



Bitcoin Fundamentals: Structure, Scarcity and Use

Understanding the first and most established cryptocurrency

What Is Bitcoin?

Bitcoin is a cryptocurrency designed to enable peer-to-peer transfers of value without reliance on centralized intermediaries such as banks or governments. Introduced in 2009, Bitcoin was the first application of **blockchain technology** and remains the most widely recognized cryptocurrency.¹ Bitcoin exists on its own blockchain, a shared network that records and verifies transactions.¹

How the Bitcoin Network Works

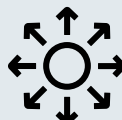
The Bitcoin blockchain functions as a decentralized ledger that records every transaction in chronological order. Transactions are grouped into “blocks,” validated by the network and added to the blockchain at regular intervals.

Key Features of the Bitcoin Network:



TRANSPARENCY

The transaction history is publicly viewable.



DECENTRALIZATION

No single entity controls the network.



SECURITY

Transactions are validated using cryptographic methods.



IMMUTABILITY

Once recorded, transactions generally cannot be altered without broad network consensus.

¹ Bitcoin: A Peer-to-Peer Electronic Cash System (Satoshi Nakamoto, 2008) — <https://bitcoin.org/bitcoin.pdf>

Bitcoin and Digital Scarcity

A defining characteristic of Bitcoin is its **fixed supply**. The Bitcoin protocol limits total issuance to **21 million coins**, a feature embedded in the network's code. New Bitcoin is introduced at a predetermined pace that slows over time through a process known as block reward halving.²

Approximately 20 million Bitcoin—**roughly 95% of the total eventual supply**—have already been created as of early 2026.³ The remaining supply is scheduled to be issued gradually over the coming decades. This programmed scarcity has contributed to frequent comparisons between Bitcoin and scarce physical assets such as gold.

Bitcoin as an Asset

Bitcoin is commonly described as a digital commodity rather than a traditional currency. Market participants and regulators generally view it as a store of value or investment asset rather than as legal tender.⁴

Within financial markets, Bitcoin has exhibited significant price volatility, sensitivity to macroeconomic and regulatory developments and periods of low correlation with traditional asset classes. These characteristics have shaped how investors evaluate Bitcoin within broader portfolio discussions.⁴

Bitcoin at a Glance

ATTRIBUTE	BITCOIN
Launch	2009
Primary Role	Store of value / value transfer
Supply Structure	Fixed (21 million maximum)
Network Design	Decentralized, peer-to-peer
Transaction Validation	Proof of work
Block Creation	Approximately every 10 minutes

Source: FINRA, Bitcoin Basics, June 26, 2023.

Portfolio Applications

Some investors consider Bitcoin appropriate for a modest portfolio allocation, depending on their specific circumstances. Interest has increased alongside regulatory tailwinds in several jurisdictions, growing global adoption and continued development of market infrastructure such as custody, trading and settlement.

From an investment perspective, Bitcoin is often viewed as a potential source of capital appreciation, reflecting its fixed supply, increasing adoption and sensitivity to changes in investor demand. Its programmed scarcity and expanding participation have historically contributed to periods of significant price appreciation, though with substantial volatility. Bitcoin has also exhibited periods of low or variable correlation with traditional asset classes, leading some investors to evaluate its role as a potential portfolio diversifier.⁵

At the same time, Bitcoin remains volatile and subject to evolving regulatory, technological and market dynamics. It may not be suitable for all investors, and any role depends on individual objectives, risk tolerance, liquidity needs and time horizon.



Key Takeaway

Bitcoin represents the earliest and most established application of blockchain technology. Its decentralized structure, fixed supply and independent network distinguish it from both traditional currencies and other digital assets. Understanding these foundational characteristics can help investors more thoughtfully assess Bitcoin's potential role within an evolving financial landscape.

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² Unchained: How does the bitcoin source code define its 21 million cap? (updated Feb. 28, 2025) — <https://www.unchained.com/blog/bitcoin-sourcecode-21-million>

³ Blockchain.com: Total Bitcoins in Circulation — <https://www.blockchain.com/charts/total-bitcoins>

⁴ Investor.gov: Crypto Assets — <https://www.investor.gov/additional-resources/spotlight/crypto-assets>

⁵ Diversification does not eliminate the risk of loss.

Risk Considerations

Digital assets are highly volatile and unpredictable. Their value is influenced by, but not limited to, supply and demand, investor confidence and their willingness to purchase it using traditional currencies, inflation, interest rates, currency exchange rates, changing regulations in the U.S. and abroad, and economic trends. Investors also face risks such as price swings, flash crashes, fraud, and cybersecurity threats. Digital assets may be more vulnerable to market manipulation than securities.

Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network.

Cryptocurrency (notably, Bitcoin) operates as a decentralized, peer-to-peer financial exchange and value storage that is used like money. It is not backed by any government. Federal, state or foreign governments may restrict the use and exchange of cryptocurrency. Cryptocurrency may experience very high volatility.

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