



Bitcoin Terms and Concepts

Bitcoin is a scarce, digital currency that is decentralized.

Satoshi Nakamoto is the name used by the pseudonymous person or group that conceived of Bitcoin and released the White Paper introducing Bitcoin as a peer-to-peer electronic cash system on October 31, 2008 at the peak of the U.S. Great Financial Crisis.

A **Satoshi** is a division of a Bitcoin. One bitcoin is equal to 100 million satoshis also known as sats. **Stacking Sats** refers to accumulating the smallest unit of a Bitcoin.

Blockchain is the technology that enables Bitcoin. It is a shared, digital ledger of transactions distributed across the computer systems in the peer-to-peer network.

A **Full Node** is a computer in Bitcoin's network that hosts and synchronizes a copy of the entire blockchain ledger.

Bitcoin Mining is the process of verifying blocks of Bitcoin transactions. It's also the process by which new bitcoins are entered into circulation.

Proof of Work (PoW) is the algorithm that secures Bitcoin. Miners deploy extremely large amounts of computing power to solve very complex cryptographic puzzles. These computer systems compete with each other to be the first to solve the puzzle and be able to validate the new block for the blockchain. Miners must reach a consensus to confirm the puzzle was solved, then the block can be accepted and permanently recorded onto the blockchain ledger.

Proof of work ensures the security of the blockchain and complete decentralization of the process. It prevents attacks and double spending. No person, entity or country controls Bitcoin, instead Bitcoin is controlled by verifiable software systems and processes.

When a miner solves a puzzle, and that work and those transactions are confirmed, the miner is paid a reward in new Bitcoins according to a schedule. Every four years, the amount of Bitcoin the miners receive for each block of transactions is reduced by 50%. These events are referred to the **Halvings**. The next halving will occur in 2024.

Proof of Stake (PoS) is a different process of validating transactions on the blockchain. It is based on validators who stake their own currency in the mining process. It's more energy efficient but it can lead to centralization, because people who have more coins to stake can verify more transactions.

Digital Scarcity refers to the limited availability of a virtual good that cannot be easily copied or recreated. Bitcoin has a hard supply cap of 21 million coins that will ever be mined and because of decentralization that can never be changed no matter how high the price per Bitcoin goes. No person, entity or government can create new coins that will dilute the value of existing coins.

Fiat refers to currency that is established as money or legal tender by government decree or regulation. More simply, fiat is government-issued money and almost all currencies around the world are fiat currencies. Fiat money gives central banks greater control over the economy because they control how much money is printed. Fiat money is 100% centralized because it is entirely controlled by governments. The printing of new money to finance government debt dilutes existing money saved and introduces inflation.

A **Central Bank Digital Currency** or CBDC is fiat money in the form of a digital coin. It is being considered or introduced by various Central Banks, including the US, China and Europe. Because it is digital it gives Central Banks new and powerful tools to monitor, tax, stimulate or influence society. As with today's fiat money, digital dollars, Yuan or Euros will be 100% centralized.

Keynesian Economics is a school of thought that believes that government intervention in the form of increasing/decreasing the money supply can stabilize the economy. The theory advocates for government spending through public policies that aim to achieve full employment and price stability. Most Western Central Banks today practice Keynesian Economics and utilize increases to the money supply to theoretically smooth business cycles.

Austrian Economics aligns more with Bitcoin philosophy and argues that government efforts to control the economic cycle invariably make it worse. Austrian economists believe that the less government interferes in free markets, the more soundly the economy grows. It argues the manipulation of money supply distorts the allocation of capital and causes boom bust cycles to be more frequent and severe.

Michael Saylor is the CEO of MicroStrategy (\$MSTR), the first publicly listed company to adopt the Bitcoin Standard and convert its entire treasury of capital into Bitcoin. MicroStrategy currently owns more than 90,000 Bitcoins. Saylor advocates for Bitcoin adoption by other institutions and helps guide CEOs and money managers through the process.

A **Bitcoin Maximalist** is an individual who, like MicroStrategy, has adopted the Bitcoin Standard and converted their savings entirely into Bitcoin, shunning all other assets as a store of value.

The **Stock-to-Flow model** is an econometric model discovered by Plan B, which predicts Bitcoin's price based on its scarcity, represented by the ratio of the existing supply of Bitcoin to how many new coins are being created. Because the supply of Bitcoin is absolute and reductions in the flow of new supply via the halvings are scheduled, the stock to flow ratio can be accurately predicted into the future. According to The Stock to Flow Model, the increasing price of Bitcoin since inception correlates strongly with the halving cycles and changes in the stock to flow ratio. The model predicts the likely price for Bitcoin after the last halving (2020) will reach approximately \$100,000.