

EMERALD ADVISERS, LLC "ON DA BLOCK"

WEEKLY RECAP OF THE HAPPENINGS IN DEFI, DIGITAL ASSETS AND BLOCKCHAIN

STEVEN E. RUSSELL, ESQ. | PORTFOLIO MANAGER

The Market

Quarterly Bitcoin Returns

Year	Quarter				Year
	1Q	2Q	3Q	4Q	
2011	161.5%	1952.1%	-70.1%	-5.0%	1426.7%
2012	7.0%	34.9%	84.9%	8.3%	189.1%
2013	626.2%	-6.9%	41.0%	479.8%	5428.7%
2014	-37.9%	41.0%	-39.0%	-17.9%	-56.1%
2015	-23.9%	7.5%	-10.0%	82.4%	34.2%
2016	-3.8%	61.1%	61.1%	58.9%	124.3%
2017	10.8%	130.4%	75.5%	220.8%	1336.4%
2018	-50.1%	-7.8%	3.3%	-43.3%	-73.0%
2019	9.4%	174.4%	-26.3%	-13.7%	90.9%
2020	-9.4%	41.1%	17.2%	172.5%	308.5%
2021	100.8%	-40.7%	25.2%	5.4%	57.2%
2022	-0.6%	-58.6%			-58.8%
Mean	65.8%	194.0%	14.8%	86.2%	734.0%
Median	3.2%	37.9%	17.2%	8.3%	107.6%
Win Rate	50.0%	66.7%	63.6%	63.6%	75.0%



Source: NYDIG

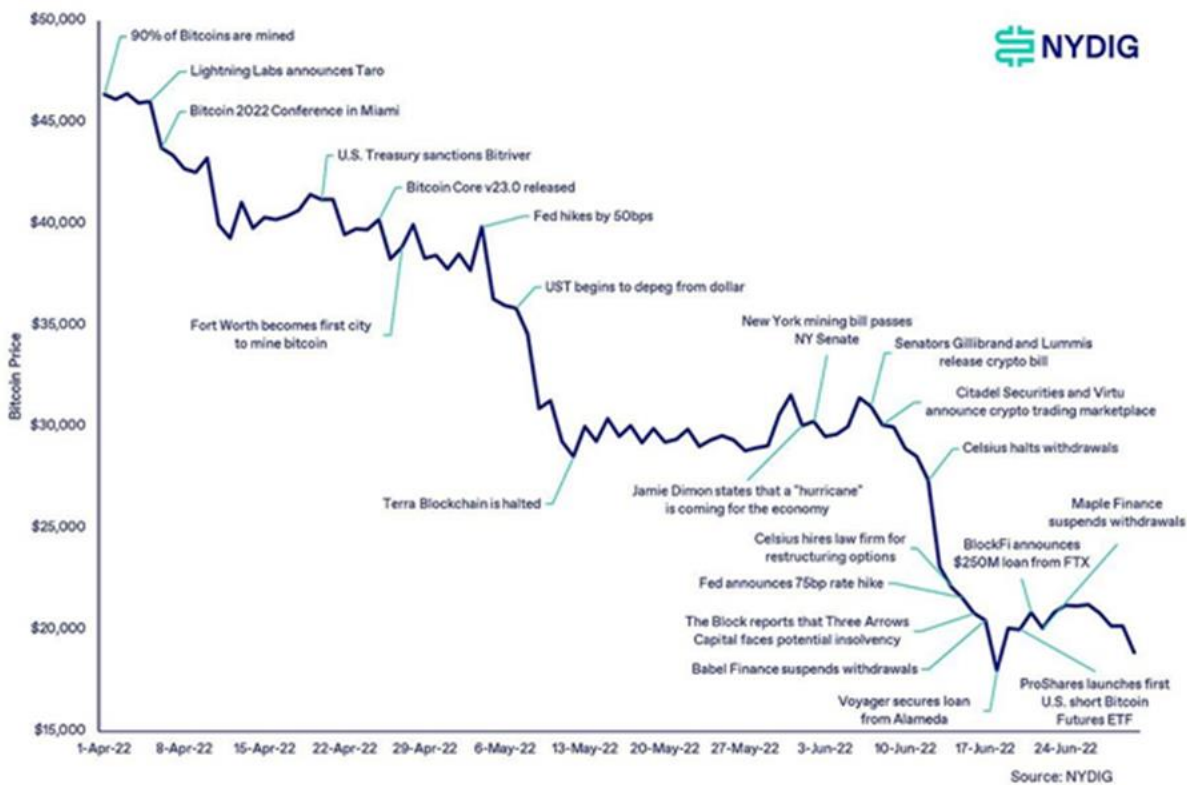
1. With bitcoin falling 74.6% since its all-time high as of November 10th, 2021 and a bear market well underway, this cycle is shaping up to look very similar to the past 3 cycles. The bear market has exposed weaknesses in counterparties across the ecosystem, including centralized lenders and funds as well as decentralized protocols themselves.

