Quarterly Report
Q3 2022
FULL REPORT

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Analysts: Win Win, Benjamin Hor, Shaun Lee, Dillon Yap, Weng Dee, Zhong
Founders’ Note

After the carnage during Q2 2022, Q3 was a relatively quiet quarter, with the market largely in consolidation mode despite mid-season bullish anticipation for the Ethereum Merge, where total crypto market cap briefly touched $1.2T. However the rally didn’t last long, with an increasingly challenging global macro environment wreaking havoc on financial asset classes.

BTC pretty much ended the quarter where it started, around the $19,000 level. ETH is ~25% up, though at peak it briefly exceeded $2,000, which was double the ~$1,000 price level it started the quarter at. Total market cap closed out the quarter at ~$986B. The Merge narrative did have positive ripple effects towards related tokens, with LDO and RPL seeing significant gains this quarter. The Merge also triggered the launch of more liquid staking offerings from more providers such as Coinbase, Liquid Collective and Frax.

Speaking of ETH, congratulations to the Ethereum Core Dev team and community for a successful Merge, which has been years in the making, and went off without a hitch. It’s a monumental technical feat, and sets the foundation for the next phase of the network’s development.

Q3 was also a quarter of regulatory turbulence. The US OFAC sanction on Tornado Cash sent shockwaves throughout the industry and reignited significant concerns and discussions over government censorship. Also affected were centralized stablecoins, in particular USDC, which lost $8.8B or 16% of its market cap over the quarter. There were also multiple crypto legislations making their way through Congress, while the CFTC taking enforcement action against a DAO was also particularly noteworthy. One can only hope for more regulatory clarity moving forward as policymakers and regulators continue to grapple with the industry.

The token value and TVL of DeFi projects largely mirrored that of the overall market, not much of a surprise given that the majority of DeFi is still built on Ethereum. Meanwhile, overall NFT volumes continue to decline from Q2, in line with trading volumes of tokens. However that has not stopped certain collections such as Pudgy Penguins, ENS and y00ts rising to prominence, while the launch of Sudoswap and its AMM model for NFTs garnered a lot of excitement and attention.

Considering global geopolitical tensions and macroeconomic turmoil, the near-term outlook for crypto looks likely to remain challenging to say the least. At the same time, devs continue to build throughout the bear market, efforts which will hopefully pay off as the market eventually recovers. For everyone else watching and trading the market, hold on to your seats, it’s going to be a rocky road ahead!
MARKET LANDSCAPE
Q3 2022 Spot Market Overview

Crypto market only inched slightly higher in Q3 2022 despite mid-August rally

Total crypto market cap seems to (so far) have found a bottom when it hit a low of $875B on 19th July. In Q3, total market cap rallied up to ~$1.2T before falling again to end the quarter at 6.5% or about ~$100B higher than end-Q2.

Average Q3 trading volume stood at ~$90B, slightly lower than the ~$100B levels of Q2.

ALGO exited the Top 30, while ETC took its place having had a boost after the Merge, clinching 23rd place. Some notable moves within the Top 30 include XRP overtaking BUSD at #6 (+60%), MATIC moving from #19 to #15 (+66%), and UNI which jumped from #27 to #18 (+129%).

Source: CoinGecko
Q3 2022 Crypto Dominance

Relative crypto dominance between the top coins crabbed along

In Q3, Bitcoin dominance fell slightly from 41.1% to 38%, while ETH climbed from 14.3% to 16.4%.

The Top 7 cryptocurrencies remained the same, except for XRP overtaking BUSD at #6.

Within the Top 30, top gainers in market dominance were UNI, ETC, and ATOM which increased their relative market share from 0.25% to 0.49%, 0.22% to 0.39%, and 0.23% to 0.38% respectively.

Source: CoinGecko
Q3 2022 Cryptocurrencies Price Returns

A tiny bit of relief – except for P2E

<table>
<thead>
<tr>
<th>Top 5 Cryptocurrencies</th>
<th>Q3 2022</th>
<th>Q2 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTC</td>
<td>-1%</td>
<td>-57%</td>
</tr>
<tr>
<td>ETH</td>
<td>26%</td>
<td>-68%</td>
</tr>
<tr>
<td>BNB</td>
<td>31%</td>
<td>-49%</td>
</tr>
<tr>
<td>XRP</td>
<td>46%</td>
<td>-60%</td>
</tr>
<tr>
<td>ADA</td>
<td>-4%</td>
<td>-60%</td>
</tr>
</tbody>
</table>

Within the top 5 cryptocurrencies, all fared relatively well with each either staying resilient or making a decent recovery from Q2. XRP outperformed, recovering close to 50% in Q3, followed by BNB and ETH.

