# Jack M. Wilson: Crypto Currency References

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# **Table of Contents**

# Contents

Ta	ble of Contentsble of Contents	1
Cr	ypto Currencies	15
	Satoshi Nakamoto White Paper (October 31, 2008)	15
	https://bitcoin.org/bitcoin.pdf	15
	CATO Institute 2013 Analysis of Bitcoin. "Who Is Satoshi Nakamoto?"	16
	https://www.cato.org/regulation/fall-2013/who-satoshi-nakamoto	16
	Unbacked Crypto Currencies	17
	Stable Coins	17
	https://www.investopedia.com/terms/s/stablecoin.asp or https://en.wikipedia.org/wiki/Stablecoin	17
	9/11/22 PBS Video: Crypto Decoded   Full Documentary   NOVA   PBS	17
	https://www.youtube.com/watch?v=dnavKPl5f9I	17
	8/18/21 BusinessWeek: From Doge Soldiers to Bitcoinists: A Field Guide to the Crypto Faithful:	18
	https://www.bloomberg.com/news/features/2021-08-18/from-doge-soldiers-to-bitcoinists-a-field-guide-to-the-crypto-faithful	
	Molly White website: https://web3isgoinggreat.com/	29
Cr	ypto Debate	29
	10-20-22: Time: Bitcoin Holds Steady but Remains Low at \$19,000. How Investors Should React	29
	https://time.com/nextadvisor/investing/cryptocurrency/bitcoin-crash-continues/	29
	7-28-22 Email Crypto Debate -Wilson to Johnson	29
Sc	am List	34
Cr	ypto-Tech Descriptions	34
	11-15-22 WSJ: FTX Debacle Could Drag Down Decentralized Crypto Too	34
	https://www.wsj.com/articles/ftx-debacle-could-drag-down-decentralized-crypto-too- 11668511696	34

	11-4-22: CNBC: Web inventor Tim Berners-Lee wants us to 'ignore' Web3: 'Web3 is not the web a all'	
	https://www.cnbc.com/2022/11/04/web-inventor-tim-berners-lee-wants-us-to-ignore-web3.h	ntml
	10-15-21 NYT: A Crypto Optimist Meets a Crypto Skeptic	
	https://www.nytimes.com/2021/10/15/opinion/ezra-klein-podcast-katie-haun.html	36
Γh	ne Decline and Fall of the Crypto Empire	36
	1-16-2023 NYT: The Crypto Collapse and the End of the Magical Thinking That Infected Capitalism	36
	https://www.nytimes.com/2023/01/16/opinion/the-crypto-collapse-magical-thinking-capitalism.html	36
	1-13-23 NYT Dealbook: Andrew Ross Sorkin -S.E.C. goes after "ill-gotten" crypto gains	37
	12-27-22 Benzinga: Crypto Mass Extinction: Kevin O'Leary's Prediction Vs AlphapleaseHQ Founde List Of 10 Survivors	
	https://www.msn.com/en-us/money/news/crypto-mass-extinction-kevin-o-leary-s-prediction-alphapleasehq-founder-s-list-of-10-survivors/ar-	
	AA15K4Ft?ocid=msedgntp&cvid=f3035b8e170049008c24d4928c74573a	
	https://www.wsj.com/articles/cryptos-final-price-could-be-zero-technology-debt-lbo-twitter-	. 40
	musk-bankman-fried-ftx-market-cap-coin-11669567022?mod=hp_trending_now_opn_pos2	40
	11/26/22 WSJ: Wall Street's 'Dr. Doom' calls crypto 'corrupt gambling' and rips 'proof of reserves trumpeted after FTX collapse	s'
	https://www.msn.com/en-us/money/markets/wall-street-s-dr-doom-calls-crypto-corrupt-gambling-and-rips-proof-of-reserves-trumpeted-after-ftx-collapse/ar-AA14AAs4?ocid=msedgntp&cvid=976397ca24e24ddabd72416b82e15128	41
	11/23/22 WSJ How Crypto's Collapse May Have Done the Economy a Favor	
	https://www.wsj.com/articles/how-cryptos-collapse-may-have-done-the-economy-a-favor-11669215926?mod=hp_lead_pos7	
	11-17-22 WSJ: Is This the End Game for Crypto?	43
	https://www.nytimes.com/2022/11/17/opinion/crypto-banks-regulation-ftx.html	43
	11-13-22 TheStreet: Crypto Crisis: Billionaire Mark Cuban Attacks the System	. 44
	https://www.thestreet.com/technology/crypto-crisis-billionaire-mark-cuban-attacks-the-stock-market	
	11-11-22 NYTimes: The Crypto Ponzi Scheme Avenger	45
	https://www.nytimes.com/2022/11/11/business/crypto-ponzi-scheme-hyperfund.html	45
Ŧ	X: The Collapse of FTX and Samuel Bankman-Fried	46
	12-31-22 NY Post: How Sam Bankman-Fried 'Madoff' with regulators	46

https://www.msn.com/en-us/money/markets/how-sam-bankman-fried-madoff-with-regulators/ar-AA15R2pZ?ocid=msedgntp&cvid=f02e9c7d4565482584498df0d52efc60	46
12-26-22 WSJ: From Sam Bankman-Fried's arrest to bitcoin plunging below \$20,000, here are t craziest crypto stories of 2022	
https://markets.businessinsider.com/news/currencies/crypto-crash-bitcoin-bear-market-sanbankman-fried-ftx-bankruptcy-2022-12	
12-21-22 Two Bankman-Fried colleagues plead guilty to fraud - Caroline Ellison and Gary Wang helped the disgraced crypto mogul divert funds and are now aiding prosecutors	•
https://www.washingtonpost.com/business/2022/12/21/caroline-ellison-fraud-charges/	48
12-14-22 FTX's Bankman-Fried donated about \$40M this political cycle. Here's who benefited	48
https://www.washingtonpost.com/business/2022/12/14/sbf-ftx-political-donations/	48
12/14/22 CNN: Why Tom Brady, David Ortiz, Jimmy Fallon and other celebrities are getting sue over crypto	
https://www.cnn.com/2022/12/14/tech/celebrity-crypto-lawsuits/index.html	49
12-6-22 Boston Globe: Caroline Ellison, math whiz and Newton native, was bound for success. T she got into crypto.	
https://www.bostonglobe.com/2022/12/06/business/caroline-ellison-math-whiz-newton-nawas-bound-success-then-she-got-into-crypto/?p1=Article_Recirc_Most_Popular&p1=Article_Recirc_Most_Popular	
11-11-22 NYTimes: Investors Who Put \$2 Billion Into FTX Face Scrutiny, Too	50
https://www.nytimes.com/2022/11/11/technology/ftx-investors-venture-capital.html#:~:text=FTX's%20list%20of%20investors%20spans,Holdings%2C%20BlackRock%d%20Thoma%20Bravo	
11-10-22 Forbes: These FTX Investors Stand To Lose The Most From The Crypto Exchange's Implosion	52
https://www.forbes.com/sites/chasewithorn/2022/11/10/exclusive-these-investors-stand-to-lose-the-most-from-ftxs-implosion/?sh=545d04ae2670	
11-16-22 Yahoo Sports: Tom Brady, Stephen Curry, Shaq and Naomi Osaka among celebrities su class-action crypto lawsuit	
https://sports.yahoo.com/tom-brady-stephen-curry-shaq-and-naomi-osaka-among-celebriticsued-in-class-action-crypto-lawsuit-181117155.html	
11-19-22 WSJ: They Lived Together, Worked Together and Lost Billions Together: Inside Sam Bankman-Fried's Doomed FTX Empire	54
https://www.wsj.com/articles/sam-bankman-fried-ftx-alameda-bankruptcy-collapse-11668824201	54
11-11-22 NYTimes Embattled Crypto Exchange FTX Files for Bankruptcy	54
https://www.nytimes.com/2022/11/11/business/ftx-bankruptcy.html	54

11-11-22 WSJ: FTX Files for Chapter 115	4
https://www.wsj.com/articles/ftx-files-for-chapter-11-bankruptcy- 11668176869?mod=hp_lead_pos154	4
11-10-22 WSJ: The FTX Crypto Fiasco5	6
https://www.wsj.com/articles/the-ftx-crypto-fiasco-cryptocurrency-sam-bankman-fried-alameda-coindesk-binance-11668122004?mod=hp_opin_pos_15	
11-10-22 CNBC: Sequoia Capital marks down its FTX investment to \$050	6
https://www.cnbc.com/2022/11/10/sequoia-capital-marks-down-its-ftx-investment-to-0.html . 50	6
11-9-22: WSJ: Binance Walks Away From Deal to Rescue FTX5	7
https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp_lead_pos15	7
11-8-22, Globe and Mail: Ontario Teachers' Pension Plan faces a hit on investment in crypto trading platform FTX5	
https://www.theglobeandmail.com/business/article-ontario-teachers-pension-plan-faces-a-hit-on-investment-in-crypto/	7
11-8-22 Fortune: FTX is not 'fine': The crypto industry's latest crisis must lead to changes 5	8
https://fortune.com/crypto/2022/11/08/ftx-is-not-fine-the-crypto-industrys-latest-crisis-must-lead-to-changes/	8
11-8-22 (afternoon) WSJ: Binance's Deal for Rival FTX Marks Power Shift Amid Crypto Turmoil 5	8
https://www.wsj.com/articles/crypto-exchange-binance-agrees-to-acquire-rival-ftx- 11667924737?mod=hp_lead_pos45	8
Ethereum Merge and POW vs POS	9
9 15-22 MSN: InvestorPace: The Ethereum Merge Just Created a Huge Risk for ETH Crypto Fans 59	9
https://www.msn.com/en-us/money/markets/the-ethereum-merge-just-created-a-huge-risk-for-eth-crypto-fans/ar-AA11SuZM?ocid=msedgntp&cvid=ea0c1f80b6ed4879e8b218b47237e152 5	
9-15-22 CNN: The world's second biggest cryptocurrency just got a lot greener6	1
https://www.cnn.com/2022/09/15/tech/ethereum-merge-crytocurrency-energy-consumption-hnk-intl/index.html	1
9-15-22 Yahoo Finance: ETH down 5% despite smooth Ethereum Merge	1
https://finance.yahoo.com/news/eth-trading-ethereum-merge-142242016.html6	1
9-14-22 WSJ:Crypto Investors Step Up Bets Against Ether as 'Merge' Looms6	2
https://www.wsj.com/articles/crypto-investors-step-up-bets-against-ether-as-merge-looms-11663189258?mod=hp_lead_pos66	2
9-12-22 Tech Crunch: Big hopes for the upcoming Ethereum Merge6	3
https://techcrunch.com/2022/09/12/big-hopes-for-the-upcoming-ethereum-merge/	3

Energy	63
7-1-22 Time: Fact-Checking 8 Claims About Crypto's Climate Impact	63
https://time.com/6193004/crypto-climate-impact-facts/	63
8-7-22 -Bloomberg - Buterin Says Any Ethereum Miner Migration Won't Slow Merge	64
https://www.msn.com/en-us/money/markets/buterin-says-any-ethereum-miner-migration t-slow-merge/ar-AA10mZ3r?ocid=msedgntp&cvid=cad2a19f6e49473aa2268d427ed20187	
8-2-22 NerdWallet: Ethereum Merge Is Coming: Why It Matters: The merge will change how transactions are validated and could cut energy use by over 99%.	
https://www.nerdwallet.com/article/investing/the-ethereum-merge-is-coming-what-it-mfor-	ieans-
you?utm_campaign=ct_prod&utm_source=syndication&utm_medium=wire&utm_term= stanleymarketwatch-com&utm_content=1219240	
5-4-22 Columbia University Cryptocurrency's Dirty Secret: Energy Consumption	67
https://news.climate.columbia.edu/2022/05/04/cryptocurrency-energy/	67
7-17-22 NYTimes: Cryptomining Capacity in U.S. Rivals Energy Use of Houston, Findings Show	v 67
https://www.nytimes.com/2022/07/15/climate/cryptocurrency-bitcoin-mining-electricity	ı.html 67
7-17-22 MSN: United States Crypto Miners Are Now Using as Much Power as Houston	68
https://www.msn.com/en-us/money/markets/united-states-crypto-miners-are-now-using much-power-as-houston/ar-AAZFK5F	_
5-18-22-Forbes: Why Does Bitcoin Use So Much Energy?	68
https://www.forbes.com/advisor/investing/cryptocurrency/bitcoins-energy-usage-explain	ned/ 68
Fraud	69
1-5-22- The Street: Mark Cuban Warns of Potential New Crypto Scandal and Fraud (Wash Tra	ades). 69
https://www.msn.com/en-us/money/markets/mark-cuban-warns-of-potential-new-crypt scandal-and-fraud/ar-AA1610zG?ocid=msedgntp&cvid=48cca181842846f8b036ce494b8b	
9-9-22 WSJ: Head Trader of Crypto Platform EmpiresX Pleads Guilty in \$100 Million Fraud So	cheme 72
https://www.wsj.com/articles/head-trader-of-crypto-platform-empiresx-pleads-guilty-in-million-fraud-scheme-11662671525?mod=hp_minor_pos10	
8-15-22 Fortune: Martin Shkreli's crypto crashes after major wallet dumps tokens	72
https://fortune.com/2022/08/15/martin-shkreli-crypto-crash-pharma-bro/	72
8-13-22 MARTIN SHKRELI DUMPS HUGE STAKE IN HIS NEW CRYPTO, CAUSING IT TO CRASH	73
https://futurism.com/the-byte/martin-shkreli-crypto-dump-crash	73
8-14-22 Forbes Lawsuit Accuses Mark Cuban, Voyager Digital Of Defrauding Cryptocurrency	73

https://www.forbes.com/sites/doylerader/2022/08/14/lawsuit-accuses-mark-cuban-voyager digital-of-defrauding-cryptocurrency-investors/?sh=7a264a8523c0	
8-6-22 WSJ: Before Crypto Lender Celsius Crashed, CEO Alex Mashinsky Was Known for Big Idea Battles	
https://www.wsj.com/articles/before-crypto-lender-celsius-crashed-ceo-alex-mashinsky-was known-for-big-ideas-and-battles-11659787202?mod=series_cryptobitcoindogecoin	
7-27-22 Bankrupt Crypto Brokerage Voyager Ordered to Cease False Promises About U.S. Banki Insurance	_
https://www.wsj.com/articles/bankrupt-crypto-brokerage-voyager-ordered-to-cease-false-promises-about-u-s-banking-insurance-11659044094	75
7-27-22 WSJ: Titanium Blockchain CEO Pleads Guilty to Fraud	75
https://www.wsj.com/articles/titanium-blockchain-ceo-pleads-guilty-to-fraud- 11658795919?mod=hp_minor_pos11	75
7-22-22 Bloomberg: Tesla's Bitcoin Dump Leaves Accounting Mystery in Its Wake	75
7-22-21 NASDAQ: Elon Musk Reveals Crypto Holdings. Here's Which Cryptocurrencies the Billion Owns	
https://www.nasdaq.com/articles/elon-musk-reveals-crypto-holdingsheres-which-cryptocurrencies-the-billionaire-owns-2021	77
7-17-22 CNBC From \$25 billion to \$167 million: How a major crypto lender collapsed and dragg many investors down with it	
https://www.cnbc.com/2022/07/17/how-the-fall-of-celsius-dragged-down-crypto-investors.h	
6-17-22 Fortune 3AC confirms near \$200 million loss from Luna collapse. 'The Terra-Luna situati caught us very much off guard'	
https://fortune.com/2022/06/17/three-arrows-capital-200-million-loss-luna-terra-crypto-hed fund/	_
6-3-22 CNBC: Crypto scams have cost people more than \$1 billion since 2021, says FTC	78
https://www.cnbc.com/2022/06/03/crypto-scams-cost-people-more-than-1-billion-since-202 ftc.html	
Theft	79
12/2/22 Bloomberg: Binance Probes a Crypto Exploit That All But Wiped Out a Token on Ankr Se	
https://www.msn.com/en-us/money/other/binance-probes-a-crypto-exploit-that-all-but-wip out-a-token-on-ankr-service/ar-	ed-
AA14OdNE?ocid=msedgntp&cvid=b77d2df6ce124b6bacbaa18b90759a9a	
8-10 2022 CRYPTO WORLD: Hackers have stolen \$1.4 billion this year using crypto bridges. Here why it's happening	

	https://www.cnbc.com/2022/08/10/hackers-have-stolen-1point4-billion-this-year-using-crypto-bridges.html#:~:text=Bridge%20hacks%20have%20resulted%20in%20more%20than%20%241.3 20billion%20stolen%20in%202022&text=%E2%80%9CBlockchain%20bridges%20have%20becom%20the,firm%20Elliptic%2C%20in%20an%20interview	% ne
	6-13-22 Mashable: The biggest crypto scams of 2022 (so far)	80
	https://mashable.com/article/biggest-crypto-scams-2022	80
	8-9-22 MSN Hackers swiped \$190 million worth of ether and stablecoins from crypto firm Nomad, report says	81
	https://www.msn.com/en-us/money/other/hackers-swiped-190-million-worth-of-ether-and-stablecoins-from-crypto-firm-nomad-report-says/ar-AA10dZoq?ocid=msedgntp&cvid=d7ae10951a6844f38528ea82f6e06093	81
	4-22 LinkedIn April 2022 - Crypto Thieves Get Bolder by the Heist, Stealing Record Amounts	
	Crypto Thieves Get Bolder by the Heist, Stealing Record Amounts	
	4-22-22 WSJ: Crypto Thieves Get Bolder by the Heist, Stealing Record Amounts	
	https://www.wsj.com/articles/crypto-thieves-get-bolder-by-the-heist-stealing-record-amounts- 11650582598?mod=hp_lead_pos2	
	4-21-22 ZDNet: Beanstalk DeFi project robbed of \$182 million in flash loan attack	84
	https://www.zdnet.com/article/beanstalk-defi-project-robbed-of-182-million-in-flash-loan-attac	-
	4-19-22 Fortune: Hackers stole \$182 million in crypto. Here's how Beanstalk Farms is hoping to sta afloat	эу
	https://fortune.com/2022/04/19/hackers-stole-182-million-in-crypto-heres-how-beanstalk-farm	-
	11-2-21 How a Squid Game Crypto Scam Got Away With Millions	85
	https://www.wired.com/story/squid-game-coin-crypto-scam/	85
Ро	litical-Regulatory	87
	12-1-22 WSJ: Rising Tether Loans Add Risk to Stablecoin, Crypto World	87
	https://www.wsj.com/articles/rising-tether-loans-add-risk-to-stablecoin-crypto-world-11669875590?mod=hp_lead_pos3	87
	11-16-22 LinkedIn :Wilson comment on Oct 29 Forbes article on pensions	87
	10-29-22 Forbes: Pension Funds Or Cryptocurrency, What's The Bigger Scam?	88
	https://www-forbes-com.cdn.ampproject.org/c/s/www.forbes.com/sites/edwardsiedle/2022/10/29/pension-funds-cryptocurrency-whats-the-bigger-scam/amp/	
	10-17-22 Benzinga: \$101M In Ethereum Was Just Transferred Between 2 Wallets	

https://www.msn.com/en-us/money/news/101m-in-ethereum-was-just-transferred-between wallets/ar-AA1342l1?ocid=msedgntp&cvid=8779aff280a2403cbc9e8af750989449	
10-14-22 WSJ: Crypto Advocacy Group Sues U.S. Treasury Over Tornado Cash Sanctions	90
https://www.wsj.com/articles/crypto-advocacy-group-sues-u-s-treasury-over-tornado-cash-sanctions-11665610506?mod=hp_minor_pos11	90
10-3-22 WSJ: Crypto Could Threaten Financial System, Federal Risk Panel Warns	90
https://www.wsj.com/articles/crypto-could-threaten-financial-system-federal-risk-panel-warr 11664826496?mod=hp_lista_pos5	
8-12-22 WSJ; Tornado Cash's Sanctions Show Shift in Crypto Regulatory Focus	91
https://www.wsj.com/articles/tornado-cashs-sanctions-show-shift-in-crypto-regulatory-focus 11660336224?mod=hp_minor_pos10	
6-7-22 CNET: Are Cryptocurrency Transactions Actually Anonymous? Spoiler alert: Bitcoin transactions can still be traced.	92
https://www.cnet.com/personal-finance/crypto/are-cryptocurrency-transactions-actually-anonymous/	92
8-3-21 SEC: Remarks Before the Aspen Security Forum by Chair Gary Gensler	92
https://www.sec.gov/news/speech/gensler-aspen-security-forum-2021-08-03	92
6-11-21 WSJ: How the FBI Got Colonial Pipeline's Ransom Money Back	93
https://www.wsj.com/articles/how-the-fbi-got-colonial-pipelines-ransom-money-back-11623403981	93
6-8-21 CNET US recovers part of multimillion-dollar ransom paid in Colonial Pipeline hack: Colon Pipeline CEO Joseph Blount says he made the call to pay the ransom	
https://www.cnet.com/news/privacy/us-recovers-part-of-multi-million-dollar-ransom-paid-to-colonial-pipeline-hackers/	
3-9-16 Science: Why criminals can't hide behind Bitcoin: Even with cryptocurrency, investigators follow the money	
https://www.science.org/content/article/why-criminals-cant-hide-behind-bitcoin	94
7-31-22 Benzinga Binance Says It Lost 90% Of Customers, 'Billions In Revenue' Due To KYC Compliance	95
https://www.msn.com/en-us/money/news/binance-says-it-lost-90-of-customers-billions-in-revenue-due-to-kyc-compliance/ar-AA10aGzo	95
8-1-22 Coindesk: Binance Investigations Officer: AML Cost Exchange 'Billions in Revenue'	95
https://www.coindesk.com/layer2/2022/08/01/binance-compliance-officer-kyc-cost-exchange billions-in-revenue/	
5-5-22 CNN: Elizabeth Warren is worried about Fidelity's plan to offer bitcoin in 401(k)s	96

https://www.cnn.com/2022/05/05/success/fidelity-bitcoin-elizabeth-warren-feseries/index	x.html
	96
5-2022 LinkedIn -Yellen Cites UST Breakdown While Calling for Stablecoin Rules	97
Yellen Cites UST Breakdown While Calling for Stablecoin Rules	97
5-20-22 LinkedIn U.S. SEC chair says much to be done to protect crypto investors	98
U.S. SEC chair says much to be done to protect crypto investors	99
Crypto User Issues	100
9-1-22: MSN Their Crypto 'Bank' Failed and They Lost Six Figures Overnight — What Now?	100
https://www.msn.com/en-us/money/smallbusiness/their-crypto-bank-failed-and-they-lost-figures-overnight-what-now/ar-	
AA10TSQK?ocid=msedgntp&cvid=1594e57b8df04f939b9104114b0565c2	
8-14-22: WSJ Public Pension systems join those stung	104
https://www.wsj.com/articles/public-pension-systems-join-those-stung-by-crypto-crash- 11660425848?mod=hp_lista_pos2	104
7-30-22 Crypto Prices Crashed, but True Believers Are Holding On:	105
https://www.wsj.com/articles/crypto-prices-crashed-but-true-believersare-holding-on-11659143571?mod=hp_lead_pos3	105
6-29-22 NY Times: Crypto Crash Widens a Divide: 'Those With Money Will End Up Being Fine'	106
https://www.nytimes.com/2022/06/29/technology/crypto-crash-divide.html	106
7-23 WSJ: They Thought 'Crypto Banks' Were Safe, and Then Came the Crash: Crypto firms su Celsius and Voyager pitched themselves as good alternatives to traditional lenders	
https://www.wsj.com/articles/they-thought-crypto-banks-were-safe-and-then-came-the-ci	
7-12-22 The Guardian: 'They couldn't even scream any more. They were just sobbing': the aminvestors ruined by the crypto crash	
https://www.theguardian.com/technology/2022/jul/12/they-couldnt-even-scream-any-mothey-were-just-sobbing-the-amateur-investors-ruined-by-the-crypto-crash	
5-19-22 NY Times: Has the Crypto Crash Hurt Your Investments? We Want to Hear About It. T about your experiences in the volatile crypto market.	
https://www.nytimes.com/2022/05/19/technology/crypto-investments-crash.html	111
5-2020 LinkedIn -What Is Happening to the People Falling for Crypto and NFTs	111
Ponzi Argument	113
9-5-22 Benzinga and CNBC: Jim Cramer Says Stay Away From Dogecoin And Shiba Inu, Making Money In Crypto Doesn't Mean It's For Real	113

https://www.msn.com/en-us/money/news/jim-cramer-says-stay-away-from-do inu-making-money-in-crypto-doesn-t-mean-it-s-for-real/ar-	gecoin-and-shiba-
AA11rHLF?ocid=msedgntp&cvid=11b430d7e12548d1bae8e82a988d9456	113
8-1-22 CBS: (Forsage) Crypto execs charged with running \$300 million Ponzi schem	e 113
https://www.msn.com/en-us/money/companies/crypto-execs-charged-with-rupponzi-scheme/ar-AA10c82L?ocid=msedgntp&cvid=6117eeaeb34b4acfa92a7c49	-
7-23-22 The Street: Crypto: A Bernie Madoff-Style Scheme May Have Crushed Pror	
Luc Olinga https://www.msn.com/en-us/money/markets/crypto-a-bernie-mad may-have-crushed-prominent-lenders/ar-AAZTovl	
7-23-22 LinkedIn Meet Molly White (Crypto Critic)	115
7-11-22 Globe: Meet Molly White, the Mass. software engineer going after the cry	pto industry 116
https://www.bostonglobe.com/2022/07/11/business/meet-molly-white-mass-s-going-after-crypto-industry/	_
7-8-22 TheStreet: Mark Cuban Caught in Bankruptcy of Crypto Lender Voyager	116
https://www.msn.com/en-us/money/savingandinvesting/mark-cuban-caught-incrypto-lender-voyager/ar-AAZnj79?ocid=msedgntp&cvid=a3d38e7899504646a2	228cabda669fa5e
7-8-22 CNBC: Embattled crypto lender Celsius is a 'fraud' and 'Ponzi scheme,' laws	uit alleges 117
https://www.cnbc.com/2022/07/08/crypto-lender-celsius-is-a-fraud-and-ponzi-claims.html	
7-11-22 Reuters: Three Arrows liquidators asks U.S. court to force crypto founders	to cooperate . 118
https://www.reuters.com/legal/litigation/three-arrows-liquidators-asks-us-cour founders-cooperate-2022-07-11/	
7-8-22 Reuters: Crypto lender Voyager addresses customer anger in first bankrupt	cy hearing 119
https://www.reuters.com/legal/litigation/crypto-lender-voyager-addresses-cust bankruptcy-hearing-2022-07-08/	
7-7-22 LinkedIn: Crypto Broker Voyager Digital Files for Bankruptcy Protection	119
7-6-22 WSJ Crypto Broker Voyager Digital Files for Bankruptcy Protection:	119
https://www.wsj.com/articles/crypto-broker-voyager-digital-files-for-bankruptc 11657098630?mod=hp_lista_pos5	
6-18-22 LinkedIN Abigail Johnson, if you find yourself in a hole, stop diggin	g 122
Jack Wilson• President-Emeritus and Distinguished Professor at University of	
6-16-22 LinkedIn -Bill Gates Says NFTs and Crypto Are '100%' Based on Greater Foo	
Bill Gates Says NFTs and Crypto Are '100%' Based on Greater Fool Theory	122

6-17-22 -CNBCTV18.com Bill Gates calls out cryptos & NFTs, says asset class is '100% based on greater fool theory'	
6-15-22 -WSJ: Bill Gates Says NFTs and Crypto Are '100%' Based on Greater Fool Theory	123
https://www.wsj.com/articles/bill-gates-says-cryptocurrencies-and-nfts-are-100-based-on-greater-fool-theory-11655302143	123
6-14-22 LinkedIN -Bitcoin plunges as major crypto lender halts operations	123
Bitcoin plunges as major crypto lender halts operations	124
6-14-22 LinkedIn Who Pays for Crypto's Collapse?	125
Opinion   Who Pays for Crypto's Collapse?	125
https://www.wsj.com/articles/who-pays-for-crypto-collapse-class-action-lawsuits-bitcoin-ethereum-losses-investors-coinbase-luna-xrp-11655056359?mod=hp_trending_now_opn_p	os1
6-11-22 LinkedIn - When the crypto crisis hits (and it soon will), the U.S. will be forced to strip the cloak of anonymity that facilitates criminal acts and which gives crypto its allure	away
When the crypto crisis hits (and it soon will), the U.S. will be forced to strip away the cloak or anonymity that facilitates criminal acts and which gives crypto its allure	
5-28-22 LinkedIn Terra USD Crash	127
TerraUSD Crash Led to Vanished Savings, Shattered Dreams	127
5-27-22 WSJ: TerraUSD Crash Led to Vanished Savings, Shattered Dreams: Investors swept up in mania for the high-yielding stablecoin thought it would be safe	
https://www.wsj.com/articles/terrausd-crash-led-to-vanished-savings-shattered-dreams-11653649201	127
5-28-22 LinkedIn - Is cryptocurrency a Ponzi scheme? - The Boston Globe	128
Is cryptocurrency a Ponzi scheme? - The Boston Globe	128
5-24-22 Boston Globe: Is cryptocurrency a Ponzi scheme?	129
https://www.bostonglobe.com/2022/05/24/opinion/is-cryptocurrency-ponzi-scheme/	129
5-20-22 LinkedIn Crypto Meltdown Exposes Hollowness of Its Libertarian Promise	129
5-20-22 LinkedIn -Crypto key in Fidelity's future, but 'still a lot of uncertainty,' CEO Abby Johnson	
Crypto key in Fidelity's future, but 'still a lot of uncertainty,' CEO Abby Johnson says - Boston Business Journal	
5-20-22 LinkedIn -How More Than \$1 Trillion of Crypto Vanished in Just Six Months	131
How More Than \$1 Trillion of Crypto Vanished in Just Six Months	132
5-20-22 LinkedIn - TerraUSD stablecoin tumbles and luna token plunges 97% as rescue attempt to avert 'death spiral'	

TerraUSD stablecoin tumbles and luna token plunges 97% as rescue attempts fail to avert 'de spiral'	
5-6-22 Bitcoin Magazine: HOW BANKS ARE TRYING TO DISCREDIT BITCOIN	140
https://bitcoinmagazine.com/business/how-banks-try-to-discredit-bitcoin	
5-22 LinkedIn - Watch out for the 'rug pull' crypto scam that's tricking investors out of millions	
Watch out for the 'rug pull' crypto scam that's tricking investors out of millions	141
5-22 LinkedIn May 2022 Labor Department Criticizes Fidelity's Plan to Put Bitcoin on 401(k) Mer	
Labor Department Criticizes Fidelity's Plan to Put Bitcoin on 401(k) Menu	
4-27-22 Fidelity: The Expanding Frontier of Digital Assets	142
https://www.fidelity.com/about-fidelity/our-company/post-consensus-message	142
4-2022 LinkedIn - Short Sellers Bet Tether, Crypto's Central Bank, Is Vulnerable to a Run	143
Short Sellers Bet Tether, Crypto's Central Bank, Is Vulnerable to a Run	143
4-2022 LinkedIn More U.S. Companies Wade Into NFTs Despite Lack of Accounting Rules -Khon Karim	
More U.S. Companies Wade Into NFTs Despite Lack of Accounting Rules	144
https://www.nytimes.com/interactive/2022/03/18/technology/nft-guide.html	144
Well said, Jack!! https://www.fastcompany.com/90727504/report-sec-has-its-eyes-on-probing-if-some-tokens-are-illegal-securities	
6-17-22 NY Times: Wonking Out: Wasn't Bitcoin Supposed to Be a Hedge Against Inflation?	145
https://www.nytimes.com/2022/06/17/opinion/crypto-bitcoin-inflation-gold.html?searchResultPosition=1	145
6-17-22 Boston Globe We're in 'crypto winter.' Here's what locals think about the future of the industry.	
https://www.bostonglobe.com/2022/06/17/business/crypto-industry-has-had-terrible-week heres-what-local-experts-have-do/	
6-16-22 Coindesk How Crypto Lender Celsius Overheated	147
https://www.coindesk.com/business/2022/06/16/how-crypto-lender-celsius-overheated/	147
6-18-22 Guardian: Trillion-dollar crypto collapse sparks flurry of US lawsuits – who's to blame? .	149
https://www.theguardian.com/technology/2022/jun/18/cryptocurrency-collapse-bitcoin-kimkardashian-floyd-mayweather	
11-1-21 NY Times: Banks Tried to Kill Crypto and Failed. Now They're Embracing It (Slowly):	149
https://www.nytimes.com/2021/11/01/business/banks-crypto-bitcoin.html	149
Web 3 is Going just Great! Molly White	150
https://web3isgoinggreat.com/	150

	Kraken	. 151
	https://kraken-culture.notion.site/	. 151
	Guardian: Trillion-dollar crypto collapse sparks flurry of US lawsuits – who's to blame?	. 152
Δlε	gorand Crypto Currency	. 152
	https://www.investopedia.com/terms/s/stablecoin.asp or https://en.wikipedia.org/wiki/Stablecoin	. 152
	27-12-2022 Coindesk: Algo Value -Algorand	
	https://www.coindesk.com/price/algorand/	
	11-29-2021 NASDAQ: Algorand Could Be the Next Solana if El Salvador Succeeds	. 154
	https://www.nasdaq.com/articles/algorand-could-be-the-next-solana-if-el-salvador-succeeds.	. 154
	12-17-2021-CoinGeek: Shocker: Bitcoin in El Salvador is fake	. 154
	https://coingeek.com/shocker-bitcoin-in-el-salvador-is-fake/	. 154
	1/6/2022 Yahoo News: Is Algorand "the Future of Finance?" Look to El Salvador to Find Out	
	https://www.yahoo.com/video/algorand-future-finance-look-el-165416188.html	. 155
	11-2-2021 NASDAQ: As El Salvador Delves Deeper Into Blockchain, Give Algorand a Closer Look	. 155
	https://www.nasdaq.com/articles/as-el-salvador-delves-deeper-into-blockchain-give-algorance	
	12-2-2021 BitCoin Magazine: GOVERNMENT-IMPOSED BITCOIN ADOPTION IS CLASHING WITH COMMUNITY EFFORTS ON THE GROUND IN EL SALVADOR	. 15 <i>€</i>
	https://bitcoinmagazine.com/culture/reporting-on-bitcoin-adoption-in-el-salvador	. 156
	3-15-2022 RestOfWorld: Six months in, El Salvador's bitcoin gamble is crumbling	. 158
	https://restofworld.org/2022/el-salvador-bitcoin/	. 158
	12-27-2022 Business Insider: The 'world's coolest dictator' rounded up 60,000 people in a crackd on MS-13. A shrimp farming community is fighting back.	
	https://www.msn.com/en-us/news/crime/the-world-s-coolest-dictator-rounded-up-60-000-people-in-a-crackdown-on-ms-13-a-shrimp-farming-community-is-fighting-back/ar-AA15HEV7?ocid=msedgntp&cvid=f3035b8e170049008c24d4928c74573a	. 158
	7-9-22 LinkedIn: Nayib Bukele's failed Bitcoin experiment in El Salvador - The Boston Globe	. 159
	7-7-22 Boston Globe: Nayib Bukele's failed Bitcoin experiment in El Salvador - The Boston Globe	160
	7-1-22 CoinDesk: Brutal Month for Bitcoin as June Ends With Biggest Drop in 11 Years	. 160
	https://www.coindesk.com/markets/2022/07/01/brutal-month-for-bitcoin-as-june-ends-with-biggest-drop-in-11-years/	
	7-8-2022 Globe: Nayib Bukeles failed bitcoin experiment in El Salvador	
	https://www.bostonglobe.com/2022/07/08/opinion/nayib-bukeles-failed-bitcoin-experiment-salvador/#comment-138904494	-el-

6-19-22 LinkedIn: -Baker-Polito Administration Awards \$1.9 Million 'Tech & Innovation' Grant QUBIC Labs in Quincy	
https://www.linkedin.com/in/jack-wilson- 09546a6b?miniProfileUrn=urn%3Ali%3Afs_miniProfile%3AACoAAA7XCfEBZfL_ZlWiCdlYeiz7y Ve71gs	
Baker-Polito Administration Awards \$1.9 Million 'Tech & Innovation' Grant to QUBIC Labs in Quincy	
6-17-2022 Patriot Ledger: Quincy startup incubator gets \$2 million to foster local blockchain, to companies	
https://www.patriotledger.com/story/news/2022/06/17/quincys-qubic-labs-gets-2-million-ggrow-blockchain-companies/7647998001/	_
5-20-22 LinkedIn-Patrick Bench - Will Boston join the crypto crowd? - The Boston Globe	163
Will Boston join the crypto crowd? - The Boston Globe	163
Reply: Jack Wilson President-Emeritus and Distinguished Professor at University of Massachu	
8-21-2021 El Salvador Signs a Cooperation Agreement with Koibanx to Develop the Governmer Blockchain Infrastructure on Algorand	
https://www.algorand.com/resources/ecosystem-announcements/el-salvador-signs-agreemwith-koibanx-to-develop-its-blockchain-infrastructure-on-algorand	
Quotes:	164
Bill Gates	164
Paul Krugman, Nobel Prize winning economist	164
Warren Buffet	165
- https://www.cnbc.com/2022/04/30/warren-buffett-gives-his-most-expansive-explanation for-why-he-doesnt-believe-in-bitcoin.html	
Charles Munger"	165
Nassim Nicholas Taleb	165
Jamie Dimon CEO of Citibank	165
Jeremy Grantham, CEO and founder of GMO	165
https://www.msn.com/en-us/money/markets/bubble-expert-jeremy-grantham-predicts-a-hdecline-in-stocks-tears-into-bitcoin-and-slams-the-fed-in-a-new-interview-here-are-the-10-bdeclines/ar-AA10wB1B?ocid=msedgntp&cvid=d8687c67e88d4e87a6a02cfa1a320862	oest-

# **Crypto Currencies**

# Satoshi Nakamoto White Paper (October 31, 2008)

#### https://bitcoin.org/bitcoin.pdf

Abstract. A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending.

We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

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#### 10. Privacy

The traditional banking model achieves a level of privacy by limiting access to information to the parties involved and the trusted third party. The necessity to announce all transactions publicly precludes this method, but privacy can still be maintained by breaking the flow of information in another place: by keeping public keys anonymous. **The public can see that someone is sending an amount to someone else, but without information linking the transaction to anyone**. This is similar to the level of information released by stock exchanges, where the time and size of individual trades, the "tape", is made public, but without telling who the parties were

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#### 12. Conclusion

We have proposed a system for electronic transactions without relying on trust. We started with the usual framework of coins made from digital signatures, which provides strong control of ownership, but is incomplete without a way to prevent double-spending. To solve this, we proposed a peer-to-peer network using proof-of-work to record a public history of transactions that quickly becomes computationally impractical for an attacker to change if honest nodes control a majority of CPU power. The network is robust in its unstructured simplicity. Nodes work all at once with little coordination. They do not need to be identified, since messages are not routed to any particular place and only need to be delivered on a best effort basis. Nodes can leave and rejoin the network at will, accepting the proof-of-work chain as proof of what happened while they were gone. They vote with their CPU power, expressing their acceptance of valid blocks by working on extending them and rejecting invalid blocks by refusing to work on them. Any needed rules and incentives can be enforced with this consensus mechanism

# CATO Institute 2013 Analysis of Bitcoin. "Who Is Satoshi Nakamoto?"

# https://www.cato.org/regulation/fall-2013/who-satoshi-nakamoto

Bitcoin is a private, non - centrally managed "cryptocurrency" that users create and exchange over the Internet via an open - source protocol. The concept of Bitcoin was first made public in a 2008 paper by the pseudonymous Satoshi Nakamoto and its first client software appeared the following year. Bitcoin is fascinating for at least three reasons: its technological virtuosity, the light it throws on the nature of money (including the possibility of private fiat money), and its clash with the regulatory state.

Private money? Are bitcoins really money? This question brings us to the second reason for the system's fascinating character: it helps us understand the nature of money. Money is anything that is generally accepted as a medium of exchange. Anything that has currency in this sense is a currency. Currency—and thus money—is a question of degree. A dollar bill would not be money for a jungle tribe that has no contact with the external world. A dollar bill has more currency in the United States than in northern Canada. As George Selgin points out, bitcoins are not (yet?) currency: they apparently are accepted by thousands of retailers, but those retailers represent only a tiny fraction of market participants. Try to pay for gas with bitcoins—or gold, for that matter—at a randomly chosen service station and you will see what is not money.

Yet Bitcoin's lightning development suggests that it has the potential to become money. Some 11 million bitcoins are in circulation, and are traded on a number of virtual markets. Bitcoin is a fiat precurrency.

Taking subjective preferences seriously, Friedrich Hayek envisioned the possibility of private fiat money nearly four decades ago. After all, money is just what people think is money. Even gold has value only because people assign value to it. The challenge with fiat money is keeping its value stable against the inflationary incentives of its supplier—who will find it tempting to just "crank up the presses" to pay bills. Hayek's response to that challenge was to argue that the supplier of a private currency would have an incentive to fine-tune supply so as to keep price constant—a response that has not satisfied everybody.

#### ---more----

That brings us to a third issue with Bitcoin: will the regulatory state allow the development of such digital currencies? The prospects do not look good.

We can understand why Leviathan does not like Bitcoin. Since this would-be currency is electronic, encrypted, and peer-to-peer, transactions in it are untraceable. Of course, getting in and out of the system is traceable under current surveillance laws. You come under official eyes when you buy bitcoins with dollars (or any other official currencies) or when you take your bitcoins out of the network. Entry or exit transactions between you and your bank (or other established financial intermediary) are monitored. As long as transactions are made between Bitcoin accounts, however, their authors remain anonymous. There is no central authority necessary to authorize bitcoin transactions and capable of knowing who carries them. The transactions are recorded as anonymous entries in a virtual registry that is synchronized on all computers on the network.

# **Unbacked Crypto Currencies**

Most existing crypto currencies are unbacked "fiat" crypto currencies like Bitcoin, Ethereum, Dogecoin, Shiba Innu. Like any fiat currency there is nothing of value backing the currency other than a trust that its value will remain roughly the same or even (hopefully) go up over time. Just like the fiat currencies of the past which are based upon the "full faith and credit" of this issuing organization, this is a challenge for crypto currencies. This is nothing new, the US Dollar remains the most trusted fiat currency due to its long-term stability, transparency, and ease of use and conversion. Other fiat currencies like the Venezuelan Bolivar, the Confederate Dollar, and countless others do not enjoy the same trust. It is much the same with digital fiat currencies.

#### Stable Coins

Some crypto currencies are backed by tangible assets. These are often termed "Stablecoins."

https://www.investopedia.com/terms/s/stablecoin.asp or https://en.wikipedia.org/wiki/Stablecoin

Tether is an example. Of course, the dollar was once backed by gold reserves, but the US went off the gold standard in 1933 to the consternation of many of the elite. Stablecoins are not excessively volatile and are not generally viewed as attractive investments but offer an easier and more private way to move value in and out of unbacked crypto currencies. A subset of what I will call quasi-Stablecoins is backed by other crypto currencies or by administrative bodies that "print" crypto or buy it to stabilize the value -much like the US Government does. Some of these are called "algorithmic stable coins." Terra USD was one of the best known of these before it collapsed. Not all StableCoins are stable.

# 9/11/22 PBS Video: Crypto Decoded | Full Documentary | NOVA | PBS

https://www.youtube.com/watch?v=dnavKPI5f9I

What exactly is crypto, and how does it work? This technology is more than just money.

Official Website: <a href="https://to.pbs.org/3WPrytt">https://to.pbs.org/3WPrytt</a> | #NOVAPBS

From Bitcoin to NFTs, crypto is making headlines. But what exactly is it, and how does it work? Experts go beyond the hype and skepticism to unravel the social and technological underpinnings of crypto – exploring how it came to be and why this new technology may change more than just money.

