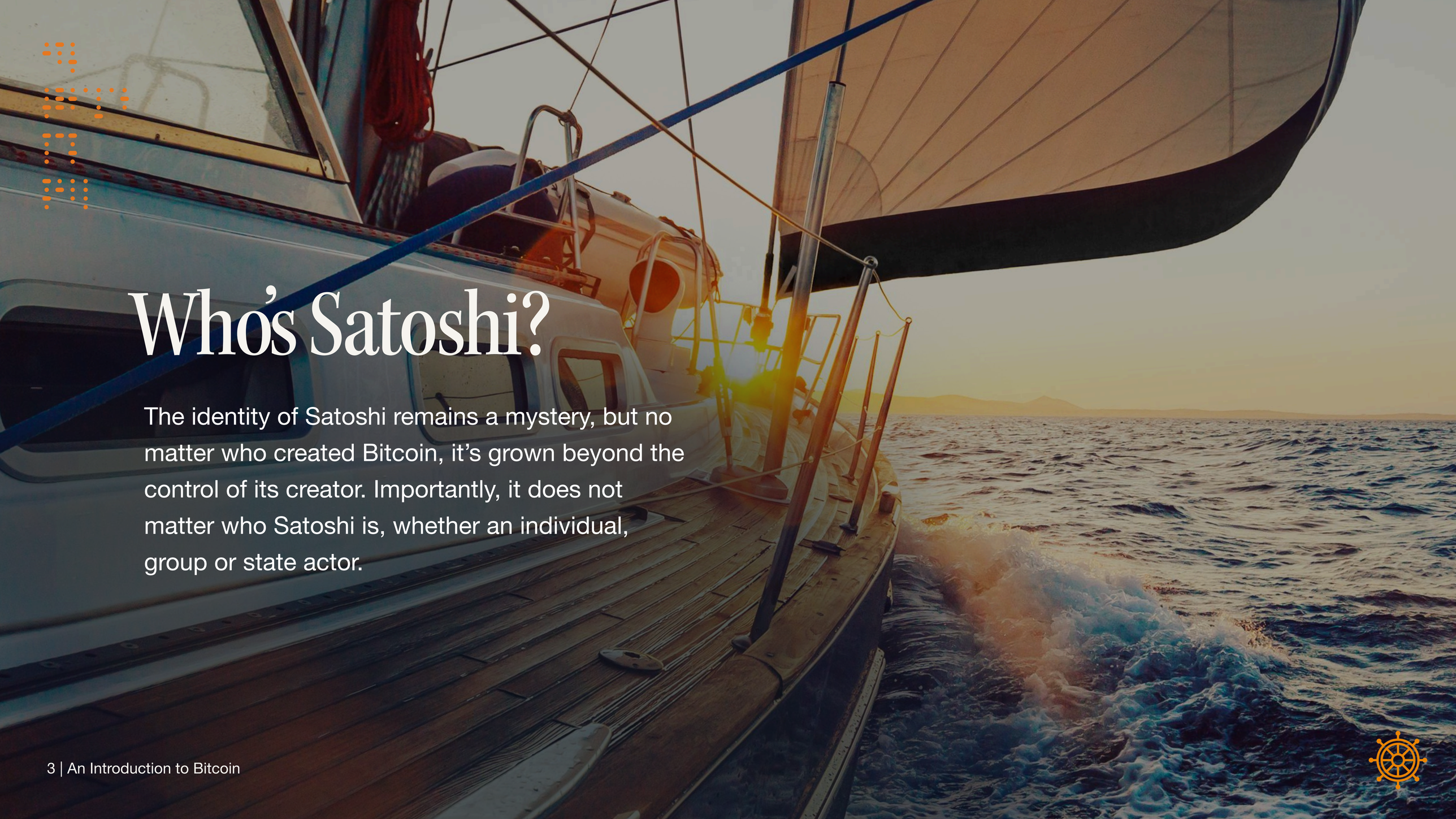
An Introduction to Bitcoin

The Bitcoin Way

What is Bitcoin?

At its essence, Bitcoin is a purely peer-to-peer version of electronic cash that allows online payments to be sent directly from one party to another without going through a financial institution. It was created by an anonymous developer going by the name, Satoshi Nakamoto.



Who's Satoshi?

The identity of Satoshi remains a mystery, but no matter who created Bitcoin, it's grown beyond the control of its creator. Importantly, it does not matter who Satoshi is, whether an individual, group or state actor.

A Brief Timeline

2008

On October 31, Satoshi Nakamoto publishes the Bitcoin whitepaper, “Bitcoin: A Peer-to-Peer Electronic Cash System,” introducing the concept of a decentralized digital currency.

2009

January 3, the Bitcoin network launches with the genesis block mined by Satoshi Nakamoto, resulting in an unspendable 50 BTC.

2010

First recorded Bitcoin transaction for real-world goods. Laszlo Hanyecz purchases two pizzas for 10,000 BTC, now celebrated as Bitcoin Pizza Day.

2011

Bitcoin reaches parity with the US dollar.

2013

Silk Road, an online marketplace using Bitcoin, is shut down by the FBI, highlighting Bitcoin’s association with illicit activities. Bitcoin is worth $1,000.

2017

Bitcoin price surges to nearly $20,000, driven by retail investor frenzy.

A Decade After Launch, the Fifth Epoch

2018

Bitcoin drops below $4,000, marking a bear market with a severe, 73% price plummet.

2020

Bitcoin's third halving occurs, reducing the block reward to 6.125. Institutional adoption begins publicly led by MicroStrategy Inc.

2021

El Salvador becomes the first nation to adopt Bitcoin as the price tops $69,000.

2022

Bear market hits; Bitcoin falls below $17,000 amid crypto exchange failures that include FTX, Celsius, and BlockFi.

2024

After a bear market and $16,000 price in 2022, Bitcoin soars to break past $100,000. The fourth halving and fifth epoch begins.

