

Zerocap Q3 2022 Report

CONTENTS

1. Introduction

About
CIO Note

2. Market Overview

Macro
Broader Markets
Key Insights (Events)
Digital Asset Markets

3. Quarterly Asset Performance

Bitcoin
Bitcoin On-Chain
Ethereum
Ethereum On-Chain

4. Decentralised Finance

Total Value Locked
Layer 2's
Real Yield & GMX

5. NFTs & Metaverse

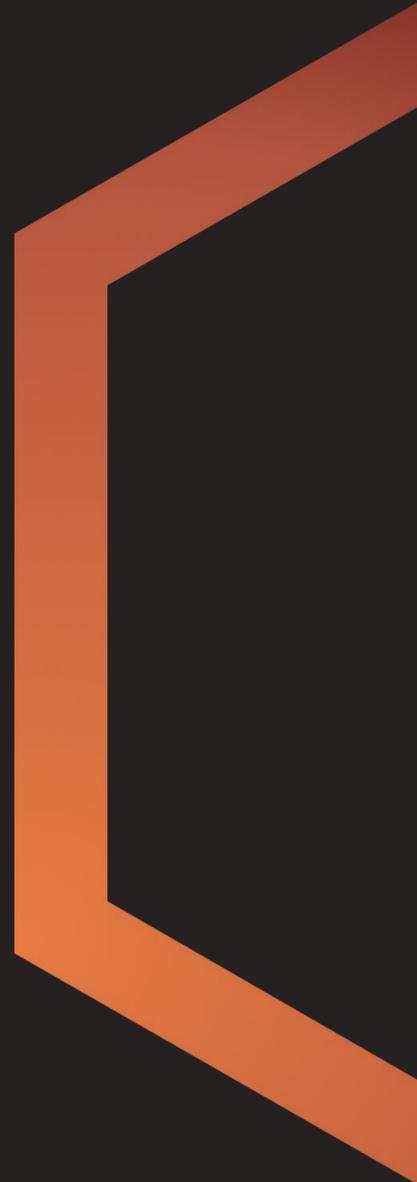
NFTFi
Solana NFTs

6. Emerging Themes

Cosmos
Upcoming Layer 1's
zkEVM Announcements
Censorship
Middle East's Metaverse Play

7. Zerocap Products

Highlights



About

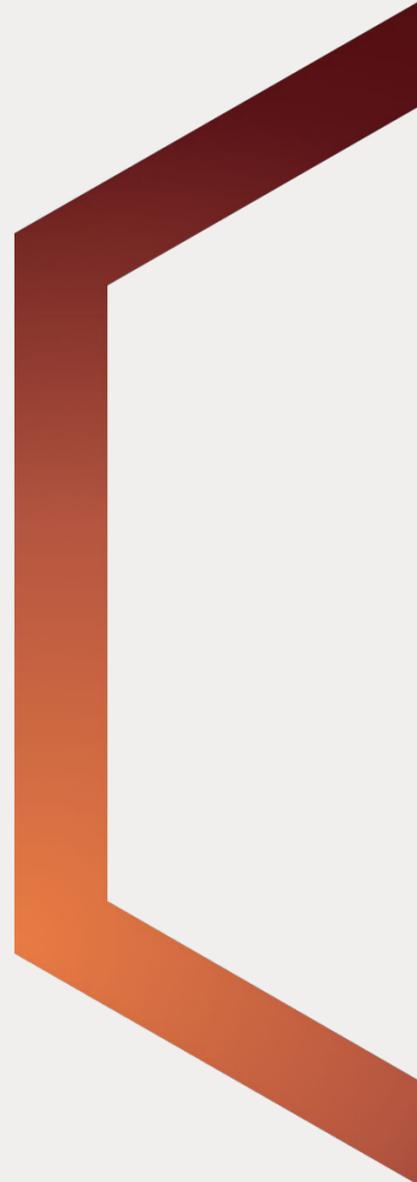
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Zerocap offers a full-service model for all your digital asset needs, served by a team of seasoned professionals with a deep understanding of digital asset technology, institutional trading and portfolio construction.

Zerocap sets a new standard for governance and compliance in the digital asset industry, as evidenced by licensing, auditing, institutional backing and a unique insurance policy from Lloyd's of London.

Founded in Melbourne, Australia, Zerocap has global operations and has processed over 2 billion dollars of spot crypto assets for their client base.

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CIO Note

During Q3, we saw a notable shift in global markets. While the onslaught of newsflow concerning geopolitical conflict lost its sting, global recessionary fears boiled in the face of persistent inflation.

Recent capitulation in the digital asset market weighed heavy on price action. However, throughout July, investor sentiment flipped – digital assets maintaining their high-beta risk profile, and following the lead of traditional markets. Performance continued through to mid-August with benefactors to Ethereum’s merge narrative such as Lido, Optimism and Ethereum Classic outperforming the market.

Ahead of its highly anticipated merge to Proof-of-Stake, for the first time since early 2021, ETH led the market. Expectations regarding ETH’s medium-term relative performance caused heightened attention on the ETH/BTC pair. While hype was significant in the lead up to the Merge, the Fed’s assertion of future hikes forced larger players to focus on risk unwind. Consequently, price action surrounding the event was underwhelming. Notably, the event highlights a significant technological feat. Not only was 100% uptime maintained during the event, the transition marks an important development for Ethereum and blockchain technology irrespective of its short-term price action.

Following September’s CPI numbers, a hawkish outlook took hold of expectations and market participants fully priced a 75 bps rate hike later that month. Additionally, post-Merge, we saw participants take profits from trades related to the event. In lockstep with equities, participants de-risked in anticipation of September’s FOMC meeting. Markets continued to fall in line with deflated sentiment.

Alongside tighter monetary policy, the USD continued to strengthen relative to other currencies causing turmoil in foreign exchange markets. As the USD edged higher, the EUR, JPY and GBP devalued aggressively. By quarter end, the GBP diminished to all time lows, furthering global recessionary fears. In response, the Bank of England announced their intention to purchase long dated bonds which, to a degree, alleviated short-term concerns. However, markets have yet to witness sustained relief in worsening economic conditions. As cracks begin to show, Q4 will likely herald uncertainty and the continuation of defensive flows. Europe moves into winter amidst surging inflation and energy prices. The region’s stability looks to be further tested.

Regarding the cryptocurrency markets, in the presence of heightened macro uncertainty, we’ll likely see tight correlation to equities remain with the ingoing potential for BTC to decouple as a non-sovereign geopolitical hedge. Nonetheless, a number of sectors have potential to outperform on the back of protocol fundamentals and market narratives. Opportunity still remains, particularly when investing through Structured Products that harvest volatility premiums.

All the best for Q4.

SECTION 2.

Markets

Macro

This quarter’s macroeconomic climate was defined by inflation and the extension of geopolitical crises. The weight of these headwinds were reflected in the broader market.

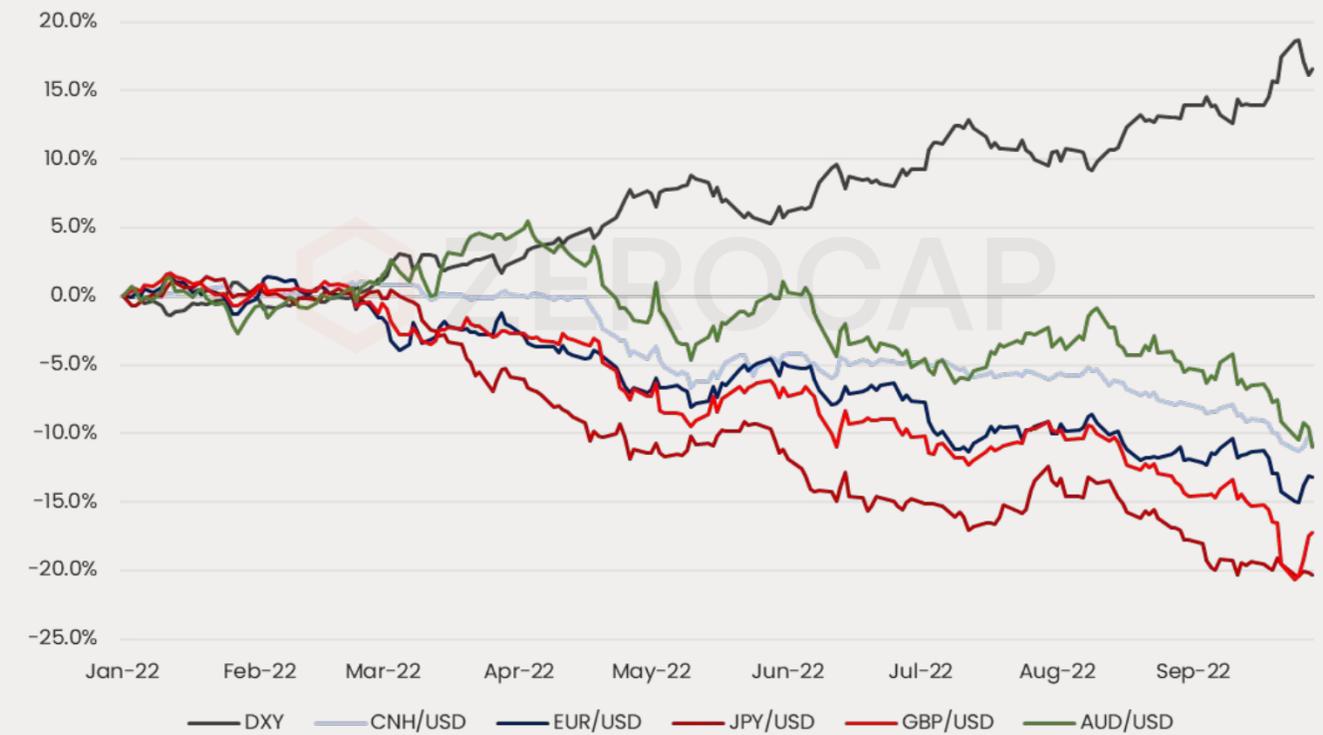
The United States Federal Reserve reaffirmed their commitment to fight inflation and remained hawkish. Setting the global central bank standard, the Fed imposed two 0.75% rate hikes this quarter alone and closed Q3 with a benchmark FED funds rate of 3.00% - 3.25%. Markets are pricing in hikes which exceed 50 bps for both of Q4’s two FOMC meetings.

The US’s imposed monetary policy acted as stimulus to catapult its dollar higher. Throughout Q3, markets witnessed the USD dominate global foreign exchange markets. The DXY marked a quarterly maximum of 114.778; levels not seen since early 2002. As the USD ascended, currencies such as the EUR and GBP suffered. Gradually edging downward, the Euro eventually broke below parity with the USD after the Italian Prime Minister, Mario Draghi, announced their resignation on July 14th. In quick response to the Euro’s diminishing strength, the European Central Bank imposed a 0.50% rate hike in its July meeting, the ECB’s first hike in eleven years.

The imposing nature of the USD’s strength reached into Asian markets. The Chinese Yuan reached a low of ¥7.26724 during Q3. In response, the PBOC looked to bolster Yuan strength by raising FX risk reserve requirement on forward contracts to 20%. This move intended to make the purchase of FX via currency forwards more expensive.

