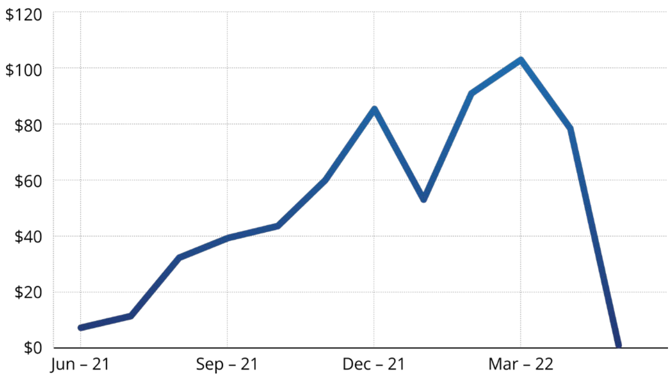
A quant's eye view

Teza Capital Management is a global quantitative asset management firm. We pride ourselves on attracting and retaining top talent, developing strategies with a data-driven and science-backed methodology, and continuously innovating in pursuit of alpha for our clients. Our Manager Insights pieces delve into our "quant's eye view" on markets, investment strategies, and industry developments.

The digital assets space just underwent arguably the most significant blow to its credibility to date – and some people believe Wall Street is to blame. Whether or not these speculations are correct, one thing seems certain: it was a clear case of market manipulation.

One of the top digital assets projects - TerraLabs with its token Luna and "stablecoin" UST - has been, for all practical reasons, forcefully bankrupted. Folks in the crypto space have taken to Reddit and Twitter, where they've expounded a variety of theories on the swift takedown of Terra. A Twitter thread with thousands of likes, retweets, and comments makes the case that the attack was a coordinated attempt by Bitcoin shortsellers on Wall Street. They believe that a large player recognized that unstaking millions in UST at once would cause the stablecoin to depeg from the dollar, forcing the Terra team to sell significant Bitcoin reserves to repeg the stablecoin. Once investors became aware of the situation, they would also unstake and sell UST, requiring even more Bitcoin reserves to be sold and creating a huge opportunity for Bitcoin shortsellers.

Figure 1. Terra to USD Price Chart



Source: Yahoo! Finance data

More likely, though, the attack had nothing to do with Bitcoin, as it is hard to create a certain movement in a more liquid product by manipulating a less liquid one, particularly when there is no direct link between the two. However, pushing UST to the point of clear depegging and forcing a wipe out of the multi-billion dollar market cap of Luna in the process is much more doable. The attackers likely held a short position in Luna and started to sell large amounts of UST, which by itself should be a "market neutral" activity (as UST is a "stable" coin). When both coins started to give in, reinforcing each other's drop, the avalanche happened.

In either case, a well targeted run-on-the-bank reinforced by a positive feedback loop from Luna's own algorithmic setup resulted in a swift devaluation of assets and transfer of money from Luna and UST holders to attackers' pockets.

On May 12, Caetano Manfrini, the legal officer at GEMMA, a crypto firm based in Brazil tweeted that the crash was "deliberate and coordinated" citing a "massive 285m dump on Curve and Binance by a single player." He dubbed the situation "pure staging," and speculated that "the project is bothering someone."

Clearly capital was deployed strategically and at scale to depeg Terra. Whether or not big banks were behind the attack remains to be seen. However, Wall Street is ripe with historical examples of such "inventful" trades. From currencies manipulations to the "Dr. Evil" trade, for decades traders have (legally or illegally) looked to profit from market manipulations.

While certain assets (typically those that are deemed "securities") are "protected," others (such as currencies) are not. When we say "protected," it does not mean that the losses in these schemes are always recovered. Rather, violators are more likely to be prosecuted, deterring them from manipulation of these assets in the first place.

At this time, the cryptocurrency space is akin to fiat currency trading in that no individual, entity, or regulatory body has the authority to control them. They are *decentralized.*

Thus, "manipulation" in the digital assets space is just "trading." And this is what happened to Luna. TerraLabs has (had?) a slogan – "Terra - powering the innovation of money," but classic market manipulation powered it into the ground. While digital assets still promise to revolutionize finance, the space is only beginning to experience many of the sharp teeth and claws of traditional finance.

The most important lesson here is that the idiosyncratic risk of each individual project in the digital space at this early age of its existence is way too high. Until the space matures, the savvy investor should look for exposure to growth in web3 through a well-diversified basket or an index.

DISCLOSURES

Teza's Edge

Teza has built an institutional-strength organization consisting of a highly talented group of world-class researchers and investment professionals driven by success.

- **HERITAGE:** Our endeavors in institutional asset management are based on our 10+ year tenure as a proprietary, algorithmic low-latency trading firm, as we strive to leverage the extensive synergies we've identified between the two models.
- **TEAM:** We have world-class talent with over 60 employees in 4 locations. Our 30+ accomplished researchers and investment professionals hold advanced degrees from renowned universities in science, technology, engineering, and mathematics.
- **APPROACH:** We follow a rigorous, scientific process and have deployed state-of-the-art portfolio construction and optimization.
- **EXECUTION:** We have highly developed futures execution capabilities given our quantitative trading roots.
- **RISK PHILOSOPHY:** We ensure controls and checks and every key step of research and operations.
- **INFRASTRUCTURE:** As a result of significant investments into our operational infrastructure, we have created a scalable, robust platform.

Founder Biography

Misha Malyshev has led Teza Group as the CEO since the company's founding in 2009. He earned his Ph.D. in Astrophysics from Princeton University in 1998. He also holds an M.S. in Theoretical Physics and a B.S. degree summa cum laude in Physics and Mathematics from Moscow Institute of Physics and Technology. Dr. Malyshev worked for Bell Labs conducting scientific research until 2000. From 2000 through early 2003, he worked as a consultant with McKinsey & Company, where he developed substantial experience working for asset management and investment banking clients. Dr. Malyshev joined Citadel Investment Group, L.L.C. in April 2003 as a member of its strategy group. In 2004, he moved to Citadel's Quantitative Analytics group, where he developed a quantitative trading business. Dr. Malyshev was rapidly promoted to the position of Managing Director and Global Head of High Frequency Trading at Citadel, which he held until he resigned in the winter of 2009. Dr. Malyshev is an avid supporter of education initiatives, and has partnered with organizations that inspire young people, particularly women and minorities, to pursue careers in science, technology, engineering and math. He is currently on the global leadership council of buildOn, an international nonprofit organization that runs youth service after-school programs in United States high schools and builds schools in developing countries.

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