- Chapters
- 00:00 Introduction
- 03:31 Using Cryptocurrency for Positive Change
- 06:27 What is Money?
- 11:11 The History of Cryptography: Decoding Messages
- 19:12 The Creation of Digital Money: Bitcoin
- 22:38 How Does Bitcoin Work?
- 26:21 Efforts to Revitalize Communities with Crypto
- 28:39 What is Crypto Mining?
- 33:04 The First Use of Bitcoin as Money

- 34:35 Digital Art in Blockchains: What is an NFT?
- 38:33 Innovative Uses of Ethereum Blockchain
- 43:49 Auctioning a Copy of the U.S. Constitution
- 45:59 Making Blockchain Use More Energy Efficient
- 48:35 The Future of Cryptocurrency

#### BusinessweekFeature

# 8/18/21 BusinessWeek: From Doge Soldiers to Bitcoinists: A Field Guide to the Crypto Faithful:

For Ethereans, maxis, yield farmers, and no-coiners, digital assets aren't just an investment but a way of life.

By Christopher Beam August 18-21 at 12:01 AM EDT

https://www.bloomberg.com/news/features/2021-08-18/from-doge-soldiers-to-bitcoinists-a-field-guide-to-the-crypto-faithful

Glossary: "HODL"- hold on for dear life. "YOLO" -You only live once.

In a now-famous 1994 clip from the Today show, Bryant Gumbel asks his fellow hosts, "What is internet, anyway?" They fumble through various answers before a technician behind the camera explains.

The current crypto discourse feels similar, with everyone jumping to enlighten everyone else, even when they themselves might not fully grasp it. Most eyes glaze at the first mention of "blockchain." Crypto has already minted entire industries—and whole new ways of getting rich—while most people still can't tell a token from a Pokémon. There's Bitcoin and Ethereum and Dogecoin and SafeMoon and Chainlink and Solana and Polkadot and Polygon and Cardano and and and ...

Among the crypto faithful—particularly the maximalists, or "maxis," who go all-in for their one true coin—the differences between the coins are critical. Which one you own says a lot about who you are: your philosophy, your friend circle, even your fashion sense. Each cryptocurrency represents an entire culture, with its own memes, aesthetic, language, trusted voices, and power structure. Buying one is not only an investment; it's a declaration of identity. As Aleksandar Svetski, a professed "Bitcoin supremacist," put it during a panel at the Bitcoin 2021 conference in Miami in June, "I don't care what you say. Show me your bank account, and I'll tell you what you believe." Perhaps the reverse is also true: If you want to understand one of these mysterious new assets, look at its believers.

Crypto is in a precarious moment. More people have bought coins this year than ever before. At the same time, the sector is drawing increasing scrutiny from regulators around the world. In June, China banned Bitcoin mining. U.S. Securities and Exchange Commission Chair Gary Gensler has indicated a need for tighter rules. Almost every week a crypto company gets busted for fraud or a ransomware hacker demands payment in Bitcoin. And though most coins reached all-time highs in May, the market has lost a fifth of its value since then.

In this fraught environment, fan armies have assembled: Bitcoin maxis, Ethereans, the Doge Army, Link Marines touting Chainlink, and other altcoiners. The motivation is partly to talk their book, hoping that

the more people hear about a coin, the more likely they are to buy it—a goal known derisively as "number go up." But the tribes also help delineate their projects' scope, principles, and priorities.

New coins are born every day, and few survive. In some cases, the winners are the products that offer the best technology or solve a thorny problem. But often the most popular tokens simply have the loudest boosters. (See: Elon Musk.) To outsiders the coin wars might sound like the infighting of Monty Python's Life of Brian's Judean People's Front vs. the People's Front of Judea. But to those invested in crypto—financially and emotionally—the differences couldn't be more significant, and the implications for the digital future couldn't be greater.

#### The Bitcoinists

The first time Sal Strom heard about Bitcoin, she had a physical reaction. In 2017 the artist was dining with a friend in Oregon whose son was investing in "some internet money thing," Strom recalls. She already used cash so rarely, this felt to her like the next step in an evolution: "All my little hairs go up on my arm. My body said, 'This is real.'"

Sal Strom: The idea of money that doesn't need a government or bank "just made sense to me." Photographer: Magnus Holmes for Bloomberg Businessweek

Strom went home and researched cryptocurrencies online. The idea of decentralized money that lives on the internet "just made sense to me," she says. Strom had also been in debt for a decade, switching from one credit card to another. Bitcoin, which she expected to increase in value as more people adopted it, promised a way out. She transferred her savings from stocks into Bitcoin.

Strom began making Bitcoin-themed art. She created a collage showing a map of the world with various foreign currencies glued on and Bitcoin logos superimposed. Another work depicts a graveyard and a tally of "Bitcoin obituaries"—the number of times the currency had been declared dead—based on a meme she'd seen on Twitter. Strom says she takes the same approach to art as she does to finance: "When they tell you something won't work, I love to do it."

Strom, who's 64, doesn't fit the archetype of the self-righteous libertarian Bitcoin bro. But the way she talks about Bitcoin echoes the language and attitudes that legions of faithful espouse. She didn't just learn about Bitcoin; she got "orange-pilled," "went down the rabbit hole," and "studied" it like the Talmud. She refers to cryptocurrencies other than Bitcoin as "shitcoins," and describes accumulating small amounts of Bitcoin as "stacking sats," or satoshis, named after Bitcoin's pseudonymous founder Satoshi Nakamoto. (100 million satoshis = 1 Bitcoin.)

For most crypto people, Bitcoin is the gateway drug. It's a simple, elegant idea: a digital currency that anyone can send and receive without intermediaries (or, in Bitcoin parlance, "censors") such as banks or governments. Transactions are executed and recorded on the blockchain (sorry, this won't take long), a decentralized ledger stored on computers around the world. In exchange for providing security to the ledger, "miners" are rewarded with new coins and transaction fees. Advocates pitch Bitcoin as a store of value ("digital gold"), a medium of exchange (less so now, because of volatility), and a hedge against inflation. You don't have to understand the intricacies of blockchain technology to grok that there will only ever be 21 million Bitcoin. As demand goes up and supply remains fixed, the logic goes, the price will increase.

But Bitcoin's main appeal may be its romanticism: Decentralize money, Bitcoiners say, and you radically shift power away from banks and the state. For aspiring revolutionaries, buying Bitcoin can feel like storming the Bastille, without even having to put on pants.

Conversion comes with a starter kit of memes and catchphrases. Bitcoiners I spoke with at the Miami conference promised to "hodl" their coins instead of selling them, dismissed criticism as "FUD" (fear, uncertainty, and doubt), and added laser eyes to their Twitter avatars to signal their allegiance. "Have fun staying poor" is the refrain directed at non-Bitcoiners.

Ponzi or No?

Return on one Bitcoin since:

Oct. 1. 2013: \$45,615 Jan. 1-21: \$16,405 4-15-21: -\$17,608 6-25-21: \$14,117

The doubters often reinforce their belief. "Everybody I know is against it," Strom says. Her son, a financial adviser, urged her not to invest in Bitcoin, and her partner, who works in tech, told her it's a scam. (He prefers Ethereum.) After reading a book called Bitcoin & Black America, Topher Bates tried to talk friends and family into investing. "The truth is, most people don't want to hear it," Bates says. "I haven't lost friends," says John Lester, who attended the Bitcoin conference dressed in a T-shirt featuring Ray Liotta with laser eyes. "But I've definitely had friends I'm less deeply connected to."

At the same time, Bitcoin has brought them closer to fellow disciples. Strom and artist Carole Ann Danner, both of whom displayed work at the Bitcoin conference, bonded over their shared passion. "She's more obsessed than I am," Strom says. Paul and Nara Kim, a couple in New York City, talked about Bitcoin on their first date in 2018; now they're married.

For all its revolutionary swagger, the community struggles with diversity, at least in the U.S. "There's not a lot of Black women here," says Andile Ndlovu, looking around at the Miami Bitcoin conference crowd. "It's not good." Ndlovu, who was born in Zimbabwe and works in the music industry in Los Angeles, chalks it up to a perception among Black people that crypto is "elitist" or that you have to be rich to get involved. "I'm here to learn more so I can let my people know what's going on," she says.

Andile Ndlovu: Noting a lack of Black women in crypto, she wants to fight the idea that it's only for the rich. Photographer: Rozette Rago for Bloomberg Businessweek

Arguing with a Bitcoiner is like having one's brain yanked apart. There's a riposte to any objection: The energy required to secure the network destroys the environment—but it incentivizes green energy! It's slow and clunky—but the newer Lightning network makes it fast! It won't survive regulation—but it can't be controlled! It's a Ponzi scheme—but so is any new asset going through price discovery!

For many fans, Bitcoin comes down to faith: They believe it will succeed because they believe others will also believe it will succeed. If that reasoning sounds circular, they say, welcome to money. Now it's simply a matter of convincing the rest.

That's where the maxis come in. Whereas Strom doesn't evangelize about Bitcoin, Svetski, the shaven-headed Australian entrepreneur and "Bitcoin supremacist," considers it his duty. "We are the white blood cells of the network," he said during a panel at the Miami conference. "If the center does not

hold, we become just another shitcoin project." Bitcoin maxis must therefore promote it and shoot down contrary narratives. This may sound like shilling. But Svetski tells me he wants to keep Bitcoin aligned with its original ideals of freedom and resistance to censorship. "This is perfect money," he says, that is "rooted in mathematics" and the laws of thermodynamics. In the future we'll remember humanity's three great inventions as "fire, Bitcoin, and teleportation."

Maximalists are as tough on each other as they are on critics, Svetski says. When influential Bitcoiner Robert Breedlove tweeted about a new crypto product called BitClout, Bitcoin maxis laced into him. "Iron sharpens iron," Svetski says. "It might seem like abuse, but we're honestly calling each other out."

#### **Ethereans**

Michael Babyak needed a new thing. After years of working in Washington politics, first on Capitol Hill and finally as director of marketing technology for the Republican National Committee, he quit his job in 2017 when he found himself, as he diplomatically puts it, "at odds with a leader of the party." He'd gotten into politics to be "part of something bigger than myself," but now that existential ballast was gone.

He'd first bought Bitcoin in 2015 to pay for streaming sports. After the market crashed in 2017, he decided to buy more, then eventually bought some Ether, the cryptocurrency that fuels another blockchain called Ethereum, and watched the numbers climb. "I was like, 'I need to start learning what the heck this stuff actually is,' " he says.

Turned off by what he called the "doomsday prepper" attitude of Bitcoiners, he began exploring Ethereum forums, where he discovered "the most universally welcoming community in the world," he says. When he asked questions, developers responded promptly. Ethereum, he learned, takes the blockchain technology undergirding Bitcoin and builds a whole ecosystem of computer programs, or "smart contracts," on top of it. Instead of just sending and receiving money, you could use the ledger as a platform for all kinds of transactions, whether real estate deals, art purchases, or complex financial instruments. The Ethereum blockchain's dedicated currency, Ether, is used to interact with those programs. The key factor, Ethereans say, is "trustlessness": when signing a contract, instead of paying an auditor to vet the counterparty and a bank to transfer funds and a lawyer to sue the counterparty when they fail to deliver, you can simply trust the code to execute the contract as designed.

And it's all open source. Anyone can take the code for one project on Ethereum and use it to build another, or recombine existing ones—a quality known as "composability" that inspired the metaphor of Ethereum as "money Legos." For example, a few years ago crypto traders wanted to be able to sell their coins and lock in profits, but they didn't want to cash out for dollars, which can be cumbersome. So developers created a "stablecoin" pegged to the U.S. dollar. Stablecoins are now a cornerstone of the blockchain-based financial system, because they make it easier to move money around and enable developers to build countless new "Legos" on top. (They're also controversial, as people wonder if some coins are fully backed by dollars.) Babyak had never been a Wall Street guy like many of his Princeton classmates, but he now found himself getting excited by a "paradigm shift in finance."

He also saw Ethereum changing the way companies operate. After years of working in government, Babyak thrilled to the possibilities of blockchain-based decentralized autonomous organizations (DAOs). Instead of a boss giving orders and employees following them, DAO members can vote on

company decisions based on how many of the organization's tokens they own. "It's almost like democracy at its finest," Babyak says. Sure, a small cohort could seize power by buying up all the tokens, but, he argues, at least the process is transparent. Likewise, creators and brands can issue "social tokens" to give fans a stake in their output, building community and aligning financial incentives.

The pragmatism of the Ethereum crowd appealed to Babyak. If Bitcoiners are the warriors of the crypto universe, Ethereans are the builders. Bitcoiners emphasize individual freedom from financial tyranny, while Ethereans embrace an ethos of collective action and collaboration. "You're betting on cooperation," Babyak says.

The whole aesthetic of the Ethereum community stands in contrast to Bitcoin's alpha-male energy. Instead of laser eyes and 300-inspired Spartan references, Ethereans favor unicorns and pastel colors. The website of a recent online hackathon sponsored by ETHGlobal featured a retro '90s look: a Microsoft Windows-style interface in friendly pinks and blues, along with a "LoFi Beats" button in the corner. "This is not a competition," the organizer said while explaining the rules of the competition. "We want you to learn, and that's our primary goal." Ethereum chic was perhaps best captured in a 2019 video in which its gangly co-founder, Vitalik Buterin, raps painfully about the blockchain in front of looping animations, including a kangaroo DJ and a koala bear riding a rocket that spews a trail of rainbow hearts. Ethereans signal their loyalty on social media by replacing Es with  $\Xi$  symbols in their names, so it's Bloomb $\Xi$ rg Busin $\Xi$ ssw $\Xi$ Ek. (The  $\Xi$  is also the currency symbol for Ether.) In another common move, Babyak recently changed his Twitter handle to babyak.eth.

Bitcoin loyalists scoff at many of the Ethereans' claims. Babyak says he believes in "the flippening," a moment in the future when Ether will surpass Bitcoin in total market value. Svetski rejects the idea that Ether could unseat Bitcoin as the top digital currency: "We've discovered gold while everyone else is still f---ing around with seashells." Svetski isn't impressed with Ethereum-backed projects such as nonfungible tokens, or NFTs, the online artworks that recently blew up in value. "We don't need another way to sell each other JPEGs," he says. "We need to fix money."

Compared with the Etherean worldview, Bitcoin maximalism can sound like a kind of minimalism: One invention fixes everything. Ethereans, by contrast, envision a future of ongoing incremental changes, upgrading into eternity. It's a big-tent vision of technological progress that even has room for Bitcoin. "These two things can both exist," Babyak says.

# Decoding

Satoshi-The smallest unit of a Bitcoin

100 million satoshis equal 1 Bitcoin

#### stablecoin

A cryptocurrency whose value is supposed to equal \$1. But there are questions about how some stablecoins back up this claim.

Ethereans do have their peeves. They frown at any blockchain billed as an "Ethereum killer," whether it's Cardano ("all hype," Babyak says), Solana ("kinda cringey"), or Binance Smart Chain (full of "scams

and hacks"). Never mind that these networks are trying to address real problems with the Ethereum protocol, including its slow speed and often exorbitant transaction fees. Ethereans say that future upgrades, which will transition the mining process to make it less energy-intensive, among other tweaks, will resolve those issues better than the newcomers starting from scratch.

Just as Babyak was embraced by the Ethereum community, he's expanded it, too. He now finds himself being treated as an authority on the subject of crypto, with friends and acquaintances seeking his advice. His wife, Cameron Hardesty, chief executive officer of a flower-distribution business, encouraged him to put his thoughts into a newsletter, which he plans to publish soon. She's happy to see him excited about something new. "He was wandering in the wilderness a bit, careerwise," she says. "And then crypto happened. It's given him a pathway to this new identity."

Hardesty also called out crypto's lopsided gender ratio. An article on the website Bitch Media recently dubbed Bitcoin "astrology for men." Hardesty sees crypto playing a social role. "The way men relate to each other, there has to be some non-emotional glue to the conversation," she says. "It's usually sports, and now for Michael it's crypto, too."

Babyak's love for the blockchain can cause tension, Hardesty says. Between her startup and a baby on the way, it can be stressful to hear about crypto all day. "I'm frequently like, 'Can we talk about something else?' " she says. She also wants to make sure they're not overexposed, financially. "He's such a believer that he can't imagine a world in which the value of these assets doesn't keep growing," she says. But Babyak says he takes a relatively conservative approach to crypto investment. After "a little bit of **YOLOing**" in other coins, he says, he now keeps the vast majority of his crypto savings in Ether.

(JMW: YOLO: You only live once)

#### **Gamblers and Farmers**

For Jack Brew, YOLOing is the point. The 23-year-old first got into crypto when he was 15 so he could play online poker. He'd save up his babysitting money, arrange to meet a guy at a Starbucks in Venice, Calif., and pay him cash in exchange for Bitcoin. "It wasn't shady or anything," Brew says.

In college he got into margin trading and became an Ether maxi right before the token went parabolic. As a freshman he made almost \$250,000, he says, only to lose it all on some bad shorts, or bets that the price of Ether would fall. "It was gross," Brew says. "It put me in a dark place." He got out of trading altogether and focused on finishing his degree.

But then came the DeFi Summer of 2020. "That's when I got a little bit back into everything," he said. Decentralized finance, or DeFi, covers an array of blockchain-based tools aimed at building a whole new financial system based on computer protocols instead of traditional companies. DeFi-ers imagine that one day everything—mortgages, stock and bond markets, and more—will run on smart contracts. For now, though, DeFi mainly entails swapping crypto tokens on decentralized exchanges, such as Uniswap or SushiSwap, or on other dapps (decentralized apps) that let users earn more tokens by doing things like borrowing and lending coins or providing liquidity for trades.

It can be hard to get one's head around the abstract world of DeFi, so imagine for a moment something more concrete: a large bazaar, with customers wanting to trade every kind of item, from chickens to staplers to mops to beans. Say people want to exchange chickens for staplers. Individuals

can act as market makers by maintaining an inventory of both chickens and staplers—providing liquidity—and take a cut of every trade. That cut could take the form of chickens or staplers, or some completely different item, such as beans. The market maker could also be rewarded with mops provided by the bazaar itself, to incentivize the person to work at this bazaar instead of the bazaar across the street. If a trade is especially risky—the price of one item could crash suddenly—the cut taken by the market maker can be extremely high: not only one bean, but a thousand or a million.

That's DeFi, except what's being traded is an only slightly less random collection of digital tokens, most of which you've never heard of. Instead of keeping an inventory of chickens and staplers, a market maker gets paid to provide coins to a trading pool. Because demand for these tokens is wildly uncertain, the liquidity providers, known in the DeFi space as "yield farmers," can earn big profits fast to compensate for big risks. The most lucrative opportunities don't last long, so they're constantly on the hunt for the next score. Hence the term "degen," short for "degenerate gambler," which members of the DeFi community have proudly adopted.

Scams abound. Sometimes the theft is written into a token's code; other times token creators abscond, leaving lenders holding worthless coins—a move known as a "rug pull." A savvy yield farmer can assess the risk of an investment, but even high-profile projects can collapse, as Mark Cuban learned in June when he got caught in the now-famous Titan debacle, as the token's value plunged almost to zero.

The prospect of astronomical yields was too much for Brew to resist, so he took up his plow. He found a liquidity pool called Swerve where he could stake the stablecoin Tether for an annual yield of 300%. (He'd missed its early yields of 1,000%.) Providing liquidity for a coin called Swampy was yielding 5% a day, plus the price of Swampy itself was at one point doubling daily. His biggest returns came from Cake, the native token of a decentralized exchange called PancakeSwap, which skyrocketed in April. He started the year low on funds; a few months later, he says, he was worth seven figures.

Monitoring his farms was a full-time job. "You couldn't afford not to be paying attention," he says. "If a new pool got released, or if you missed a presale," you could lose out. Yield farming occasionally interfered with his day-to-day life, like when a tip came in while he was spending time with his girlfriend. "I'd be like, 'Babe, I gotta go deal with this real quick."

One day, Brew was surfing in Malibu when he got a text from a friend saying that Pancake Bunny, a DeFi platform in which he'd staked Cake tokens, got rug-pulled. "I thought all my Cake was gone," he says. Fortunately, when he checked his account, his tokens were still there; the rug pull hit a different token associated with the platform.

Having learned from his past losses, Brew locked 75% of his crypto portfolio in such a way that he couldn't touch it for a year. "There could be a point where I don't have the self-control to make a rational decision," he says. He still takes risks with the remaining tokens. "I think it's the only way I know how to make money," he says.

#### The No-Coiners

When I spoke with Amy Castor, she was in an undisclosed location. She hasn't gotten explicit threats, but the outspoken "no-coiner" has made enemies with her articles and tweets expressing doubt about the value of cryptocurrencies and blockchain technology. So she preferred to keep her whereabouts a

secret. "The bigger a threat you become to this industry, the more people want to come after you," she says.

Castor would know: She used to work in the industry. As a writer for crypto-focused publications, she flew around the world attending conferences, with IOHK, the company behind Cardano, a blockchain platform started by an Ethereum co-founder, sometimes footing the bill. "I had a blast, traveling, and partying, and drinking too much," she says. "People would say, 'You're family, you're one of us.' " Her relationship with the family soured after Castor began researching an article that displeased Cardano's founder, Charles Hoskinson. "When I started to dig too deep, I was kicked out," she says. (A spokesperson for IOHK says the company is "passionately committed to the principle of full editorial independence and would never treat a journalist differently based on what they have written about us in the past.")

Around the same time, she began to admire the writing of David Gerard, a dyspeptic crypto critic in London. Gerard makes no attempt to hide his disdain for the blockchain and its fans. "There's a lot of things to object to about crypto—it's full of scams, it rips people off, proof-of-work mining is destructive—but my objection has always been the people," he says. Gerard, a system administrator who has also worked as a music journalist, helped Castor understand the "cult of Bitcoin," she says. She began sending him drafts for feedback, and vice versa. "I began to write more and more pieces that were critical of the crypto space," she says.

The fundamental problem with Bitcoin, Gerard argues, is that it's a "negative-sum game" designed to pay early investors at the expense of later investors—a Ponzi-like arrangement that's bound to collapse. Bitcoin as a medium of exchange makes no sense, he says, because it's slow, expensive, and volatile. As a longtime IT professional, Gerard is skeptical of Ethereum's smart contracts: "Isn't that a bullshit term?" he says. "It's not a contract, and it's not smart. It's literally a small computer program on the blockchain. In real computing we call these database triggers, or stored procedures, and you never use them if you can avoid it. ... It's just an engineering nightmare." Nor does the "immutability" of the blockchain appeal to him: "Normal people don't care about the irreversibility of transactions," he says. If anything, they want to be able to dispute charges or undo typos. But with immutable transactions, he says, "all fat finger fumbles are final."

Is there any value whatsoever to crypto? Yes, Gerard says: "Buying things your government doesn't want you to. That's a neutral way of saying this is for drugs and crooks."

#### History of Rip-Offs

2014: The Bitcoin exchange Mt. Gox closes after the theft of Bitcoin worth \$450 million.

2016: A hacker drains Ether worth more than \$50 million from the DAO, a virtual venture capital fund that was one of the first decentralized finance projects.

2017: A viral ransomware attack called WannaCry locks up computers around the world. The attackers demand to be paid in Bitcoin.

2020: "Rug pulls" and exit scams become leading forms of crypto fraud, says blockchain forensics company CipherTrace Inc. In these cons, developers promote new tokens and then suddenly cash out or disappear with users' funds.

2021: In early August, hackers steal about \$600 million worth of crypto from PolyNetwork, a decentralized platform. Oddly, they later returned some of it.

In the hype-ridden crypto media sphere, the no-coiners serve as a check on boosterism. It's a running joke that Bitcoiners can interpret any news as "good for Bitcoin," whether it's China cracking down on miners or Musk announcing Tesla Inc. would no longer accept Bitcoin because of its environmental impact. (He's since reconsidered.) Castor, Gerard, and a crew of skeptics push back against these cheerleading narratives. Castor has lately focused on El Salvador's adoption of Bitcoin as legal tender, which Bitcoin Twitter celebrated despite moves by El Salvador's right-wing president to undermine the country's democratic institutions. "You start to ask, 'How did this happen? Who's behind this?'" she says.

Castor gets the appeal. "I can understand why people fall for it," she says. "It's part of a whole belief system." But she argues the main reason people buy it is "adrenaline—that same thrill people get from gambling addictions." The philosophical justifications are window dressing, according to Gerard. "You'll say and do anything, espouse any dumb ideology, go through the motions, and repeat catchphrases, such that you'll get rich for free," he says.

Castor briefly owned crypto, but it only made her anxious. "It felt like a hot potato to me," she says. "It was scary. It messes with your mind." It can be intoxicating for an investor, but it "also has the potential to destroy them," she says. "It's like Lord of the Rings." Gerard has never bought a coin. "I don't feel that I have to go skinny-dipping in a sewer to tell people that skinny-dipping in a sewer probably won't work out well." (Full disclosure, I decided to buy a few different coins in April as an investment and see what happens. They've plummeted.)

Gerard argues that DeFi may be the most insidious threat of all. "It isn't producing anything economically," he says, and amateur investors could get hurt by professional traders. "My moral interest is when retail gets ripped off," he says. "If you're rich, fine. But Mom and Dad don't understand this."

The no-coiners face a cry-wolf problem. Gerard has been predicting crypto's demise for a decade now. "I've been wrong about Bitcoin lots," he says. This doesn't undercut his arguments, though: "It shows how stupid the market can be."

Unlike many of their pro-crypto counterparts, the no-coiners are not getting rich. Gerard has turned his commentary into a modest income, self-publishing books including Attack of the 50 Foot Blockchain, but Castor sometimes struggles to make ends meet. "I find a way to live very frugally," she says. I asked if they'd ever organize a no-coiner conference. "Yeah, but nobody would fund it," she says.

# **Doge Soldiers**

Tim Ursich Jr. didn't understand the tweet: "One word: Doge." "I thought it was a typo," Ursich says. Elon Musk was being weird. He let it go.

But then Ursich saw references to Dogecoin everywhere. Curious, he sought out his crypto gurus, a group of tennis players he treated as a chiropractor at his sports clinic in Los Angeles County. "Their

answer was that it's something fun to own for those that don't understand the market but want to feel like they're part of a community," he says.

Ursich, who has attention deficit hyperactivity disorder, says he's always looking for ways to channel his energy. He immediately vibed with the Dogecoin community, who spent all day posting memes on Twitter and Reddit. "They're super fun and laid-back," he says. "They're like the flower babies of the '60s, where nothing really bothers them." He loved that it started as a joke to make fun of Bitcoin—it was named after the meme featuring a cute and silly looking shiba inu—plus he has an affinity for dogs, having grown up in California with "four dogs at a time, always rescues."

Dogecoin is more like Bitcoin than Ethereum. It has no intrinsic utility and no value other than what others are willing to pay for it. But unlike Bitcoin, there's no cap on the supply of Doge. Ursich's vision of the crypto future is simple: "If Bitcoin is the gold, Ethereum is the silver." Ursich says he imagines Dogecoin becoming the pocket money of crypto. (Right now, Dogecoin is worth about 27¢ to Bitcoin's \$45,700 and Ether's \$3,150.)

When some Doge fans suggested that the word stands for "Do only good everyday," Ursich decided to act. Seeing charities struggling during the pandemic, he started producing physical Dogecoins—novelty items that cost a few dollars to manufacture—and sold them, donating a percentage of profits to animal rescues. He also mailed coins to people who shared their struggles online. "I said, 'I stand with you,'" he says. "'Just because you're not getting engagements on social media doesn't mean people aren't praying for you.'"

As the currency gained traction, its price rose. The Dallas Mavericks basketball team and baseball's Oakland Athletics began accepting Dogecoin as payment for tickets. Musk said he was working with Dogecoin developers to "improve system transaction efficiency." "It wasn't just a joke memecoin anymore," Ursich says.

Success bred competition, as memecoins such as SafeMoon, Shiba Inu, and Doge Killer promised similar astronomical returns. To Ursich these coins were merely "lottery scratchers" created to make a quick buck. Many Dogecoiners lashed out. The angry reaction in his own community disturbed Ursich. He hosted an audio chatroom on Twitter and criticized the negativity within the Doge Army ranks. "Don't talk bad about other communities," he said. "Our message is to do only good." Thanks partly to that impassioned speech, his Twitter account, TheDogeCoinMilitia, now has more than 40,000 followers.

Despite its prominence, few consider Dogecoin a serious rival to the blue chips of crypto. Some critics argue that Dogecoin epitomizes the postmodern turn of the GameStop era, in which asset prices can rise and fall with no apparent connection to underlying value. "Doge is the ultimate in that it's only narrative," says Chris Blec, a consultant who runs the site DeFi Watch, which pushes for greater transparency in crypto. Financial analyst Demetri Kofinas denounces this phenomenon as "financial nihilism" and argues that it's tied to a larger problem of social and existential dislocation. "This is why simulation theories have gotten so popular," he said in a recent online talk, referring to the idea (also promulgated by Musk) that we may be living in a computer-generated Matrix. "There is this feeling that reality is less relevant."

Unlike other memecoins, Doge arguably has value in the form of Musk. Crypto often gets described as a cult, but Dogecoin fits the definition better than other tokens, says Sam Lessin, an investor and

partner at Slow Ventures. "Elon Musk is one of the greatest modern cult leaders," he says. In the current financial environment, following the cult leader may in fact be a rational decision, he says. "If you do what Elon says first, you will actually make money."

Ursich says that Dogecoin appeals to him less because of its price than because of the community, especially during the pandemic. Even though he couldn't see his sister and her family, who live in Montana, he bonded with his 12-year-old niece over Doge memes. "I couldn't ask her about school or basketball, but we could always talk about Doge," he says. In this sense, Dogecoin—and really every token—is a social token.

Ursich now makes a point of accepting crypto, including Dogecoin, as payment at his clinic. He dreams of someday creating an animal sanctuary for sloths. "I couldn't tell you why," he says. "For whatever reason I'm superdrawn to sloths."

Molly White website: https://web3isgoinggreat.com/

# **Crypto Debate**

10-20-22: Time: Bitcoin Holds Steady but Remains Low at \$19,000. How Investors Should React

https://time.com/nextadvisor/investing/cryptocurrency/bitcoin-crash-continues/

Bitcoin hasn't been above \$50,000 since Dec. 25-21. Despite the ups and downs, bitcoin's price has seen a **nearly 70% drop in value** since its all-time high above \$68,000 on Nov. 10, set back by surging inflation, lagging recovery in the job market, and the Fed's ongoing signals that it would begin winding down pandemic measures to support the economy.

# 7-28-22 Email Crypto Debate -Wilson to Johnson

From: Wilson, Jack M Sent: Thursday, July 28-22 10:55 AM

To: Johnson, William C < William Johnson@uml.edu>; Yelle, William E < William Yelle@uml.edu>;

Morena, Patricia C < Patricia\_Morena@uml.edu>

Subject: RE: Cryptocurrency Debate

Right. Classic age discrimination.

The autocratic head of El Salvador replied "OK Boomer" to similar remarks. When he could not argue the merits, he had to resort to denigrating their age. Oh yeah, then he proceeded to lose most of his country's reserves by investing in crypto. Sorry El Salvadoreans. Plunging you into even greater poverty is a small price to pay for making the autocratic leader look "with it."

By the way: Here is what Vitalik Buterin had to say: ""If you're trying to figure out where to store your life savings, traditional assets are still your safest bet."

"Buterin, who says he will boycott CoinDesk's Consensus conference, alleges the firm "is recklessly complicit in enabling giveaway scams.""

Speaking of bias (illegal bias I would say), consider that all the folks that you cite have huge investments in crypto. Elon Musk engaged in a classic (normally illegal) pump and dump scheme when he went on twitter to promote crypto and then sold almost all of his investment after all his pumping. That is why they call it a dump. Watch the "Wolf of Wall Street" to learn about how pump and dump schemes work.

I will be providing numerous examples of this illegal conflict of interest and ageist bias in my talk.

I will also suggest that (IMHO) investment leaders like Abby Johnson who succumb to greed and offer crypto to investors because those investors want to give her money for them are in violation of their fiduciary requirements under investment law. Here is what Senator Warren and other Senators and the Department of Labor had to say about Fidelity offering bitcoin as an investment in their retirement accounts:

- Massachusetts Sen. Elizabeth Warren and Minnesota Sen. Tina Smith sent a letter to Fidelity this week asking, among other things, why it didn't heed earlier concerns by the Department of Labor on the issue of including cryptocurrencies in 401(k) retirement accounts.
- "Why did Fidelity ignore DOL's 'serious concerns regarding the prudence of a fiduciary's decision to expose a 401(k) plan's participants to direct investments in cryptocurrencies'?" the senators wrote.
- Last week, a top DOL official reiterated the agency's worries that Americans' retirement security could be put at risk. "We have grave concerns with what Fidelity has done," Ali Khawar, acting assistant secretary of DOL's Employee Benefits Security Administration, told the Wall Street Journal.
  - https://www.cnn.com/2022/05/05/success/fidelity-bitcoin-elizabeth-warrenfeseries/index.html

These guys you cite simply MUST say positive things. They have to find the "greater fools" to continue to buy back their investments at a higher price. If this area was regulated better (like banks or stock offerings) these guys would be in jail for quite long terms. I was a huge fan of Musk for his creation of Tesla and SpaceX, but that does not allow him to pump up crypto and then dump it. Buterin is a billionaire by selling things with no tangible value, but finding greater fools to send more and more money. He needs to constantly be positive to keep the house of cards upright. (And I actually think he is one of the few in this industry that might have a tiny streak of integrity.)

How are these guys different than Bernie Madoff who sold worthless investment vehicles to enthusiastic investors wanting to get the high returns he promised? He got away with it for DECADES, before he ran out of "greater fools" to give him more money to keep providing those high returns to the early investors. Ponzi schemes (or other pyramid schemes) always collapse after making the originators rich and impoverishing many others.

Yep, crypto has been quite a successful "get rich quick" scam in recent years. Sadly, later investors have lost trillions.

So apparently you think young people are intelligent and older people are dumb. Got it. Try another argument please.

From: Johnson, William C < William Johnson@uml.edu>

Sent: Wednesday, July 27-22 5:11 PM

To: Yelle, William E < William Yelle@uml.edu >; Wilson, Jack M < Jack Wilson@uml.edu >; Morena,

Patricia C < <u>Patricia Morena@uml.edu</u>> **Subject:** RE: Cryptocurrency Debate

Hi Jack,

Did you by chance calculate the average age of the people you quoted? 75 years...

Bill Gates: 66

Paul Krugman: 69

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

Warren Buffet: 91 Charlie Munger: 98 Nassim Taleb: 62 Jamie Dimon: 66

What do people like Vitalik Buterin (28), Jack Dorsey (45), Mark Zuckerberg (38) or Elon Musk (51)

think?

Might there be some bias in the selection of famous people you are quoting?

Bill

From: Yelle, William E < William Yelle@uml.edu>

Sent: Wednesday, July 27-22 1:20 PM

To: Wilson, Jack M < <u>Jack Wilson@uml.edu</u>>; Johnson, William C < <u>William Johnson@uml.edu</u>>;

Morena, Patricia C < Patricia Morena@uml.edu>

**Subject:** Re: Cryptocurrency Debate

Jack and Bill,

I love the back and forth. Yes, a 100 word abstract from each of you would be ideal. I would venture to say "provocative". This is a great way of generating interest and kicking things off.

Best - Bill Y

From: Wilson, Jack M < <u>Jack Wilson@uml.edu</u>>
Date: Wednesday, July 27-22 at 11:58 AM

To: Johnson, William C < <a href="mailto:William Johnson@uml.edu">William Johnson@uml.edu</a>>, Morena, Patricia C < <a href="mailto:Patricia Morena@uml.edu">Patricia Morena@uml.edu</a>>

Cc: Yelle, William E < William Yelle@uml.edu>

Subject: RE: Cryptocurrency Debate

I understand. My feelings are a bit strong, but they are shared by many others.

- CNBC" June 17-22 Microsoft Co-Founder Bill Gates described cryptocurrencies as "100 percent based on some sort of Greater Fool Theory."
- Paul Krugman, Nobel Prize winning economist in the NY Times June 17-22: "If you believe, as I do, that crypto is to a large extent a Ponzi scheme, this may just happen to be the moment when the scheme has run out of new suckers."
- Warren Buffet: "If you ... owned all of the bitcoin in the world and you offered it to me for \$25, I wouldn't take it,"

 $\underline{https://www.cnbc.com/2022/05/02/warren-buffett-wouldnt-spend-25-on-all-of-the-bitcoin-in-the-world.html}$ 

Most famously, Buffett said bitcoin is "probably rat poison squared."

https://www.cnbc.com/2022/04/30/warren-buffett-gives-his-most-expansive-explanation-for-why-he-doesnt-believe-in-bitcoin.html

- Charles Munger" "In my life, I try and avoid things that are stupid and evil and make me look bad in comparison to somebody else and bitcoin does all three," Munger said. (Ibid above)
- Nassim Nicholas Taleb: Last year, Taleb revised his position in a paper that described bitcoin's value as "zero". "This is the first time we've seen a financial bubble coupled with religious, cult-like behaviour and an investment strategy not seen before in history," he says.
- Jamie Dimon CEO of Citibank: "I personally think that bitcoin is worthless," Dimon said during an Institute of International Finance event on Monday, CNBC Pro reported.

BTW: I don't fully agree with Warren Buffet. If anyone offers me all the Bitcoin I would take it. (And sell it immediately!) The first rule of Ponzi schemes is that those who get in early and get out fast can make a lot of money. It is those "greater fools?" who get crushed. Yes, you have to put aside morals and ethics to do that, but money causes many people to do it. (I'm lookin' at you Abby Johnson.)

What about: "Crypto currency: Scam and/or promising new technology."

Amidst all these scams, there may be a nugget of useful technology, but they have to solve some scaling issues to avoid frying the earth into a cinder. (No Ethereum and POS have not solved that.)

From: Johnson, William C < William Johnson@uml.edu >

Sent: Wednesday, July 27-22 10:27 AM

To: Wilson, Jack M < <u>Jack Wilson@uml.edu</u>>; Morena, Patricia C < <u>Patricia Morena@uml.edu</u>>

Cc: Yelle, William E < William Yelle@uml.edu>

Subject: RE: Cryptocurrency Debate

Hi Jack,

I am a bit surprised by the strength of your feeling. But I am also okay with:

"Cryptocurrency: A Promising New Technology or a Scam."

Or "Cryptocurrency: Advances in Technology or Advances in the Pyramid Scheme"

I will give it some more thought.

It clearly is a fad. Neither of us can dispute this label. Whether it is also a "promising new technology" or an "advance in pyramid schemes" may be where we disagree.

Bill

From: Wilson, Jack M < <u>Jack Wilson@uml.edu</u>>

Sent: Wednesday, July 27-22 8:09 AM

To: Johnson, William C < William Johnson@uml.edu >; Morena, Patricia C < Patricia Morena@uml.edu >

Cc: Yelle, William E < William Yelle@uml.edu>

Subject: RE: Cryptocurrency Debate

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

I am late for a meeting right now, but I do not like the title either I am far more negative than "fad." It is much worse than that. I prefer words like "scam," "Ponzi Scheme," "fraud," "pyramid scheme," or something like that. More after my meeting.

Jack

From: Johnson, William C < William Johnson@uml.edu>

Sent: Tuesday, July 26-22 7:35 PM

To: Morena, Patricia C < Patricia Morena@uml.edu >; Wilson, Jack M < Jack Wilson@uml.edu >

Cc: Yelle, William E < William Yelle@uml.edu>

**Subject:** RE: Cryptocurrency Debate

Hi Tricia,

I believe the agreed-upon title was "Cryptocurrency: Today's Fad or Tomorrow's Technology."

I think the title below does not give enough emphasis to what crypto can and will be in the future.

What is the abstract you are looking for? Is it one statement from Jack and one from me? Do we each get a 100 word abstract? This might be a nice way to start off, but I am not sure exactly what you are thinking about. If it needs to be a 100 word abstract about the overall discussion, then that is a completely different thing.

Thanks,

Bill

From: Morena, Patricia C < <a href="mailto:Patricia Morena@uml.edu">Patricia Morena@uml.edu</a>>

**Sent:** Tuesday, July 26-22 10:16 AM

To: Johnson, William C < <a href="www.wilson.gen.wilson"><u>William Johnson@uml.edu</u></a>>; Wilson, Jack M < <a href="mailto:Jack Wilson@uml.edu">Jack Wilson@uml.edu</a>>

Cc: Yelle, William E < William Yelle@uml.edu>

**Subject:** Cryptocurrency Debate

Hi Jack and Bill,

I am coordinating some logistics and a promotional piece for your October 27 debate. I would like to confirm the final title of the debate: "Cryptocurrency: Today's Fad". Also, it would be helpful if you can share a headshot. short bio, and abstract for the promo piece.

Thanks,

Tricia Morena

MANNING SCHOOL OF BUSINESS

Program Administrator - Jack M. Wilson Center for Entrepreneurship

Global Entrepreneurship Exchange – GE2

E: patricia morena@uml.edu

T: 978-934-2876

# **Scam List**

Celsius: Freezes accounts. (\$1.2 B-\$4.7 Billion) Accused in lawsuit of fraud and Ponzi scheme

Terra-USD: Stable Coin disappears due to run on bank (\$60 Billion including Luna)

Luna: Collapses when lack of value is found

Voyager Bankrupt and Ordered to Cease False Promises About U.S. Banking Insurance

Beanstalk: POS theft of \$182 million

Axie Infinity hacked, \$615 million stolen (probably N. Korean theft)

Titanium Blockchain CEO Pleads Guilty to Fraud

Nomad: Theft of \$192 million in stable coin and Ether

Tesla: Pump and Dump

Ethereum: DAO hack steals \$60 million

Squid Game scam: Classic "Rug Pull" steals \$3.36 million

Day of Defeat: Rug Pull theft of \$1.35 million after promising 10 million times return on investment due to "mystery plan."

3Ac-Three Arrows Capital: Bankrupt, Founders absconded, lost \$10 B (\$200 million loss in Luna)

FTX and Alameda go bankrupt and Samuel Bankman-Fried is arrested. Caroline Ellison pleads guilty to fraud.

# **Crypto-Tech Descriptions**

#### 11-15-22 WSJ: FTX Debacle Could Drag Down Decentralized Crypto Too

Decentralized finance doesn't provide a solution to many of crypto's deeply-rooted problems, nor will it be left alone by regulators

https://www.wsj.com/articles/ftx-debacle-could-drag-down-decentralized-crypto-too-11668511696

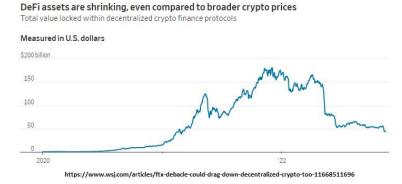
For many proponents of digital currencies, the demise of crypto exchange FTX shows the line between "bad" centralized crypto and its "good" decentralized counterpart. Unfortunately, the two are more intertwined than fans may care to admit.

The FTX debacle has spread, prompting investors to dump digital currencies and quit other centralized crypto venues. Trading house Alameda Research, an affiliate of FTX that blew a hole in its balance sheet, used to have a big role in market making, and its absence is worsening price swings, according to analytics firm Kaiko. The latest ructions follow a round of failures among crypto lenders that started in May, also triggered by excessive risk and opaque practices.

It looks like a final indictment of crypto's efforts to ape Wall Street with its own answers to Goldman Sachs and JPMorgan. If this is a game of trust, nobody should put their faith in a crypto king rather than a banker with a direct line to myriad liquidity providers—including the central bank—and the protection of deposit insurance.

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The lesson to learn from FTX isn't just that opacity is bad, but that all of crypto is a deeply interconnected ecosystem in which assets are created without relation to real-world wealth and then used as collateral to further inflate what boils down to a single, enormous credit risk—crypto itself.



