21SHARES

LUNA FAQ

May 12, 2022

What is the relationship between UST, USD, and LUNA?

- TerraUSD (UST) is pegged to USD at a 1:1 rate, meaning the value of a unit of UST should generally be close to 1 USD.
- The mechanism for maintaining this peg relies on the ability of traders to exchange UST for Terra's native token, <u>LUNA</u> (or vice versa) at a price of \$1.00. If the price of UST falls below \$1.00 there is an arbitrage opportunity for traders to profit by exchanging UST for LUNA.
- New LUNA is created to satisfy these exchanges, which pushes down the price of LUNA.
- Read our statement on UST and Terra <u>here</u>.

What is happening with LUNA?

- On May 7th, 2022, UST began to lose its peg to the US Dollar. However, after substantial drawdowns to as low as \$0.85, the stablecoin started to climb back towards the target \$1 value after assurances by the Terra founder Do Kwon and backers such as Jump Capital and Alameda Research.
- On May 9th, a second depegging event stalled the recovery, and the token began a significant downward correction towards 20 cents on the dollar.
- The Luna Foundation Guard (LFG) announced multiple measures deploying a total of \$1.5B worth of Bitcoin out of the treasury reserve to be used by market makers as a loan to act directly in venues to restore the peg.
- The initial plan was to provide the bitcoin reserve on Astroport, a decentralised exchange (DEX) so that users could have an option to redeem bitcoin instead of LUNA. However, the development is still a few weeks away from a testnet launch.
- As at 12:00 CET on May 12, 2022, the stablecoin is trading at approximately \$0.50. Some of the largest market makers in the crypto industry are attempting to restore the peg of UST.
- Fully collateralized stablecoins have depegged and recovered in the past. Still, given that the Terra ecosystem has been growing at such a high rate reaching \$30B in TVL and \$40B in market value at its peak, this is the biggest event of its kind.
- Other stablecoins, mainly non-collateralised, which lost their peg, never recovered, including Empty Set Dollar, Dynamic Set Dollar, and Basis Cash. Some have become the market leaders, namely Circle's USDC, which is collateralized.

Why is this happening?

Broadly, there are two reasons for current events in UST and LUNA.

- 1. The general market backdrop has been volatile, with technology stocks and technology-related assets particularly impacted.
- 2. The mechanism that connects UST, USD, and LUNA (described above) has broken down, resulting in dynamics that tend to cause the price of LUNA to fall.

Looking at point 2 in more depth:

- UST is an algorithmic stablecoin pegged to USD, which means there should be a 1:1 exchange rate. Over the last week that peg has come undone with UST initially trading slightly below a 1:1 ratio. Over the last 48 hours, this divergence has accelerated, and UST is now trading at approximately 50 cents (as of 12:00 CET on May 12, 2022).
- UST is a non-collateralized and algorithmic stablecoin which means that its peg is not maintained by virtue of collateral, but by the market action of arbitrageurs using a mint and burn mechanism akin to the creation and redemption mechanism of ETFs share.
- Terra provides an interface via which UST can always be exchanged for LUNA as if it were worth \$1.00, whatever the traded value. If UST drops below \$1 in value to \$0.50, arbitrageurs can purchase UST at \$0.50 and use it to mint LUNA as if it were worth \$1.00.
- Arbitrageurs can then sell the LUNA to capture the \$0.50 profit per UST. This opportunity adds buy pressure to UST, bringing the price back up until the arbitrage opportunity disappears at peg. This is the mechanism Terra uses to peg UST to \$1.00.
- But this also adds selling pressure to LUNA, bringing down its value. Under normal market conditions, the sell pressure from these arbitrageurs is not enough to affect the market price significantly. Still, in the extended de-pegging scenario and bear market we are in now, the value of LUNA dropped catastrophically.

For more details, please read 21Shares' market update here.

What are the potential outcomes for LUNA?

- The founder of Terra, Do Kwon, has officially announced on <u>Twitter</u> that the team has decided to let the arbitrageurs continue to exit the system until they all exit.
- The project will increase the <u>minting capacity</u> of LUNA to absorb the exit liquidity.
- Once the collapse is complete, the repegging mechanism should reduce spreads over time and return UST to the \$1 peg.
- UST will also adjust from an uncollateralized mint-burn model to be a collateralised model.
- This, however, does not have clear implications for the value of LUNA. This will depend on the narrative that develops after a potential recovery.

Which 21Shares products hold LUNA?

Product	Ticker	AUM (\$M) ¹	Allocation to LUNA ¹
21 Shares Terra ETP	LUNA	\$5.1	100%
21Shares Crypto Mid-Cap Index ETP	ALTS	\$1.3	6.2%
21Shares Crypto Basket Index ETP	HODL	\$129.7	2.2%
Sygnum Platform Winners Index ETP	MOON	\$49.0	1.7%
21Shares Crypto Basket 10 ETP	HODLX	\$4.7	1.0%

¹As of market close May 10, 2022

How could 21Shares ETPs be impacted?

The above 21Shares ETPs are designed to provide one-to-one exposure to the performance of underlying assets. As such, when the performance of those underlying assets is volatile – as has been the case recently – that volatility will be passed through to the performance of the products.

If the price of LUNA drops to zero, that will be reflected in the indexed products and the value of the tracker fund will also fall to zero. As LUNA experiences low prices and high volatility, it is likely that exchange spreads will continue to widen, which may ultimately lead to delisting on the part of the exchanges.

Our indexed products are specifically intended to provide diversified exposure to a broad range of cryptos recognizing that digital assets, like traditional assets, can experience substantial volatility at times and that uncertainty is inherent in any investment.

We will continue to closely monitor our products to ensure that they deliver the intended allocations and allow investors well-diversified exposure to this emerging (and sometimes volatile) asset class.

For our latest thoughts on the markets, please visit https://21shares.com/research.

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