<table>
<thead>
<tr>
<th>Top 5 DeFi Tokens</th>
<th>Q3 2022</th>
<th>Q2 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNI</td>
<td>31%</td>
<td>-56%</td>
</tr>
<tr>
<td>LINK</td>
<td>23%</td>
<td>-63%</td>
</tr>
<tr>
<td>AAVE</td>
<td>32%</td>
<td>-73%</td>
</tr>
<tr>
<td>LDO</td>
<td>254%</td>
<td>-88%</td>
</tr>
<tr>
<td>GRT</td>
<td>-5%</td>
<td>-80%</td>
</tr>
</tbody>
</table>

DeFi token prices surely lived up to the “DeFi is Dead” meme last quarter. By contrast, the Top 5 DeFi tokens are the only category in green across the board this quarter. LDO led the pack by a large margin, increasing by 3.5x in Q3, likely benefiting from the Ethereum Merge narrative. It’s worth noting however these gains are merely recoveries from the significant drop in the previous quarter.

<table>
<thead>
<tr>
<th>Top 5 Exchange Tokens</th>
<th>Q3 2022</th>
<th>Q2 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNB</td>
<td>-31%</td>
<td>-49%</td>
</tr>
<tr>
<td>LEO</td>
<td>-27%</td>
<td>-29%</td>
</tr>
<tr>
<td>OKB</td>
<td>-33%</td>
<td>-42%</td>
</tr>
<tr>
<td>FTT</td>
<td>-1%</td>
<td>-50%</td>
</tr>
<tr>
<td>CRO</td>
<td>-3%</td>
<td>-75%</td>
</tr>
</tbody>
</table>

As for the Top 5 exchange tokens, BNB and OKB made a good recovery, while LEO continued to slide. FTT and CRO closed out the quarter pretty much flat. This is in contrast to last quarter where LEO outperformed all other Top 30 coins just by staying resilient.

<table>
<thead>
<tr>
<th>Top 5 Play-To-Earn Tokens</th>
<th>Q3 2022</th>
<th>Q2 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANA</td>
<td>-20%</td>
<td>-67%</td>
</tr>
<tr>
<td>SAND</td>
<td>-25%</td>
<td>-67%</td>
</tr>
<tr>
<td>AXS</td>
<td>-13%</td>
<td>-77%</td>
</tr>
<tr>
<td>GMT</td>
<td>-23%</td>
<td>-67%</td>
</tr>
<tr>
<td>GALA</td>
<td>-25%</td>
<td>-79%</td>
</tr>
</tbody>
</table>

Play-To-Earn tokens saw no relief in Q3, taking double digit beatings on top of the already brutal last quarter.

Source: CoinGecko
Muted quarter for stablecoins as OFAC sanctions wreak havoc on USDC

The Top 5 stablecoins remained the same, having no new entrants or changes in order. There were notable changes in market cap within the Top 5, with USDC dropping 16% or $9B after the Tornado Cash sanction, and BUSD being the main beneficiary of this, increasing by 18% or $3B.

USDT also saw a slight increase, possibly having absorbed some of the selloff of USDC. Meanwhile DAI and FRAX remained about the same in terms of market cap from Q2.

Outside the Top 5, FEI dropped out of the Top 15, while USDX broke in. Some notable changes include TUSD (-27% or $0.32B), GUSD (+90% or $0.15B), USTC (-20% or $0.16B), and USDN (-84% or $0.65B).
Q3 2022 Total Crypto Market Cap & Bitcoin vs. S&P 500

Decoupling no where in sight as crypto continues to move in tandem with equities

The total crypto market cap correlation with the S&P500 was 0.85 (high) in Q3 2022. This was a slight decrease from the correlation coefficient of 0.92 in Q2 2022.

Though Bitcoin was comparatively more volatile, the S&P 500 fell by 5.2%, which is 5x more than Bitcoin’s 1% drop in Q3 2022. This was also in contrast to the total crypto market cap which rose by 6.5%.

The total crypto market cap also continued moving in lockstep with Bitcoin, with their correlation at 0.9. This is however a decrease from a perfect correlation of nearly 1 during Q2 2022.
Q3 2022 Notable Events Timeline

The ghost of Terra still haunts us

Three Arrows Capital
filed for Chapter 15 bankruptcy
1 Jul

Sudoswap launch
8 Jul

Gamestop NFT marketplace launch
12 Jul

Celsius filed for Chapter 11 bankruptcy
14 Jul

Zipmex halted withdrawals
21 Jul

Nomad bridge exploited for $190m
2 Aug

Ethereum PoW hard fork went live
16 Sep

ETH Merge completed
15 Sep

Dogechain launch
13 Aug

Tornado Cash sanctioned by OFAC
9 Aug

Solana Slope wallet exploited
3 Aug

Wintermute hacked for $160m
20 Sep

Cardano Vasil hard fork completed
27 Sep

FTX won bid to buy Voyager
27 Sep

Interpol issued red notice for Do Kwon
27 Sep

Nexo sued by 8 US states
27 Sep

Binance launched auto-conversion of USDC, USDP, TUSD into BUSD
29 Sep
While Terraform Labs pivoted to a new chain, the abandoned Terra Classic (LUNC) seem to have retained a following. Its market cap is 10x that of the relaunched Terra Luna at the end of Q3 ($2.1B vs $410M). In Q3 the proposal to implement a burn tax of 1.2% per transaction was approved, which resulted in a LUNC price increase. However, this did not last long. Currently, the burn rate averages around 200M LUNC / day.