“Change is good, but the **dollar is better**”

USD vs Major Currencies - YTD Returns



Source: TradingView

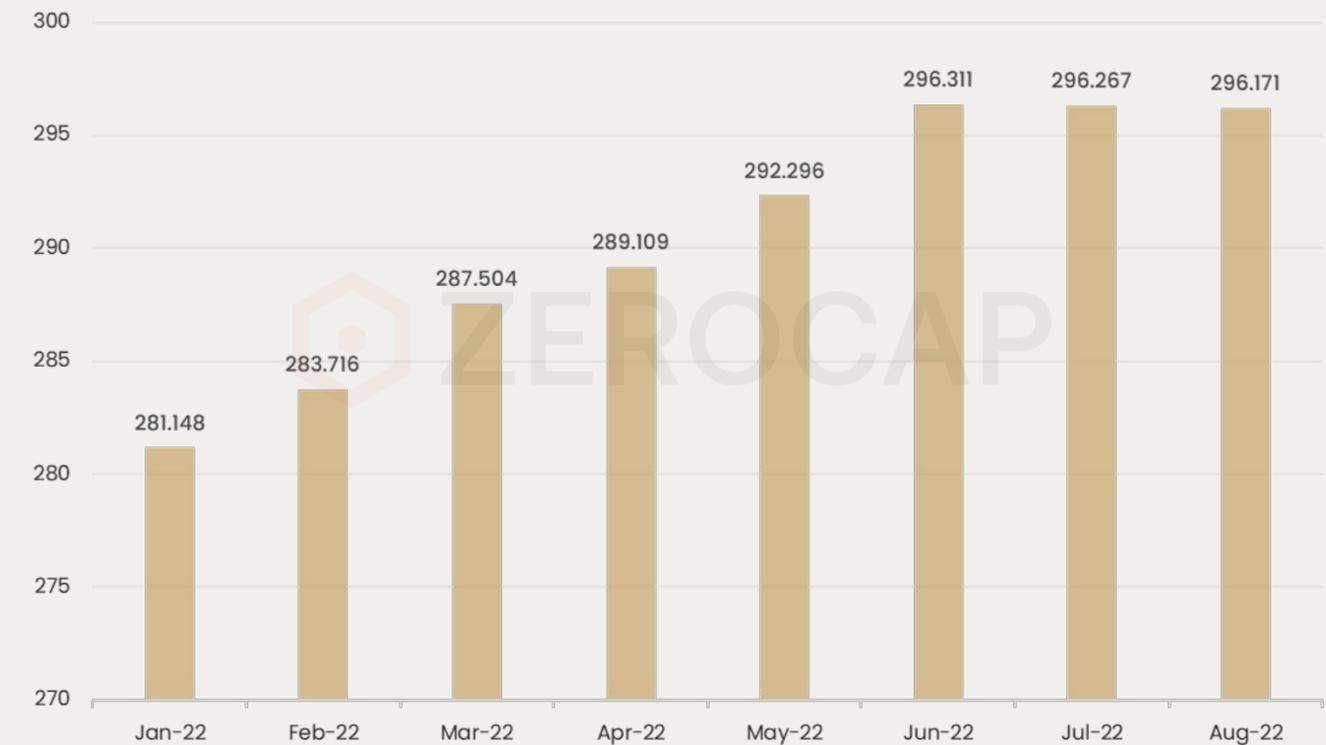
Macro

Elsewhere in the Asian region, the Bank of Japan maintained its ultra-dovish stance and made similar moves to prop up the Yen. September 22nd's "Yentervention" saw the first Japanese government Yen buy-back since 1998. The Yen recovered more than 2% against the dollar on the day reaching 140.34. Japanese prime minister Fumio Kishida reinforced the move, asserting Japan's intention to decisively respond to excessive fluctuations in the currency market.

Despite a slight reduction in inflation to 9.9% in August (down from July's 10.1% reading), the highest since 1982, the United Kingdom's inflation concerns were far from over. Confidence in the sterling declined due to conflicting internal policy decisions made by the BOE and newly elected Prime Minister, Liz Truss' government. On September 26th, the GBP reached an all-time low of 1.036 GBP/USD. The move was spurred by a decision to cut taxes of 5% on those who earned an income above £150,000 p.a. This was amplified by a suspected inflation-adjusted reduction in government benefits for low income earners. Following condemnation from the International Monetary Fund, UK debt markets panicked. Shortly after, the BOE reneged on its quantitative tightening measures, establishing a £65 billion bond buyback program to circumvent mass insolvency in pension funds holding long term gilts.

The global fight against inflation has spurred fears of a global recession. Participants now look to the G20 Summit occurring in mid November for leaders to provide guidance on the way forward considering the current faltering macroeconomic conditions.

U.S. CPI



Source: Trading Economics.com

Broader Markets

The implications of the FED's hawkish stance rolled over into global markets this quarter with asset prices being particularly sensitive to macroeconomic prints out of the US. Q3 saw the US enter a period of technical recession following two consecutive quarters of GDP contraction. Reflected in the German ZEW economic sentiment index, institutions and analysts were the most pessimistic they have been since the global financial crisis. Risk-off in the face of ongoing macro headwinds was mirrored in equities with the S&P500 and Nasdaq returning -16.63% and -24.50% QoQ respectively.

The ongoing geopolitical tensions in Ukraine as well as China's Zero Covid Policy weighed on commodity markets. Even so, copper futures posted gains of 5% late July as China increased copper imports to 498,188.60 tonnes, up 26% when compared to August 2021. Russia's partial mobilisation of troops in Ukraine's eastern Donbas region saw nickel and wheat prices soar into late September. Chicago wheat futures shifted upwards to a 6 month high on September 20th.

The London Metal Exchange is currently toying with a potential blanket ban on the storage and imports of Russian metals. Irrespective of skyrocketing household utility prices, a Russian liquified natural gas plant in Portovaya has been burning off an estimated \$10 million of gas per day since June. Experts attribute the burning of excess gas to the recent halt of supply from the European Nord Stream 1 gas pipeline. Russia has since asserted that flows won't resume until sanctions against the country ease. Correspondingly, despite Opec Plus' best efforts to bolster oil prices with a 100,000 barrel per-day cut in production, WTI and Brent posted quarterly losses of -26% and -24% respectively.

August's hot CPI figures caught markets off guard. The mismatch prompted the 2Y and 10Y UST yield curve inversion to widen in excess of 42 bps. The pivot to risk-off saw tech equities decline. Indeed, the NASDAQ contracted more than 6% to a low of 11,710 and the fintech-centric S&P 500 retraced 5.15% by week-end. This quarter, global markets faced intense selling pressure across the board.

Q3 Performance	HIGH	LOW	QoQ
SPGSCI	730.59	591.81	-15.00%
WTI	109.48	76.17	-24.28%
GOLD	1812.10	1614.00	-8.01%
COPPER	3.78	3.13	-8.09%
S&P	4818.62	3584.13	-16.63%
NASDAQ	16764.85	10966.95	-24.50%

Source: TradingView

Digital Asset Markets

Q2 2022 was a period defined by counterparty risk, macroeconomic headwinds and de-risking. We saw the effects of Celsius and 3AC's capitulation roll into Q3. More institutions fell victim to liquidity crises and amidst ongoing concerns.

Nonetheless, much of the fear had been priced in by Q3, resulting in a relative restoration of cryptocurrency market capitalization, increasing 7.02% QoQ.

Bitcoin's crypto market dominance contracted in conjunction with waning market optimism and risk off sentiment in equities bleeding into crypto markets. However, toward the latter part of the quarter, the poorly received 2022 economic Growth Plan out of the U.K. sent the British pound to all-time lows against the USD. Interestingly, daily trading volumes between the GBP and Bitcoin spiked to a record high as participants moved out of sterling. The move into digital assets and out of fiat currencies due to a diminished confidence in monetary bodies is a dynamic that may continue to foster if current economic conditions persist.

Crypto Market Capitalisation YTD



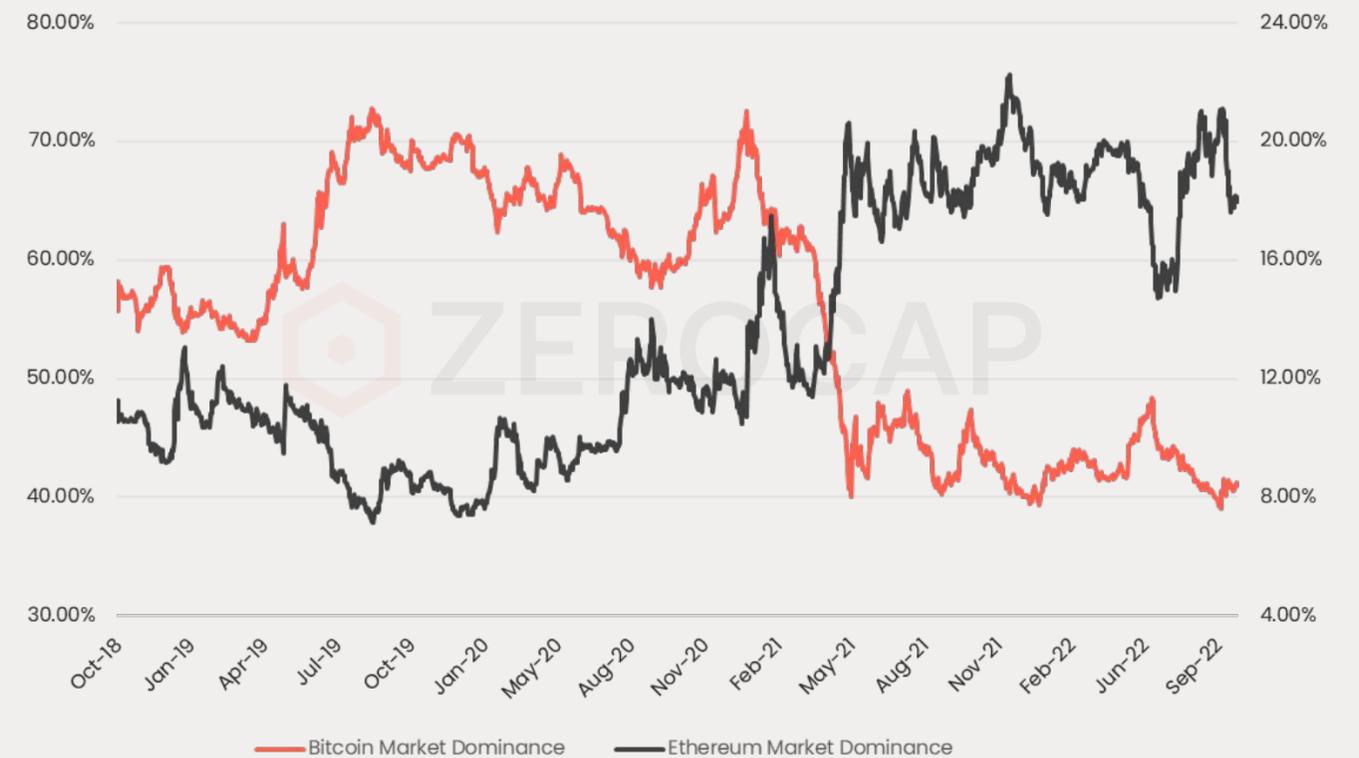
Source: TradingView

Digital Asset Markets

An interesting dynamic unfolded during the quarter. On the one hand, Ethereum’s long-awaited merge to PoS bolstered sentiment and prices, whilst on the other, macro factors continued to dampen appreciation, reinforcing a breakdown in correlation for specific sectors.

Correspondingly, as participants formed merge related trades and as anticipation grew, the intermarket dynamic between Ethereum and Bitcoin shifted. Ethereum’s options open interest surpassed that of Bitcoin and while Bitcoin’s market dominance withdrew by 2.38%, Ethereum’s grew by 2.79% QoQ in real terms.

