Terra's UST Stablecoin Losing its Dollar Peg

UST Failed to Keep its Promise of Stability- What Really Happened?

Preview

The entire crypto community woke up to a shock on May 11. A stablecoin going south. This article is an in-depth analysis of what played out.

Synopsis

Stablecoins, pegged to a dollar, are designed to maintain the dollar mark irrespective of prevailing market trends. Last Week proved otherwise as UST crumbled down to a fraction of a penny. Luna experienced a similar downward trend. This is no coincidence as they both exist in the Terra ecosystem. In this article, you will find out what happened.

Body

The shock of 11th May reverberated through the crypto community as UST, a stablecoin in the Terra ecosystem, lost its dollar peg, plunging all the way to a few cents.

This catastrophic incident raised fresh concerns about the fate of stablecoins. UST is not any coin. It sits on the list of top 10 most valued stablecoin by market cap, native to Terra, and used as the preferred asset in numerous defi protocols and dapps in this ecosystem.



https://coinmarketcap.com/currencies/terrausd/

Terra relies on arbitragers to stabilize the price of UST against market trends. When UST climbs above a dollar on off-chain exchanges, arbitragers burn their Luna on the Terra chain and sell it off-chain for another stablecoin at a profit.

On the other hand, when the price of UST drops below the 1\$ mark on outside exchanges, arbitragers repeat the process in the opposite direction.

In the event that sellers greatly outnumber the demand of such stablecoins, they lose balance and death spiral to zero. This is not common, but it is possible as seen with UST.

The Role of Anchor Protocol

Anchor Protocol is a lending and borrowing platform on the Terra ecosystem. This protocol is quite famous due to its 20% APY to lenders, the highest across the crypto community. A whopping 20% for depositing in Anchor Protocol placed a high demand on the stablecoin.

With Anchor Protocol possessing over 70% of the circulating UST, it is undeniably pivotal in the algorithmic balance of UST.

On the other hand, Anchor incentivizes borrowers with their native token that is worth more than the APR they pay. This is synonymous with getting paid for borrowing. Whatever, investors are interested in cash grabs and exit when the system is no longer profitable.

In both cases, Anchor raises concerns because its lending-borrowing structure is hardly sustainable. Prior to the event of 11th May, Anchor Protocol reduced its APY in a bid to sustain itself. This move created an exit from the ecosystem because Anchor's incentives is a major reason for the demand for UST.

The Terra exit started gradually, placing a sell pressure on UST, which later cascaded to a fatal failure.

Under normal circumstances, arbitragers step in to take a small profit when stablecoins dip a few cents, driving the price back to its peg. In the case of UST, the loss of interest for UST created a death spiral that eventually led to its depeg.

Conclusion

The fall of UST portrays a failure of the algorithmic mechanism designed to keep it afloat. It is a fundamental loophole in a system that is, more or less, bound to fail.

On a lighter note, stablecoins have different underlying mechanisms that pegged them to a dollar mark. Tether for example is collateralized by an equivalent reserve of US dollars while other stablecoins are backed by gold or other tangible assets. With a solid backup, they are well-positioned to buffer market fluctuations.

UST algorithm was built on the assumption that arbitragers will keep the coin pegged to a dollar in an attempt to make slight profits when it depegs a little. This assumption did not hold last week and UST lost its foothold.