11-4-22: CNBC: Web inventor Tim Berners-Lee wants us to 'ignore' Web3: 'Web3 is not the web at all' <a href="https://www.cnbc.com/2022/11/04/web-inventor-tim-berners-lee-wants-us-to-ignore-web3.html">https://www.cnbc.com/2022/11/04/web-inventor-tim-berners-lee-wants-us-to-ignore-web3.html</a>
KEY POINTS

- Tim Berners-Lee, the computer scientist credited with inventing the World Wide Web, said he doesn't view blockchain as a viable solution for building the next iteration of the internet.
- "In fact, Web3 is not the web at all," he told an audience at the Web Summit tech conference in Lisbon.
- Berners-Lee said people too often conflate Web3 with "Web 3.0," his own proposal for reshaping the internet.

LISBON, Portugal — The creator of the web isn't sold on crypto visionaries' plan for its future and says we should "ignore" it.

He has his own web decentralization project called Solid.

"It's important to clarify in order to discuss the impacts of new technology," said Berners-Lee, speaking onstage at the Web Summit event in Lisbon. "You have to understand what the terms mean that we're discussing actually mean, beyond the buzzwords."

"It's a real shame in fact that the actual Web3 name was taken by Ethereum folks for the stuff that they're doing with blockchain. In fact, Web3 is not the web at all."

Web3 is a nebulous term in the tech world used to describe a hypothetical future version of the internet that's more decentralized than it is today and not dominated by a handful of powerful players such as Amazon, Microsoft and Google.

It involves a few technologies, including blockchain, cryptocurrencies and nonfungible tokens.

While breaking our personal data out of Big Tech's clutches is an ambition shared by Berners-Lee, he's not convinced blockchain, the distributed ledger technology that underpins cryptocurrencies like bitcoin, will be the solution.

"Blockchain protocols may be good for some things but they're not good for Solid," a web decentralization project led by Berners-Lee, he said. "They're too slow too expensive and too public. Personal data stores have to be fast, cheap and private."

"Ignore the Web3 stuff, random Web3 that was built on blockchain," he added. "We're not using that for Solid."

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# 10-15-21 NYT: A Crypto Optimist Meets a Crypto Skeptic

https://www.nytimes.com/2021/10/15/opinion/ezra-klein-podcast-katie-haun.html

Katie Haun and I discuss the future cryptocurrency could create. Ezra Klein

I think the thing people need to understand about, for example, the Bitcoin application here, is that it's the bits and bytes that are actually the bearer instruments. It's as if I showed up and handed you a suitcase full of cash.

# The Decline and Fall of the Crypto Empire

# 1-16-2023 NYT: The Crypto Collapse and the End of the Magical Thinking That Infected Capitalism

https://www.nytimes.com/2023/01/16/opinion/the-crypto-collapse-magical-thinking-capitalism.html

By Mihir A. Desai: Mr. Desai is a professor at Harvard Business School and Harvard Law School.

At a guest lecture at a military academy when the price of a single Bitcoin neared \$60,000, I was asked, as finance professors often are, what I thought about cryptocurrencies. Rather than respond with my usual skepticism, I polled the students. More than half of attendees had traded cryptocurrencies, often financed by loans.

I was stunned. How could this population of young people come to spend time and energy in this way? And these students were hardly alone. The appetite for crypto has been most pronounced among Gen Z and millennials. Those groups became investors in the past 15 years at previously unseen rates and with exceedingly optimistic expectations.

I have come to view cryptocurrencies not simply as exotic assets but as a manifestation of a magical thinking that had come to infect part of the generation who grew up in the aftermath of the Great Recession — and American capitalism, more broadly.

For these purposes, magical thinking is the assumption that favored conditions will continue on forever without regard for history. It is the minimizing of constraints and trade-offs in favor of techno-

utopianism and the exclusive emphasis on positive outcomes and novelty. It is the conflation of virtue with commerce.

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With Bitcoin now trading at around \$17,000, and amid declining stock valuations and tech sector layoffs, these ideas have begun to crack. The unwinding of magical thinking will dominate this decade in painful but ultimately restorative ways — and that unwinding will be most painful to the generation conditioned to believe these fantasies.

Cryptocurrency is the most ideal vessel of these impulses. A speculative asset with a tenuous underlying predetermined value provides a blank slate that meaning can be imposed onto. Crypto boosters have promised to replace governments by supplanting traditional currencies. They vowed to reject the traditional banking and financial system through decentralized finance. They said they could reject the purported stranglehold of internet giants on commerce through something called Web 3.0. They insisted we could reject the traditional path toward success of education, savings and investment by getting in early on dogecoin, a meme coin intended as a joke that reached a peak market capitalization of over \$80 billion.

These illusory and ridiculous promises share a common anti-establishment sentiment fueled by a technology that most of us never understood. Who needs governments, banks, the traditional internet or homespun wisdom when we can operate above and beyond?

#### ---more---

Embracing novelty and ambition in the face of huge problems is to be lauded, but the unhinged variety of these admirable traits that we have seen so much of in recent years is counterproductive. The fundamentals of business have not changed merely because of new technologies or low interest rates. The way to prosper is still by solving problems in new ways that sustainably deliver value to employees, capital providers and customers. Over-promising the scope of change created by technology and the possibilities of business and finance to a new generation will lead only to disaffection as these promises falter. All those new investors and crypto owners may nurse a grudge against capitalism, rather than understand the perverse world they were born into.

The end of magical thinking is upon us as cryptocurrencies and valuations are collapsing — and that is good news. Vested interests will resist that trend by continuing to propagate fictions. But rising rates and a return to more routine business cycles will continue to provide the rude awakening that began in 2022.

#### 1-13-23 NYT Dealbook: Andrew Ross Sorkin -S.E.C. goes after "ill-gotten" crypto gains

Washington's legal crackdown on crypto is intensifying, with the S.E.C. accusing some of the biggest names in the sector of operating an illegal lending service that racked up huge losses for customers.

The S.E.C. complaint: The agency charged the crypto lender Genesis Global Capital and its erstwhile business partner, the crypto exchange Gemini, with selling unregistered securities through a high-yield financial product called Gemini Earn. Genesis is a subsidiary of Digital Currency Group, founded by the crypto magnate Barry Silbert; Gemini is run by the billionaire twins Tyler and Cameron Winklevoss.

The firms are accused of leveraging the popularity of Gemini Earn — which promised customers a return on their investment of up to 8 percent — to raise billions. The problem: They violated securities laws by failing to adhere to "disclosure requirements designed to protect investors," said the S.E.C. chair, Gary Gensler.

The losses are massive. The S.E.C. says 340,000 Earn customers are out of pocket by about \$900 million. The complaint seeks civil penalties, injunctive relief and payback "of ill-gotten gains." In a tweet yesterday, Tyler Winklevoss said Earn was regulated by the New York Department of Financial Services and the company had complied with all rules. He added that the S.E.C. charges were "counterproductive" as the firms worked to recover customer funds. (Genesis did not immediately respond to a request for comment.)

Genesis and Gemini were already feuding over the funds. After the crypto exchange FTX imploded in November, Genesis froze withdrawals, leaving Earn customers stranded. Negotiations between the Winklevosses and DCG have since broken down into a nasty public spat.

The S.E.C. has zeroed in on crypto lending. Last year, the agency reached a \$100 million settlement with the now-bankrupt crypto lender BlockFi. In 2021, Coinbase abandoned plans to launch a yield-generating product and blamed the S.E.C. for deeming it a security.

Meanwhile, Sam Bankman-Fried went on defense in the court of public opinion. The 30-year-old founder of FTX is facing criminal fraud charges and awaiting trial at his parents' Silicon Valley home. He has an ankle monitor restricting his movements, but he still has internet access, and he took to Substack to reiterate a narrative that prosecutors, regulators and industry experts have previously rejected.

Bankman-Fried denied claims he siphoned billions from his companies. "I didn't steal funds," he wrote. Bankman-Fried pointed a finger at the law firm Sullivan & Cromwell, saying it should not be allowed to work on the FTX bankruptcy because it advised the company on transactions in the past. The firm is under increased scrutiny, including from senators, about its work as counsel to FTX.

#### Elsewhere in crypto:

- Bill Ackman, C.E.O. of Pershing Square Capital Management, again came to the defense of Bankman-Fried, asking his nearly 600,000 Twitter followers not to rush to judgment.
- The exchange Crypto.com announced it would lay off 20 percent of its staff, its second round of cuts in six months as the wider rout in crypto asset prices takes a toll.

# 12-27-22 Benzinga: Crypto Mass Extinction: Kevin O'Leary's Prediction Vs AlphapleaseHQ Founder's List Of 10 Survivors

https://www.msn.com/en-us/money/news/crypto-mass-extinction-kevin-o-leary-s-prediction-vs-alphapleasehq-founder-s-list-of-10-survivors/ar-

AA15K4Ft?ocid=msedgntp&cvid=f3035b8e170049008c24d4928c74573a

As we approach the end of 2022, in the midst of a crypto bear market and record-breaking inflation, pundits and investing experts in the space are looking to sort out the winners and losers of this market correction.

In a keynote interview during the Dec. 7 Benzinga Future of Crypto summit, investor and "Shark Tank" host Kevin O'Leary said: "When those things get cleared up, it will likely be ten coins, and I'll invest in all of them, the rest are as they say sh\*tcoins, and they'll go to zero," O'Leary said.

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The likely contenders for growth in 2023, according to @Aylo\_pls include:

- .1. Ethereum (CRYPTO: ETH) He cited the fact that Ethereum has established Proof-of-Stake (POS) validation, is less inflationary than BTC, and that proto-danksharding will 100x scale the blockchain next year.
- 2. Polygon (CRYPTO: MATIC) Citing major brands partnerships, the second-highest rate of transactions, second-highest daily transactions (all chains), 5.7 million DEX traders (a statistic not reported in their recent yearly update), and zkEVM solution.
- 3. Arbitrum (CRYPTO: ARBI) Aribitrum has the fourth-biggest Total Value Locked (TVL), a 500% growth of active developers, and a partnership with Reddit.
- 4. StarkNet (ERC-20 StarkNet Token) Has 98,000 users in Alpha, a partnership with Visa, and \$100 million in Series D fundraising with an \$8 billion valuation.
- 5. Chainlink (CRYPTO: LINK) Based on its 1500+ integrations, \$6 trillion in total value, and live staking v0.1.
- 6. Uniswap (CRYPTO: UNI) He cites Uniswap as the dominant Distributed Exchange (DEX), with 67% market share, \$230 million in fees generated, and \$165 million in series B fundraising.
- 7. AAVE (CRYPTO: AAVE) This premier borrowing/lending protocol, the launch of the GHO stablecoin, and Financial Conduct Authority (FCA) licensing in the U.K.
- 8. Lido (CRYPTO: LDO) He calls Lido the premier liquid staking protocol with over 240,000 users, a 66% market share, \$6 billion in stakes assets, and \$45 million in revenue.
- 9. Curve (CRYPTO: CRV) The platform has nearly a 50% market share of stable trading volume and \$100 million in fees generated. Curve is also due to launch the CRV stablecoin.
- 10. GMX (CRYPTO: GMX) This dominant on-chain trading platform has \$73 billion in trading volume, 170,000 users, and \$100 million in fees.

In responses, @Aylo\_pls said the list of projects expected to thrive instead of just survive would be "a much shorter list."

At Benzinga's Future of Crypto event, O'Leary argued that more regulation is needed for the cryptocurrency market, with other countries like Canada, Switzerland, and the United Kingdom far ahead of the U.S. "I think it's to our detriment, we've lagged here," O'Leary said. O'Leary pointed out that we have regulations for exchanges like the Nasdaq and New York Stock Exchange and asked why we don't have regulations for crypto. "Those have rules, we just have to apply them to these exchanges."

#### 11-27-22 WSJ: Crypto's Final Price Could Be Zero

No sane lender would extend credit against assets lacking any underlying collateral.

https://www.wsj.com/articles/cryptos-final-price-could-be-zero-technology-debt-lbo-twitter-musk-bankman-fried-ftx-market-cap-coin-11669567022?mod=hp\_trending\_now\_opn\_pos2

There aren't many leveraged buyouts of technology companies, and for good reason. Technology and debt, like Red Bull and milk, don't mix. Why? Because when technology works, it commands high valuations. You can't LBO Google. But when technology moves on to the next new thing, there isn't much residual value in the form of assets and collateral to call on in case of debt defaults. FTX, Elon Musk and SoftBank are learning this lesson.

Twitter, which last turned a profit in 2019, now has \$1 billion a year in debt payments. Wall Street can't off-load Twitter's buyout debt, now maybe 60 cents on the dollar, without losing money. Mr. Musk even told employees "bankruptcy isn't out of the question." Of course, he has benefited from selling his own highly valued (though declining) Tesla shares, recently another \$4 billion for a total of more than \$19 billion. As Chief Twit, Mr. Musk proclaims Twitter will operate under free-speech principles. Advertisers are fleeing. So are employees. If he defaults and walks away, the only thing left is some aging code and a few plastic blue birds to sell at auction.

The new poster child for the toxic cocktail of technology and debt is Sam Bankman-Fried, with his imploded FTX and Alameda empires. Sure, these companies misappropriated, to put it nicely, customers' assets. And yes, withdrawals that acted like a bank run drove the company into Chapter 11. But the company's original sin was to borrow against its own FTT token, which was held up by nothing but air.

This was crypto's mass delusion. FTT was so thinly traded that FTX could set any price, but not forever. FTX and Alameda borrowed against tokens they themselves were manipulating, including Solana and others, which some called Sam Coins, now Scam Coins. The fatal conceit: They thought FTT would stay high forever, so they invested in often illiquid positions. FTX was even paying employees, vendors and whoever else would take it in FTT tokens, whose total market cap used to be almost \$10 billion and is now about \$400 million.

You can't manipulate something forever. Reality eventually replaces delusion. All it took was someone to touch a pin to the bubble. After Coindesk leaked a copy of Alameda's balance sheet loaded with FTT tokens, Binance CEO Changpeng Zhao started selling. FTT went from \$22 to under \$3 in 48 hours. So much for collateral. When the smoke clears, FTX/Alameda may have \$8 billion to \$15 billion in debt outstanding, with little to sell for repayment. It will take years to sort out who gets what.

Meanwhile, others also barreled in. A cottage industry of firms emerged to lever up crypto. This is when things turned toxic. The first task was to lure customers by paying interest on their crypto holdings. The Anchor Protocol behind the spectacularly imploded Terra-Luna algorithmic tokens was paying up to 20%.

Other platforms such as Binance and Crypto.com would pay 4%, 8% or more on crypto as well, suckering in the masses who could earn only 0.01% interest from, well, real banks. But how could anyone pay interest on crypto? By turning around and lending it out to hedge funds and others who also used leverage. Insanity.

Genesis Global Capital created a lending platform to facilitate borrowing crypto. Lending against what? Again, just air. Firms such as Gemini, set up by the Winklevoss twins, were paying 8% interest, so customers could harvest yields. Why was there any yield on crypto? Good question. It worked on the way up, not so much on the way down. Crypto was lent out like a hot potato until someone got stuck with the value down 90% and everyone else left with defaulted debt. This was probably the only way the delusion could have ended.

Most of these platforms are now frozen and might disappear as customers caught with a hot potato frantically demand withdrawals in the wake of the FTX collapse. Of course, all these crypto lenders had to do was ask: What's the underlying collateral? Where are the assets? With no good answer, no sane lender would have lent against it. But no one asked.

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# 11/26/22 WSJ: Wall Street's 'Dr. Doom' calls crypto 'corrupt gambling' and rips 'proof of reserves' trumpeted after FTX collapse

https://www.msn.com/en-us/money/markets/wall-street-s-dr-doom-calls-crypto-corrupt-gambling-and-rips-proof-of-reserves-trumpeted-after-ftx-collapse/ar-AA14AAs4?ocid=msedgntp&cvid=976397ca24e24ddabd72416b82e15128

On Friday morning, Binance announced the release of its proof of reserve system, starting with Bitcoin. It wrote on its site, "Following our recent announcement outlining our commitment to transparency, Binance is releasing its Proof of Reserves (PoR) System, which is the next step in our effort to provide transparency on user funds. The launch of this feature will start initially with BTC, with other tokens and networks being added in the next couple of weeks."

The same day, Roubini tweeted, "Crypto is corrupt gambling where the house always & systematically front runs the retail suckers that get rekt. 100+ million suckers rekt globally by a bunch of crypto gangsters."

Earlier this week, he tweeted, "Proof of Reserves (PoR) is the gimmick used by crypto exchanges/lending platforms to pretend that their customers funds are safe. As these assets are in the exchange custody they are on its balance sheet & customers assets aren't safe in bankruptcy. These are banks NOT exchanges!"

He also retweeted posts from others, including one on Saturday from Bitfinex'ed reading, "Exchanges are trying to do so-called proof of reserves to show that they have customers funds. Remember folks,

proof of reserves are meaningless. Exchanges borrow from one another to show the crypto. That's why you see 'accidental' transfers of hundreds of millions of dollars."

Roubini also called the cryptocurrency industry "totally corrupt" while speaking at Abu Dhabi Finance Week on Nov. 16. He urged Emiratis to expel Binance exchange founder Changpeng "CZ" Zhao—a resident of the United Arab Emirates who has a license to operate in the country—likening him to disgraced FTX founder Sam Bankman-Fried.

"He's banned in the U.K., he's under investigation by the U.S. justice department for money laundering...and he's here on this stage and has residence in this country," Roubini said. "He's a walking time bomb, he should be kicked out of the country."

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### 11/23/22 WSJ How Crypto's Collapse May Have Done the Economy a Favor

Crypto's lack of connections with traditional finance means its problems haven't spilled over to the economy

https://www.wsj.com/articles/how-cryptos-collapse-may-have-done-the-economy-a-favor-11669215926?mod=hp lead pos7

This year's crypto collapse has all the hallmarks of a classic banking crisis: runs, fire sales, contagion.

What it doesn't have are banks.

Check out the bankruptcy filings of crypto platforms Voyager Digital Holdings Inc., Celsius Network LLC and FTX Trading Ltd. and hedge fund Three Arrows Capital, and you won't find any banks listed among their largest creditors.

While bankruptcy filings aren't entirely clear, they describe many of the largest creditors as customers or other crypto-related companies. Crypto companies, in other words, operate in a closed loop, deeply interconnected within that loop but with few apparent connections of significance to traditional finance. This explains how an asset class once worth roughly \$3 trillion could lose 72% of its value, and prominent intermediaries could go bust, with no discernible spillovers to the financial system.

"Crypto space...is largely circular," Yale University economist Gary Gorton and University of Michigan law professor Jeffery Zhang write in a forthcoming paper. "Once crypto banks obtain deposits from investors, these firms borrow, lend, and trade with themselves. They do not interact with firms connected to the real economy."

A few years from now, things might have been different, given the intensifying pressure on regulators and bankers to embrace crypto. The crypto meltdown may have prevented that—and a much wider crisis.

Crypto has long been marketed as an unregulated, anonymous, frictionless, more accessible alternative to traditional banks and currencies. Yet its mushrooming ecosystem looks a lot like the banking system, accepting deposits and making loans. Messrs. Gorton and Zhang write, "Crypto lending platforms recreated banking all over again... if an entity engages in borrowing and lending, it is economically equivalent to a bank even if it's not labeled as one."

And just like the banking system, crypto is leveraged and interconnected, and thus vulnerable to debilitating runs and contagion. This year's crisis began in May when TerraUSD, a purported stablecoin—i.e., a cryptocurrency that aimed to sustain a constant value against the dollar—collapsed as investors lost faith in its backing asset, a token called Luna. Rumors that Celsius had lost money on Terra and Luna led to a run on its deposits and in July Celsius filed for bankruptcy protection.

Three Arrows, a crypto hedge fund that had invested in Luna, had to liquidate. Losses on a loan to Three Arrows and contagion from Celsius forced Voyager into bankruptcy protection.

Meanwhile FTX's trading affiliate Alameda Research and Voyager had lent to each other, and Alameda and Celsius also had exposure to each other. But it was the linkages between FTX and Alameda that were the two companies' undoing. Like many platforms, FTX issued its own cryptocurrency, FTT. After this was revealed to be Alameda's main asset, Binance, another major platform, said it would dump its own FTT holdings, setting off the run that triggered FTX's collapse.

Genesis Global Capital, another crypto lender, had exposure to both Three Arrows and Alameda. It has suspended withdrawals and sought outside cash in the wake of FTX's demise. BlockFi, another crypto lender with exposure to FTX and Alameda, is preparing a bankruptcy filing, the Journal has reported.

To be sure, some investors, from unsophisticated individuals to big venture-capital and pension funds, have sustained losses, some life-changing. But these are qualitatively different from the sorts of losses that threaten the solvency of lending institutions and the broader financial system. While such losses can't be ruled out, banks' exposure to crypto comes primarily from supplying custodial and payment services and holding crypto companies' cash, such as to back stablecoins.

Traditional finance had little incentive to build connections to crypto because, unlike government bonds or mortgages or commercial loans or even derivatives, crypto played no role in the real economy. It's largely been shunned as a means of payment except where untraceability is paramount, such as money laundering and ransomware. Much-hyped crypto innovations such as stablecoins and DeFi, a sort of automated exchange, mostly facilitate speculation in crypto rather than useful economic activity.

#### 11-17-22 WSJ: Is This the End Game for Crypto?

#### https://www.nytimes.com/2022/11/17/opinion/crypto-banks-regulation-ftx.html

Recent events have made clear the need to regulate crypto, an industry that grew from nothing to a \$3 trillion market capitalization a year ago, although most of that has now evaporated. But it also seems likely that the industry couldn't survive regulation.

The story so far: Crypto reached its peak of public prominence last year, when Matt Damon's "Fortune favors the brave" commercial — sponsored by the Singapore-based exchange Crypto.com — first aired. At the time Bitcoin, the most famous cryptocurrency, was selling for more than \$60,000.

Bitcoin is now trading below \$17,000. So people who bought after watching the Damon ad have lost more than 70 percent of their investment. In fact, since most people who bought Bitcoin did so when its price was high, most investors in the currency — around three-quarters of them, according to a new analysis by the Bank for International Settlements — have lost money so far.

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

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It has never been clear exactly why anyone other than criminals would want to do this. Although crypto advocates often talk about the 2008 financial crisis as a motivation for their work, that crisis never impaired the payments system — the ability of individuals to transfer funds via banks. Still, the idea of a monetary system that wouldn't require trust in financial institutions was interesting, and arguably worth trying.

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Furthermore, trust in conventional financial institutions rests in part on validation by Uncle Sam: The government supervises banks, regulates the risks they can take and guarantees many deposits, while crypto operates largely without oversight. So investors must rely on the honesty and competence of entrepreneurs; when they offer exceptionally good deals, investors must believe not just in their competence but in their genius.

How has that been working out?

As boosters love to remind us, previous predictions of crypto's imminent demise have proved wrong. Indeed, the fact that Bitcoin and its rivals aren't really usable as money needn't mean that they become worthless — you can, after all, say the same thing about gold.

But if the government finally moves in to regulate crypto firms, which would, among other things, prevent them from promising impossible-to-deliver returns, it's hard to see what advantage these firms would have over ordinary banks. Even if the value of Bitcoin doesn't go to zero (which it still might), there's a strong case that the crypto industry, which loomed so large just a few months ago, is headed for oblivion.

#### 11-13-22 TheStreet: Crypto Crisis: Billionaire Mark Cuban Attacks the System

The star of the hit show Shark Tank is a prominent investor in the cryptocurrency industry.

https://www.thestreet.com/technology/crypto-crisis-billionaire-mark-cuban-attacks-the-stock-market

The abrupt implosion of the FTX cryptocurrency exchange has sent an earthquake shock to the industry and beyond.

The financial woes of the company, which was valued at \$32 billion in February, surprised many, as the firm and its CEO and founder Sam Bankman-Fried, had emerged as the saviors of many struggling crypto businesses in the summer.

They had bailed out prominent crypto lenders like BlockFi, Voyager Digital, Celsius Network and Robinhood (HOOD) - Get Free Report, which had suffered a liquidity crunch due to the abrupt collapse of sister cryptocurrencies Luna and UST, or TerraUSD.

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For Cuban, these shares have "no intrinsic value."

"Their only value comes from selling to someone believing that the share will go up in value," Cuban said. "To increase demand, the company will market their stocks to funds and brokers in hopes they will buy their stocks and recommend them to their clients. One tool is quarterly earnings calls. Another is by creating modified reporting structures like EBITDA and other invented metrics."

EBITDA refers to earnings before interest, taxes, depreciation and amortization, which helps investors to gauge the financial health of a company.

Basically, the information that companies often give to investors is exaggerated at best and falsified at worst.

"Unfortunately for suckers, I mean investors, there are thousands of SEC approved companies that trade off the major exchanges for which there is little regulation, less information or liquidity, and where we often see BANKRUPT companies trade millions of shares," Cuban concluded.

### 11-11-22 NYTimes: The Crypto Ponzi Scheme Avenger

https://www.nytimes.com/2022/11/11/business/crypto-ponzi-scheme-hyperfund.html

The Crypto Ponzi Scheme Avenger -From his home in New Zealand, the YouTuber Danny de Hek assails what he calls a dangerous and deceptive scheme, one rant at a time.

Last year, Danny de Hek was a social media guru badly in need of a social media guru. A buoyant New Zealander with geeky glasses, he dispensed advice about how to vastly expand your online audience, to a group of just 350 subscribers.

He earned a living by drop shipping electronics as he searched for ways to make serious money. Then, in February, the husband of a friend sent the 52-year-old Mr. de Hek an email crowing about a company that somehow guaranteed outsize and clockwork returns. Investors in what was then known as HyperFund — it has since been rebranded twice — could triple their money in 600 days.

"It's the best passive income retirement plan I have ever seen," the acquaintance wrote. Get in now then sit back and watch the cash roll in.

The message changed Mr. de Hek's life, though not in the way his friend might have hoped. After a few days of looking into HyperFund, Mr. de Hek concluded it was a scam, one that he estimates has attracted at least \$1 billion by recruiting thousands of participants, some of whom put up as little as \$300 or as much as \$50,000 or more.

By March, he had crafted a new online identity: crypto Ponzi scheme buster. Mr. de Hek has since denounced HyperFund in more than 130 videos posted to YouTube, some of them nearly two hours long, lecturing viewers in a style that toggles between goofball and scold.

"When I looked into HyperFund, to me it just seemed black and white," Mr. de Hek said during one of several interviews from his home in Christchurch. "Then I thought, I need to warn people about this."

Mr. de Hek is one of the few voices flagging crypto-based Ponzi schemes, which U.S. investigators say are a severely underpublicized scourge. The past week has shown just how volatile the market is: One of the largest cryptocurrency exchanges in the world, FTX, collapsed and the industry, is in meltdown.

## FTX: The Collapse of FTX and Samuel Bankman-Fried

#### 12-31-22 NY Post: How Sam Bankman-Fried 'Madoff' with regulators

https://www.msn.com/en-us/money/markets/how-sam-bankman-fried-madoff-with-regulators/ar-AA15R2pZ?ocid=msedgntp&cvid=f02e9c7d4565482584498df0d52efc60

(Comparing Madoff to Bankman-Fried)

To his credit, Securities and Exchange Commission chief Gary Gensler is arguing that the Sam Bankman-Fried crypto scandal doesn't mean we need more regulations to rein in digital-coin excess and fraud. Laws are on the books that give the current regulatory and legal system plenty of tools to prosecute bad actors. Plus theft has been illegal since the beginning of civilization.

But if our regulators are properly armed, how did the furry-haired alleged fraudster get away with something that could rival the wrongdoing of the notorious Bernie Madoff and his \$65 billion Ponzi swindle?

To answer that question, you need to dissect how both Madoff and the dude known as SBF worked the regulatory apparatus — "capturing" it, if you will, so that the inquiring minds in government didn't think it was worth their time to look into the duo's too-good-to-be-true dealings.

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For years, Madoff was considered a virtuous member of the Wall Street club — and his access to the system of checks and balances to detect fraud was vast. He helped create the Nasdaq stock market, became a senior member of its self-regulatory organization. He and his firm partners worked in various capacities in the financial industry's main lobby group. Madoff and his family gave money to connected politicians with financial-system oversight responsibilities. His compliance officer, a niece, was married to an SEC official.

Madoff had a prominent market-making business and an investment fund that grew to enormous heights on paper — around \$65 billion in alleged assets, making it one of the biggest private investment funds — yet it never generated much interest from the SEC because it had the Madoff name on it.

On paper, his investments produced implausibly stable returns in good markets and bad, eventually prompting a handful of securities-industry insiders to conclude that Bernie was a crook. Whistleblowers went to the SEC, which kicked the tires a bit but not enough.

The 2008 financial crisis, and Madoff's investors needing cash, exposed the fraud the SEC and the alphabet soup of watchdogs missed: Those returns were fictional and investor money was pilfered in a massive Ponzi scheme. Madoff died in prison after serving about 12 years of his 150-year sentence.

Bernie Madoff is infamous for his \$65 billion Ponzi scheme. Louis Lanzano/AP

Shades of Madoff can be seen throughout the SBF narrative as it relates to how Bankman-Fried worked the regulatory apparatus. SBF funneled money to pols with crypto oversight; hired people from crypto

regulatory agencies such as the Commodity Futures Trading Commission to work at his FTX crypto exchange; wined and dined others.

His money to DC opened doors — even at the Biden White House (SBF was a major contributor to the president's 2020 campaign). He was also a favorite speaker before various committees in Congress looking to hear from the millennial crypto sage. Maxine Waters (D-Calif.), head of the House Financial Services Committee, appeared so impressed with SBF's knowledge of crypto that after hearing him speak, she blew him a kiss.

Like Madoff, there were a few SBF skeptics — particularly how he was seemingly thriving while others were getting crushed in the 2022 crypto correction. He ran an exchange and a hedge fund on the side, which is always a recipe for trouble when the hedge fund loses money and customer accounts can be fleeced.

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Like Madoff, SBF is now likely heading to prison. The SEC's charging document lists SBF's impressive array of alleged wrongdoing, having a risk-taking hedge fund associated with customer money in an affiliated exchange, lack of controls, the alleged theft of customer money to trade with, etc., etc.

It's a vast, serious fraud that occurred right under the SEC's nose.

# 12-26-22 WSJ: From Sam Bankman-Fried's arrest to bitcoin plunging below \$20,000, here are the 9 craziest crypto stories of 2022

https://markets.businessinsider.com/news/currencies/crypto-crash-bitcoin-bear-market-sam-bankman-fried-ftx-bankruptcy-2022-12

- 2022 was a brutal year for digital assets as worries about stability rocked the crypto world.
- Bitcoin plunged 64% as interest rate hikes made investors think twice about riskier assets.
- The high-profile collapses of FTX, Celsius, and Three Arrows Capital eroded trust in crypto.

In February, crypto exchange FTX made its Super Bowl debut with a commercial featuring "Curb Your Enthusiasm" star Larry David.



Sam Bankman-Fried was arrested in the Banamas on traud charges. Mario Duncanson/Getty Images

https://markets.businessinsider.com/news/currencies/crypto-crash-bitcoin-bear-market-sam-bankman-fried-ftx-bankruptcy-2022-12

By December, the exchange had collapsed — and its disgraced former CEO Sam Bankman-Fried had been arrested and was facing eight criminal charges in the US.

All in all, 2022 was a brutal year for digital assets, as rising interest rates and high-profile bankruptcies helped feed a broad and deep selloff in the market.

# 12-21-22 Two Bankman-Fried colleagues plead guilty to fraud - Caroline Ellison and Gary Wang helped the disgraced crypto mogul divert funds and are now aiding prosecutors

https://www.washingtonpost.com/business/2022/12/21/caroline-ellison-fraud-charges/

Two former colleagues of disgraced cryptocurrency mogul Sam Bankman-Fried pleaded guilty to federal criminal charges that they helped him orchestrate a years-long scheme to defraud investors in FTX, the crypto trading platform that collapsed last month, the U.S. attorney for the Southern District of New York said Wednesday.

The executives — Caroline Ellison, who served as chief executive of Alameda Research, a hedge fund owned by Bankman-Fried, and Gary Wang, FTX's former chief technology officer — are cooperating with prosecutors, said Manhattan U.S. Attorney Damian Williams.

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In a parallel move, the Securities and Exchange Commission on Wednesday also charged Ellison and Wang with fraud, alleging they helped Bankman-Fried divert FTX customer funds to the hedge fund while misleading investors about it. The agency also alleges Ellison, acting at Bankman-Fried's direction, manipulated the price of FTT, a digital token issued by FTX that the executives used to mislead investors about the health of their businesses.

"When FTT and the rest of the house of cards collapsed, Mr. Bankman-Fried, Ms. Ellison, and Mr. Wang left investors holding the bag," SEC Chair Gary Gensler said in a statement.

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John J. Ray III, brought in to replace Bankman-Fried as FTX's chief executive and manage its liquidation, said he has never seen "such an utter failure of corporate controls at every level of an organization." In testimony before the House Financial Services Committee last week, he blamed the company's collapse on the "absolute concentration of control in the hands of a very small group of grossly inexperienced and unsophisticated individuals."

#### 12-14-22 FTX's Bankman-Fried donated about \$40M this political cycle. Here's who benefited

https://www.washingtonpost.com/business/2022/12/14/sbf-ftx-political-donations/

Sam Bankman-Fried, the disgraced founder of the cryptocurrency exchange FTX, was a prolific political donor, pumping about \$40 million this cycle alone into campaign committees and other groups, mostly aligned with Democrats, federal records show.

His contributions are under scrutiny as federal prosecutors on Tuesday alleged that Bankman-Fried had broken campaign finance laws by sourcing donations from his related crypto hedge fund, Alameda Research, and falsely reporting them as originating from other people.

---List of Contributions----

# 12/14/22 CNN: Why Tom Brady, David Ortiz, Jimmy Fallon and other celebrities are getting sued over crypto

https://www.cnn.com/2022/12/14/tech/celebrity-crypto-lawsuits/index.html

# 12-6-22 Boston Globe: Caroline Ellison, math whiz and Newton native, was bound for success. Then she got into crypto.

By Anissa Gardizy Globe Staff, Updated December 6, 2022, 8:26 p.m.

https://www.bostonglobe.com/2022/12/06/business/caroline-ellison-math-whiz-newton-native-was-bound-success-then-she-got-into-

crypto/?p1=Article Recirc Most Popular&p1=Article Recirc Most Popular

At an exclusive party in the Bahamas last spring, FTX founder Sam Bankman-Fried was perched atop a patio railing, mingling with pop star Katy Perry and actor Orlando Bloom. FTX was one of the hottest cryptocurrency exchanges of the moment, and Bankman-Fried was surrounded by people vying for attention.

cross the patio, keeping to herself, was one of Bankman-Fried's key lieutenants, Caroline Ellison, who ran the crypto trading firm he founded, Alameda Research. She didn't appear fazed by the celebrities, and party-goer David Micley found it easy enough to strike up a conversation with her.

"She didn't seem like a person that took herself too seriously or thought of herself as too important," said Micley, who works in the crypto industry and described the party scene to the Globe.

Ellison did not mention her position at Alameda for a few minutes and didn't say much about her work, Micley said. Instead, the two made small talk after discovering they were both from Newton.

Seven months later, Ellison is now very much the subject of attention. In a few stunning days, FTX went from being a darling of the crypto industry to filing for bankruptcy — and its close relationship with Alameda is at the center of the collapse.

A Nov. 2 story from CoinDesk showed that much of Alameda's assets were held in FTT, the trading token issued by its sister company. That sparked liquidity concerns and a series of cascading events, with investors withdrawing some \$5 billion from FTX and a bailout from investors falling through.

FTX, Alameda, and other subsidiaries filed for bankruptcy protection on Nov. 11, and Bankman-Fried resigned as CEO of FTX. The same day, The Wall Street Journal reported that FTX lent customer funds to Alameda, which was against the exchange's terms of service agreement. Ellison was fired as CEO of Alameda, and investigators in the United States and the Bahamas are trying to determine what happened.

Now, those who knew the 28-year-old from Massachusetts wonder how she got involved in the Wild West of the crypto industry in the first place. A child of two members of the faculty at MIT, Ellison sailed through high school, won accolades for her excellence in math, attended Stanford University, and worked on Wall Street.

Ellison did not respond to multiple requests for an interview, and her parents would not comment for this story. What is known about her comes from conversations and online exchanges with more than a dozen people who knew her — high school classmates, teachers, acquaintances — as well as her Tumblr blog and podcast interviews she's given in recent years.

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"Most things came naturally to her," Golick said. "It did not surprise me that she ended up a CEO so young." What surprised her was that Ellison would be associated with a scandal. "She never cheated, that was definitely not her," Golick said.

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Ellison joined Alameda as a trader in 2018 and immediately noticed how different it was to trade crypto at a startup, compared to equities at an established firm such as Jane Street. She also saw how moving quickly in the nascent crypto market could be more lucrative. "As a trader, the most fun thing is to make money," she said on a podcast.

In 2019, Bankman-Fried founded the crypto exchange FTX in the Bay Area, relocating first to Hong Kong and then the Bahamas in search of a more favorable regulatory environment. Alameda also shifted operations to Hong Kong, and Ellison moved there in 2019.

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Since the rapid collapse in November, Ellison has been quiet. By contrast, Bankman-Fried has been anything but. In several interviews or public appearances, he has made eye-popping statements about the internal operations of the firms, and what role he did — or did not — play in their demise.

For example, in a virtual interview at The New York Times DealBook Summit last week, Bankman-Fried said he didn't try to commit fraud or knowingly send FTX customer funds to his trading firm.

"I wasn't running Alameda, I didn't know exactly what was going on," he said in the interview. "I haven't been making those decisions."

While much remains to be pieced together, a quip Ellison made about the crypto industry on her blog earlier this year may have more of a ring of karma to it than she intended.

"Yeah, it's mostly scams and memes when you get down to it," she wrote.

### 11-11-22 NYTimes: Investors Who Put \$2 Billion Into FTX Face Scrutiny, Too

Venture capital firms and investment funds showered the failed crypto exchange and its founder with money. There were few strings attached.

https://www.nytimes.com/2022/11/11/technology/ftx-investors-venture-capital.html#:~:text=FTX's%20list%20of%20investors%20spans,Holdings%2C%20BlackRock%20and%20Thoma%20Bravo

Sam Bankman-Fried's pitch to investors was not much of a pitch: It was a take-it-or-leave-it offer.

In meetings to raise money for his cryptocurrency exchange FTX over the last year, the entrepreneur left little room for negotiation, two investors said. FTX was his company, Mr. Bankman-Fried told them,

and he planned to run it with little oversight. Interested investors should "support him and observe," one investor who heard the pitch said.

They responded by giving him \$500 million early this year, valuing the privately held FTX at \$32 billion.

This week, Mr. Bankman-Fried met with investors again — but with a different tone. FTX had collapsed overnight, putting billions of dollars in customer funds in jeopardy, setting off a slew of government investigations and thrusting the crypto markets into chaos. He was sorry, he said. He had messed up. Without a bailout, FTX could fail.

It was a humbling fall for Mr. Bankman-Fried, 30, who had cultivated a reputation as an iconoclastic wunderkind who could multitask effortlessly and slept on a beanbag at the office. Yet more than 80 investors went along with his vision, pouring nearly \$2 billion into FTX in just two years.

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FTX's list of investors spans powerful and well-known investment firms: NEA, IVP, Iconiq Capital, Third Point Ventures, Tiger Global, Altimeter Capital Management, Lux Capital, Mayfield, Insight Partners, Sequoia Capital, SoftBank, Lightspeed Venture Partners, Ribbit Capital, Temasek Holdings, BlackRock and Thoma Bravo.

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Four FTX investors, who declined to be identified, said they were shocked by the company's sudden collapse. They said they had properly researched the company's financials, which showed a healthy, growing business that provided an easy-to-use platform for people to buy, sell and store crypto. And they were completely in the dark about FTX's possible self-dealing with Alameda, they said.

Investing in FTX gave them a piece of the hottest start-up in an emerging sector that promised to be as big as smartphone apps or the internet itself. Many investors had trumpeted their support of the deal. Sequoia even published a glowing profile of Mr. Bankman-Fried to its website.

Now the deal represents a major black eye.

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But even by 2021's frothy standards, Mr. Bankman-Fried's latitude from investors was extreme. Despite raising \$2 billion, he remained the majority owner of the company. No investors joined FTX's board of directors, which was made up of Mr. Bankman-Fried, an FTX employee and a lawyer. (An advisory board of investors had no functional control over the company.) The company did not tell investors the nature of its business with Alameda Research, Mr. Bankman-Fried's separate crypto trading operation.

Mr. Bankman-Fried was so averse to outside input that investors who dared suggest that a more experienced executive run the company were likely to be shut out of future rounds of funding, one investor said.

**Paradigm**, a crypto-focused venture fund that put \$278 million into FTX, told its own backers in a letter on Wednesday that the investment was likely worthless. **Sequoia** said in a statement that it valued its

\$213 million investment in FTX at \$0. The venture capital arm of the **Ontario Teachers' Pension Plan**, which put \$95 million into FTX, said in a statement, "Not all of the investments in this early-stage asset class perform to expectations."

FTX's lack of oversight also left investors out of the loop about what happened this week as Mr. Bankman-Fried tried to find a last-minute bailout.

"The full nature and extent of this risk is not known at this time," **Sequoia** wrote. FTX's liquidity shortfall "will take many months to fully understand," Paradigm said.

Mr. Bankman-Fried, who did not immediately respond to a request for comment, had never made it a secret that he thumbed his nose at tradition.

In an interview with The New York Times in April, Ramnik Arora, one of FTX's top executives, described a video meeting last year between Mr. Bankman-Fried and partners at a top venture firm. In the meeting, Mr. Bankman-Fried delivered a well-received presentation while simultaneously playing a video game.

#### 11-10-22 Forbes: These FTX Investors Stand To Lose The Most From The Crypto Exchange's Implosion

https://www.forbes.com/sites/chasewithorn/2022/11/10/exclusive-these-investors-stand-to-lose-themost-from-ftxs-implosion/?sh=545d04ae2670

No one is set to lose more from FTX's implosion than Sam Bankman-Fried, the crypto wunderkind who founded the exchange and then drove it into the ground this week. His net worth, once as high as \$26.5 billion, has plummeted to less than a billion dollars—one of the fastest falls from the billionaires ranks ever. FTX users and employees may be in for big losses too, with Bankman-Fried now trying to cobble together emergency funding to cover a shortfall of up to \$8 billion as customers demand their money back. "I can't make any promises," he tweeted Thursday. "But I'm going to try."

Then there are FTX's investors.

As the crypto exchange ballooned in size, it became a huge draw for venture capitalists eager to get in on the Bitcoin boom. In June 2021, FTX raised \$1 billion at an \$18 billion valuation from venture investors such as **Paradigm, SoftBank and Sequoia** Capital. Three months later, FTX brought in a \$421 million haul, pushing its valuation to \$25 billion, from investors like Singapore-government owned investment firm **Temasek, Tiger Global Management** and the **Ontario Teachers' Pension Plan**. By January of this year, crypto prices were on the decline, but FTX charged ahead. Investors, many of whom had also pumped money into the earlier rounds, put another \$400 million into FTX—at a \$32 billion valuation.

That \$32 billion figure has gone up in smoke. So has the \$1.8 billion-plus of capital that investors pumped into FTX over the course of three years: Several shareholders have marked their investments in FTX and FTX U.S. down to \$0, including venture capital firm Sequoia and the Ontario Teachers' Pension plan. Forbes did the same, dropping Bankman-Fried and cofounder Gary Wang from our

billionaire's list Wednesday, based on the collapse of both FTX and the pair's trading firm, Alameda Research.

