



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

1. As of pre stock market open Thursday, Bitcoin (BTC), the leading cryptocurrency by market value, has dropped by 13% since reaching a recent high of \$25,000 on Aug. 15, CoinDesk data shows. Wall Street's tech index NASDAQ has lost nearly 6% since Aug. 15, while the dollar index, which gauges the greenback's exchange rate against major fiat currencies, has jumped 2.5%. The U.S. 10-year bond yield has increased by nearly 30 basis points.

Networks

1. The Ethereum Foundation announced, "The successful upgrade of all public testnets is now complete, and The Merge has been scheduled for the Ethereum mainnet." The Merge will roll out in two upgrades, called Bellatrix and Paris. Bellatrix should occur at 11:34 AM UTC on Sept. 6, and Paris will trigger sometime between Sept. 10 and Sept. 20. The Paris upgrade could happen \pm 5 days than expected due to block times and hash rate fluctuations.
2. With less than a month to go until Ethereum's transition to proof-of-stake, the number of weekly ETH deposits sent for staking the Beacon Chain hit an all-time low, per data from Dune Analytics. The total amount of ETH deposited to the Beacon chain is currently at over 13.3 million, representing 11.18% of Ethereum's circulating supply. However, the number of weekly ETH deposits has steadily declined since the beginning of May, recently reaching the lowest levels ever seen. The week ending on Aug. 22 saw just 12,377 deposits to the Beacon Chain, a sharp contrast to more than 500,000 deposits made throughout the week ending March 14. Market participants noted several potential causes, including those who wanted to stake have already done so, others may wish to wait post-merge to make sure nothing goes wrong, slowing market momentum, and speculation.

3. Data from crypto analytic firm Santiment indicates that the gap between Ethereum's top-10 largest non-exchange addresses and exchange addresses is closing. Over the past three months, top whale addresses have sent a significant amount of ETH onto exchanges as non-exchange addresses saw a decline of 11% while exchange-based addresses have seen a 78% surge. The flow of crypto onto exchanges is considered a bearish sentiment and is often done by traders to take a profit by selling their tokens. The increase in the amount of ETH by whale addresses on exchanges suggests these whales are expecting the price to go lower in the near future.
4. The average transaction fees on the Bitcoin (BTC) blockchain fell below \$1.00 for the first time in over two years, further strengthening its use case as a viable mainstream financial system.
5. Thorswap, a multi-chain decentralized exchange (DEX) aggregator built on THORChain's cross-chain liquidity protocol, launched cross-chain swaps for most Ethereum-based tokens.

Mining

1. A newsletter from the Texas Comptroller's office revealed the state's pro-crypto stance with the intent to host long-term miners and operators. Officials in Texas, one of the fastest growing crypto mining hubs in the US, believe mining operations can garner a symbiotic relationship with the energy industry. The fiscal note highlighted that unlike "manufacturing facilities or industrial chemical plants, which can be expected to be around for decades," crypto mining facilities do not place considerable electrical demands on the grid. Research associate Joshua Rhodes said that while other power-hungry industries often continue production amid market fluctuations, Texas officials believe miners can participate in demand response programs involving turning off mining rigs during peak demand. Rhodes added, "The difference is that Bitcoin mines (mining facilities) can come in so fast and may be gone so fast depending on the price of Bitcoin." The study also envisioned that increased mining operations could spur additional energy infrastructure, especially in remote areas of West Texas.
2. Establishing free economic zones that foster crypto adoption in Armenia is bearing fruit as local mining operator ECOS added 60 megawatts (MW) capacity to its facility.
3. Iran has confiscated more than 9,400 crypto mining rigs over the past five months while grappling with power blackouts over the summer. Most of that figure stems from a significant haul in June, when Iranian police discovered an illegal mining farm and seized 7,000 units, marking the country's largest confiscation of illegal machines.

