

Q4 2024

Quarterly investment outlook

Sectors & use cases

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1. Highlights

- The crypto market's perception of US election outcomes has shifted from viewing a Democrat win as negative to seeing it as neutral.
- Bitcoin's numerous positive drivers remain in place, with renewed institutional inflows, growing demand for safe haven assets and the promising launch of Bitcoin restaking.
- As further centralised and decentralised entities launch their own Layer 2s, the short-term impact on revenues may perpetuate the prevailing negative sentiment around Ethereum and may further delay institutional allocations; however, it would be premature to reassess Ethereum's medium- to long-term outlook as they implement their scaling strategy.
- Despite transaction volume growth, the Layer 2 sector is hindered by large supply from new launches and token unlocks, and revenues leaking to protocols without a token.
- Sentiment has revived around AI-linked tokens, and decentralised prediction markets are in focus after Polymarket's success.
- The market is rewarding evidence of real user growth (Helium) and efforts to improve projects' token models (Aave, Uniswap), while the tokens of most DEPIN projects, as well as most RWA tokenisation protocols, are lagging the market despite positive underlying trends for both subsectors.
- An unfortunate trend is the memecoin sector's outperformance over all other sectors year-to-date; not only do these tokens lack fundamental value, but they also soak up funds that might otherwise be available to economically useful projects.



2. Trends and drivers

Protocol Layer

Layer 1 blockchain

As Bitcoin continues to benefit from numerous positive drivers and most crypto use cases beyond memecoins show only limited growth, Bitcoin's dominance continues to increase, now approaching 60 percent.

The disappointing launch of the Ethereum ETFs has perpetuated negative sentiment around Ether, and the short-term impact on Ethereum's revenues from further Layer 2 launches is likely to add to this, potentially further delaying institutional allocations.

Meanwhile, Solana's growth trends continue; however, predictions of Solana overtaking Ethereum are premature, as the market share gap remains substantial across most metrics, and pro-Solana statements by some leading traditional financial institutions have not yet been backed up by adoption trends.

Although there is excitement around newer high-performance blockchains, looming large token unlocks will be a challenge for the token prices of these projects.

Bitcoin's ever-growing dominance

- Despite the market's expectation of altcoins taking over the mantle from Bitcoin as the cycle progresses, Bitcoin's dominance has continued to increase over the past two years.
- The initial rise from around 40 percent to 50 percent aligned with the early recovery phases of crypto market cycles, where Bitcoin typically leads. However, dominance has continued to increase to nearly 60 percent since BlackRock filed to launch Bitcoin spot ETFs in mid-2023, and the eventual launch of the ETFs attracted both strong inflows from new investors into Bitcoin and perpetuated supportive narratives.
- These trends remain in place, with expectations of another wave of allocations to Bitcoin ETFs – including potentially from very large traditional institutions.
- The growing acceptance of Bitcoin as a safe haven asset, the trend for Bitcoin restaking and application sectors being disadvantaged by money flowing into memecoins instead of economically productive projects all support Bitcoin's continued dominance.
- The fragility of the monetary system, escalating government debt, the challenge from BRICS and ever-growing geopolitical tensions put the spotlight on safe haven assets. While Bitcoin is still outperforming gold year-to-date, much of the outperformance occurred in Q1, and since then, gold has been catching up. After a 25 percent outperformance of gold over Bitcoin since March, there is room for Bitcoin to advance again relative to gold.

- The much-touted trend of corporate treasuries embracing Bitcoin since MicroStrategy took the lead in 2020 has not materialised so far. Although several corporations followed suit at the time, growth has largely come from these companies (primarily MicroStrategy) adding to their existing holdings, with only a very small number of tiny companies initiating a Bitcoin investment. This may, in part, be due to MicroStrategy's approach of making large, leveraged bets on Bitcoin, overwhelming its actual business and de facto turning the company into a hedge fund – an example that corporate treasurers are unlikely to follow. The fate of a current shareholder proposal for Microsoft to make a treasury allocation to Bitcoin could, however, be pivotal in how this trend unfolds, especially given that BlackRock is a substantial shareholder in Microsoft.
- Unexpected large supply has been the strongest headwind for Bitcoin recently, and concerns about more supply remain after a long-running court case concluded, allowing the US government to sell a substantial Bitcoin stake it had seized from Silk Road. It is, however, by no means certain that this liquidation will proceed, and if it does, it can be done in ways that minimise market impact.
- Another source of supply has been Bitcoin miners selling down their reserves as the Bitcoin price has been moving sideways since the April halving, failing to provide support to their revenues.

Bitcoin's DeFi ecosystem gains momentum

- After the first phase of Bitcoin staking platform Babylon's mainnet launch, the initial cap was quickly filled, and the second staking round gathered USD 1.5 billion of staking deposits within an hour and a half.
- The trend of transforming Bitcoin into a yield-bearing asset is gaining a lot of momentum, with the potential to activate a large number of long-term Bitcoin holders and bring new economic value to the subsector. Bitcoin's DeFi ecosystem is building steadily, with an increasing number of major projects leveraging its security to generate yield for tokenholders, and venture capital is heavily supporting this emerging sector with fresh funding rounds.

Negative sentiment on Ethereum continues after poor reception of the ETFs

- Negative net flows from the newly launched Ethereum spot ETFs have contributed to the already poor sentiment around Ethereum.
- Although the slow start was not unexpected – due to the short marketing period, traditional investors still digesting the concept of Bitcoin, Ethereum’s much lesser name recognition and the lack of staking yields – the negative net flows were disappointing.
- Additionally, Ethereum’s transaction volumes continue to languish, while both its Layer 2s and key competitors, such as Solana, are experiencing strong growth. With further Layer 2 launches, including ApeCoin, Kraken and, perhaps most importantly, leading DEX Uniswap, Ethereum’s revenues may suffer in the short term, further contributing to the negative sentiment around Ethereum. As traditional investors assess the Ethereum ETFs, the lack of positive trends in transaction volumes and revenues may further delay the anticipated institutional allocations.
- However, we believe that reassessing Ethereum’s medium- to long-term outlook is premature – the growth from scaling through Layer 2 networks is expected to materialise as transaction volumes from crypto use cases take off. The short-term impact is not unexpected, though it is weighing heavily on sentiment.
- Meanwhile, Ether’s liquid supply continues shrinking, with exchange reserves near all-time lows and staking deposits climbing to all-time highs, creating the potential for demand shocks from any catalyst, such as fresh ETF inflows or increased network activity.

