

## Research Report | 08.06.2023

# The "Bitcoin Halving" as a catalyst for the digital gold

In less than a year, the upcoming "Bitcoin halving" will take place, cutting Bitcoin's inflation rate in half once again. This event, which occurs roughly every four years, is a key aspect of the decentralized currency's monetary policy, along with the fixed total supply.

Bitcoin represents a revolutionary step in the world of finance and is the first successful implementation of a decentralized digital currency. The decentralized payment system allows for the secure and direct holding and transfer of digital money without the need for a third party.

Introduced in 2009, this currency ensures transparency, security, and immutability in its network thanks to blockchain technology. Every transaction is publicly recorded and verifiable.

#### Digital commodity programmed for scarcity

Bitcoin was introduced during the global financial crisis of 2008 as a direct response to the extensive money creation by central banks to rescue struggling banks. The creator, Satoshi Nakamoto, an unknown individual or group, published the groundbreaking whitepaper titled "Bitcoin: A Peer-to-Peer Electronic Cash System" just months after.

The concept, based on cryptography and blockchain, revolutionized digital value transfer and was characterized by a monetary policy that stood in stark contrast to the traditional monetary system of then and now.

Bitcoin is inherently designed to be disinflationary, as the total number of bitcoins that can ever be created is limited to 21 million. This feature is supported by a halving mechanism of newly minted bitcoins, which occurs approximately every four years. The newly minted bitcoins, distributed as rewards to so-called miners, represent the sole source of Bitcoin's supply growth. Miners play a

crucial role in the network by validating transactions through their activities, contributing to the security and integrity of the Bitcoin system. The maximum quantity of 21 million bitcoins is projected to be reached around the year 2140, after which miners will be compensated through transaction fees.

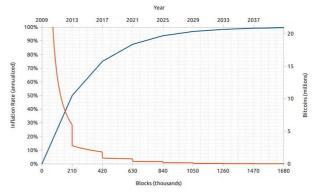


Figure 1: Bitcoin inflation (orange) and total supply (blue) estimates until 2040 | Source: Coin Central

### Clearly defined rules of a digital monetary system

Bitcoin inventor Nakamoto recognized a critical weakness in traditional economic systems and responded by creating a decentralized currency. Alongside the classic currency attributes of fungibility and divisibility, Nakamoto specifically focused on ensuring long-term value preservation through the disinflationary structure. However, the crucial element of a currency — adoption — lay beyond Nakamoto's control.

Initially used only within small online communities, Bitcoin is now a recognized currency accepted by a variety of retailers, online platforms, and even some governments. This widespread adoption has been



fueled by the increasing digitalization of the economy and the growing awareness of the benefits of a blockchain-based and disinflationary currency.

Often referred to as "digital gold," Bitcoin possesses attractive properties for investors due to its limited supply, its role as a potential hedge against inflation, and the advantages of digital transferability.

#### Halvings as guidance for market participants

More than 19 million Bitcoins are now in circulation. Bitcoin comes with a high level of ownership responsibility as users are solely responsible for the security of their private keys, without which their Bitcoins would be inaccessible or lost. Estimates suggest that 1-2% of the total amount of Bitcoins are lost each year, primarily due to forgotten passwords or lost storage devices. As of today, up to five million Bitcoins could have irretrievably disappeared from circulation.

Historically, recurring Bitcoin price patterns have emerged around the halving cycles, leading to industry discussions about four-year cycles characterized by exponential price increases. The upcoming halving in spring 2024 could trigger notable price movements once again, although it is important to note that historical price developments do not necessarily predict future trends. Nevertheless, the fundamental changes in Bitcoin's supply are real and play a crucial role in defining Bitcoin as a scarce digital asset.

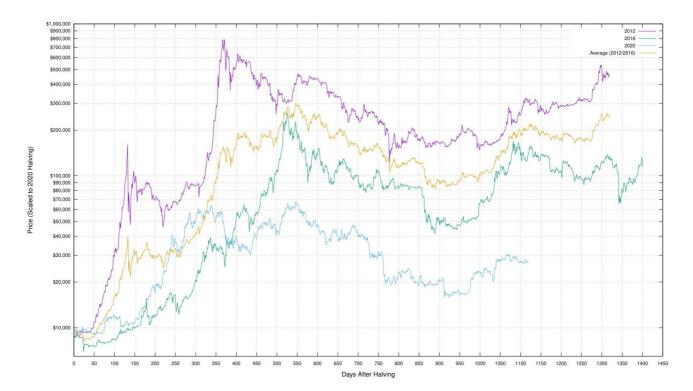


Figure 2: Logarithmic comparison of Bitcoin cycles with start from the respective halving: 2012 (purple), 2016 (green), 2020 (blue) and mean 2012/16 (yellow) | Source: Bitcoin Halving Tracker