

What could go wrong? Crypto catastrophes in 2022



Terra UST & LUNA

May 2022



The Terra blockchain included a decentralized lending platform, Anchor.

Anchor lent out UST stablecoins against collateral, which was often denominated in LUNA.

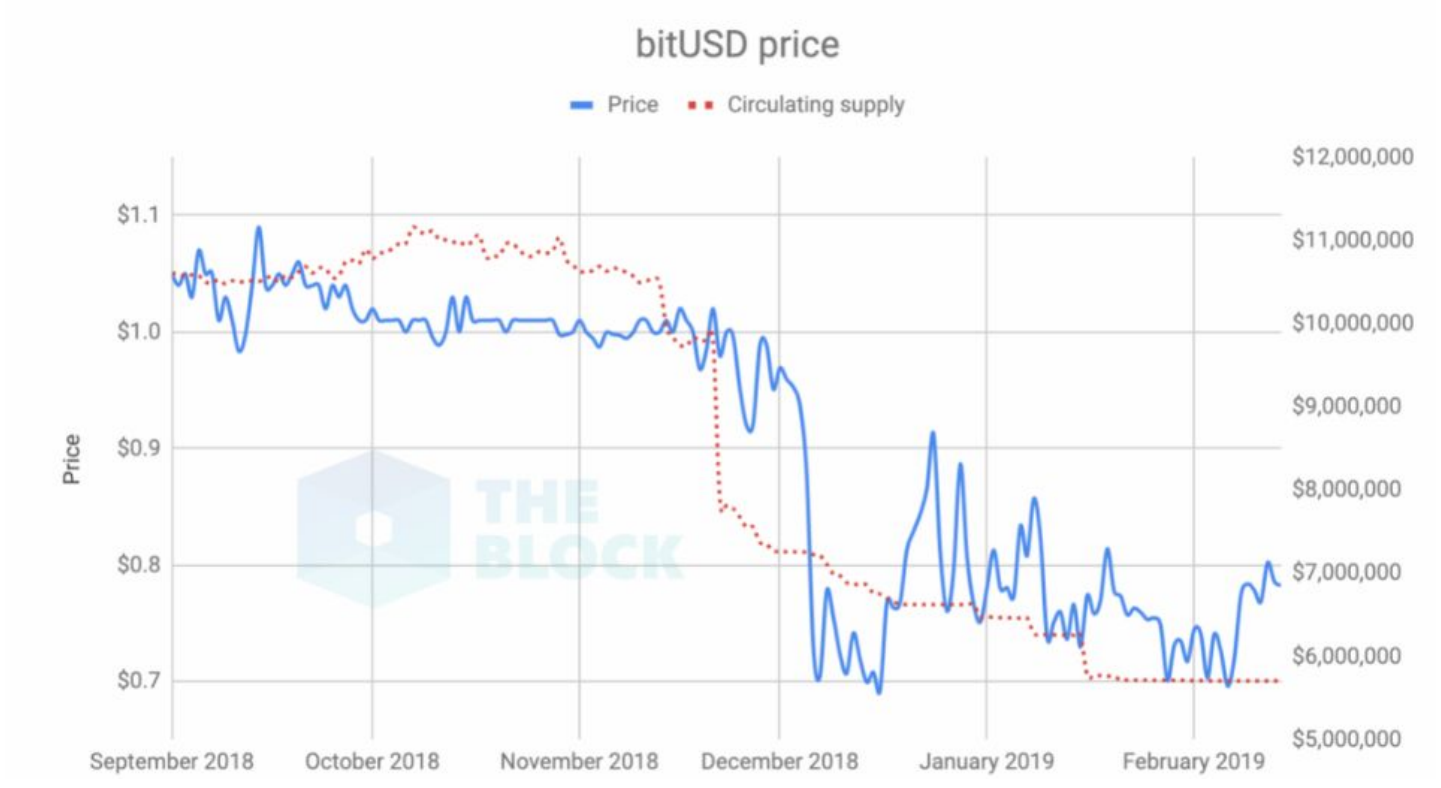
LUNA benefited from transaction fees paid to miners on Terra. Its supply was adjusted to stabilize Terra's price

A "death spiral" began when drops in LUNA triggered foreclosures on UST loans on Anchor.

This has happened before

BitUSD - 2018

On Nov. 25 2018, BitUSD triggered an emergency procedure called 'global settlement' because bitUSD was too under-collateralized by BitShares. The event caused a disablement of BitUSD borrowing and the price of BitUSD subsequently collapsed. The circulating supply has also been nearly cut in half in the last four months.



