March 2024

Bitcoin Halving

A tale of limitless innovation: A journey to 2140

IMPORTANT INFORMATION

- The value of investments and the income from them can go down as well as up so you/the client may get back less than you/they invest.
- Investors should note that the views expressed may no longer be current and may have already been acted upon.

Marketing communication.
This material is for Investment Professionals only and should not be relied upon by private investors.

Fidelity INTERNATIONAL

Key takeaways

- Bitcoin Halving is a pivotal event that takes place approximately every four years, resulting in a reduction of the mining reward for each block. This mechanism effectively manages the supply of new Bitcoin, ensuring the currency's scarcity and preventing inflation.
- Historical data from previous Halvings suggests that Bitcoin has consistently experienced a substantial increase in value following each Halving event. Several factors may contribute to this trend.
- As we look ahead to the next Halving in 2024, it is crucial for investors to exercise caution and thoroughly comprehend the characteristics of Bitcoin, as well as the associated risks involved.

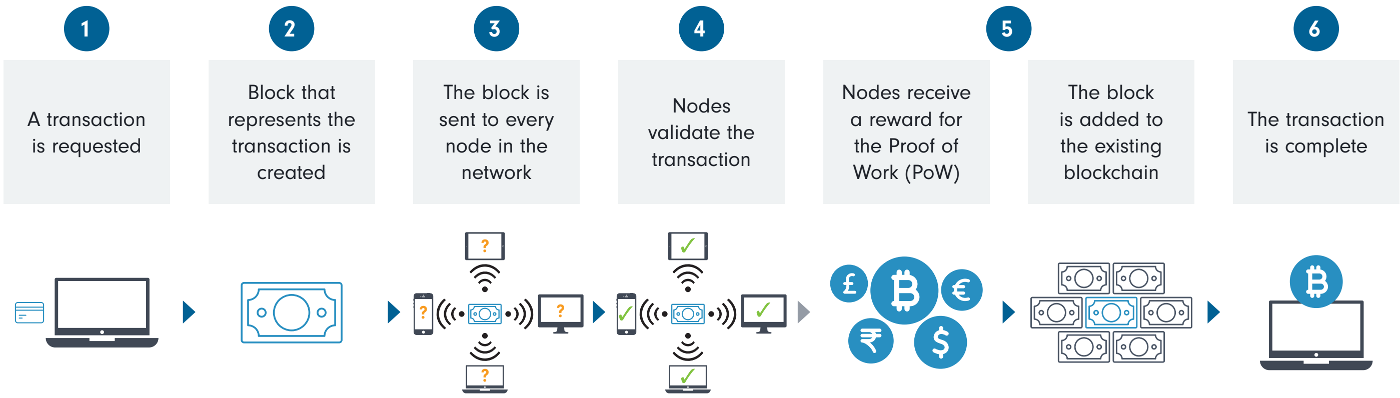
It started with the release of the Bitcoin whitepaper in 2008, introducing the concept of a decentralized peer-to-peer payment system. This innovative network utilizes peer to peer network, game theory and cryptographic algorithms to securely connect and validate transaction records, eliminating the reliance on a central authority.
The Bitcoin network empowers a network of computers, known as nodes, to independently validate transactions and collectively agree on their authenticity.

Understanding the Bitcoin Halving

Halving events are programmed to regulate the supply of new coins entering circulation and ensure the scarcity of Bitcoin, which has a predetermined limit of 21 million coins. The creation of new Bitcoins is achieved through the process of Bitcoin mining. Miners compete to validate and secure transactions on the peer-to-peer network by solving complex mathematical problems using specialized hardware. When miners successfully solve the problem, they are rewarded with a certain number of newly minted Bitcoin, which is ultimately how new Bitcoins are generated and added to the market.

In the early days of Bitcoin mining in 2009, miners received a reward of 50 Bitcoin per block. This served as an incentive for early adopters to participate in mining. However, the rate at which new Bitcoin is created is reduced by half every 210,000 blocks mined. Since each block takes approximately 10 minutes to mine, Halving events occur approximately every four years. This process will continue until all 21 million Bitcoin have been mined, estimated to be around the year 2140.

How the Bitcoin Network works



Source: Fidelity International.

Why does Bitcoin Halving occur?