Solana challenging Ethereum

- Solana’s spectacular growth trends have ignited discussions of Solana overtaking Ethereum as the leading smart contract platform.
- However, the market share gap vs Ethereum remains very substantial across most metrics. The veracity of some of Solana’s quoted metrics is questioned, and memecoins constitute an extremely high (>90 percent) share of activity on Solana – a risk due to the lack of fundamental value or economic merit in this sector.
- Statements by some leading traditional financial institutions claiming a preference for Solana over Ethereum for payments raised hopes that Solana may triumph in real-world adoption – which could indeed put it in a position to seriously challenge Ethereum’s dominance.
- However, the observable trends in this direction have remained fleeting so far. For example, despite strong pro-Solana statements from PayPal after making its PayPal USD stablecoin available on Solana, Ethereum has regained a dominant market share in PayPal USD from a low of 34 percent versus Solana’s high of 66 percent – Ethereum now holds approximately 60 percent market share again.
- Nonetheless, for now sentiment continues to favour Solana over Ethereum, extending its already 50 percent year-to-date outperformance.
- It is also interesting to note that despite Solana’s very positive trends and the bullish sentiment supporting it, it has not outperformed Bitcoin this year, or only very marginally (by 1-2 percent).

Token unlocks from high throughput blockchains

- Certain newer high-performance blockchains have recently come into focus as potential challengers to Solana.
- Following new tokenisation product launches and interest from some traditional institutions, total value locked on Aptos nearly doubled, with its token price up 60 percent, while Sui outperformed with a 116 percent increase over the quarter after a major blockchain upgrade, a token launchpad, the integration of USD Coin and Grayscale’s Sui fund launch. Sui’s token reached all-time highs until controversy surrounding insider trading allegations led to a pullback.
- Although sentiment remains positive around the potential for new high-performance blockchains, substantial impending token unlocks will be a challenge for the market to digest.

Durov arrest impacts Toncoin’s growth trends

- Prior to the arrest of Telegram CEO Pavel Durov, Toncoin was one of the fastest-growing blockchain ecosystems, driven by the success of various native applications among Telegram’s nearly 1 billion users.
- Although the unexpected arrest led to a selloff in the token, user activity surged – possibly in defiance. But while the crackdown appeared to improve Telegram’s image as a free speech platform, the eventual release of Durov and his acquiescence to various demands led to a reversal.
- After Telegram agreed to share user data with law enforcement, Toncoin’s daily users dropped from a high of 5 million to about 1.5 million, with the token price also dropping 15 percent.

Sector-specific chains remain resilient

- As the market continues to seek out cheaper alternatives across multiple chains, the demand for sector-specific solutions has remained steady. THORChain’s token rallied after a hard fork aimed at enhancing network efficiency.
- MANTRA, a sector-specific chain promising to unlock access to traditionally illiquid assets, has continued to perform strongly. As traditional institutions publicly endorse the tokenisation trend, chains focusing on real-world assets are benefiting from this push. Mantra’s token surged 29x so this year, reaching a USD 1.2 billion market cap ahead of its mainnet launch in late October.

Layer 2 scalability solutions

Despite transaction volume growth, the Layer 2 sector is hindered by large supply from new launches and token unlocks, as well as revenues leaking to protocols without a token. The trends continue for further centralised and decentralised entities to launch their own Layer 2s and for sector-specific Layer 3s to build on top of Layer 2s.

As Ethereum pursues the “Surge” (scalability-focused) phase of its roadmap, decentralisation and interoperability for Layer 2s have come into focus. Taiko launched the first based rollup, leading the way to decentralised sequencing. Meanwhile, only a small number of the current Layer 2s are considered to be on the right track by Ethereum founder Vitalik Buterin.

Layer 2 activity growing

- Layer 2 transaction volumes continue to grow, with a recent high reached in August, and the total Ether value locked continues to rise, approaching 15 million Ether.
- Base, in particular, has been growing very strongly, almost doubling its transaction volumes again since the end of Q2, gaining further market share. Having benefited from several UI/UX developments, its growth can be largely attributed to memecoin trading on Base-linked DEXs and access to Coinbase’s user base via the Coinbase wallet.
- Meanwhile, zkSync’s transaction volumes dropped off steeply after a mishandled airdrop.

Sector still an underperformer

- The Layer 2 sector remains the worst performer year-to-date due to large supply and value leaking to projects without a token.
- Although Ethereum’s founder urges a focus on decentralisation, favouring protocols such as Arbitrum and Optimism, this has not yet translated into market share gains.

Uniswap, ApeChain, Kraken Layer 2 launches

- After Base’s success, centralised exchange Kraken also announced the launch of its own Layer 2.
- Decentralised protocols are also launching further sector-specific Layer 2s, including decentralised exchange Uniswap launching Unichain and gaming/metaverse project ApeCoin launching ApeChain.
- The Uniswap Layer 2 launch is particularly significant, as it will initially divert a substantial amount of revenue from Ethereum to Uniswap token holders.

The growth of L3s

- Gaming-focused Layer 3s such as Zai and PlayBlock have contributed quite significantly to transaction growth for the Layer 2 sector recently, as gaming requires high scalability, transaction speed and very low transaction costs.

Based rollups and decentralisation

- As Ethereum implements its scalability roadmap, Vitalik Buterin has been emphasising the requirement for Ethereum-based Layer 2s to be decentralised and in line with Ethereum’s ethos, and he is vocally supporting the few protocols that are on track towards this vision.
- The launch of Taiko’s fully permissionless and decentralised ZK rollup was an important step in this regard, and the protocol has seen substantial user growth, making it the third largest in transaction volume behind leader Base and gaming-focused Layer 3 Xai.