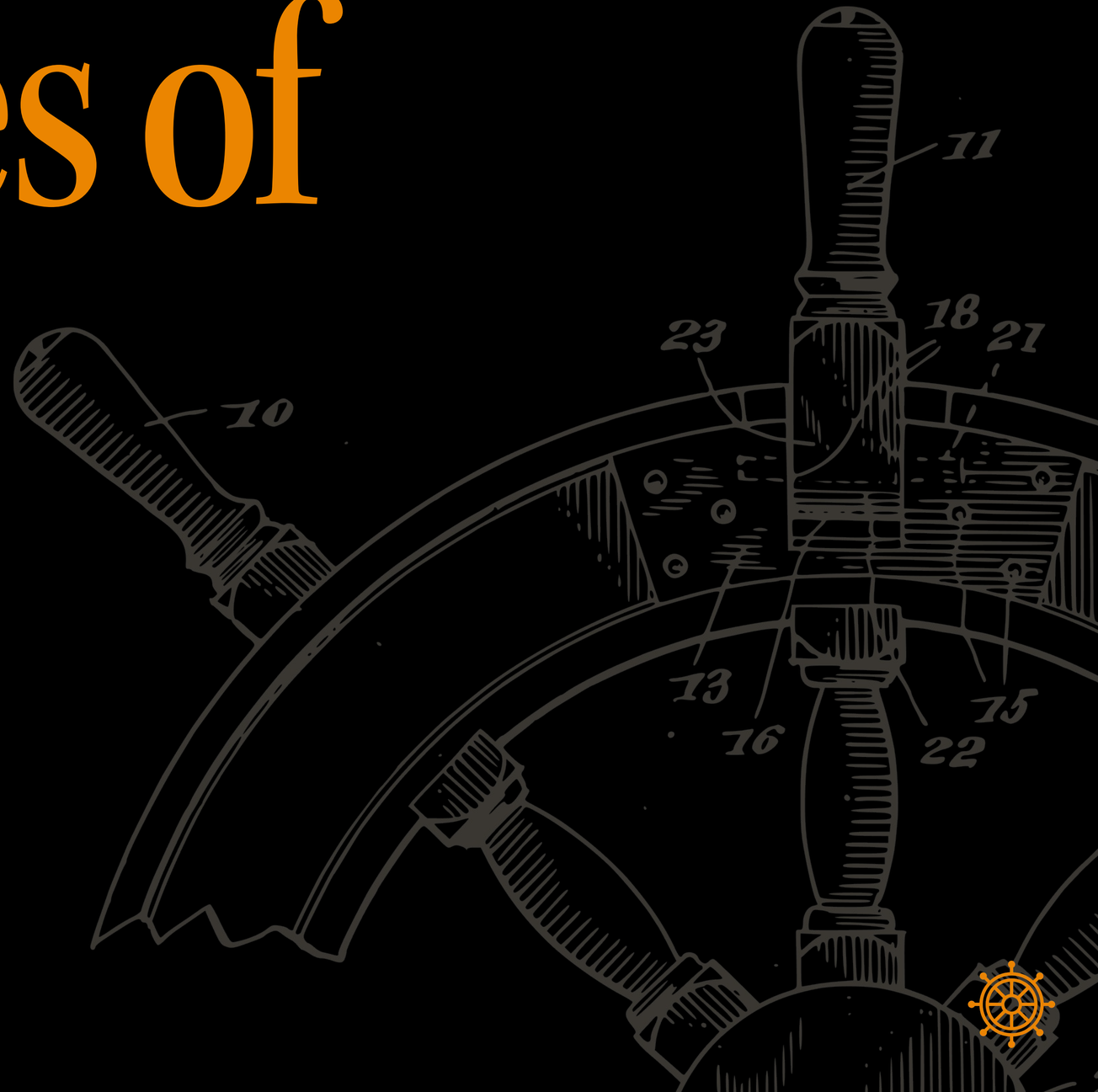
2025

Bitcoin continues its journey towards mainstream adoption, across countries, institutions and individuals.

Growing Bitcoin Adoption

Bitcoin became legal tender in El Salvador in 2021, accepted as money next to traditional fiat money.

9 Principles of Bitcoin



1

Decentralized

Bitcoin operates without a central authority, like a bank or government, using a global network of computers (nodes) to validate and record transactions, ensuring no single entity controls the system.

2

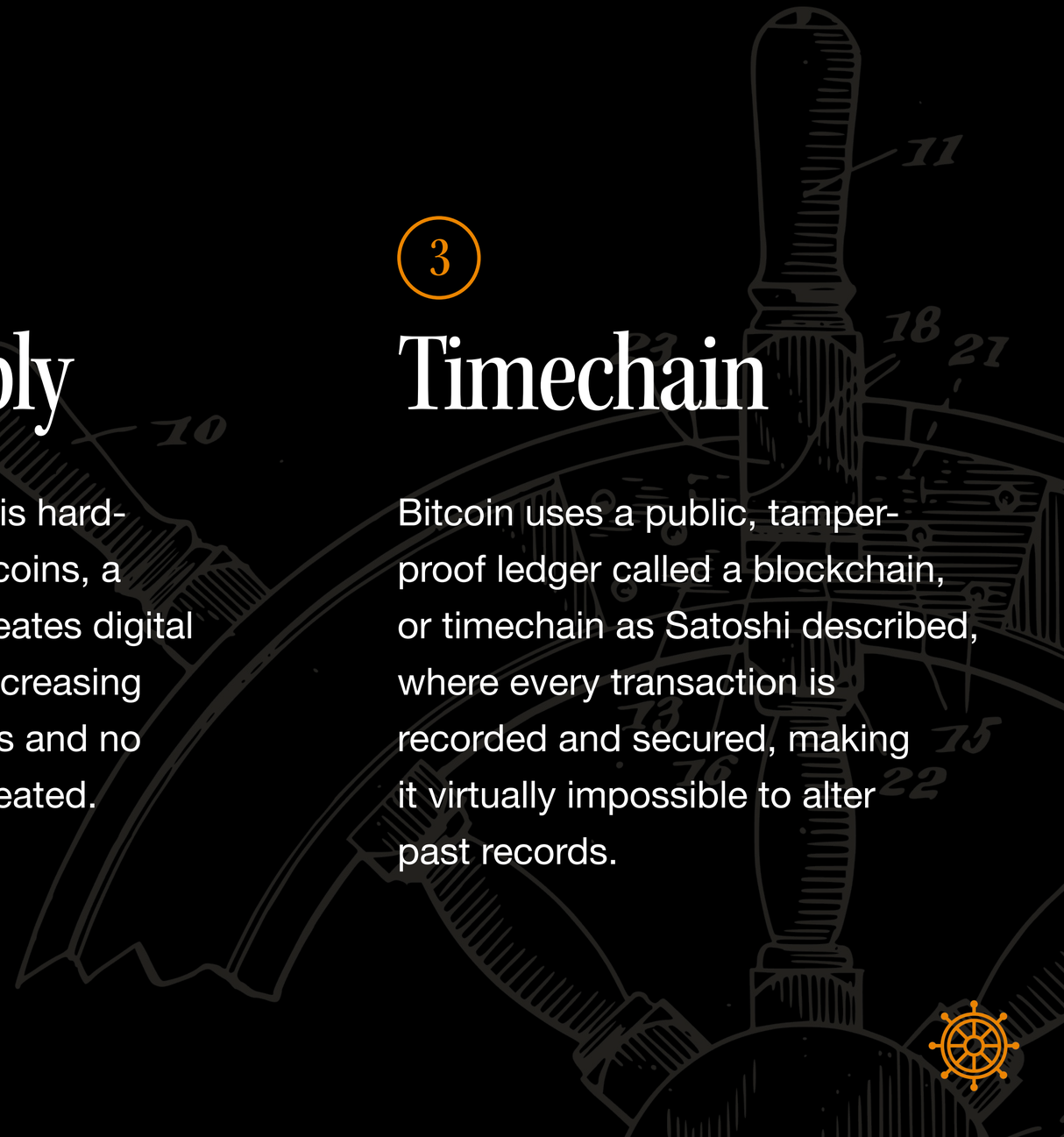
Fixed Supply

Bitcoin’s total supply is hard-capped at 21 million coins, a design choice that creates digital scarcity, potentially increasing value as demand rises and no more coins can be created.