BTC vs ETH - Market Dominance



Source: TradingView

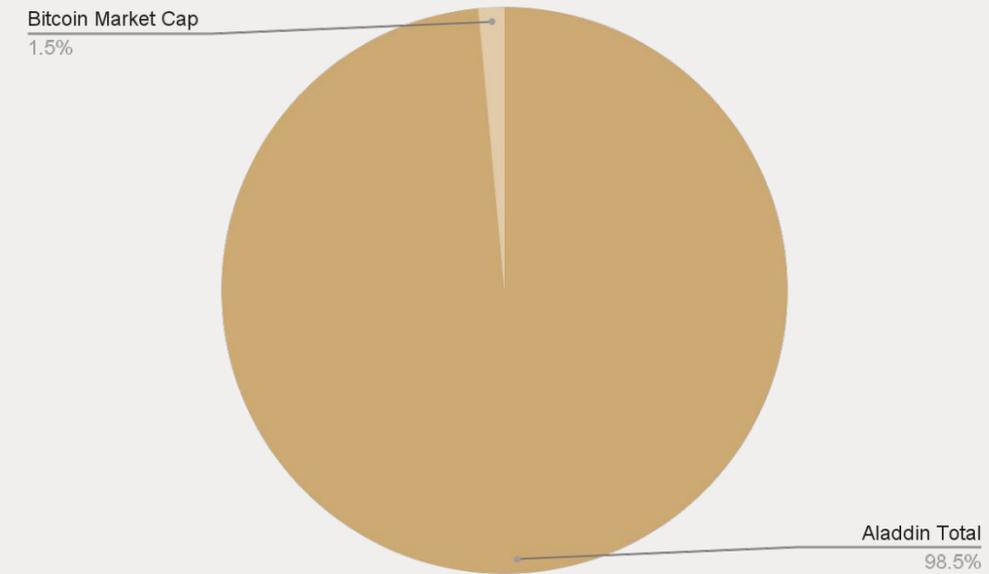
Key Events

While action was heavily dictated by the hawkish narrative and regulatory levels, there were significant developments that took place at both at an institutional level.

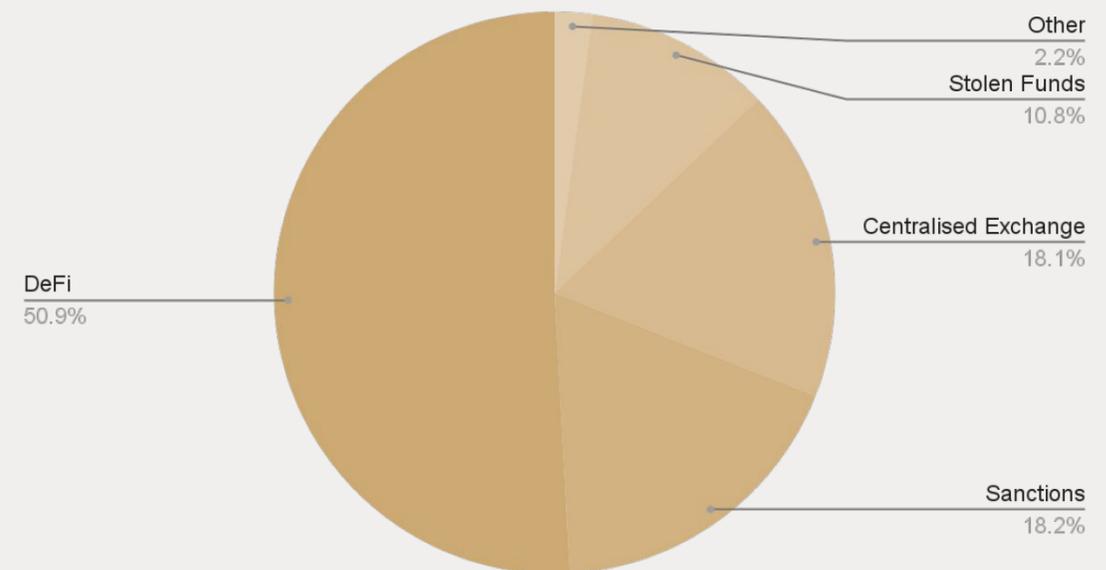
Coinbase announced a partnership with BlackRock. This partnership intends to grant institutional clients of Aladdin, BlackRock’s investment management platform, access to crypto. As part of the arrangement, clients will be able to directly manage their Bitcoin exposure and trading flows via Aladdin’s software. Beyond expanding access to digital assets, just 1.50% of Aladdin’s AUM represents the entire market capitalisation of Bitcoin. As a result, this partnership may hold significant long term implications on liquidity and the value of digital assets.

The fallout from Celsius and 3AC’s collapse spilled into Q3. During July, a handful of institutions filed for chapter 11 bankruptcy. Given the nuanced nature of crypto and a lack of established precedence and regulation, courts are faced with issues that are ambiguous in nature. The outcome of which will build stronger legal frameworks.

During Q3, **privacy coins were placed in the spotlight.** Tornado Cash was of particular significance and was sanctioned by the US Treasury and OFAC. Concerns derived from the protocol’s mixing service, which allowed for the washing of digital assets, was the driving factor of the sanctions. In accordance with the sanctions, wallet addresses that had association to the service were blacklisted from a number of decentralised protocols. Moreover, this event brought into question the true nature of decentralisation and whether it is sustainable in the presence of regulation.



Crypto received by Tornado Cash by source



SECTION 3.

Quarterly Asset Performance

Bitcoin

Bitcoin opened Q3's action at 19,820 and was quick to edge higher. While persisting inflation continued to hinder upside, substantial consolidation within the 19,650 to 20,250 range occurred and moves lower were firmly bid at the 18,760 level.

During Q3's opening stages, momentum favored the bulls, breaking the top-heavy 200-SMA by late July. Action persisted higher until mid-August, when the certainty of future hikes from the Fed was affirmed. Significant de-risking alongside long liquidations drove price back toward the 18,760 support. While Ethereum's merge temporarily bolstered sentiment and promoted a retest of resistance within the 22,400 – 22,785 range, BTC was quick to revert lower, closing -1.96% QoQ.

BTC - Q3 Price and Volume



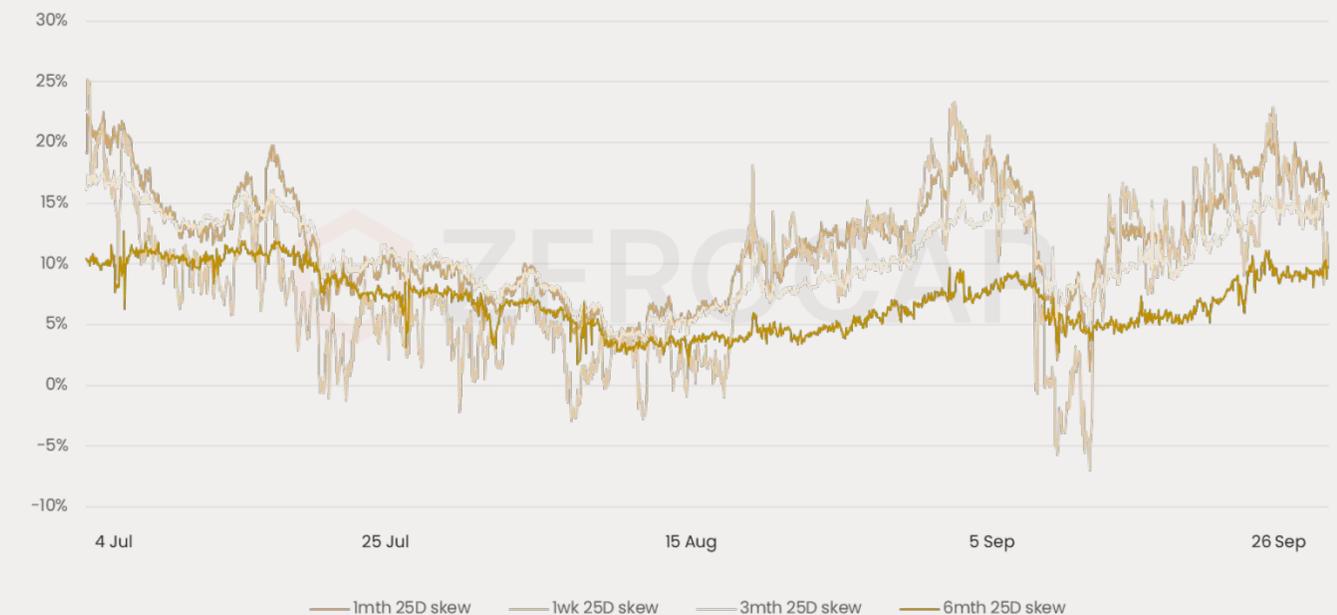
Source: Glassnode

Bitcoin

The SEC’s disapproval of Grayscale’s Bitcoin Spot ETF proposal in the early stages of July caused some selling pressure, nonetheless, Bitcoin possessed a desire to push higher. In light of 40-year high inflation prints out of the U.S., tighter monetary conditions and continued GDP contraction, Bitcoin appreciated 16.84% in July, its best monthly return since October 2021. Alongside price appreciation, Bitcoin’s 25-Delta Skew diminished until mid-August, indicating participant’s growing favor toward bullish plays. The mismatch between concerning macro prints and price action is a function of markets having priced in the worst-case scenario, and these prints coming in as “less bad”, justifying positive risk moves.

Bitcoin pushed to quarterly highs above 25,000 as markets approached August’s highly anticipated FOMC minutes. Newsflow such as BlackRock Inc (10T AUM), partnering with Coinbase to facilitate access to cryptocurrencies and also providing a private Bitcoin trust, acted to bolster action. However, the ever-present hawkish macro-outlook promoted an lack of conviction in BTC’s participants and the macroeconomic environment’s true dictatorship was highlighted after August’s FOMC minutes when fears of future hikes were made certain. During September, we saw participants move back in favor with downside protection strategies and while the Ethereum merge acted to temporarily spark action, BTC edged lower into month end.

Bitcoin: Options 25 Delta Skew



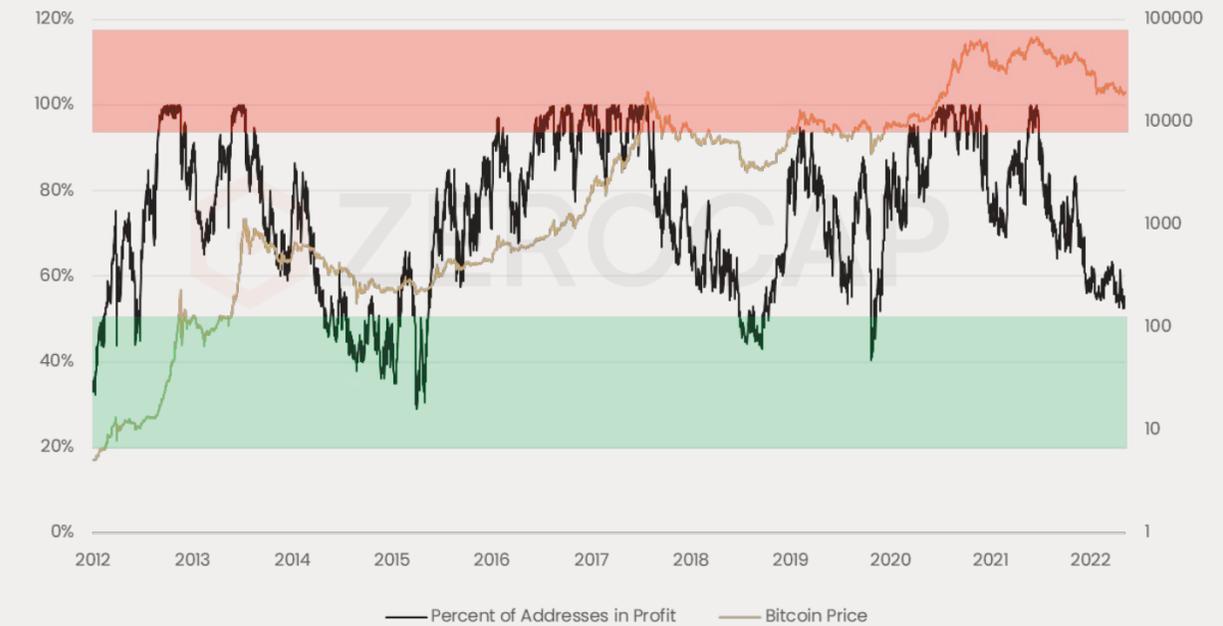
Source: Glassnode

Bitcoin On-Chain

Bitcoin's percent of addresses in profit is a metric that is often used to time market cycles. It's an indicator that shows on-chain 'pain' zones from when market participants were accumulating. During Q3, this metric continued lower, entering into regions that have been consistent with late-stage bear markets. There was significant support for buoyancy above 18,650. Nonetheless, macro factors will trump this if inflation scares or geopolitical tensions intensify.

