllable Load (e.g., Industrial Pump)	Notes
Response Speed	Very Fast (Seconds)	Instant (Milliseconds via UPS)	Medium (Minutes)	Bitcoin miners can quickly shut down in response to price signals.
Duration of "Off" Time	Indefinite (Can stay off for days)	Short (Minutes to hours before batteries drain)	Variable (Hours to Days)	The speculative nature of mining allows for extended shutdowns.
Complexity to Stop	Extremely Simple (Flip a switch)	Complex (Requires workload migration)	Simple (Stop the process)	Minimal operational impact for miners to stop.
Economic Value	Low (Speculative)	High (Core economic infrastructure)	Medium (Production/Service value)	The primary drawback for utility prioritisation is low economic value.
Grid Service	"The Sponge" (Soaks up excess energy)	"The Stabiliser" (Fixes tiny frequency blips)	Demand Response (Load shedding)	Miners are excellent at absorbing oversupply, Data Centres for frequency regulation.
Location Flexibility	High (Can be built anywhere)	Low (Needs fibre/cooling)	Medium (Tied to industrial sites)	Bitcoin mining operations can easily relocate to areas with excess or cheap power.

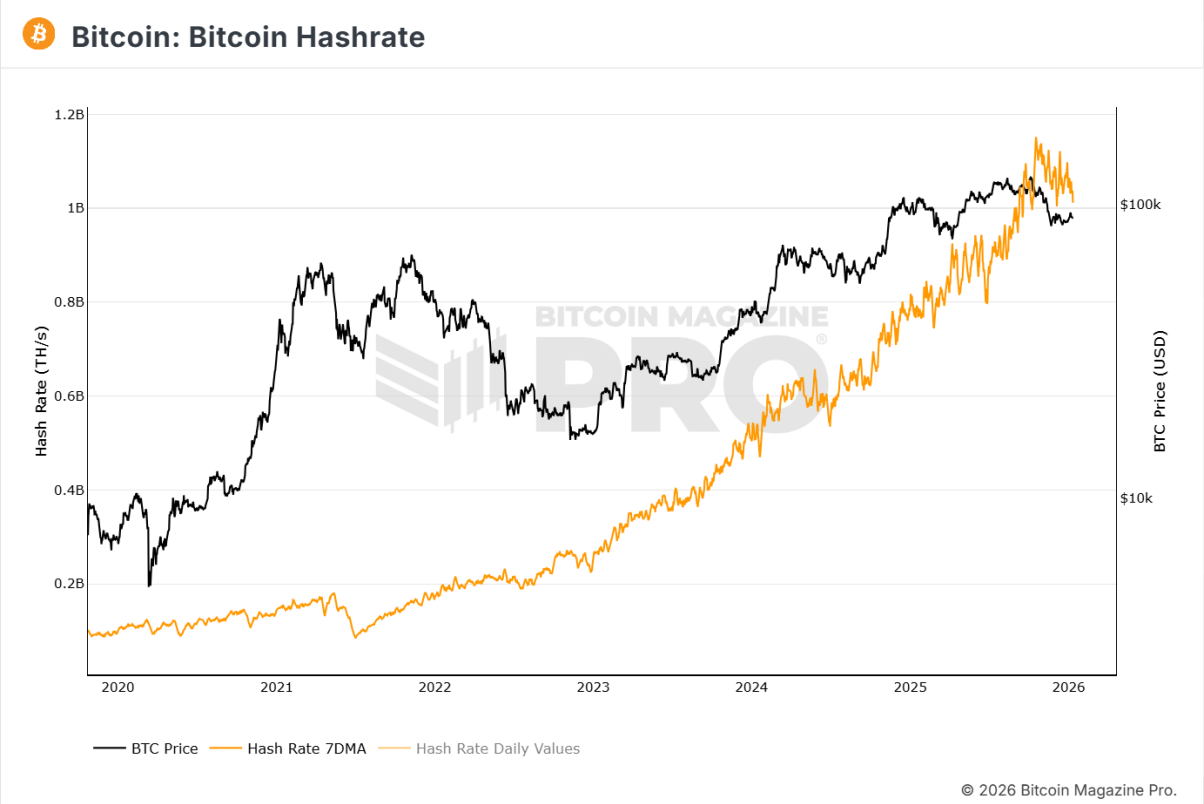
Show Me The Incentive

If specialist companies are finding it harder to mine bitcoin, who will be incentivised to mine bitcoin in the future? If we can figure that out, we have a path to the coin's renaissance. A possible list might be:

1. Nation states who have committed to bitcoin as a new monetary standard (e.g. Bhutan) and/or “whales” (MicroStrategy), and/or dollar adversaries with access to cheap power (Russia)
2. Individuals who care enough about “freedom money” to invest in mining at small scale
3. Facilities that enable electrification where previously there was none (eg Gridless), but are subscale for data management

It’s not a long, or wildly compelling, list.