3

Timechain

Bitcoin uses a public, tamper-proof ledger called a blockchain, or timechain as Satoshi described, where every transaction is recorded and secured, making it virtually impossible to alter past records.



4

Pseudonymous

Bitcoin transactions use wallet addresses instead of real names, offering a degree of privacy, though the blockchain's transparency means transactions can be traced if linked to an identity.

5

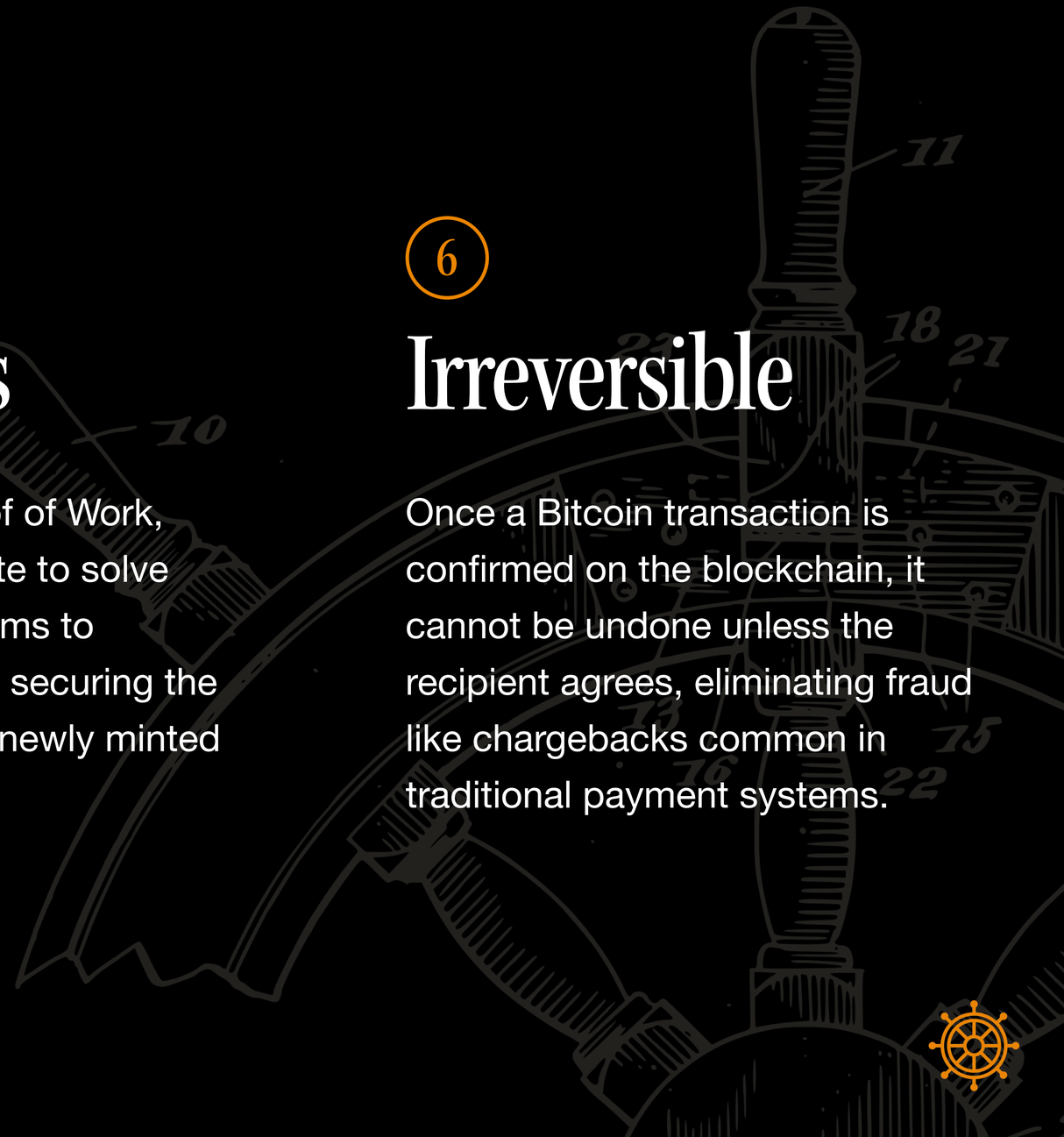
Consensus

Bitcoin employs Proof of Work, where miners compete to solve complex math problems to validate transactions, securing the network and earning newly minted Bitcoin as rewards.

6

Irreversible

Once a Bitcoin transaction is confirmed on the blockchain, it cannot be undone unless the recipient agrees, eliminating fraud like chargebacks common in traditional payment systems.



7

Worldwide

Bitcoin functions 24/7 across borders, allowing anyone with internet access to send or receive funds instantly, without relying on banks or payment processors.

8

Divisible

A single Bitcoin can be divided into 100 million units, called Satoshis, enabling precise transactions, from large investments to tiny payments, with great flexibility.

9

Permissionless

Anyone can use Bitcoin without needing approval from any authority, making it a tool for financial freedom, especially in regions with restricted access to banking.

A Note From Tony

Stop using worthless paper. Opt-out of their fiat system and start saving in Bitcoin, the technology that no one can control. At The Bitcoin Way, we work tirelessly to help our clients take proper, 100% self-custody of their Bitcoin and secure their mobile devices and digital lives.

—Tony Yazbeck, Co-founder

No Central Issuer

Bitcoin’s lack of an issuer is a core feature tied to its decentralized design. Unlike traditional currencies or assets, which are typically issued by a central authority like a government, central bank, or corporation, Bitcoin has no single entity responsible for its creation or distribution.

No Authority

Once the Bitcoin network was live in 2009, its creator effectively stepped away, leaving Bitcoin to operate without a controlling authority. No organization, government, or company issues Bitcoin or dictates its supply. Bitcoin's code is open source, available to download anywhere with an internet connection. Users can run a node, a full copy of every transaction, from anywhere with an internet connection.

Totally Open Money

For the first time, humanity has a way to use money freely, without the need of a trusted third party, unlocked and able to be used over the internet.