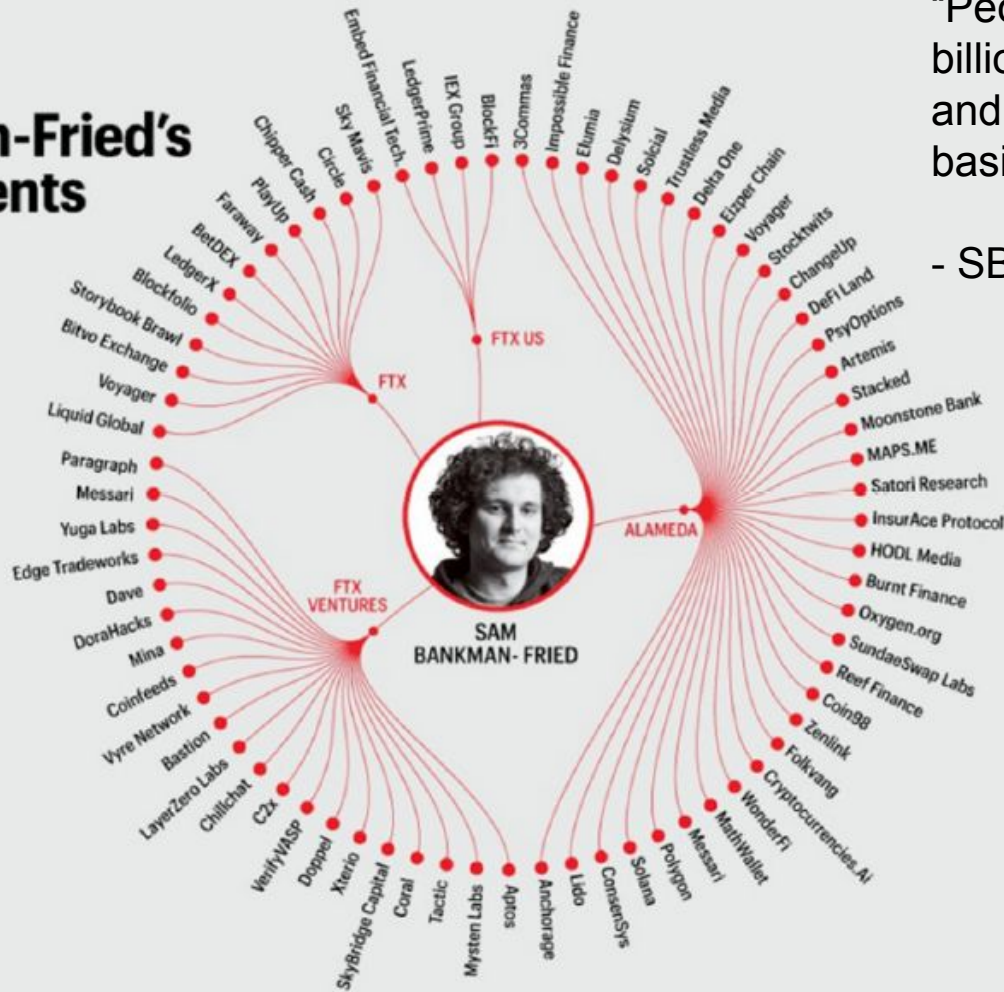
Collateral damage from UST

- Celsius Network bankruptcy, July 2022
 - Three Arrows Capital bankruptcy, July 2022
 - Voyager Digital bankruptcy, July 2022
 - Compute North bankruptcy, September 2022
 - Etc...
-
- *Many of these entities were interconnected*
 - *Crypto assets often pledged as collateral, and when they lost value, foreclosure and defaults occurred*

FTX

November 2022

Sam Bankman-Fried's Investments



“People wired \$8 billion to Alameda, and Oh God, we basically forgot”