Long term holders, which are often considered firmer hands, showed strong accumulation tendencies during Q3. Correspondingly, this behavior will likely contribute to the long term resilience of the 18,650 to 20,000 range. An evident bias towards accumulation at current prices suggests that moves below 18,650 may only be brief as firmer hands take advantage of relatively attractive pricing.

Bitcoin - % Addresses in Profit



Source: Glassnode

Bitcoin: Total Supply Held by LTH



Source: Glassnode

Bitcoin On-Chain

The narrative surrounding miner capitulation developed in Q3. Early reports of notable Bitcoin miner, Bitfarms, selling off nearly half of its BTC to reduce its debt exacerbated fears of further short-term selling pressure.

Bitcoin's Mining Difficulty, a metric that is often used to analyse the health of Bitcoin's network and is also used to better understand late-stage bear markets, showed signs of decreasing in early Q3. This trend is aligned with over-leveraged miners halting operations. However, during August, mining difficulty initiated a move indicative of solvent miners acquiring relatively cheaper equipment to enhance their existing operations. Soon after, Bitcoin's mining difficulty appreciated to new all-time highs.

While this trend is representative of improved network health and potentially improved efficiency amongst miners, it sparked an increase in the cost of mining Bitcoin. Yet, without a corresponding follow through in BTC price, many participants halted their operations. Similarly, potential miners were disincentivized to contribute to the Bitcoin network based on this cost-benefit analysis.

Mining Difficulty



Source: Glassnode

Ethereum

Ethereum’s merge was a defining element of Q3. Following the collapse of dominant institutions in Q2, direction lacked key drivers. However, in early Q3, we saw Ethereum act as the leading indicator for market growth.

As anticipation surrounding the merge increased, sentiment amongst participants was bolstered. This established bullish momentum in the market. Ethereum’s price increased by approximately 100% from quarter open to mid August, seeing quarterly highs of 2,031.56.

Hawkish undertones out of August’s FOMC caused strong de-risking across markets. Yet, Ethereum’s action was cushioned and eventually edged higher as participants took merge related positions. We saw a breakdown between Ethereum’s behaviour and correlation to high beta equities such as the Nasdaq.

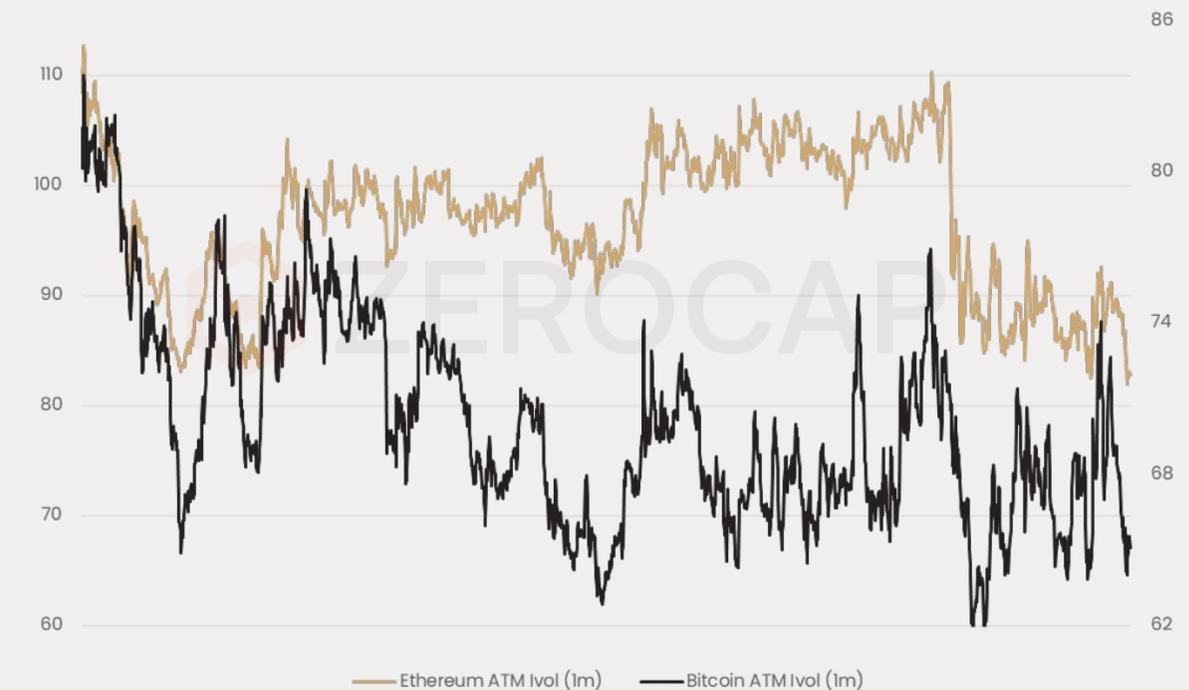
Nonetheless, at large, the merge was a buy the rumour and sell the news event. In the three days following the event, merge trades were unwound and price fell 15%. Following the merge, Ethereum’s correlation to high beta assets reverted and the continued macro uncertainty caused selling pressure to persist into the latter parts of Q3. Ultimately, Ethereum returned 24.31% QoQ.

ETH - Q3 Price and Volume



Source: Coinmarketcap

ETH vs BTC ATM Implied Volatility



Source: Glassnode

Ethereum

Ethereum’s merge sparked the eviction of miners. Attention was placed on PoW alternatives, many of which appreciated. A collection of prominent Ethereum miners coordinated a fork of the Ethereum blockchain and created a new PoW token, ETHW. Existing Ethereum holders were airdropped the token shortly after the completion of the merge.

Traders took advantage of unique trading conditions to maximise returns from the airdrop. A popular trade was the shorting of Ethereum’s perpetual future while also holding a long position in the underlying spot asset. This meant that traders who were credited the fork token were protected from directional price moves. The crowded nature of the trade forced perpetual funding rates to their lowest recorded level. For this reason, prominent borrowing & lending DeFi protocols saw Ethereum denominated lending pools reach 100% utilisation.

Ethereum - Futures Perpetual Funding Rate



Source: Glassnode

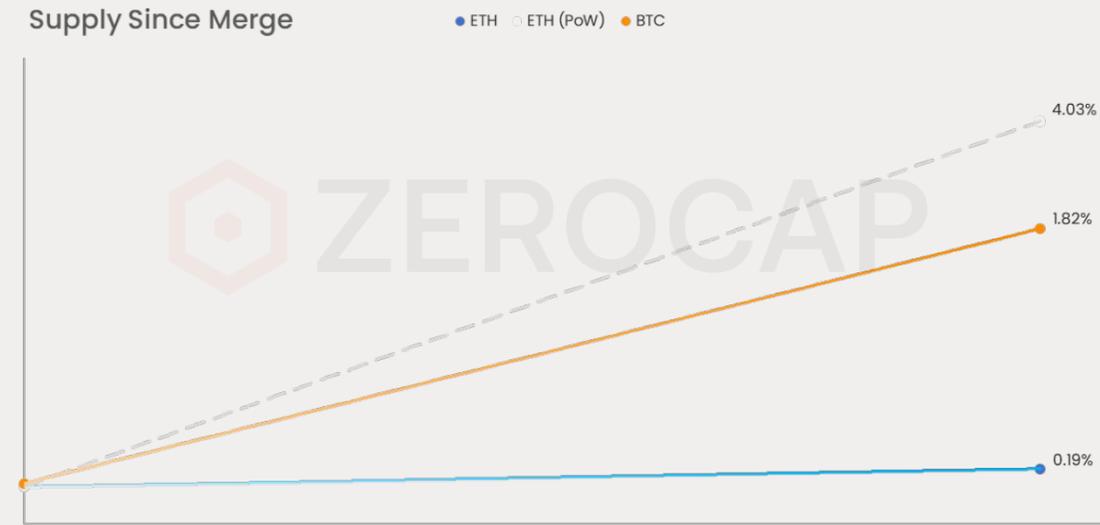
Ethereum On-Chain

Ethereum’s shift to PoS reduced the blockchain’s energy consumption and decreased the token’s rate issuance.

Firstly, PoW requires relatively more energy to validate transactions. Bitcoin is notoriously criticised for this. Following the merge, Ethereum’s energy consumption has reduced by 99.98%. Notably, according to a researcher at the Ethereum Foundation, the merge reduced global energy consumption by an estimated 0.2%.

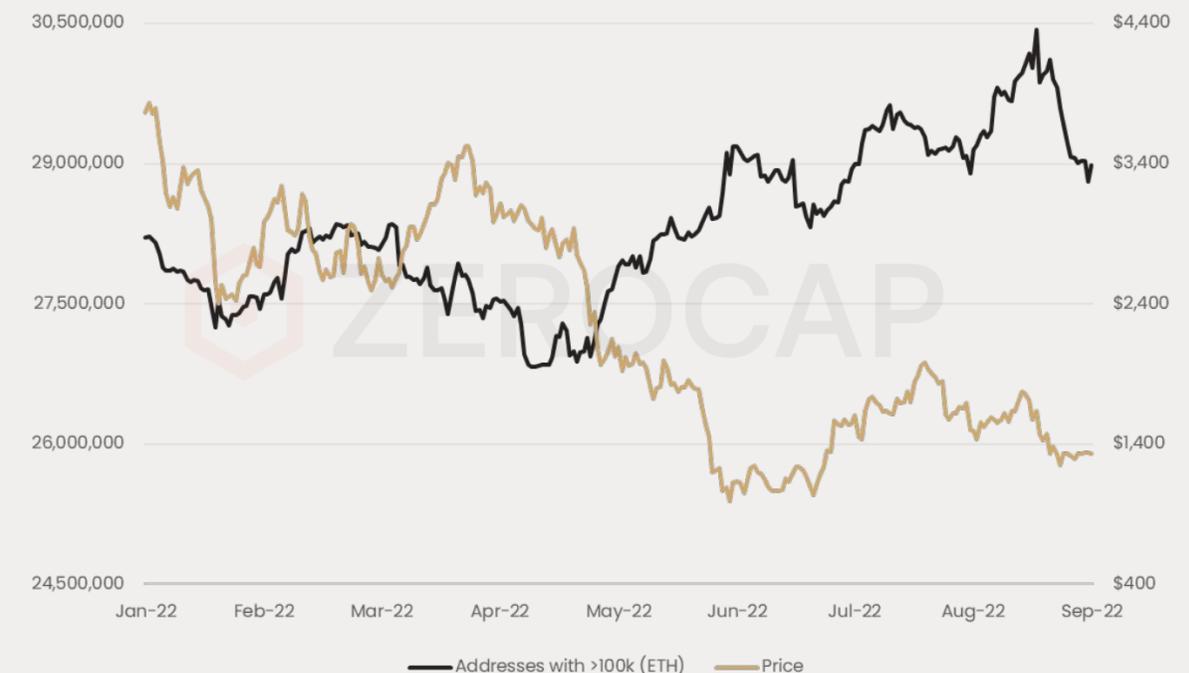
Additionally, Ethereum’s supply rate has meaningfully reduced since the merge. As opposed to the growth rate of 3.76% pre-merge, the token supply has increased at an annualised rate of 0.16%. This is expected to decline further as network activity increases given more gas will be burnt. Inevitably, this shift is predicted to form deflationary characteristics related to Ethereum’s supply.

