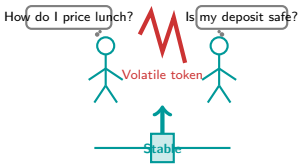
Why Would Anyone Need a Cryptocurrency That Does Not Change in Value?

Crypto is famous for wild price swings. You buy a token today and it could be worth half by tomorrow. But if you want to lend, borrow, or get paid on-chain, you need something that holds its value. Enter stablecoins.

Three problems volatility creates:

1. **Pricing** — merchants cannot set stable prices in a volatile token
2. **Lending** — borrowers and lenders cannot agree on fair terms when collateral swings wildly
3. **Savings** — people in unstable economies cannot store value in something that fluctuates more than their own currency

These three needs — pricing, lending, saving — explain why stablecoins have become the most widely used category of crypto token.



Stable value makes everything else possible.

A stablecoin does not try to make you rich. It tries to be boring — and that boring reliability is what makes lending, trading, and saving on-chain possible.

Think About the Last Time You Sent Money Abroad — Did You Worry About the Exchange Rate?

You send money to family in another country. Between the moment you send and the moment they receive, the exchange rate might shift. They get less than you intended. Now imagine sending crypto instead — the same amount, but the value drops by several percent in transit.

Now imagine a different version:

The token:	A digital coin that always represents the same purchasing power as one unit of a major currency.
The promise:	Whether you send it in the morning or receive it at night, it buys the same amount.
The question:	Who or what guarantees that promise? And what happens if the guarantee fails?

No conversion fees. No waiting. No exchange rate surprise. But the stability is only as strong as the mechanism behind it.

The Core Idea

This is the core idea behind stablecoins: digital tokens designed to maintain a constant value. The question is not whether they work — many do, most of the time. The question is what they depend on, and what breaks when that dependency fails.

What Are the Three Ways to Keep a Token Worth One Dollar?

Aspect	Fiat-Backed	Crypto-Collateral	Algorithmic
Backed by	Cash in a bank	Crypto locked on-chain	Nothing (or partial)
Trust required	Issuer honesty	Smart contract code	Market confidence
Capital needed	One-to-one	Over-collateralized	None
Centralization	High	Medium	Low
Stability record	Strong	Strong	Fragile

Read the first and last columns together. The safest design requires the most trust in a central party. The most decentralized design has the weakest stability record. No column dominates.

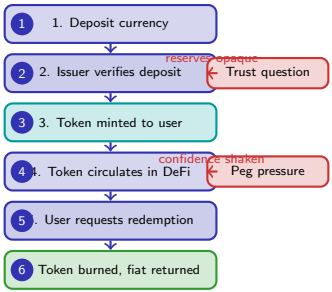
Key distinctions:

- **Fiat-backed** — a company holds real currency in a bank and issues one token per unit deposited
- **Crypto-collateralized** — a smart contract locks cryptocurrency worth more than the tokens it mints
- **Algorithmic** — software expands or contracts the token supply to push the price toward the target

Each approach answers the stability question differently, and each carries a different risk profile.

The three designs represent three different answers to the same question: who or what guarantees the value? A bank, a smart contract, or an algorithm — each with its own failure mode.

Follow One Stablecoin from Minting to Redemption — Who Holds What?



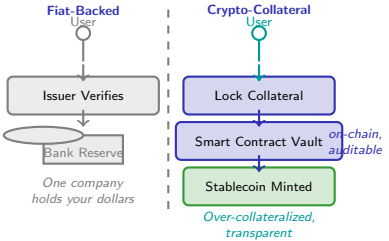
What happened in those six steps:

- No central bank was involved — a private issuer created the token
- No blockchain was needed for the reserves — real currency sits in a traditional bank
- The peg held because arbitrageurs could always mint or redeem at the target price
- The trust shifted from "do I trust this currency?" to "do I trust this issuer?"

The entire lifecycle depends on one assumption: that the reserves actually exist and can be accessed on demand.

Every step in the stablecoin lifecycle that relies on a centralized party reintroduces the trust assumptions that blockchain was designed to remove. The stability is real, but so is the dependence.

What Backs a Stablecoin — a Bank Account or a Smart Contract?



Trust in an institution vs. Trust in code

The trade-off at the core:

Fiat-backed:	simple, stable, capital-efficient — but you must trust the issuer to hold real reserves, not lend them out, and honor redemptions
Crypto-collateral:	transparent, decentralized, censorship-resistant — but requires locking up more value than you mint, and collateral can lose value in a crash
Why not both?	Some designs blend approaches — partial reserves plus algorithmic adjustments — but hybrid designs carry hybrid risks

The architecture determines who bears the risk. In fiat-backed, the issuer. In crypto-backed, the depositor.

A fiat-backed stablecoin is as safe as the bank that holds its reserves. A crypto-collateralized stablecoin is as safe as the smart contract that manages its vaults. Neither is trustless — they just trust different things.

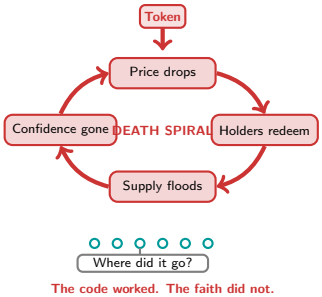
The Algorithm Promised Stability — So Why Did the Token Go to Zero?