- SBF to Vox

PHOTO: ANTHONY KWAN
SOURCE: CRUNCHBASE

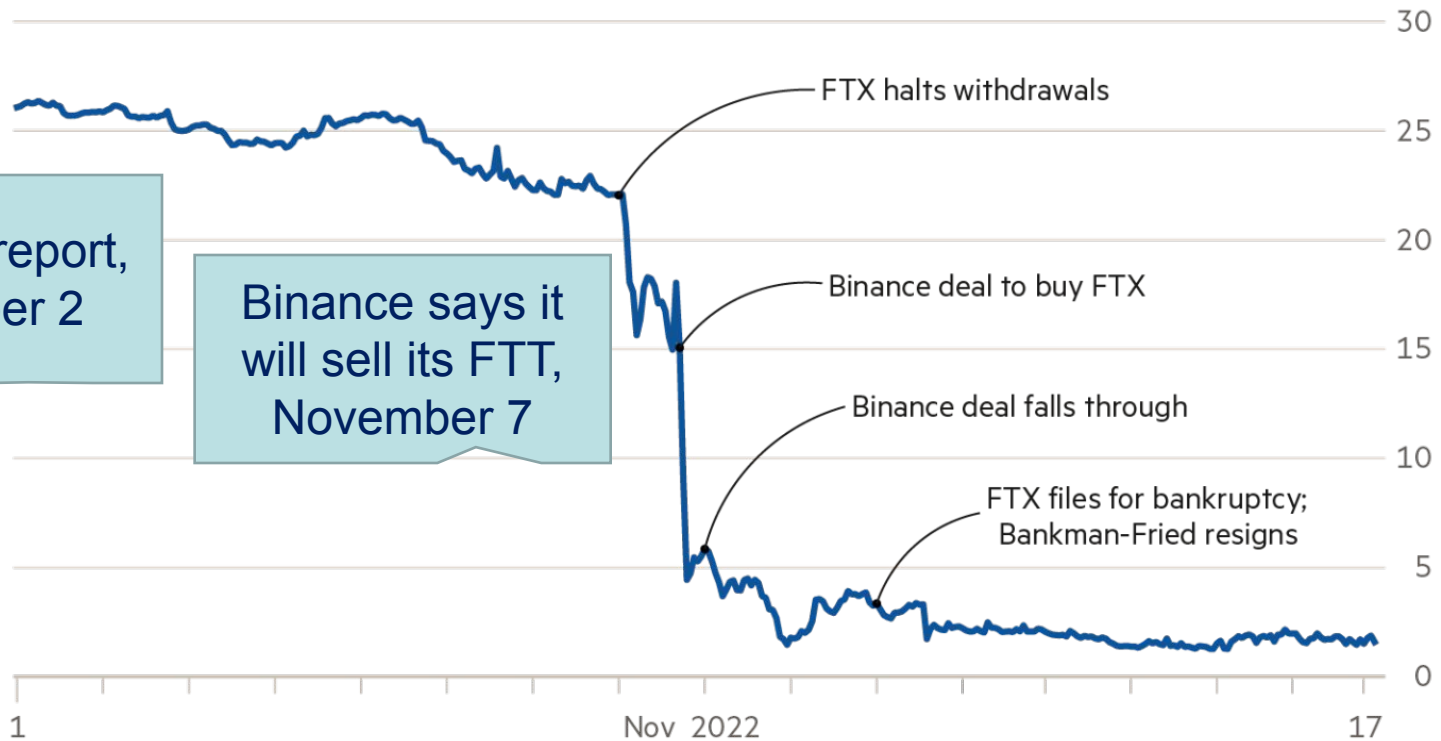
FORTUNE

FTT token collapses in a “run on the bank”

Why were
these ever
worth \$25?

FTX token price tracks the exchange's demise

\$ per token



Who drained \$600 million from FTX?

November 20 & 21, 2022

FTX Exploiter Converts Millions in Ether to Alameda-Linked Ren Bitcoin Tokens

In addition, the exploiter transferred thousands of ether to a brand-new wallet.

By Shaurya Malwa Nov 20, 2022 at 8:22 a.m. EST

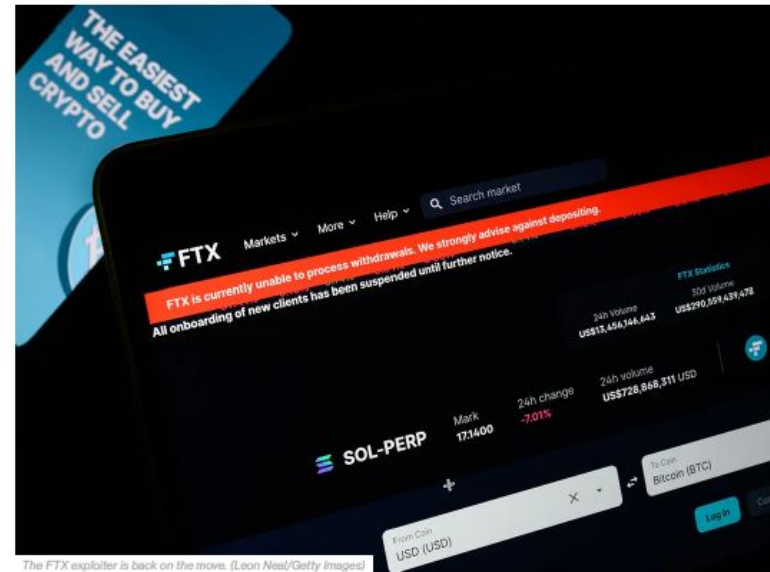


Thousands of ether were bridged using the Ren Protocol, which is closely linked to embattled trading firm Alameda Research. (Adam Levine/CoinDesk)

FTX Exploiter Transfers \$200M in Ether to 12 Crypto Wallets

The exploiter had previously drained hundreds of millions of digital assets from FTX on the same day as the embattled crypto exchange filed for bankruptcy protection.