Polygon upgrade

- Polygon’s 2.0 upgrade went live in September, replacing its native MATIC token with POL as the gas and staking token. While its token performance has not improved, the new token’s utility may appeal to investors, as its role in securing a multichain ecosystem allows tokenholders to earn yield across the Polygon aggregated network of blockchains.

Layer 0 interoperability solutions

Despite the well-recognised importance of cross-chain interoperability, the Layer 0 sector has not been a strong performer, and token prices have struggled to keep up with the innovations happening in the sector.

The headwinds include continued challenges with tokenomics models for certain protocols, and the Cosmos Foundation's management came under fire in a recent governance vote over suspicions of mismanaging funds.

Innovation, however, remains strong, including LayerZero's integration with institutional custody provider BitGo and restaking platform EigenLayer, a significant upgrade to Cosmos's IBC protocol introducing permissionless interchain security and Chainlink's ICPP integration with asset issuers, DePIN projects, Layer 2 protocols and several traditional financial institutions working on RWA tokenisation projects.

Application Layer - DeFi

DeFi lending

Among widespread deleveraging in the crypto market in Q3, the drop in Ether's price led to a record number of liquidations in Ethereum's lending market, with nearly half a billion dollars in loans liquidated in August alone – the second highest in history.

Nonetheless, the leading lending platform Aave saw its token price increase by 72 percent, driven by a fee switch proposal intended to replace the inflationary funding of its safety module, as well as major project integrations and the launch of Grayscale's institutional Aave fund.

Although the lending subsector received a publicity boost after the Donald Trump backed World Liberty Financial Protocol submitted a proposal to launch on Aave's mainnet, the eventual token sale was poorly received.

MakerDAO rebranded to Sky as part of a broader strategy to improve its governance and tokenomics structure and announced a strategic partnership with longtime competitor Aave to further bridge DeFi and traditional finance. The rebranding included a rollout of new upgradeable versions of its stablecoin and governance token.

Liquid staking/restaking

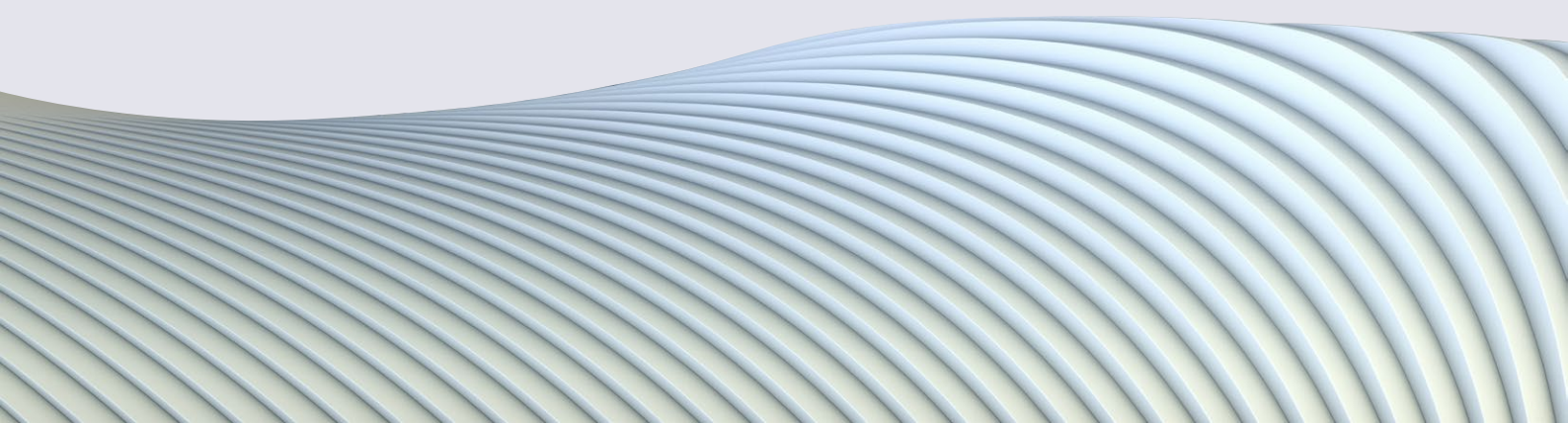
Setbacks for major tokens in the subsector left liquid staking as the worst performer recently.

Liquid staking provider Lido's staked Ether TVL has grown year-to-date in absolute terms, but its share of the liquid staking market has gradually decreased with increased competition. While staked Ether deposits across the market have continued to increase since mid-year, reaching all-time highs, Lido's TVL has flatlined over the period.

After a period of substantial growth, EigenLayer experienced capital outflows after controversy around its airdrop policy, with competitors such as Symbiotic and Karak capturing some market share.

This subsector of the market, however, continues to have positive drivers with opportunities for further substantial growth. Lido recently launched an institutional-grade liquid staking solution and entered into partnerships with Aave and Fireblocks to promote infrastructure development for Lido Staked ETH. Meanwhile, Solana liquid staking is also growing strongly. Kraken recently integrated with EigenLayer, now offering restaking to users.

A further new and exciting trend is Bitcoin acting as a yield-bearing asset, with the recent launch of Babylon bringing restaking to leverage Bitcoin's security.



Decentralised exchanges

Memecoin trading has dominated decentralised exchanges recently, with tokens launched on Solana's pump.fun driving much of the recent burst in activity. The popularity of pump.fun also prompted chains like TRON to launch their own memecoin launchpad, with the issued tokens also dominating in traded volumes.

The memecoin frenzy drove Solana's DEX volumes past Ethereum-based DEXs, while also significantly boosting revenues and on-chain activity. However, as memecoins now account for an overwhelming portion of traded volumes, there are concerns about the high concentration risks and the fact that the memecoin sector is inherently more vulnerable to collapse than other, more economically viable crypto sectors. This was demonstrated at the beginning of August when interest in memecoins briefly dropped following the sharp market correction, and Solana DEXs lost three-quarters of their traded volume.

The growing memecoin activity has also helped decentralised exchanges grow their relative market share vs centralised exchanges. The ratio is close to all-time highs near 15 percent.