(This analysis does not include shares of FTX U.S., the exchange's American operations, which raised \$400 million at an \$8 billion valuation concurrent with FTX's series C round in January. It's possible that losses from FTX U.S. will push some investors' total investment in Sam Bankman-Fried's empire even higher.)

Temasek	1,526,228	3,815,337	381,557	1,294,448	7,017,570	1.0%
Paradigm	2	4,769,173	22	2,157,413	6,926,586	1.0%
Sequoia	2,289,340	4,769,173	572,335	-	7,630,848	1.1%
OTPP	2,233,504	21	558,376	2	2,791,880	0.4%
Other Investors			110012000110000		300000000000000000000000000000000000000	
Series B Investors	2	24,530,288	2	2	24,530,288	3.5%
Series B-1 Investors	-	-	1,676,573	-	1,676,573	0.2%
Series C Investors	-	-	-	6,026,735	6,026,735	0.9%
Option Pool	20,858,124	5	-	-	20,858,124	3.0%

According to the capitalization table Sam Bankman-Fried sent Forbes in August, investors who stand to lose big if FTX goes to zero include employees, investment firms and Ontario teachers" pensions. FORBES

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At least two famous faces who inked endorsement deals with FTX are poised to lose, too. NFL legend **Tom Brady and fashion model Gisele Bundchen** owned 0.15% and 0.09% of FTX as of June 2021, respectively, according to an earlier capitalization table also shared with Forbes by Bankman-Fried. Accounting for assumed dilution in the subsequent funding rounds, Forbes estimates their ownership in FTX at 0.14% and 0.08%, respectively. It's unclear how much the ex-couple invested for their shares, but Brady's estimated stake would have been worth \$45 million, and Gisele's worth \$25 million, before crypto prices fell and Bankman-Fried took a flamethrower to their investment.

# 11-16-22 Yahoo Sports: Tom Brady, Stephen Curry, Shaq and Naomi Osaka among celebrities sued in class-action crypto lawsuit

https://sports.yahoo.com/tom-brady-stephen-curry-shaq-and-naomi-osaka-among-celebrities-sued-in-class-action-crypto-lawsuit-181117155.html

The class-action suit was filed against FTX founder Sam Bankman-Fried and a number of celebrities who endorsed FTX, a crypto trading company. In addition to Brady, Curry and Osaka, Shaquille O'Neal, David Ortiz, Shohei Ohtani, Trevor Lawrence and Udonis Haslem are all named as defendants. Brady's ex-wife and supermodel Gisele Bundchen, comedian Larry David and "Shark Tank" personality Kevin O'Leary are also named in the suit, as are the Golden State Warriors, a prominent partner of FTX.

# 11-19-22 WSJ: They Lived Together, Worked Together and Lost Billions Together: Inside Sam Bankman-Fried's Doomed FTX Empire

https://www.wsj.com/articles/sam-bankman-fried-ftx-alameda-bankruptcy-collapse-11668824201

The emerging picture of what went wrong suggests the crypto empire was a mess almost from the start, with few boundaries, financial or personal

NASSAU, Bahamas—Sam Bankman-Fried's \$32 billion crypto-trading empire collapsed in an incandescent bankruptcy last week, prompting irate customers, crypto acolytes and Silicon Valley bigwigs to ask how something that seemed so promising could have imploded so fast.

The emerging picture suggests FTX wasn't simply felled by a rival, or undone by a bad trade or the relentless fall this year in the value of cryptocurrencies. Instead, it had long been a chaotic mess. From its earliest days, the firm was an unruly agglomeration of corporate entities, customer assets and Mr. Bankman-Fried himself, according to court papers, company balance sheets shown to bankers and interviews with employees and investors. No one could say exactly what belonged to whom. Prosecutors are now investigating its collapse.

Mr. Bankman-Fried's companies had neither accounting nor functioning human-resources departments, according to a filing in federal court by the executive brought in to shepherd FTX through bankruptcy. Corporate money was used to buy real estate, but records weren't kept. There wasn't even a roster of employees, to say nothing of the terms of their employment. Bankruptcy filings say one entity's outstanding loans include at least \$1 billion to Mr. Bankman-Fried personally and \$543 million to a top lieutenant.

The lives of the people who ran FTX and its related companies were similarly blurred. Ten of them lived and worked together in a \$30 million penthouse at an upscale resort in the Bahamas. The hours were punishing, and the lines between work and play were hard to discern. Romantic relationships among Mr. Bankman-Fried's upper echelon were common, as was use of stimulants, according to former employees. ----more---

#### 11-11-22 NYTimes Embattled Crypto Exchange FTX Files for Bankruptcy

The announcement capped a stunning week that has shocked the crypto industry.

https://www.nytimes.com/2022/11/11/business/ftx-bankruptcy.html

#### 11-11-22 WSJ: FTX Files for Chapter 11

https://www.wsj.com/articles/ftx-files-for-chapter-11-bankruptcy-11668176869?mod=hp\_lead\_pos1

Beleaguered cryptocurrency platform FTX filed for bankruptcy protection Friday—a swift demise for a company hailed as a trusted platform just a week ago.

In a statement, the company said Chief Executive Sam Bankman-Fried resigned from his position but would remain at the company to assist with an orderly transition. FTX said it would begin a process to review and monetize assets for stakeholders.

John J. Ray III has been named the new CEO of FTX Group, the company said. The bankruptcy filing includes FTX Trading Ltd., the company presiding over the global trading website FTX.com, Alameda Research, a trading firm founded by Mr. Bankman-Fried, and the company over FTX US, the platform for U.S. users.

FTX is the latest in a string of crypto companies seeking bankruptcy protection this year. Months ago, Mr. Bankman-Fried served as a lender of last resort to his industry, following the failure of other crypto companies. FTX's fortunes reversed in the past 10 days, after a CoinDesk report showed the depth of the relationship between FTX and Alameda, triggering a loss of faith in the platform by amateur and professional investors.

Thursday morning, Mr. Bankman-Fried said the troubles at FTX were confined to its international operations. He tweeted that FTX US "was not financially impacted" and that "every user could fully withdraw." Later that day, FTX US said it might stop trading. On Friday, FTX US filed for bankruptcy along with the rest of FTX.

Bitcoin slipped after the announcement to trade near \$16,500 apiece.

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FTX was previously seen as a rising star in the digital asset world. It attracted nearly \$2 billion of investments from high-profile venture-capital funds, hedge funds and the Ontario Teachers' Pension Plan. Many investors face a wipeout of their equity stakes in FTX as the exchange heads to the bankruptcy court. Venture-capital firm Sequoia Capital said on Wednesday it is writing down its \$150 million investment in FTX to zero.

Bankruptcy means that it could be a long time before individual investors and others owed their funds are able to potentially recover any of them, if ever. Creditors to Mt. Gox, the Japanese crypto exchange that failed following a 2014 hack, are still waiting for their funds almost a decade later.

The collapse in digital currency prices earlier this year triggered a rash of crypto-related bankruptcy filings, including **Celsius Network LLC**, **Voyager Digital Ltd.**, **and Three Arrows Capital Ltd**.

Crypto investors may find an uphill battle to get their crypto deposits back in bankruptcy proceedings because their investments are likely to be treated as unsecured claims without collateral rights.

FTX's bankruptcy calls into question the fate of Voyager Digital. In September, the company won the auction to buy the bankrupt lender's assets with a purchase price of about \$50 million, The Wall Street Journal has reported. Voyager has been processing customer U.S. dollar withdrawals but crypto withdrawals are still on hold until the restructuring process is complete, a Voyager spokesman said.

#### 11-10-22 WSJ: The FTX Crypto Fiasco

https://www.wsj.com/articles/the-ftx-crypto-fiasco-cryptocurrency-sam-bankman-fried-alameda-coindesk-binance-11668122004?mod=hp opin pos 1

Another lesson in the risks of joining a mania in speculative assets.

This week's investor run on the FTX crypto-currency exchange marks round two of the great crypto crackup, and so far the victims are consenting adults. Barring an unexpected spread to the banking system, this is another in the long line of easy-money manias turned to panic.

FTX CEO Sam Bankman-Fried has been the crypto industry's leading champion. This year he engineered bailouts of several troubled crypto firms, including lenders Voyager Digital and BlockFi Inc., as plunging digital asset values exposed bad bets and computer coding. Recall the May collapse of stablecoin TerraUSD, whose stable value was based on an algorithm.

Crypto markets have lost some \$2 trillion in market value over the last year as the Federal Reserve has removed liquidity and markets reprice financial assets. Yet even as other crypto firms ran into trouble, Mr. Bankman-Fried insisted that FTX was solid. On Thursday he acknowledged in a Twitter mea culpa for the ages that he was wrong.

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### 11-10-22 CNBC: Sequoia Capital marks down its FTX investment to \$0

https://www.cnbc.com/2022/11/10/sequoia-capital-marks-down-its-ftx-investment-to-0.html

- Venture capital firm Sequoia Capital said it will mark down to zero its investment of over \$210 million in cryptocurrency exchange FTX, as possibilities of bankruptcy loom.
- "Based on our current understanding, we are marking our investment down to \$0," the Silicon Valley-based firm said Wednesday.
- "The fund remains in good shape," it said in a statement posted on its Twitter account

Venture capital firm Sequoia Capital said it will mark down to zero its investment of over \$210 million in cryptocurrency exchange FTX, as possibilities of bankruptcy loom.

"In recent days, a liquidity crunch has created solvency risk for FTX," Sequoia said in a note to investors posted on Twitter.

"Based on our current understanding, we are marking our investment down to \$0," the Silicon Valley-based firm said Wednesday.

"The full nature and extent of this risk is not known at this time," Sequoia said, adding that they are monitoring the situation which is developing quickly.

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Separately, Minneapolis Fed president Neel Kashkari on Wednesday continued his sharp criticism against cryptocurrencies.

"It's kind of the wild Wild West and chaos all rolled into one," he said of the virtual asset during an event at South Dakota State University,

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He added the "fatal flaw" in the asset is that anyone can create those coins, making them "hard to distinguish."

"It might be 99% noise, hype and confusion based on what's going on right now," he said, without further commenting on the implosion of FTX and its spillover effect onto other currencies.

FTX, owned by 30-year-old entrepreneur Sam Bankman-Fried, was valued at \$32 billion earlier this year.

#### 11-9-22: WSJ: Binance Walks Away From Deal to Rescue FTX

Crypto exchange's decision leaves FTX with uncertain future as it faces multibillion-dollar shortfall <a href="https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-buy-ftx-11668020963?mod=hp">https://www.wsj.com/articles/binance-is-said-to-be-likely-to-walk-away-from-deal-to-be-likely-to-walk-away-from-deal-to-be-likely-to-be-likely-

Crypto exchange Binance reversed course on a rescue offer for FTX Wednesday, leaving the prominent digital firm with an uncertain future as it faces a shortfall of up to \$8 billion, according to people familiar with the matter.

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Also on Wednesday, Securities and Exchange Commission Chairman Gary Gensler issued a stern warning to crypto platforms, after more than a year of encouraging them publicly to register with his agency. He also likened the broader crypto market to a stack of Jenga blocks that gets weaker with each failure.

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He (a customer) said he tried to withdraw his cash multiple times, to no avail. "Knowing FTX's brand and name, I would have never thought it would go under in a few days," Mr. Turský said. "Even if it did, I would have never expected them to stop all withdrawals"

Binance chose not to go ahead with the nonbinding offer following a review of the company's finances, the exchange said. "In the beginning, our hope was to be able to support FTX's customers to provide liquidity, but the issues are beyond our control or ability to help," Binance said in a statement.

# 11-8-22, Globe and Mail: Ontario Teachers' Pension Plan faces a hit on investment in crypto trading platform FTX

https://www.theglobeandmail.com/business/article-ontario-teachers-pension-plan-faces-a-hit-on-investment-in-crypto/

A big cryptocurrency investment by the Ontario Teachers' Pension Plan is in jeopardy amid the latest market turmoil for the sector.

Teachers, which is Canada's third-largest pension fund, invested in trading platform FTX Ltd. a year ago at an announced US\$25-billion valuation. Teachers watched Tuesday as FTX sold itself to rival Binance Holdings Ltd. after facing what Binance called a "liquidity crunch" for FTX.

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Tokens such as bitcoin plunged to multiyear lows as investors rushed to exit the digital asset market upon Tuesday's news from FTX.

The situation marks the second such stumble for a major Canadian pension plan in the world of crypto. In August, the Caisse de dépôt et placement du Québec completely wrote off its **US\$150-million investment in crypto platform Celsius Network Ltd.**, which filed for bankruptcy protection in July.

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"Given the fluid nature of the situation we have no comment right now," Teachers' spokesperson Dan Madge said Tuesday. He declined to say how large the investment was but noted that FTX was not included in the pension plan's list of investments of more than \$200-million in its 2021 annual report.

### 11-8-22 Fortune: FTX is not 'fine': The crypto industry's latest crisis must lead to changes

https://fortune.com/crypto/2022/11/08/ftx-is-not-fine-the-crypto-industrys-latest-crisis-must-lead-to-changes/

(JMW Note: within hours of this publications FTX collapsed and Binance took it over)

This is not good. The Twitter feud between the CEOs of FTX and Binance, which I described in yesterday's newsletter, has blown up further and triggered a crisis in the crypto industry. The outcome as of Tuesday is still unclear, but markets show signs of buckling—Bitcoin is back below \$20,000 for the first time in weeks—amid concern about the financial health of FTX, which until last week was seen as an industry leader poised to help crypto go mainstream.

If you're getting up to speed, the trouble began over the weekend when Binance CEO Changpeng "CZ" Zhao, citing this spring's Terra/Luna debacle, tweeted that the company would sell its holdings of FTX's native token, FTT. Other comments by CZ suggested that the decision came about in part owing to his rival CEO, Sam Bankman-Fried (SBF), maligning Binance to regulators. More......

#### 11-8-22 (afternoon) WSJ: Binance's Deal for Rival FTX Marks Power Shift Amid Crypto Turmoil

Agreement comes after crypto companies, traders pulled money from FTX over concerns about its financial stability

https://www.wsj.com/articles/crypto-exchange-binance-agrees-to-acquire-rival-ftx-11667924737?mod=hp\_lead\_pos4

Cryptocurrency exchange FTX, months after looking like a shining survivor in a struggling industry, succumbed Tuesday to a sudden liquidity crunch of its own and agreed to be taken over by rival Binance.

The deal signals a power shift in the crypto world, which has been hurt by rising interest rates and investors' retreat from risk. The pact marks a victory for Binance founder Changpeng Zhao and a humbling comedown for Sam Bankman-Fried, the founder of FTX, which had been growing in size and

recognition before a clash between the two men set off a series of events that shook investor confidence in his firm.

Collapses of crypto hedge funds and trading firms this year have whittled down a sprawling and crowded field of new institutions that set out to build a new kind of finance. FTX, valued at \$32 billion in a funding round in January, is by far the biggest to stumble.

It suffered a very old kind of problem: a run. Its users pulled money and cryptocurrency out of their accounts en masse, prompting worries by remaining investors that they could be caught out. Binance then stepped in.

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Just Monday, Mr. Bankman-Fried said on Twitter that the exchange was "fine" and had more than \$1 billion in excess cash to cover its liquidity needs.

"We have a long history of safeguarding client assets, and that remains true today," he said.

## **Ethereum Merge and POW vs POS**

### 9 15-22 MSN: InvestorPace: The Ethereum Merge Just Created a Huge Risk for ETH Crypto Fans

https://www.msn.com/en-us/money/markets/the-ethereum-merge-just-created-a-huge-risk-for-eth-crypto-fans/ar-AA11SuZM?ocid=msedgntp&cvid=ea0c1f80b6ed4879e8b218b47237e152

Ethereum's (ETH-USD) Merge upgrade is certainly worth celebrating. It makes for perhaps the biggest upgrade in the history of the blockchain. And, in an era where crypto isn't just a niche interest but a viable investment avenue, the financial implications are massive. But things aren't all milk and honey. There are some drawbacks and, as cybersecurity company CertiK points out, these drawbacks may be far reaching. They open up lots of questions and unknowns.

In a new blog post, however, CertiK is reminding investors there are risks to such a big transition. The company warns of three particular downsides that could make life much more difficult for users.

Investors already know that hacks and scams are running amok through the crypto space, with billions of dollars in assets stolen just this year. But the Merge opens Ethereum up to a new hack threat called ChainID Replay attacks. A hard fork called EthereumPoW (ETHW-USD) is set to release, keeping a mineable version of Ethereum alive. But by keeping the same ChainID as Ethereum, hackers can duplicate transactions across both chains and take twice as much crypto from an unwitting sender. All it takes is for these bad actors to receive a transaction from a victim.

The second issue — validators not reaching consensus — is not an issue anymore as the Merge went off without a hitch. However, CertiK's third point, while not the most technical, could actually prove to be the biggest problem down the line.

One of the things that has taken a back seat to celebrating today is the very real topic of centralization on the blockchain. Ethereum wasn't incredibly decentralized before, to be sure. But the Merge has

shifted the balance of power toward a few major crypto companies. Now, traditional stockholders are gaining incredible influence over the network.

While a proof-of-work network, miners had quite a lot of power on Ethereum. As CertiK points out, the top miners had significant control over the hashrate of the network. This meant they had a lot of sway when it came to the speed and cost of transactions.

As the Merge transitions Ethereum to proof-of-stake, though, it's simply recentralizing that power among even larger entities. Now the network is dictated by staking rather than mining. The more one has staked, the more chain validators they control.

CertiK shows a breakdown of the entire supply of staked ETH. The chart shows that over two-thirds of the network will be controlled by just five entities. These are Lido Finance, Kraken, Bitcoin Suisse, Staked and Coinbase (NASDAQ:COIN). What's more, three of these companies — Kraken, Staked and Coinbase — are U.S.-based and fall under U.S. Treasury and U.S. Securities & Exchange Commission (SEC) regulations.

Why does this recentralization matter? After all, if power was concentrated before, is it really that different if it's centralized post-Merge? The answer is more surprising than you might think.

Back in August, investors posed a question to Coinbase CEO Brian Armstrong on Twitter (NYSE:TWTR): Would Coinbase comply with regulator demands and censor certain transactions if asked to, or would it shut down its staking service completely to preserve the integrity of a censorship-free blockchain? Armstrong responded by saying he would go with the second option, shutting down Coinbase's lucrative staking tool to "focus on the bigger picture."

In answering the question, Armstrong called the situation a "hypothetical we hopefully won't actually face." But in the days since this exchange, that hypothetical has turned into a reality. The U.S. Treasury has since ordered sanctions against crypto mixer Tornado Cash for aiding crypto activity, setting a precedent in which the U.S. government strong-arms the crypto industry to censor itself or risk being shut down.

As this request — or rather demand — of on-chain censorship becomes more and more realistic, CertiK poses several questions:

"How would Ethereum respond to this sudden evaporation of 15% of the network's stake? How about Coinbase's shareholders who see a lucrative opportunity for the company to earn income with OFAC-compliant staking, and aren't so keen on passing up that opportunity in the name of crypto's ideological values?"

Another question with more sinister connotations is about whether Armstrong would be true to his word and actually shut down staking. After all, it's a very profitable venture for Coinbase. Would the company be willing to walk away from this money?

Wall Street's fingers are wrapping ever-tighter around the market. Now, more companies like Kraken have plans to go public. Something will have to give; one of these companies will not be able to simply shut down to preserve the "integrity of blockchain." As CertiK makes apparent, this issue is on the horizon. It's only a matter of time — and the Merge just accelerated things.

### 9-15-22 CNN: The world's second biggest cryptocurrency just got a lot greener

https://www.cnn.com/2022/09/15/tech/ethereum-merge-crytocurrency-energy-consumption-hnk-intl/index.html

Ethereum, the world's second most valuable cryptocurrency, has completed a massive software upgrade that its backers claim will slash its carbon footprint.

The long-awaited revamp, which is known as "The Merge," will reduce ethereum's energy consumption by nearly 99.95%, according to the Ethereum Foundation, a nonprofit organization dedicated to supporting the cryptocurrency and its related technologies.

"The Merge refers to the original Ethereum Mainnet merging with a separate ... blockchain called the Beacon Chain," it added.

Until now, both ethereum and bitcoin were running on a mechanism called "proof-of-work," under which high-powered computers were required to solve complex puzzles. The merger moves ethereum to a mechanism called "proof-of-stake," which is much more energy efficient, as it does away with the need to have computers compete against each other. Instead, users deposit their ether to participate in the race for more currency.

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While cryptocurrencies have seen a phenomenal rise in the last few years, observers say they're terrible for the environment. According to Digiconomist, a platform that tracks crypto energy usage, a single Ethereum transaction is equivalent to the weekly power consumption of an average US household.

Earlier this month, Digiconomist said that the power saved as a result of the upgrade would "likely be equivalent to the electrical energy consumption of a country like Portugal." It could also become the "final nail in the coffin" for bitcoin's transaction mechanism.

#### 9-15-22 Yahoo Finance: ETH down 5% despite smooth Ethereum Merge

https://finance.yahoo.com/news/eth-trading-ethereum-merge-142242016.html

Hours after midnight Thursday, Ethereum, the second-biggest blockchain network, successfully completed its Merge upgrade.

Lauded by both supporters and critics as crypto's most ambitious software upgrade, the change shifted how Ethereum processes transactions — from proof-of-work to proof-of-stake — a first in the world of blockchains.

The upgrade caused Ethereum's energy consumption to plummet, with proponents saying the move also helps the blockchain to become a faster, cheaper and more useful financial layer of the internet. However, developers behind the effort pointed out the Merge itself doesn't directly improve the blockchain protocol's scaling.

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The upgrade's final stage took about 12 minutes followed by another 12-15 minutes for Ethereum's core developer team to gauge the transition's "finality" with as many as 41,000 people watching during a live Merge "viewing party."

By eliminating mining, the Ethereum Foundation and other analysts projected the protocol's energy consumption — which had required as much power as a small country — would drop by 99.95%. Justin Drake, an Ethereum researcher said just before the upgrade that the Merge "will reduce worldwide electricity consumption by 0.2%."

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For end users of Ethereum,"the merge does basically nothing in terms of their experience," Tim Beiko, an Ethereum core developer explained proudly during the call. "For all the users of Ethereum, all the infrastructure just keeps working as expected."

"It's both better for the environment as well as I guess like other non-environmental externalities, like how [Ethereum] proof of work just massively increased prices for GPUs and made a bunch of gamers angry," said Buterin.

Speaking at a Barclay's conference Tuesday, Mike Novogratz, founder and CEO of Galaxy Digital called the upgrade "wildly important" as it proved decentralized communities could accomplish such a significant project without a CEO or board of directors.

"After so much successful testing, honestly, the event itself was a 12-minute thing where nothing happened," Martin Leinweber, a crypto strategist with indexing firm MarketVector, told Yahoo Finance.

#### 9-14-22 WSJ:Crypto Investors Step Up Bets Against Ether as 'Merge' Looms

High-stakes revamp of Ethereum network comes with security, concentration and ether price risks, investors and analysts say

https://www.wsj.com/articles/crypto-investors-step-up-bets-against-ether-as-merge-looms-11663189258?mod=hp lead pos6

Investors ramped up their bets against ether, the second-largest cryptocurrency, on the eve of the Ethereum network's big software upgrade slated for early Thursday morning.

The cost of holding a short position—a bet that ether's value will fall—in the perpetual futures market has risen ahead of the upgrade, a sign that investors are increasingly hedging their risk going into the network update. So-called funding rates for ether perpetual futures, a kind of futures contract that doesn't have an expiry date, have been negative for more than a month, meaning that traders are paying a premium for pessimistic bets.

This could leave ether primed for a short squeeze, in which investors are forced to unwind their pessimistic bets, pushing ether higher, if the upgrade is a success.

Many investors see the Ethereum network's "Merge" as a make-or-break moment for the crypto market. The upgrade is intended to create a more-efficient and less-energy-intensive blockchain. A high-profile failure could send ether plunging and pummel investor confidence.

The technical upgrade is highly complex, in part because there are already thousands of applications running on the Ethereum blockchain. About \$33.5 billion worth of ether is currently deposited in 554 decentralized-finance applications alone, according to data provider DeFi Llama.

"It's very difficult for me to see how a fully functioning platform with a market cap of around \$200 billion can essentially change the engines out in flight and not have some sort of security issue in all that complexity," said Christopher Calicott, a crypto venture investor at Trammell Ventures.

Bugs in the code and other network vulnerabilities could remain undiscovered until the rollout. The Ethereum Foundation, a nonprofit supporting the blockchain, offered up to \$1 million for information on any critical bugs discovered on the network before Sept. 8.

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If the merge goes according to plan, critics fear the upgrade could bring centralization risks. As of Sept. 9, four companies controlled about 60% of all the staked ether tokens. Lido is the largest staker, accounting for 31% of the 13.4 million ether locked up in the proof-of-stake Ethereum blockchain. After Lido, Coinbase, Kraken and Binance together control about 30% of the total staked ether tokens, crypto research firm Nansen wrote in a recent report.

#### 9-12-22 Tech Crunch: Big hopes for the upcoming Ethereum Merge

https://techcrunch.com/2022/09/12/big-hopes-for-the-upcoming-ethereum-merge/

It's going to be a big week for the crypto market.

On Thursday, the Ethereum system upgrade dubbed "the Merge" will occur, moving one of the largest and most important blockchains in the world away from its current proof-of-work setup to a proof-of-stake model. The technical change brings with it a wealth of questions, including what sort of precedent it sets for rival blockchains that are sticking to their proof-of-work guns.

## **Energy**

#### 7-1-22 Time: Fact-Checking 8 Claims About Crypto's Climate Impact

https://time.com/6193004/crypto-climate-impact-facts/

Crypto advocates argue that the proof-of-work process is becoming more energy efficient: that more and more miners are turning to renewable energy sources like wind, solar, or hydropower, as opposed to coal or natural gas. However, one peer-reviewed study from earlier this year shows the opposite: that the Bitcoin network's use of renewable energy dropped from an average of 42% in 2020 to 25% in August 2021. Researchers believe that China's crackdown on crypto, where hydropower-driven mining operations used to be plentiful, was the primary catalyst of this decrease.

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Regardless of which statistic is closer to the truth, there are still many mining operations using nongreen energy sources. In New York, Greenidge repurposed a coal power plant that was previously shuttered. It's now powered by natural gas, which is also fossil-fuel-based. Yvonne Taylor, vicepresident of Seneca Lake Guardian, an environmental non-profit, told TIME in April that Greenidge would emit "over a million tons of CO2 equivalents into the atmosphere every year, in addition to harmful particulate matter."

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As an example, Thiel suggested that there are wind farms in Vermont that have no ability to sell their energy because of their remote locations and the lack of transmission lines. Putting a crypto mining plant on top of the farms would theoretically give them immediate revenue. "If the goal of this country is to convert to green or sustainable energy forms for the majority of our energy use by 2050, the only way it's going to happen is if the power generators have an incentive to build the power plants," Thiel says.

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Claim: Crypto mining relies on renewable energy—However, one peer-reviewed study from earlier this year shows the opposite: that the Bitcoin network's use of renewable energy dropped from an average of 42% in 2020 to 25% in August 2021.

Claim: Data centers are just as bad for pollution as crypto mining operations.

"Crypto mining consumes about twice as much electricity as Amazon, Google, Microsoft, Facebook, and Apple combined,"

Claim: Christmas lights use more electricity than Bitcoin -False

#### 8-7-22 -Bloomberg - Buterin Says Any Ethereum Miner Migration Won't Slow Merge

https://www.msn.com/en-us/money/markets/buterin-says-any-ethereum-miner-migration-won-t-slow-merge/ar-AA10mZ3r?ocid=msedgntp&cvid=cad2a19f6e49473aa2268d427ed20187

(Bloomberg) -- Ethereum co-founder Vitalik Buterin said the blockchain's software transition is unlikely to be significantly impacted even if some miners gravitate to alternative chains to mint tokens.

Ethereum Classic, an earlier fork which still uses the proof-of-work mechanism that relies on massive electricity, could be one of the biggest beneficiaries of any miner exodus. Ethereum's upgrade is expected to impact earnings for as many as one million miners. Some that are already looking for a platform for their costly mining equipment may turn to Ethereum Classic.

"I don't expect Ethereum to really be significantly harmed by another fork," Buterin said in a webinar on Saturday. "In general my impression from pretty much everyone I talk to in Ethereum ecosystem, they have been completely supportive of the proof-of-stake effort and the ecosystem has been quite united around it."

Buterin's comments come ahead of a long-anticipated major software upgrade to the blockchain that aims to reduce the extensive energy use. The switch, which has become known as the Merge, is viewed as the most ambitious technical change in the blockchain world.

Ethereum will switch from using miners -- essentially, powerful computers -- to order transactions to using much more energy-efficient coin wallets, run by so-called validators. The move to the new system, called proof of stake, has been worked on -- and delayed -- for years, as scores of developers worldwide have kept on improving and testing the software to work out any bugs.

Ethereum is the most important commercial highway in crypto, and any disruptions could cost billions and impact millions of users. The chain supports more than 3,400 active decentralized apps, allowing for everything from trading to gaming, according to tracker DappRadar. More than \$40 billion is sitting in decentralized-finance applications on Ethereum, which lets users trade, lend and borrow coins, according to industry data tracker DeFi Llama. Most of the most valuable non-fungible tokens, such as CryptoPunks, live there.

# 8-2-22 NerdWallet: Ethereum Merge Is Coming: Why It Matters: The merge will change how transactions are validated and could cut energy use by over 99%.

https://www.nerdwallet.com/article/investing/the-ethereum-merge-is-coming-what-it-means-for-you?utm\_campaign=ct\_prod&utm\_source=syndication&utm\_medium=wire&utm\_term=anne-stanleymarketwatch-com&utm\_content=1219240

The Ethereum network, which powers the cryptocurrency Ether (ETH), is making moves to become more sustainable. It's planning to switch from an energy-intensive proof-of-work consensus mechanism to a more sustainable proof-of-stake system. The Ethereum merge is the moment at which this switch will take place.

Ethereum's website states that a final merge date is not set, though a leader on the project tweeted that Sept. 19 was the target date. But the project, which has been in development for a few years, has been delayed several times before. While it seems that plans for the merge have become firmer, more delays are possible.

Central to the merge is the goal of reducing energy consumption. Ethereum estimates its energy consumption will drop by more than 99.95%. It also claims the merge will lead to better scalability.

### Why the merge is happening

To explain this transition, the Ethereum Foundation uses an analogy in which it describes Ethereum as a spaceship in mid-flight: "The community has built a new engine and a hardened hull. After significant testing, it's almost time to hot-swap the new engine for the old mid-flight. This will merge the new, more efficient engine into the existing ship."

So what's wrong with the old engine? Mainnet, the blockchain used since Ethereum's inception in 2015, uses proof-of-work to securely add new transactions and other information. A proof-of-work consensus mechanism requires user computers to solve increasingly difficult computations before being allowed to add a new block. This method, which is used by many cryptocurrencies including

Bitcoin, is secure, but it's also energy-intensive. Ethereum proof-of-work consumes the same amount of energy on a yearly basis as some entire countries consume in the same time frame.

Proof-of-stake is an alternative that consumes less energy. Instead of devoting electricity, which fuels computing power, users who want to be part of the verification process will put their personal cryptocurrency on the line in a process called staking. These users, called validators, are randomly selected to verify new information to be added to a block. They receive cryptocurrency if they confirm accurate information. If they act dishonestly, they stand to lose their stake.

How the merge could work

An important technology behind the merge is the "Beacon chain" — a proof-of-stake ledger of accounts that has been adding and verifying transactions distinct from Mainnet since its launch in December 2020. It's been undergoing testing, gaining a track record and otherwise becoming established in its own right. (For example, it now has more than 400,000 validators.)

If and when the merge occurs, the information from Mainnet will be transferred to the Beacon chain — the mid-flight-rocket-engine swap in Ethereum's parlance.

#### What will change

Mining will no longer be possible. If Ethereum moves from mining to staking as planned, it won't be possible to verify transactions on Mainnet through mining. Instead, validators on the Beacon chain will then confirm all new transactions. The rate at which new coins enter circulation will decrease by about 90% because mining rewards, which are larger than staking rewards, will cease. The energy needed to maintain Ethereum should also drop.

Sharding will become possible. Sharding, which splits validation work into smaller amounts, should allow the network to handle more transactions. It also could increase network participants by allowing people to run Ethereum on small devices, like phones. Sharding is not part of the merge, but it will be on the table for future updates.

What won't change

Gas fees and transaction speeds. The merge will not result in lower gas fees or faster transaction speeds, according to Ethereum's website.

The way you access your ETH. Because the merge will transfer the entire transaction history, those digital assets will be accessible in the same way as before.

#### 5-4-22 Columbia University Cryptocurrency's Dirty Secret: Energy Consumption

### https://news.climate.columbia.edu/2022/05/04/cryptocurrency-energy/

Though skeptics may characterize cryptocurrency as "fake money," "worse than tulip bulbs," or a "greater fool" scheme, it is a very real business. The market capitalization of the almost 19,000 cryptocurrencies in circulation is currently around \$1.75 trillion — about the same as the gross domestic product of Italy, the world's eighth largest economy. Even though you might not be able to buy a loaf of bread with Bitcoin at the corner store, many investors are putting a lot of legal tender money into cryptocurrencies.

But crypto has a dirty little secret that is very relevant to the real world: it uses a lot of energy. How much energy? Bitcoin, the world's largest cryptocurrency, currently consumes an estimated 150 terawatt-hours of electricity annually — more than the entire country of Argentina, population 45 million. Producing that energy emits some 65 megatons of carbon dioxide into the atmosphere annually — comparable to the emissions of Greece — making crypto a significant contributor to global air pollution and climate change.

And crypto's thirst for energy is growing as mining companies race to build larger facilities to cash in on the 21st century gold rush.

"Bitcoin mining operations are in an arms race between time, the volume of miners, and the efficiency of the machines they use," said Joshua D. Rhodes of the Center on Global Energy Policy. "When it comes to Bitcoin's energy use, it's currently something of a 'wildcatter' market. The Texas grid operator ERCOT estimates that crypto miners may increase energy demand by up to 6 gigawatts by mid-2023, roughly the equivalent of adding another Houston to the grid."

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Perhaps even more concerning, some companies in the U.S. are now bringing retired power plants back online in order to cash in on crypto. Greenidge Generation, a natural gas-powered Bitcoin mining plant in the picturesque Finger Lakes region of upstate New York, is a controversial example of this trend. Local groups point out that the plant not only pollutes the air, but also harms the Seneca Lake ecosystem by discharging up to 134 million gallons of hot water a day into New York's deepest glacial lake. More broadly, there are concerns the plant may be a canary in the crypto mine both for New York State and the nation.

#### 7-17-22 NYTimes: Cryptomining Capacity in U.S. Rivals Energy Use of Houston, Findings Show

https://www.nytimes.com/2022/07/15/climate/cryptocurrency-bitcoin-mining-electricity.html

One of the largest cryptomining companies in the United States, Marathon Digital Holdings, told the probe that it operated almost 33,000 highly specialized, power-intensive computers, known as "mining rigs," as of February, up from just over 2,000 at the start of 2021. By early next year, it intends to get that number up to 199,000 rigs, an almost hundredfold increase in two years, it said.

The company currently operates a cryptomining center powered by the Hardin Generating Station in Montana, which generates electricity by burning coal, the dirtiest fuel.

#### 7-17-22 MSN: United States Crypto Miners Are Now Using as Much Power as Houston

https://www.msn.com/en-us/money/markets/united-states-crypto-miners-are-now-using-as-much-power-as-houston/ar-AAZFK5F

#### 5-18-22-Forbes: Why Does Bitcoin Use So Much Energy?

https://www.forbes.com/advisor/investing/cryptocurrency/bitcoins-energy-usage-explained/

The digital gold rush has come with a catch: Massive electricity consumption.

It's estimated that Bitcoin consumes electricity at an annualized rate of 127 terawatt-hours (TWh). That usage exceeds the entire annual electricity consumption of Norway. In fact, Bitcoin uses 707 kilowatt-hours (kWh) of electricity per transaction, which is 11 times that of Ethereum,

Of course, Bitcoin isn't unique among cryptocurrencies in terms of its environmental burden, but its popularity and uniquely inefficient consensus mechanism make it an easy scapegoat. Meanwhile, the blockchain technology that underlies it could be the key to a greener future.

Conceptually, it doesn't seem like Bitcoin should require enormous amounts of electricity. All you have to do is point and click or tap on your smartphone to buy and sell the cryptocurrency. We've had technology that does much the same for other sorts of digital transactions for decades.

But it's Bitcoin's decentralized structure that drives its huge carbon emissions footprint.

To verify transactions, Bitcoin requires computers to solve ever more complex math problems. This proof of work consensus mechanism is drastically more energy-intensive than many people realize.

"In the case of Bitcoin, this is done by having many different competitors all conduct a race to see how quickly they can package the transactions and solve a small mathematical problem," says Paul Brody, global blockchain leader at EY.

The miner who completes the mathematical equation the fastest not only certifies the transaction but also gets a small reward for their trouble in the form of a Bitcoin payment.

In Bitcoin's early days, this process didn't consume nation-state amounts of electricity. But inherent to the cryptocurrency's technology is for the math puzzles to become much, much harder as more people compete to solve them—and this dynamic will only accelerate as more people attempt to buy into Bitcoin.

Multiple miners are using electricity in competition for rewards. Even though there may be hundreds of thousands of computers racing to solve the same problem, only one can ultimately receive the Bitcoin honorarium.

"Of course, this is wasteful in the sense that 99.99% of all the machines that did work just throw away the result since they didn't win the race," says Brody. While this process produces a fair and secure result, it also creates a ton of carbon emissions. "I very much doubt [whoever founded] Bitcoin anticipated such enormous success in the future and, consequently, the enormous amounts of power we're talking about," Brody says.

This process also takes an immense amount of time: Upwards of 10 minutes per Bitcoin transaction. That's the time it takes for a new block to be mined.

Other digital transactions, like those powered by Visa, are faster and rely on less energy. Visa, for instance, can handle around 1,700 transactions per second (TPS) compared with Bitcoin's 4 TPS.

In terms of crypto mining, the U.S. holds the lion's share of the global Bitcoin mining market, with nearly 38% of global hashrate recovery—meaning lots of blockchain computations—according to May 2022 report from the Cambridge Digital Assets Program (CDAP).

CDAP also found that China is the second biggest Bitcoin mining hub, despite Beijing's crackdown to eliminate Bitcoin mining within its borders, with more than 20% of the global market share.

Other Bitcoin mining hubs include Kazakhstan with a 13% global share, Canada at more than 6% and Russia at nearly 5%, with the rest scattered across the globe.

#### POS:

Transition to Proof-of-Stake Systems

Proof of stake doesn't require this same mad dash as proof of work to solve complex puzzles, and it uses fewer resources.

Put simply, proof of stake requires network participants to front a small amount of cryptocurrency to be entered into a lottery for the chance to verify transactions. The thought is that if you're putting up some amount of value as collateral, you're less likely to approve fraudulent transactions that would devalue the currency and cost you your stake.

Because proof of stake systems remove the competitive computational element, "it saves energy and allows each machine in a [proof of stake] to work on one problem at a time, as opposed to a PoW system, in which an array of machines are rushing to solve the same problem, thus wasting energy," says eToro cryptocurrency market analyst Simon Peters.

Ethereum, the second largest crypto by market cap after Bitcoin, is in the process of converting to proof of stake from proof of work as part of Ethereum 2.0. This will dramatically reduce the energy consumption of Ethereum-based tokens and blockchains by an estimated 99.95%.

## Fraud

### 1-5-22- The Street: Mark Cuban Warns of Potential New Crypto Scandal and Fraud (Wash Trades)

https://www.msn.com/en-us/money/markets/mark-cuban-warns-of-potential-new-crypto-scandal-and-fraud/ar-AA1610zG?ocid=msedgntp&cvid=48cca181842846f8b036ce494b8b4e1f

The cryptocurrency industry in recent months has been hit by numerous scandals, which have sharply raised skepticism and mistrust among the general public and encouraged more calls for regulators to step in.

One aspect common to all these crypto scandals is that the big names and players in the sector get spattered by the mess. No one is immune.

It all started last May when sister cryptocurrencies Luna and UST, or TerraUSD, collapsed.

The two tokens crashed after UST lost its peg to the dollar, the foundation qualifying it as a stablecoin. Such cryptocurrencies are tied to more stable assets, like the U.S. dollar or gold. But UST was an algorithmic stablecoin, which was backed not by dollar reserves but rather by its sister asset, Luna.

This disaster caused a credit crunch that proved catastrophic for many firms, including hedge fund Three Arrows Capital, or 3AC, which found itself unable to honor its payments to crypto lenders Celsius Network and Voyager Digital.

3AC was forced into liquidation. Celsius and Voyager filed for Chapter 11 bankruptcy.

The depegging of Terra's UST coin and the collapse of Celsius and 3AC drove massive losses for investors: \$20.5 billion in the case of UST and \$33 billion in the case of Celsius and 3AC, according to blockchain security firm Chainalysis.

Factors: Cross-Exposure and Lack of Transparency

This crisis mainly revealed the links and exposure of crypto firms to each other, like the banks during the financial crisis of 2008. The other lesson was the lack of transparency of centralized crypto companies, which are mostly unregulated.

This opacity created another situation that would cause the overnight implosion of FTX a few months later.

The cryptocurrency exchange and its sister company, Alameda Research, a hedge fund that also serves as a trading platform, became the companies through which their founder, Sam Bankman-Fried, took advantage of the crisis of confidence in the crypto industry. He consolidated power and became the new strongman of the crypto space.

Bankman-Fried used the two companies to save other struggling firms, but as would come clear later, some of these deals were questionable, such as the one with lender BlockFi. Less than three months later, the Bankman-Fried empire went bankrupt.

Regulators accused the former trader of defrauding and conspiring to defraud FTX clients and investors. It will take time to determine exactly what happened, but FTX customer funds appear to have been comingled with Alameda's and were illegally used in high-risk transactions.

According to Chainalysis, the downfall has caused \$9 billion of losses for FTX clients, but this number doesn't take into account potential losses for people who deposited their funds with the exchange. The likelihood of these investors recovering them is unclear.

Cuban Sees a Scandal Tied to Wash Trades

As 2023 begins, the question is whether in this new year the crypto industry will also be marked by scandals.

For the billionaire and cryptocurrency investor Mark Cuban, it's a question of when, not whether.

This new scandal, he says, will appear in the form of the implosion of so-called wash trades, according to him, on the centralized exchanges.

"I think the next possible implosion is the discovery and removal of wash trades on central exchanges," the owner of the Dallas Mavericks told TheStreet in an interview by email. "There are supposedly tens of millions of dollars in trades and liquidity for tokens that have very little utilization. I don't see how they can be that liquid."

He cautioned: "I don't have any specifics to offer to support my guess."

A wash trade, an illegal practice, consists of creating artificial interest around a financial product -- a crypto token or coin in this case -- to make a profit. This form of "pump-and-dump" scheme is widespread in the cryptocurrency industry.

Basically, a scammer/trader buys and sells the same tokens, creating artificial trading volumes around that cryptocurrency. The scammer encourages positive social-media comment about the token, giving other traders the impression that the token is popular and in big demand. In turn, that generates more interest in the token, driving up its price. The scammers then liquidate their positions at the peak of demand.

"Wash Trading (is) entering into, or purporting to enter into, transactions to give the appearance that purchases and sales have been made, without incurring market risk or changing the trader's market position," says the The U.S. Commodity Futures Trading Commission.

Bitcoin Is Not Immune From Wash Trades

While many wash trades have occurred in traditional finance, the crypto space is particularly conducive to the practice because nearly 13,000 cryptocurrencies are listed, according to data firm CoinGecko. Scammers have to make one or another token stand out from that pack so they can engage in wash trade.

As an example, according to a 2022 study by Forbes magazine on 157 centralized cryptocurrency exchanges, more than half the volumes of exchanges concerning bitcoin are fake.