There was a second round of airdrop of Terra 2.0 (LUNA) tokens to holders which were mistakenly left out of the first round. In the immediate aftermath, LUNA saw a spike in price but these gains were erased with the issuance of an arrest warrant and Interpol red notice for Do Kwon.
On Aug 8, US OFAC sanctioned Tornado Cash (TC), adding its website and its contract addresses to the SDN list for laundering proceeds from cybercrimes. Immediately following the sanction, a list of TC resources were banned, including their Github repositories.

A few days later, Netherlands authorities arrested Alexey Pertsev, a developer who worked on TC. He is currently still being held in jail awaiting charges.

A month later, the Treasury Department updated its FAQs, providing further clarity on what is permitted / prohibited. Notably “interacting with open-source code itself, in a way that does not involve a prohibited transaction with Tornado Cash, is not prohibited.”

A week after the FAQ update, Github unbanned TC’s repositories.

The effect of Tornado Cash sanctions rippled across the entire crypto stack

Front-end

- DeFi projects with US entities or significant US presence such as dYdX, Aave, Balancer and Uniswap blocked accounts associated with TC from their official front-end. However alternative front-ends can actually be spun up fairly easily.

dApp / Smart Contract

- The DeFi protocols / smart contracts themselves remain uncensored, and any user can still interact with them on-chain.
- US-based centralized stablecoin issuer Circle also immediately froze the USDC within the sanctioned addresses. However thus far the other centralized stables USDT, BUSD etc have not followed suit to preemptively freeze their assets.
- The impact of these sanctions did not stop with centralized stables. There were significant discussion surrounding decentralized stables, particularly DAI where a significant portion of its underlying collateral is in USDC, and there is a risk that it could be sanctioned and the collateral frozen.

Protocol

- On the protocol layer, the main concerns surrounded mev-boost. As Flashbots is a US entity they are forced to comply with the sanctions, but the team has proceeded to open-source the code for other devs to fork.
- Infura and Alchemy blocked TC’s access, igniting discussion on decentralized RPCs. Infura later announced plans for a Decentralized Infrastructure Network.

Node Operator

- Worries surrounded US-based node operators who may be forced to comply with current and future sanctions, particularly as Coinbase is currently the node operator with the largest stake. CEO Brian Armstrong had to come out on Twitter to reaffirm their commitment to not implementing censorship at the validator layer.
Cardano reached a new milestone while ATOM unveils ATOM 2.0

Cardano carried out its **Vasil Hard Fork** on September 22, 2022.

CIP-31 and CIP-33 aims to **improve transaction throughput and increase concurrency** by improving the output process for the Plutus smart contract language.

CIP-32 aims to **improve the development process** by modifying the way data is communicated between parties on the blockchain.

**Diffusion pipelining** is an upgrade for block propagation time, allowing blocks to be transmitted without full validation. At the same time making changes to the consensus layer to improve block propagation across nodes.


Tokenomics of ATOM will be revamped, with the aim to **reduce inflation and reach a target emission rate of 300,000 ATOM per month (0.1%)**. If the proposal passes, validators would be rewarded with revenue generated under the new interchain Security model. This new model is meant to improve scalability and overall IBC connectivity.

A core feature of Interchain Security include **Interchain Scheduler (IS)** which is a **Maximal Extractable Value (MEV)** system that allows validators to reorder transactions within a block. This would allow The Cosmos Hub to earn more revenue by selling blockspace.

The third tenet revolves around governance. The Interchain Allocator (IA) feature will be a **coordinated liquid staking service** for the entire IBC. At the same time, there is a push for a Governance Stack which is essentially advocating for an assembly of DAOs across different blockchains.
BITCOIN ANALYSIS
BTC crabbled its way through Q3 of 2022. After having hit its yearly low of $17,760 in Q2, BTC has mainly stayed within the $18k and $22k range during Q3.

BTC hit a quarterly high of $24,433 but soon fell back to the $18k and $22k range, where it currently remains.

Some noteworthy Q3 events affected BTC:
- **Blackrock**, the world's largest asset manager, launched a private BTC trust
- **MicroStrategy** entered an agreement to sell $500 million in shares to fund more purchases of BTC
- **Increase of interest rates by the US Fed** saw investors exit risky assets for USD and Treasury bonds
- **Taro test version launched**, allowing Bitcoin developers to create assets on the blockchain via Lightning Network

BTC Price and Spot Trading Volume (Jan– Sept 2022)

Q1 2022 Price Return 1.6%
Q2 2022 Price Return -55.8%
Q3 2022 Price Return -1.0%

Source: CoinGecko
Bitcoin hash rate continues to trend upwards

Bitcoin's total hash rate continued to edge upwards throughout Q3, even as the bear market deepens.

