



Scarcity in the Digital Age

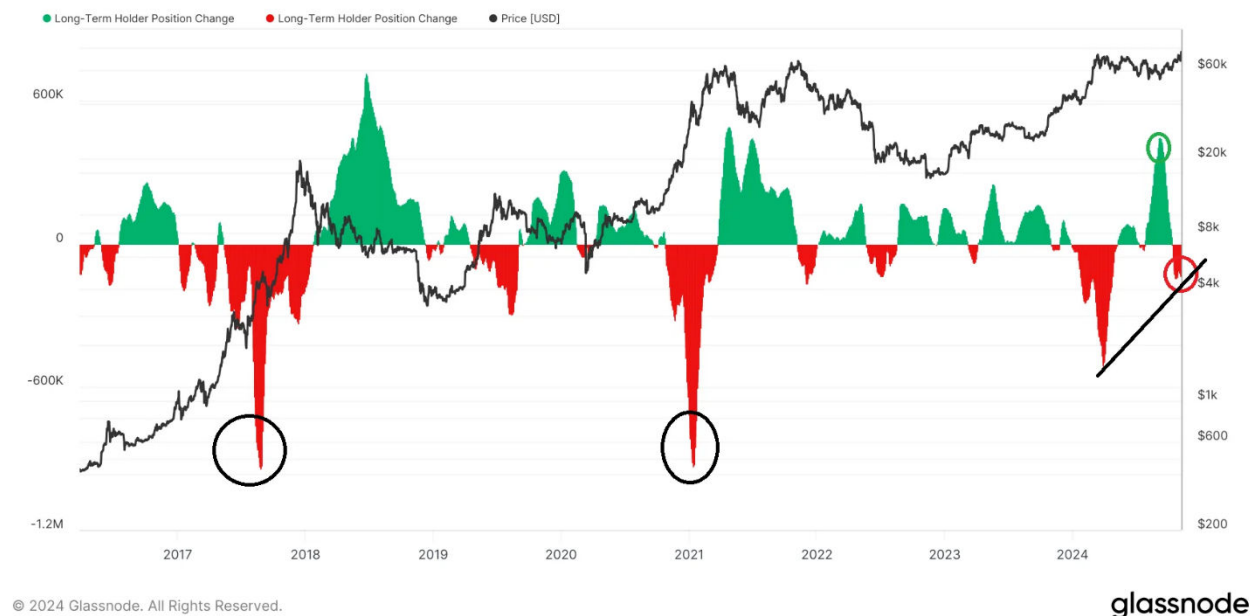
Q1 2025 Client Letter

Blockchain based cryptocurrencies have been around since the release of Bitcoin in early 2009. This letter aims to provide insight into why Bitcoin, the leading digital asset, has grown from zero to nearly a \$2 trillion market cap in just 16 years. Bitcoin analysis online and through news outlets tends to be highly polarized, either driven by ardent believers or dismissed outright as a worthless token based on hype. Just like any emerging asset class, we believe it is our responsibility to conduct a thorough analysis and carefully evaluate the pros and cons of recommending exposure. Bitcoin is an open-source, peer-to-peer monetary network created by the pseudonymous Satoshi Nakamoto, designed for storing and transferring value without intermediaries. It is decentralized, meaning no central party is in control of it. Instead, tens of thousands of network participants (nodes) validate transactions and uphold the protocol globally. Bitcoin utilizes cryptography, specifically encrypted digital signatures and hashing, to secure transactions. The source code dictates that there will only be 21 million coins total, and each coin can be divided into 100 million units (called sats), similar to how gold can be divided into fractions of an ounce. This fixed supply sets Bitcoin apart from other crypto projects and most traditional assets, as its scarcity is programmed and predictable. To most enthusiasts, it marks a significant improvement over gold, which has been used to store value for thousands of years. Gold's final settlement cannot be transferred over the internet and its supply steadily increases by about 1.5%–2% per year. No one can increase the supply of BTC, regardless of the demand. In contrast, more precious metals and natural resources can be discovered, land can be developed and new fine art can be created. The supply of these assets adjusts in response to the demand for them. Global investors have embraced many of them because they are relatively scarce compared to their respective currencies, rather than being absolutely scarce (capped in supply). Bitcoin remains fixed at 21 million and represents something the world potentially doesn't know how to process yet. Let's examine how an asset operates when its total supply is inelastic—a characteristic that inevitably attracts criticism.