Similar to Bitcoin’s halving, the Ethereum’s Merge to PoS presents a supply shock to its token. Historically, Bitcoin’s halvings have marked the beginning of cyclical shifts. Moreover, the change in Ethereum’s supply dynamics have formed a bullish narrative for Ethereum’s longer-term price action. Notably, this narrative is reaffirmed by the behaviour of larger holders within Ethereum’s ecosystem. During Q3, the number of addresses with balances greater than 100 ETH increased in the lead up into the merge. This trend is highly correlated with price due to the underlying assumption that “smart money” is accumulating. Importantly, we saw this metric decrease following the merge, behaviour that is likely consistent with participants taking profits.



Source: <https://ultrasound.money/>

Ethereum - Addresses with > 100k (ETH)



Source: Glassnode

SECTION 4.

Decentralised Finance

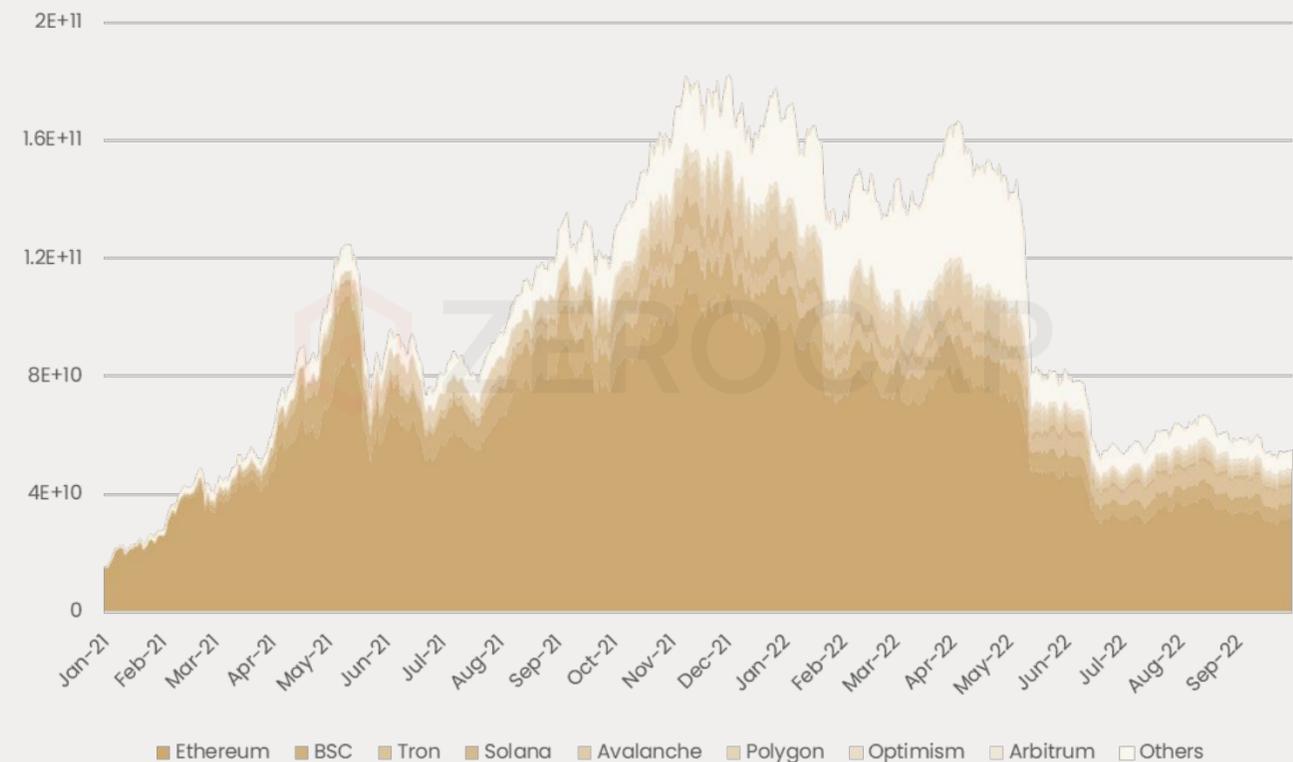
Total Value Locked

Following the Terra capitulation in Q2, the total value locked (TVL) across chains decreased dramatically. However, as markets entered Q3 and market fears relatively subsided, TVL began climbing higher.

Starting at 70.4 billion, TVL reached a peak of 91 billion before closing the quarter at 72 billion. Unlike prior quarters which saw substantial fluctuations in TVL due to events such as the Terra ecosystem collapse, no such event occurred in Q3 leading to relative stability.

Moreover, TVL's behaviour during Q3 mimicked the consolidation we saw in digital asset prices. As the value of the underlying assets varied in value off the back of macroeconomic risk, TVL adjusted accordingly. QoQ TVL increased 1.99%.

Total Value Locked



Source: DeFi Llama

Layer 2's

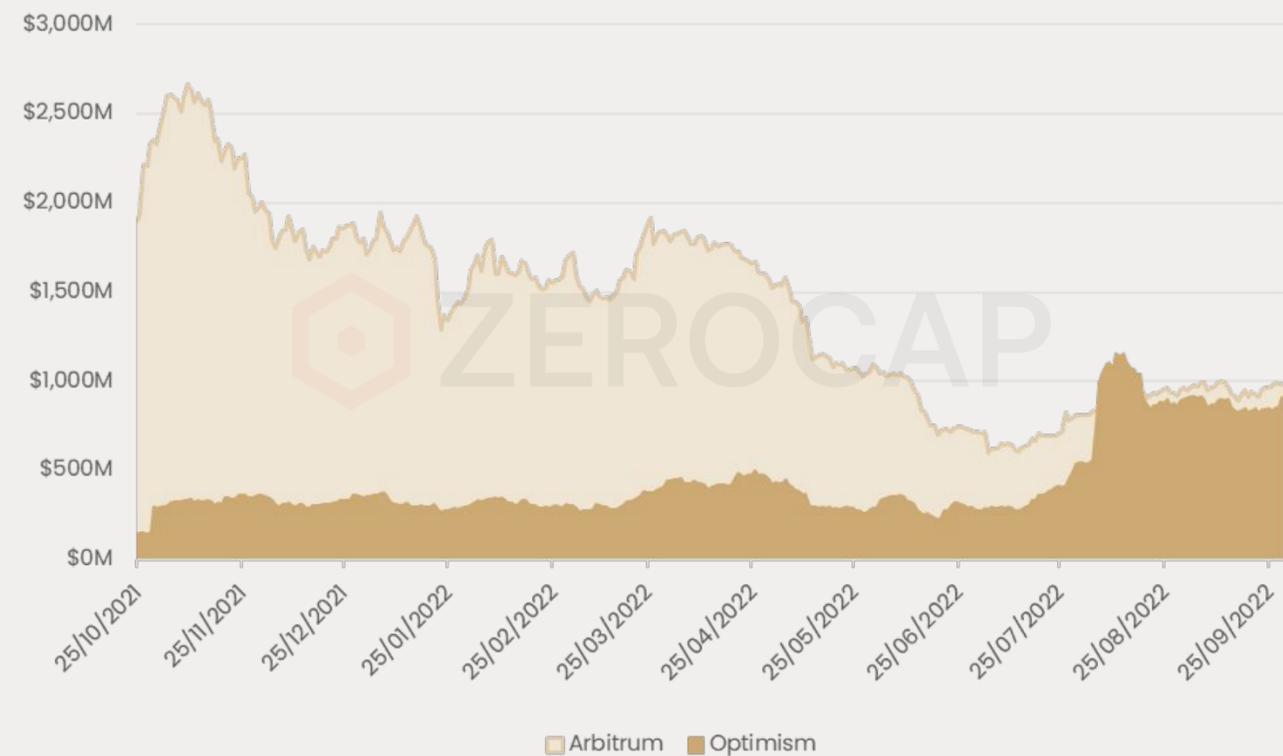
The narrative driven by Ethereum's transition to PoS benefited a number of differing ecosystems reliant on the success of Ethereum. Ethereum's Layer 2 scaling solutions were one category that benefited.

Specifically, Layer 2s that utilise optimistic rollups experienced significant growth in their TVL. The notable rise in TVL can be attributed to the importance of scaling Ethereum.

Of particular note, Optimism's DeFi ecosystem grew from 267 million, at the onset of the quarter, to a peak of 1.2b during Q3. Much of Optimism's traction derived from its incentive program. The program aimed to increase on-chain participation by offering a number of OP tokens to specific DeFi protocols that operate on the Optimism network. Participants of these networks were rewarded with OP tokens. Notably, at the conclusion of the incentive program, Optimism's network activity diminished. By the end of Q3, the Layer 2's TVL was approximately 935 million, falling by over 28%.

Similarly, Arbitrum, another dominant network that uses optimistic rollups also witnessed substantial growth. Of a more stable nature, Arbitrum's TVL grew from 730 million to just under 1 billion. Further, Arbitrum completed its Nitro upgrade, which is designed to reduce fees and increase transaction throughput, escalating the layer 2's TVL.

TVL - Arbitrum vs Optimism



Source: DeFi Llama

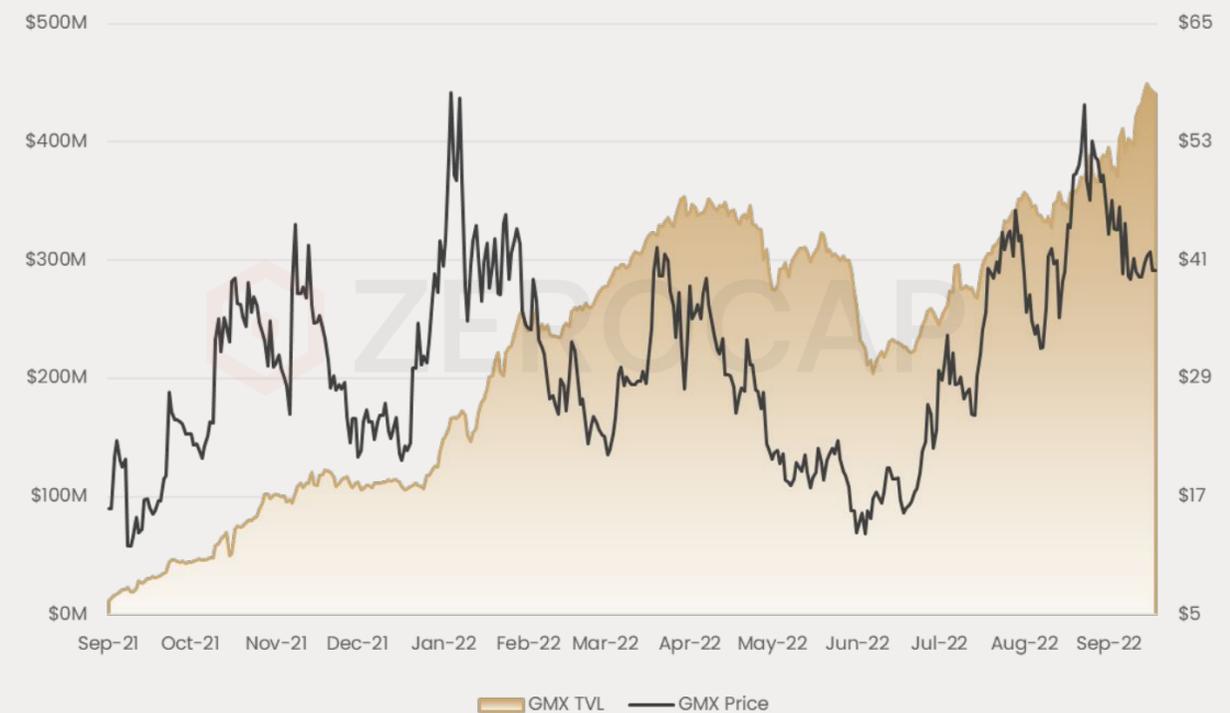
Real Yield & GMX

During Q3, light shined on a new narrative in the DeFi space. Real yield is a construct that rewards token holders based on protocol revenue as opposed to token emissions.