The token of leading decentralised exchange Uniswap has rallied over 50 percent from the August lows on increasing revenues, the announcements of permissionless cross-chain bridging and the Unichain Layer 2 network, as well as renewed rumours about activating a fee switch.

After a strong period of growth earlier this year, derivatives DEX volumes also dropped over the quarter, as did the market share of decentralised derivatives exchanges relative to their centralised counterparts. Nonetheless, the total value locked across derivative protocols reached all-time highs, with Hyperliquid and Solana-based derivatives exchanges such as Jupiter and Drift growing particularly strongly.

Tokenisation/asset creation protocols

The trend for tokenisation remains firmly in place, with institutions such as Visa investing in tokenisation rails and traditional financial institutions such as BlackRock, Fidelity and Franklin Templeton launching their own tokenised investment products. Central banks and regulators are also encouraging innovation with sandbox environments and interbank use cases.

Despite the start of the US rate cut cycle, the tokenised treasury market continues to grow. This is also supported by the rising activity in tokenised bonds and money market funds from Franklin Templeton, Fidelity, Janus Henderson and Credit Agricole's subsidiary CACEIS.

However, despite the continued strong increase in TVL and a positive medium- to long-term outlook, the tokens of RWA protocols such as Ondo Finance corrected substantially in Q3 after phenomenal performance in H1.

The wildly successful token launch protocol Pump.fun, which has originated over 2.5 million memecoins on Solana, announced its own token launch.

Decentralised finance/other

ASSET MANAGEMENT INSURANCE PAYMENTS PREDICTION MARKETS

The decentralised prediction markets sector continues its impressive performance, with Polymarket's volumes increasing 550 percent over the quarter and October already on track to be the highest month in terms of market activity ever (traded volumes nearing USD 2 billion). However, the market is expected to cool off after the US presidential election on November 5th.

To date, market leader Polymarket still lacks an investable token, although there are rumours of a token launch.

Ethena reinvigorated the decentralised yield farming market, although its TVL has declined by over 25 percent from its H1 highs, and the token price has fallen substantially.

The integration of insurance in crypto product offerings can be pivotal in unlocking growth. Nonetheless, TVL in decentralised insurance has not grown since mid-2022 due to scalability issues and regulatory challenges.

Application Layer – Emergent use cases

Web3 infrastructure

DEPIN AI ORACLES DATA SERVICES IDENTITY SOLUTIONS

Although tokens of DePIN projects faced a major correction over the last six months, the demand for decentralised computing power services remains one of the most significant drivers as centralised providers struggle to support the increasing data demands of sophisticated AI models, resource-intensive applications and the associated high energy costs.

Solutions offering inexpensive mobile and hotspot sharing services are seeing decentralised telecom services like Helium experience organic demand from both traditional businesses and mobile users. As Helium Mobile adoption surged, signups rose from about 24,500 at the beginning of the year to over 100,000 by Q3, and the price of the Helium token more than doubled since the end of Q2. The fact that Helium is partnering with major US telecom companies to transfer and share data to its network shows the genuine demand for low-cost infrastructure using minimal power consumption and IoT connectivity integrations.

Sentiment has revived around AI-linked tokens such as Bittensor. After the announcement of plans to launch EVM-compatible smart contracts enhancing AI network functionality and allowing developers to build on-chain applications, the price of Bittensor increased 2–3x. To capitalise on growing institutional interest in AI-related tokens, Grayscale launched a decentralised AI fund for accredited investors.

The tokens of decentralised oracles have lagged the market recently, while the trends for this subsector remain strong, with the crypto market's ongoing interoperability and cross-chain data needs and leading oracle protocols expanding their services to improve bridging traditional finance and RWAs with on-chain ecosystems. The strong product-market fit positions this subsector for organic and sustainable growth moving forward.

Web3 consumer applications

DECENTRALISED SOCIAL STREAMING

Despite excitement around decentralised social media earlier this year, platforms such as Farcaster, Lens and Friend.Tech have seen a dramatic drop in users and revenues. Although decentralised social media remains an important concept, these platforms have not been able to convert and sustain users.

Friend.Tech has proven to be a particular disappointment, with monthly revenue dropping to USD 71, the price of the recently issued token collapsing and the developer team abandoning the project and renouncing control of its smart contract.

UXLINK, a decentralised social infrastructure, has been the sector's only strong performer, recording 25 million registered users and 10 million tokenholders by August. Its token price tripled after being listed on several exchanges in July. Binance also announced a futures contract listing recently.

Decentralised streaming services are also struggling for now, but innovations in tokenised intellectual property and the metaverse could support future growth. Tune.FM raised USD 50 million to challenge traditional platforms like Spotify by addressing royalties and licensing issues and bypassing traditional subscription models.

Blockchain-based gaming

Telegram's minigames pulled in millions of users to the blockchain gaming sector, but the burst in activity came from its simple play-to-earn games, not the high-quality graphics and immersive gameplay that blockchain games are often criticised for lacking.

Major gaming stores such as Steam and Epic Games are slowly integrating blockchain games, though these are being released without their unique on-chain features and with no clear timeline for adding them.

The potential is still huge if fully on-chain games and in-game marketplaces become a significant part of the traditional gaming economy, a conviction supported by over USD 100 million in venture capital funding this quarter, but progress has been slower than expected.

Decentralised metaverse applications

The metaverse sector is still showing limited growth, though some crypto projects are pushing forward with sandbox environments and partnerships to improve brand engagement.

Most of the meaningful metaverse developments are happening outside of the crypto industry, in areas like automotive, tourism, online shopping or healthcare. Decentralised projects are still focused on smaller games with basic token models, simplistic designs and a lack of immersive experiences..

Stablecoins

The increasing regulatory clarity around stablecoins is encouraging many traditional financial institutions to launch their own. The recent trend in new stablecoin launches seems to lean more towards benefiting traditional financial services, while regulators appear to be sending a signal that only stablecoins issued by banks or other regulated financial entities will be acceptable in the future for use in real-world transactions.

Developing regulations such as MiCA are seeing major crypto exchanges delist all non-compliant stablecoins by the end of the year. However, there is every reason to assume that stablecoins that fall outside the scope of developing regulations, such as Tether, will continue to play a crucial role in the crypto ecosystem – which, for now, accounts for the vast majority of stablecoin transactions.