Some operators have began selling some of their BTC holdings in order to fund their operations.

The market has claimed its first Bitcoin mining victim. Compute North, a bitcoin mining hosting provider filed for bankruptcy in September. Meanwhile, mining operator Hut 8 continued to stack BTC, having accumulated over 8,000 BTC from its operations.

Despite all these, overall hash rate is still trending upwards (for now), even hitting a new ATH on 11 September.
Misplaced focus? Bitcoin’s energy use has been scrutinized since its inception

Bitcoin mining has always been criticized for its alleged outsized carbon emissions and climate change impact. Looking at the figures however, it seems these criticisms are arguably disproportionate and often misleading.

Recently, Ethereum’s successful transition to proof-of-stake and subsequent >99% reduction in energy use has renewed attention and comparisons to Bitcoin.

However, Bitcoin and Ethereum have fundamentally different use-cases. Both technologies have unique features that could be leveraged to create positive externalities in their own ways.

- Methane capture*
- Incentivise buildout of low carbon energy
- Permissionless platform for building dApps with positive impacts e.g. ReFi

Note: Methane (CH₄), while less abundant in the atmosphere than carbon dioxide (CO₂), is 84x more potent at trapping heat than CO₂ over a 20-year period and is responsible for about 1/3 of current warming. Using methane to power mining can limit short-term warming and buy society time to decarbonize and phase out fossil fuels.

Source: CCAE, Climate Watch, IEA
USD Reigns Supreme!

CoinGecko Q3 2022 Cryptocurrency Report

While Q3 was rather choppy for Bitcoin, it managed to outperform other asset classes outside of the US Dollar Index (DXY). However from a YTD perspective, it still experienced the largest loss amongst all other asset classes.

Bitcoin dipped hand-in-hand with US equities, but largely managed to recover compared to the equities market.

Fiat currencies have been performing poorly against the US Dollar. The EURO and GBP have nearly hit parity against the USD. Meanwhile, central banks across the world have mimicked the Federal Reserve in raising interest rates to stem the outflow while also combating inflation.

Source: Yahoo Finance
Q3 2022 Ethereum Price vs. Trading Volume

The Merge – a successful non-event

- ETH finally broke away on a rally in early Q3 but failed to break the $2,000 resistance, peaking at $1,982 in mid-August before tumbling back down again.

- ETH price started climbing again in late August, just 2 weeks before the Merge. Despite being touted as the most bullish event ever for Ethereum, the upswing was brief.

- A combination of high CPI, anticipation for an aggressive FOMC hike, and traders moving in to “sell-the-news” mode meant the selloff started even days before the Merge.

- In the end, The Merge hypetrain ran into a headwind of bearish macroeconomic conditions, with the general consensus of it being a “successful non-event”.

Source: CoinGecko
Ethereum Roadmap Post-Merge

After The Merge, Ethereum is now 55% complete according to Vitalik

Pre-Merge

- Beacon Chain: 01 Dec 2020
- Berlin: 15 Apr 2021
- London: 05 Aug 2021
- Altair: 27 Oct 2021
- Arrow Glacier: 09 Dec 2021
- The Great Renaming: 24 Jan 2022
- Ropsten Testnet Merge: 08 Jun 2022
- Gary Glacier: 30 Jun 2022
- Sepolia Testnet Merge: 06 Jul 2022
- Goerli Testnet Merge: 10 Aug 2022
- Bellatrix: 06 Sep 2022

Post-Merge

- The Surge: Ethereum’s scalability will be greatly improved by sharding, boosting TPS from 15-40 to 100,000
- The Verge: Storage is optimized through Verkle Trees, making validation more scalable, faster and easier to set up, allowing more validators to join in
- The Purge: Excess historical data to be purged to reduce network congestion and hard drive space requirements for validators
- The Splurge: Miscellaneous updates and upgrades, “the fun stuff”

The Merge: 15 Sep 2022

Source: https://ethereum.org/
Q3 2022 Ethereum Consensus Layer Staking

Staked ETH plateauing after spike in Q1 2022

Total Staked ETH surged past 14k ETH just after the Merge, representing 11.6% of total ETH supply.

Lido is the leader in ETH staking with 30% of all staked ETH, though this is distributed between 30 node operators.

It was also the one that gained the most staked ETH in Q3, followed by Coinbase, Figment, Binance and Kraken.

Closer to and after the Merge, there has been more liquid staking offerings that have come to market from the likes of Coinbase, Cloud Collective and Frax.
Ethereum's net token emissions have slowed significantly post-Merge

Since the Merge, Ethereum's net token emissions have slowed significantly, giving credence to earlier anticipation of "triple-halving".

Average daily net emissions have decreased from +9,587ETH since the start of 2022 to +560ETH post-Merge.

While the Merge was not meant to improve scalability, it's interesting that average gas price has stayed low (~10–20 gwei) despite a small spike in on-chain transactions post-Merge.