Real yield presents an offering that may be relatively more sustainable in stimulating usage of the protocol without increasing a token's supply. Although numerous platforms attempted to leverage real yield as part of their offering, decentralised derivatives exchanges were arguably the most successful. This notion is affirmed by the market share captured by new protocols from last quarter's most dominant platform, dYdX.

GMX is an Arbitrum based decentralised perpetual exchange. The platform allows users to leverage up to 30x on trades. GMX's underlying token offers holders with yield based rewards. The yield is generated from GMX's revenues. During Q3, GMX experienced significant growth in TVL, trade volumes and fees generated. Moreover, the protocol's daily trading volume rose from an average of 115m to about 340m between Q2 and Q3. On average, this translated to 589m in fees per week. This cemented the protocol as the 4th largest revenue generator amongst all tracked blockchains and protocols throughout the period. This feat was achieved despite GMX's comparatively small market capitalisation of 352.3 million. GMX's TVL increased by approximately 200m during Q3, an increase which represents nearly a 100% change. The developing narrative related to real yield and GMX's subsequent growth were also reflected in GMX's token price returned over 170% QoQ.

GMX TVL & Price



Source: DeFi Llama

SECTION 5.

NFTs & the Metaverse

NFTFi

The financialisation of NFTs, known as NFTFi, is a developing narrative within the crypto space. Two key events relating to protocols looking to herald in the financialisation of NFTs stood out this quarter.

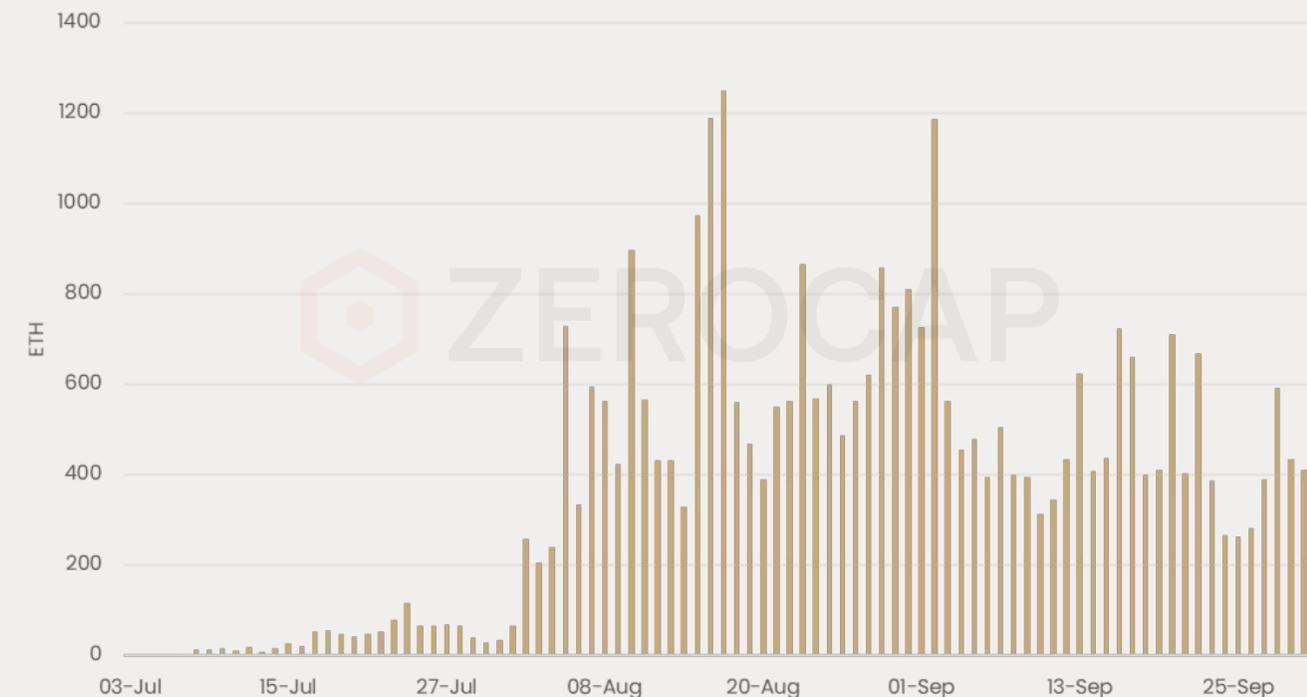
BendDAO is a NFT money market protocol that enables users to post their NFT as collateral and received loans of up to 30-40% of their floor price. During Q3, following a significant number of positions being liquidated simultaneously, BendDAO faced a liquidity crisis. This occurred as result of a caveat in BendDAO’s design pertaining to the design of a position’s health factor. The factor is relevant in determining the liquidation of collateral and as the factor moves toward 1, NFTs posted as collateral are at risk of liquidation.

In response to the problem as well as to prevent the issue from occurring again in the future, the protocol enacted an improvement proposal to lower the liquidation threshold, speed up the liquidation process and change the minimum bid on liquidation auctions.

Another key event this quarter was the inauguration of automated market makers (AMMs) for NFTs. SudoSwap is the first protocol to establish an effective AMM that executes peer-to-peer swaps in a decentralised manner. SudoSwap employed a formula similar to Uniswap’s liquidity pool to determine price. Inherent in its design, the peer-to-peer nature of transactions on SudoSwap overcome the need to pay royalty fees.

Notably, NFT AMM protocols provide instant liquidity for NFTs, a previously illiquid market. Accordingly, SudoSwap’s volume has grown remarkably, already having facilitated more than 50 million in volume since launching early this quarter.

TX Volume for SudoSwap



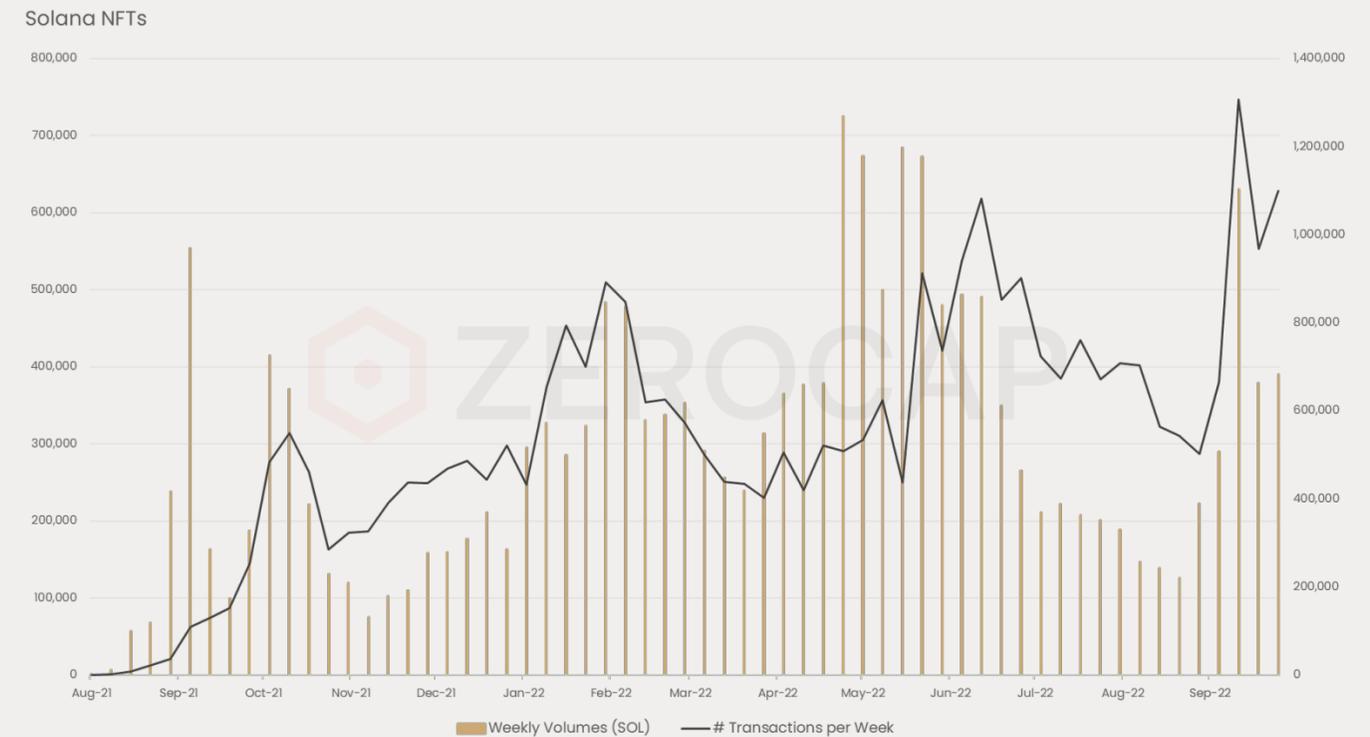
Source: Dune Analytics

Solana NFTs

Although Ethereum has long dominated the NFT market, Solana NFTs have gradually increased in popularity, transactional volumes and market share. This was particularly true in Q3.

The rise of Solana’s position within the NFT market was primarily prompted by two well-known collections, DeGods and y00ts, both of which were created by Dust Labs. During Q3, Dust Labs raised 7m in seed capital to continue building NFTs on the Solana blockchain. The raised funds will additionally go to building out Dust Labs’ offerings in the Solana space; this will likely include NFT games, community events and more.

Correspondingly, Solana-based NFT monthly volumes increased from 69.6m to 90.9m, a change which represents a 39% appreciation QoQ. Solana’s growth in NFT transactional volumes outperformed that of Ethereum’s growth which diminished from 1.5b to 777.1m QoQ, a 48% move.



Source: Nansen

SECTION 6.

Emerging Themes

Cosmos

Interoperability is an important, fundamental element of web3.0 and the future of blockchain technology. Cosmos, a layer 0 network, experienced momentous growth and received meaningful attention off the back of this developing narrative.

Cosmos provides developers and users with technology to build application specific blockchains. Through its provision of a modular base level, developers can utilise Cosmos' security, speed, consensus and inter-blockchain communication (IBC) features.

Cosmos' thesis is that a multi-chain future is inevitable. This is founded on the need for interoperability and the difficulty of a single, general purpose blockchain satisfying all needs. A variety of unique networks are now positioning themselves to be a vanguard in the sector and are utilising Cosmos' infrastructure to do so.

