

The Collapse of Terra-LUNA: What Broke in Algorithmic Stablecoins?

A \$60billion cautionary tale about ambition, innovation, and systemic failure
in decentralized finance

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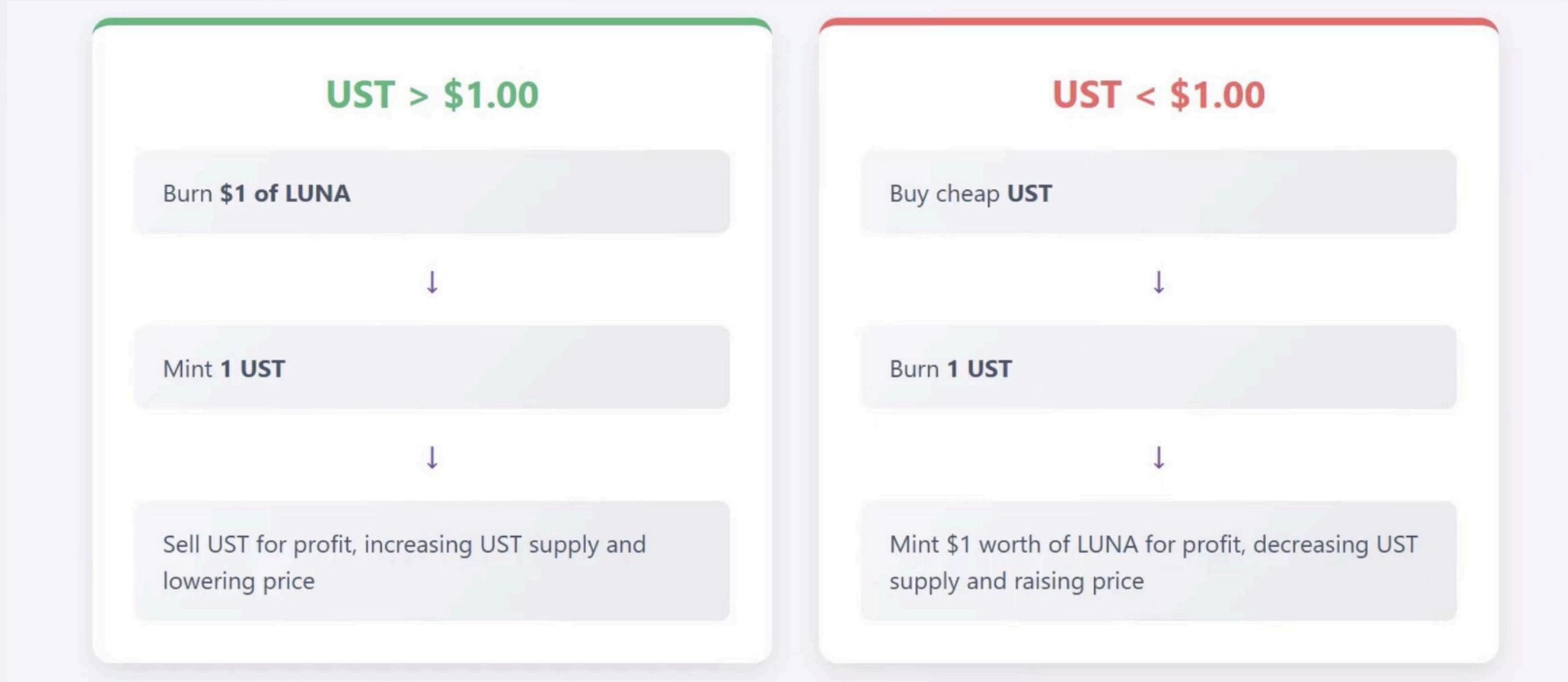


Terra's Ambitious Dream: Algorithmic Stablecoins Explained



TerraUSD (UST) was an algorithmic stablecoin designed to maintain a \$1 peg without traditional asset backing like dollars or bonds. Instead, it relied on code and market incentives. The system used a dual-token architecture: UST as the stablecoin and LUNA as the governance token. A mint-and-burn arbitrage mechanism allowed users to swap \$1 worth of LUNA for 1 UST and vice versa, theoretically creating market forces that would always restore the \$1 peg. This elegant design promised a decentralized, capital-efficient alternative to collateralized stablecoins—but it had fatal vulnerabilities.

How the Arbitrage Mechanism Worked



Anchor Protocol: The Catalyst

~20% APY

Guaranteed returns on UST deposits

Massive Adoption

Attracted billions in UST deposits, driving **rapid growth**

Unsustainable Model

Returns were **subsidized**, not organically generated

UST Demand

Created artificial demand for UST to access high yields

Critical Weakness

Became the primary **use case** for the entire ecosystem

 CRITICAL FAILURE

The Death Spiral: When the Mechanism Failed



The Trigger

In May 2022, massive withdrawals from Anchor Protocol which offered an unsustainable 20% APY caused UST to lose its \$1 peg, dropping to \$0.98, then \$0.90.

The Spiral Begins

Panicked holders burned UST to mint LUNA, causing LUNA's supply to hyperinflate from 1 billion to over 6 trillion tokens in just days.

Total Collapse

LUNA's price crashed from \$80 to fractions of a cent. With LUNA worthless, the arbitrage mechanism failed completely, creating an unstoppable death spiral.

Catastrophic Impact: Numbers That Shocked the Crypto World

\$60B

Value Destroyed

Combined market capitalization wiped out
within a matter of days

280K+

Victims Worldwide

Investors suffered devastating losses
across the globe

\$14B

Anchor TVL Gone

Total value locked devaporated almost
overnight

From Visionary to Convicted

UST's price collapsed from \$1.00 to just \$0.08, destroying billions in wealth. Do Kwon, Terraform Labs founder, went from celebrated crypto visionary to convicted fraudster by 2025. The Terra-LUNA collapse became one of cryptocurrency's most spectacular failures, triggering broader market contagion and regulatory investigations worldwide.

What Went Wrong? Core Flaws in Algorithmic Stablecoins

No Real Asset Backing

Unlike traditional stablecoins backed by dollars or bonds, UST relied purely on market confidence and LUNA's value. When panic struck, there was no safety net—just code that amplified the crisis.

Mechanism Became Amplifier

The mint-and-burn arbitrage was designed to dampen volatility, but under extreme stress it did the opposite. Each UST redemption minted more LUNA, accelerating hyperinflation and destroying value faster.

Unsustainable Incentives

Anchor Protocol's 20% yields attracted massive, unstable capital inflows. This Ponzi-like structure concentrated risk and created a powder keg waiting for a spark to ignite total collapse.

Transparency as Weakness

Blockchain visibility meant investors could watch the death spiral in real-time. Seeing others exit triggered herd behavior, accelerating the bank run that traditional opacity might have slowed.



Lessons Learned & The Future of Stablecoins

01

Innovation Must Meet Reality

Algorithmic stablecoins can work, but they must balance clever mechanisms with robust collateralization and realistic stress testing to prevent systemic collapse.

03

Sustainability Over Hype

Terra's collapse proves that sustainable DeFi requires honest economics, transparent operations, and realistic incentives—not unsustainable yields and algorithmic magic.

02

Regulation Is Coming

Global regulators have intensified scrutiny of stablecoins and DeFi protocols to protect investors, ensure transparency, and maintain broader financial market stability.

04

The Innovation Continues

Despite this catastrophic failure, the crypto community keeps building. Terra-LUNA remains a stark, essential reminder of the dangers lurking in unchecked financial engineering.

Thank you.