Creation Through Mining

Instead of an issuer, new Bitcoin is generated through a process called mining, where participants (miners) use computational power to solve complex mathematical problems to validate transactions on the blockchain. Miners are rewarded with newly created Bitcoin for their efforts, but this isn't "issuing" in the traditional sense. The process is governed by Bitcoin's open-source protocol, which enforces a predetermined issuance schedule. This schedule ensures that only 21 million Bitcoin will ever exist, with new coins released at a gradually decreasing rate (halving roughly every four years).

Predefined Rules

The Bitcoin protocol dictates how new coins are created and distributed. These rules are hardcoded and can only be changed if the majority of the network's participants (nodes and miners) agree to a change, a process that is intentionally difficult to coordinate. This eliminates the need for a central issuer who could arbitrarily create more coins or alter the system.

The Implications of No Issuer

No manipulation

Without an issuer, no single entity can inflate the supply by printing more Bitcoin, unlike fiat currencies where central banks can increase money supply.

Trustless system

Users don't need to trust a central authority; they trust the transparent, predictable rules of the protocol, enforced by the decentralized network.

Fixed supply

The absence of an issuer reinforces Bitcoin's 21-million-coin cap, making it a deflationary asset by design, as no one can issue additional coins beyond the limit.

Contrasting Traditional Assets

For comparison, fiat currencies like the US dollar are issued by central banks, which control supply through monetary policy. Similarly, stocks or bonds are issued by corporations or governments. Bitcoin's issuance, however, is algorithmic, predictable, and governed by consensus, not by any single entity's discretion.

Rules, Not Rulers

Bitcoin removes power from the State, Central Banks and provides decentralized digital money for the people, who can freely use at their own discretion.

A Truly Free Market

While the lack of an issuer promotes decentralization, it also means there’s no central authority to address issues like lost coins, losing private keys, theft due to hacking, or intervening in network disputes. Governance relies on community consensus, which can lead to debates or forks when disagreements arise.

Open Source: Voluntary

Open Source

Bitcoin’s software is open source, meaning its source code is publicly available, freely accessible, and modifiable under an open-source license (the MIT License). Anyone can view, use, copy, modify, or distribute the code. This applies to the software that runs Bitcoin nodes, manages wallets, and governs the network’s rules, such as the 21-million-coin cap and Proof of Work consensus.

What it Means

Public Code Repository

Bitcoin Core, and Bitcoin Knots are hosted on platforms like GitHub, where developers worldwide can access, review, or propose changes to the codebase.

Community Development

No single entity owns or controls Bitcoin’s development. Instead, a global community of volunteer developers, known as contributors, collaborates to maintain and improve the software

Consensus For Changes

Major changes to Bitcoin’s protocol (e.g., altering the block size or consensus rules) require broad agreement among developers, miners, and node operators, ensuring no unilateral control.

An Open Network

Transparency

The code is fully transparent, allowing anyone to verify how Bitcoin operates, from transaction validation to mining rewards.

How Open Source Works

Forking

Because the code is open, anyone can create a modified version (a fork) of Bitcoin, leading to projects like Bitcoin Cash or Litecoin, though these operate as separate networks.

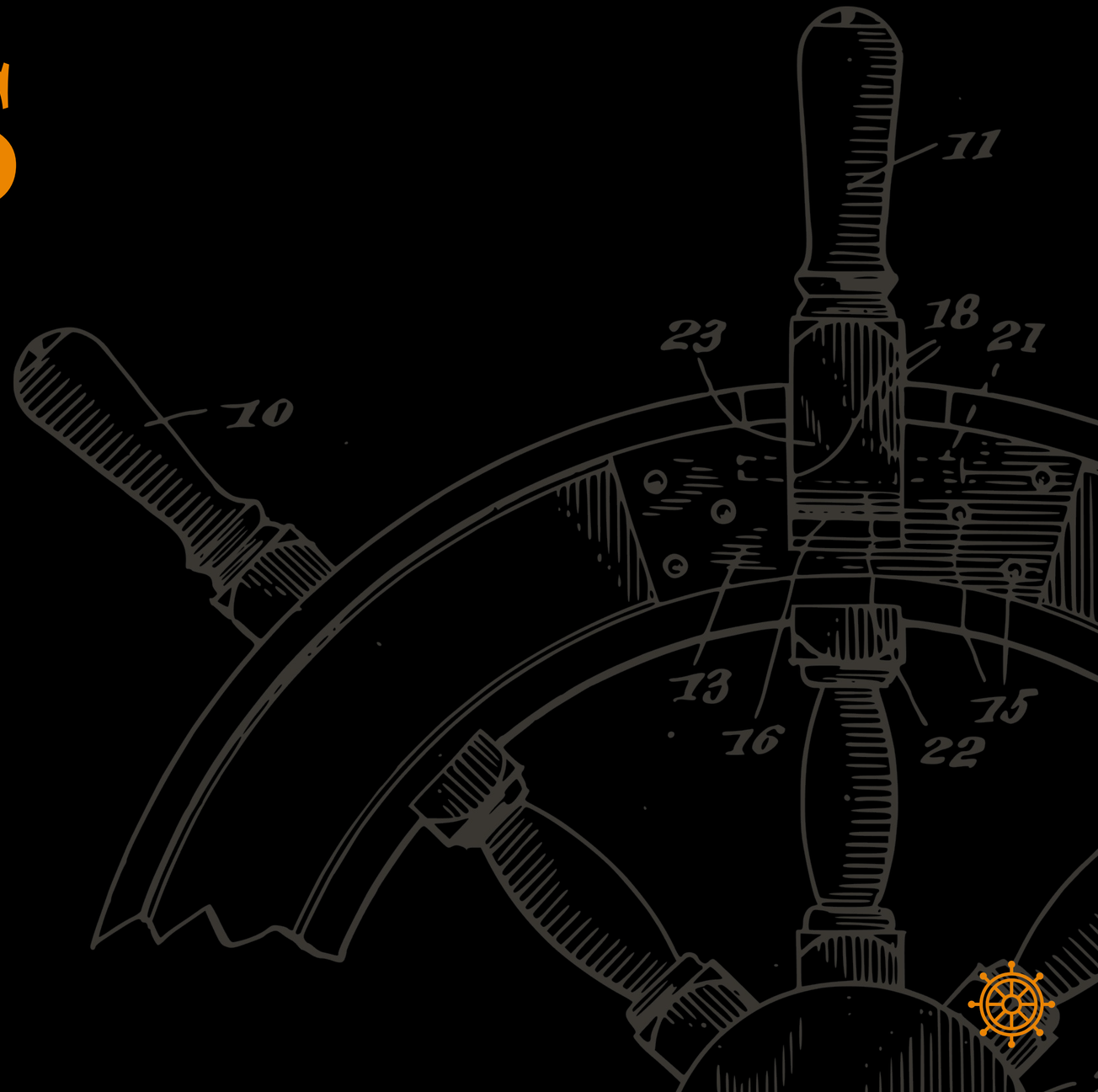
Volunteer Contributions

Developers contribute code improvements, bug fixes, or new features. Contributions are reviewed by other developers before being merged into Bitcoin Core.