"More than half of all reported trading volume is likely to be fake or non-economic," the magazine concluded, adding that it "estimates the global daily bitcoin volume for the industry was \$128 billion on June 14. That is 51% less than the \$262 billion one would get by taking the sum of self-reported volume from multiple sources."

Consider the figures from the various data firms concerning bitcoin trading volumes. At last check, CoinMarketCap puts the latest 24-hour trading volume of bitcoin at \$15.8 billion, CoinGecko at \$17.6 billion, Nomics at \$26.14 billion and Messari at \$3.52 billion.

These disparate figures show that even the most reputable research firms fail to have the same data on bitcoin, the top cryptocurrency in terms of market value.

This suggests that opacity is the key word and raises even larger questions about the data regarding trading volumes of less popular and less exposed cryptocurrencies.

And this question in turn raises that of the solvency of certain centralized cryptocurrency exchanges. More than 560 exchanges are operating, according to CoinGecko.

### 9-9-22 WSJ: Head Trader of Crypto Platform EmpiresX Pleads Guilty in \$100 Million Fraud Scheme

https://www.wsj.com/articles/head-trader-of-crypto-platform-empiresx-pleads-guilty-in-100-million-fraud-scheme-11662671525?mod=hp\_minor\_pos10

The head trader of South Florida-based cryptocurrency platform EmpiresX pleaded guilty in an alleged investment fraud scheme that raised around \$100 million from investors, the Justice Department said.

Joshua David Nicholas, of Stuart, Fla., pleaded guilty Thursday at the U.S. District Court for the Southern District of Florida in Miami to one count of conspiracy to commit securities fraud, according to court documents.

Prosecutors allege that Mr. Nicholas and the founders of the firm, which is also known as Empires Consulting Corp., fraudulently claimed their business operated a trading bot using artificial and human intelligence that guaranteed returns to investors. In reality, however, EmpiresX was "a Ponzi scheme" that paid earlier investors with money obtained from later investors, prosecutors allege. The company also failed to register its investment program with the U.S. Securities and Exchange Commission as required.

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#### 8-15-22 Fortune: Martin Shkreli's crypto crashes after major wallet dumps tokens

https://fortune.com/2022/08/15/martin-shkreli-crypto-crash-pharma-bro/

The cryptocurrency of "Pharma Bro" Martin Shkreli plunged 90% on Friday after a wallet that appeared to belong to Shkreli sold more than 160 billion tokens.

d. In January, a federal judge slapped Shkreli with a lifetime ban from the pharmaceutical industry. It's unclear whether his new project violates this ban, though Druglike states that it's "not a pharmaceutical company" nor engaged in drug development.

Since its debut, Martin Shkreli Inu has been an especially volatile crypto. Even with the drop, it has gained 198% since its debut. And Friday's plunge wasn't the first. On July 27 and 28, the crypto's value nosedived 65%, before recovering ground.

While Shkreli claimed a hack, other big names in the crypto world lambasted him as news of the price drop spread. Billy Markus, one of the founders of Dogecoin, via Twitter, compared the drop to the infamous Squid Game rug pull of last year.

"this is the most shocking thing since squid game token," he wrote.

In 2015, Shkreli was CEO of Turing Pharmaceuticals and raised the price of Daraprim—a drug that treats a specific parasite infection that's particularly threatening for people with compromised immune systems, like those with HIV/AIDS—to \$750 from \$13.50 per tablet. Three years later, a federal court sentenced him to seven years in jail after finding him guilty of three counts of securities fraud. Shkreli was accused of defrauding investors out of millions of dollars that they gave to his two hedge funds,

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

then swindled cash and stocks from another biotech company that he founded to repay those investors.

#### 8-13-22 MARTIN SHKRELI DUMPS HUGE STAKE IN HIS NEW CRYPTO, CAUSING IT TO CRASH

"THIS IS THE MOST SHOCKING THING SINCE SQUID GAME TOKEN."

https://futurism.com/the-byte/martin-shkreli-crypto-dump-crash

**Pump and Dump**: It really looks like the scam master is back at it again.

Martin Shkreli — the notorious "Pharma Bro" who was just released from prison in May after being sentenced to seven years because of securities fraud — just dumped a massive chunk of his own cryptocurrency, causing its value to tank.

In July, Shkreli launched a new Web3 project called Druglike despite being banned from the pharmaceutical industry for life. He also launched his own cryptocurrency called Martin Shkreli Inu. Yesterday, Bloomberg reported that a wallet most likely belonging to Shkreli sold off more than 160 billion tokens, causing its value to drop by 90 percent.

When asked via Discord what happened and why so much of the currency had been sold, Bloomberg says an account believed to be run by Shkreli responded, "I got hacked."

#### **Rug Pull**

If the reports are true, what Shkreli did isn't exactly illegal, but it sure is nasty.

Industry site Coin Telegraph says **rug pull scams can vary** but dumping a massive crypto stake and leaving investors with the worthless leftovers is one strategy. Because it's a "soft pull" and not a "hard pull" it's immoral, but not against the law.

Notably, even the most controversial of crypto founders called Shkreli out for his latest choice.

"This is the most shocking thing since Squid Game token," Dogecoin creator Shibetoshi Nakamoto said on Twitter yesterday.

Nakamoto was referencing last year's Squid Game-themed coin that scammed people out of millions of dollars. The comparison makes sense, but Nakamoto's wrong about one thing — nothing Shkreli does is shocking at all anymore.

#### 8-14-22 Forbes Lawsuit Accuses Mark Cuban, Voyager Digital Of Defrauding Cryptocurrency Investors

https://www.forbes.com/sites/doylerader/2022/08/14/lawsuit-accuses-mark-cuban-voyager-digital-of-defrauding-cryptocurrency-investors/?sh=7a264a8523c0

Dallas Mavericks governor Mark Cuban is facing a class-action lawsuit for his promotion of bankrupt cryptocurrency brokerage Voyager Digital.

The Moskowitz Law Firm, based in Coral Gables, Florida, filed a civil suit against Cuban in the United States District Court in Southern Florida, demanding a jury hearing for the case.

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The suit alleges that Cuban and Voyager Digital CEO Stephen Ehrlich used their influence to misrepresent the brokerage, making dubious claims to lure in investors and eventually defrauding them.

"Cuban and Ehrlich, went to great lengths to use their experience as investors to dupe millions of Americans into investing—in many cases, their life savings—into the Deceptive Voyager Platform and purchasing Voyager Earn Program Accounts ('EPAs'), which are unregistered securities," the lawsuit alleges.

The suit continues, describing Voyager Digital as an "unregulated and unsustainable fraud, similar to other Ponzi schemes" that "specifically target[s] young and inexperienced investors."

### 8-6-22 WSJ: Before Crypto Lender Celsius Crashed, CEO Alex Mashinsky Was Known for Big Ideas and Battles

Entrepreneur proposed a stream of moonshot ideas in different industries over many years—and frequently left a string of unhappy colleagues and investors

https://www.wsj.com/articles/before-crypto-lender-celsius-crashed-ceo-alex-mashinsky-was-known-for-big-ideas-and-battles-11659787202?mod=series\_cryptobitcoindogecoin

For some 30 years, Alex Mashinsky barreled into whatever was the hot technology of the time, promising revolutions in long-distance calling, airport rides and, most recently, crypto. He often left a trail of unhappy friends, colleagues and investors.

His latest venture, Celsius Network LLC, pitched itself as both safe and subversive. It was a way for regular people to tap the moneymaking potential of crypto, and to upend traditional banking. Last month, Celsius filed for bankruptcy protection, and its customers worry they might never get their money back.

Public records and interviews with people who know Mr. Mashinsky paint a picture of a brash, confident serial entrepreneur with a constant stream of big ideas. Some of his companies have been more successful than others, but they often had a common thread: Mr. Mashinsky frequently left them under tense circumstances.

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On June 11, Mr. Mashinsky responded on Twitter to someone who said he had heard about Celsius accounts being locked.

"...do you know even one person who has a problem withdrawing from Celsius?" Mr. Mashinsky wrote. "Why spread FUD and misinformation."

The next day, Celsius said it was pausing all customer withdrawals, citing extreme market conditions.

### 7-27-22 Bankrupt Crypto Brokerage Voyager Ordered to Cease False Promises About U.S. Banking Insurance

Fed, FDIC issue joint letter demanding Voyager cease and desist from making false and misleading statements

https://www.wsj.com/articles/bankrupt-crypto-brokerage-voyager-ordered-to-cease-false-promises-about-u-s-banking-insurance-11659044094

WASHINGTON—U.S. regulators issued a joint letter ordering bankrupt cryptocurrency broker and lender Voyager Digital Ltd. to cease and desist from marketing itself as insured by the Federal Deposit Insurance Corp., saying statements on its website and elsewhere were false and misleading.

The joint letter released Thursday, from the Federal Reserve and FDIC, said the company's statements "likely misled and were relied upon by customers who placed their funds with Voyager and do not have immediate access to their funds."

Voyager sought Chapter 11 bankruptcy protection earlier this month. A spokesman declined to comment on Thursday's letter.

In addition to the joint letter, the FDIC put out broader guidance on Friday, saying banks need to make sure their partnerships with crypto firms don't exaggerate the reach of the deposit insurance.

"Inaccurate representations about deposit insurance by non-banks, including crypto companies, may confuse the non-bank's customers and cause those customers to mistakenly believe they are protected against any type of loss," the FDIC said in an advisory to the banks it oversees.

Voyager had marketed its accounts as protected by that national safety net, an attractive pitch in the volatile world of cryptocurrency.

"In the rare event your USD funds are compromised due to the company or our banking partner's failure, you are guaranteed a full reimbursement (up to \$250,000)," Voyager wrote in 2019.

#### 7-27-22 WSJ: Titanium Blockchain CEO Pleads Guilty to Fraud

Michael Alan Stollery pleaded guilty to one count of securities fraud related to a \$21 million initial coin offering

https://www.wsj.com/articles/titanium-blockchain-ceo-pleads-guilty-to-fraud-11658795919?mod=hp minor pos11

#### 7-22-22 Bloomberg: Tesla's Bitcoin Dump Leaves Accounting Mystery in Its Wake

https://www.bloomberg.com/news/articles/2022-07-22/tesla-s-bitcoin-dump-leaves-accounting-mystery-in-its-wake

Tesla's Bitcoin Dump Leaves Accounting Mystery in Its Wake

ByNicola M White; July 22-22 at 1:47 PM EDT

Tesla Inc. made waves this week when it announced that it had dumped the bulk of its Bitcoin stash. Selling 75% of its cryptocurrency gave the company a one-time cash infusion, Elon Musk's electric car company said, but the battered value of its remaining Bitcoin also dinged profits.

Exactly how crypto helped and hurt Tesla's bottom line is difficult to disentangle, however, based on what it told the public on earnings day. Current accounting rules—or lack thereof—play a big role.

"Tesla's disclosure is really vague and not transparent," said Vivian Fang, accounting professor at the University of Minnesota's Carlson School of Management. "It is very difficult to realize exactly what is the realized gain and what is the impairment charge."

This is what we know, based on the company's shareholder letter: The sale added \$936 million in cash to its balance sheet, but impairments impacted the company's income. The company's remaining pot of digital assets as of June 30 was worth \$218 million, a reduction of more than one billion dollars from the previous quarter. The company booked a "depreciation, amortization, and impairment" charge of \$922 million, but it didn't break out what's captured in that figure. The 30-page slide deck, of which nine are pictures, mentions Bitcoin twice.

"I'm anxious to see the actual filings—to see if they disclose the date that they sold, the price that they sold at," said Aaron Jacob, head of accounting solutions at TaxBit, a cryptocurrency software company. "They may not disclose any of that."

Tesla isn't compelled to do so. No part of US generally accepted accounting principles spells out how companies must account for cryptocurrency or other digital assets, nor do they mandate the type of information companies must reveal in their footnote disclosures. Businesses follow guidance from the American Institute of CPAs that says those that don't qualify as investment companies should account for crypto holdings as intangible assets.

This means companies record digital assets on their balance sheets at historical cost, minus drops in value during the period. The upshot is that companies only get to record price dips—never recoveries, if the value rebounds. For volatile digital assets, it almost always means companies have to record impairments, even if they're only losses on paper.

'FASB Has No Disclosure Rule'

"Right now, FASB has no disclosure rule, zero," Fang said. "The only thing we know they need to tell us is the cost of whatever Bitcoin holding they have, and if there is an impairment, they have to recognize the impairment charge."

The Financial Accounting Standards Board is in the early stages of writing rules to fill the digital asset guidance gap. It has fielded hundreds of requests asking for rules that allow companies to reflect the fair value of their crypto holdings, so they capture not just the lows, but also when crypto values spike.

Accounting impairments drag down earnings for companies that bet big on Bitcoin. Enterprise software maker MicroStrategy Inc., which holds the most Bitcoin of any public company, has had to record millions in losses because of the accounting. It voluntarily discloses a bevy of information about its crypto, including the average purchase price and the coins' fair value during the quarter, as a supplement to the official accounting.

### 7-22-21 NASDAQ: Elon Musk Reveals Crypto Holdings. Here's Which Cryptocurrencies the Billionaire Owns

https://www.nasdaq.com/articles/elon-musk-reveals-crypto-holdings.-heres-which-cryptocurrencies-the-billionaire-owns-2021

Musk stressed that he owns more Bitcoin than anything else and confirmed that both SpaceX and Tesla also own Bitcoin. "The Bitcoin that I own is worth much more than the Ethereum or Doge," he said.

The crypto enthusiast also reiterated that he is in this for the long term. "I might pump, but I don't dump," smiled the billionaire whose tweets have been known to rock the cryptocurrency market.

He couldn't resist a chance to share his views on Doge either. Musk explained that he likes Dogecoin because, "I love dogs and memes," and it doesn't take itself too seriously.

Musk went on to say, "The most ironic and entertaining outcome would be that the cryptocurrency that was started as a joke to make fun of cryptocurrencies ends up being the leading cryptocurrency."

### 7-17-22 CNBC From \$25 billion to \$167 million: How a major crypto lender collapsed and dragged many investors down with it

https://www.cnbc.com/2022/07/17/how-the-fall-of-celsius-dragged-down-crypto-investors.html

Celsius filing for bankruptcy this week surprised virtually no one. Once a platform freezes customer assets, it's typically all over. But even though it was expected, it remains a really big deal for the industry.

In October 2021, CEO Alex Mashinsky said the crypto lender had \$25 billion in assets under management. Even as recently as May — despite crashing cryptocurrency prices — the lender was managing about \$11.8 billion in assets, according to its website. The firm had another \$8 billion in client loans, making it one of the world's biggest names in crypto lending.

Now, Celsius is down to \$167 million "in cash on hand," which it says will provide "ample liquidity" to support operations during the restructuring process.

Meanwhile, Celsius owes its users around \$4.7 billion, according to its bankruptcy filing — and there's an approximate \$1.2 billion hole in its balance sheet.

Regardless of whether the Celsius implosion portends a larger collapse of the greater crypto ecosystem, the days of customers collecting double-digit annual returns are over. For Celsius, promising those big yields as a means to onboard new users is a big part of what led to its ultimate downfall.

"They were subsidizing it and taking losses to get clients in the door," said Castle Island Venture's Nic Carter. "The yields on the other end were fake and subsidized. Basically, they were pulling through returns from [Ponzi schemes]."

## 6-17-22 Fortune 3AC confirms near \$200 million loss from Luna collapse. 'The Terra-Luna situation caught us very much off guard'

https://fortune.com/2022/06/17/three-arrows-capital-200-million-loss-luna-terra-crypto-hedge-fund/

"We are committed to working things out and finding an equitable solution for all our constituents," 3AC co-founder Kyle Davies told the WSJ. The fund had over \$3 billion worth of cryptocurrencies under management as of April.

3AC is exploring options including asset sales and a rescue by another firm and hopes to reach a settlement with creditors, Davies said. 3AC owes at least \$6 million to crypto exchange BitMEX, as per a separate report by The Block today.

Davies said 3AC invested over \$200 million in LUNA tokens as part of a \$1 billion raise by the Luna Foundation Guard in February, an amount that is now essentially worthless since the Terra ecosystem imploded in mid-May. "The Terra-Luna situation caught us very much off guard," Davies told the WSJ.

LUNA lost nearly all of its value over the course of a week, while ecosystem algorithmic stablecoin terraUSD (UST) fell to a few pennies after losing its intended peg with the U.S. dollar.

3AC was additionally known as one of the largest holders of Grayscale Bitcoin Trust (GBTC), an institutional bitcoin product, as well as staked ether (stETH) tokens, both of which have seen steep declines recently (Grayscale and CoinDesk are independent subsidiaries of the Digital Currency Group).

Davies added that 3AC was working on quantifying its losses and valuing its illiquid assets, which include many venture-capital investments in crypto startups.

Meanwhile, Nichol Yeo, a partner of law firm Solitaire LLP, which is advising 3AC, told the WSJ that it was keeping Singapore's financial regulator, the Monetary Authority of Singapore, apprised of 3AC's recent developments.

#### 6-3-22 CNBC: Crypto scams have cost people more than \$1 billion since 2021, says FTC

https://www.cnbc.com/2022/06/03/crypto-scams-cost-people-more-than-1-billion-since-2021-ftc.html

More than **46,000 people say they lost over \$1 billion in crypto** to scams since the start of 2021, according to a report released by the Federal Trade Commission on Friday.

Losses last year were nearly sixty times what they were in 2018, with a median individual loss of \$2,600.

The FTC notes that the top cryptocurrencies people said they used to pay scammers were bitcoin (70%), tether (10%), and ether (9%).

One key feature of cryptocurrencies like bitcoin is that payment transfers are final and can't be reversed. This isn't always a good thing. Chargebacks — a type of tool designed to protect consumers — allow consumers to reverse a transaction if they claim they have been fraudulently charged for a good or service they did not receive.

### **Theft**

#### 12/2/22 Bloomberg: Binance Probes a Crypto Exploit That All But Wiped Out a Token on Ankr Service

https://www.msn.com/en-us/money/other/binance-probes-a-crypto-exploit-that-all-but-wiped-out-a-token-on-ankr-service/ar-AA14OdNE?ocid=msedgntp&cvid=b77d2df6ce124b6bacbaa18b90759a9a

(Bloomberg) -- This year's long list of crypto security exploits targeting decentralized finance has another unwelcome entry.

Binance, the largest digital-asset exchange, said Friday it's helping to probe an attack on a token offered by the Ankr protocol. The token, aBNBc, is now almost worthless after trading at about \$300 a day ago.

The aBNBc token had derived its value in part from a link to Binance Coin and was intended to give holders of the latter ways of earning returns.

About \$123 million of assets are deposited on the Ankr protocol, according to its website. Ankr said it was working with exchanges to stop trading of the affected coin.

Blockchain security specialist PeckShield Inc. said on Twitter the attacker may have exploited a software bug to mint vast amounts of the token before rushing to convert them into other coins to make away with the digital swag.

More than \$3 billion has been hacked from the crypto sector so far in 2022, which is on course to be a record year for exploits involving digital assets, according to blockchain specialist Chainalysis.

The attacks add to woes from a yearlong rout in Bitcoin and other tokens alongside high-profile blowups at crypto firms such as the FTX exchange.

# 8-10 2022 CRYPTO WORLD: Hackers have stolen \$1.4 billion this year using crypto bridges. Here's why it's happening

https://www.cnbc.com/2022/08/10/hackers-have-stolen-1point4-billion-this-year-using-crypto-bridges.html#:~:text=Bridge%20hacks%20have%20resulted%20in%20more%20than%20%241.3%20billion%20stolen%20in%2022&text=%E2%80%9CBlockchain%20bridges%20have%20become%20the,firm%20Elliptic%2C%20in%20an%20interview.

Crypto bridges, which link blockchain networks together, have become major targets for cybercriminals.

A total of around \$1.4 billion has been lost to breaches on cross-chain bridges this year, according to figures from blockchain analytics firm Chainalysis.

The biggest incident was the record \$615 million haul snatched from Ronin, a bridge supporting the popular nonfungible token game Axie Infinity.

Crypto investors have been hit hard this year by hacks and scams. One reason is that cybercriminals have found a particularly useful avenue to reach them: bridges.

Blockchain bridges, which tenuously connect networks to enable the fast swaps of tokens, are gaining popularity as a way for crypto users to transact. But in using them, crypto enthusiasts are bypassing a centralized exchange and using a system that's largely unprotected.

A total of around \$1.4 billion has been lost to breaches on these cross-chain bridges since the start of the year, according to figures from blockchain analytics firm Chainalysis. The biggest single event was the record \$615 million haul snatched from Ronin, a bridge supporting the popular nonfungible token game Axie Infinity, which lets users earn money as they play.

There was also the \$320 million stolen from Wormhole, a crypto bridge backed by Wall Street high-frequency trading firm Jump Trading. In June, Harmony's Horizon bridge suffered a \$100 million attack. And last week, almost \$200 million was seized by hackers in a breach targeting Nomad.

#### .... More

The vulnerability of bridges can be traced in part to sloppy engineering.

The hack on Harmony's Horizon bridge, for example, was possible because of the limited number of validators that were required for approving transactions. Hackers only needed to compromise two out of a total of five accounts to obtain the passwords necessary for withdrawing funds.

A similar situation occurred with Ronin. Hackers only needed to convince five out of nine validators on the network to hand over their private keys to gain access to crypto locked inside the system.

In Nomad's case, the bridge was much simpler for hackers to manipulate. Attackers were able to enter any value into the system and then withdraw funds, even if there weren't enough assets deposited in the bridge. They didn't need any programming skills, and their exploits led copycats to pile in, leading to the eighth-largest crypto theft of all time, according to Elliptic.

#### 6-13-22 Mashable: The biggest crypto scams of 2022 (so far)

We're only halfway through the year!

#### https://mashable.com/article/biggest-crypto-scams-2022

The developers of Day of Defeat called the project a "radical social experiment" that was "mathematically designed to give holders 10,000,000X PRICE INCREASE." On top of that, they touted a "Mystery Plan" (come on!) that would be rolled out in June of next year that would further see the price of the token increase by 1,000,000. In a FAQ on the Day of the Defeat website, they answered a question concerning their access to the pool of funds, which they said they would "promise" not to redeem. A promise!

Well, guess what? It appears that they broke that promise. In May, the project rug pulled after \$1.35 million was pulled out, causing the token's value to drop by more than 96 percent. As Molly pointed out, it's unlikely even the people who made off with that \$1.35 million did not see those crazy returns that were promised. If they did, their investment would've needed to be less than 14 cents.

### 8-9-22 MSN Hackers swiped \$190 million worth of ether and stablecoins from crypto firm Nomad, report says

https://www.msn.com/en-us/money/other/hackers-swiped-190-million-worth-of-ether-and-stablecoins-from-crypto-firm-nomad-report-says/ar-AA10dZoq?ocid=msedgntp&cvid=d7ae10951a6844f38528ea82f6e06093

Hackers stole \$192 million worth of ether and stablecoin's from crypto firm Nomad, Reuters reported.

The the theft occurred on a so-called token bridge, which allows the transfer of different tokens.

Hackers took cryptocurrency firm Nomad for \$190 million worth of stablecoins and ether, Reuters first reported.

Nomad said on Twitter that the company was aware of the theft and was investigating the matter. The theft occurred on Nomad's cryptocurrency bridge, a vehicle that allows users to exchange different cryptos via neighboring blockchains.

Nomad is the latest cryptocurrency bridge to fall victim to a heist. \$1 billion worth of tokens have been stolen from crypto bridges in 2022 alone, and they are a preferred target for hackers as they are often developed by anonymous parties and are often run with little security behind them.

But Nomad sought to differentiate itself from the vulnerability that plagues crypto bridges. According to Nomad's chief executive, "Nomad's optimistic security model is the gold standard for trust-minimized cross-chain communication."

In February Hackers stole \$300 million from Wormhole, which connects the Ethereum blockchain to Solana. Just a month. later, \$615 million worth of cryptos were stolen from the Ronin Bridge.

Reuters reported that crypto analytic firm PeckShield said that some of the cryptos were sent to a "mixer," which can disguise the origins of coin transactions, while roughly \$95 went to three privately held wallets.

# 4-22 LinkedIn April 2022 - Crypto Thieves Get Bolder by the Heist, Stealing Record Amounts Jack Wilson

I am not sure whether to laugh or shake my head. Crypto enthusiasts keep telling us that crypto currency is un-hackable. Crypto thieves keep stealing crypto currency by the millions (sorry billions). Of course, a key aspect of crypto currency is to facilitate criminal enterprises - even when it is not being stolen. Where would ransomware and money laundering be without crypto? How would Russia manage to hide financial transactions and transfers by their government and their oligarchs? When the flaws in crypto are pointed out, the hypsters just whine "oh you do not understand!" or "You are too old to understand. We younger generation have this totally under control." One thing it is good for is raising money from the gullible. Companies that claim to be using "blockchain" technology have done remarkably well in raising money -although they have done remarkably poorly in building actual businesses. Now

big financial institutions and government organizations are jumping in with both feet to prove how "with it" they are, and they will pay the price of doing so.



Crypto Thieves Get Bolder by the Heist, Stealing Record Amounts

wsj.com • Subscription may be required

#### Rick Salomone President at Salomone Marketing Group

Spot on Jack!

Jack Wilson: The Beanstalk hack described here exploits a flaw in the "proof of stake protocol." The original crypto currencies used a "proof of work" protocol to create a competition between data miners to solve cryptographic problems to be allowed to update the blockchain. Unfortunately, this led to exponential growth of needed computing power and also of the energy needed to do the mining. It is totally unsustainable and unscalable. "Ok," crypto-hypers said, "we will convert to "proof of stake" to decide who is allowed to update the blockchain. A recent Massachusetts company, Algorand, led by an outstanding MIT scientist has touted their crypto currency, Algo, and their platform as a "proof of stake" alternative to Bitcoin to save energy. Ethereum is converting from "proof of work" to "proof of stake" for the same reason. Yes, "proof of work" is an environmental disaster, but "proof of stake" was quickly shown to be rather easy to corrupt. One simply had to find a way to obtain a major "stake" to take over the system. Beanstalk did exactly what all the experts said would be easy to do. Now I know commenters will rush to tell us all the ways they plan to fix this. Caveat emptor.

# Jim Picciotto 1st degree connection1stVice President/Commercial Relationship Officer at Avidia Bank

Unhackable...there is nothing that the right person, with the right access, with the right funding can't disrupt. Keep printing the paper...and let Treasury and Capital Markets dictate what type of instruments are currency.

#### **Jack Wilson:**

Agree. Digital currency is nothing more than another kind of fiat currency. We definitely will have country based digital currencies that are backed by the "full faith and credit of the US (China...India...Germany etc) government" and will work reasonably well. Fiat currencies depend upon that backing. That is why the US Dollar, the Euro, (and increasingly the Chinese Yuan!) have been the mainstays of trade, and the Venezuelan Bolivar, the Russian Ruble, the Confederate currency and others have not. Once we get digital currencies that are backed and regulated one can imagine a digital dollar easily. In fact, we are already largely there. Unfortunately, it is just that point of central regulation that is anathema to Bitcoin fans. They want secrecy and an ability to avoid government regulation, taxation, currency controls, or other oversight.

#### 4-22-22 WSJ: Crypto Thieves Get Bolder by the Heist, Stealing Record Amounts

https://www.wsj.com/articles/crypto-thieves-get-bolder-by-the-heist-stealing-record-amounts-11650582598?mod=hp lead pos2

Hacker steals \$182 million over the weekend, the fifth largest hack on record

On Sunday, a hacker exploited a new algorithmic stablecoin project called Beanstalk and drained it of \$182 million worth of digital assets.

The hack wiped out all of the ether held by the fund. Once the ether was removed, the value of the stablecoin itself, called Bean, collapsed to 10 cents from \$1 on Sunday, according to data firm CoinGecko. Most recently it was trading at 6 cents.

After the bean stablecoin's collapse, the hacker's profit was about \$76 million, according to a blog post from Beanstalk Farms, the group that operates the project.

The Beanstalk hack was the fifth-largest crypto theft on record, according to Rekt.news, which tracks crypto hacks. The hack follows a \$540 million theft last month from the platform for the online game Axie Infinity.

The 2022 pace of roughly a hack a week is in line with last year, but the amount stolen is rising, according to Rekt. Since August, there have been 37 hacks in 38 weeks that have drained about \$2.9 billion worth of cryptocurrencies.

That is on par with the \$3.2 billion stolen in all of 2021, according to analytics firm Chainalysis.

#### 4-21-22 ZDNet: Beanstalk DeFi project robbed of \$182 million in flash loan attack

Reserves were drained after the attacker awarded themselves voting rights.

https://www.zdnet.com/article/beanstalk-defi-project-robbed-of-182-million-in-flash-loan-attack/

Decentralized finance (DeFi) project Beanstalk has lost \$182 million in a flash loan attack.

It might seem more like a corporate heist than a typical cyberattack. Still, this security incident was possible after the unknown threat actor secured the project voting rights necessary to transfer reserve funds away from the project's liquidity pools.

On April 19, Beanstalk, a credit-based stablecoin protocol project based on Ethereum, said the platform was subject to a flash loan attack two days previously.

The cyberattack exploited the project's protocol governance mechanism. According to a post-mortem conducted by Omniscia, the exploit occurred due to the recent implementation of the Curve LP Silos, "ultimately permitting the attacker to conduct an emergency execution of a malicious proposal siphoning project funds."

Flash loan functions in DeFi projects allow users to borrow large amounts of virtual funds for a short period of time. In Beanstalk Farm's case, voting powers were based on the amount of tokens held.

Omniscia says that after the attacker secured a flash loan -- and, therefore, extensive voting rights normally used to accept or decline changes in the protocol's code -- an emergency governance

mechanism was abused to 'vote' for a malicious proposal and allow themselves to send funds to a wallet they controlled.

The flash loan was then repaid.

According to PeckShield, who first spotted the attack, total losses reached \$182 million, with the attacker able to pocket roughly \$80 million. Other losses were due to the fees required to execute the flash loan.

### 4-19-22 Fortune: Hackers stole \$182 million in crypto. Here's how Beanstalk Farms is hoping to stay afloat

https://fortune.com/2022/04/19/hackers-stole-182-million-in-crypto-heres-how-beanstalk-farms/

Beanstalk Farms is appealing to the hacker that stole \$182 million in cryptocurrency on Sunday, offering a \$1.8 million "Whitehat bounty" if the exploiter returns 90% of the stolen funds.

Hackers stole the crypto by exploiting the decentralized finance project's governance system. Blockchain analytics company PeckShield was the first to spot the incident, and provided the \$182 million estimate, noting the attackers took over 24,000 in Ethereum and 36 million in Bean, the company's stablecoin.

After obfuscating the funds and substituting them with others (and the associated fees that go with that effort to remain anonymous), PeckShield says, the hackers netted \$80 million. It took just 13 seconds to empty the account.

Beanstalk, in a statement, said the theft of non-Beanstalk assets totaled roughly \$76 million.

"Yesterday morning, the Beanstalk contract on the Ethereum mainnet was exploited via a previously-unknown issue with Beanstalk's governance process," the company said. "The Beanstalk Farms team was immediately alerted and took action to temporarily shut off protocol governance and pause Beanstalk. Approximately \$76M was stolen from the protocol's liquidity pools. The team has since burned the remaining Beans in the exploiter contract."

In hopes of retrieving the cash, the company made an offer to the hacker, implying it would not pursue charges.

#### 11-2-21 How a Squid Game Crypto Scam Got Away With Millions

On the front lines of a "rug pull" that left investors in the lurch.

https://www.wired.com/story/squid-game-coin-crypto-scam/

Just after 1:38 pm UTC on November 1, **\$3.36 million** that had been invested into Squid Game coin was yanked out of the project by its creators. The liquidity pool in the exchange disappeared in an instant, and within 10 minutes the coin was almost worthless, trading at one-third of a cent.

"Anyone can spin up a token and liquidity pool, so it is a common risk for new projects run by anons," says Patrick McCorry, CEO of PISA Research and formerly an assistant professor in cryptocurrencies and security engineering at King's College London.

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### **Political-Regulatory**

#### 12-1-22 WSJ: Rising Tether Loans Add Risk to Stablecoin, Crypto World

Tether reports hadn't disclosed that loans it issues are denominated and payable in the token

https://www.wsj.com/articles/rising-tether-loans-add-risk-to-stablecoin-crypto-world-11669875590?mod=hp\_lead\_pos3

The company behind the tether stablecoin has increasingly been lending its own coins to customers rather than selling them for hard currency upfront. The shift adds to risks that the company may not have enough liquid assets to pay redemptions in a crisis.

Tether Holdings Ltd. says it lends only to eligible customers and requires that borrowers post lots of "extremely liquid" collateral, which could be sold for dollars if borrowers default.

These loans have appeared for several quarters in the financial reports that Tether shows on its website. In the most recent report, they reached \$6.1 billion as of Sept. 30, or 9% of the company's total assets. They were \$4.1 billion, or 5% of total assets, at the end of 2021.

Tether calls them "secured loans" and discloses little about the borrowers or the collateral accepted. Alex Welch, a Tether spokeswoman, confirmed that all of the secured loans listed in the reports were issued and denominated in tether. The company said the loans were short-term and that Tether holds the collateral.

Tether, which is incorporated in the British Virgin Islands, doesn't publish audited financial statements or a complete balance sheet, leaving outsiders with an incomplete picture of the company's financial health. "Tether's disclosures are limited to the information contained in the mentioned reports," Ms. Welch said.

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In addition to loans, Tether's report showed \$2.6 billion of "other investments" as of Sept. 30, which it reported with no accompanying disclosure of market value. In its Dec. 31 report, Tether showed \$5 billion of "other investments (including digital tokens)," without providing a breakdown.

"They should be giving the fair value on all the underlying assets," Mr. VanDenburgh said. "We don't know if they can pay off dollar-for-dollar based on all their claims against them if they had a major run on the funds."

#### 11-16-22 LinkedIn: Wilson comment on Oct 29 Forbes article on pensions

I agree with the author completely on the problems with pensions, however, his comments on crypto are among either the most naive or the most intentionally false statements I have ever heard!

Take for example this opening statement about crypto:

"In contrast to public pensions, says attorney Santos, the world's first cryptocurrency—bitcoin—operates on a fully transparent platform called a "blockchain" that is proven to be resistant to fraud and hacking by design."

Fully transparent? Ya gotta be kidding me! Every crypto transaction is done with a code that take a dedicated team of investigators and an NSA level computer to try to track down the actual owner. You can see the transactions, but you do not know who is doing them unless you can afford that kind of investigation. We are getting better at doing that, but it is still an long, expensive, difficult, and rare event.

Resistant to fraud? Ya gotta be kidding me!!!! This has been the greatest opportunity for fraud in the history of finance. Billions were lost in fraud last year and there was a \$2 trillion (out of \$3T) loss in value to investors in the last year.

This has long been a sales talking point for crypto shills. At this point saying something like this is either incredibly naive or an absolute intentional act of deception.

Saying this just after the Ontario (Canada) Pension Fund lost millions (probably hundreds of millions) in an investment in crypto through the FTX debacle is staggeringly off base.

#### 10-29-22 Forbes: Pension Funds Or Cryptocurrency, What's The Bigger Scam?

#### https://www-forbes-

com.cdn.ampproject.org/c/s/www.forbes.com/sites/edwardsiedle/2022/10/29/pension-funds-or-cryptocurrency-whats-the-bigger-scam/amp/

Lack of transparency at our nation's public pensions makes scamming easier than cryptocurrency fraud.

Public pension funds or cryptocurrency, what's the bigger scam? The surprising answer is pension funds, according to Anessa Santos, a Florida attorney and Special Magistrate who specializes in blockchain and fintech, and the reason why has everything to do with transparency, she says.

Long heralded as providing retirement security for America's workers, pension plans seemingly promise employees that if they contribute a portion of their income to the plan today, they are guaranteed continued income through retirement. According to Public Plans Data, the 2020 U.S. Census reported we have roughly 6,000 public sector retirement systems that collectively hold \$4.5 trillion in assets for 25.9 million government workers and retirees, and that distribute \$323 billion annually. This is a massive pot of money notorious for attracting the wolves of Wall Street, including fund managers and financial advisors who exploit regulatory gaps and vulnerabilities in plan administration to enrich themselves at the expense of pensioners.

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In contrast to public pensions, says attorney Santos, the world's first cryptocurrency—bitcoin—operates on a fully transparent platform called a "blockchain" that is proven to be resistant to fraud and hacking by design. "If you'll tiptoe with me through the weeds of blockchain technology for a moment," she says, "I'll explain how it can radically alter the pension fund playing field in favor of participants."

Blockchain, simply described, is a new way to keep track of small details, and it solves a lot of problems we have with our current data management systems, especially where data privacy and security are concerned, she says. Fundamentally, blockchain is a decentralized network that stores digital

information in blocks. Each new block of information is timestamped, numbered in sequence, and appended to the previous block, forming a chain. Anyone, anywhere, can participate in maintaining the blockchain network by running a copy of the software on their computer. These computers, called "network nodes," each replicate the entire transaction history of the blockchain. Each transaction is verified and confirmed by at least 51% of the network nodes before being encrypted and written to the blockchain. Once recorded, the software does not permit edits, leaving a perfect trail for auditors. Blockchain, says Santos, has proven impenetrable by bad actors where the network has achieved "decentralization," meaning, no one person or organization can control how it works.

While there are debates over what it means to be decentralized, there is consensus that both the bitcoin and ethereum blockchains have achieved it. This is why Canada's Prime Minister, Justin Trudeau, could not stop the transmission of bitcoin to Canadians during the trucker protest. The bitcoin blockchain is so huge, spanning the breadth and depth of the globe, that you would have to turn off the global internet, forever, to kill it.

"Every transaction ever performed on publicly available blockchains like bitcoin and ethereum is always completely transparent for public inspection. Once an individual is connected to a transaction, their activity can be traced up-chain, down-chain, and cross-chain. Try doing that

#### ----more---

When I asked her how investors can discern the difference, she responded it's not easy and would require another article to detail. In the meantime, Santos says, consider the following: "How is it that, despite having a seemingly complex regulatory framework, pensioners continue to be legally robbed of their life savings? How is it that we have a perfect solution to corruption, but it's never implemented? Why is it that cash is king of anonymity, but we focus on killing crypto when it's proven traceable? Someone, or someones, is benefitting from maintaining the status quo. Who? Follow the money."

I'm no expert on cryptocurrency transparency but I know public pensions. And, based upon 40 years of forensic experience, I can assure you the swiftest way to end public pension fraud is to restore the full transparency once demanded by state public records laws.

#### 10-17-22 Benzinga: \$101M In Ethereum Was Just Transferred Between 2 Wallets

https://www.msn.com/en-us/money/news/101m-in-ethereum-was-just-transferred-between-2-wallets/ar-AA1342l1?ocid=msedgntp&cvid=8779aff280a2403cbc9e8af750989449

What happened: \$101,521,913 worth of Ethereum (CRYPTO: ETH) was just moved between 2 anonymous cryptocurrency wallets in a single transaction.

This mysterious person's Ethereum wallet address has been identified as:

#### 0x44ba1e69985bceb509a44dda041dd4b57d70043f

\$101 million worth of Ethereum was sent to an unknown recipient, with Ethereum wallet address: **0x47ccf33b7ecb1296c3f763a6f069a691a4df70d6** 

Why it matters: Cryptocurrency whales that own millions of dollars in Ethereum tend to move markets single-handedly. If the whale decides to exit this Ethereum position, there could be enough market impact to push down the price of ETH. It takes about \$15 to \$30 million of sell pressure to move the price of Ethereum down 2% on any given exchange.

JMW: Is this what crypto advocates call "transparency?"

#### 10-14-22 WSJ: Crypto Advocacy Group Sues U.S. Treasury Over Tornado Cash Sanctions

Coin Center, a Washington, D.C.-based crypto research and advocacy group, filed suit against the Treasury, asking it to remove Tornado Cash from its sanctions list

https://www.wsj.com/articles/crypto-advocacy-group-sues-u-s-treasury-over-tornado-cash-sanctions-11665610506?mod=hp\_minor\_pos11

A cryptocurrency research and advocacy group has filed a lawsuit challenging the U.S. Treasury Department's sanctions against cryptocurrency mixer Tornado Cash.

Coin Center, a Washington, D.C.-based crypto-focused think-tank, along with three individuals, filed suit against the Treasury Department Wednesday in federal court in the Northern District of Florida, asking it to remove Tornado Cash from the sanctions list.

The suit argues that Treasury's Office of Foreign Assets Control, which enforces U.S. sanctions, doesn't have statutory authority to impose sanctions on Tornado Cash, a platform based on open-source, self-running software protocols, and that the action against it infringes on Americans' right to privacy and on their rights under the First Amendment of the U.S. Constitution.

In August, OFAC imposed sanctions on Tornado Cash, a currency mixer that enables users to co-mingle their funds in order to obfuscate ownership. OFAC accused Tornado Cash of laundering billions of dollars in virtual currency, including \$455 million allegedly stolen by North Korean hackers.

The Treasury Department said Tornado Cash had failed to impose effective controls to stop its users from laundering funds for malicious cyber actors, and that the platform has laundered more than \$7 billion in cryptocurrency since 2019. The sanctions block all property held by the platform under U.S. jurisdiction and bar U.S. companies and individuals from transacting business with it.

In September, the Treasury said Tornado Cash's website had been deleted from the internet, but that it remained available through certain internet archives.

#### 10-3-22 WSJ: Crypto Could Threaten Financial System, Federal Risk Panel Warns

Regulators' report in response to President Biden's order highlights cryptocurrency vulnerabilities

https://www.wsj.com/articles/crypto-could-threaten-financial-system-federal-risk-panel-warns-11664826496?mod=hp\_lista\_pos5

WASHINGTON—Risks tied to cryptocurrencies could grow rapidly and eventually threaten the broader financial system, a panel of senior U.S. officials warned Monday, calling for tougher oversight of digital assets.

The Financial Stability Oversight Council, chaired by Treasury Secretary Janet Yellen, said the crypto industry remains small compared with the overall financial system, but that could change quickly and exacerbate potential systemic risks.

"The financial stability risks of crypto-assets would be substantial if those vulnerabilities were to remain in place while the scale of crypto-asset activities and interconnectedness with the traditional financial system were to grow rapidly," the risk panel said in a 120-page report.

Monday's report is the latest response to a March executive order from President Biden, which called a number of federal agencies to evaluate the risks and opportunities posed by cryptocurrencies.

The industry initially hoped regulators would see promise in the asset class, but officials have recently warned about the potential for disruption posed by financial innovation without sufficient regulation.

"As we have painfully learned from history, innovation without adequate regulation can result in significant disruptions and harm to the financial system and to individuals," Ms. Yellen said ahead of a unanimous vote by the FSOC to release Monday's report.

The FSOC said large parts of the cryptocurrency industry fall under the jurisdiction of the existing financial regulatory laws. It called for Congress to consider legislation to address any gaps, such as over the "spot" market for cryptocurrencies that don't meet the definition of a security overseen by the Securities and Exchange Commission.

Cryptocurrencies remain largely unregulated by the federal government, leaving investors without protections from fraud and market manipulation that come with many other types of investments.

#### 8-12-22 WSJ; Tornado Cash's Sanctions Show Shift in Crypto Regulatory Focus

Treasury sanction is based on increased scrutiny of protocols, or computer code, and is drawing questions from industry participants

https://www.wsj.com/articles/tornado-cashs-sanctions-show-shift-in-crypto-regulatory-focus-11660336224?mod=hp\_minor\_pos10

The U.S. Treasury Department's decision to crack down on cryptocurrency platform Tornado Cash for allegedly being used to launder stolen funds—and the subsequent freezing of millions of dollars in assets by one of the largest U.S. stablecoins in compliance with the order—has prompted concerns of excessive government pressure from many crypto participants, particularly those in the decentralized finance sector.