By Kristian Sandor Nov 21, 2022 at 12:36 p.m. EST



The FTX exploiter is back on the move. (Leon Neal/Getty Images)

Blockchain data from Etherscan shows that a crypto account associated with the FTX exploiter moved a 180,000 ether (ETH) – worth roughly \$200 million at current prices – to 12 crypto wallets Monday, with es receiving 15,000 ETH over a period of minutes.

Some fundamental problems

- Hidden assets and liabilities
- Conflicts of interest
- Extreme leverage, often secured by risky assets
- Interconnectedness
- Naivety and inexperience of both exchange operators and investors

Regulatory challenges

- Assets are held on decentralized networks
 - Financial system is typically centralized, with regulations enforced by banks, brokers, etc.
- Governance by code, not by people
 - Nobody to hold accountable
 - Code is not always well-written
 - Velocity of transactions is very high, e.g., “flash loans”
- Reliance on third-party “oracles” to supply data
 - Manipulating prices on outside sites allows attackers to compromise DeFi platforms

Regulatory challenges

continued

- Ignorance and overconfidence of regulators
 - “We have laws about this already”
 - Agencies are staffed by lawyers, not software engineers
 - Enforcement is very, very difficult
- *When regulation comes to crypto, it will likely be voluntary, driven by consumer demand*

Hack of The Beanstalk

April 18, 2022

THE VERGE

POLICY \ TECH \ CYBERSECURITY \

Beanstalk cryptocurrency project robbed after hacker votes to send themself \$182 million

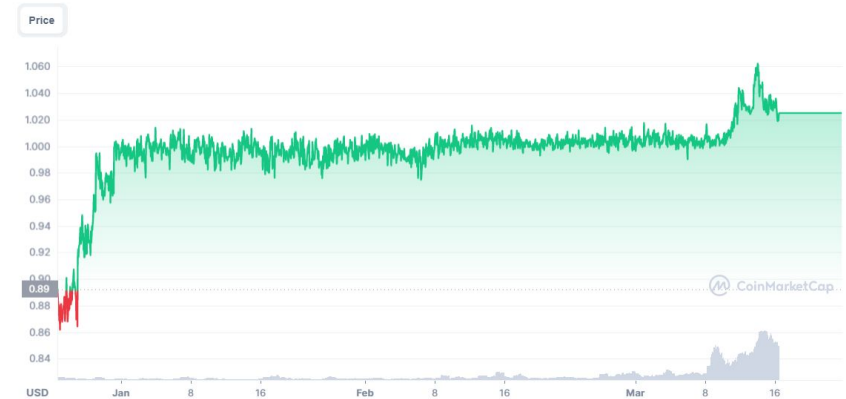
The attacker used a flash loan to obtain a controlling stake in the project

By [Corin Faife](#) | [@corintxt](#) | Apr 18, 2022, 4:26pm EDT

- Borrow \$1 billion of stablecoins in a *flash loan* from Aave
- Deposit the coins in Beanstalk
- Get governance tokens representing 67% of voting power
- Propose “donating money to Ukraine”
- Vote to pass the proposal
- Take the “donation” of \$182 mm of ETH and BEAN and disappear
- Withdraw the stablecoins and repay the flash loan with interest.

Elapsed time: 13 seconds

Bean to USD Chart



PeckShield Inc.
@peckshield

The @BeanstalkFarms protocol loss is ~\$182m and the hacker nets \$80m. The rest \$100m goes to various protocols as fees to pay flashloan and swap. Should these protocols (incl. @AaveAave @SushiSwap @CurveFinance @Uniswap @BeanstalkFarms) return these fees back to @BeanstalkFarms?

Yes	35.8%
No	46.4%
I don't know	17.8%

2,064 votes · Final results
11:34 PM · Apr 17, 2022

68 ❤️ Reply Share

[Read 34 replies](#)

“Red flags” – how useful?

- Very rapid growth
- Charismatic founder with carefully managed image
- Cultivation of politicians
- Promises of philanthropy
- Complexity
- Friends and family in corporate governance
- Very little audit infrastructure
- Easy access to capital