However, stablecoin providers who are already adhering to the developing regulatory standards are likely to gain an advantage as stablecoin use in real-world transactions grows. Algorithmic stablecoins, in particular, are likely to face further restrictions and headwinds.

Tether briefly traded 0.25 percent below its dollar peg after a Wall Street Journal article claimed the project was being investigated by the US government for sanctions violations. Tether's CEO denied knowledge of any investigation; however, the incident is a reminder of the systemic risk posed by Tether's overwhelming dominance.

Meanwhile, the PayPal USD stablecoin, which has seen slow growth in adoption to date, may get a boost from a collaboration with Fireblocks, with the latter launching a programme to fund projects to develop applications using PayPal USD.

Yield-bearing stablecoins continue to grow, with upcoming launches by several institutions and crypto companies, but they still remain only a small portion of the stablecoin market capitalisation.

3. News review

Protocol Layer

Layer 1 blockchains

- Bitcoin transaction count increased by 11.4 percent over the quarter, while transaction volumes increased by nearly 2 percent, driven by increased activity in several Bitcoin DeFi protocols.
- Bitcoin mining difficulty recently hit an all-time high, increasing to 95.67T, and a record hashrate that went above 700 EH/s for the first time.
- The SEC filed its appeal in the case against Ripple, while the last-minute submission left the community speculating whether the regulator missed the filing deadline.
- Bitcoin spot ETFs continue to see steady inflows, with net inflows since launch of USD 22 billion and total AUM of USD 61 billion.
- Solana competitor Sui saw significant developments in its ecosystem, with new DEX, lending and staking launches. Sui also announced a new incubator hub in Dubai, while Grayscale launched its Grayscale SUI Trust for accredited investors.
- RWA-linked MANTRA chain announced its highly anticipated mainnet launch; the OM token price doubled since last quarter and surged an impressive 29x so far this year.
- Several new high-performance blockchains announced updates and launches, including CrossFi's mainnet launch focusing on scalable Web3 payments, Monad's public testnet launch later this year focusing on parallelisation scalability and Initia raising fresh funding focusing on deploying modular and interoperable rollups on Cosmos' interoperability chain.

Layer 2 scalability solutions

- Layer 2 transaction activity continues to increase, with average transaction speeds now 20 percent higher than Ethereum's, while transaction counts are currently scaling at a factor of 23x compared to Ethereum.
- The TVL across Layer 2s increased by another 16.2 percent since last quarter, primarily driven by the burst in activity on Base, which saw its TVL increase by 63 percent to USD 2.6 billion and may soon overtake Arbitrum in market share.
- Uniswap Labs announced plans to launch its own Layer 2 solution, Unichain, built on the Optimism OP stack.
- Zero-knowledge-based Scroll launched its native SCR token; despite gathering nearly USD 1 billion in assets ahead of the airdrop launch, the protocol saw a sharp 21 percent drop in TVL shortly after.

Layer 0 interoperability solutions

- Chainlink partnered with several crypto projects and institutions to integrate its Cross-Chain Interoperability Protocol (CCIP), including Taurus, World Mobile Token, Linea Finance, Mountain Protocol, SuperRare, IDA Finance and ANZ. It also recently launched its new CCIP privacy tool for traditional institutions to safeguard sensitive financial data.
- Institutional custodian BitGo officially partnered with LayerZero as its interoperability provider to expand its tokenised Wrapped Bitcoin to the BNB Chain and Avalanche blockchains.
- Polkadot announced that the long-awaited final phase of its Polkadot 2.0 upgrade is expected to launch and be fully operational by early 2025.
- Cosmos successfully launched its Gaia v20 protocol upgrade; however, its liquid staking module is now under scrutiny due to potential vulnerabilities linked to North Korean hackers.

Application Layer – DeFi

DeFi lending

- The Ethereum lending market saw over USD 543 million in liquidations, with August alone accounting for more than half of the yearly liquidations.
- Market leader Aave successfully launched its v3.2 protocol upgrade and announced several partnerships, including stablecoin integrations from Sky Protocol and its native GHO stablecoin on Layer 2s. Grayscale also announced the launch of its Aave Trust fund for accredited investors.
- Ethereum-based MakerDAO rebranded to Sky Protocol as part of its “end game plan”, overhauling its governance and tokenomics and introducing new versions of its stablecoin and governance token, USDS and SKY.
- Decentralised insurance protocol Nexus Mutual launched several product upgrades and sold more than USD 198.5 million, an increase of 18 percent since the previous quarter; it recently surpassed USD 5 billion in total cover underwritten since its launch.

Liquid staking/restaking

- Restaking protocol EigenLayer underwent several major upgrades, improving its restaking process and broadening the scope of ERC-20 assets that can contribute to the security of decentralised networks.
- EigenLayer and Puffer Finance both launched their tokens via airdrops, becoming the first restaking protocols to have an investable token; however, both tokens saw declines of 21 percent and 63 percent, respectively, from their all-time highs.
- Crypto exchange Kraken launched Ethereum restaking via EigenLayer for its non-US customers.
- After opening a second round of staking, Bitcoin’s Babylon protocol gathered nearly 24,000 BTC in deposits (worth USD 1.5 billion) in just over an hour; the staking protocol now has over 25,300 stakers.
- Solana restaking protocol, Solayer, saw its TVL increase nearly 250 percent since the previous quarter.

Decentralised exchanges

- DEX traded volumes declined by 7 percent quarter-on-quarter, despite the high activity of traded volumes on Solana, Base and Binance Chain-based DEXs.
- Ethereum is still the dominant chain for DEX trading, but it is quickly losing market share to Solana and Base, losing nearly a quarter of its dominance this year, with its market share now below 35 percent.
- Meanwhile, Base grew its market share to 13 percent by the end of the quarter, with trading volume growing 31.4 percent and overtaking Arbitrum.
- Solana-based DEXs now account for nearly 90 percent of all new tokens appearing on DEXs, with a record 183k tokens launching in the second week of October alone.
- Several memecoin launchpads were announced on Solana, BNB Chain, Tron and Base protocols, driving a significant portion of DEX traded volumes.