Accordingly, Cosmos' community has observed popular protocols such as dYdX, as well as new projects, including Sei and Osmosis, voting to use Cosmos to establish their own blockchain.

IBC Chains



Source: DeFi Llama

Cosmos- Cumulative Transaction Volume



Source: AtomicScan

Upcoming Layer 1's

Ethereum's limited scalability has been subject to ongoing criticism. In turn, a number of alternative Layer 1 blockchains with smart contract functionality have grown in popularity.

The market for Layer 1 blockchains already includes notable projects such as Solana and Avalanche. Accordingly, it has become somewhat oversaturated. Notably, in Q3 two up and coming chains successfully raised substantial capital. Mysten Labs', Sui, and Aptos Labs', Aptos, raised 300m and 150m respectively.

In contrast to existing Layer 1 rivals of Ethereum, Sui and Aptos utilise Move. Move is a programming language developed by Meta in its attempt to create a decentralised payment system. Moreover, the use of Move allows for the creation of a parallel execution engine, adding another distinguishing factor to these chains when compared to its counterparts. This underlying attribute allows Sui and Aptos to emerge as scalable blockchains with some transactions being executable simultaneously rather than in a rigid order.



zkEVM Announcements

Last quarter, we touched on the significant growth of all layer 2s. This included projects that leveraged optimistic rollups and zero knowledge rollups. As previously outlined, optimistic layer 2s have experienced substantial growth.

Likewise, projects utilising zero knowledge rollups made significant technological strides with many networks announcing zkEVM-compatible platforms. Notably, in order for a project to be correctly classified as a zkEVM-compatible, it must be a Layer 2 that utilises zero knowledge rollups and is compatible with the Ethereum Virtual Machine (EVM).

When Ethereum was created, development around zero knowledge technology and how it pertains to blockchain did not exist. As a result, the blockchain is not congruent with this category of rollups. Due to a lack of similarity, building an effective network that is zkEVM-compatible is a difficult task. Nonetheless, a number of various teams, such as zkSync, Scroll and Polygon, all announced zkEVM-compatible platforms within the same week.



Censorship

Stemming from the contentious blacklisting of Tornado Cash by the US Treasury, censorship and censorship resistant blockchains have become a major point of discussion.

Tornado Cash is a dominant crypto mixer that utilises zero knowledge proofs to “clean” tokens. With the justification that Tornado Cash assisted North Korea in laundering stolen crypto funds, the US’ Office of Foreign Assets Control (OFAC), added the platform to its Specifically Designated Nationals (SDN) list. This document has historically included names as well as wallet addresses that American individuals and entities cannot interact with; however, a smart contract itself had never been listed.

Subsequent to the barring of Tornado Cash by OFAC, Circle, issuer of the popular stablecoin, USDT, blacklisted the sanctioned addresses. Likewise, Github removed the mixer’s open sourced code from its platform. The contagion did not end here. Various protocols began complying with the US Treasury in banning wallets that had interacted with Tornado Cash from utilising its services.

Although Tornado Cash has continued in its operations as it does not operate under the jurisdiction of a centralised authority, the event foregrounded the implications of privacy and regulation.

A fundamental feature of cryptography, which itself was enshrined into Bitcoin and future blockchains, is privacy. Blockchains had enabled individuals to have pseudonymous identities with the privacy features heralded by the technology. Yet, the OFAC’s blacklisting of Tornado Cash and the consequent detriments to those who interacted with the platform, depicted that privacy is seeping away on the blockchain. Despite the private-centric ethos of crypto, Tornado Cash users were punished as criminals for attempting to obfuscate their actions. In addition, it became clear that crypto does not exist in a vacuum, but rather can still be highly influenced by external regulatory factors.

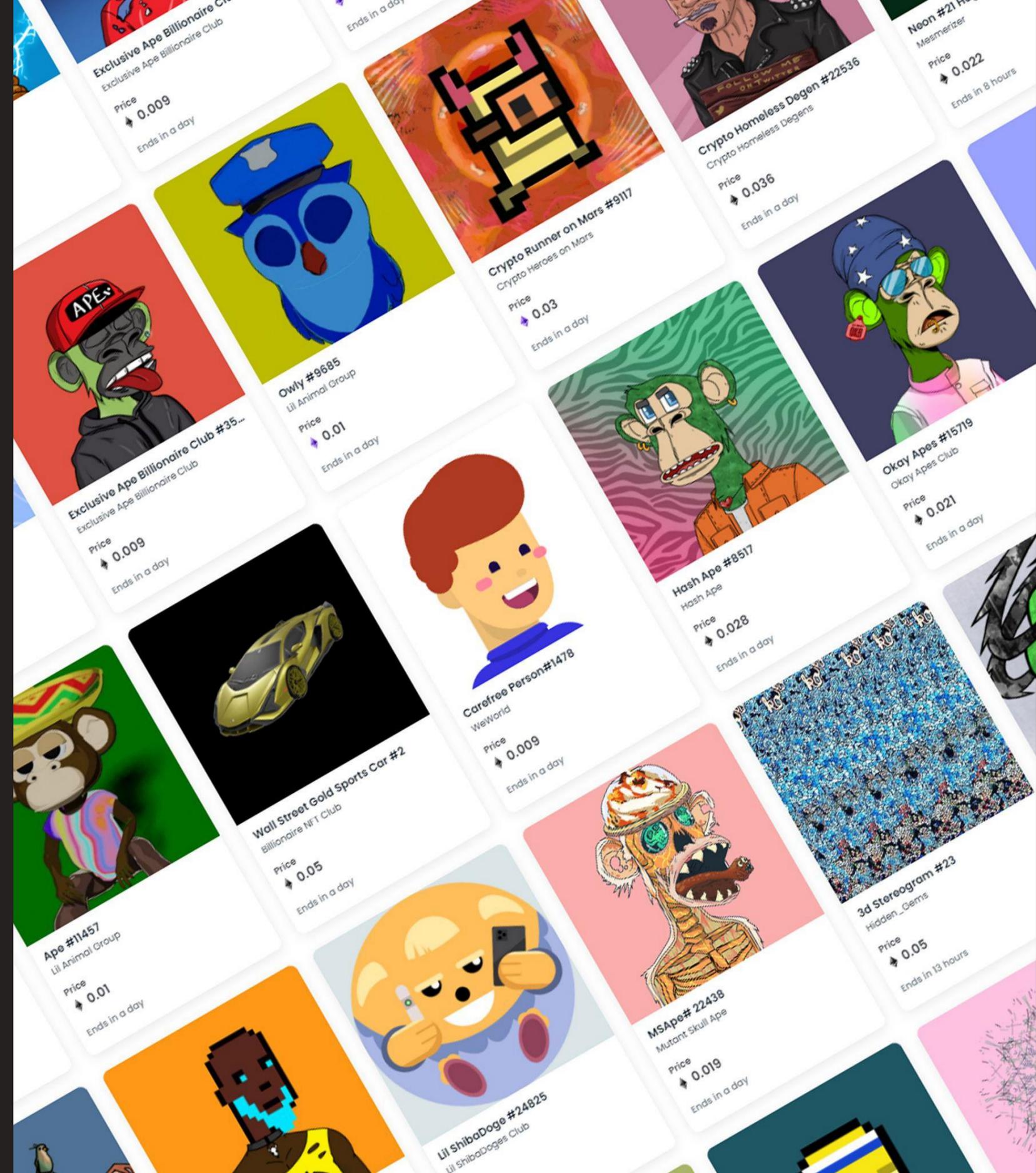
Flashbots’ compliance with these US regulations have overshadowed the censorship-resistant nature of blockchains. Flashbots offers a client that optimises for miner extractable value (MEV), thus increasing profits for validators. However, pertinent debates have arisen relating to how Flashbots prevents the proposal of blocks which include transaction for wallets on the SDN list. This in itself is an attempt to censor Ethereum at the base level of the chain, an action that was poorly taken by many in the community..

Middle East's Metaverse Play

The race to become the global metaverse hub ramped up this quarter. Stemming from South Korea and the United Arab Emirates (UAE), metaverse development within these countries have increased at an exponential rate.

UAE's Dubai and Abu Dhabi edged ahead of South Korea's Seoul as a result of support from the government. The governmental push drove attractiveness and feasibility for investors. Subsequently, there was a notable increase in private wealth in the crypto space. This adoption may act in favour of the UAE economy.

Metaverse related companies have already created 6.7k jobs and contributed to over \$500m to the UAE economy. Notably, Metaverse Holdings, a real estate company that develops within the metaverse ecosystem chose Dubai and Abu Dhabi as two of the first cities to be digitally rendered into its Metaverse. In partnership with the UAE's governments, Metaverse Holdings' metaverse aims to create jobs, provide education, and promote revenues for the retail and tourism sectors.



Middle East's Metaverse Play

In order to further its involvement in the metaverse, Dubai established the Virtual Asset Regulatory Authority (VARA). The regulatory body has been tasked with provide rules and guidelines for regulators introducing laws in the crypto industry. Shortly after VARA's formation, the Emirates announced the Dubai Metaverse Strategy which accentuated its concentration on becoming one of the world's top 10 metaverse economies. The strategy additionally aims to form over 40k jobs and 1k companies by 2030.

Likewise, Abu Dhabi has elevated its presence in the metaverse sector with the development of the Abu Dhabi Blockchain and Virtual Asset Committee. This committee has a focus on building a safe ecosystem for the creation of companies building metaverse technologies as well as finding synergies between blockchain and fields like agritech, fintech, healthcare and energy.



SECTION 7.

Zerocap Products

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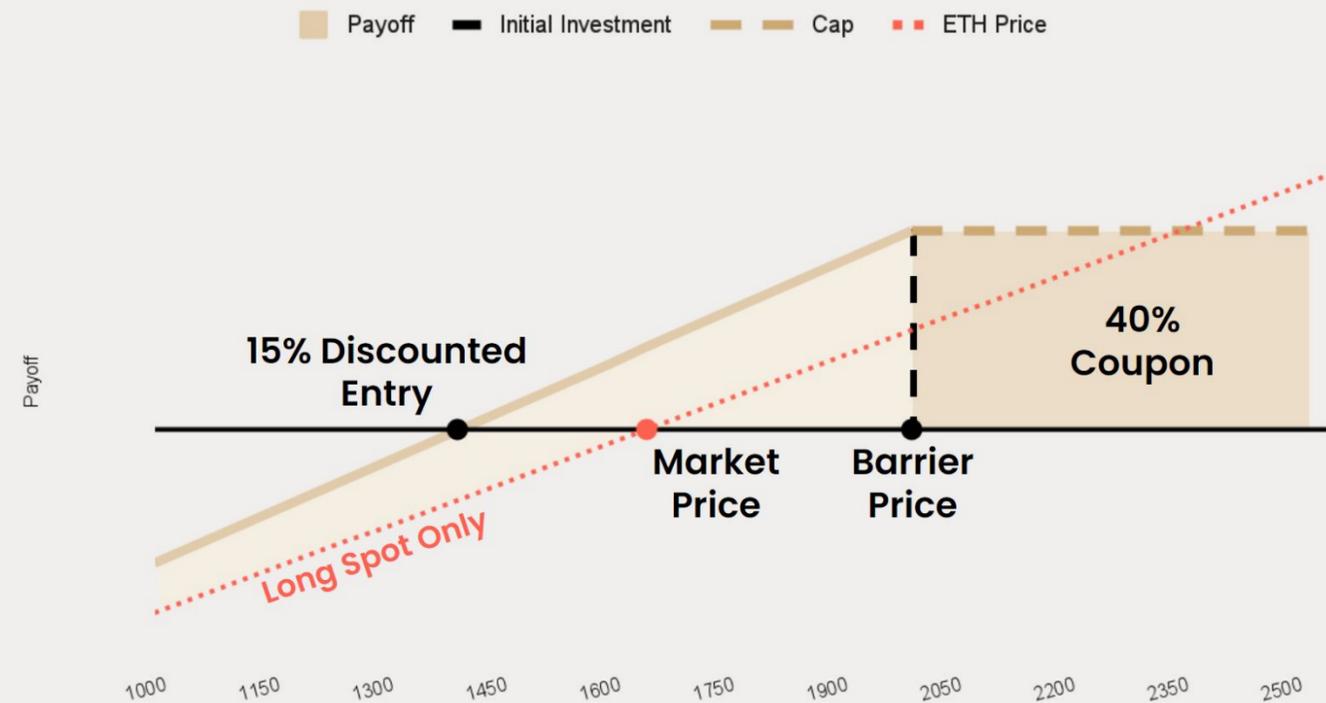
Highlights

The ETH Merge Note Structured Product attracted significant interest from a number of clients and institutions. The note attracted media attention, as seen in the [Australian Financial Review](#).