The result of all this is that we are starting to see the bitcoin “hashrate” - the amount of power committed to the upkeep of the network – start to decline. At this point it’s far from calamitous. At a rate of around a billion terahashes per second, the computing power around bitcoin is insanely high. However, it’s the direction that we worry about.



You can look at the above chart and say, well, this is nothing unusual. The hashrate has declined before and it did nothing to slow bitcoin’s progress. Indeed it has been a decent contrary indicator. You’d be right, but then again, we have never before had these twin issues of stablecoins and data centres clouding the picture.

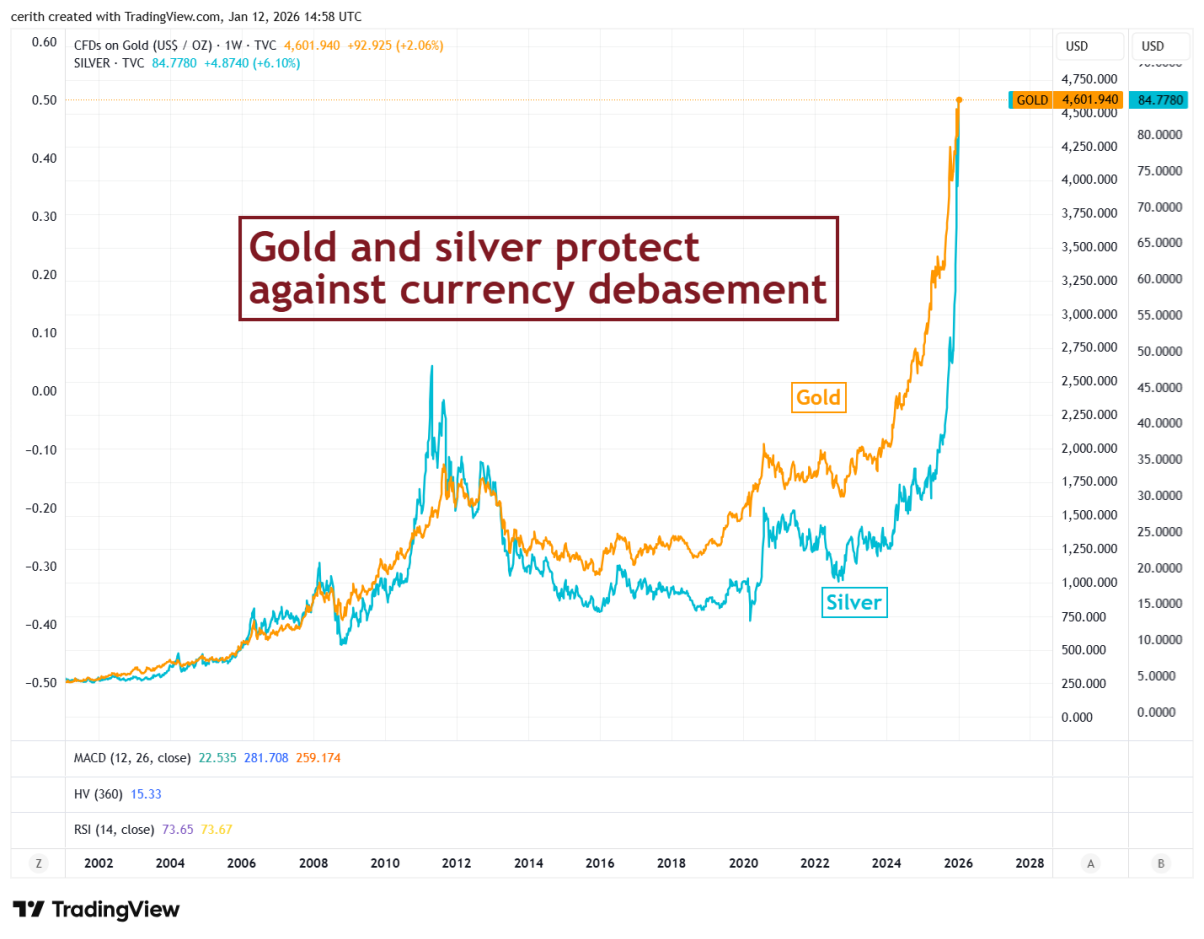
What Changes Our Mind?