Node Operation

Volunteers can run full nodes to validate transactions and enforce network rules, contributing to Bitcoin’s decentralization without needing permission.

Fiat Versus Bitcoin



Unlimited Paper?

Bitcoin’s fixed monetary supply starkly contrasts with the fiat money systems used by governments and central banks today. Fiat money, such as the US dollar, euro, or yen, operates under a fundamentally different model, characterized by centralized control and flexible supply.


“Infinite Cash”

Fiat's Flexibility

Fiat currencies are issued by central banks like The Federal Reserve, The European Central Bank, or governments, which have the authority to create new money at their discretion. This is often done through mechanisms like quantitative easing (printing money to buy assets) or adjusting interest rates to influence money supply.

Fiat Money Controlled by Elites

No Fixed Cap

Without an issuer, no single entity can inflate the supply by printing more Bitcoin, unlike fiat currencies where central banks can increase money supply.

Debt-Based Creation

Users don't need to trust a central authority; they trust the transparent, predictable rules of the protocol, enforced by the decentralized network.

Inflationary Tendency

The absence of an issuer reinforces Bitcoin's 21-million-coin cap, making it a deflationary asset by design, as no one can issue additional coins beyond the limit.

Bitcoin's Scarcity

Bitcoin's fixed 21-million-coin cap ensures scarcity, potentially increasing value as demand rises. Scarcity protects against inflation, preserves value for holders, and appeals to those distrustful of centralized control. It's particularly attractive in regions with hyperinflation (e.g., Venezuela, where inflation hit 1.7M% in 2018), but will ultimately embraced broadly as fiat money continues its inevitable collapse.

Certainty and Predictabiility

Predictability

Bitcoin's issuance schedule (halvings and total cap) is predictable and transparent, coded into the protocol from the start.

Economic Implications

Bitcoin's fixed supply promotes a deflationary model, where value rises over time as adoption grows, encouraging saving over spending.

Trust Model

Bitcoin relies on trust in mathematics and code, with its supply rules verifiable by anyone running a node.


1 BTC = 1 Bitcoin

Fiat's Flexibility

Pros: Allows governments to respond to economic crises, like recessions or pandemics, by injecting money to stabilize markets or fund relief.

Cons: Risks inflation, currency devaluation, and loss of public trust if mismanaged. Historical examples include Weimar Germany in the 1920s, Zimbabwe's collapse in the 2000s, Lebanon, Venezula, and Argetina in more recent times.

Bitcoin's Scarcity

Pros: Protects against inflation, preserves value for holders, and appeals to those distrustful of centralized control. It's essential in regions with hyperinflation and manipulated currencies (all).

Cons: Only 4% or less of the world currently owns Bitcoin, with even a smaller portion in self-custody, although current events may cause the number of Bitcoin holders to increase rapidly.

Sovereignty:
True Freedom

Permissionless Control

Bitcoin’s permissionless nature means individuals can use, store, and transfer their wealth without needing approval from banks, governments, or intermediaries. Bitcoin’s design empowers individuals with sovereignty over their money, time, and transactional freedom by providing a decentralized, permissionless, and inflation-resistant financial system. This sovereignty contrasts sharply with traditional fiat systems, where central authorities exert significant control over their users.

True Freedom

Sovereign Money

Bitcoin’s permissionless nature means individuals can use, store, and transfer their wealth without needing approval from banks, governments, or intermediaries. Bitcoin achieves this through its lack of permission requirements, protection against inflation and monetary debasement, and the resulting autonomy over money and time.

Permissionless Control

No Gatekeepers

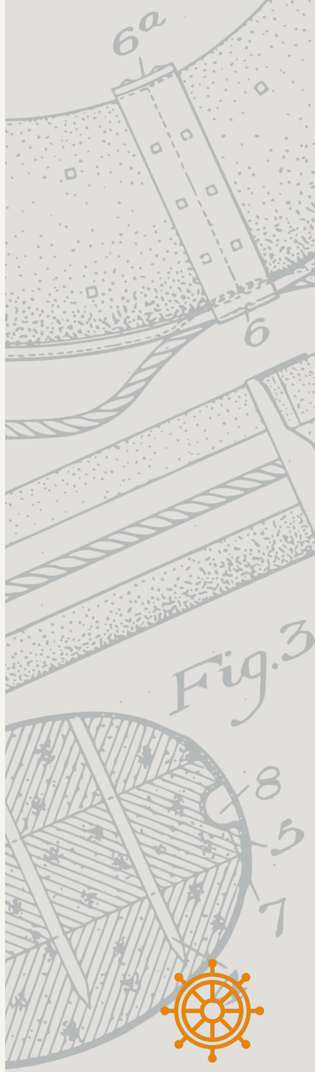
Anyone with an internet connection can create a Bitcoin wallet, receive, and send funds without requiring permission from a financial institution. There’s no need for a bank account, credit check, or ID.

Self Custody

Bitcoin allows users to hold their own private keys, giving them direct control over their funds. Unlike fiat in a bank, where the institution technically holds your money, Bitcoin in a personal wallet is fully under the user’s control.