Ethereum block times have slightly improved from ~13 – 13.5 secs to ~12.1 secs post-Merge, though this is likely not noticeable by normal users.

Source: Etherscan
Ethereum Proof-of-Work (PoW) Forks

Despite earlier hype, ETH PoW forks have not gained much traction in price or hash power.

Price of ETH PoW Forks (September 2022)

- ETC
- ETHW
- ETHF

Prices of ETHW and ETHF have fallen by ~80% and ~98% respectively since launch, while ETC is ~40% down compared to its price at the start of the year.

At present, the hashrate on these forks are hovering ~150TH/s (ETC), ~50TH/s (ETHW) and ~8TH/s (ETHF) respectively.

For ETC, this is already a 70x increase from its hashrate at the start of 2022.

Another PoW chain, Ravencoin has saw its hashrate increase from 3 to 15TH/s.

Just prior to the Merge, ETH hashrate was 870TH/s. Post-Merge, only ~170TH/s seem to have migrated to other chains, indicating ~700TH/s in hashpower may have been shut down.

Source: CoinGecko; 2Miners; Etherscan; state.etherfair.org
DEFI ANALYSIS
Q3 2022 DeFi Overview

Although market moved sideways, the DeFi sector bucked the trend

The resurgence of DeFi's market share was largely due to the narrative surrounding the Merge.

Notable, there was an uptick in trading volume and volatility for governance tokens of liquid staking protocols such as Lido (LDO) and Rocket Pool (RPL).

The increase in market cap mostly came from DeFi's blue-chip protocols such as Uniswap and Aave.

Despite the overall crypto market showing no significant signs of improvement, DeFi market cap actually increased significantly in Q3 from $36B to $45B.

However this is still ~70% down from the start of the year.
As Terra imploded, old and new contenders arise to take its spot.

While Ethereum's TVL has shrunk by 67% since the start of the 2022, it is still the most dominant network in Q3, controlling up to 58% of multi-chain TVL. However, its dominance has weakened slightly compared to Q2, as more altchains continue to pop up.

Tron's TVL increased by 40% to $5.5B, narrowly surpassing BSC to become the 2nd most dominant network, thanks to the high incentives offered by its USDD algo-stablecoin.

Unsurprisingly, TVL on Solana continues to shrink, dropping by 15% in Q3 due to the multitude of exploits that occurred on the network such as Slope wallet, Nirvana and Crema Finance.

Source: DefiLlama
*Monthly TVL is calculated by taking the average TVL on daily basis for each month.
*After the collapse of Terra in May 2022, the original Terra network was renamed as Terra Classic.
DeFi enjoyed a decent rebound in Q3 2022, as most sectors managed to stem the bleeding and then some. Overall, the DeFi market cap grew by ~31% compared to the previous quarter. Even though Ethereum has plunged 33% to $1,330 from its quarterly high in mid-August, it is still up by 26% compared to Q2, aligning with DeFi’s rise in market cap.

Besides maintaining its status as the largest constituent of DeFi, DEXs notched a significant increase in market share, rising 36.8% to $10.9B. Notably, the liquid staking sector nearly tripled its market cap to $1.54B in Q3, largely driven by the Merge narrative. Lido, the market cap leader in that category, rose 264% to $1.60 within the same period.

Although the fixed interest sector grew by an impressive 90%, largely due to the BarnBridge V2 launch, it is also the smallest, representing only 0.3% of the overall DeFi market.

* Categorical market cap includes only governance and utility tokens (excluding stablecoins and wrapped tokens)
Q3 2022 Cross-chain Bridge Liquidity

WBTC, JustCryptos and Multichain storm way ahead of the competition

Top 12 Bridges with Highest Liquidity (as of 1st October 2022)

<table>
<thead>
<tr>
<th>Bridge</th>
<th>TVL</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBTC</td>
<td>$4.8B</td>
</tr>
<tr>
<td>JustCryptos</td>
<td>$2.3B</td>
</tr>
<tr>
<td>Multichain</td>
<td>$1.8B</td>
</tr>
<tr>
<td>Stargate</td>
<td>$489M</td>
</tr>
<tr>
<td>Portal</td>
<td>$437M</td>
</tr>
<tr>
<td>Poly Network</td>
<td>$309M</td>
</tr>
<tr>
<td>Orbit Bridge</td>
<td>$272M</td>
</tr>
<tr>
<td>hBTC</td>
<td>$238M</td>
</tr>
<tr>
<td>Synapse</td>
<td>$211M</td>
</tr>
<tr>
<td>Celer cBridge</td>
<td>$150M</td>
</tr>
<tr>
<td>Terra Bridge</td>
<td>$146M</td>
</tr>
<tr>
<td>Thorchain</td>
<td>$106M</td>
</tr>
</tbody>
</table>

Source: DeFiLlama

As of 1st October, the top 12 bridges command over $11.26B worth of liquidity. However, that's a 57% plunge compared to the start of the year.