2. June 2022 continued following the downward trend in crypto assets overall. BTC fell (-38%) over the course of June to a 10 month low. June 2022 volatility (91%) was on the higher end of historical observations, and turned out to be a more volatile month than May 2022 (79%) for BTC. Historically speaking, June is generally a positive month for BTC performance with a historical median return of +1%.

3. Ethereum posted a loss (-46%) in June 2022. Annualized volatility for ETH (122%) was higher than that of BTC (91%), and ETH's volatility during June peaked to an eight month high.

4. Bitcoin's network mining difficulty dropped by -2.6% on June 22nd, which is the second biggest drop this year following the drop in late May of -4.3%. Bitcoin network's global hash rate also decreased during the drop in network mining difficulty to 207 EH/s, falling from an all-time high of 254 EH/s in mid-May. Falling mining difficulty levels and hash rates indicate a lower level of competition among crypto miners working to introduce new blocks.

Major News Events of Q2 2022



Regulation

1. The U.S. Office of Government Ethics has issued a new legal advisory notice that prohibits any employee who owns cryptocurrency from working on Federal crypto regulation as the government moves toward President Joe Biden's "whole-of-government" approach to crypto regulation. The directive applies to all White House staff and the employees of all federal agencies, including the Federal Reserve and Treasury Department.

Network and/or Platform Upgrades

1. Ethereum's Sepolia testnet successfully executed its Merge by switching from proof-of-work to proof-of-stake. Testnets allow Ethereum network developers to find and troubleshoot potential problems prior to launching any new changes on the mainnet. At this point, the Ropsten and Sepolia testnet have merged, leaving only the Goerli testnet to implement The Merge. After the completion of The Merge of all three testnets, the Ethereum network will move towards finalizing the official merge. The Merge on the Ethereum mainnet is currently slated for August 2022.

2. The much-anticipated Vasil hard fork has been completed on the Cardano testnet, bringing it one major step closer to becoming a reality on the mainnet and promising broad performance upgrades. Project developers, stake pool operators (SPO) and exchanges are now encouraged to deploy their work on the testnet to ensure integrations run smoothly when the mainnet gets the Vasil treatment in about four weeks.

Stablecoins

1. Circle's founder and CEO, Jeremy Allaire, has published a Twitter thread extinguishing rumors that the stablecoin of USDC is on the brink of collapse. Mr. Allaire started the Twitter thread by sharing Circle's most recent statements on transparency and trust, audits and attestations, and the state of USDC's liquidity.

2. Tether says it has massively reduced its commercial paper holdings in favor of US Treasuries, with aims to reduce them to zero. Crypto whales have swapped their USDT for US dollars en masse over the past two months, shrinking its supply by 20%.

3. Notably, USDC's market capitalization has grown by 8.27% since May, reaching its highest level of \$55.9 billion on July 2. In contrast, USDT has suffered an over -19% drop in its market valuation, currently trading around \$66.14 billion.

4. Argentina, a country with one of the highest crypto adoption rates in the world, saw the price of United States dollar-pegged stablecoins surge across exchanges on Saturday after the abrupt resignation of its Economy Minister, Martin Guzman.

5. The U.K. Treasury is planning legislation to establish a regulatory system for stablecoins, to come as early as August, Coindesk reported Wednesday (July 6). This comes in the form of a partnership with the Bank of England (BoE), the Payment Systems Regulator (PSR) and the Financial Conduct Authority (FCA), and other regulatory bodies.

6. Meta (formerly Facebook) has announced that the Novi pilot is ending and will no longer be available after Sep. 1, 2022. Users are urged to withdraw any remaining balances from their Novi accounts before this date.

7. European Union (EU) policymakers have struck a deal on landmark legislation to regulate crypto assets and service providers throughout the bloc's 27 member nations, aiming to protect investors and set up strict standards for stablecoin issuers.

General News

1. El Salvador purchased 80 additional bitcoin at an average price of \$19,000, the latest example of President Nayib Bukele evidently "buying the dip." The Central American nation is down -55.03% on its bitcoin bet. However, the country said its losses posed "extremely minimal" risk to the country's fiscal position in May.