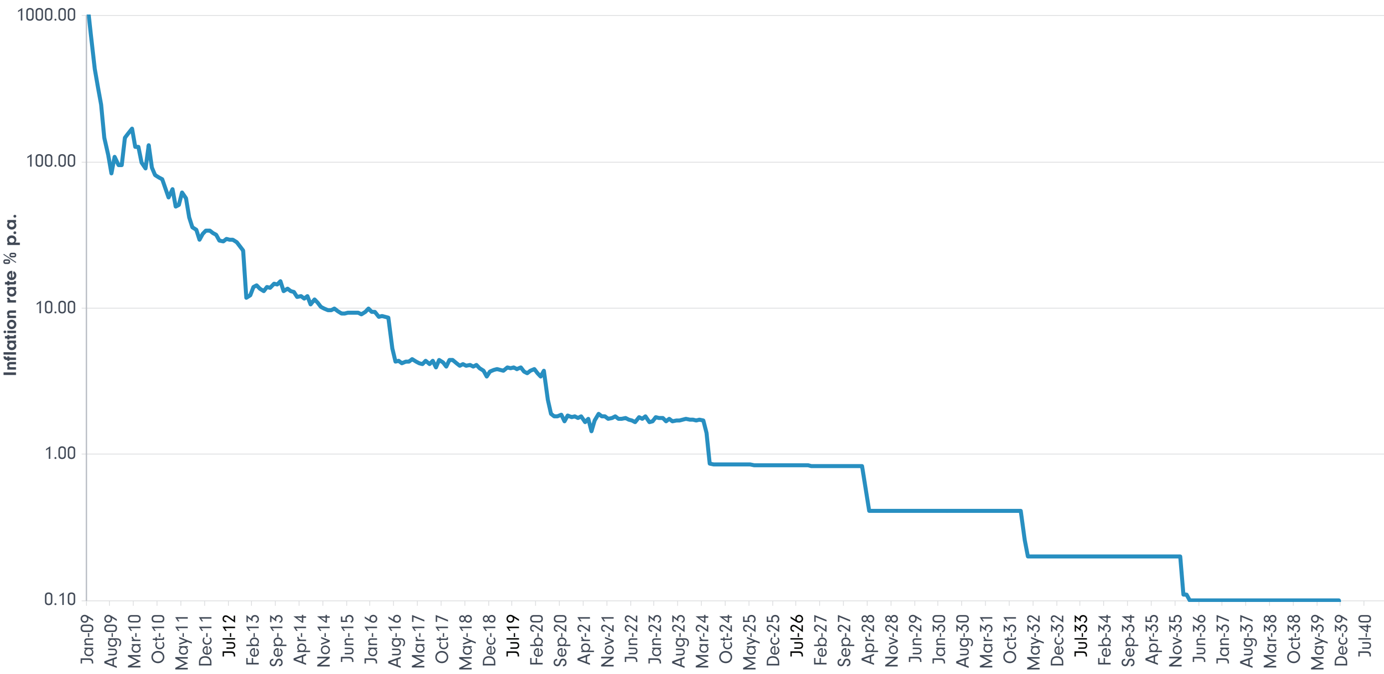
Scarcity and controlled supply:

The goal of Bitcoin's creator, Satoshi Nakamoto, the individual or group behind, was to establish a digital currency with a limited and carefully managed supply. By reducing the block reward, the rate at which new Bitcoin enters the market is restricted. This controlled issuance process aims to maintain the long-term stability and value of the coin.

Inflation control:

The cap supply of Bitcoin prevents the possibility of unlimited inflation that can occur with traditional fiat currencies. Bitcoin Halving plays a crucial role in curbing excessive inflation within the Bitcoin ecosystem. As the Halving events occur, the rate at which new Bitcoin are produced decreases, slowing down the inflation rate. For example, Bitcoin's inflation rate was 50% in 2011, plummeting to 12% after the 2012 Halving, and currently stands at 1.74%. After the next Halving, it is expected to decrease further to approximately 0.85%.