If company A's stock price surges, the company may issue new shares to raise capital. This increases the share count for A, reducing the ownership percentage of existing shareholders (dilution). When oil prices surge, energy companies usually ramp up drilling, invest in new exploration, and restart previously unprofitable wells. When gold, silver, or copper prices rise, mining companies accelerate operations, expand exploration, and reopen old mines that were previously uneconomical. You often hear the term "the cure for high prices is high prices", and this reigns true for most assets. Does this apply to Bitcoin? Well, the short answer is no, supply is fixed, so price-driven shifts happen in ownership rather than production. Participants are never diluted by the network, as they can audit Bitcoin's decentralized source code and ensure their ownership stake remains intact. It's a savings technology specifically designed to shield individual savers from inflation—or the decline of value relative to goods, services, or other assets they wish to buy. It takes a little more explanation to dig into how the existing supply changes hands, though. Historically, about 65-75% of Bitcoin's outstanding supply is held by long term holders who rarely sell and are net buyers of the asset. Ownership typically shifts significantly at the peaks of bull markets and the depths of bear markets. In fact, every Bitcoin bull cycle top has been marked by long term holders turning into net sellers, distributing coins to new buyers and taking profits off the table. Conversely, every bear cycle bottom is marked by long term holders stepping in and swooping up coins from highly leveraged

traders being liquidated and individuals selling based on fear. See below, as green shows accumulation of long-term holders and red shows distribution.

BTC: Long-Term Holder Net Position Change (7d Moving Average)



Following the collapse of exchanges like FTX, Celsius, and Voyager in 2022, long-term Bitcoin holders appeared to step in, providing price stability. It's important to distinguish these failures from Bitcoin itself, as they were largely driven by the actions of centralized companies (mainly offshore crypto exchanges) engaging in risky practices such as fractional reserve lending, poor risk management, and a general lack of transparency. Many of these firms also operated in a 24/7 market with high-frequency trading and exposure to massive leveraged positions, which ultimately contributed to their downfall. One of Bitcoin's key attributes is the ability for users to take full self-custody of their funds, reducing reliance on intermediaries that may be susceptible to financial mismanagement, security breaches, or insolvency. The phrase 'Don't trust, verify' reflects the emphasis on self-sovereignty within the Bitcoin community. However, individuals considering self-custody must carefully assess their ability to securely manage private keys and recovery phrases, as these are critical for maintaining access to their Bitcoin.

Many highly knowledgeable economists who have extensively studied currency and debt systems have raised concerns about Bitcoin. They argue that its inelastic supply is a fundamental flaw in relation to the current financial system. Remember, during economic downturns, when businesses, individuals, and governments rush to cash in response to financial strain, Bitcoin's fixed supply cannot expand to meet the surge in demand for cash and credit. Critics also highlight the "hoarding" effect—given that 65–75% of Bitcoin's supply is held by long-term investors—which could drive its price significantly higher in a crisis if few are willing to sell, potentially restricting access for those who need it. They often can see the value in Bitcoin's 24/7 nature, the portability of it, and the censorship resistance, but not the fixed nature of the supply. Since 2009, hard core Bitcoiners have argued that the current financial system is increasingly prone to manipulation, inflation in the money supply, and centralized control by entities such as the Federal Reserve and the Treasury. Since they have the ability to create new base money to support financial institutions during crises, history suggests they will continue to do so when necessary—an inherent aspect of the current system. Naturally, attempting to fit Bitcoin into this traditional system framework creates friction. At its core, Bitcoin represents a system of rules without rulers, and the 21 million supply is the anchor that reflects that reality.

Digital scarcity is becoming increasingly important in a digital world, especially in areas like AI, robotics, and machine-to-machine micropayments. As the global economy moves more online, AI-generated content, deepfakes and unlimited digital reproduction are now becoming common. One might ask the question: since Bitcoin is just code, can't anyone copy/paste and create their own version of it (even AI)? And doesn't that make it less scarce? It's a fair question, but the logic behind it is flawed. It is true that one of the most important aspects of Bitcoin's code is its open-source software that anyone can copy. The real question is, how much would your newly copied cryptocurrency be worth? The answer is likely close to zero – Bitcoin is very distinct because any user with a basic computer can run the Bitcoin core software. Its market capitalization has reached nearly \$2 trillion, driven in part by its global network effects— a phenomenon also observed in internet-based platforms, social media, streaming services, and e-commerce over the past two decades. Bitcoin represents a tool that individuals, corporations, and governments can use, independent of any single jurisdiction. It is traded on international exchanges, has ETF products, and is listed on the CME, supported by a growing financial infrastructure. While the possibility of a competing digital asset surpassing Bitcoin exists, its established network effects and security model make such a shift challenging. Bitcoin's monetary policy is predefined, with a fixed supply and issuance regulated by its proof-of-work mining process, which requires energy and computational effort to secure the network and validate transactions approximately every 10 minutes. Some critics argue that Bitcoin's volatility limits its use as a payment system or store of value, particularly when measured against fiat currencies like the dollar or euro. However, perspectives on its role in the financial system continue to evolve. Bitcoin is widely recognized as the leader in its space, but whether it will also emerge as a dominant store of value, medium of exchange, or future currency remains to be seen. The coming years will provide further insight into its long-term role in the global economy.

Sincerely,

Three handwritten signatures in cursive script, arranged horizontally. The first signature is 'Dan', the second is 'Grant', and the third is 'Jordan'.

Dan Twogood, RICP®, Grant Twogood, CFP®, Jordan Twogood