Interestingly, the JustCryptos bridge has the 2nd highest TVL of $2.3B, ahead of popular EVM bridges such as Multichain and Stargate. Liquidity on the Tron-based bridge has grown by 196% in Q3 2022. Yet, it is no surprise that more users are bridging over to Tron, thanks to the ecosystem offering high yields on USDD.

Even though Stargate offers lower yields to liquidity providers compared to Celer and Synapse, they seem to be way ahead of the pack in liquidity, having more than 3x the TVL of cBridge. However, it still a far cry away from its ATH TVL of $4.2B during its initial release.

Surprisingly, Terra Bridge still has some remnants of liquidity, even though it’s reduced by 90% from $1.47B earlier in April 2022.

In Q3 2022, exploits on bridges are still a reality. As the latest victim, the Nomad Bridge was hit for $190M, making it the 5th largest exploit in the space. As it stands, 4 of the top 5 exploits currently involve bridges, and it is unlikely that it will change anytime soon.
NON-FUNGIBLE TOKENS (NFTs)
NFT winter has arrived

Q3 2022 NFT Trading Volume across Top 8 Chains

Top 8 Chains for NFT Trading Volume (Jan – Sep 2022)

- **Ethereum**: $5.78B
- **Solana**: $4.01B
- **Flow**: $2.86B
- **BNB**: $4.17B
- **ImmutableX**: $3.28B
- **Polygon**: $0.92B
- **WAX**: $0.71B
- **Panini**: $0.65B

Trading volume decrease from Q2 2022 to Q3 2022: 76.4%

Since then, trading volume has tumbled 83% from the start of the year. Recent months have logged numbers even lower than July 2021, right before NFT summer.

Most notably, Ronin and Avalanche have fallen out of the Top 8, replaced by ImmutableX and Panini. Recent sports mania has somewhat spilled over to the NFT space, propelling Flow into the Top 3.

Solana, fueled by y00ts and DeGods, managed to double its September volume while all its competitors faltered.

Source: FootPrint Analytics; Cryptoslam
Q3 2022 NFT Platform Trading Volumes

MagicEden gains ground on OpenSea dominance in a struggling market

Top 5 NFT Marketplaces (Jan – Sep 2022)

Volume

-77.4% Trading volume decrease from Q2 2022 to Q3 2022

The NFT market took a heavy hit in the past quarter, registering a -71% fall in volume.

Latest numbers in Sep 2022 show that as much as ~85% of X2Y2's volume potentially came from wash-trading, which would have given it the edge over OpenSea in the leaderboard. The same goes for LooksRare which despite its already meager volume, is still apparently driven by ~87% wash trades.

MagicEden was the only one that saw growth in September, doubling its MoM volume and dominance while the rest of its competitors continued to slip. With its recent foray into Ethereum, as well as the headline-grabbing launch of y00ts (see Slide 33), MagicEden (22%) has gained ground on OpenSea's (60%) dominance, but it remains to be seen if it can sustain its current momentum.

Source: FootPrint Analytics

*OpenSea volumes include Ethereum, Polygon and Solana

**Wash trades on LooksRare and X2Y2 are excluded
**Q3 2022 Top NFT Collections**

As the Pengus make their comeback, Solana NFTs continue to bring the heat

<table>
<thead>
<tr>
<th>Top 10 Collections on Ethereum</th>
<th>Top 10 Collections on Solana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pudgy Penguins</td>
<td>y00ts</td>
</tr>
<tr>
<td>Ethereum Name Service</td>
<td>DeGods</td>
</tr>
<tr>
<td>DigiDaigaku</td>
<td>ABC</td>
</tr>
<tr>
<td>Bored Ape Yacht Club</td>
<td>Galactic Geckos</td>
</tr>
<tr>
<td>Mutant Ape Yacht Club</td>
<td>Aurory</td>
</tr>
<tr>
<td>Otherdeed for Otherside</td>
<td>Trippin Ape Tribe</td>
</tr>
<tr>
<td>RENGA</td>
<td>Cets on Creck</td>
</tr>
<tr>
<td>Azuki</td>
<td>Shadowy Super Coder DAO</td>
</tr>
<tr>
<td>Art Blocks Curated</td>
<td>Primates</td>
</tr>
<tr>
<td>RTFKT Clone X Forging SZN 1</td>
<td>Blocksmith Labs</td>
</tr>
</tbody>
</table>

Pudgy Penguins once again took the NFT space by storm as the rarest Pengu in the collection, a unique left-facing Pudgy, was sold for 400 ETH (~$630k). Besides that, the team had also announced a new advisory board as well as the creation of the Pudgy Toy line.

With over 2.3 million unique domains registered, ENS climbed quickly to the top ahead of the Merge, as well as the attention surrounding the '999 club' and the '10k club' where you can only gain access if you have the ENS with the required digits.

