Cutting-Edge Crypto Coins Tout Stability. Critics Call Them Dangerous.

Algorithmic stablecoins that use financial engineering to link their value to the dollar have surged in popularity

By Alexander Osipovich Follow

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A new breed of cryptocurrencies is seeking to replicate the stability of the dollar. But critics say they are a disaster waiting to happen.

So-called "algorithmic stablecoins" have surged in popularity in recent months, spurring debate over whether they are good for the crypto industry. They are the edgy upstart sibling of conventional stablecoins—digital currencies that seek to maintain a one-to-one relationship with a traditional currency, usually the dollar.

Issuers of conventional stablecoins say they hold cash or bonds so each of their digital coins is backed by a dollar's worth of real assets. But algorithmic stablecoins aren't necessarily backed by any assets at all. Instead they rely on financial engineering to maintain their link to the dollar. Some have failed, saddling investors with losses.

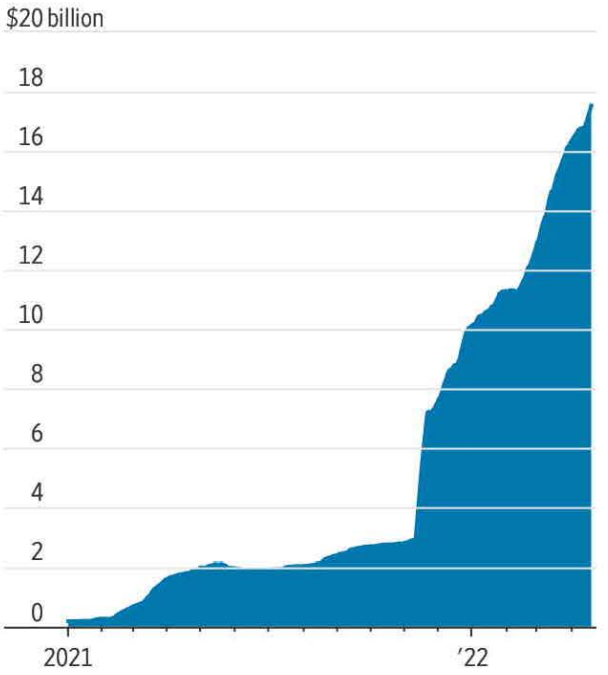
"It's a lot more dangerous than taking a T-bill and tokenizing it," said Charles Cascarilla, chief executive of Paxos, the issuer of Binance USD, a popular stablecoin that uses the asset-backed approach. "It's a recipe for something really bad to happen."

Proponents say algorithmic stablecoins are better than the conventional kind because they aren't run by a single centralized entity. Instead they run autonomously on blockchain-based networks, relying on traders who could be anywhere in the world to keep them tied to the dollar. Such a design makes it more difficult for regulators to control algorithmic stablecoins, often seen as an

advantage in crypto circles. U.S. regulators have stepped up their scrutiny of stablecoins in recent months but have largely focused on asset-backed coins.

Algorithmic stablecoins are getting better at keeping their link to the dollar and could eventually overtake their conventional peers, said Sam Kazemian, creator of Frax, an algorithmic stablecoin partly backed by crypto assets.

Total outstanding supply of TerraUSD



Source: The Block

"As algorithmic stablecoins become more and more widespread, people will become more comfortable with them and realize that the best ones are just as reliable as fiat-backed stablecoins," Mr. Kazemian said.

The esoteric topic of algorithmic stablecoins has become more mainstream with the startling rise of TerraUSD, the most popular such coin.

The outstanding supply of TerraUSD has grown more than 500% during the past six months to about $17.5 billion, according to crypto news and research service the Block. As of Monday, TerraUSD surpassed Binance USD to become the third-largest stablecoin overall, accounting for 9.7% of total stablecoin supply, the Block's data show. The two largest stablecoins are tether and USD Coin.

Here's how TerraUSD works. If its price dips below $1, traders can "burn" the coin—or permanently remove it from circulation—in exchange for $1 worth of new units of another cryptocurrency called Luna. That reduces the supply of TerraUSD and raises its price. Conversely, if TerraUSD climbs above $1, traders can burn Luna and create new TerraUSD. That increases supply of the stablecoin and lowers its price back toward $1.

In other words, the collective efforts of traders seeking to make quick arbitrage profits should keep TerraUSD within a relatively tight band around $1. Luna

effectively acts as a shock absorber for TerraUSD, buffering volatility in TerraUSD.

Launched in 2020, TerraUSD has mostly maintained its dollar peg—except during bouts of heavy volatility such as last spring's big crypto selloff. TerraUSD dropped below 92 cents on May 23, 2021, according to data provider CoinMarketCap.