2. Meta (FB) has started to test Polygon- and Ethereum-based NFTs among a selected group of creators on Facebook. This testing follows a series of pilot integrations on Instagram in May.

3. According to DefiLlama data, in 2021, the DeFi market had around \$200 billion of liquidity locked in smart contracts.

4. Bybit will settle options contracts in USDC. The crypto derivatives exchange will offer options contract settlement using USDC. Against the backdrop of the bearish cycle, Bybit chose USDC, the second-largest stablecoin by market cap, for its ability to enable stable prices for the duration of each contract.

5. Crypto exchange OKX plans to increase its headcount by 30%. While many crypto exchanges have had hiring freezes and layoffs, OKX wants to increase its staff by 30%, according to Lennix Lai, the platform's director of financial markets.

6. The growth of China's blockchain market has accelerated, with the total number of services registered with the country's internet regulator reaching 1,821, according to a review of government documents and interviews with industry insiders, the South China Morning Post (SCMP). While the country has banned the trading of cryptocurrencies, an increasing number of Chinese companies are looking for new applications for blockchain, potentially opening a huge market for services run on the technology the SCMP reported.

7. Crypto marketplace WonderFi (WNDR) closed its \$30 million acquisition of Canadian crypto trading platform Coinberry on Monday after being admitted to trading on the Toronto Stock Exchange last week. The shares rose over 9% at the open.

8. The UK's Financial Conduct Authority (FCA) has appointed the director of the multi-agency National Economic Crime Command (NECC), Matthew Long, as its new director of payments and digital assets.

9. Huobi Technologies (1611.HK) said its brokerage subsidiary, HBIT, has obtained a license to conduct foreign exchange and money transfer operations across the U.S., a step along the way for it to offer cryptocurrency transactions.

10. Ethereum scaling tool Polygon is following the Solana blockchain in bringing Web3 to smartphones with a new partnership with tech startup Nothing. Nothing has tapped the Polygon network to offer non-fungible tokens (NFTs) on its new Android-based Nothing Phone.

NFTs

1. NFT marketplace trading volume fell from \$16.6 billion at the start of this year to just over \$1 billion last month, a 94% decline.

Hacks/Exploits

1. The Commodity Futures Trading Commission (CFTC) is charging a South African trading company using Bitcoin (BTC) as its base currency for allegedly running the largest-ever BTC trading scheme. The CFTC Commissioner alleges that the firm ran a fraudulent scheme to solicit, accept and pool over \$1.7 billion to trade off-exchange and retail foreign currency exchange. Defendants engaged in an international fraudulent multi-level marketing scheme via various websites, in addition to social media, to solicit Bitcoin from members of the public for participation in their pool. At least 23,000 of the pool participants were from the United States.

Crypto Mining

1. The New York State Department of Environmental Conservation has denied bitcoin (BTC) mining operation Greenidge Generation's application to renew an air permit required to continue operating in New York. Regulators said Greenidge's fossil fuel-powered operation was inconsistent with the state's climate goals. Greenidge said it will continue to operate under its current air permit, which is still in effect, "for as long it takes to successfully challenge this arbitrary and capricious decision."

Any company and/or security mentioned herein is included because of their business dealings using cryptocurrencies or distributed ledger technology and are included for general discussion purposes. Emerald does not recommend their purchase or sale. Companies issuing securities held in accounts managed by Emerald's affiliated advisory firms may appear in this newsletter from time to time based solely on their activity in the industry or news worthy events generated by their business operations.

This newsletter is furnished for informational/educational use only by Emerald Advisers, LLC, its affiliates (collectively "Emerald") and its clients. It does not constitute the provision of investment, legal or tax advice. It is not prepared with respect to the specific investment objectives, financial situation or particular needs of any specific person. The information contained in this newsletter was obtained from sources deemed reliable. Such information is not guaranteed as to its accuracy, timeliness or completeness by Emerald. Any opinions contained in this newsletter represent the judgment of the authors as of the publication date and are subject to change without notice. Past performance is no guarantee of future results. Neither the information in this newsletter nor any opinion expressed herein constitutes an offer nor recommendation to buy or sell any security or financial instrument.

CONTACT US

Phone: 1-800-722-4123

info@teamemerald.com

3175 Oregon Pike | Leola, PA 17540

King of Prussia, PA | Pittsburgh, PA | Cleveland, OH

WWW.TEAMEMERALD.COM