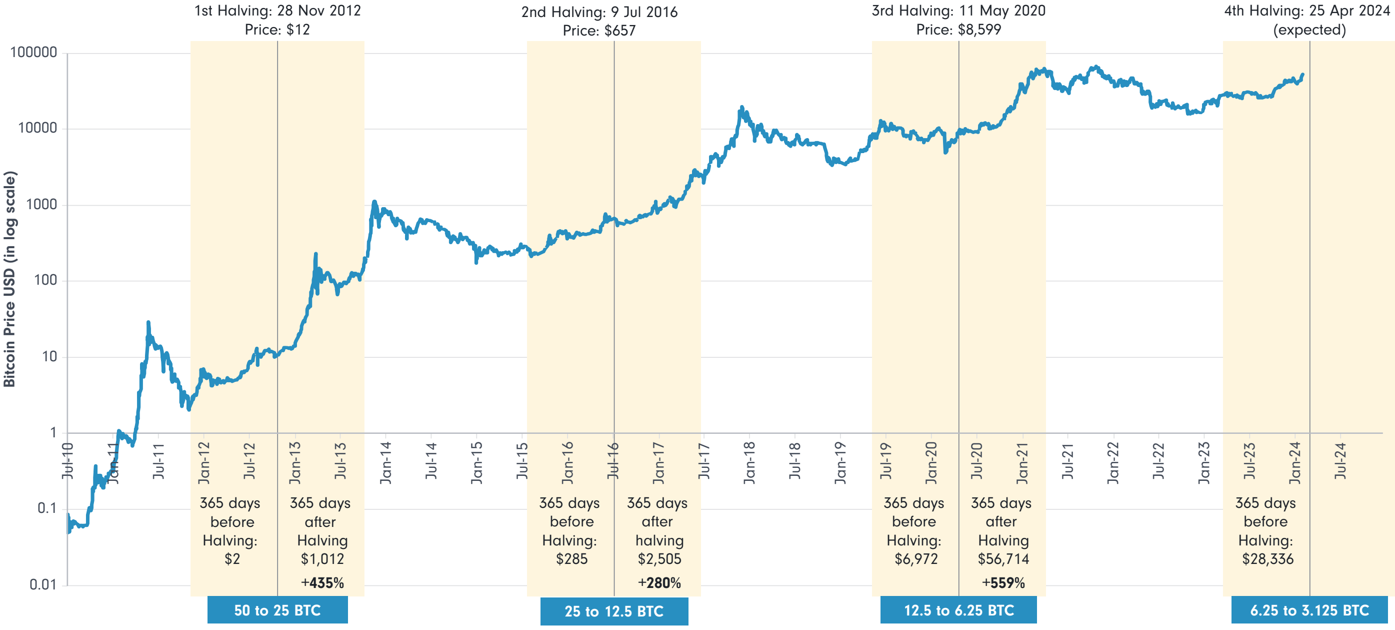
Bitcoin monthly inflation (history and forecast)



Past performance is not an indicator of future returns. For illustrative purposes only.

Source: Bitbo, adapted by Fidelity International (2024).

The evolution of Halving: Key milestones in Bitcoin's history



Past performance is not an indicator of future returns.

Source: Fidelity International, Bloomberg, as of 15 February 2024.

Market forces and economics:

The Halving event has economic implications for both Bitcoin miners and the wider market. Miners must adapt their operations to remain profitable with a lower block reward, by investing in more efficient hardware and sourcing sustainable energy which in turn intensifies competition and prompts less efficient miners to exit the market. Additionally, the Halving reduces the influx of new Bitcoin, which brings demand and supply economics into play. As supply decreases and demand fluctuates, the price of Bitcoin may change accordingly.

Since its inception in 2009, there have been three notable Halving events occurred in 2012, 2016 and 2020. The first Halving took place in 2012, reducing the mining reward from 50 to 25 Bitcoin per block. The 2016 Halving further reduced the incentives to 12.5 Bitcoin per block. As of May 11, 2020, each new block mined only generates 6.25 new Bitcoin. The next Halving is expected to happen this year in April 2024. It is crucial for investors to grasp the potential implications of this historically significant catalyst event. Before each Halving, Bitcoin's historical price experienced considerable volatility, reflecting the speculative nature of the market. However, as time passed, there was an observable trend of the trading range gradually narrowing, indicating a potential maturation of the market.