The speculative nature of the event prompted the formation of numerous trades and consequently, implied volatility became heavily weighted toward strikes on the upside of Ethereum option contracts.

As a result of heightened implied volatility, the product was able to capitalise on heightened option premiums in the lead up to the merge. The result is a Structured Product that offers two beneficial potential scenarios - either earn 40% annualised at the end of the term, or buy ETH at 15% below current market pricing.

ETH Merge Note



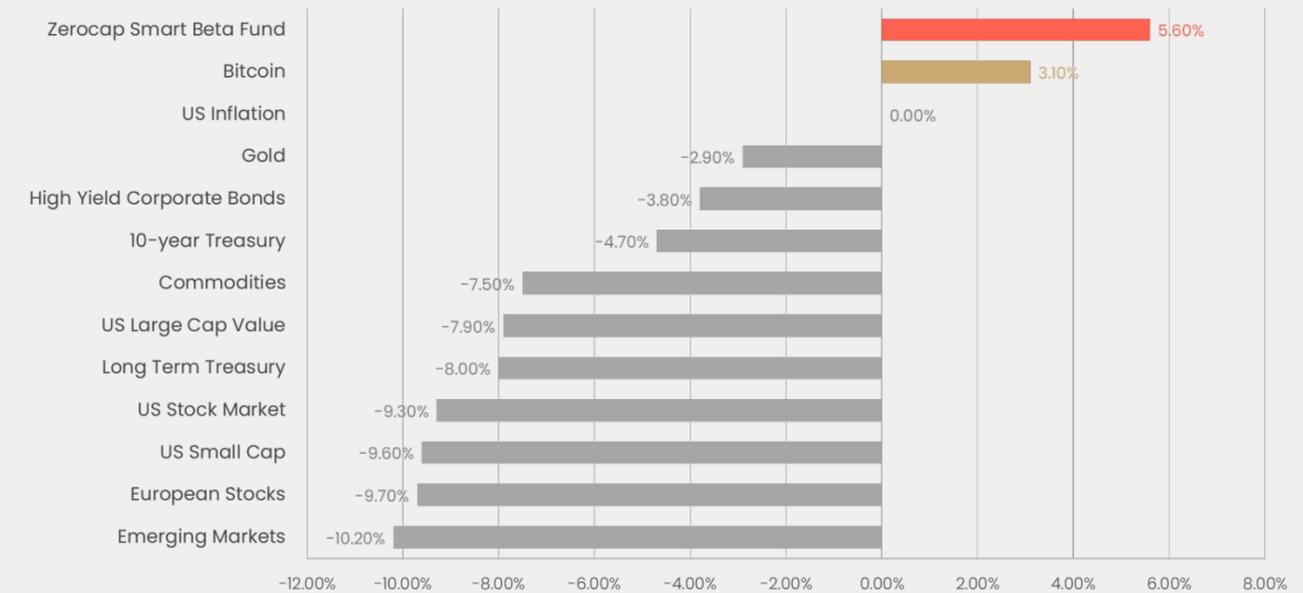
Highlights

September was a stellar month for the Smart Beta Bitcoin Fund, and indeed the quarter – reporting a monthly NAV increase of 4.21% – meanwhile Bitcoin, traditional equities and bonds all had negative returns.

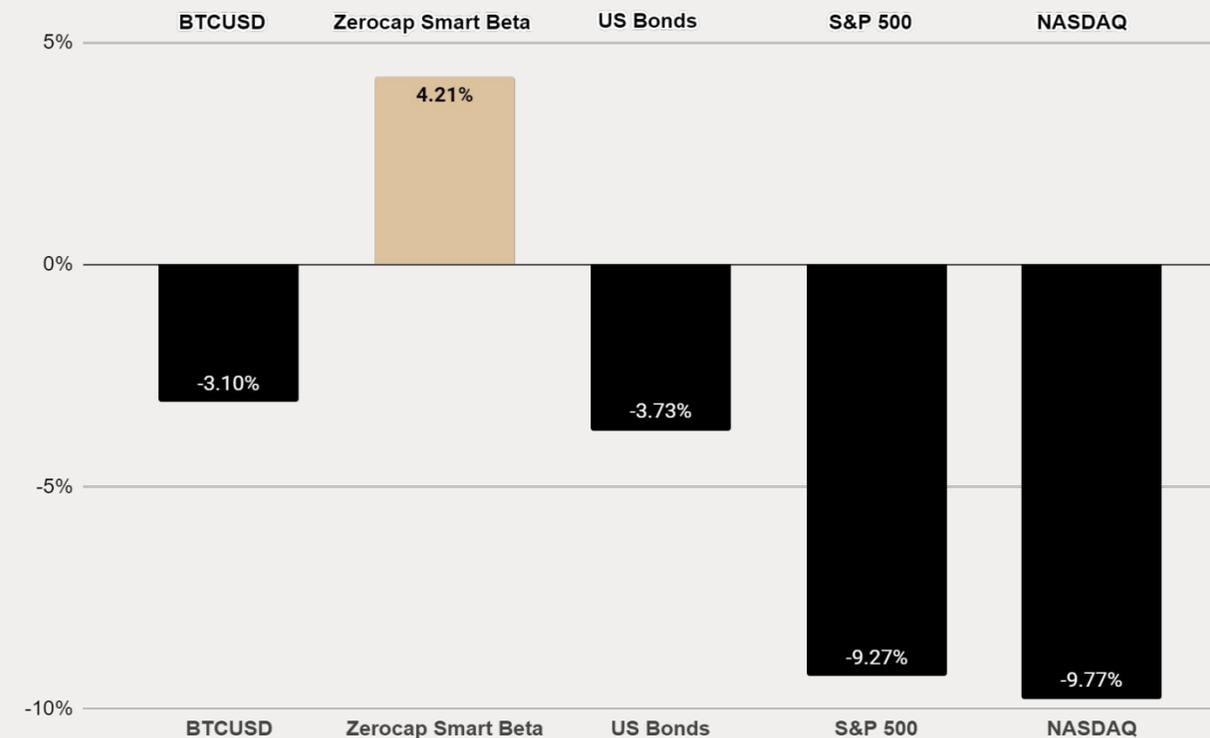
Since inception, the fund has successfully achieved its objective of controlling the volatility of Bitcoin. It’s YTD return is only -4.64% while BTC is down -57.96% for the year. Another highlight for the Fund last month was its nomination as a finalist at [Finder’s Innovation Awards 2022](#) for the category "Best Digital Currency Innovation". The winner of this award will be announced on October 21st.

In August, Zerocap also won the “Best innovation in crypto &/or digital assets” at [the Fintech Awards 2022](#).

Zerocap Smart Beta Bitcoin Fund – Q3 2022 Comparison



Returns for September 2022



How to Get Started

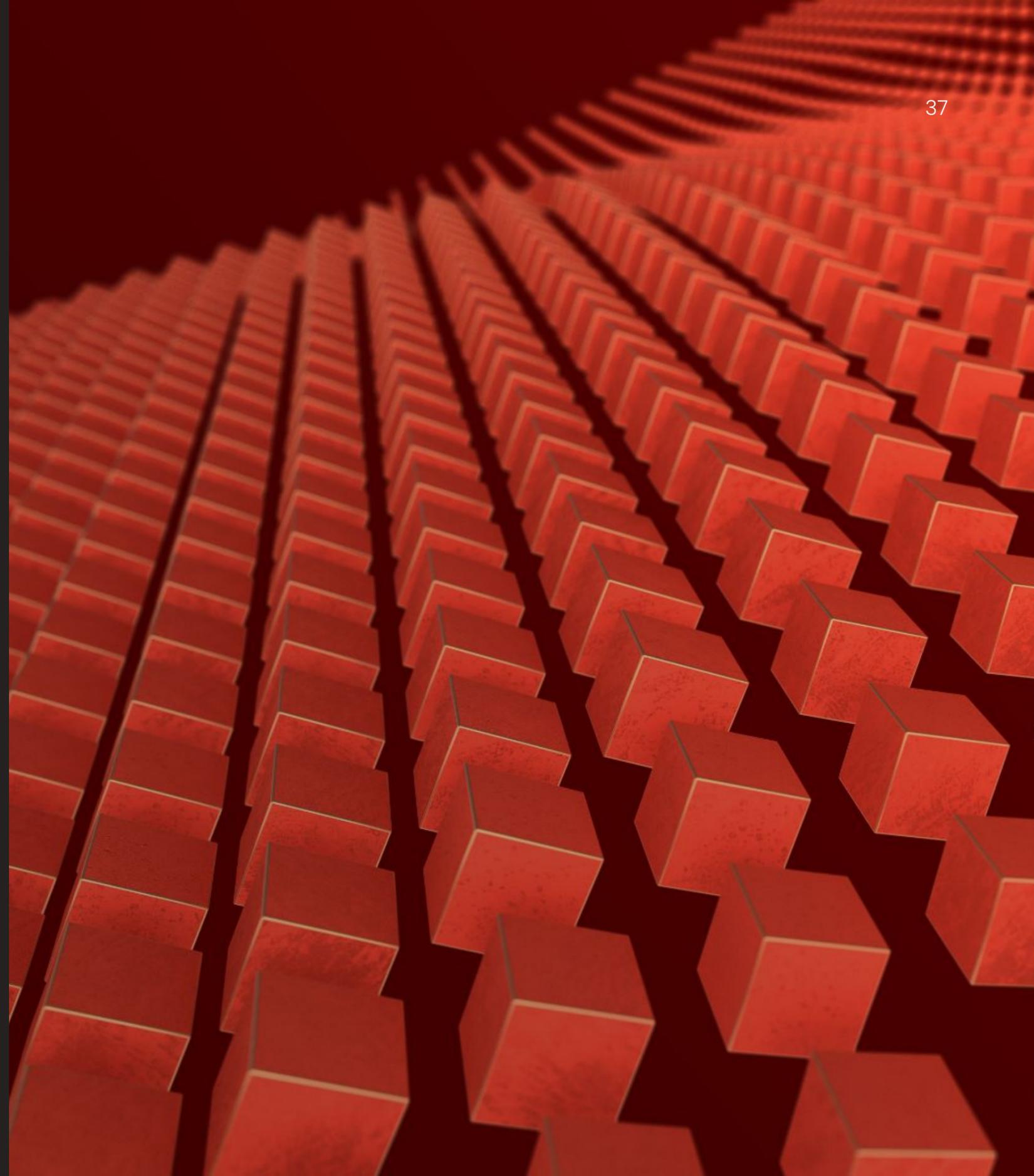
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To discuss how digital assets fit into your investment strategy, contact us at:

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