Stablecoins

1. In accordance with promises it made earlier this year, top stablecoin issuer Tether (USDT) has begun to slash its commercial paper holdings. In the second quarter of 2022, Tether reduced its commercial paper holdings from \$20 billion to \$8.5 billion, a decrease of more than 58%, according to a new report from the company. The report was completed with a member firm of BDO,

one of the biggest public accounting networks in the world. Tether says it plans to reduce its commercial paper holdings to approximately \$200 million by the end of August and to zero by the end of the year.

2. Stablecoin issuers like Tether (USDT) and Circle have accumulated a significant share in the United States Treasury market, outperforming major traditional finance players. Various stablecoin providers collectively held \$80 billion worth of short-term U.S. government debt as of May 2022, according to a study by the investment bank JPMorgan released on Aug. 16.

3. The issuer of the world's biggest stablecoin Tether (USDT) has said it will not freeze sanctioned wallet addresses with ties to Tornado Cash until it receives a request to do so from the US Office of Foreign Assets Control (OFAC).

Regulation

1. In a letter Tuesday, Rep. Tom Emmer asked Treasury Secretary Janet Yellen to account for the crypto industry's concerns regarding the Tornado Cash sanctions imposed two weeks ago.

2. The European Central Bank (ECB) has laid the foundation for the criteria it would be considering when harmonizing the licensing requirements for crypto in Europe. As the ECB puts it, there is currently no harmonized regulatory framework governing crypto asset activities and services in the EU. This will change with the finalization of several regulatory initiatives at European and international level that will lay down the broader regulatory framework under which crypto activities are allowed, and how banks should manage the risks they pose.

3. The Federal Deposit Insurance Corporation has issued cease and desist letters to five companies – FTX US, SmartAssets, FDICCrypto, Cryptonews and Cryptosec – for allegedly making false representations about deposit insurance related to cryptocurrencies. The agency alleges that these organizations misled the public about certain cryptocurrency-related products being insured by FDIC and urges them to “take immediate corrective action to address these false or misleading statements.”

4. The Australian treasury announced a multi-step plan to establish a crypto regulatory framework informed by comprehensive “token mapping” research. Token mapping will reportedly allow officials to view and evaluate nuanced trends in Australian crypto markets to best “identify how crypto assets and related services should be regulated.”

General News

1. Lloyds Bank is bringing a 4,000-year-old debt instrument into the 21st century, completing the UK's first transaction using a digital promissory note purchase.

2. Decentralized exchange (DEX) Uniswap has blocked 253 crypto addresses in its four months of working with blockchain analytics firm TRM Labs. The DEX blocked the addresses primarily due to connections with stolen funds or transaction mixing services like Tornado Cash, which the US Treasury recently sanctioned.

3. Crypto marketplace WonderFi applied to list on NASDAQ less than two months after the stock started trading under the symbol WNDR on the Toronto Stock Exchange. The company seeks to boost its international appeal by making its shares available to wider group of investors.
4. Celsius Network on Tuesday sued crypto custodian Prime Trust in an attempt to claw back \$17 million in crypto that the bankrupt lender alleges its former business partner still holds.
5. Shoppers in Argentina could soon be paying for their weekly grocery shop in crypto thanks to a collaboration between MasterCard and Binance. In just a few weeks, the "Binance Card" will be able to be used in more than 90 million stores where MasterCard is accepted, both in-store and online. It will allow payment in cryptocurrencies such as Bitcoin and BNB (Binance Coin), with cryptocurrencies converted to fiat currency in real-time at the point of purchase.
6. Social media network Reddit has begun airdropping its Polygon-based "Collectible Avatars" as the first step towards a wider push for including blockchain technology.
7. Embattled crypto lender HodlNaut reported a nearly \$200 million financial shortfall in a court affidavit filed earlier this month. The report shows that HodlNaut has an outstanding liability of around \$281 million, compared with assets of ~\$88 million, resulting in a shortfall of approximately \$193 million.
8. The Sandbox's Alpha Season 3 launches on Aug. 24, allowing holders of NFTs from collections such as Bored Ape Yacht Club (BAYC), Moonbirds, and World of Women to play using avatars based on their NFTs.
9. Bitcoin Depot, the world's largest operator of crypto ATMs, plans to go public with a listing on NASDAQ by merging with special purpose acquisition company (SPAC) GSR II Meteora at an estimated valuation of \$885 million, according to a statement shared with CoinDesk.
10. Web3 infrastructure company Alchemy purchased ChainShot, which offers live and instructor-led Ethereum developer boot camps, in its first acquisition. The news follows a \$200 million raise in February, which valued Alchemy at over \$10 billion, and recent integrations with Polkadot and Solana.