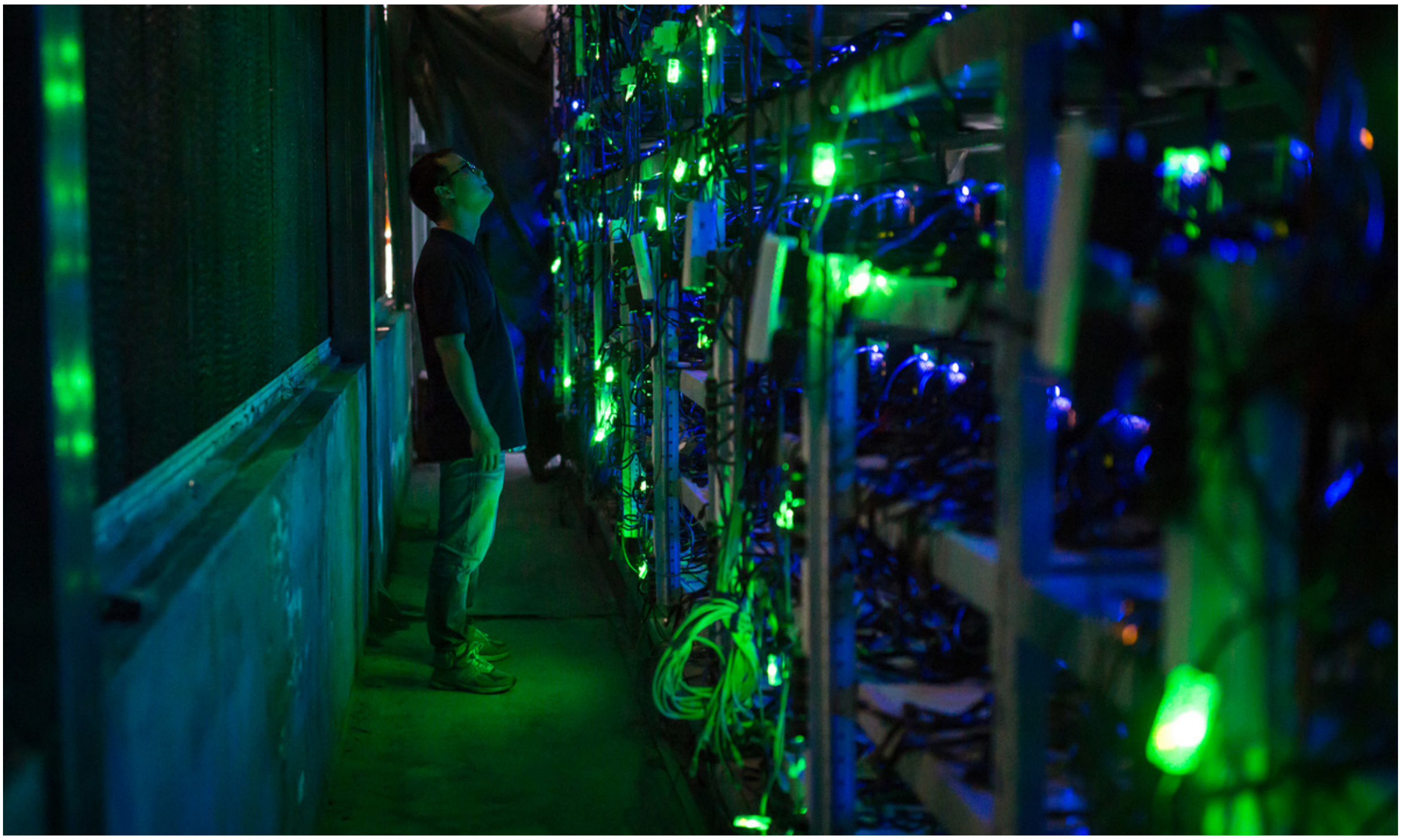
Looking at the 365 days following a Halving event, Bitcoin has consistently demonstrated a significant increase in value compared to its pre-Halving performance. Several factors may contribute to this trend.

Firstly, the supply and demand dynamics play a role. Over the past decade, Bitcoin adoption has been on the rise, contributing to increased demand. Simultaneously, the programmed reduction in issuance rate creates upward pressure on the price due to reduced supply.

Secondly, there is an intriguing alignment between Bitcoin's origin and subsequent Halving events and broader global liquidity cycles. Bitcoin emerged during the aftermath of the 2008-2009 global financial crisis, with its 4-year Halving schedule coinciding closely with periods of monetary expansion and contraction.

Lastly, the introduction of innovative investment vehicles, such as Bitcoin Trusts (since 2013), Bitcoin ETPs (since 2019), Bitcoin ETF futures (since 2021) and Bitcoin ETFs (since 2024), has provided investors with alternative ways to access Bitcoin across various market cycles.

While historical performance does not guarantee future results, this trend remains an intriguing narrative that warrants close observation as the cryptocurrency market continues to evolve.



What happens in 2140, once all Bitcoin have been mined?