Censorship Resistance

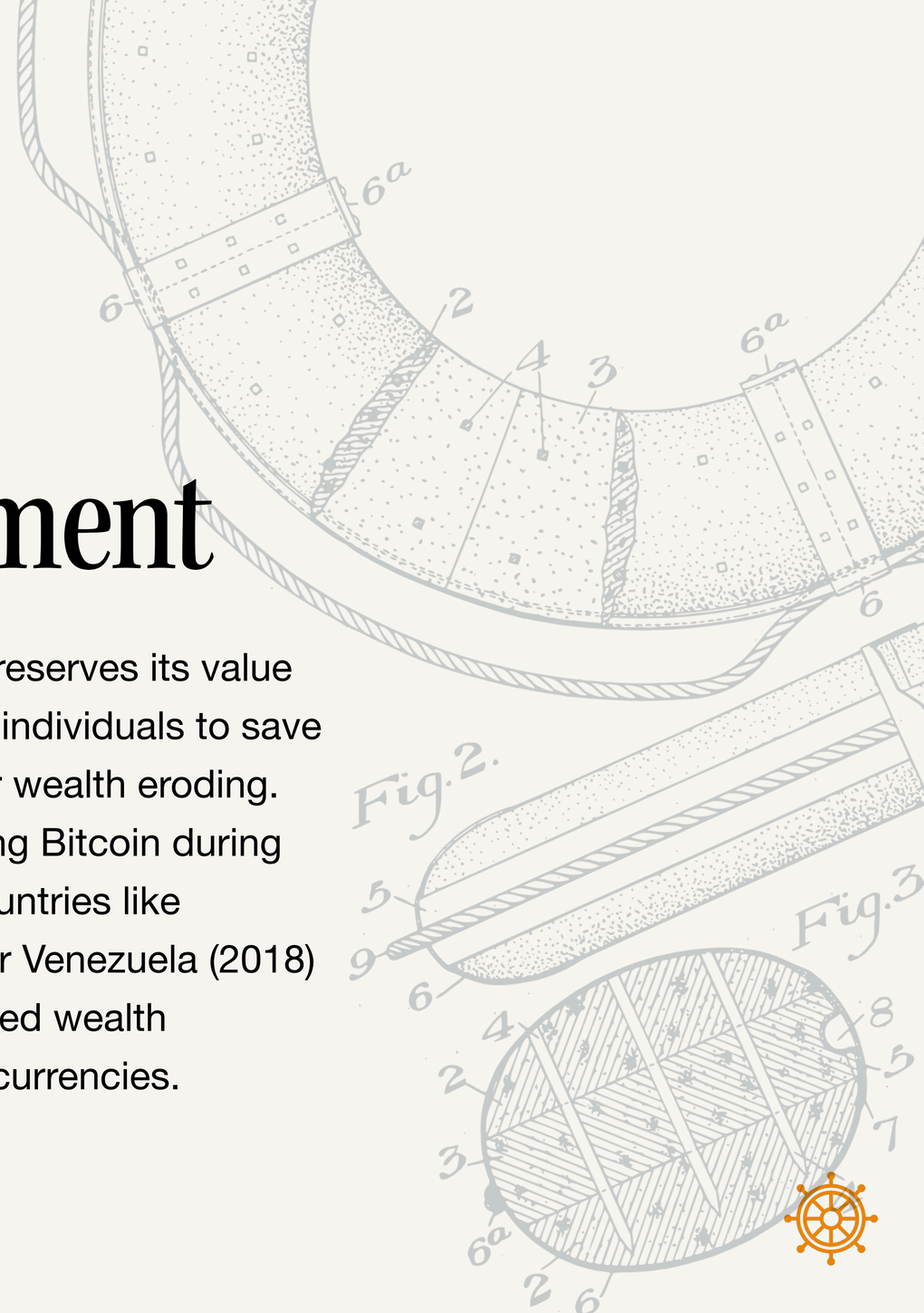
Transactions on the Bitcoin network cannot be easily blocked or censored by third parties, as the network is decentralized and maintained by thousands of nodes worldwide.



Protection From Debasement

Fiat systems often experience monetary debasement, where the value of money decreases due to over-issuance. For example, the US dollar lost about 20% of its purchasing power from 2015 to 2025 due to inflation, with peaks like 9.1% annual inflation in June 2022. In fact, the dollar has lost 10% of it’s value in 2025.

Bitcoin’s scarcity preserves its value over time, allowing individuals to save without fear of their wealth eroding. For instance, holding Bitcoin during hyperinflation in countries like Zimbabwe (2008) or Venezuela (2018) would have protected wealth compared to local currencies.



Zero Manipulation

Unlike fiat, where central banks adjust money supply based on policy goals, Bitcoin’s supply is governed by immutable code. No single entity can inflate the supply, ensuring predictable issuance. During the 2020-2022 pandemic, the US Federal Reserve increased the M2 money supply by ~25%, diluting the dollar’s value. Bitcoin’s supply remained unaffected, maintaining its scarcity.

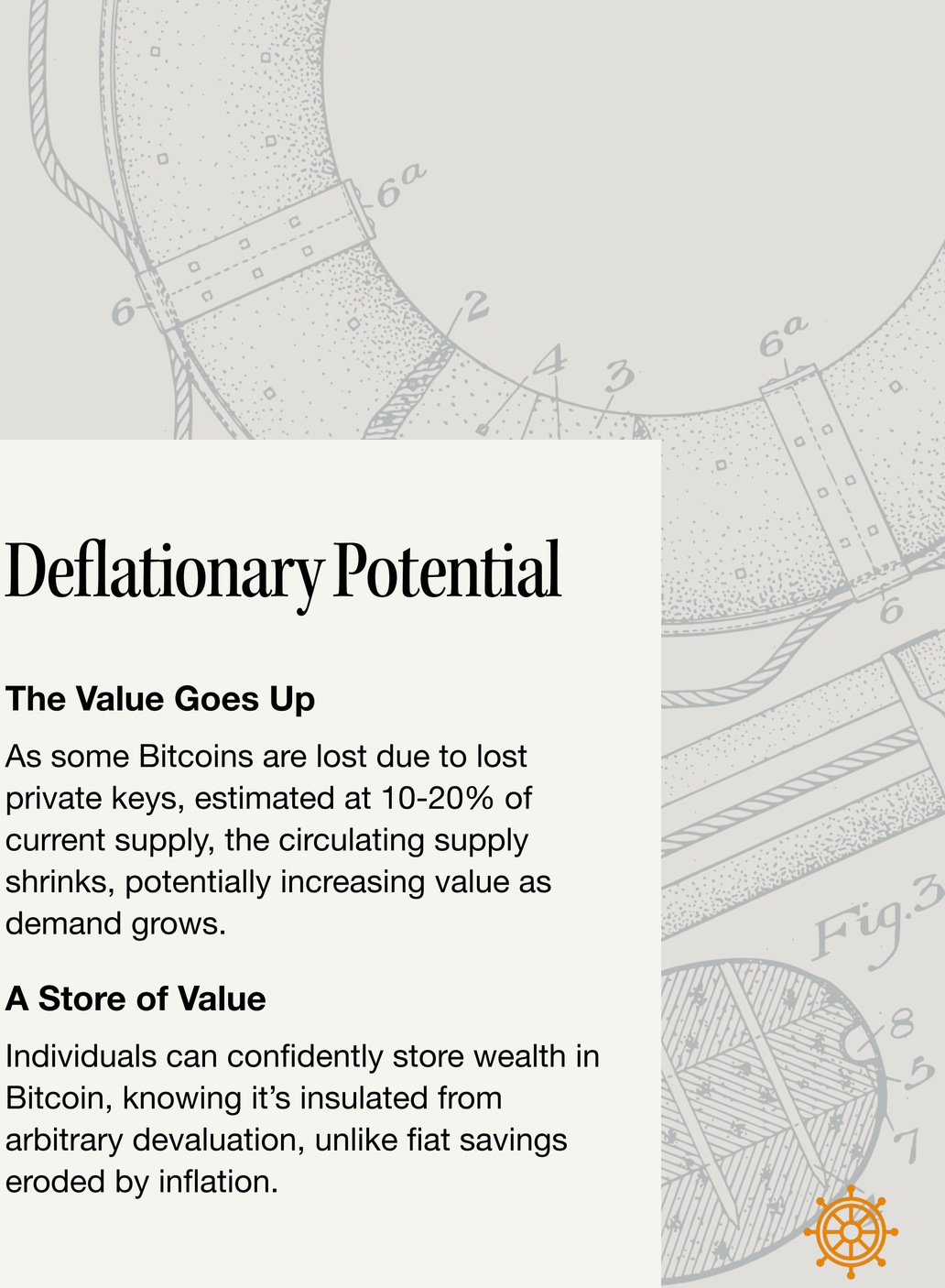
Deflationary Potential

The Value Goes Up

As some Bitcoins are lost due to lost private keys, estimated at 10-20% of current supply, the circulating supply shrinks, potentially increasing value as demand grows.