Ryan Clements, a law professor at the University of Calgary who has studied algorithmic stablecoins, says TerraUSD is susceptible to what crypto traders call a "death spiral."

In such a scenario, an algorithmic stablecoin drops below $1 and nervous traders step back from the arbitrage mechanism that keeps it pegged to the dollar. If there aren't enough traders willing to buy the coin and push it back to $1, the market's faith in the peg could erode. That could prompt even more traders to flee, accelerating the coin's decline.

An algorithmic stablecoin called Iron collapsed in a death spiral in June, costing investors about $2 billion. It was partially collateralized. Iron fell from $1 to about 75 cents, the level of collateral behind the coin. A related cryptocurrency called Titan—which had played a shock-absorber role similar to Luna—plunged from $64.04 to roughly zero within hours. The anonymous team behind Iron said in a blog post that it had suffered a "large-scale crypto bank run."

Mr. Clements says no algorithmic stablecoin is safe from a death spiral. "They are inherently fragile," he said.

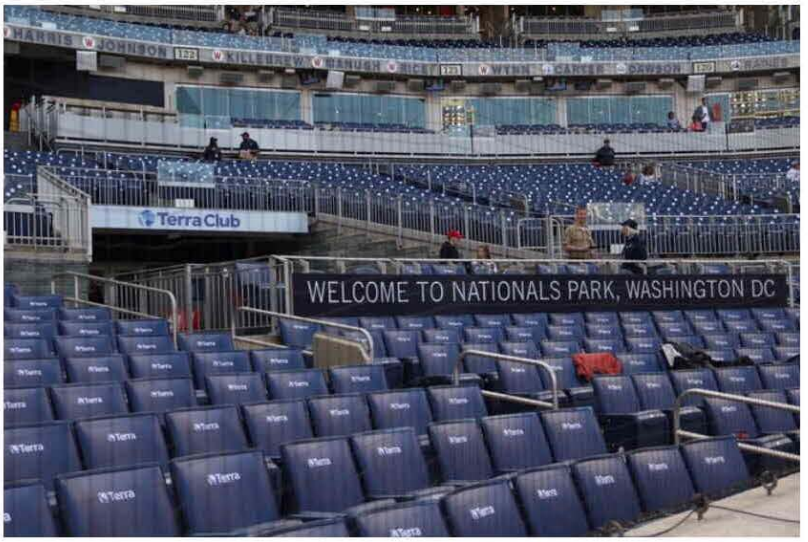
TerraUSD is the brainchild of Do Kwon, a South Korean crypto developer. A spokesman for Mr. Kwon's company, Terraform Labs, said he was unavailable for an interview.

During the past three months, Mr. Kwon has sought to allay concerns about TerraUSD losing its peg by funding a multibillion-dollar reserve of bitcoin and several other cryptocurrencies. The reserve is intended to act as an additional backstop against a severe drop in TerraUSD.

Mr. Kwon has also argued that it is unlikely TerraUSD's liquidity will vanish because of all the activity on the coin from numerous trading and lending

projects.

Mr. Kwon profits from the expansion of TerraUSD because of his substantial holdings of Luna, which has climbed in value as more people have bought TerraUSD. He drew attention last year when he sued the Securities and Exchange Commission in a long-shot bid to thwart the agency from enforcing a subpoena against him. A New York federal court ruled against him in February. He is appealing the decision.



The Washington Nationals baseball team struck a sponsorship deal with the Terra blockchain network. PHOTO: WASHINGTON NATIONALS

Also in February, the Washington Nationals baseball team announced a $38 million sponsorship deal to promote Terra, the blockchain network that TerraUSD is built on. The team struck the deal with a "decentralized autonomous community" of Terra users, but Mr. Kwon appears to have played a significant role in pushing it through. The Nationals have said they could start accepting TerraUSD as a form of payment.

One of the main factors behind the rapid growth of TerraUSD is an incentive scheme offered by Anchor Protocol, a sort of decentralized bank for crypto investors built on the technology of Mr. Kwon's Terra network. Last year Anchor began offering annual interest rates of around 20% for TerraUSD deposits. Those lofty yields helped drive demand for the stablecoin, even as some observers have questioned whether they are unsustainably high.

"I know a lot of people who, rather than keeping cash at Chase, they basically put all their money in UST," said Brian Rudick, senior strategist at GSR, a crypto trading firm, referring to TerraUSD by its ticker symbol. "And they're basically living rent-free because they're getting paid on that yield."

Mr. Cascarilla, of rival stablecoin issuer Paxos, worries that investors drawn into TerraUSD by high yields will ultimately be hurt if it collapses.

"It's definitely not a stablecoin," Mr. Cascarilla said. "It's an unstable coin."

Write to Alexander Osipovich at alexander.osipovich@wsj.com

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