NFTs

1. Leading brands including Nike, Gucci, Dolce & Gabbana, Adidas and Tiffany have amassed a combined \$260 million worth of sales from NFTs, according to data from Dune Analytics that was first reported by NFTGators.
2. Global confectionery giant Mars collaborated with metaverse band KINGSHIP to create limited edition boxes of M&M's featuring content from the Bored Ape Yacht Club (BAYC).

3. Despite the NFT sector going through a lengthy bear market, one Pudgy Penguin NFT has recently sold for a whopping 400 ETH (~\$670,000) on Monday, Aug. 22.
4. The 4K Protocol, a Web3 project that bridges real-world assets to NFTs, has collaborated with decentralized finance (DeFi) lending platform Arcade to launch DeFi loans against physically-backed luxury watch NFTs.
5. Former Disney star and famous musician Miley Cyrus filed two metaverse and NFT trademarks relating to the words "Miley" and "Miley Cyrus" with the US Patent and Trademark Office.

DeFi

1. A \$74 million proposal by two former Uniswap Lab executives for a new Uniswap Foundation has become a reality after receiving over 99% of the votes from Uniswap holders. The foundation aims to streamline Uniswap's Grant Program (UPG) and reduce friction in the protocol's governance system.
2. The developers behind THORChain-based decentralized exchange (DEX) THORSwap said the protocol added more than 4,300 Ethereum-based tokens to its cross-chain liquidity aggregator, allowing users to swap them into other supported blockchains, such as Bitcoin, Cosmos, Dogecoin, and THORChain.

Metaverse

1. Web3 continues its foray into the music scene as the 2022 MTV Video Music Awards added the "Best Metaverse Performance" in its award categories, giving the age-old awards show a hint of the future.
2. The Beijing municipal government on Aug. 23 announced a two-year (2022-2024) metaverse innovation and development plan that would require all districts to track NFT technology trends and integrate metaverse into education and tourism.

Hacks/Exploits

1. Near Protocol's Rainbow bridge mitigated a threat in under 31 seconds due to automated security processes which cost the attacker 5 ETH (~\$8,000).
2. Blockchain analytics firm Elliptic reported that bad actors stole over \$100 million worth of non-fungible tokens (NFTs) between Jul. 2021 and Jul. 2022. However, the actual amount is likely higher as they retroactively identify thefts. During that year, the estimated \$100 million of stolen NFTs comprised about 0.65% of the \$15.3 billion overall NFT trading volume.
3. SudoRare, an NFT platform that forked from SudoSwap and LooksRare, ran off with 519 ETH (~\$815,000) of user funds and deleted all of its social media accounts on Aug. 23.

CBDCs

1. According to multiple sources, on Tuesday, China officially began rolling out the next round of its central bank digital currency (CBDC) pilot test program. In the city of Guanzhou, it is now possible to pay for public bus rides with the digital yuan (e-CNY) CBDC on 10 transit routes, which is a first for the country. To do so, passengers simply need to download the e-CNY app, deposit funds and scan the QR code located in the bus payment section to pay for their ride. Similarly, the day before, the city of Ningbo said that passengers could now pay for subway rides at 125 stations with e-CNY. Ningbo is the ninth city in China to roll out the e-CNY pilot test in its subway lines, where passengers can simply scan and pay for the journey.

2. The head of the Colombian Tax and Customs National Authority, Luis Carlos Reyes, claimed that the government would seek to create a digital currency to prevent illicit financial activity like tax evasion. However, the official did not specify what kind of digital currency exactly the Colombian government will be looking to launch, a central bank digital currency (CBDC) or rather an asset-backed national currency similar to Venezuela's Petro digital currency project.

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