Tokenisation/asset creation protocols

- Tokenised US treasuries increased by 31 percent to USD 2.24 billion since last quarter and tripled year-to-date.
- Hashnote, in particular, saw significant growth with its USDY treasury product nearing USD 350 million in assets, a 211 percent increase from the previous quarter. The asset management platform also partnered with Anchorage Digital and derivatives exchange Deribit, the latter which added USDY as a yield-bearing cross-margin collateral option.
- Several leading institutions announced their own tokenisation initiatives, including Visa’s new tokenised asset platform (VTAP), and sandbox environments by DTCC and Project Ensemble by the Hong Kong Monetary Authority.
- Meanwhile, large asset managers such as Franklin Templeton, Fidelity and Janus Henderson are launching their own tokenised money market funds.
- AI-linked projects SingularityDAO, Cogito Finance and Selfkey have joined forces to launch Singularity Finance, a new protocol designed to tokenise real-world assets in the AI economy.
- Tokenised RWA platform Swarm Markets recently announced its partnership with OrdinalsBot, offering investment in gold bars on the Bitcoin network.
- Several new protocols were announced, including tokenisation platforms by Marathon Digital, Rexas Finance and Phlomis Finance, as well as Credbull’s on-chain private credit fund.

Decentralised finance/other

ASSET MANAGEMENT INSURANCE PAYMENTS PREDICTION MARKETS

- Decentralised prediction markets are seeing exponential growth in activity, largely driven by the upcoming US presidential election in early November. Monthly active traders have grown nearly 30x since the start of the year, while volumes have risen by 157 percent from USD 553 million to USD 1.35 billion in October alone.
- Polymarket announced a partnership with popular AI search engine Perplexity to make it easier for users to find Polymarket's pool data and general information directly in the engine's search results.
- Solana-based competitor BET saw a brief USD 20 million spike in daily volume but faces scrutiny over these metrics after a sharp decline in activity, which has since fallen to all-time lows.
- Meanwhile, Polymarket continues to dominate the sector with over 90 percent market share.
- Decentralised payments platform Cross Finance (CrossFi) launched its mainnet on the Cosmos SDK, with the aim to provide a scalable and cost-efficient Web3 payments infrastructure for e-commerce stores and online merchants.

Application Layer – Emergent use cases

Web3 infrastructure

DEPIN AI ORACLES DATA SERVICES IDENTITY SOLUTIONS

- Chainlink's CCIP was integrated into several projects, including gaming Layer 1 Ronin Network, RWA projects such as Mountain Protocol and Taurus Group, Layer 2 solution Linea and Hong Kong stablecoin issuer IDA Finance.
- Helium recently saw a 34 percent spike in daily users of its hotspots from other carriers, with nearly 245,000 users in a single day. Over 100 TB of data was offloaded from other carriers, a 6x increase from the previous three months combined.
- The Helium Foundation introduced a new improvement proposal along with a new wallet upgrade and a mobile plan supporting multiple crypto payment options.
- Venture capital into AI-related projects reached USD 213 million in Q3, a 340 percent increase since Q2 last year.
- Grayscale launched its decentralised AI fund for accredited investors, which includes tokens such as Render, Bittensor, Filecoin, Near and Livepeer, among others.
- Bittensor announced several major protocol and software upgrades, while its TAO token rallied 163 percent from its quarterly low.
- The second phase of SingularityNET, Fetch.ai and Ocean Protocol's merger went live, with the new ASI token now compatible with all major software and hardware wallets; the token (using the FET ticker) increased nearly 77 percent.
- Decentralised file storage network Arweave surpassed 10 billion total transactions, following several upgrades to its infrastructure.
- Mysten Labs unveiled its new decentralised storage protocol, Walrus, which recently launched its public testnet on the Sui Network.
- Decentralised GPU network Aethir launched its mainnet in July, reporting USD 36 million in annual recurring revenue. The Aethir Foundation announced a USD 100 million ecosystem fund to accelerate further adoption of its platform.
- Decentralised oracle provider Pyth Network partnered with Sony Group to power its Layer 2 network, Soneium (managed by Sony Blockchain Labs), Telegram's TON blockchain and several DeFi protocols to support high-frequency data requests.

Web3 consumer applications

DECENTRALISED SOCIAL STREAMING

- The new decentralised music streaming platform Tune.FM raised fresh funding, with the goal of helping artists earn substantially more compared to what they do on leading platforms like Spotify by offering fair royalties through micropayments and digital music collectibles; the platform runs on the Hedera Hashgraph blockchain.
- UXLINK recently surpassed 28 million global users, becoming the largest Web3 social platform, and recently announced plans to integrate its Social Growth Layer with popular platforms like Telegram, WhatsApp and WeChat, among others.
- Despite initial success, decentralised social media projects such as Friend.tech, Lens Protocol and Farcaster have since suffered sharp declines in user activity due to a lack of continuous updates, fresh content and unique user experiences.
- Farcaster, in particular, saw its activity and users decline by 71 percent and 44 percent, respectively, while Friend.tech developers renounced control over its smart contracts following a significant collapse in protocol revenues.

Blockchain-based gaming

- Blockchain gaming saw reasonable growth in Q3, with daily active users increasing by 21 percent and capturing 26 percent of all DApp activity.
- Major gaming company Ubisoft launched its long-awaited Web3 game, Champion Tactics, on the Oasys blockchain.
- PiP World, a new Web3 gaming and EdTech ecosystem, raised fresh funding to build out a new blockchain game mixed with personalised learning.
- Gaming sector specialist Layer 2 Ronin Network's active wallets increased by 34 percent last quarter.
- Telegram's viral tap-to-earn minigames saw a sharp drop in both token prices and active users following several airdrops; the popular Hamster Kombat's token fell by 61 percent, while users fell by nearly 65 percent over the same period.