We might argue that bitcoin’s long-term journey had to start with a hoarding narrative. After all, there are very few ways that one can actually spend it. Do you know any shops that accept bitcoin?

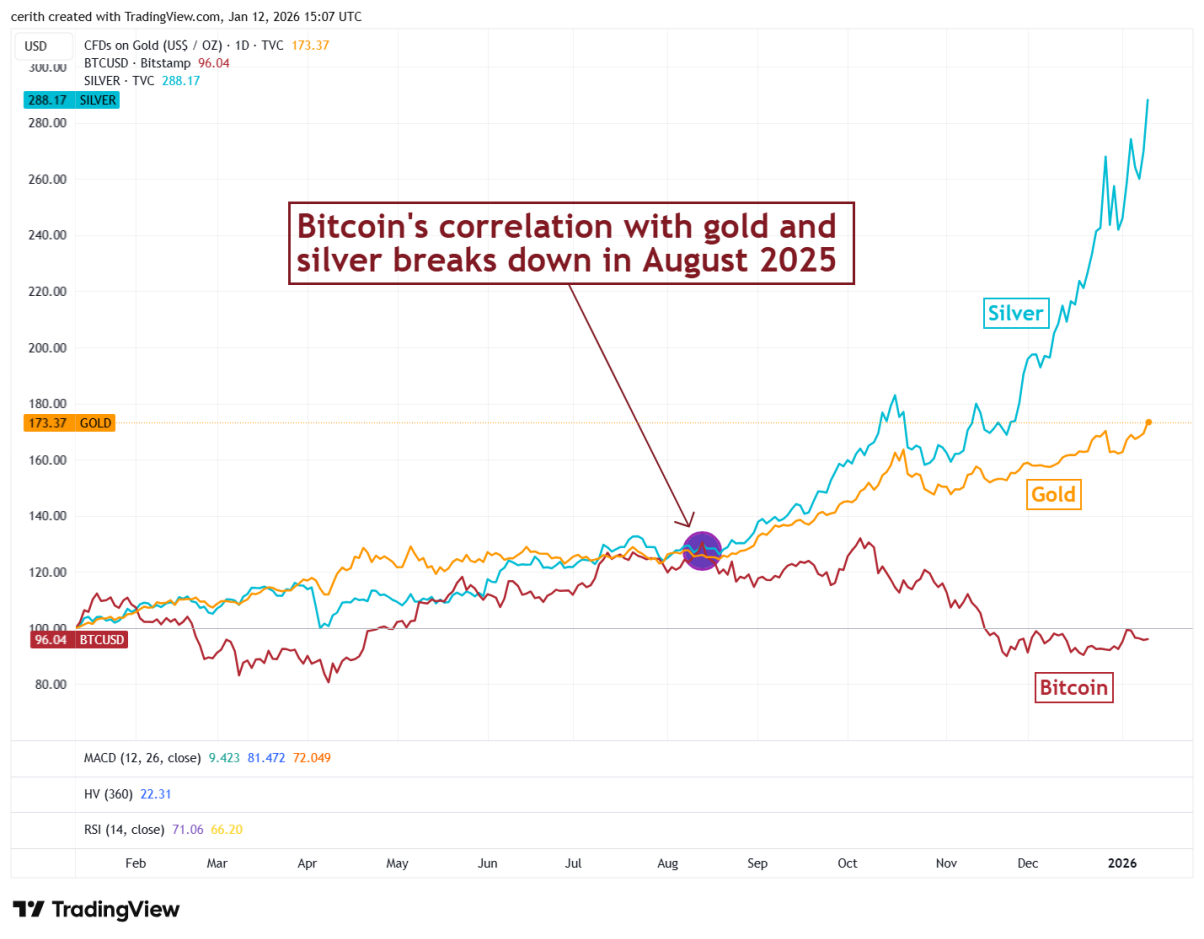
This is the story that bitcoiners will cling onto. As the Lightning Network spreads its tentacles, and as usage becomes easier (via smartphone apps and self-custody solutions), so we hope that bitcoin gets used more and more in daily life.