Once all 21 million Bitcoin are mined, there will be no more new Bitcoin entering the market. This will mark the end of the Bitcoin mining process, and miners will rely solely on transaction fees for their income. The lack of new Bitcoin may reduce the number of miners due to decreased profitability, however there are other possibilities in the Blockchain network which may bring new revenue sources. For instance, miners may charge higher transaction fees to process high value transactions or work with other "layer 2" ecosystem providers like lightning network to facilitate daily Bitcoin spending.

And so, the story of blockchain and Bitcoin continues to unfold, captivating minds, and reshaping the future, with one of its final chapters destined to be written in the year 2140.

We hope that you found this of interest. To learn more about digital assets and how Fidelity can support you, please consult your usual Fidelity representative and visit our dedicated site:
www.fidelity.lu/investment-themes/digital-assets

Important Information

This material is for Institutional Investors and Investment Professionals only and should not be distributed to the general public or be relied upon by private investors.

This material is provided for information purposes only and is intended only for the person or entity to which it is sent. It must not be reproduced or circulated to any other party without prior permission of Fidelity.

This material does not constitute a distribution, an offer or solicitation to engage the investment management services of Fidelity, or an offer to buy or sell or the solicitation of any offer to buy or sell any securities in any jurisdiction or country where such distribution or offer is not authorised or would be contrary to local laws or regulations. Fidelity makes no representations that the contents are appropriate for use in all locations or that the transactions or services discussed are available or appropriate for sale or use in all jurisdictions or countries or by all investors or counterparties.

This communication is not directed at and must not be acted on by persons inside the United States. All persons and entities accessing the information do so on their own initiative and are responsible for compliance with applicable local laws and regulations and should consult their professional advisers. This material may contain materials from third parties which are supplied by companies that are not affiliated with any Fidelity entity (Third-Party Content). Fidelity has not been involved in the preparation, adoption or editing of such third-party materials and does not explicitly or implicitly endorse or approve such content. Fidelity International is not responsible for any errors or omissions relating to specific information provided by third parties.

Fidelity International refers to the group of companies which form the global investment management organization that provides products and services in designated jurisdictions outside of North America. Fidelity, Fidelity International, the Fidelity International logo and F symbol are trademarks of FIL Limited. Fidelity only offers information on products and services and does not provide investment advice based on individual circumstances, other than when specifically stipulated by an appropriately authorised firm, in a formal communication with the client.

Europe: Issued by FIL Pensions Management (authorised and regulated by the Financial Conduct Authority in UK), FIL (Luxembourg) S.A. (authorised and supervised by the CSSF, Commission de Surveillance du Secteur Financier), FIL Gestion (authorised and supervised by the AMF (Autorité des Marchés Financiers) N°GP03-004, 21 Avenue Kléber, 75016 Paris) and FIL Investment Switzerland AG.

In Hong Kong, this material is issued by FIL Investment Management (Hong Kong) Limited and it has not been reviewed by the Securities and Future Commission.

FIL Investment Management (Singapore) Limited (Co. Reg. No: 199006300E) is the legal representative of Fidelity International in Singapore. This document / advertisement has not been reviewed by the Monetary Authority of Singapore.

In Taiwan, independently operated by Fidelity Securities Investment Trust Co. (Taiwan) Limited 11F, No.68, Zhongxiao East Road, Section 5, Taipei 110, Taiwan, R.O.C. Customer Service Number: 0800-00-9911

In Korea, this material is issued by FIL Asset Management (Korea) Limited. This material has not been reviewed by the Financial Supervisory Service and is intended for the general information of institutional and professional investors only to which it is sent.

In China, Fidelity China refers to FIL Fund Management (China) Company Limited. Investment involves risks. Business separation mechanism is conducted between Fidelity China and the shareholders. The shareholders do not directly participate in investment and operation of fund property. Past performance is not a reliable indicator of future results, nor the guarantee for the performance of the portfolio managed by Fidelity China.

Issued in Japan, this material is prepared by FIL Investments (Japan) Limited (hereafter called "FIJ") based on reliable data, but FIJ is not held liable for its accuracy or completeness. Information in this material is good for the date and time of preparation and is subject to change without prior notice depending on the market environments and other conditions. All rights concerning this material except quotations are held by FIJ and should by no means be used or copied partially or wholly for any purpose without permission. This material aims at providing information for your reference only but does not aim to recommend or solicit funds /securities.

For information purposes only. Neither FIL Limited nor any member within the Fidelity Group is licensed to carry out fund management activities in Brunei, Indonesia, Malaysia, Thailand and Philippines.

GIM24UK0311

Fidelity
INTERNATIONAL