An algorithmic stablecoin maintained its peg for over a year. Billions in value flowed in. Then one large sell triggered a feedback loop that destroyed the entire system in three days.

The death spiral — step by step:

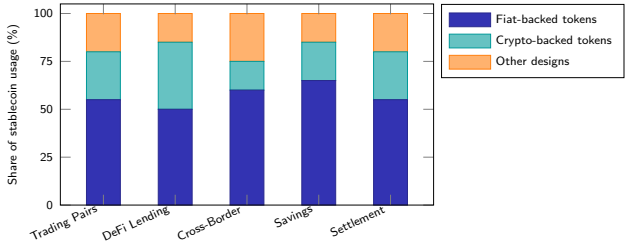
1. Token price drops below the target
2. Holders rush to redeem, minting governance tokens
3. Governance token supply floods the market
4. Governance token price crashes
5. The mechanism that was supposed to restore the peg now accelerates the collapse

The code executed exactly as designed. Every redemption followed the rules. The flaw was not in the execution — it was in the assumption that confidence would hold.



When the mechanism that restores the peg depends on the same confidence that the peg creates, you get a circular dependency. Break the circle at any point and the entire system unravels.

Where Do Stablecoins Actually Get Used — And How Much Depends on Them?



Illustrative distribution based on public market data patterns. Not actual protocol data.

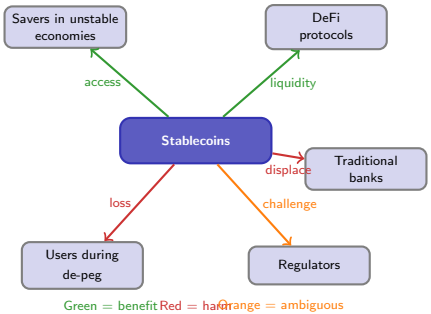
What these use cases reveal:

Trading pairs:	The largest use — stablecoins serve as the base currency for most token trades
DeFi lending:	Borrowers and lenders use stablecoins to avoid exposure to price swings
Cross-border:	Faster and cheaper than traditional remittance channels, available around the clock
Savings:	In economies with high inflation, a dollar-denominated stablecoin preserves purchasing power

The dominance of fiat-backed tokens in most categories reveals a market preference: when stability matters most, users choose the simplest mechanism.

Stablecoins are not a niche experiment. They are the infrastructure layer that makes decentralized finance functional — the plumbing that lets everything else flow.

Who Wins and Who Loses When a Token Promises to Be Worth One Dollar?



The distribution of impact is uneven:

- **Winners:** Savers in high-inflation countries gain access to dollar-denominated stability. DeFi protocols gain reliable base assets for lending and trading.
- **Losers:** Traditional banks face competition for deposit-like products. Users caught in a de-peg event may lose significant value with no recourse or insurance.
- **Ambiguous:** Regulators see both promise (financial inclusion, faster payments) and threat (shadow banking, money laundering, systemic risk).

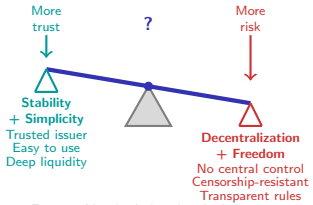
The same token that protects savings in one country may undermine monetary policy in another.

A stablecoin is not neutral infrastructure. It shifts power — from central banks to private issuers, from domestic currencies to the dollar, from regulated banks to programmable contracts. Who benefits depends on where you stand.

Three Questions That Reveal Any Stablecoin's True Design

Before trusting value to any stablecoin, ask three questions. The answers will not tell you which to choose — but they will tell you what you are depending on.

1. **What backs the value — and can you verify it?**
   Fiat-backed tokens point to bank accounts. Crypto-collateralized tokens point to on-chain vaults. Algorithmic tokens point to an assumption. The strength of the answer determines the strength of the peg.
2. **Who can freeze, block, or change the rules?**
   Centralized issuers can blacklist addresses. Smart contract admins can upgrade code. Pure algorithms have no override — which is a strength until something goes wrong.
3. **What happens when confidence breaks?**
   Fiat-backed tokens have redemption guarantees (if reserves exist). Crypto-backed tokens have liquidation mechanisms (if markets function). Algorithmic tokens have nothing but faith.



Every stablecoin design tips the balance.

The Stablecoin Trilemma says you can optimize for two of three: stability, decentralization, and capital efficiency. These three questions help you identify which two a given stablecoin has chosen — and what it sacrificed.

Your Challenge: Evaluate a Stablecoin Scenario

A new stablecoin launches with the following design: it is partially backed by government bonds held by a licensed company, and partially stabilized by an algorithm that adjusts supply when the price drifts. The issuer publishes monthly reports but has not completed an independent audit. The token has gained rapid adoption for cross-border payments.

Apply the three questions from the previous slide:

1. **Backing question:** What backs this stablecoin? Is the backing fully verifiable? What happens if the government bonds lose value?
2. **Control question:** Who controls this stablecoin? Can the issuer freeze accounts? What does "partially algorithmic" mean for the override mechanism?
3. **Confidence question:** What happens if a major user redeems a large amount at once? Does the hybrid design make the system more resilient or more fragile?

No Single Right Answer

There is no single right answer. The hybrid design offers partial solutions to multiple problems — but partial solutions also mean partial vulnerabilities. The point is to practice identifying what each design choice gains and what it gives up.