Citing these U.S. sanctions against Tornado Cash, Dutch authorities Friday said they had arrested a suspected developer of Tornado Cash in Amsterdam on Wednesday, alleging the 29-year-old man is involved in concealing criminal transactions and facilitating money laundering through Tornado Cash. The Dutch authorities in a statement didn't disclose the suspect's identity and said they aren't ruling out more arrests.

The Treasury Department's action Monday against Tornado Cash, a platform based on open-source, self-running software protocols, is unprecedented, crypto industry participants add, as the U.S. has previously only sanctioned wallet addresses and centralized services.

The U.S. Treasury Department accused Tornado Cash, a so-called mixer platform that enables users to exchange cryptocurrencies with relative anonymity, of laundering billions of dollars in virtual currency, including \$455 million allegedly stolen by North Korean hackers. The Treasury also identified and blacklisted dozens of wallet addresses associated with Tornado Cash. The sanctions block all property held by the platform under U.S. jurisdiction and bar U.S. companies and individuals from transacting business with it.

### 6-7-22 CNET: Are Cryptocurrency Transactions Actually Anonymous? Spoiler alert: Bitcoin transactions can still be traced.

https://www.cnet.com/personal-finance/crypto/are-cryptocurrency-transactions-actually-anonymous/

Earlier this year, \$3.6 billion in bitcoin was seized from a Manhattan couple who were arrested and charged with money laundering in connection with a 2016 hack on the Hong Kong cryptocurrency exchange Bitfinex. It was the largest financial seizure in the Justice Department's history.

Law enforcement went to great lengths to trace the illicit funds, including tracking the stolen bitcoin through a complicated web of transactions spanning multiple countries. It took six years, but authorities eventually caught up. More recently, researchers have demonstrated traceability via unintentional patterns in bitcoin's transactional data -- the bigger a data set gets, the more patterns show up. And patterns can be identified and tracked.

#### 8-3-21 SEC: Remarks Before the Aspen Security Forum by Chair Gary Gensler

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https://www.sec.gov/news/speech/gensler-aspen-security-forum-2021-08-03

Nakamoto — we still don't know who she, he, or they were — wrote, "I've been working on a new electronic cash system that's fully peer-to-peer, with no trusted third party." [3]

Nakamoto had solved two riddles that had dogged these cryptographers and other technology experts for a couple of decades: first, how to move something of value on the internet without a central intermediary; and relatedly, how to prevent the "double-spending" of that valuable digital token.

Subsequently, his innovation spurred the development of crypto assets and the underlying blockchain technology.

Based upon Nakamoto's innovation, about a dozen years later, the crypto asset class has ballooned. As of Monday, this asset class purportedly is worth about \$1.6 trillion, with 77 tokens worth at least \$1 billion each and 1,600 with at least a \$1 million market capitalization. [4]

Before starting at the SEC, I had the honor of researching, writing, and teaching about the intersection of finance and technology at the Massachusetts Institute of Technology. This included courses on crypto finance, blockchain technology, and money.

In that work, I came to believe that, though there was a lot of hype masquerading as reality in the crypto field, Nakamoto's innovation is real. Further, it has been and could continue to be a catalyst for change in the fields of finance and money.[5]

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At its core, Nakamoto was trying to create a private form of money with no central intermediary, such as a central bank or commercial banks.

We already live in an age of digital public monies — the dollar, euro, sterling, yen, yuan. If that wasn't obvious before the pandemic, it has become eminently clear over the last year that we increasingly transact online.

Such public fiat monies fulfill the three functions of money: a store of value, unit of account, and medium of exchange.

No single crypto asset, though, broadly fulfills all the functions of money.

As a policy matter, I'm technology-neutral.

As a personal matter, I wouldn't have gone to MIT if I weren't interested in how technology can expand access to finance and contribute to economic growth.

But I am anything but public policy-neutral. As new technologies come along, we need to be sure we're achieving our core public policy goals.

In finance, that's about protecting investors and consumers, guarding against illicit activity, and ensuring financial stability.

So how does the SEC fit into all this?

The SEC has a three-part mission — to protect investors, facilitate capital formation, and maintain fair, orderly, and efficient markets in between them. We focus on financial stability as well. But at our core, we're about investor protection.

If you want to invest in a digital, scarce, speculative store of value, that's fine. Good-faith actors have been speculating on the value of gold and silver for thousands of years.

Right now, we just don't have enough investor protection in crypto. Frankly, at this time, it's more like the Wild West.

This asset class is rife with fraud, scams, and abuse in certain applications. There's a great deal of hype and spin about how crypto assets work. In many cases, investors aren't able to get rigorous, balanced, and complete information.

#### 6-11-21 WSJ: How the FBI Got Colonial Pipeline's Ransom Money Back

Seizure of more than half of the company's payment cuts against crypto's reputation as an untraceable financial medium for hackers

https://www.wsj.com/articles/how-the-fbi-got-colonial-pipelines-ransom-money-back-11623403981

Colonial Pipeline provided investigators with the bitcoin address where it paid hackers on May 8, launching them on the trail, according to court records filed in the U.S. District Court for the Northern District of California. The hackers moved the funds through at least six more addresses by the following day, the records show.

On May 13, DarkSide told affiliates that its servers and other infrastructure had been seized, but didn't specify where or how. On May 27, court records show, a sum including 63.7 bitcoins traced to the Colonial ransom landed at a final address, where the FBI this week seized that portion of the funds.

The FBI said in its request for a warrant Monday that its investigators had in their possession the private key for that address. Officials didn't elaborate on how it obtained the information, and a spokesman didn't offer further comment.

The sum recovered by the FBI likely represents a cut of the ransom shared with DarkSide's affiliates, said Pamela Clegg, director of financial investigations and education at blockchain analytics firm CipherTrace. On May 13, the same day DarkSide claimed its servers had been seized, the remaining funds from Colonial that haven't been recovered by the FBI were consolidated with other crypto tied to ransom payments in a wallet that now holds about 108 bitcoins, she added.

### 6-8-21 CNET US recovers part of multimillion-dollar ransom paid in Colonial Pipeline hack: Colonial Pipeline CEO Joseph Blount says he made the call to pay the ransom.

https://www.cnet.com/news/privacy/us-recovers-part-of-multi-million-dollar-ransom-paid-to-colonial-pipeline-hackers/

The US Department of Justice said Monday that it's recovered millions of dollars in cryptocurrency that was part of a ransom paid to hackers who attacked Colonial Pipeline and prompted the shutdown last month of the East Coast's main fuel-supply artery.

The DOJ said it seized 63.7 bitcoins valued at about \$2.3 million that was part of the ransom demanded by a group known as DarkSide, which is thought to be based in Russia. The pipeline operator had paid hackers \$4.4 million in cryptocurrency.

## 3-9-16 Science: Why criminals can't hide behind Bitcoin: Even with cryptocurrency, investigators can follow the money

#### https://www.science.org/content/article/why-criminals-cant-hide-behind-bitcoin

The Federal Bureau of Investigation (FBI) and other law enforcement begged to differ. Ross Ulbricht, the 31-year-old American who created Silk Road, a Bitcoin market facilitating the sale of \$1 billion in illegal drugs, was sentenced to life in prison in February 2015. In March, the assets of 28-year-old Czech national Tomáš Jiříkovský were seized; he's suspected of laundering \$40 million in stolen Bitcoins. Two more fell in September 2015: 33-year-old American Trendon Shavers pleaded guilty to running a \$150 million Ponzi scheme—the first Bitcoin securities fraud case—and 30-year-old Frenchman Mark Karpelès was arrested and charged with fraud and embezzlement of \$390 million from the now shuttered Bitcoin currency exchange Mt. Gox.

...

This system worked so well that it was carelessness, not any privacy flaws in Bitcoin, that led to the breakthrough in the investigation of Silk Road. When Ulbricht, the ringleader, was hiring help to

expand his operation, he used the same pseudonym he had adopted years before to post announcements on illegal drug discussion forums; that and other moments of sloppiness made him a suspect. Once FBI tracked his IP address to a San Francisco, in California, Internet cafe, they caught him in the act of logging into Silk Road as an administrator.

Other criminals could take solace in the fact that it was a slip-up; as long as you used Bitcoin carefully, your identity was protected behind the cryptographic wall. But now even that confidence is eroded.

## 7-31-22 Benzinga Binance Says It Lost 90% Of Customers, 'Billions In Revenue' Due To KYC Compliance

https://www.msn.com/en-us/money/news/binance-says-it-lost-90-of-customers-billions-in-revenue-due-to-kyc-compliance/ar-AA10aGzo

(KYC means Know Your Customer and sometimes Know Your Client. KYC or KYC check is the mandatory process of identifying and verifying the client's identity when opening an account and periodically over time. In other words, banks must make sure that their clients are genuinely who they claim to be.)

The world's largest cryptocurrency exchange has reportedly lost out on a significant chunk of potential revenue due to KYC compliance.

What Happened: In a recent interview with CoinDesk, Binance compliance team Tigran Gambaryan and Matthew Price, former investigators at the U.S. Internal Revenue Service's cybercrime unit, said that the exchange's tighter KYC policies had come at a cost to the business.

"We have lost 90% of customers after implementing KYC, losing billions in revenue," said Gambaryan.

#### 8-1-22 Coindesk: Binance Investigations Officer: AML Cost Exchange 'Billions in Revenue'

While venting to CoinDesk about unflattering Reuters coverage, the crypto exchange's investigations team shared insights about the scale of illicit activity at Binance and its crime-fighting methods.

https://www.coindesk.com/layer2/2022/08/01/binance-compliance-officer-kyc-cost-exchange-billions-in-revenue/

UPDATE (Aug. 1, 17:11 UTC): Clarifies headline and fixes transcript to reflect that it was not the addition of know-your-customer (KYC) identity checks, but rather the anti-money-laundering (AML) measure of removing sanctioned accounts in part because they hadn't gone through KYC, that cost Binance billions in revenue. Also corrects name of the executives' department (investigations, which reports to compliance but is separate).

Three leading members of Binance's investigations team opened up about what it takes to deal with fraud, money laundering, terrorist financing and bad press for the world's largest crypto exchange.

Reuters recently published a series of investigative reports on Binance and its association with illicit activity. The news service claimed that Binance has become a hub for criminal activity and that it overlooked several money-laundering red flags. Reuters claimed also that Hydra, a Russian-language

darknet market, has links deeply entrenched within Binance's user base, stating that the exchange facilitated \$780 million in payments related to Hydra since 2017.

Binance's investigations team is now led by Tigran Gambaryan and Matthew Price, former investigators at the U.S. Internal Revenue Service's cybercrime unit. Both men played roles in taking down prominent darknet markets AlphaBay, Silk Road and Hydra.

The exchange, which operates in numerous jurisdictions despite not having a formally registered headquarters, also recruited ex-HSBC sanctions expert Chagri Poyraz as its new global head of sanctions compliance.

CoinDesk reached out to Binance to verify Reuters' claims and ended up having two long conversations with Gambaryan, Price and Poyraz. They disputed a number of the claims, including allegations that Binance disproportionately facilitates more money-laundering than other exchanges and Binance has become a hotbed for criminality.

At times, the executives sounded like pub patrons venting to a bartender, occasionally using pejoratives to describe journalists, and such comments should be taken with a pinch of salt.

Nevertheless, they spoke with surprising candor on how the criminal underworld remains firmly ingrained within the crypto industry, despite their best efforts, In the process they offered a rare window into how they tracked down some of the world's most notorious cybercriminals, all while trying to keep the lid on illicit funds being siphoned through Binance.

... more...

#### 5-5-22 CNN: Elizabeth Warren is worried about Fidelity's plan to offer bitcoin in 401(k)s

https://www.cnn.com/2022/05/05/success/fidelity-bitcoin-elizabeth-warren-feseries/index.html

Bitcoin is notoriously volatile. But it may also prove politically vexing for Fidelity, which is getting blowback from two senators for its recent decision to offer bitcoin as an investment option on its 401(k) platform.

Massachusetts Sen. Elizabeth Warren and Minnesota Sen. Tina Smith sent a letter to Fidelity this week asking, among other things, why it didn't heed earlier concerns by the Department of Labor on the issue of including cryptocurrencies in 401(k) retirement accounts.

"Why did Fidelity ignore DOL's 'serious concerns regarding the prudence of a fiduciary's decision to expose a 401(k) plan's participants to direct investments in cryptocurrencies'?" the senators wrote.

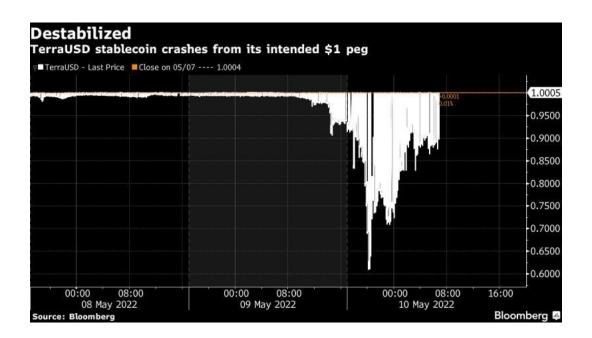
Last week, a top DOL official reiterated the agency's worries that Americans' retirement security could be put at risk. "We have grave concerns with what Fidelity has done," Ali Khawar, acting assistant secretary of DOL's Employee Benefits Security Administration, told the Wall Street Journal.

Warren and Smith also questioned whether Fidelity might have a conflict of interest in offering a bitcoin investment option to its more than 20 million 401(k) participants.

"When Fidelity made its decision to allow sales of bitcoin in retirement accounts, how did the company address its own conflicts of interest, given that the company now is both a bitcoin miner and a purveyor of bitcoin?" they said.

#### 5-2022 LinkedIn -Yellen Cites UST Breakdown While Calling for Stablecoin Rules

There continues to be turmoil in the crypto market. There are two basic types of crypto currency: Unbacked currency like Bitcoin or Ethereum and so-called "StableCoins" like TerraUSD or Tether which are backed by some kind of asset. But Stablecoins can differ between whether the asset is tangible or just another crypto currency. Tether, for example, is backed by the US dollar, while TerraUSD is backed by Luna, which is an unbacked cryptocurrency. While Tether and others like it are useless as an investment, because they simply reflect the value of the dollar, they are useful for making cryptocurrency transactions and safe storage of value obtained in the very volatile unbacked currency market. Many have long observed that "StableCoins" backed by (Unstable!) crypto-coins are quite susceptible to crashes. In fact they are not really "stable" at all. This why the current US Treasury Secretary wishes to see some government regulation to protect naive investors. The TerraUSD situation illustrated this worry quite dramatically.



Yellen Cites UST Breakdown While Calling for Stablecoin Rules

**Khondkar Karim**, DBA, CPA: Thanks for posting, Jack! Did you see this?

https://news.bitcoin.com/report-uae-airline-emirates-set-to-use-bitcoin-as-a-payment-service/

Report: UAE's Emirates Airline Set to Use 'Bitcoin as a Payment Service' - Featured Bitcoin News

**Jack Wilson:** Yes. There are a lot of enterprises that have decided to accept crypto currency. That is not a major worry to me since this is not where the major problems will arise for the world's economy. Of course, the more organizations that accept crypto the more data mining will have to be done. This will create huge demands on the energy market and be bad for the environment of course. In fact, the cost of these transactions will be so high and the rate so slow, that this is likely to only be a niche enterprise. It is mainly for marketing purposes to show how "with it" they are. At this point market realities are kind of forcing companies to do some small efforts at accepting crypto,

#### 5-20-22 LinkedIn U.S. SEC chair says much to be done to protect crypto investors

Jack Wilson

I absolutely agree with him. that is why I keep posting about the flaws in cryptocurrency.

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(Reuters) - Cryptocurrency assets are highly speculative and investors in them need more protections or they could lose trust in the markets, Gary Gensler, chair of the U.S. Securities and Exchange Commission, said on Monday.

Generally, people who buy cryptocurrencies do not get the disclosures they get when they make other asset purchases around things like whether the trading platform they are using is actually trading against them, or whether they actually own the assets they store in digital wallets. Gensler said.

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U.S. SEC chair says much to be done to protect crypto investors

### **Crypto User Issues**

#### 9-1-22: MSN Their Crypto 'Bank' Failed and They Lost Six Figures Overnight — What Now?

https://www.msn.com/en-us/money/smallbusiness/their-crypto-bank-failed-and-they-lost-six-figures-overnight-what-now/ar-AA10TSQK?ocid=msedgntp&cvid=1594e57b8df04f939b9104114b0565c2

Their Crypto 'Bank' Failed and They Lost Six Figures Overnight — What Now?

On Sunday, June 12, at 10:20 p.m., George — like thousands of other customers using crypto lending exchange Celsius — received an email reading: "Due to extreme market conditions, today we are announcing that Celsius is pausing all withdrawals, Swap and transfers between accounts."

"I knew they had exposure but never thought they would lock up our assets," George, who wished to publicly divulge only his first name for reasons of privacy, told GOBankingRates.

George was shocked at first, but within minutes he went to Voyager, another platform he was using, and converted his assets there to cash.

"Then on Monday, Voyager limited their withdrawals," he said.

George, a 58-year-old consultant, used to do business with six different crypto platforms but went on to keep only Celsius, Voyager and BlockFi. "I hit the trifecta," he said. "I thought I was diversifying — if one gets hit, I have the other two. But no. It's insane. I picked the three worst platforms. I have to laugh about it."

He now has \$22,000 in frozen assets and says that his family has been on an "emotional roller coaster" over the past few months.

"I wish I would have pressed the platforms more on the transparency of who they were dealing with. They would have never revealed that, and I should have said, 'Well, I'll go somewhere else.' Greed kept me there."

Voyager Digital, Celsius Crash After Three Arrows Capital Collapse

Crypto lending platforms Voyager Digital and Celsius promised eye-popping yields to their customers — that is, until they both filed for bankruptcy in early July due to their exposure to the now infamous Three Arrows Capital. Three Arrows Capital went bankrupt after the implosion of Terra LUNA and its TerraUSD (UST) stablecoin.

"My problem is that I transferred all my wallet into cefi [centralized finance] platforms right at the beginning of the pandemic to get yield, a dividend, an extra kick," George explained. "I went in when the timing was right... summer 2020."

"Stablecoins were paying 10% interest (USDC, Tether) and when you compare that to banks, it was a no brainer."

George explained that Celsius paid interest every Monday, sending an email to customers letting them know how much they made.

"It was a dopamine hit. You feel it's safe. They had \$18 billion in assets under management at one point. Alex Mashinsky did an AMA every Friday live and I met him twice at conferences," he said.

As of August 5, his family is still in limbo.

"We hear very little from Celsius. As for Voyager, they had offers, one from FTX, but their lawyers pushed back and want to keep exploring options, they want to go through bankruptcy. Now it's just time, we have to wait. And how much will we get back? Fifty cents back on the dollar? Ten?"

As **GOBankingRates** spoke to other affected customers, the recurring theme among the answers was the initial trust customers placed in Celsius and its CEO Alex Mashinsky, as well as the ensuing anger they felt from having that trust abused.

Jovany Lopez, a 40-year-old full-time investor, said he had heard some rumors about Celsius having issues. Lopez now has more than \$120,000 frozen on the platform — assets that were intended for "savings and investing for the future."

"And I talked about moving all of my crypto out of Celsius, but then I decided not to. Then, within a week, Celsius stopped withdrawals. I was so angry at myself for not following my gut feeling a week prior," he shared.

Alice Huang Wijaya, a 31-year-old multimedia journalist who has \$11,000 in frozen assets, tells a similar story. She feels "shock, anger with a dash of hope that it will be fine."

She had started hearing rumors circulating on trader groups, she said. "I was about to pull out, but just two days before freezing, Mashinsky said on Twitter everything was fine and I trusted him!"

YouTuber, podcaster, crypto enthusiast, and creator of BitBoyCrypto.com Ben Armstrong — aka BitBoy Crypto — told GOBankingRates he lost more than \$3 million.

"I fully blame Alex Mashinsky for gross negligence and foolish behavior with other people's assets and trust," he said. "Celsius stole over 1,000 Ethereum and 100 Bitcoin and other cryptos that added up over \$3 million. Those funds were part of my business war chest to pay employees and make investments during the bear market."

Although he learned the news at the same time as other clients, he had actually received correspondence from a Celsius rep just days before withdrawals were paused. At that time, Armstrong was reassured that his funds were safe.

He thinks all the money in Celsius "is gone forever and it will take years for crypto lenders to rebuild trust," However, he hasn't lost faith in the space, saying that, "Crypto is an emerging market that involves considerable risk, but the upside is even higher."

Compounding these stories of disastrous investment, several people GOBankingRates spoke to had recommended the platforms to members of their families or friends. Dragging their loved ones into such a financial fiasco added to common sentiments of anger and for some, guilt.

George, who says he still is a big believer in crypto, had recommended all three platforms to his brother-in-law, which he says is the part that bugs him the most. "It's painful," he said.

George's brother-in-law, Jorge — a 65-year-old former civil engineer who retired in April — lost \$270,000. Jorge's lost funds had been set aside partially for retirement, "but mainly to diversify my investments with the hope of making profits and later on to invest in real estate, with those winnings."

Although he says he initially felt "angry and disillusioned," Jorge still thinks that crypto is "a better alternative than government printed money. Crypto will be in the future, a more stable currency. I just don't know when that future will be."

Jorge regrets, however, placing some of his funds in USDC interest accounts. "I should have known better... that an 8% to 10% interest [rate] was unsustainable," he said.

Lopez, the 40-year-old investor, echoes that sentiment, saying that he is still bullish on crypto for the long-term and doesn't have "any bad feelings about it," as he still believes in the fundamentals, especially those around Bitcoin. "The exchanges got overleveraged and greedy," he said.

"I am not even that angry about losing \$120K," he said. "I am more disappointed and angry for the people and family who trusted Celsius. I know I can replace the money I lost but my heart breaks for the others. Celsius should pay everyone 100% back, but it's clear they are trying to save themselves versus the customers who trusted them."

He says he blames himself for trusting Celsius and breaking the No. 1 rule in crypto: "Not your keys, not your crypto." He now recommends taking cryptos out of exchanges and putting them in a hot or cold wallet.

Similar stories of loss and pain are flooding the Southern District of New York, where bankruptcy proceedings are already happening. Letters included in the court proceedings show customers pleading for a way to get their money back.

For example, 72-year-old Lindsey Derence told the judge in a letter to the court that she's at risk of losing much of her life savings. "It took me four years of buying BTC and ETH in small increments to accrue to 1 Bitcoin, 7ETH that are now locked on Celsius. I planned to hold these assets in a safe crypto 'bank' and wait for them to increase in value so I could pay off my mortgage. Only without a mortgage payment will I be able to exist on just social security," she wrote.

"When I tried to move my cryptos into a custody account, I was locked out by Celsius. That shows his fraudulent intent prior to bankruptcy. Since that moment, I've been in a state of fear, depression, anxiety, helplessness at the prospect of losing this much of my life savings. Small depositors must be made whole again," she penned.

Several experts said that because the crypto industry is in its infancy, it makes getting funds back more complicated in the event of a hack or the collapse of a project.

Ari Redbord, a former senior advisor for the U.S. Treasury Department and now head of legal and government affairs at TRM Labs, told GOBankingRates that with the recent collapse of stablecoin project Terra, there is little that can be done.

"Civil lawsuits are expensive and take time and there is no FDIC-style insurance the way there would be for a bank. This is why global regulators and the crypto industry have supported proposals that call for reserve requirements for these types of projects," he said.

"One interesting answer came recently from the U.K.'s HM Treasury which, last month, released a consultation which recommends changing existing legislation to give the Bank of England power to appoint administrators to oversee insolvency arrangements with failed stablecoin issuers. The BOE

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would be able to either prioritize making consumers and investors whole or mitigating systemic risk of being a 'too big to fail' scenario," he shared.

Jay Fraser, director Of strategic partnerships at blockchain-enabled securities exchange BSTX, agrees, noting the parallel with the Mt. Gox situation in 2014.

"People who lost their money due to the exchange being hacked still haven't gotten it back. There are no laws governing crypto assets like there are with money held in a bank. Crypto funds essentially belong to the crypto exchange, not to you, so without regulation, there's a high chance that account holders won't be getting their money back," Fraser said. He added that, ultimately, the likelihood of recovery is based on how much underlying collateral the company still has.

"With so much of the industry-wide collapse driven by the Three Arrows defaults, how much money customers get back will depend on how much money can be recovered from Three Arrows. So far, that's only been \$40 million of about \$3 billion in loans. This experience, as painful a lesson as it is, could be a positive for the long-term adoption of crypto by institutional managers," he said. "With more guardrails and regulation that closely mirrors traditional finance, risk managers could allow more exploration of crypto assets for institutional portfolios."

#### 8-14-22: WSJ Public Pension systems join those stung

https://www.wsj.com/articles/public-pension-systems-join-those-stung-by-crypto-crash-11660425848?mod=hp lista pos2

#### THE WALL STREET JOURNAL.

### Public Pension Systems Join Those Stung by Crypto Crash

Some find buying opportunities in low prices, cryptocurrency technology



A retirement fund serving Houston firefighters said last year that it put \$25 million into bitcoin and ether. Both have fallen by over 50% since that announcement.

PHOTO: CALLAGHAN O'HARE/REUTERS

Among the investors who bet on cryptocurrency over the past year are pension funds that manage public workers' retirement savings. Now those funds are navigating the crash.

A Quebec pension fund made a \$150 million equity investment in Celsius Network LLC last fall. In July, the cryptocurrency lender filed for bankruptcy protection.

A \$5 billion retirement fund serving Houston firefighters said last October it had put \$25 million into bitcoin and ether. Since that announcement, both cryptocurrencies have fallen by more than 50%.

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"Of course we would have preferred otherwise," Houston Firefighters' Relief and Retirement Fund investment chief Ajit Singh said in an email. But "volatility and large swings are expected."

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Federal regulators are less enthusiastic. The Labor Department in March told 401(k) plans to exercise extreme care in allowing participants to invest in cryptocurrency, and a senior labor official said in April the crypto market isn't ready for people's retirement savings.

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In May, a pair of Virginia pension systems approved a three-year, \$70 million commitment to two funds that provide short-term loans to crypto-related financial firms offering services like crypto trading. The funds are managed by VanEck and Parataxis Capital.

"The yields are more attractive right now given that some people are less willing to do this given the crypto winter that we've endured," said Katherine Molnar, investment chief of the Fairfax County Police Officers Retirement System.

The Fairfax police fund and its sister fund, the Fairfax County Employees' Retirement System, have a total of \$6.6 billion under management and about 30,000 beneficiaries. They have about 4.5% and 2.5% of assets, respectively, committed to crypto-related holdings, after rapid gains on a 2018 investment.

That holding, a stake in a venture-capital fund invested mostly in crypto technology, has already paid out more cash than the Virginia funds put in, according to the manager, Morgan Creek Capital Management, and its book value has quadrupled as of June 30.

Still, many are steering clear, like the \$300 billion California State Teachers' Retirement System.

"The risk is fairly high," a spokeswoman said, "so we would set a high bar to invest in these opportunities."

#### 7-30-22 Crypto Prices Crashed, but True Believers Are Holding On:

A divide is growing between investors looking to make money and those who believe in crypto's mission

https://www.wsj.com/articles/crypto-prices-crashed-but-true-believersare-holding-on-11659143571?mod=hp\_lead\_pos3

With the crypto market crashing, there is a growing divide between investors who are looking to make money and those who believe in its mission. Some true believers, like Mr. Larsen, tout crypto as a way to replace, or at least push back against, big banks and the traditional fiat-money system. Others are more enthusiastic about blockchain, a kind of digital ledger underpinning cryptocurrencies, that could be used to change how records are tracked and stored in areas as varied as medicine and real estate.

#### 6-29-22 NY Times: Crypto Crash Widens a Divide: 'Those With Money Will End Up Being Fine'

https://www.nytimes.com/2022/06/29/technology/crypto-crash-divide.html

Crypto Crash Widens a Divide: 'Those With Money Will End Up Being Fine'

No cryptocurrency investor has been spared the pain of plunging prices. But the fallout from more than \$700 billion in losses is far from even.

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But for all those supposedly egalitarian principles, crypto's collapse has revealed a yawning divide: As employees of crypto companies lose their jobs and ordinary investors suffer huge losses, top executives have emerged relatively unscathed.

No crypto investor has fully escaped the downturn. But a small group of industry titans accumulated immense wealth as prices spiked over the last two years, giving them an enviable cushion. Many of them bought Bitcoin, Ether and other virtual currencies years ago, when prices were a small fraction of their current value. Some locked in their gains early, selling parts of their crypto holdings. Others run publicly traded crypto companies and cashed out of their stock or invested in real estate.

By contrast, many amateur traders flooded into the crypto market during the pandemic, when prices had already started soaring. Some poured in their life savings, leaving them vulnerable to a crash. Thousands also flocked to work for crypto companies, thinking it was a ticket to new riches. Now many of them have seen their savings vanish or have lost their jobs.

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"No matter what, those with money will end up being fine," he said.

The combined fortunes of the 16 richest crypto billionaires exceeded \$135 billion in March, Forbes estimated. As of this week, the total was about \$76 billion, but most of the loss was suffered by a single billionaire, Changpeng Zhao, the chief executive of the crypto exchange Binance, whose \$65 billion fortune shrank to \$17.4 billion.

Cameron and Tyler Winklevoss, whose wealth stood at \$4 billion apiece before the crash, were each worth \$3.3 billion this week, according to Forbes. They declined to comment.

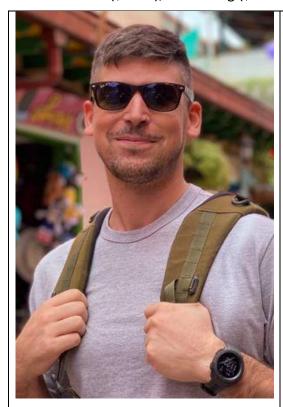
For retail investors like Ben Thompson, 33, the reality is different. Mr. Thompson, who lives in Sydney, Australia, lost about \$45,000 — half his savings — in the crash. He had dabbled in crypto since 2018 and planned to use the money to open a brewery.

"A lot of people who seemed quite reputable had a lot of confidence," Mr. Thompson said. "The smaller people get taken advantage of."

### 7-23 WSJ: They Thought 'Crypto Banks' Were Safe, and Then Came the Crash: Crypto firms such as Celsius and Voyager pitched themselves as good alternatives to traditional lenders

https://www.wsj.com/articles/they-thought-crypto-banks-were-safe-and-then-came-the-crash-11658568780?mod=hp\_lista\_pos3

Lewis Holcomb (\$100k), Jack Wang (\$500k), Dave Jachelski (\$7k) -Money losers in Celsius and Voyager





## 7-12-22 The Guardian: 'They couldn't even scream any more. They were just sobbing': the amateur investors ruined by the crypto crash

https://www.theguardian.com/technology/2022/jul/12/they-couldnt-even-scream-any-more-they-were-just-sobbing-the-amateur-investors-ruined-by-the-crypto-crash

Fuelled by hype and hysteria, the market in bitcoin and other cryptocurrencies went from an obscure niche to a \$3tn industry. Then the house of cards collapsed

In the gloom of an 18th-century drawing room at the private rehab clinic Castle Craig, near Peebles in the Scottish Borders, Roy, a 29-year-old victim of the global cryptocurrency crash, tells me his story. It is a dazzling summer's day, but here the mood is sombre. Roy shifts uncomfortably in his chair as he begins.

It all started in February 2021, with a radio advert for Dogecoin, a cryptocurrency promoted by Elon Musk, the founder of Tesla. Intrigued, Roy started Googling, eventually using his credit card to make an initial investment of €2,500 (£2,200) in a range of cryptocurrencies. The value of Roy's portfolio

climbed to €8,000, then €100,000, then €525,000. Roy had entered the market during an adrenalised bull run, meaning an extended period of price growth. A combination of Covid stimulus packages, low interest rates and an unprecedented level of enthusiasm for cryptocurrency among furloughed workers meant the bull was careering out of sight.

Roy started spending all his time watching YouTube videos and speaking to other cryptocurrency enthusiasts in private groups on the messaging app Telegram. He had been treated for cocaine and alcohol addiction twice, but by 2021 he was sober and working as an addiction counsellor, although he was on sick leave as a result of panic attacks brought on by childhood trauma. He soon relapsed. By day, he checked his cryptocurrency wallets every 10 seconds; by night, he set alarms to go off on the hour. He began fantasising about a life free of financial constraints, in which he would never have to work. "I thought I was on top of the world," Roy says. "Nobody could tell me anything. Money would fix every single problem I faced from now on."

"I always thought the next project would bring me back up again and I'd cash out before it crashed."

Then the cryptocurrency market crashed. The price of bitcoin fell from £42,000 in May 2021 to £23,000 by the end of June. It rallied to an all-time high of £48,000 in November, before diving to £26,000 at the end of January. Since then, it has been in near-continuous freefall. At the time of writing, bitcoin is hovering at £17,000. "It felt like I had lost my life," says Roy. "Because I had invested everything in crypto. I had built every dream I had on there. So, when it came crashing down, my whole life came crashing down."

Desperate, Roy made a string of bad bets. The value of his portfolio dwindled to €20,000, then €3,000. "It got so out of control because I saw all my chances to live a better life fading away," he says. "So I became really desperate and eventually just completely isolated. I didn't want to see anybody, because I thought I was a failure."

Most mornings, he would wake up shaking from alcohol withdrawal, order booze online and spend the day drinking and taking drugs. He developed stomach ulcers. "You can't explain the pain," he says. "I would drink and puke and drink and puke and drink and hope to keep it in, so the pain would go away. I felt like dying."

In May, jobless and broke, Roy checked into Castle Craig, one of the only centres in the world that treats cryptocurrency addiction. (He lost his job when he relapsed; his rehab fees are covered by medical insurance.) His cryptocurrency portfolio is worth about €300. Now, amid the incongruous grandeur of a Scottish stately home, he is attempting to rebuild his life – and quieten the tormenting thought that he should have pulled out his money when he had the chance.

"It's heartbreaking," Roy says, softly. "I hate myself for the fact that I didn't take it out."

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'I worked my ass off doing 16- hour days for six years to earn this money' ... Alla Driksne.

Photograph: @allasyummyfood

"I couldn't eat or sleep for two nights," says **Alla Driksne**, a 34-year-old chef from London. "I got sick from the stress." She has lost her life savings – a six-figure sum – in the Celsius freeze.

Anger. Alex Koh, a 41-year-old engineer and personal finance YouTuber from Glasgow, directs his towards Do Kwon, the South Korean entrepreneur who founded terra/luna. Koh says he lost enough to buy a four-bedroom house in London. Kwon has been accused of fraud by five investors based in South Korea; he is being investigated there by a financial crimes unit and in the US by the Securities and Exchange Commission.

Depression. "I thought I'd be able to retire early," says **Koh**. "But it's all gone down the drain. I've never cried so much in my life."

Koh's wife has a master's degree in business administration and she urged him to be cautious. "She said: 'Alex, it sounds like a Ponzi scheme ... this is social media marketing to rope you in;

take your liquidity and go." But he didn't listen. "They call it 'being an alpha'," he says. "You have to be on Twitter, and follow the right people, and be in the right Discord channel. You listen to the right

chatrooms. It makes you feel so special."



□ 'If I rebound from this, perhaps I can be an inspiration to people' ... Alex Koh. Photograph: YouTube

Bargaining. **Vahid**, a 31-year-old from London, has used Twitter to plead for his money with Alex Mashinsky, the founder of Celsius. Vahid's life savings, more than £50,000 in cryptocurrency, is locked in his Celsius account. Vahid had planned to use the money to start a business or buy a house. For support, he spends his time on conference calls with other Celsius victims; I listen in to one. "I know anything short of getting your native token [initial investment] back is unacceptable," says one investor, with desperation in his voice. "But would you rather get back 10%, or 20%, or 34%, you know? Now, I'm hoping it's not a complete loss."

Shame. **Vahid** hasn't told anyone he has lost his life savings. "I don't want people turning around to me, saying: you should have taken your money out last year," he says. I ask him if he is embarrassed. "Of course," he responds

...

**Nassim Nicholas Taleb** was once open-minded about the potential of cryptocurrencies. The risk engineering professor originated the theory of the "black swan": a hard-to-predict but seismic event, such as the 2008 financial crash, that is often rationalised after the fact with the benefit of hindsight. In 2018, Taleb wrote an essay describing bitcoin as "an excellent idea" and a possible "insurance policy against an Orwellian future".

Last year, Taleb revised his position in a paper that described bitcoin's value as "zero". "This is the first time we've seen a financial bubble coupled with religious, cult-like behaviour and an investment strategy not seen before in history,"

### 5-19-22 NY Times: Has the Crypto Crash Hurt Your Investments? We Want to Hear About It. Tell us about your experiences in the volatile crypto market.

#### https://www.nytimes.com/2022/05/19/technology/crypto-investments-crash.html

Over the last two years, a boom in cryptocurrency prices has minted a generation of millionaires, catapulting industry executives and even some regular investors to extraordinary wealth. But lately the crypto market has crashed. Last week, the collapse of a so-called stablecoin helped ignite a broader meltdown, tanking the price of Bitcoin and wiping \$300 billion in value from the broader crypto economy. Some investors who had put their life savings into the crypto market lost everything.

....

#### 5-2020 LinkedIn -What Is Happening to the People Falling for Crypto and NFTs

#### Jack Wilson

Anybody want to buy some tulips? Oh, I know, the last tulip mania ended badly. This time will be different. These are verified crypto, Web 3.0, Non-fungible Tulips (NFTs!). Get them early so that you can sell them to a greater fool. No worries! The greater fool can sell to the next greater fool. Just try to avoid being the greatest fool. Get in fast and get them while they are hot. Remember that the early investors in tulips, NFTs, and Madoff securities will make lots of money. Too bad about those greatest fools. Caveat emptor. Thank goodness the government has not yet figured out how to regulate these to protect the suckers (er..customers). This keeps it safe for creative entrepreneurs to make piles of money. It worked for Bernie, and it is working for Bitcoin, Ethereum, Dogecoin, Shiba Inu, and many others. Hey, Bernie made it work for over 30 years! I know some folks have already noticed that this crypto crap is mostly selling things with no tangible value and that it has created a disaster in the energy and environment situation. They know that the mathematics of crypto is unscalable and that efforts to solve that by moving from POW to POS has led to insecure environments enabling some staggeringly large thefts. No worries. Many analysts had discovered Bernie was selling a lie and provided incontrovertible proof of that all the way to the SEC. It barely slowed down Bernie's sales. So get them while they are hot. Jump right in and get your Non-fungible tulips, NFTs, crypto-crap, Bored Apes, and other Web 3.0 goodies. But wait! There's more! This is a one time opportunity. Don't miss out. (For those who find sarcasm difficult to understand, please contact me directly and I will provide a translation.)

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What Is Happening to the People Falling for Crypto and NFTs nytimes.com • 2 min read

#### **Ponzi Argument**

### 9-5-22 Benzinga and CNBC: Jim Cramer Says Stay Away From Dogecoin And Shiba Inu, Making Money In Crypto Doesn't Mean It's For Real

https://www.msn.com/en-us/money/news/jim-cramer-says-stay-away-from-dogecoin-and-shiba-inu-making-money-in-crypto-doesn-t-mean-it-s-for-real/ar-AA11rHLF?ocid=msedgntp&cvid=11b430d7e12548d1bae8e82a988d9456

Mad Money host Jim Cramer warned investors to stay away from altcoins like Shiba Inu (CRYPTO: SHIB) and Dogecoin (CRYPTO: DOGE) and a host of other cryptocurrencies that did not live up to expectations.

What Happened: In a recent segment of CNBC's Mad Money, Cramer said that it was time to question the fundamentals of cryptocurrency.

"All things crypto took off with great fanfare, like the dot com bombs, we were told that they were stores of value, that they meant something, that they would be around for a long time," he said.

"I'm at least big enough to admit that this time I was wrong about crypto. I wish the real promoters would do the same. Just because you make money in it, which I was fortunate enough to do, doesn't necessarily mean that it's for real."

Cramer urged investors to stay away from coins like SHIB, DOGE, Polkadot (CRYPTO: DOT), Avalanche (CRYPTO: AVAX), Uniswap (CRYPTO: UNI), Cosmos (CRYPTO: ATOM) and other "really solid investments" that are associated with the term blockchain.

"There's no point in any of this stuff beyond separating you from your money," he said.

The Mad Money host said he believed it, until 300 of them went out of businesses.

https://www.youtube.com/watch?v=saalwvKXgFU

https://www.cnbc.com/video/2022/08/30/jim-cramer-rips-cryptocurrencies-and-other-speculative-assets-urges-investors-to-stay-away.html

These are Seinfeld assets. They are about nothing."

#### 8-1-22 CBS: (Forsage) Crypto execs charged with running \$300 million Ponzi scheme

https://www.msn.com/en-us/money/companies/crypto-execs-charged-with-running-300-million-ponzischeme/ar-AA10c82L?ocid=msedgntp&cvid=6117eeaeb34b4acfa92a7c49827abf41

Eleven people who ran and promoted cryptocurrency firm Forsage are facing charges of operating a pyramid and Ponzi scheme that raised more than \$300 million from millions of investors in the U.S. and elsewhere, according to the Securities and Exchange Commission.

The Forsage executives posted videos that promised huge returns for investors, with one calling it "a powerful long-term source of passive income" and telling viewers, "Forsage means fast and furious."

But securities regulators allege the service's founders weren't providing an investment strategy, but rather running a pyramid scheme, where investors made money by recruiting others. Also, earlier investors were paid through the money invested by newer customers, the hallmark of a classic Ponzi structure.

#### 7-23-22 The Street: Crypto: A Bernie Madoff-Style Scheme May Have Crushed Prominent Lenders

#### Luc Olinga

https://www.msn.com/en-us/money/markets/crypto-a-bernie-madoff-style-scheme-may-have-crushed-prominent-lenders/ar-AAZTovl

Most financially troubled crypto lenders have one thing in common: hedge fund Three Arrows Capital.

An unprecedented crisis of confidence has affected the crypto industry for several months.

To measure it, just consider the prices of cryptocurrencies, which are often attached to a platform or a project. The cryptocurrency market has lost \$2 trillion in value since hitting an all-time high of \$3 trillion in early November, according to data firm CoinGecko. Prices for bitcoin, the king of cryptocurrencies, are down more than two-thirds since hitting an all-time high of \$69,044.77 on November 10.

The severity of the crisis intensified earlier this spring with a seemingly contained event. Early in May, sister coins Luna and UST or TerraUSD collapsed. The fall of the two digital currencies was caused by the fact that many investors wanted to liquidate their positions at the same time. At least \$55 billion was wiped out in this disaster.

....

Three Arrows Capital was operating like a Bernie Madoff Ponzi scheme in disguise, research firm FSInsight, an independent research firm said in a recent report. The firm was an "old-fashioned Madoff-style Ponzi scheme" that took positions similar to those that sank Long Term Capital Management (LTCM), FSInsight said.

Long Term Capital was a famous hedge fund, which was run by famous Wall Street traders and Nobel Prize-winning economists. The firm went down in 1998, forcing the government to intervene in order to prevent the collapse of the markets.

In case of Three Arrows, Kyle Davies, 35, and Su Zhu, 35, the founders, were operating like Bernie Madoff, says the research note delving into the hedge fund's implosion. Davies and Zhu had "used their reputation to recklessly borrow from just about every institutional lender in the business," FSInsight wrote.

Zhu and Davies were likely "using borrowed funds to repay interest on loans issued by lenders, while 'cooking their books' to show massive returns on capital," the note added.

This conclusion suggests questions about whether 3AC's financial disclosures were true. At its peak, the hedge fund said it had over \$18 billion under management. But given the amount of exposure that crypto lenders had to the hedge fund, it's likely that most of its assets were bought with debt and its collateralization ratio was quite small, according to Sean Farrell, head of digital assets at FSInsight.