Besides that, DigiDaigaku also became one of the most popular collections in Q3 2022, championing the concept of Free-to-Own (F2O). Released during a stealth mint in August, the collection of 2022 NFTs reached an ATH of 21 ETH (~$31k) after its creators, Limit Break, raised $200M in funding.

Over on Solana, y00ts and DeGods attracted all the attention. Since y00ts was first announced, the project has generated plenty of buzz and attention to the Solana NFT scene. The y00ts scholarship, which is basically similar to a whitelist, allowed 15,000 people to mint their first y00ts toobs, including the likes of Wayne Rooney and Lil Baby.
Launch of Sudoswap

Sudoswap surges ahead of competition with new, royalty-free NFT AMM

Sudoswap Trading Volume and Daily Active Users (Jul – Sep 22)

Trading Vol. | Total Volume | DAU
--- | --- | ---
$3.5M | $1.4M | 83
$3.0M | $31.1M | 1,101
$2.5M | $21.8M | 547
$2.0M | $1.8M | 547
$1.5M | $1.5M | 422
$1.0M | $2.0M | 385
$0.5M | $2.5M | 325
$0.0M | $3.0M | 293

Total Volume = $1.4M
DAU = 83

Total Volume = $31.1M (+2.041%)
DAU = 1,101 (+1.231%)

Total Volume = $21.8M (-30%)
DAU = 547 (-50%)

Sudoswap introduces old DeFi concepts such as LPs and bonding curves to NFT trading - think Uniswap but for JPEGs.

To learn more about how SudoSwap works, check out our introductory article [here](#).

Within just a month of its launch, the SudoSwap-mania caught on fire and exploded to >$30M in trading volume in August - a whopping 20x MoM increase.

SudoSwap, like others, was eventually buffeted by the NFT downturn trend in September. Yet, its rising popularity among traders is undeniable, even overtaking powerhouses like CryptoPunks and LooksRare in monthly volume for both August and September.

A large part of this is due to how sudoAMM is designed to facilitate liquidity exchange, and also its cost efficiency in being royalty-free.
Sudoswap Triggers Debate over NFT Royalties

NFT marketplaces chooses sides

Sudoswap’s rise ignited heated discussions about the role of royalty in Web3 and NFTs, with one party (Team Creator) clamoring over this supposed step-back, and another (Team Trader) lauding this innovation.

X2Y2 also joined in the royalty fray, announcing a new feature, allowing buyers to customize the amount of royalty paid.

MagicEden on the other hand decided to side with Team Creator, releasing Metashield, a royalty enforcement that helps creators identify NFTs that bypass royalties. The creators will be free to “shield” the NFTs in question as they see fit, including blurring the image, changing the metadata or flagging the NFT.

The NFT-royalty debate is still ongoing with no end in sight yet, but at the end of the day crypto is ultimately a capitalistic space where everything eventually comes down to where the most money can be made. Unless it becomes embedded as in the case of MagicEden’s Metashield, it is likely that the broader market will pivot to whichever platform offers the best cost efficiency, while only the hardcore fans will still pay royalties to support their favorite creators.
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Historical Market Data
Search for an NFT collection's historical market data such historical floor price, historical market cap, historical volume and more!

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Q3 2022 Top 10 Cryptocurrency Exchanges

Spot trading volumes are starting to recover in-time for Uptober?

Top-10 Cryptocurrency Exchange (CEX + DEX) Trading Volume (Jan – Sep 2022)

- CEXes have continued to increase their dominance. The CEX:DEX ratio has increased to 95% in Q3 2022 from 89% in Q2 2022.
- DEXs have suffered more than CEXes as most crypto degens left the market.
- Spot trading volumes have been decimated, briefly dipping even below $1T in July and August before recovering in September.

In line with a global slowdown of the economy and financial markets, traders and investors alike have naturally de-risked from crypto assets.

Source: CoinGecko

Top 10 (DEX + CEX) Total Trading Volume Decline from Q2 2022 to Q3 2022

-20.8%
### Q3 2022 Top 10 Centralized Exchanges (CEX)

CEXs are seeing some recovery towards the end of September.

#### Top 10 CEX Total Trading Volume Breakdown (Jan – Sep 2022)

<table>
<thead>
<tr>
<th>Month</th>
<th>Binance</th>
<th>BitMart</th>
<th>UpBit</th>
<th>OKX</th>
<th>Coinbase</th>
<th>FTX</th>
<th>Gate.io</th>
<th>KuCoin</th>
<th>Huobi</th>
<th>Crypto.com</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-22</td>
<td>39%</td>
<td>41%</td>
<td>43%</td>
<td>43%</td>
<td>48%</td>
<td>47%</td>
<td>47%</td>
<td>51%</td>
<td>52%</td>
<td>39%</td>
</tr>
<tr>
<td>Feb-22</td>
<td>8%</td>
<td>10%</td>
<td>4%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>8%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Mar-22</td>
<td>12%</td>
<td>11%</td>
<td>10%</td>
<td>6%</td>
<td>8%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Apr-22</td>
<td>11%</td>
<td>10%</td>
<td>9%</td>
<td>4%</td>
<td>8%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>May-22</td>
<td>14%</td>
<td>12%</td>
<td>10%</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Jun-22</td>
<td>2%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Jul-22</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
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<td>8%</td>
<td>7%</td>
<td>8%</td>
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</tr>
<tr>
<td>Aug-22</td>
<td>4%</td>
<td>2%</td>
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<td>3%</td>
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<td>2%</td>
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</tr>
<tr>
<td>Sep-22</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Top-10 central exchanges** recorded a total of **$2.62T in spot trading volume** in Q3 2022, dropping below the $3T mark for the first time in a quarter since the bull market began.