A Store of Value

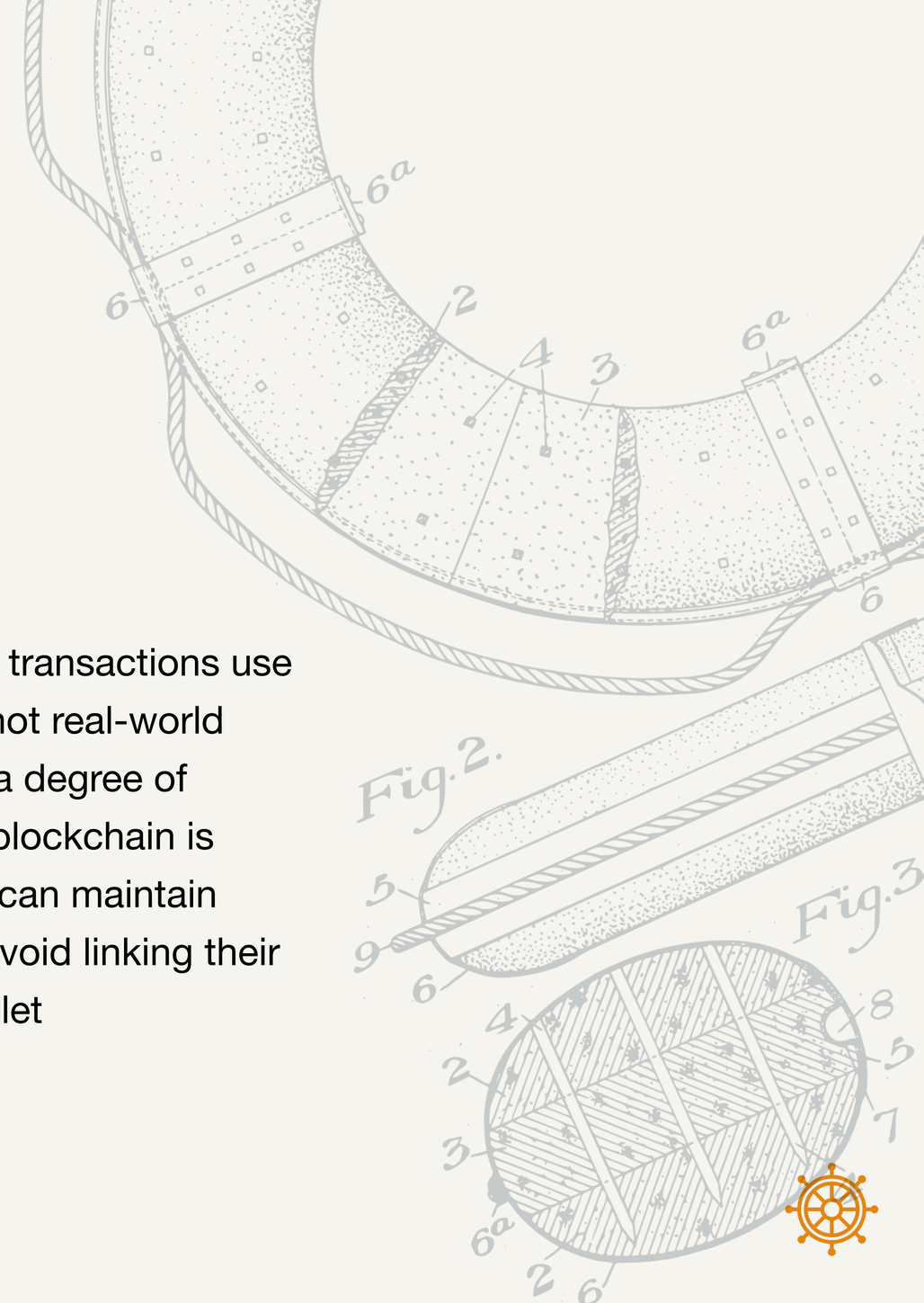
Individuals can confidently store wealth in Bitcoin, knowing it’s insulated from arbitrary devaluation, unlike fiat savings eroded by inflation.



Transactional Freedom

Bitcoin’s structure grants individuals unparalleled freedom to transact, reinforcing their sovereignty. Bitcoin transactions can be sent anywhere in the world, 24/7, without intermediaries like banks or payment processors. This eliminates delays, high fees, or restrictions common in fiat systems

In addition, Bitcoin transactions use wallet addresses, not real-world identities, offering a degree of privacy. While the blockchain is transparent, users can maintain anonymity if they avoid linking their identity to their wallet



The Best Money

Control Time

Bitcoin’s design also grants individuals greater control over their time, as it streamlines financial interactions and reduces dependency on bureaucratic systems. As Bitcoin increases in value, the effect is that the Bitcoin holder is in control of their time, how much or how long they work as Bitcoin’s purchasing power increases.

Freely Transact

Financial Inclusion

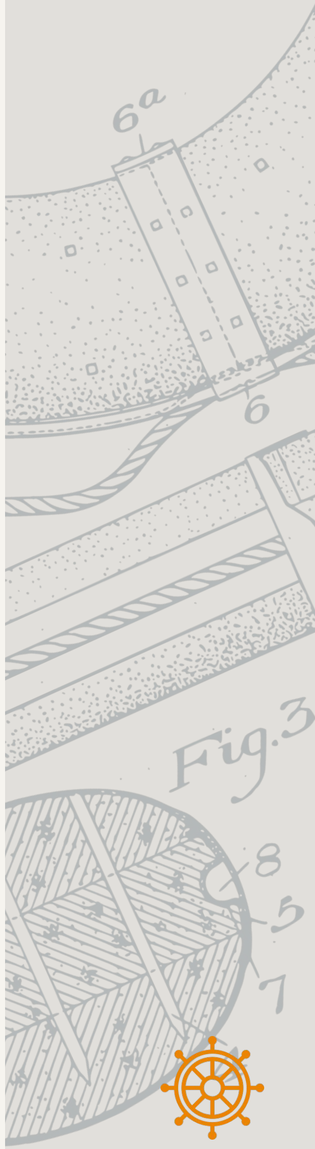
Bitcoin’s sovereign nature empowers the unbanked, 1.4 billion people, to access a financial system, particularly in regions with limited banking infrastructure providing sovereignty over their economic lives.

