Truist Advisory Services, Inc.

Portfolio Perspective from the Investment Advisory Group

Stablecoin disruption fueling broader cryptocurrency volatility

May 17, 2022

Jeff Terrell, CFA
Senior Analyst – Investment Strategy

Evan Daugherty, CFA, CAIA
Analyst – Investment Strategy

Key highlights

- The cryptocurrency selloff has been synchronized with other risk assets and amplified by the Terra blockchain protocol collapse.
- The TerraUSD (UST) stablecoin lost its $1 intended peg due to the flawed mechanics behind its non-collaterlized design and the collapse of its Terra Luna cryptocurrency.
- The failure of UST to maintain its $1 peg has been disruptive in the short-run but is not a likely indictment of the stablecoin sector in the long-run.
- The fallout from Terra's collapse continues to be felt and any regulatory framework for stablecoins has likely been accelerated.

What happened

In recent weeks, cryptocurrencies have traded lower in synchrony with equities. However, in recent days, the steep cryptocurrency drawdown was further fueled by the failure of the Terra blockchain protocol and its UST stablecoin due to a flawed "pegging" mechanism which caused UST to lose its intended $1 peg.

- Rolling 30-day correlations between cryptocurrencies and stocks have recently spiked to new heights with stubbornly high levels of equity market volatility as measured by the VIX index. This is especially true in the relationship between cryptos and more technology heavy indices.
- The collapse of the Terra blockchain and its two native tokens, LUNA and UST, fueled last week's broader crypto selloff. UST initially lost its $1 peg on May 6. Once its flawed mechanics became apparent to market participants, UST and LUNA each suffered a cascading valuation spiral seeing their combined market value drop from the April 5 all-time high of $58 billion to Monday's value of just $2.6 billion.

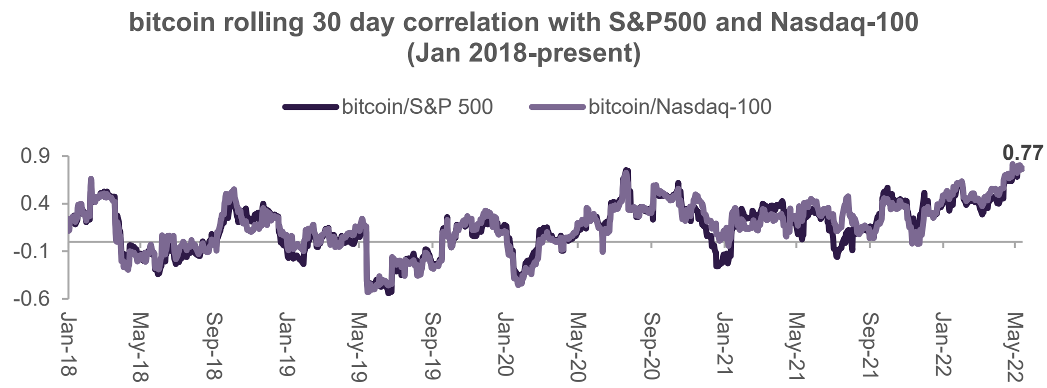
Cryptocurrency markets will now decipher whether Terra's failure is isolated or systemic in nature. While shockwaves from Terra could be felt in the days ahead, we do not think it is an indictment on the broader digital asset ecosystem. We believe this will accelerate Washington's regulatory agenda which would be a net positive for investors.

Cryptos follow the equity drawdown

Cryptocurrencies have been caught in the broad downdraft of equities in 2022. More specifically, cryptos have traded in alignment with growth equities which have been particularly challenged as the Federal Reserve (Fed) embarks on tighter monetary policy to combat elevated inflation. This also highlights the sensitivity of cryptos to a macro environment with diminishing liquidity both through Fed policy and the expiration of emergency fiscal stimulus measures we saw during the heights of COVID-19.

The chart below illustrates that cryptocurrencies now have the highest correlation to equities in the last several years.

Highly correlated asset pairs have limited diversification properties during turbulent markets, just when investors want it most.



Data sources: Truist IAG, FactSet. Indices are represented by ETFs.

We expanded our work on correlations between crypto assets and the S&P 500 under different market regimes by evaluating their relationship across daily returns during a five year time frame in both up and down markets. We observed:

- Correlations remain low when considering all days.
- Correlations decline on days with positive S&P 500 returns.
- Correlations are lowest on days with large positive S&P 500 returns.
- Correlations rise on days with negative S&P 500 returns.
- Correlations are highest on days with large negative S&P 500 returns.

This reinforces our position that cryptocurrencies have not proven to reduce overall portfolio risk during times of market turbulence.

Stablecoins and the breakdown of TerraUSD (UST)

What is a stablecoin?

Stablecoins have risen in popularity as a cash equivalent and liquidity provider in the digital asset markets. Many believe their prospects of disrupting the global payments system will be the catalyst for continued growth.

Stablecoins were conceived as the crypto equivalent to a money market fund. They are intended to have a fixed $1 value and have become a staple of the crypto community with the majority of all cryptocurrency transaction volume now being done in stablecoins. They have grown to prominence with three key use cases:

- If collateralized by non-volatile stable assets like short-term U.S. Treasury securities, stablecoins have become a reliable way for firms to transact business across smart-contract platforms with great speed and efficiency.
- Cross border financial transactions can be executed with greater speed and at a lower cost with a stable digital token that can be trusted to maintain its value throughout the lifecycle of a transaction.
- Digital asset investors utilize stablecoins as a place to park excess liquidity while not actively engaged in buying and selling other cryptocurrencies on exchanges.