**BitMart** is a dark horse, **having grown from 2% at the start of the year and reaching 9% this quarter**. This is indicative of an overall trend where newer and more retail-oriented exchanges like Crypto.com have suffered significant losses. While older exchanges favoured by OG degens are still retaining traction.

**Binance** has finally **captured more than 50% of the market**. One reason could be the imposition of zero-fee Bitcoin spot trading across all 13 trading pairs on their platform.
Q3 2022 Top 10 Decentralized Exchanges (DEX)

DEXs, meanwhile, are just spiralling down

Top 10 DEXs recorded a total of $179.0 billion in spot trading volume in Q3 2022, giving a monthly average of $60B. Compare this with Q2 2022 which saw a total of $287B and a monthly average of $95B.

Combined across all chains, Uniswap is still the dominant DEX with ~64% market share. Dodo, however, has been steadily growing QoQ as it starts capitalizing on its expansion to other chains.

It seems that the play for market share is favoring expansionary growth across different chains. Single-chain DEXes such as Pancakeswap are slowly losing market share, dropping by 60.1% over the quarter.

Source: CoinGecko

### Top 10 DEX Trading Volume Breakdown (Jan – Sep 2022)

<table>
<thead>
<tr>
<th>Market Share</th>
<th>Total Trading Volume ($ Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>$178B</td>
</tr>
<tr>
<td>90%</td>
<td>$148B</td>
</tr>
<tr>
<td>80%</td>
<td>$129B</td>
</tr>
<tr>
<td>70%</td>
<td>$93B</td>
</tr>
<tr>
<td>60%</td>
<td>$115B</td>
</tr>
<tr>
<td>50%</td>
<td>$78B</td>
</tr>
<tr>
<td>40%</td>
<td>$68B</td>
</tr>
<tr>
<td>30%</td>
<td>$60B</td>
</tr>
<tr>
<td>20%</td>
<td>$50B</td>
</tr>
</tbody>
</table>

Top 10 DEXs: Uniswap, Dodo, Pancake swap v2, Curve, Balancer, Sushi, Serum, THORChain, Quickswap, Jupiter
Q3 2022 Derivatives Exchanges – Perpetual Swaps Volume

Monthly average has dropped below the $3T mark for the first time in the year

Trading volume for all perperuals across the Top 10 derivatives exchanges decreased by $750 billion in Q3 2022.

Relative market share between exchanges and their market positions remained largely the same throughout the first three quarters of the year.

The only ones that have managed to increase their market share are Bybit and OKX. Nonetheless, Binance still remains the top dog, controlling more than half of the market (54%) trading volume.

Source: CoinGecko
Gate.io is gaining market share at the expense of Binance

Open interest (OI) across the top-10 derivatives exchanges recorded a total of $2.2 trillion in Q3 2022. A slight decline in OI is reflective of the overall bear market where trading interest has dropped.

Not much has changed throughout the quarter, except for Gate.io whose OI has grown by 19.4% over the quarter. Binance, meanwhile has seen some significant losses, and lost 7.6% of its share of OI in Q3.
Q3 2022 Performance of GBTC and $BITO

GBTC ends the quarter with ATH discount of 36%, with no ETF in sight still

![Total AUM of GBTC & BITO (Jan – Sep 2022)](image)

Just like BTC, the total AUM of GBTC and BITO **ended the quarter pretty much where they started**. Still, these are figures way down from the beginning of the year – **-58.5%** and **-53.1% YTD decrease** in AUM respectively. For GBTC, the nightmare doesn’t stop here...

Since the SEC’s rejection of GBTC’s ETF application, the trust has seen a **steady widening of its discount to NAV**, particularly in September which saw it end the quarter at an ATH discount of 36%.

Despite GBTC’s legal threats, the SEC is unlikely to change their tune anytime soon. SEC has repeatedly cited “fake Bitcoin trades” as the reason for not approving a spot Bitcoin ETF, a problem that’s apparently **still rampant today**.

Meanwhile, BITO has been able to keep the value of its AUM in-line with the NAV. In fact, BITO even managed to **capture a bit more market share** while maintaining an AUM of >$600M, thanks to competitor SPBC’s misfortune of a ~50% drop in AUM in Q3.

Source: YCharts
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