Decentralised metaverse applications

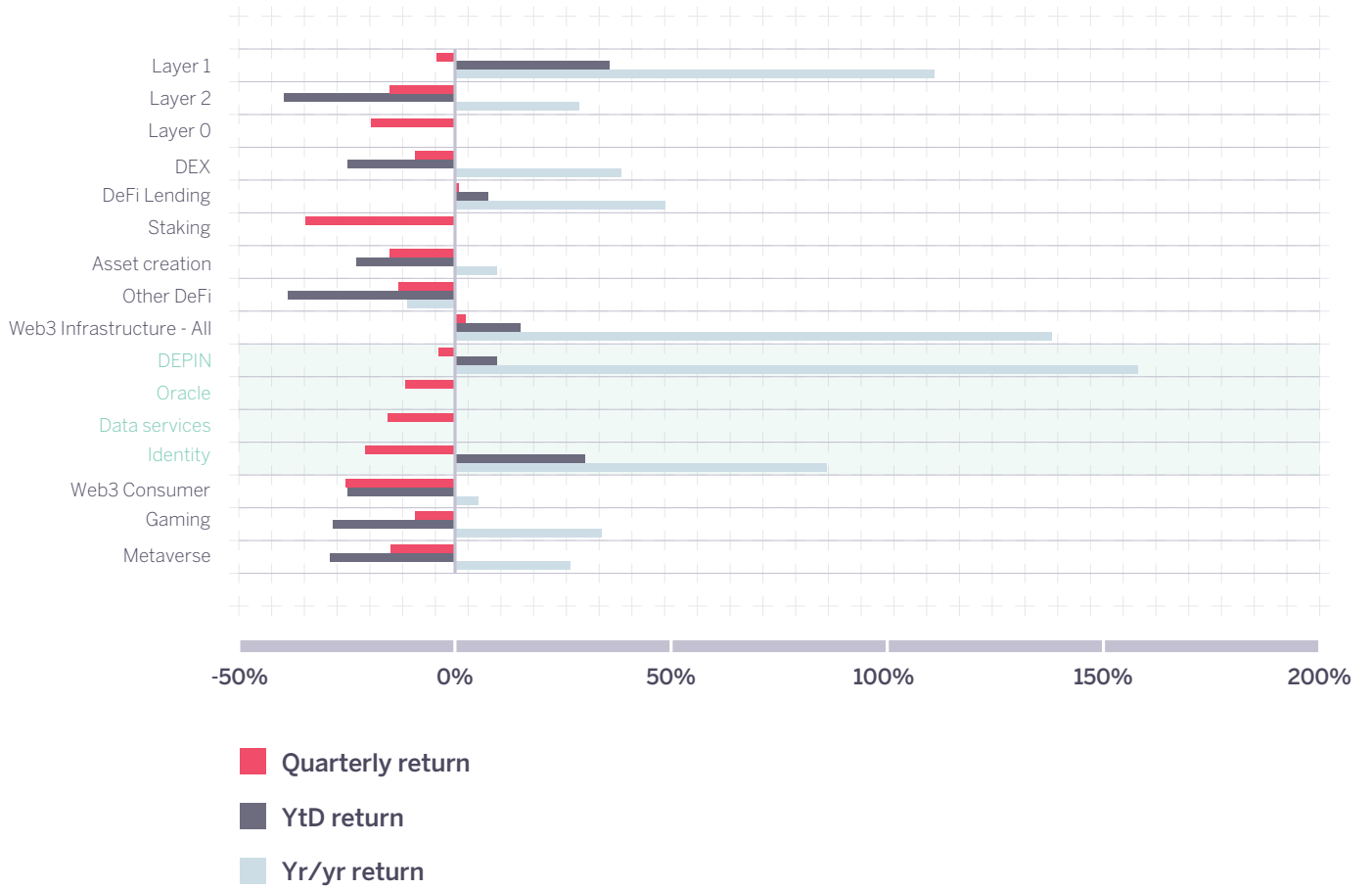
- NFT metaverse collections saw a mixed performance in Q3, with trading volume down 67 percent, but sales rising by 26 percent.
- Luxury automobile giant Lamborghini recently partnered with Animoca Brands to bring motorsport enthusiasts and the traditional automotive industry to the Web3 and metaverse sectors.
- The 2024 Global Metaverse Conference was held in Seoul, South Korea, in October, showcasing a number of metaverse initiatives and blockchain/AI integration efforts, as well as regulatory guidelines by the South Korean government to encourage responsible innovation.

Stablecoins

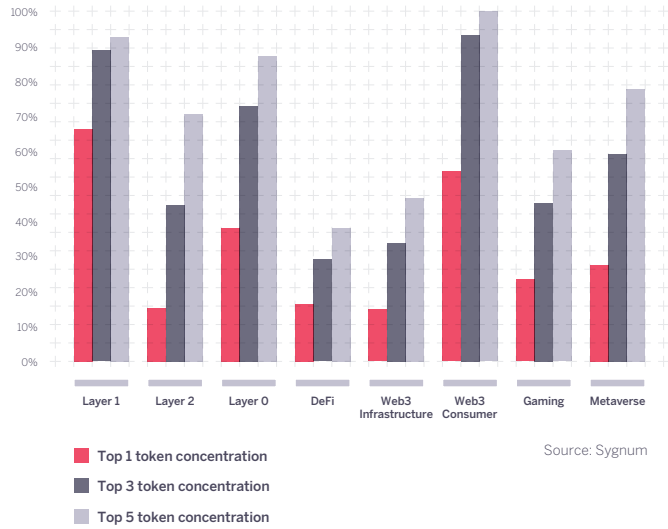
- The stablecoin market increased by 7 percent for the fourth consecutive quarter, with Tether's market cap increasing more than 6.5 percent and now accounting for 70 percent of the market share.
- Major exchanges Coinbase and Binance are delisting non-compliant stablecoins from their European platforms ahead of the MiCA regulations that will take effect at the end of the year; other exchanges, such as Uphold, have already done so, while OKX and Kraken are re-evaluating their stablecoin offerings.
- Numerous new stablecoins were announced recently, including the launch of the UAE's first Dirham-pegged stablecoin, AE Coin, which will be regulated by the Central Bank.
- Plans for early 2025 launches include stablecoins from the government of Wyoming, institutions such as BBVA, State Street and Revolution, as well as Ethena and institutional crypto custodian BitGo.
- Sky Protocol (formerly MakerDAO) launched USDS, an upgraded version of its DAI stablecoin; users can voluntarily upgrade DAI to USDS and earn additional rewards.
- Ripple partnered with several crypto exchanges to support the launch of its dollar-pegged stablecoin RLUSD (currently in private beta on XRP and Ethereum), with a public release expected after it receives regulatory approval.
- Stripe partnered with Paxos to launch a stablecoin payments platform and to integrate stablecoins into its Pay with Crypto product.