However, it's **very unlikely to become mainstream unless there is a catastrophic fiat crisis.** Unfortunately, the emergence of stablecoins, in conjunction with the USA's recent muscular assertion of its Western dominance, suggests that **the dollar's primacy has, if anything, been reinforced.** For all the attempts to weaken the dollar (as measured by the DXY), it has marginally strengthened over the past six months.

As it stands, gold is performing the value-protecting role. If that was bitcoin's job, it is failing just when it was required.



Note how the correlation suddenly breaks in August 2024. It would be fair to suggest that this period coincides with a series of announcements, from companies like Bitfarms pivoting to data management, to Mark Zuckerberg hugely raising the stakes in terms of how much Meta would be investing in AI.



Looking at the above chart, the market woke up to this sea change pretty fast, although you won't read much about why that was. Interestingly, it also **coincided with a massive countertrend move in Ethereum (ETH) relative to bitcoin.**

We also saw some massive reallocations from so-called crypto whales at the time, as per this article. Note the following sentence, with which we'd agree:

For investors, this shift underscores the importance of aligning portfolios with assets that offer both speculative potential and foundational utility. ***While Bitcoin remains a store of value****, Ethereum's position as a settlement and innovation layer makes it* ***a more dynamic play in a world increasingly shaped by tokenized assets and decentralized finance****.*

Does Bitcoin remain a "store of value"? Discuss.

The Future Will Be Shared

We're conscious that we might be in territory where we're backfitting a price move with a narrative, yet there is an inescapable logic to what we are seeing, and to our way of thinking the risk of holding bitcoin has materially increased over the last six months as a result of the emergence of factors that hadn't previously been considered.

The future for Ethereum, by contrast, looks bright. In a world where much of crypto is being captured by the existing banking system, it is able to straddle the old and the new while remaining "credibly neutral". Within the digital world it has retained the lion's share of on-chain value (or Total Value Locked, "TVL") despite intense competition. Furthermore, if one is looking for a deflationary digital asset, ETH is even more scarce than BTC. Lastly, it is highly decentralised, the defining characteristic

which gives it value as a modern monetary asset [as discussed in our note last year "Is Ethereum Money?"

The difficulty for all crypto is that prices are led first and foremost by bitcoin. A continued decline in price would be disruptive for the entire ecosystem. However, there will be a point at which selective accumulation of assets that have genuine emerging use cases will ultimately be tremendously profitable.

Fund Positioning

The central conclusion is not that bitcoin is broken and will never recover. The idea is revolutionary, and we hope and believe its day will come. No, the conclusion is that bitcoin is, at the moment, a much higher risk asset to hold than it was 12 months ago. Until we see a sustainable growth in fee generation it is impossible to escape that conclusion.

In terms of portfolio construction, that means we own less of it, and in terms of balance sheet positioning, it means we have more defensive settings as we watch how these problems are worked through. Much depends on macro settings – our risk regime overlay currently preaches caution – and policy responses.

The good news is that this comes at a time when we see incredible opportunities in other parts of the digital asset universe. Apart from ETH, we see growing usage in a mix of Decentralised Finance and Physical Infrastructure protocols. These, and others, could be many multiples more valuable on a 3-5 year view.

Final Thought

One of the greatest dangers in investing is the "embedded assumption", the thing that is so obviously "right" that no one questions it. It happens all the time. If you told someone in 2001 that within a decade Nokia would be a bit-part player in mobile handsets, you'd be laughed out of the room. You can do all the analysis you want, but if you get the central assumption wrong, it's all for nought.

It might – might - be the same for bitcoin. That sentence alone is probably enough to get me "crypto cancelled", but it shouldn't be. Bitcoiners demand open-mindedness from traditional investors, and that should be reciprocated. Bitcoin might yet dominate global finance. Yet it might also turn out to have been the testbed for this new technology. A wonderful idea, but one that was undone by a greedy, self-interested faction who labelled it as something it isn't, for their own ends.

Charlie Erith

14th January 2026

About Wiston Capital

Wiston Capital is a crypto hedge fund manager.

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