Authoritarian Protection

In countries with oppressive regimes, Bitcoin allows individuals to store and transfer wealth without government interference, preserving their autonomy.

Long-Term Wealth Preservation

By shielding against inflation and debasement, Bitcoin enables individuals to plan for the future, knowing their savings won’t lose value due to external policies.



Conclusion

Bitcoin grants individuals sovereignty over their money, time, and transactional freedom by operating as a decentralized, permissionless system with a fixed supply. It eliminates the need for intermediaries, protects against inflation and monetary debasement through its 21-million-coin cap, and enables fast, global , censorship-resistant transactions. This empowers users to control their wealth, transact freely, and manage their time without reliance on centralized institutions, contrasting sharply with fiat systems where governments and banks hold significant sway. Despite challenges like volatility and self-custody risks, Bitcoin's design offers a powerful tool for financial autonomy and personal sovereignty.

Terms & Definitions

Blockchain – A distributed, tamper-resistant digital ledger that records transactions across many computers, ensuring security and transparency without a central authority.

Consensus – The process by which decentralized network participants agree on the validity of transactions and the state of the blockchain.

Debasement – The reduction of a currency's value through increased supply, typically by governments printing more money.

Decentralized – A system with no central authority; control and verification are distributed across many independent participants.

Devaluation – A deliberate decrease in the value of a currency relative to others, usually enacted by governments to influence trade or debt.

Difficulty Adjustment – A mechanism in Bitcoin that automatically adjusts how hard it is to find a new block, keeping block production steady at roughly every 10 minutes.

Fiat – Government-issued currency that is not backed by a physical commodity but by trust in the issuing government.

Fixed Supply – A monetary characteristic where the total number of units is capped; Bitcoin's supply is limited to 21 million.

Halving – A Bitcoin event occurring roughly every four years that cuts the block reward to miners in half, reducing the pace of new coin issuance.

Hyperinflation – Extremely rapid and out-of-control inflation causing currency to lose value at an accelerating rate.

Mining – The process of validating transactions and securing the Bitcoin network using computational power, for which miners earn block rewards.

Node – A computer running Bitcoin software that stores the blockchain, validates rules, and relays transactions across the network.

Terms & Definitions

Permissionless – A system where anyone can participate without needing approval from a central authority.

Recession – A sustained period of economic decline, often marked by reduced spending, unemployment, and lower industrial output.

Scarcity – A limited supply that increases value; Bitcoin’s scarcity is enforced by its capped total supply.

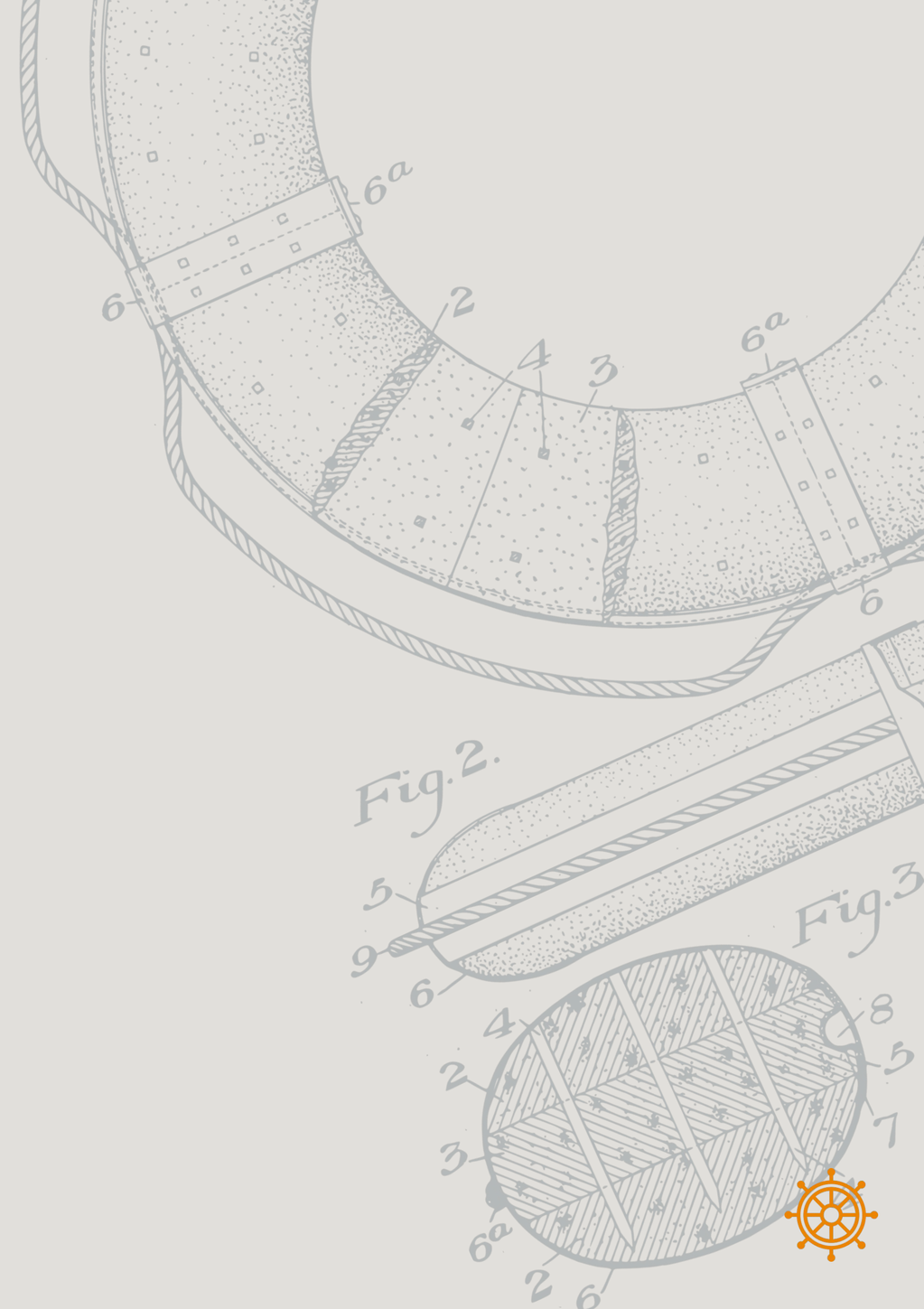
Self-custody – Taking direct control of your own Bitcoin by holding your private keys, without relying on third parties.

Solo Mining – Mining individually rather than in a pool; the miner keeps the full block reward but has lower chances of finding a block.

Sovereignty – Personal or financial independence, often referring to individuals having full control over their money without external interference.

Transaction – The movement of Bitcoin from one address to another, recorded on the blockchain.

Volatility – The degree of variation in an asset’s price over time; Bitcoin is known for significant price swings.



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