A Ponzi scheme is a fraudulent financial arrangement that consists of paying existing investors big returns using the capital invested by new investors. This fraud feeds on the credulity of those cheated. It is often only revealed when the funds brought in by incoming investors are no longer sufficient to cover the payments to earlier investors. This fraudulent system was used by the former Chairman of the Nasdaq Bernard Madoff for the largest Ponzi scheme in history.....more



#### 7-23-22 LinkedIn Meet Molly White (Crypto Critic)

#### Jack Wilson•

I am so delighted that there are people with enough courage to step up and point out that the Emperor Crypto has no clothes. While I can understand how the desire to make a buck from naive investors can drive so many companies (Fidelity and Abigail Johnson I am disappointed in you, but you are hardly alone), I urge them to remember their fiduciary duty to investors. At this time many leaders of newer crypto startups are fighting to prevent governments from regulating these investments (often by claiming they are not investments!). Others are facing bankruptcy, legal challenges, and looking for escape routes. Elon Musk was out there promoting crypto (pump?) as he amassed large positions. Then last week he revealed he had Tesla dump most of their bitcoin. As Bloomberg put it: "Tesla Inc. made waves this week when it announced that it had dumped the bulk of its Bitcoin stash. Selling 75% of its cryptocurrency gave the company a one-time cash infusion..." With folks like Musk and Abby Johnson

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promoting these (IMHO and others) Ponzi schemes, we need people like Molly with the courage to tell the truth.



Meet Molly White, the Mass. software engineer going after the crypto industry - The Boston Globe

#### 7-11-22 Globe: Meet Molly White, the Mass. software engineer going after the crypto industry

https://www.bostonglobe.com/2022/07/11/business/meet-molly-white-mass-software-engineer-going-after-crypto-industry/

Depending on whom you ask, cryptocurrency is either digital snake oil or revolutionary technology. Crypto markets have plunged in recent weeks and everyone is looking for answers. So it makes sense that a website dedicated to documenting mishaps, failures, and scams in the industry is suddenly taking off. And who's behind it? Molly White, a 29-year-old Wikipedia enthusiast and former HubSpot employee who has emerged as one of the industry's most pointed critics.

#### 7-8-22 TheStreet: Mark Cuban Caught in Bankruptcy of Crypto Lender Voyager

https://www.msn.com/en-us/money/savingandinvesting/mark-cuban-caught-in-bankruptcy-of-crypto-lender-voyager/ar-AAZnj79?ocid=msedgntp&cvid=a3d38e7899504646a228cabda669fa5e

• • • •

Mark Cuban is in trouble.

The billionaire entrepreneur has been facing a torrent of criticism for several days linked to a partnership forged with a crypto firm. Indeed, Cuban, an evangelist of the crypto industry in which he has invested, had signed an agreement linking his NBA team, the Dallas Mavericks, to the crypto lender Voyager Digital last October.

The contract, signed on October 28, is for five years and has a mission to promote cryptocurrencies by making coins more accessible through educational and digital programs.

#### \$100 Reward When Opening an Account

As part of the partnership, Voyager promised Dallas Mavericks' fans a \$100 reward to trade crypto on Voyager for a limited time if they deposited \$100 and traded just \$10. The offer had met with great success, so much so that Voyager had been obliged to set up a waiting list.

.....

Cuban's words and this partnership now come back to haunt him because many retail investors claim to have invested in Voyager or to have gone through the platform for their first investments in the crypto sector after the partnership with the Dallas Mavericks. These investors are expressing their anger on social social media.

"So we got rugged by @mcuban twice?" posted one Twitter user.

"@mcuban @costplusdrugs Don't trust Cuban. I lost everything in his "partnership" with Voyager," another user complained. "He says he isn't in it for the money and only charges 10-15% after costs. That's 9 figures for every Billion. That's not someone who "isn't in it for the money!"I'm ruined thanks to him."

"@mcuban I made sure to mention that you suggested I use @investvoyager for my crypto exchange. 
"Complained another user."

"@mcuban is full of rugs @," another said.

Cuban, who has a social media presence and has retweeted messages from users praising his efforts to drive down drug costs, has yet to discuss Voyager's bankruptcy.

A Twitter request for comment from the Dallas Mavericks has so far gone unanswered.

"In stocks and crypto, you will see companies that were sustained by cheap, easy money—but didn't have valid business prospects—will disappear," Cuban said in an interview last month with Fortune.

"Like [Warren] Buffett says, 'When the tide goes out, you get to see who is swimming naked."

#### 7-8-22 CNBC: Embattled crypto lender Celsius is a 'fraud' and 'Ponzi scheme,' lawsuit alleges

<u>https://www.cnbc.com/2022/07/08/crypto-lender-celsius-is-a-fraud-and-ponzi-scheme-lawsuit-claims.html</u>

#### **KEY POINTS**

Crypto lender Celsius artificially inflated the price of its own digital coin, failed to hedge risk and engaged in activities that amounted to fraud, a lawsuit alleges.

Celsius on Thursday was sued by former investment manager Jason Stone, as pressure continues to mount on the firm amid a crash in cryptocurrency prices.

Stone alleges in the lawsuit that Celsius was running a "Ponzi scheme."

Crypto lender Celsius artificially inflated the price of its own digital coin, failed to hedge risk and engaged in activities that amounted to fraud, a lawsuit alleges.

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Celsius on Thursday was sued by former investment manager Jason Stone, as pressure continues to mount on the firm amid a crash in cryptocurrency prices.

The lawsuit in New York state court comes after Celsius, which offers customers interest for depositing their crypto, was forced to pause withdrawals for its users as it faces a liquidity crisis.

Celsius was not immediately available for comment on the lawsuit when contacted by CNBC.

Stone's relationship with Celsius

Celsius acts like a bank in that it offers customers yield, sometimes as high as nearly 19%, if they deposit their crypto with the company. The firm then lends that crypto out to others willing to pay a high interest rate to borrow. Then it tries to pocket that money in order to give the yield back to customers.

Stone founded a company called KeyFi which specialized in crypto trading strategies. Celsius and KeyFi cut a "handshake deal" whereby the latter firm would "manage billions of dollars in customer cryptodeposits in return for a share of the profits generated from those crypto-deposits," the lawsuit alleges.

Finally, Stone claims in the lawsuit that Celsius was running a "Ponzi scheme."

Because of Celsius' failure to hedge against trading risks, it had "massive liabilities" to depositors denominated in the cryptocurrency ether but had not maintained holdings in that digital coin equal to those liabilities, the lawsuit claims.

As customers sought to withdraw either deposits, Celsius was forced to buy more ether in the open market at high prices (around January 2021) and suffered heavy losses, the lawsuit claims. Stone alleges that Celsius then began to offer double-digit interest rates in order to lure in new depositors whose funds were used to repay earlier depositors and creditors.

"Thus, while Celsius continued to market itself as a transparent and well capitalized business, in reality, it had become a Ponzi scheme," the lawsuit claims.

#### 7-11-22 Reuters: Three Arrows liquidators asks U.S. court to force crypto founders to cooperate

https://www.reuters.com/legal/litigation/three-arrows-liquidators-asks-us-court-force-crypto-founders-cooperate-2022-07-11/

By Dietrich Knauth

#### Summary:

- Liquidators said they cannot locate the founders
- They said they need access to offices, key documents, bank accounts
- An emergency hearing is scheduled for Tuesday

Reuters - Representatives for Three Arrows Capital (3AC) have asked a U.S. bankruptcy court in Manhattan to force the cryptocurrency hedge fund's founders to participate in the liquidation proceedings, saying they can't be located and have blown off requests for necessary information.

The court scheduled an emergency hearing on Tuesday to address concerns raised by the company's liquidators.

Singapore-based 3AC, which was reported to have \$10 billion in cryptocurrency earlier in 2022, held \$3 billion in assets as of April, according to the liquidators' court filing. The company filed for bankruptcy in the British Virgin Islands in late June after being hammered by a sharp sell-off in digital currencies.

# **7-8-22** Reuters: Crypto lender Voyager addresses customer anger in first bankruptcy hearing By Dietrich Knauth

https://www.reuters.com/legal/litigation/crypto-lender-voyager-addresses-customer-anger-first-bankruptcy-hearing-2022-07-08/

#### Summary

- Voyager attempted to reassure customers "all is not lost"
- Angry customers threatened company executives after their accounts were frozen
- Voyager said customers may not fully recover their crypto assets

#### 7-7-22 LinkedIn: Crypto Broker Voyager Digital Files for Bankruptcy Protection

And another one bites the dust. When will the government finally begin to hold the cryptocrooks (IMHO) to legal standards that other companies must meet? First, they (Voyager) reassured companies of their stability and then they went bankrupt. Quote: "The Chapter 11 filing comes just weeks after Voyager assured customers of its own stability—a trait that has been a common feature of wobbly crypto firms that went on to suspend withdrawals." "On June 14, Voyager said in a tweet: "We have the experience to back our decisions and weather any bear market." It added it had a "low-risk approach to asset management." "



#### 7-6-22 WSJ Crypto Broker Voyager Digital Files for Bankruptcy Protection:

Voluntary filing comes after crypto hedge fund Three Arrows Capital defaulted on a large loan from a Voyager unit

### https://www.wsj.com/articles/crypto-broker-voyager-digital-files-for-bankruptcy-protection-11657098630?mod=hp\_lista\_pos5

Cryptocurrency broker and lender Voyager Digital Ltd. VOYG 0.00% ▲ filed for chapter 11 bankruptcy protection late Tuesday, becoming the latest victim of a contagion rippling through the crypto world.

Voyager, which is listed in Toronto and operates a U.S. cryptocurrency platform, said in a court filing that it faced a "run on the bank," as it was flooded with withdrawal requests by customers while some of its own investments soured or froze.

The firm's downfall illustrates the chain reaction across the sector following large declines in many digital currencies. Voyager said its problems stem above all from the more than \$650 million it lent hedge fund Three Arrows Capital Ltd.—a debt Voyager recently said Three Arrows was unable to repay. Last week, a court in the British Virgin Islands ordered the hedge fund to liquidate after it suffered heavy losses from the collapse of Luna and other cryptocurrencies since May.

Abigail Johnson, if you find yourself in a hole, stop digging. I'm sorry to say this, but you and Fidelity have dug yourself a hole (IMHO). Now you turn around and double down on your digging? Quote: ""I figure this is my third crypto winter," she said, referring to a prolonged period when cryptocurrency prices are low. "If you believe that the fundamentals of a long-term case are really strong, when everybody else is dipping, that's the time to double down and just dive extra hard into it."

Sorry, but no. As a financial executive, you have dug Fidelity and some customers into a crypto currency hole. Now, as Bill Gates, Warren Buffet, Paul Krugman, Elizabeth Warren, many others, and I have recently pointed out, the crypto-flacks are desperate to drum up "greater fools" to pour money into what most have us view as a Ponzi scheme with no tangible values. The problem is that so many customers have already become every Ponzi scheme's "greatest fools," as crypto currencies collapse, and some have even gone to zero or near zero. Those investors have lost all or nearly all their investments. Please do not turn yourself into a crypto-flack. Please do not lead your investors into disaster. Many admire you and follow your lead. You have time to change. (Boston Globe 6/18/2022) <a href="https://lnkd.in/gpwNmRyt">https://lnkd.in/gpwNmRyt</a>

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# 6-18-22 LinkedIN Abigail Johnson, if you find yourself in a hole, stop digging Jack Wilson• President-Emeritus and Distinguished Professor at University of Massachusetts

6-16-22 LinkedIn -Bill Gates Says NFTs and Crypto Are '100%' Based on Greater Fool Theory

Jack Wilson•

Glad to see that Bill Gates appears to be copying my mantra of the last couple of years that Crypto, NFT, and Web 3.0 are mostly based upon the famous "greater fool theory" that has driven the "success" of pyramid schemes from the Tulip mania to Carlo Ponzi to Bernie Madoff. These all share the characteristics that the originators and early investors can make huge fortunes by attracting ever "greater fools" who will pay more and more for things with no tangible value. Sadly, it always ends and leaves the greatest fools holding the bag. Today we see knowledgeable people whose fortunes do NOT depend upon crypto pointing out that this is a scam. The problem is that there are thousands of entrepreneurs and early investors who are shamelessly flogging these investments because they absolutely must find those greater fools, or they are about to lose that nice fortune that they are amassing. Please my friends, don't be the greatest fool.



Bill Gates Says NFTs and Crypto Are '100%' Based on Greater Fool Theory

wsj.com • 3 min read

### 6-17-22 -CNBCTV18.com Bill Gates calls out cryptos & NFTs, says asset class is '100% based on the greater fool theory'

Microsoft Co-Founder Bill Gates described cryptocurrencies as "100 percent based on some sort of Greater Fool Theory." The Greater Fool Theory states that the market will always have investors that are foolish enough to shell out money for an overvalued investment.

"The value of companies is based on how they make great products. The value of crypto is just what some other person decides someone else will pay for it, so not adding to society like other investments," he explained.

#### 6-15-22 -WSJ: Bill Gates Says NFTs and Crypto Are '100%' Based on Greater Fool Theory

The Microsoft co-founder joked that 'expensive digital images of monkeys' would improve the world

https://www.wsj.com/articles/bill-gates-says-cryptocurrencies-and-nfts-are-100-based-on-greater-fool-theory-11655302143

Microsoft Corp. co-founder Bill Gates said he thinks cryptocurrencies and NFTs are "100%" based on the greater fool theory.

The 66-year-old billionaire was referring to the notion that overvalued assets will keep going up because there are enough people willing to pay high prices for them. He joked that "expensive digital images of monkeys" would "improve the world immensely."

Mr. Gates, who for years has lampooned cryptocurrencies, said Tuesday at a TechCrunch event in Berkeley, Calif., that people bought cryptocurrencies and NFTs based on the idea that, no matter its price, it could be sold for higher because "somebody's going to pay more for it than I do."

#### 6-14-22 LinkedIN -Bitcoin plunges as major crypto lender halts operations

The collapse of crypto currency is continuing and accelerating. It is following the traditional path of all Ponzi or pyramid schemes as the originators and earliest investors harvest piles of money from later investors (the greater fool theory) who end up holding the bag. Bitcoin was down 16% today and Ethereum was down 17%. Those are widely considered to be the best. As I have noted in earlier posts, many weaker currencies have gone to zero (or at least near zero.)



#### Bitcoin plunges as major crypto lender halts operations

msn.com • 1 min read

Jim Picciotto, , Vice President/Commercial Relationship Officer at Avidia Bank: Question: Jack; Is "safe cryptocurrency" the same as "jumbo shrimp"?!

Reply

Jack Wilson: Yep, it is right up there with "military intelligence" or "pretty ugly" too!

#### 6-14-22 LinkedIn Who Pays for Crypto's Collapse?

As crypto crashes, we are now entering the phase where we search for the guilty (and some innocent too) and sue the daylights out of them. Quote: "But this cycle had something new: crypto craziness. The Federal Trade Commission reports that 46,000 people have reported losing \$1 billion in crypto to scams since January 2021. Bitcoin is down more than 50% since its 2021 peak, Ethereum is down 65%, XRP 78%. And of course, the Luna token is down from \$116 on April 5 to essentially zero. Is anyone liable? Binance, FTX, Coinbase, Kraken, Bitfinex and Crypto.com are some of the largest exchanges for crypto trading."



#### Opinion | Who Pays for Crypto's Collapse?

Jack Wilson, Author, President-Emeritus and Distinguished Professor at University of Massachusetts:

On top of those being sued, some will likely face criminal charges for selling unregistered securities. Quote: "Are cryptocurrencies securities or not? Selling unregistered securities can be a felony, with up to five years in jail, and damages could include the dollar amount of an investors' losses or more. A 1946 Supreme Court case, Securities and Exchange Commission v. W.J. Howey Co., established the test that determines whether something is a security under the Securities Act of 1933 and subject to registration and reporting requirements. It is a four-criteria test, summarized as: A security requires an investment in a common enterprise with expectations of profit via efforts by others. I don't think any cryptocurrencies have registered as securities. But crypto creators can't say they weren't warned. In

2017 then-SEC Chairman Jay Clayton cautioned "market participants against promoting or touting the offer and sale of coins without first determining whether the securities laws apply to those actions."

https://www.wsj.com/articles/who-pays-for-crypto-collapse-class-action-lawsuits-bitcoin-ethereum-losses-investors-coinbase-luna-xrp-11655056359?mod=hp trending now opn pos1

### 6-11-22 LinkedIn - When the crypto crisis hits (and it soon will), the U.S. will be forced to strip away the cloak of anonymity that facilitates criminal acts and which gives crypto its allure

Jack Wilson

Quote: "A more interesting question is what will happen when governments finally get serious about regulating bitcoin and its brethren. Of the major economies, only China has so far begun to do so. Most policy makers have instead tried to change the topic by talking about central bank-issued digital currencies (CBDCs). In contrast, one of the biggest attractions of private cryptocurrencies is the opportunity they offer to bypass governments. True, cryptocurrency transactions are completely traceable through the blockchain ledger, but users typically set up accounts under pseudonyms and are therefore difficult to identify without other information, which is expensive to obtain."



When the crypto crisis hits (and it soon will), the U.S. will be forced to strip away the cloak of anonymity that facilitates criminal acts and which gives crypto its allure

msn.com • 1 min read

#### 5-28-22 LinkedIn Terra USD Crash

Jack Wilson

Why do I post warnings about the clear mathematical and financial flaws of crypto currency? If I can save one friend from what happened to this Massachusetts surgeon and his family or if I can induce the state and federal government to regulate these flaws and force disclosure, it will be worth the annoyance.



<u>TerraUSD Crash Led to Vanished Savings, Shattered Dreams</u>

wsj.com • Subscription may be required

5-27-22 WSJ: TerraUSD Crash Led to Vanished Savings, Shattered Dreams: Investors swept up in the mania for the high-yielding stablecoin thought it would be safe

https://www.wsj.com/articles/terrausd-crash-led-to-vanished-savings-shattered-dreams-11653649201

TerraUSD was touted as a blue-chip cryptocurrency. Now its investors are reeling from painful losses and asking if it was all a get-rich-quick scheme.

A surgeon in Massachusetts can't stop thinking about how he lost his family's nest egg. A young Ukrainian considered suicide after losing 90% of his savings. Other investors have given up dreams of starting new businesses or quitting their day jobs.

All of them were swept up in the mania for TerraUSD, whose total value swelled to \$18 billion before collapsing earlier this month. The coin's sudden downfall is a reminder that crypto—which enjoyed a huge bull market last year—is often little more than a casino, with weak regulation and few means of recourse for the losers.

#### 5-28-22 LinkedIn - Is cryptocurrency a Ponzi scheme? - The Boston Globe

Jack Wilson

If it looks like a duck and quacks like a duck......



#### Is cryptocurrency a Ponzi scheme? - The Boston Globe

bostonglobe.com • 4 min read

#### Comments:

Jim Picciotto, Vice President/Commercial Relationship Officer at Avidia Bank

Jack, notice the flight to quality from equity to BITCOIN when equities are down.....NOT! Quack, quack.

#### Reply

Jack Wilson, Author, President-Emeritus and Distinguished Professor at University of Massachusetts Love it.

#### 5-24-22 Boston Globe: Is cryptocurrency a Ponzi scheme?

https://www.bostonglobe.com/2022/05/24/opinion/is-cryptocurrency-ponzi-scheme/

Crypto believers reject the accusation by citing the relative transparency of the currencies' methods and the absence of deception. Detractors say the lack of underlying assets or government backing qualifies crypto for the Ponzi duck test.

A novel investment opportunity bursts onto the scene. Its origin story is complex yet plausible enough. Regulators shrug, then race to catch up. Charismatic pitchmen condemn the traditional system as rigged against outsiders and innovators. Reporters tell stories of sudden wealth. Customers' doubts succumb to opportunism and, for some, greed.

Good times roll, until they don't.

That might sound like the stratospheric rise and recent plunge in values of the digital money known as cryptocurrency. But a century ago it described the trajectory of Charles Ponzi, whose eponymous scheme is being invoked daily to attack crypto as a scam.

...

By definition, a Ponzi scheme is a fraud in which money from one group of people is secretly used to pay promised returns to another group of people. Think of it this way: You "invest" \$1,000 in exchange for my guarantee to double your money in weeks. What you don't know is that I don't have a legitimate business with products or services. Instead, I intend to lure more investors (a.k.a. suckers) and use their money to pay you. Eventually, the scheme collapses when I take the money and run, or when withdrawals outpace the influx of new money.

,,,

Afterward, The New York Times was more forgiving toward Ponzi than to investors seduced by the promise of easy money: "They showed only greed — the eagerness to get much for nothing — and they had not one of Ponzi's redeeming graces."

Ponzi's fall didn't dissuade others. Major spikes in Ponzi references still happen routinely, as when Bernie Madoff's multibillion-dollar scam collapsed, in 2008. Before and since, countless other swindles have been labeled Ponzi progeny, some more accurately than others.

- Mitchell Zuckoff is a journalism professor at Boston University and author of "Ponzi's Scheme: The True Story of a Financial Legend."

#### 5-20-22 LinkedIn Crypto Meltdown Exposes Hollowness of Its Libertarian Promise

Jack Wilson

The (crypto)emperor has no clothes and more people are willing to say it out loud. The only ones still puffing about the greatness of crypto are the ones who want to use it to make lots of money. It has been an easy way to get money from those willing to believe. Those who have made investments are

shaking in their boots after the collapses of Terra and Luna and the staggeringly large thefts -totaling \$2.9 billion in 2021 alone. As the WSJ article suggests: "Crypto makes day-to-day transactions more expensive, not less. Bitcoin ATM fees can range from 7% to 20%, and transaction charges from \$1.78 to \$62. The only businesses to truly embrace crypto are those allergic to oversight, such as ransomware and sanctions busting."

This is a good article that actually highlights the kinds of consumer protections that need to be added to crypto if we are to protect the public and our overall economy.



Crypto Meltdown Exposes Hollowness of Its Libertarian Promise

# 5-20-22 LinkedIn -Crypto key in Fidelity's future, but 'still a lot of uncertainty,' CEO Abby Johnson says Jack Wilson

This article about Abby Johnson's speech at the Greater Boston Chamber of Commerce illustrates how difficult it will be to avoid the danger to our economy posed by cryptocurrency. It is the old Wille Sutton motivation "Because that's where the money is." After being advised by many experts of the dangers, Fidelity is going to offer crypto anyway. Why? Because they have customers who want it: "customers started knocking at our door and asking us if we could do this, that or the other thing in this space," Johnson said. "That led us to launch a few offerings, and it was still fairly limited, but with an eye toward meeting customer needs." The other motivation was the classic: we want to prove how with-it we are! "And the company is exploring ways to catch more eyes over social media, Johnson added. "That's been a little bit of a navigational effort, because that hasn't traditionally been where financial services companies are. But I think it's really important to go to where your customers are. And increasingly, more and more of our customers are on social media, and particularly our younger customers aren't really anywhere else. So we better be there."



<u>Crypto key in Fidelity's future, but 'still a lot of uncertainty,' CEO Abby Johnson says - Boston Business</u>
Journal

#### 5-20-22 LinkedIn -How More Than \$1 Trillion of Crypto Vanished in Just Six Months

Jack Wilson

Even this \$ 1 Trillion loss will not dissuade the true believers! I was just looking at some data on venture capital and can tell you that any company that claims, however ridiculously, that they have a new new application of blockchain is getting venture capital money thrown at them. Meanwhile, the house of cards continues to crumble. Anybody want to buy any of those Non-Fungible Tulips (NFTs?) I was advertising last week?



How More Than \$1 Trillion of Crypto Vanished in Just Six Months wsj.com • Subscription may be required

**Thomas Mathew Kottukapally:** Jack - loved the insights and the reference to Non-Fungible Tulips (NFTs?)

Lucy R. Full Stack Developer 🙆 & Digital Marketing Specialist 📈

Not gonna lie, the Tulip Mania reference had me rolling.

#### **Jack Wilson**

Thanks so much. I wonder how much we might get for those non-fungible tulips. We may be on to something!

Robert B. Childers, Cyber Security Analyst/Systems Security and Remediation

Crypto? Who needs crypto? Madonna just released a NUDE NFT of herself. So, who wants to be the owner? I am sure, for a mere, few hundred thousand, you can own a nude image of Madonna. Then, you can resell it? Yes, imagine that, maybe someone will offer you more than what you paid? Maybe she will wear that funny little captains hat, like the apes do. How much is it worth to you? Has anyone created the KimKoin yet?

#### Jack Wilson

Oh yes. There is almost always a greater fool who will pay more. But there is ALWAYS a greatest fool who gets left holding the bag!

#### **Robert B. Childers**

Crypto needs some celebrity endorsements. SNOOP DOGE DOGE COIN, and maybe Matt Damon. Remember how that worked out? Maybe a Kardashian endorsement. Is there a K-Koin? What crypto needs is a KIM KOIN, KYLIEKOIN, KHLOEKOIN, et al. Maybe a DISICKkoin.

There were 18,000 coins out in the wild. BY the time you read this, there will be 19,000

#### Jack Wilson

Robert B. Childers Ha ha. Some of us might pay a little not to have to look at it! Fou are exactly right. On the other hand, you just watch. There are people who will pay.

#### **Jack Wilson**

Here is what Anand Sanwal of CBInsights had to say this week about the situation:

Crypto may be tanking, but...

Investors doubled down on blockchain and crypto in the first quarter.

While most other sectors saw Q1'22 declines, venture funding to blockchain startups grew for the 7th straight quarter.

Here's what you need to know:

- There were 7+ blockchain deals per business day in Q1'22
- US-based startups raised nearly two-thirds of global funding in the quarter
- A record 14 blockchain unicorns emerged in Q1'22, bringing the sector's total to 62
- NYC once again beat out Silicon Valley in funding for the #1 US metro spot
- More venture funding (\$2.4B) went to NFT startups than any other blockchain category, while DeFi saw 425% year-over-year funding growth

Investor enthusiasm for the blockchain space has remained high amid Web3 hype. We'll be watching if the sector keeps this up as crypto slides and venture funding at large slows down. <end quote>

#### Tim Dotterweich, MBA

No one wants to miss "the next big thing." We've seen this before. "Dot-com companies were all the rage on Wall Street in the late 1990s, amid growing adoption of the internet. Speculative investing fueled a 400% climb in the Nasdaq Composite stock market index between 1995 and 2000. By October 2002, it had plunged almost 80% from its peak."

#### **Michael Tomac**

Tim Dotterweich, MBA I think the dotcom crash is a good analogy to crypto. There will be many crypto pets.com-style collapses, but remember that companies like Google and Amazon started up during that same period. There is quite a lot of junk that will be weeded out, but some of the coins that provide real value will remain when the dust settles.

#### Michael Tomac Application Scientist at Indica Labs

Jack Wilson Why would a government run crypto be the way? One of the main reasons crypto started was because of the distrust in governments maintaining the value of their currency. And the scalability problems can be addressed by multiple transaction layers, just like with our current payment systems.

#### **Jack Wilson**

You are right to say that one of the main reasons for crypto was distrust of government run fiat currencies. The desire was for decentralized systems that government could not control or devalue. A noble idea for sure. The facts on the ground are that this has failed and failed miserably. The fluctuations in crypto FAR exceed any fluctuations in the dollar (or Yuan or Euro or Yen). We have seen the limits to scalability and each effort to get around those has (so far) also failed. Limiting transactions layers or chunking limits the exponential chess board problem but also leads to lower security and greater centralization. Neither are good results. The effort to shift from POW to POS was immediately seen as vulnerable to manipulation. (See Beanstalk) Now the main reason for getting out from under government control is to evade government regulation. That has been a magnificent gift to ransomware and other criminal activity. In a recent debate with me, a crypto enthusiast retorted that it is easy to track transactions on Bitcoin. Yep, but tracking and finding and stopping are two very different things. We got lucky with the Colonial Pipeline and got back part of the ransom.

#### **Jack Wilson**

I do not disagree with that. Like Crypto the dot-com enthusiasts hyped the idea, and people (smart money and dumb money) threw money at anything with dot-com in the title. Today it is block chain. (Disclosure: I was one of the hypers then. Ed Zander, President of Sun Computing, and I (co-chairs) ran conferences in New York, Silicon Valley, Beijing, and Shanghai to hype the dot-com era) I think that crypto currency will definitely have a future, but only when backed by the full faith and credit of reputable organizations -most likely sovereign. Blockchain has run head on into mathematical scalability problems. There may be interesting applications in limited areas. If anyone can find the Google or Amazon among the crypto crowd I will tip my hat to them. I doubt that it will be coins. Data mining has become unsustainable and the move from POW to POS has turned into a security disaster.

**Chris Laux**, Strategic Biz Dev @ Wunderkind: *Jack Wilson- Have you seen the work that Ethereum is doing, or any of the on-chain metrics that make it similar to an "Internet Bond of Value"? The Merge from Proof of Work to Proof of Stake is moving closer & closer, and it's being properly researched, tested, and QA'd* 

Jack Wilson, Author,: Chris Laux, Yes, I am familiar with that. POS will be a major improvement from an energy and environment perspective. Sadly it has also been apparent that known security flaws in POS have been exploited to steal large sums of money. At one level it is conceptually easy to claim that the flaws can be fixed by making it impossible for anyone to obtain a controlling stake and then take all the money (BeanStalk). In practice that has been more difficult. As the Ethereum strategy evolves, we shall see how it goes. Until there are auditable standards and accountability, I will remain a skeptic. However, the last thing most crypto enthusiasts want is accountability, auditability, and lack of anonymity. The whole point of crypto is to allow anonymity and evade any central government control or auditability. If any crypto currency meets auditability and accountability standards will anyone be interested?

**Jack Wilson**, Author: Chris Laux, Further to the point of Ethereum. I was appalled when they described their Internet Bonds as "risk free." Here is a quote about the effort which I found both hilarious and appalling. "It is important to note that the risk-free rate is a theoretical measure in today's world, as no investment is absolutely risk-free. For the purposes of further analysis, it is assumed that a validator on Ethereum that correctly follows the protocol under normal operations will never incur a slashable event."

-Ha ha. In other words they know the risk free claim is bogus, but they intend to use it anyway. Beanstalk claimed their POS was risk free and they lost it all. Terra USD claimed that their Stable Coin was risk free but was backed by Luna which has no tangible value. Destroying Terra was the result, with Luna going to zero.

I understand what Ethereum is trying to do, but I am skeptical that it will work. Time will tell. It would be great if they can pull it off. The odds are heavily against them.

**Chris Laux**: Jack Wilson Who is "they"? Nobody is claiming that Ethereum is risk free. What are your reasons that you're skeptical that it will work? The Beacon Chain has been successfully launched which was a massive "If". Testnets for the Merge (POW to POS) have been running well and a public testnet is about to be launched. Vitalik has proven himself to be one of the few positive actors in a space rife with scams and bad actors. Billions of dollars of transactions have taken place on Ethereum, and almost all of the innovation is taking place on-chain.

**Jack Wilson**: Chris, I gave the link that describes them as Risk Free.

**Jack Wilson**: Unfortunately, your statement that no one is calling them risk free is easily shown to be false. Many people (not nobody) are describing them as risk free. My original post on this gave a link and quote showing that. Here is another quote and link: "The arrival of Web3.0 changes this. Now, it's possible for participants anywhere in the world to get exposure to the open-source web economy through a new generation of digital work agreements—Internet Bonds."

"Understanding the fundamental properties of this new type of agreement is a critical first step in creating better models, valuation and products around it. In a matured state, the yield of the internet's new settlement layer can become **the risk free rate of a decentralized financial ecosystem** and a benchmark for valuing the cost of trustless value transfer."

-https://newsletter.banklesshq.com/p/eth-the-internet-bond?s=r

**David A Iyoha**, (He/Him), Helping Manufacturers & Fabricators get an ROI in Digitization CAD/CAM Nesting, MES, ERP & Industry 4.0 : *Jack Wilson where is this link? In any case finding a few people overpromising as proof for your argument shows it lacks strength. You can find over enthusiastic people in all investment vehicles overpromising, over selling or down right lying.* 

**Jack Wilson**: I can't argue with that. In fact, that was exactly my point. They are "over-promising, over selling, and downright lying." I provided **TWO links** for you documenting that these Ethereum Internet Bonds were being described as risk free. I even helped you further (in case you have trouble following links) by reprinting the direct quotes. If that was not enough, I probably cannot help further -although I could provide many more links and quotes on the same issue.

(Oh, by the way, justifying their bad behavior by claiming that others do it reminds me of the bank robber who claims "I'm not the ONLY one robbing banks! That is where the money is)

**Chris Laux**: Jack Wilson Fair to make a bet about what Ethereum accomplishes over the next 5 years? Happy to accept your terms

Jack Wilson: Sorry, I do not bet with strangers. I assume that you are making big bets on Ethereum. I genuinely hope that Ethereum overcomes the issues I have raised and finds a way to become successful and that you win those bets. As I have indicated in my post pointing out various flaws, I think that some organizations are trying to work on them. It will not be easy, and I am not betting on any of them. Still, I commended Ethereum for its efforts to move from POW to POS as a major energy and environmental step forward, while I pointed out that POS has flaws that have led to some recent horrendous results. Ethereum is trying to circumvent those flaws with an interesting strategy of Internet Bonds leading to the creation of an inside group allowed to approve transactions. I object to them being called "risk-free." I find it even more interesting that this is beginning to create a type of centralization that is anothema to Bitcoin purists. As I have said many times: we will eventually have crypto currencies, but only when they are backed by the full faith and credit of reputable organizations and have well regulated, accountable, auditable, and transparent operations. Exactly what Satashi Nakamoto was trying to avoid.

#### **David A Iyoha**

How much did the regular stock market lose in that time period?

#### **Jack Wilson**

The fall of crypto was over FOUR TIMES AS BAD as the stocks. The value of crypto fell from \$2.2 trillion to \$0.9 trillion from Nov 9, 2012, according to the graph in the article. This is a loss of 60%. The S&P 500 fell 13.9% (from 4685 to 4032). Crypto enthusiasts often say that crypto is used to insulate themselves from dollar inflation and stock market declines. If so, then it sure does a lousy job.

#### **Keith Moore**

Jack Wilson Agreed, but like many I can't help seeing this market being similar to the 1999-2000 era of the Dot Com Bubble. The same uneducated investors speculating, countless bad faith companies, many

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

on both sides getting destroyed. But amazing companies emerged from that rubble, such as Amazon and Google.

Bitcoin has taken another hit, but it's still going strong--at least, higher than it was a few years back. NFTs are hypersaturated and ridiculous in many ways, except to brands who have the recognition or skills/luck to capitalize on them. Other blockchain projects have amazing potential to change the world, but the tech is in VERY early stages of development. We'll see what happens.

#### **David A Iyoha**

Jack Wilson Just because it declined does not prove anything, it can also recover. Stock market enthusiasts and Housing Market enthusiasts seem to forget all the times those tanked and ruined peoples lives.

#### **Jack Wilson**

That is a whatabouta argument. Yes, the stock market can decline, and people lose money there too. Stock represents a share of something of tangible value. Yes, it also can be overhyped and lose value. Crypto is based on nothing of tangible value other than what the greater fool will pay for it. That makes in analogous to Bernie Madoff or Charles Ponzi IMHO. Even worse than that, the major justification is to "decentralize" finance. That has come to mean keeping it away from government control or regulation. That is why it is used for ransomware, criminal transactions, money laundering, or to evade countries currency controls. The fact that people are throwing money at it means nothing other than it looks like the DOT-COM era when anything with DOT-COM in the title had money thrown at it. Today it is blockchain and Crypto.

#### David A Iyoha

Jack Wilson The stock market enthusiasts pretend like stocks are based anything real and not just confidence. It is just the devil you know and grew up with.

Stocks, real estate and crypto are all basically feuled by confidence and new buyers.

Jack Wilson: Keith Moore, Perhaps that is why I am posting about the problems with crypto. During the dot-com era I founded a computer software company and sold in on February 29, 2000. (Today the remnants are part of CISCO). Immediately after the sale it had a NASDAQ market cap of \$500 million (nothing compared to today but pretty good then!). I then watched it and many other companies get crushed. I saw so many friends lose their pensions and worse. It was brutal. Then I had friends who had become very wealthy as early investors with Madoff. Then the courts began to claw back those gains when the fraud news broke. I saw their homes and investments disappearing into the court case. (They got to keep their original home.). There were similar stories about the sub-prime bust. That is why I do

not view the claim that this is much like the dot-com era as comforting. If I can save one colleague or friend from making the mistakes of the prior era, then it is worth annoying all the entrepreneurs who are hyping blockchain to obtain multi-million investments. It may also stimulate the entrepreneurs to be more careful about their claims and fix the flaws.

Comment image, no alternative text available

#### **Keith Moore** Marketing Professional at CourtCall

Jack Wilson These are good points, thanks. So what would you suggest to friends now to build a solid retirement if avoiding past era mistakes? Still long on the stock market? Bonds certainly aren't looking pretty.

#### **Jack Wilson**

Keith, You are asking the right questions and making reasonable observations. I do not claim to be an investment expert. I know a little about such things, but am more of a technology analyst. I understand a bit about technology, entrepreneurship, and new ventures and their history and financial dynamics. Therefore I do not try to advise anyone on investment strategy. I do try to steer them away from speculating on things that I can analyze and see significant risk. As many have observed, we have been through several such experiences (dot-com, Madoff, Sub-Prime, and Crypto). History and research shows that taking the long view on the stock market has proven to be a good strategy. Research has shown that very few investors have ever been able to develop a viable strategy to time the market over the long haul. History has shown that get rich schemes rarely help anyone get rich. In the early stages of any pyramid scheme, those in early can reap rewards, but the dénouement is awful.

#### **Jack Wilson**

Author

President-Emeritus and Distinguished Professor at University of Massachusetts

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Confidence pays a role in all three, but real estate and stocks are based on tangible assets that one can use in many ways. Crypto is based upon confidence alone -just like Bernie Madoffs investments. That is why "confidence games" are illegal. That is quite a difference.

#### **Max Talbot**

I don't think the +\$2 Trillion losses in the 2008 finical collapses relative to what people believed was one of the most secure asset classes scared people away from mortgage backed securities or real estate. There was an underlining flaw that we refused to acknowledge that caused that collapse. Without government bailout support we would have experienced a global meltdown.

Could something be said that with the recent losses in a much more immature asset we are not seeing congruent industries collapse unlike 2008?

In this case it's not a technical / fundament issues, would argue it a confidence or market manipulation issue. I think something could be said about the major macro's of the crypto market and why major players could have interest in seeing a major value decrees to limit buying / finical conversion power. Food for thought - could this be an under handed way to limit Russia's crypto buying power ? Indirectly the US is one of the largest crypto holders. Plus would imagine there are lot of people around the world in conflict zones exiting crypto for fiat currencies as they need rapid liquidity and there is no where near a matching demand.

Paraphrasing a bit on my rant but interested to hear your thoughts...

#### **Jack Wilson**

Yes, in another post I addressed the mortgage derivative crisis and drew some parallels and distinctions. In both cases the mathematics had some issues, but they are a bit different issues. One parallel was that all the economic incentives were huge for the organizations doing this and that influenced them to overhype the safety. Also the consumers in each case were not well qualified to do an independent analysis and the producers were incented not to help them understand. I often joke that I feel responsible as a physicist and mathematician for creating groups of students who went to wall street and applied the math that physics taught them in quantum mechanics and statistical mechanics to the derivatives market. We focused on expectation values and small fluctuation theory. They got those right. Sadly the math and physics also allows for large fluctuations and the probability of large fluctuations become quite large for small N -even though it is small for large N. Our systems usually operate within a few orders of magnitude of 10^5. That made all the difference. Black Swans appeared. Derivatives were not really as safe as advertised.

### 5-20-22 LinkedIn - TerraUSD stablecoin tumbles and luna token plunges 97% as rescue attempts fail to avert 'death spiral'

Some "stablecoins" are not backed by tangible assets, but only by another token that is an unbacked coin with no tangible value. This is a "smoke and mirrors" effort to convey tangible value that leads to a classic "house of cards." The cards always fall. They should be renamed "UNSTABLECOINS." As this article notes: UST had tumbled to \$0.375 Wednesday as of 9.31 a.m. ET, according to Coingecko, having earlier dropped as low as \$0.306. Luna, which is free-floating, was down 97% to \$0.869. It traded as high as \$116 in April. The dramatic drop in TerraUSD and luna is a "death spiral" that could see confidence in the stablecoin evaporate entirely, analysts at research house Fundstrat said in a note.

TerraUSD was the world's third-biggest stablecoin before its dramatic "de-peg" from the dollar in recent days."

These daily disasters, thefts, and ransomware attacks are easily foreseeable result of the hyped cryptocurrency fad.



TerraUSD stablecoin tumbles and luna token plunges 97% as rescue attempts fail to avert 'death spiral'

#### 5-6-22 Bitcoin Magazine: HOW BANKS ARE TRYING TO DISCREDIT BITCOIN

It's no coincidence that as the greatest threat to banking, Bitcoin is constantly under fire from the industry and its beneficiaries

#### https://bitcoinmagazine.com/business/how-banks-try-to-discredit-bitcoin

That banks don't like Bitcoin shouldn't be a surprise. Satoshi Nakamoto's invention is the greatest disruption to the age-old monetary system in decades. As a peer-to-peer network for creating and exchanging value, Bitcoin may render banks useless.

To protect their position, banking institutions have resorted to the classic tool of warfare: propaganda. By spreading misinformation, banks hope to discredit Bitcoin — reducing public adoption and encouraging stricter regulation.

....

President of the European Central Bank Christine Lagarde has also been critical of Bitcoin in the past.

At a Reuters Next Conference, Lagarde branded bitcoin "a highly speculative asset," adding that it has been used to conduct "some funny business and some interesting and totally reprehensible money laundering activity."

**5-22 LinkedIn - Watch out for the 'rug pull' crypto scam that's tricking investors out of millions**Jack Wilson

In my continuing series of posts raising concerns of scams and other risks of cryto-currency/NFTs/etc I would call your attention to one of the scam methods that has managed to **steal \$2.8 billion from investors**. Quote: "Rug pulls are a lucrative scam in which a crypto developer promotes a new project—usually a new token—to investors, and then disappears with tens of millions or even hundreds of millions of dollars. This particular type of fraud accounted for \$2.8 billion in lost money for victims, or 37% of all cryptocurrency scam revenue in 2021, according to Chainalysis, a blockchain analysis company."

""If something is too good to be true, it often is," Richter told Fortune. "The famous Squid Game token is an example that comes to mind."

In November 2021, a cryptocurrency token associated with the hit Netflix series went from \$2,586 to a penny. The project promised that an anti-dumping mechanism was written into the code, making the \$SQUID token immune to a flash-crash. Supposedly, token-holders could only sell by also holding the \$MARBLE token. Yet, the anonymous founders made off with approximately \$3.3 million with virtually no consequences. "



Watch out for the 'rug pull' crypto scam that's tricking investors out of millions fortune.com

#### 5-22 LinkedIn May 2022 Labor Department Criticizes Fidelity's Plan to Put Bitcoin on 401(k) Menu

#### **Jack Wilson**

As crypto currency penetrates into more traditional financial systems and into the government, it brings grave risks to our personal financial systems and our country's economy. Quote: "The move by Fidelity, which administers 401(k)-style accounts for more than 20 million participants, came weeks after the Labor Department published guidance on March 10 highlighting serious concerns about cryptocurrencies in 401(k) plans. The agency cited factors including the

market's volatility and the lack of broadly accepted valuation methodologies investors can rely on to evaluate cryptocurrency prices. Since November, bitcoin has lost about 40% of its value."



# Labor Department Criticizes Fidelity's Plan to Put Bitcoin on 401(k) Menu www.wsj.com • Subscription may be required

Labor Department officials believe Fidelity Investments's plan to allow investors to put bitcoin in their 401(k) accounts risks the retirement security of Americans, a senior administrator said.