Broadly speaking, there are two primary stability mechanisms utilized by stablecoins to maintain their $1 peg.

- **Collateralization:** These stablecoins invest in cash and cash equivalent securities such as treasuries to maintain a $1 to $1 ratio between the value of the token and its underlying collateral. Collateralized stablecoins do not, however, provide the same level of transparency regarding the underlying collateral holdings that investors get with regulated money market funds.

- **Algorithmic:** These stablecoins aim to maintain their $1 peg via a mathematical algorithm largely based on supply/demand metrics and trading mechanisms. These are not fully backed by collateral but supported by the algorithm and perhaps aided by other non-stable cryptocurrencies. Terra (UST) is an example of this.

Investors need to know that despite the perceived advantages of collateralized stablecoins versus algorithmic stablecoins, neither is backed by a bank, central authority or sovereign entity. In this way, decentralization without regulation in the area of non-bank issued stablecoins is a key concern of the Presidents Working Group Report on Stablecoins issued in late 2021.

"Seigniorage style" can be better understood as an industry term for algorithmic.

Since its peak on May 7 ($18.7B), TerraUSD has fallen to $1.2 billion as of May 16.

Top 5 Stablecoins

Token	Ticker	Stablecoin strategy	Market cap on 5/7/22	Stablecoin market share on 5/7/22	Market cap on 5/16/22	Change in market cap (billions)
Tether	USDT	Fiat-backed	$83.2B	45%	$76.6B	-6.6
USD Coin	USDC	Fiat-backed	$48.8B	26%	$51.1B	2.3
TerraUSD	**UST**	**Seigniorage style, crypto-collateralized**	**$18.7B**	**10%**	**$1.2B**	**-17.5**
Binance USD	BUSD	Fiat-backed	$17.5B	9%	$17.7B	0.2
Dai	DAI	crypto-collateralized	$8.5B	5%	$6.4B	-2.1
			$177B	96%	$153B	-23.7

Data source: Messari
Total stablecoin market = 28 coins @ $185 billion market cap

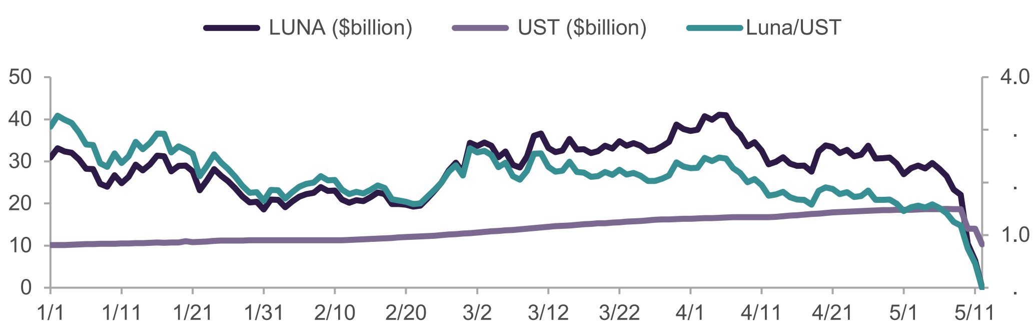
What happened to Terra Luna and Terra USD

The Terra blockchain has two cryptocurrencies. The Terra Luna (LUNA) cryptocurrency was intended as a backstop for the TerraUSD (UST) stablecoin which had briefly, but quickly, become the third largest stablecoin prior to its collapse. UST depended on a complex mathematical algorithm that would "mint" or create UST by "burning" or destroying LUNA in exchange for UST. Additionally, Terra recently accumulated bitcoin as a means to further secure the collateral pool in the event of a run on the bank of its UST stablecoin.

In short, UST was not backed by sufficient collateral and driven by a flawed mathematical algorithm. Once UST began to collapse Luna prices plummeted causing UST to lose its $1 peg. In an attempt to shore up the value of LUNA and support the UST $1 peg, Terra began selling its insufficient bitcoin reserves which caused other panic bitcoin selling.

The comfortable Luna-to-Terra overcollateralization has been range-bound between 3.5x and 1.5x. As a result of recent events this ratio has converged to zero.

LUNA and Terra Market Caps (lhs) & LUNA/Terra multiple (rhs)



Data source: Messari
All dates are calendar year 2022.

Bottom line

While there could be continued fallout from the failure of the Terra blockchain protocol in the days ahead we think this represents a hard lesson learned for investors and a red flag waving at regulators. Last week, several regulators including Treasury Secretary Yellen, SEC Chairman Gensler, and SEC Commissioner Hester Peirce renewed their calls for stablecoin regulation.

This event furthers the idea that the digital asset space is still very much in its infancy and risks should be paid close attention to. While the breakdown of the Terra stablecoin peg and collateral pool will have systemic impacts across the digital asset ecosystem in the short-term, we view this as a long-term opportunity for the space.

Sometimes exploited vulnerabilities of the system can serve as painful lessons to learn from. Yes, public perception will need to recover and regulators will likely use this as a catalyst to get involved in an effort to protect the public. But perhaps regulation and a tighter eye on security is not such a bad thing as the digital asset ecosystem continues to navigate its way towards mainstream adoption.

It is in this vein that we believe last fall's Presidents Working Group report on stablecoins will serve as the starting point for an accelerated legislative effort.

Disclosures