4. Charts

Sector performance



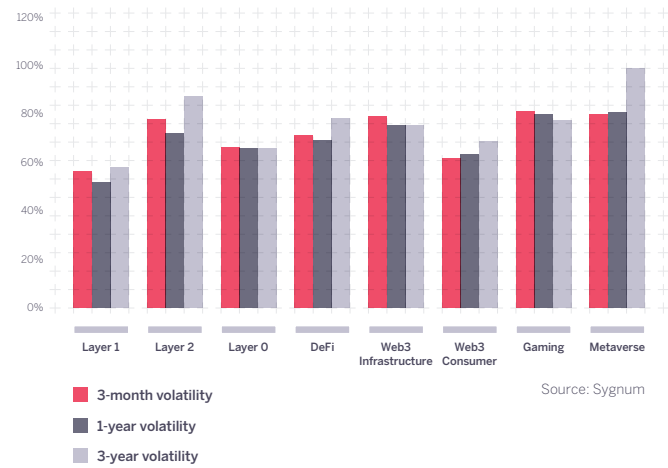
DOMINANCE OF LARGEST TOKENS



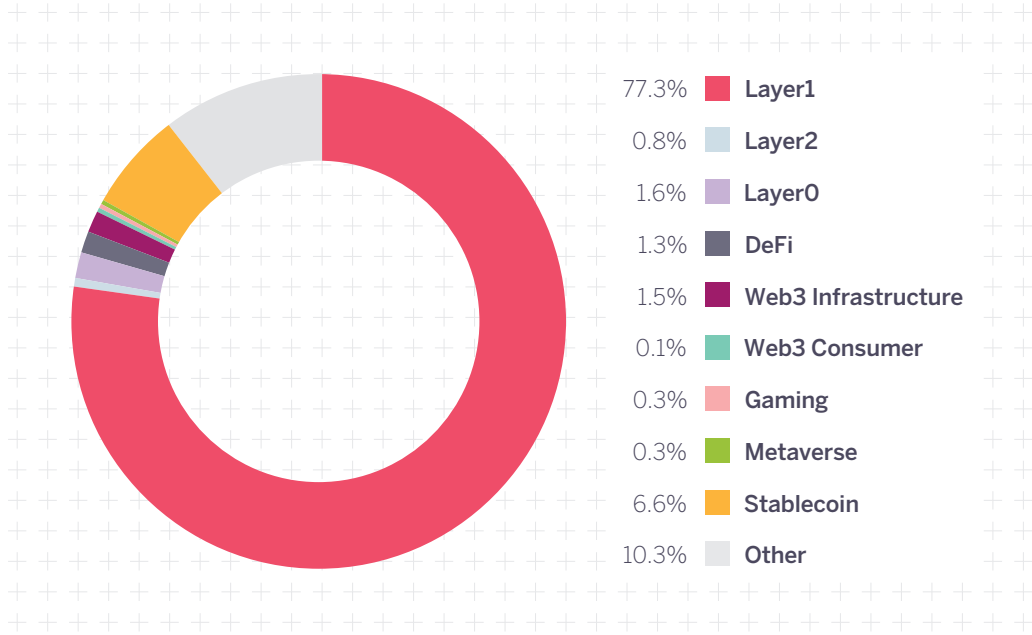
AVERAGE DAILY TRADED VOLUME, \$M, AGGREGATED



SECTOR VOLATILITY

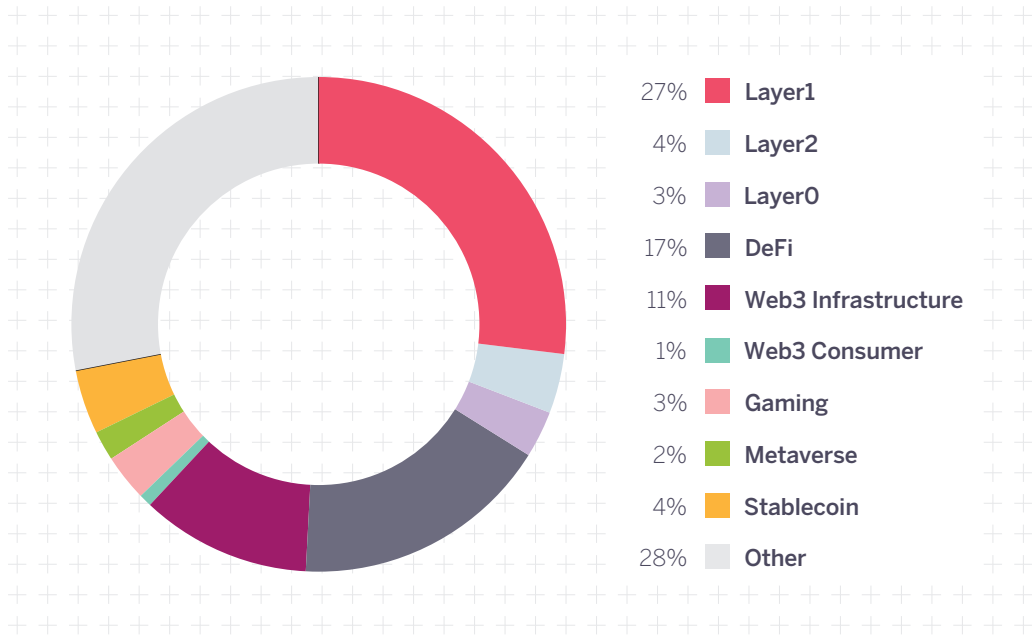


BREAKDOWN BY MARKET CAPITALISATION



Source: Sygnum

BREAKDOWN BY NUMBER OF TOKENS



Source: Sygnum

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