"We have grave concerns with what Fidelity has done," Ali Khawar, acting assistant secretary of the Employee Benefits Security Administration, said in an interview with The Wall Street Journal.

Mr. Khawar's group works inside the Labor Department to regulate company-sponsored retirement plans. In the interview, he said he views cryptocurrency as speculative. There is "a lot of hype around 'You have to get in now because you will be left behind otherwise,'" he said.

#### 4-27-22 Fidelity: The Expanding Frontier of Digital Assets

#### https://www.fidelity.com/about-fidelity/our-company/post-consensus-message

It has been quite a year for digital assets, with intense interest and scrutiny from consumers, media, regulators, and legislators alike. While the debate about crypto's future continues, Fidelity's position is clear — we have a contrarian perspective and have the financial strength and long-term patience to

persist when others hesitate. So, despite the crypto market pullback, we are not pulling back on Fidelity's commitment to digital assets......

One in four households now interact with digital assets, and growth is greatest among young investors, with 39% of Gen Z and 38% of Millennials actively engaged in the digital assets' ecosystem.

also <a href="https://today.yougov.com/topics/technology/articles-reports/2022/04/27/how-do-americans-feel-about-emerging-technologies">https://today.yougov.com/topics/technology/articles-reports/2022/04/27/how-do-americans-feel-about-emerging-technologies</a>.

# 4-2022 LinkedIn - Short Sellers Bet Tether, Crypto's Central Bank, Is Vulnerable to a Run Jack Wilson

StableCoins are supposed to provide a stable cash alternative to Bitcoin and other crypto currencies that have nothing of value backing them. For this reason, they are not used for speculative investments but serve primarily as an easy way of getting into and out of Bitcoin (etc.) and protecting gains once achieved. Now many are betting that StableCoins are not nearly as "stable" as advertised.



Short Sellers Bet Tether, Crypto's Central Bank, Is Vulnerable to a Run

### 4-2022 LinkedIn More U.S. Companies Wade Into NFTs Despite Lack of Accounting Rules -Khondkar Karim



More U.S. Companies Wade Into NFTs Despite Lack of Accounting Rules

#### Jack Wilson:

NYT: "Yes, there are tons of scams in NFTs. "Rug pulls" — when a crypto developer abruptly abandons a project and runs away with buyers' money — are a common experience. Several hyped projects have turned out to be rug pulls — including Evolved Apes, an NFT scheme whose creator vanished along with \$2.7 million.

In addition, many projects are corrupted by a practice called "whitelisting," in which certain people are invited to buy their NFTs before they're available to the general public. Whitelisting means that many profits flow to well-connected insiders, who get their NFTs at a discount and can sell them for more once they're released publicly. A study by Chainalysis found that whitelisted users who resold their NFTs made a profit 75 percent of the time, versus 20 percent of the time for nonwhitelisted users.

Money laundering, wash trading — a scheme that involves selling something to yourself in order to inflate its perceived value — and other shady practices are almost certainly happening in the NFT market, too.

https://www.nytimes.com/interactive/2022/03/18/technology/nft-guide.html

#### **Khondkar:**

Well said, Jack!! https://www.fastcompany.com/90727504/report-sec-has-its-eyes-on-nfts-probing-if-some-tokens-are-illegal-securities

Report: SEC has its eyes on NFTs, probing if some tokens are illegal securities

Report: SEC has its eyes on NFTs, probing if some tokens are illegal s...fastcompany.com

# 6-17-22 NY Times: Wonking Out: Wasn't Bitcoin Supposed to Be a Hedge Against Inflation?

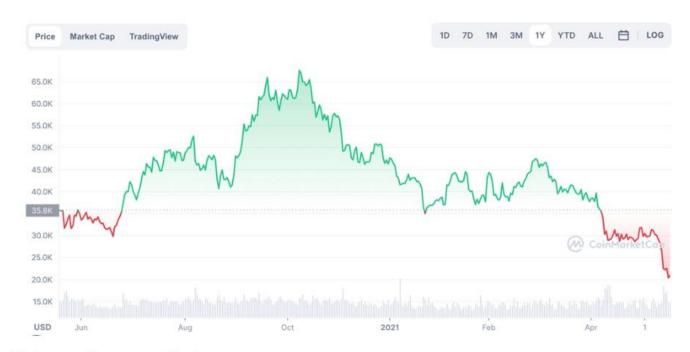
New York Times by Paul Krugman

https://www.nytimes.com/2022/06/17/opinion/crypto-bitcoin-inflation-gold.html?searchResultPosition=1

There's a financial joke, whose origin I don't know, that has been making the rounds lately. It goes like this: If inflation continues at current rates, the purchasing power of wealth held in dollars will be cut in half over the next eight years. But cryptocurrencies can beat that: They can lose half their value in just a few months.

Haha. But crypto enthusiasts have indeed marketed their products as an inflation hedge. *Coinbase, the biggest United States crypto exchange, declares that cryptocurrencies are appealing because "they're more resistant to inflation than fiat currencies like the U.S. dollar."* This is, not incidentally, the same argument people used to make for holding gold.

But a funny thing happened as fears of inflation grew, as seen in this chart showing Bitcoin's price in U.S. dollars over the past year:



This wasn't supposed to happen. coinmarketcap.com https://www.nytimes.com/2022/06/17/opinion/crypto-bitcoin-inflation-gold.html

So why have crypto prices crashed at exactly the moment inflation has taken off? To some extent it may be a coincidence: If you believe, as I do, that crypto is to a large extent a Ponzi scheme, this may just happen to be the moment when the scheme has run out of new suckers.

But there's also a more fundamental issue: People who touted cryptocurrencies as a hedge against fiat-currency inflation — sort of a digital equivalent of gold — fundamentally misunderstood how fiat currency systems work, and also, for what it's worth, misunderstand what has historically driven the price of gold. It was, in fact, predictable that an upsurge in inflation would drive the price of Bitcoin down — although maybe not that it would produce such an epic crash.

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The key point to understand is that while the dollar is indeed a **fiat currency** — that is, the authorities can issue more dollars at will, without the need to back those additional dollars with some kind of collateral — America isn't Venezuela or the Weimar Republic, a nation that prints money to pay the government's bills. Our money supply is a policy tool used by the Federal Reserve to help keep prices fairly stable — actually, rising around 2 percent a year — while avoiding recessions. Sometimes the Fed gets it wrong, as it did over the past year, when it (and I) failed to see the inflation surge coming. But when it does, it tries to correct the mistake.

What this means, in turn, is that an inflationary outbreak doesn't presage a spiral of ever-rising prices, which you can avoid by buying crypto. On the contrary, markets believe that the Fed will do whatever it takes to bring inflation back down to normal levels: The five-year, five-year forward inflation

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

expectation rate, a measure derived from spreads between regular U.S. bonds and bonds indexed to the Consumer Price Index, has barely moved through this whole episode:

# 6-17-22 Boston Globe We're in 'crypto winter.' Here's what locals think about the future of the industry.

Boston Globe By Anissa Gardizy Globe Staff, Updated June 17-22, 10:29 a.m.

https://www.bostonglobe.com/2022/06/17/business/crypto-industry-has-had-terrible-week-heres-what-local-experts-have-do/

The cryptocurrency market has been tanking in recent weeks, wiping out billions of dollars in wealth and causing some tech and business leaders to question the industry, while locals working in crypto say they remain confident about the future.

The latter is perhaps a surprising outlook given that the best-known digital currency, Bitcoin, is down 70 percent from its high in November, far worse than traditional investments such as the stock market. And this week, crypto exchange Coinbase announced layoffs, and lending network Celsius paused its service due to "extreme market conditions."

Even so, the biggest players in the sector are standing by its long-term prospects, as well as the potential for the underlying technologies to affect businesses.

That includes Abigail Johnson, chief executive of Fidelity Investments, which sells crypto-related financial services. She called the downturn an "opportunity" during a keynote session at a crypto conference last week in Austin, Texas.

Fidelity has become a major player in crypto, most recently launching a program that allows companies that use its retirements services to offer their workers a bitcoin option in their 401(k) plans. The move has drawn scrutiny from the Department of Labor and Senator Elizabeth Warren, who wrote in a letter to Johnson that investing in crypto is a "risky and speculative gamble."

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Crypto critic Molly White, a Massachusetts-based software engineer known for her website called "Web3 is Going Just Great," said in an interview there is an incentive to be "incredibly positive about the crypto space, regardless of what's happening." That's because "so much of crypto's value is predicated on people believing in it," she said.

More----

### 6-16-22 Coindesk How Crypto Lender Celsius Overheated

https://www.coindesk.com/business/2022/06/16/how-crypto-lender-celsius-overheated/

Celsius rapidly became more brazen in its attempts to generate yields, using decentralized lending protocols and aggregators to juggle around client funds for the best return.

By Oliver KnightUpdated Jun 16-22 at 2:29 p.m. EDT

## The Takeaway:

Celsius Network, an interest-earning yield platform, has frozen withdrawals after using a myriad of failed decentralized finance (DeFi) strategies.

It suffered a series of severe losses including over 38,000 ETH in a blunder related to Stakehound, followed by a \$22 million loss in connection with the Badger DAO hack.

Customers now fear they will never be able to access funds that are locked on Celsius.

Already reeling from last month's LUNA collapse, the cryptocurrency market has shed \$180 billion off its market cap in the wake of Celsius' announcement, and major exchanges have announced job cuts.

If the collapse of LUNA was cryptocurrency's Bear Stearns moment, Celsius Network threatens to become the industry's Lehman Brothers: the failure that exacerbates a market crisis.

Celsius, which resembles a bank while touting itself as a democratized interest income and lending platform, is rumored to be insolvent following a freeze on withdrawals over the weekend. Founded in 2018, Celsius had more than \$8 billion lent out to clients and \$12 billion in assets under management by May of this year, according to the company.

In the wake of the withdrawal freeze, Coinbase, BlockFi and Crypto.com have announced job cuts, while insolvency rumors are also beginning to emerge from crypto hedge fund Three Arrows Capital.

Aside from the short-term implications, overall trust in the crypto industry is falling to new lows following a six-week period that has seen \$60 billion evaporate in the LUNA crisis followed by the troubles at Celsius.

CoinDesk has received multiple reports from Celsius users over the past few weeks, some of whom are worried about losing their homes after being liquidated on millions of dollars of loans backed by the company's cratering CEL token. CEO Alex Mashinsky often touted these loans as a "megadeal" during livestreams.

"Of course, now with the deteriorating economy I am very worried that I could lose my home if the housing market crashed," said one user.

"CEL was my backstop, my safety net. I did have other crypto but it all blew up as I tried to prop up my loans," said the person, who asked to remain anonymous but provided CoinDesk with screenshots showing liquidated loans.

Despite numerous attempts to contact Celsius and Mashinsky, CoinDesk has not received a formal response, although Mashinsky tweeted Wednesday that he and his team are "working non-stop" to resolve the issues. The company has reportedly hired restructuring attorneys.

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Each stETH token is claimable for 1 ETH following the Merge. However, the lack of liquidity and demand, coupled with the potential of the Merge being delayed, has seen stETH lose relative value.

Several asset managers including Alameda and Amber Group have unloaded significant amounts in recent weeks, with Amber withdrawing \$128 million from the Curve pool to a wallet and sending most of that to the FTX exchange, possibly for cashing out.

On June 7, Celsius had liabilities of more than 1 million ETH, according to an analysis by crypto investor Brad Mills. The Celsius liquid reserves amounted to just 268,000 ETH, with a further 288,000 inaccessible until after the Merge is completed. If users began to request ether withdrawals beyond Celsius' liquid reserves, it would be forced to liquidate its stETH holdings at a 7% discount, not including the slippage that would occur due to a lack of liquidity, wrote Twitter user @Crypto\_Joe10 in a highly detailed thread.

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More headwinds may lie ahead for Celsius, which according to a Radio Canada report may find itself in hot water with regulators after offering unregulated lending services to citizens. Last year it was issued a cease-and-desist order in Kentucky while regulatory pressure also mounted in Alabama, New Jersey and Texas. On Thursday, Texas and four other US states announced that investigations were underway into Celsius' move to freeze withdrawals.

## 6-18-22 Guardian: Trillion-dollar crypto collapse sparks flurry of US lawsuits – who's to blame?

Kim Kardashian and Floyd Mayweather among those being sued, but prosecuting fraud in the crypto arena is notoriously difficult

https://www.theguardian.com/technology/2022/jun/18/cryptocurrency-collapse-bitcoin-kim-kardashian-floyd-mayweather

# 11-1-21 NY Times: Banks Tried to Kill Crypto and Failed. Now They're Embracing It (Slowly):

Digital payments technology is forcing the financial system to evolve. Banks feel their power waning and want to regain control.

https://www.nytimes.com/2021/11/01/business/banks-crypto-bitcoin.html

#### ...more---

But their initial skepticism has cost them time. An alternative financial world is springing up around the traditional banking industry. Cryptocurrency start-ups are beginning to offer credit cards and loans. People and businesses around the world are embracing digital currencies at a rapid pace. Even governments are getting involved. El Salvador recently said it would accept Bitcoin as legal tender. And the Federal Reserve, following in the footsteps of central banks around the world, is evaluating launching its own digital currency.

The traditional banking system held sway for centuries. Banks have long helped governments control the flow of money in their local economies by taking deposits, then lending some of that money to other customers. With the rise of secondary markets for loans, banks could lend even more against the deposits they had by selling the loans to investors after they were made and freeing space on their balance sheets to do more lending. At every step of the way, they made money.

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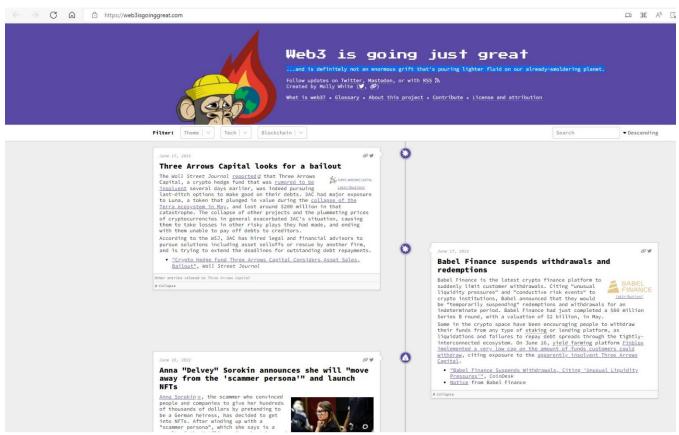
Last year, engineers at Bank of America filed the biggest number of patent applications in the bank's history, including hundreds involving digital payments technologies. It's unclear how exactly the bank plans to use its technology, but it was partly driven by the desire to keep customers within the bank's systems rather than lose them to scrappy cryptocurrency start-ups that allow them to transfer money free.

"The bank sees potential in blockchain, and we're currently a leading patentholder in the space with more than 160 patents," a Bank of America spokesman, Mark Pipitone, said. "But we still haven't found a use at scale to make the financial lives of customers and clients better."

# Web 3 is Going just Great! Molly White

...and is definitely not an enormous grift that's pouring lighter fluid on our already-smoldering planet.

# https://web3isgoinggreat.com/



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#### Kraken

https://kraken-culture.notion.site/

At Kraken, The Mission is to accelerate the worldwide adoption of cryptocurrency because we believe that this will improve lives of billions of people and usher in a new era of human flourishing.

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Here are some examples of how these beliefs might affect how you work and your experience:

- We will push back on government overreach
- We will go above and beyond to protect the personal and financial privacy of our clients
- We may develop or sponsor open source software that empowers citizens to resist corruption
- We will seek to limit market interference and restrictions on who is allowed to participate in markets
- We will engage in disputes with government agencies where outdated laws are unfairly exclusionary
- We will engage in lobbying, as a single-issue donor, supporting controversial politicians and legislation that furthers \*\*\*The Mission\*\*, possibly to the detriment of other civil rights causes\*
- We will advertise with and sponsor controversial television programs, podcasts, influencers and events, if it furthers \*\*\*The Mission\*\*\*
- We may incorporate firearm and self-defense training in to corporate retreats
- We will allow discussion and photographs of firearms in public (but optional) chat rooms
- We will not discriminate based on choices resulting from Krakenites exercising their right to bodily autonomy
- Retreat attendance is optional, however, remote participation may not be facilitated. Retreat activities are optional and we try to support several options to choose from.

# Guardian: Trillion-dollar crypto collapse sparks flurry of US lawsuits – who's to blame?

Kim Kardashian and Floyd Mayweather among those being sued, but prosecuting fraud in the crypto arena is notoriously difficult

# **Algorand Crypto Currency**

Algo is one of the many existing crypto currencies that are unbacked "fiat" crypto currencies like Bitcoin, Ethereum, Dogecoin, Shiba Innu. Like any fiat currency there is nothing of value backing the currency other than a trust that its value will remain roughly the same or even (hopefully) go up over time. Just like the fiat currencies of the past which are based upon the "full faith and credit" of this issuing organization, this is a challenge for crypto currencies. This is nothing new, the US Dollar remains the most trusted fiat currency due to its long-term stability, transparency, and ease of use and conversion. Other fiat currencies like the Venezuelan Bolivar, the Confederate Dollar, and countless others do not enjoy the same trust. It is much the same with digital fiat currencies.

#### Stable Coins

Some crypto currencies are backed by tangible assets. These are often termed "Stablecoins."

https://www.investopedia.com/terms/s/stablecoin.asp or https://en.wikipedia.org/wiki/Stablecoin

Tether is an example. Of course, the dollar was once backed by gold reserves, but the US went off the gold standard in 1933 to the consternation of many of the elite. Stablecoins are not excessively volatile and are not generally viewed as attractive investments but offer an easier and more private way to move value in and out of unbacked crypto currencies. A subset of what I will call quasi-Stablecoins is backed by other crypto currencies or by administrative bodies that "print" crypto or buy it to stabilize the value -much like the US Government does.

Some, and I am included in this group, see unbacked coins like Bitcoin or Algo as similar to pyramid or Ponzi schemes. The earliest to obtain them are relying on someone else to value them more and come and buy them at a higher price. The second group then is relying on another larger group to value them even more and thus yield them a profit. Sometimes this is called "the greater fool" effect. When one looks at the distribution of Algo, one sees that

27-12-2022 Coindesk: Algo Value -Algorand

https://www.coindesk.com/price/algorand/

What Is Algorand (ALGO)?

Algorand is a self-sustaining, decentralized, blockchain-based network that supports a wide range of applications. These systems are secure, scalable and efficient, all critical properties for effective applications in the real world. Algorand will support computations that require reliable performance guarantees to create new forms of trust.

The Algorand mainnet became live in June 2019, and was able to handle almost 1 million transactions per day as of December 2020. Algorand transaction metrics can be viewed here. Algorand initial coin offering (ICO) was held in June 2019, with the Algorand price of \$2.4 per token.

# Who Are the Founders of Algorand?

Silvio Micali is a professor of computer science at the Massachusetts Institute of Technology, and the founder of Algorand. He is a recipient of the Turing Award (in 2012) for his fundamental contributions to the theory and practice of secure two-party computation, electronic cash, cryptocurrencies and blockchain protocols. This makes him one of the foremost creators of crypto in the world.

# What Makes Algorand Unique?

Algorand was invented to speed up transactions and improve efficiency, in response to the slow transaction times of Bitcoin and other blockchains. Algorand is designed so that there are lower transaction fees, as well as no mining (like Bitcoin's energy-intensive process), as it is based on a permissionless pure proof-of-stake (PoS) blockchain protocol.

# Algorand's Compatibility with Ethereum

On Feb. 17, 2022, the Algorand Foundation announced a \$10M grant to Applied Blockchain to develop the London Bridge, a trustless bridge that will bring Ethereum compatibility to the Algorand blockchain. Algorand has struggled to attract liquidity to its ecosystem, despite promising low cost transactions, low latency and high scalability. Having a bridge to Ethereum, which currently has the most robust DApp ecosystem, would allow Algorand to connect to these applications and attract more liquidity. In the long-term, the Algorand Foundation aims to have verification of other chains be performed on Algorand's smart contracts, by incorporating state proofs in the form of Compact Certificates into the Algorand Consensus. The foundation's goal is to eventually solidify the DeFi ecosystem on Algorand.



### 11-29-2021 NASDAQ: Algorand Could Be the Next Solana if El Salvador Succeeds

https://www.nasdaq.com/articles/algorand-could-be-the-next-solana-if-el-salvador-succeeds

Algorand Could Be the Next Solana if El Salvador Succeeds CONTRIBUTOR Mark R. Hake 11-29-21 12:44PM EST

Investors in Algorand have two things on their side. For one, ALGO crypto is well off of its former highs. This allows an investor to get in at a bargain price. Secondly, investors now have the benefit of seeing Algorand put to the test on a large scale in a small nation. For all intents and purposes, it will act as a test tube.

# 12-17-2021-CoinGeek: Shocker: Bitcoin in El Salvador is fake

https://coingeek.com/shocker-bitcoin-in-el-salvador-is-fake/

Shocker: Bitcoin in El Salvador is fake Kurt Wuckert Jr EDITORIAL 17 DECEMBER 2021

Like many Salvadorans, Juan is concerned about the purchasing power of the local currency. Actually, no, he probably isn't because El Salvador uses U.S. dollars, and despite some of the very real problems with U.S. fiat, the dollar is a welcome cornerstone of stability in a country where the President is cited for bringing the military into the chambers of their legislature to make sure they know who's boss!

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Chivo Wallet isn't using BTC or Lightning Network\* at all. El Salvador, while pretending to be BTC maximalists, actually signed a deal with the Algorand blockchain to handle their national blockchain infrastructure because BTC and Lightning Network\* are both incapable of handling the traffic of a country the size of El Salvador, and the hype around "Bitcoin\* Beach" and the rest of their marketing nonsense is little more than a ploy for Bukele to attempt to join the technocratic elite of what he's guessing will be the future!

But how do we know this? CryptosRUS reported: "Little do people know that when El-Salvadorians buy a cup of coffee with Bitcoin\* via the Chivo app, that is being done via Algorand payment rails. There are different parties involved, but Algorand underpins the app."

# 1/6/2022 Yahoo News: Is Algorand "the Future of Finance?" Look to El Salvador to Find Out.

https://www.yahoo.com/video/algorand-future-finance-look-el-165416188.html

Mark R. Hake January 6-22

Algorand (CCC:ALGO-USD) is a very popular DeFi (decentralized finance) cryptocurrency that has had a very rough past three months. Algorand peaked on Nov. 11 at \$2.34, but by Jan. 6, the cryptocurrency had drifted down to \$1.55.

Glitter Finance will integrate Algorand blockchain elements with Solana to allow crypto owners to anonymously move their assets. This will keep their crypto transactions private when moving from one blockchain site or wallet to another. Normally all blockchain transactions are public knowledge through the validation process. This will become essential for Web3 businesses to thrive.

(Illustrating a key point for crypto as the main currency for crime, money laundering, drug sales, etc.)

# 11-2-2021 NASDAQ: As El Salvador Delves Deeper Into Blockchain, Give Algorand a Closer Look

https://www.nasdaq.com/articles/as-el-salvador-delves-deeper-into-blockchain-give-algorand-a-closer-look-2021-11-02

CONTRIBUTOR editor@etftrends.com (ETF Trends) ETF Trends

11-2-21 12:39AM EDT

"Algorand's selection by El Salvador is perhaps the most significant vote of confidence the project has received to date, which can lead to further large-scale adoption as other governments and institutions watch to see how the project progresses," another Cointelegraph article noted.

Should the project prove successful, this could encourage other countries in Latin America to start embracing digital currencies in similar fashion. The prospect of that alone certainly pushed prices up for Algorand's native currency Algo, which was currently trading just under \$2 as of November 1.

# 12-2-2021 BitCoin Magazine: GOVERNMENT-IMPOSED BITCOIN ADOPTION IS CLASHING WITH COMMUNITY EFFORTS ON THE GROUND IN EL SALVADOR

https://bitcoinmagazine.com/culture/reporting-on-bitcoin-adoption-in-el-salvador

GOVERNMENT-IMPOSED BITCOIN ADOPTION IS CLASHING WITH COMMUNITY EFFORTS ON THE GROUND IN EL SALVADOR: A recent visit to El Salvador shows that heavy-handed government efforts are clashing with Bitcoin's self-sovereign and community-focused ethos.

### **ANITA POSCHDEC 29-21**

Embracing Bitcoin is a bold move and a great chance for countries like El Salvador, but the end doesn't justify the means. Bitcoiners are being played for President Nayib Bukele's power fantasies of a new Bitcoin City, whose original plans were downloaded from the internet.

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I'm aware of the fact that countries which have nothing left to lose and might be "rogue" states (at least from our "western" point of view) and authoritarian leaders will be the first to adopt bitcoin on a national level. If done the right way, it will most likely give their population a huge economic and sovereign leap forward compared to nation states that are laggards. As such, I think it's a bold move and a great chance for El Salvador to embrace Bitcoin.

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I think it's one thing for private companies to do business with governments, it's in fact the purpose of businesses to make deals. But it gets a different spin, when prominent members of the Bitcoin space share a stage with an egomaniac politician, who is acting like an authoritarian leader, dismantling democratic foundations for the sake of himself, his power and his friends.

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I encourage you to read about the human rights violations, the illegality of abortions even in case of rape — women being prosecuted for homicide after being raped — and the containment centers for people who broke the mandatory six-month long lockdown due to COVID-19 in 2020. To those who have in the last weeks praised the freedom in El Salvador while in Europe and elsewhere COVID-19 restrictions endangered our freedom, remember: I never heard of any western country detaining their people for not complying with lockdown regulations.

"LGBT individuals remain targets of homophobic and transphobic violence by police, gangs, and others," Human Rights Watch reported of El Salvador. "Salvadoran LGBT rights organizations report over 600 killed since 1993. Official statistics released in January 2020 showed 692 cases of violence against LGBT and intersex people from January 2015 to June 2019. In June 2019, President Bukele dissolved the Secretariat of Social Inclusion, within which the Directorate on Sexual Diversity was based, and subsumed the directorate into an existing Gender Unit in the Ministry of Culture, renamed the Gender and Diversity Unit. LGBT activists criticized the move, protesting that few of their grave concerns regarding safety and discrimination could be adequately addressed under the ambit of culture."

J.M. Wilson-Crypto Currency References -Fair Use - Educational Purposes. Cite Source -Get Permission

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El Salvador doesn't produce enough energy for itself. The country has to import electricity from abroad. The 1 megawatt (MW) per hour that is currently used for mining at the La Geo plant in a town called Berlin does not represent excess energy.



La Geo, the geothermal power station, where Bitcoin miners operate

The involvement of Chinese investments in building the ports in La Union and La Libertad adds even more complexity.

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There is no public information about who the developers and companies behind the Bitcoin implementations are. There are several rumors and a leaked document from August 2021. In the same month, El Salvador signed an agreement with Koibanx to leverage the Algorand blockchain technology.

I was informed by a person close to the government that Chivo runs on Algorand rails, but without forking the Algorand blockchain. Chivo uses its own MongoDB database to store transactional data (a centralized, unsecure honeypot of data). Other sources have mentioned Cardano being behind the Chivo implementation.

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Algorand founder Silvio Micali has said that, "Bitcoin is a recipe for disaster," "with Bitcoin you can only do speculation," and he assures that the Algorand blockchain "solves scalability, security and energy efficiency problems that Bitcoin has." These are the usual altcoiner arguments to frame Bitcoin as "old" technology and the need for something faster and shinier.

# 3-15-2022 RestOfWorld: Six months in, El Salvador's bitcoin gamble is crumbling

https://restofworld.org/2022/el-salvador-bitcoin/

Six months in, El Salvador's bitcoin gamble is crumbling

As El Salvador prepares to launch its 'Bitcoin bond', interviews with citizens, economists and technologists reveal cracks in the country's crypto revolution

A famous adage in the crypto world goes, "Not your keys, not your coins." In other words, if another entity has access to your private key, you don't actually own your Bitcoin. Even though Chivo is technically a private company, it is 99% owned by a state-owned company and funded by a \$150 million public trust. In effect, the government would control its citizens' keys.

Gómez drafted long Twitter threads about his findings. The next day, a few days before the Chivo Wallet was set to launch, the police pulled him over for what they said was a problem with his car, took him to two stations, and confiscated his phones. Authorities announced that he was being investigated for financial fraud, but Gómez was never formally arrested or charged with a crime. Two organizations have filed a complaint with the country's attorney general alleging Gómez's detention was arbitrary. He suspects that he was targeted for speaking out about Chivo.

# 12-27-2022 Business Insider: The 'world's coolest dictator' rounded up 60,000 people in a crackdown on MS-13. A shrimp farming community is fighting back.

https://www.msn.com/en-us/news/crime/the-world-s-coolest-dictator-rounded-up-60-000-people-in-a-crackdown-on-ms-13-a-shrimp-farming-community-is-fighting-back/ar-AA15HEV7?ocid=msedgntp&cvid=f3035b8e170049008c24d4928c74573a

Gang violence has made El Salvador one of the world's most violent places not at war. The crackdown by its "Bitcoin president" created a new layer of misery.

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Scenes like this have been playing out across El Salvador since March, when President Nayib Bukele declared a "state of exception" and suspended certain constitutional rights, ostensibly to deal with MS-13 and two offshoots of the rival Barrio 18 gang, Barrio 18 Sureños and Barrio 18 Revolucionarios — all of which have terrorized El Salvador and made it one of the world's most violent places not at war. The declaration was meant to be temporary, lasting 30 days, but Bukele's administration has renewed it nine times. More than 60,000 people, mostly working-age men, have been arrested, while signs along roadways feature cinematic images of heavily-armed police ridding the country of "terrorists."

...

Abroad, Bukele is best known for two things. First, his announcement, at the Bitcoin 2021 conference in Miami, that his government would "push humanity at least a tiny bit in the right direction" by adopting Bitcoin as a national currency. Second, his "Surf City" initiative along El Salvador's 190-mile Pacific coastline, where consistent eight-to-ten-foot waves in prime spots makes it one of the best surfing destinations in the Americas.

# 7-9-22 LinkedIn: Nayib Bukele's failed Bitcoin experiment in El Salvador - The Boston Globe

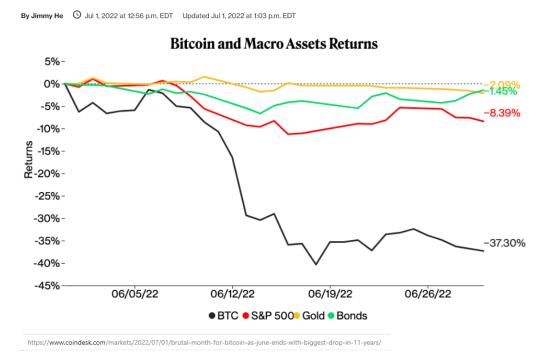
I am surprised that this article does not make mention of the fact that a Massachusetts company, Algorand, was selected to provide the platform for this disastrous experiment by an autocratic ruler. Furthermore, the Commonwealth of Massachusetts just provided a grant of \$1,961,375 grant to Quincy's QUBIC Labs to support further projects by Algorand. Lastly, today the Algorand coin Algo is 90.23% below the all-time high of \$3.28. It is really time for governments to stop supporting these disastrous projects that bring riches to a few entrepreneurial founders and disaster to others. If it looks like a Ponzi scheme, quacks like a Ponzi scheme, and sinks like a Ponzi scheme, it just may be a Ponzi scheme.



## 7-7-22 Boston Globe: Nayib Bukele's failed Bitcoin experiment in El Salvador - The Boston Globe

# 7-1-22 CoinDesk: Brutal Month for Bitcoin as June Ends With Biggest Drop in 11 Years

https://www.coindesk.com/markets/2022/07/01/brutal-month-for-bitcoin-as-june-ends-with-biggest-drop-in-11-years/



## 7-8-2022 Globe: Nayib Bukeles failed bitcoin experiment in El Salvador

https://www.bostonglobe.com/2022/07/08/opinion/nayib-bukeles-failed-bitcoin-experiment-elsalvador/#comment-138904494

The new, young, and authoritarian-esque president of a Central American nation — one that has been encumbered by persistent poverty and gang violence for years — decides, in an unprecedented move, to bet his country's economic development and taxpayer money on cryptocurrency.

What could possibly go wrong?

As it turns out, a lot could and did go wrong. A year ago, I was among those who watched in fascination as President Nayib Bukele announced his cryptocurrency experiment as a path to financial freedom and to attract much-needed capital to El Salvador.

Well, that didn't happen. Instead, Bukele's ambitious bet ran head-on into the great crypto crash of 2022.

Bitcoin, a high-stakes gamble for Bukele, seems to have failed. Approximately 70 percent of Salvadorans don't have a bank account and work in the informal economy. Meanwhile, remittances represent an outsized role in the country's economy: At roughly \$6 billion in 2021,

they were more than 25 percent of the GDP, ranking among the highest shares in the world. Roughly one-fifth of El Salvador's population lives in the United States.

But 10 months after El Salvador officially adopted Bitcoin as legal tender, the cryptocurrency has lost about 60 percent of its value. Bitcoin is a form of cryptocurrency or digital currency that is openly traded without the intervention of a central bank, and allows people to make payments to each other via an online system.

...

"Usage of bitcoin for everyday transactions is low and is concentrated among the banked, educated, young, and male population," researchers wrote. Initially, over half of Salvadoran households downloaded El Chivo Wallet, but virtually no one has downloaded it this year. They found that almost 20 percent of people who downloaded the app have not used their \$30 bonus. Nearly 61 percent of people have not used the app after spending their bonus.

Perhaps that's why many observers of El Salvador politics and local pundits have called Bukele's Bitcoin bet a gimmick "to whitewash his government's growing authoritarianism on the world stage," as Salvadoran journalist Nelson Rauda Zablah put it in a New York Times op-ed last week. Rauda Zablah called Bukele's experiment a mirage. A London School of Economics' policy fellow told CNBC recently: El Salvador's economic policy "is essentially magical thinking."

"Maybe \$425 million for the US or even California is nothing. But in El Salvador, that's roughly 6 percent of its national budget," said Ricardo Valencia, assistant professor of communications in California State University, Fullerton, in an interview. "We're seeing the effects of the Bitcoin gamble in the lack of investment in infrastructure there."

According to Valencia, crypto in El Salvador will end up looking more like hell than a mirage. "It comes with authoritarianism, dissent, crackdown," he said, referring to Bukele's strongman ways and hard-line policies to deal with increasing gang violence.

Nonetheless, Bukele is doubling down. He insists that "Bitcoin is the future" and remains well liked by Salvadorans; an opinion poll put his approval rate at 85 percent, the highest of any Latin American leader.

Meanwhile in Africa, the Central African Republic adopted Bitcoin as a legal tender in May. It is one of the world's poorest nations, ranking second to last in the United Nations Human Development Index. Its government had better pay attention to the early lessons of Bukele's Bitcoin experiment.

Marcela García is a Globe columnist. She can be reached at marcela.garcia@globe.com. Follow her on Twitter @marcela\_elisa and on Instagram @marcela\_elisa.

# 6-19-22 LinkedIn: -Baker-Polito Administration Awards \$1.9 Million 'Tech & Innovation' Grant to QUBIC Labs in Quincy

https://www.linkedin.com/in/jack-wilson-09546a6b?miniProfileUrn=urn%3Ali%3Afs\_miniProfile%3AACoAAA7XCfEBZfL\_ZlWiCdlYeiz7yOPG0Ve71g s

**Jack Wilson:** I suppose it was only a matter of time before the Commonwealth of Massachusetts would join the gueue of crypto true believers investing nearly \$2 million of taxpayer funding into a project supporting crypto and block chain ventures. On the one hand, I always want to support technology investments in new ventures in Massachusetts. On the other hand, I lament that this has gone to Algorand (through Qubic) which has the claim to fame that their "Proof of Stake" (POS) blockchain has been used to implement the disastrous El Salvador crypto experiment supporting an autocratic regime that has been cut off from IMF funding due to this harmful experiment being forced upon them by an autocrat. So how has Algorand done this year? Well, their coin, the Algo, has fallen from a high of \$2.38 to a current value of about \$0.30. This is a fall of about 87%. On the positive side, the POS approach dramatically reduces the energy needed to accomplish transactions compared to the usual bitcoin style "Proof of Work (POW)." On the negative side the POS approach has proven to be comparatively easy to compromise and has led to some spectacular thefts (Example: Beanstalk drained of \$182 million.). Proponents claim that it will be easy to fix these POS flaws, and Ethereum is in the process of migrating from POW to POS. Celsius, shut down (temporarily or permanently -to be determined) last week after offering large returns to investors to invest in their fund which they reinvested in a POS effort and various StableCoins. In the middle of a huge collapse in the Crypto/Blockchain fueled market, it seems an odd time to invest in an organization with this kind of record.



Baker-Polito Administration Awards \$1.9 Million 'Tech & Innovation' Grant to QUBIC Labs in Quincy masstech.org • 7 min read

# 6-17-2022 Patriot Ledger: Quincy startup incubator gets \$2 million to foster local blockchain, tech companies

https://www.patriotledger.com/story/news/2022/06/17/quincys-qubic-labs-gets-2-million-grant-grow-blockchain-companies/7647998001/

QUINCY – A Quincy-based startup incubator has been chosen as the first grant recipient under the state's Technology & Innovation Ecosystem Awards program and will receive nearly \$2 million to help

foster growth in blockchain technology. Blockchain is a form of storing information that prevents anyone from changing, hacking or cheating it.

The startup, QUBIC Labs, was granted \$1.96 million from the Baker administration to provide startups with access to hardware and custom software development tool kits developed by Boston-based Algorand. QUBIC will work with Algorand and other partners to develop the platform, helping grow blockchain companies from early-stage research to scaling their business and creating jobs.

# 5-20-22 LinkedIn-Patrick Bench - Will Boston join the crypto crowd? - The Boston Globe

<u>Patrick Bench• President at Benchmark</u> <u>Strategies</u>

Nice read from <u>Boston Globe Media Anissa G.</u>, hitting on the <u>#econdev</u>, <u>#fintech</u>, and <u>#publicpolicy</u> elements of the <u>#cryptocurrency</u> industry growth in US cities and states. SLG Public Affairs will be an important area in this industry.



Will Boston join the crypto crowd? - The Boston Globe bostonglobe.com • 3 min read

# Reply: Jack Wilson President-Emeritus and Distinguished Professor at University of Massachusetts

Right! Jump on the crypto bandwagon to be more like Miami (whose coin dropped 95%) or perhaps we want to be sure we have some "great successes" like TerraUSD or Luna. Gone baby gone. Or maybe we want a company that announces they have a better way than Proof of Work (POW) like Beanstalk when they implemented Proof of Stake (POS) to show how green they were in spite of knowing that POS is easily defeated. They lost \$182 million (essentially all) of their customer's money when the POS exploit was executed. In 2021 alone \$3.2 billion was stolen according to ChainAnalyis. We could use crypto like bitcoin and Algorand to underwrite an autocratic regime like El Salvador and help them to lose two thirds of their investment and be told by the IMF that they no longer qualify for IMF support. But think of the great things that crypto enables: where would ransomware, money laundering, evasion of government regulations, and other criminal behavior be if they did not have crypto currency. And now Boston wants to jump onboard?

# 8-21-2021 El Salvador Signs a Cooperation Agreement with Koibanx to Develop the Government's Blockchain Infrastructure on Algorand

https://www.algorand.com/resources/ecosystem-announcements/el-salvador-signs-agreement-with-koibanx-to-develop-its-blockchain-infrastructure-on-algorand

August 31, 2021 -- San Salvador, El Salvador -- Koibanx, a leading Latin American asset tokenization and Blockchain financial infrastructure company, announced today that it has signed a cooperation agreement with the government of El Salvador, a sovereign nation that uses the US dollar, to develop its blockchain infrastructure on top of Algorand's technology.

Koibanx chose to leverage Algorand's blockchain in several recent national public and private initiatives across Latin America, including a national blockchain-based COVID certification program, a point-of-sale credit issuance system and various smart contract financing platforms. Designed for broad participation across a variety of use cases, Algorand's technology provides the performance, scalability, security and functionality required to implement large scale projects around the world. Koibanx is making strides across Latin America to bring more efficient infrastructure and tools to the region's burgeoning digital economy.

"El Salvador is paving the way for other countries to make the promise of blockchain a reality. We are honored to be working with the government to enable Salvadoreans to access a global digital economy and the potential for a more prosperous future," said Leo Elduayen, CEO & Founder of Koibanx. "To make this possible, we needed technology that was robust enough to handle the needs of an entire nation. We found that in Algorand, a proven blockchain that meets our rigorous requirements for speed, security and stability."

# **Quotes:**

#### **Bill Gates**

WSJ: June 15-22 - Microsoft Corp. co-founder Bill Gates said he thinks cryptocurrencies and NFTs are "100%" based on the greater fool theory.

Mr. Gates, who for years has lampooned cryptocurrencies, said Tuesday at a TechCrunch event in Berkeley, Calif., that people bought cryptocurrencies and NFTs based on the idea that, no matter its price, it could be sold for higher because "somebody's going to pay more for it than I do."

CNBC" June 17-22 - Microsoft Co-Founder Bill Gates described cryptocurrencies as "100 percent based on some sort of Greater Fool Theory." The Greater Fool Theory states that the market will always have investors that are foolish enough to shell out money for an overvalued investment.

# Paul Krugman, Nobel Prize winning economist

NYT June 17-22 If you believe, as I do, that crypto is to a large extent a Ponzi scheme, this may just happen to be the moment when the scheme has run out of new suckers.

# Warren Buffet

"If you ... owned all of the bitcoin in the world and you offered it to me for \$25, I wouldn't take it,"

<a href="https://www.cnbc.com/2022/05/02/warren-buffett-wouldnt-spend-25-on-all-of-the-bitcoin-in-the-world.html">https://www.cnbc.com/2022/05/02/warren-buffett-wouldnt-spend-25-on-all-of-the-bitcoin-in-the-world.html</a>

Most famously, Buffett said bitcoin is "probably rat poison squared." Munger doubled down on that sentiment Saturday.

- https://www.cnbc.com/2022/04/30/warren-buffett-gives-his-most-expansive-explanation-for-why-he-doesnt-believe-in-bitcoin.html

# Charles Munger"

"In my life, I try and avoid things that are stupid and evil and make me look bad in comparison to somebody else – and bitcoin does all three," Munger said.

#### Nassim Nicholas Taleb

Last year, Taleb revised his position in a paper that described bitcoin's value as "zero". "This is the first time we've seen a financial bubble coupled with religious, cult-like behaviour and an investment strategy not seen before in history," he says.

### Jamie Dimon CEO of Citibank

"I personally think that bitcoin is worthless," Dimon said during an Institute of International Finance event on Monday, CNBC Pro reported.

## Jeremy Grantham, CEO and founder of GMO

"Bitcoin is not a good reserve of value, as we've seen. It's terrible for a currency exchange. It's expensive to transact, but worst of all, it is deadly to the environment. It's incredibly energy intensive to give you a speculative instrument to wager on, that's it. The fact that it takes our precious energy and has a carbon footprint is the worst crime of all, and the sooner it goes away, the better."

"As a speculative instrument, it's made a lot of money for a couple hundred people who got in early with a lot. Most of the other people playing it have now lost money, we know that. It's the same old, same old where the rich get richer and the poor get poorer, so any attempt to spin this as an equalizer is just that, it's pure spin." (Also on bitcoin.)

https://www.msn.com/en-us/money/markets/bubble-expert-jeremy-grantham-predicts-a-huge-decline-in-stocks-tears-into-bitcoin-and-slams-the-fed-in-a-new-interview-here-are-the-10-best-quotes/ar-AA10wB1B?ocid=msedgntp&cvid=d8687c67e88d4e87a6a02cfa1a320862