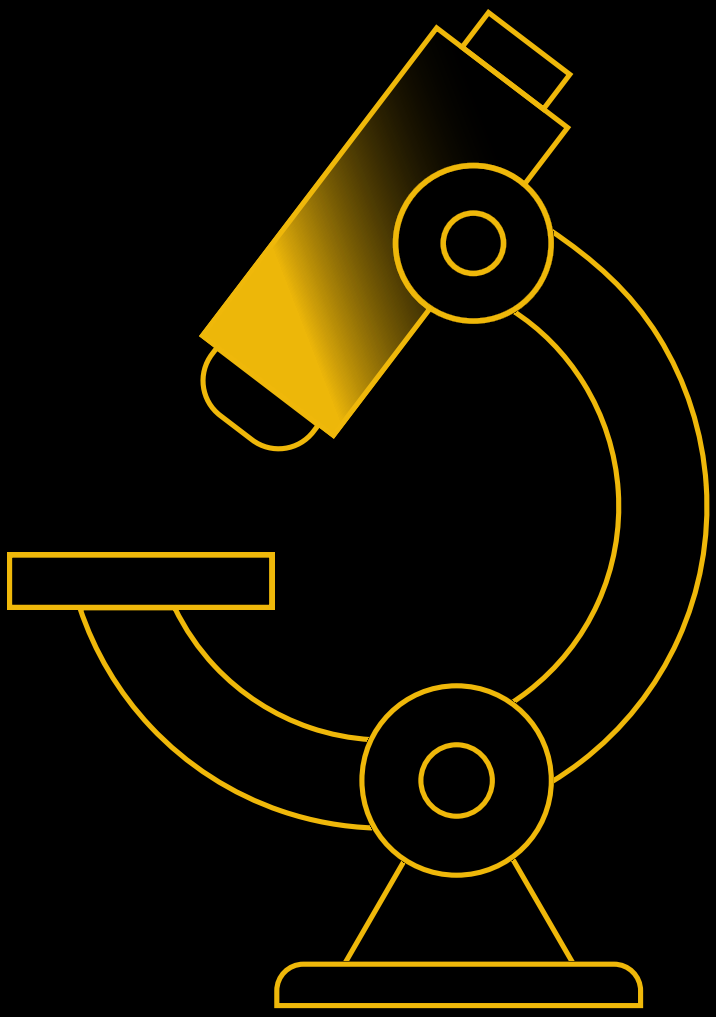
BINANCE RESEARCH

FULL-YEAR 2025 & THEMES FOR 2026

January 2026



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01 / Key Takeaways

- 2025 was a year of milestone achievements alongside differing market performance for crypto. Total market capitalization surpassed US$4T for the first time and Bitcoin (BTC) reached a new all-time high (ATH), reflecting continued institutional adoption, regulatory progress – particularly around stablecoins – and the expansion of regulated investment products. At the same time, heightened macroeconomic uncertainty driven by monetary policy, trade tensions, and geopolitical risks dominated market behavior, leading to sharp price swings and repeated risk-off episodes. This drove a wide intra-year trading range of roughly 76%, with total market value swinging between ~US$2.4T and ~US$4.2T. Despite structural progress in market access and infrastructure, crypto markets ended the year down ~7.9%, underscoring that price formation in 2025 was increasingly shaped by macro conditions and traditional financial cycles rather than crypto-native adoption alone.

- From a macro viewpoint, the year was defined by "data fog" and volatility, as markets navigated a new U.S. administration, the "Liberation Day" tariff shock, and a government shutdown that obscured economic signals. While Artificial Intelligence (AI) speculation and the OBBBA fiscal bill drove BTC to new highs in early H2, the market ended 2025 with crypto decoupling from rebounding traditional assets due to regulatory delays. However, the outlook for 2026 signals a definitive "risk reboot" driven by a "policy triumvirate": synchronized global monetary easing, substantial fiscal stimulus via cash/tax refunds, and a wave of deregulation. This shift promises to replace retail-driven speculation with institutional flows, positioning crypto for a liquidity-fueled expansion supported by the potential for a U.S. Strategic BTC Reserve.

- Bitcoin showed a clear divergence between structural market-level strength and base layer economic activity. BTC reached new ATHs during the year but ended modestly lower, underperforming gold and most major equity indices, while maintaining a market capitalization near ~US$1.8T and sustaining ~58–60% market dominance. Capital concentration into BTC intensified despite softer price performance: U.S. spot ETFs accumulated over US$21B in net inflows, and corporate holdings surpassed 1.1M BTC, equivalent to ~5.5% of total supply. Network security continued to strengthen, with hash rate exceeding 1 ZH/s and mining difficulty rising ~36% year-on-year (YoY), signaling sustained miner investment. In contrast, base layer activity softened: active addresses declined ~16% YoY, transaction counts remained below prior cycle peaks, and speculative token activity appeared only in short, non-persistent bursts. The combined signal is that Bitcoin's liquidity, price formation, and demand increasingly flowed through off-chain financial channels and holding behaviour, while the base layer played a secondary role, reinforcing Bitcoin's position as a macro-financial asset rather than a transaction-led network.

- Across Layer 1s (L1s), the year showed that activity alone was not a reliable indicator of economic relevance, with many networks failing to convert usage into fees, value capture, or sustained token performance. Separately, the L1 landscape continued to consolidate around a small number of leading networks. Ethereum remained dominant by developer activity, Decentralized Finance (DeFi) liquidity, and aggregate value, but its base layer execution footprint and rollup-driven fee compression

weighed on ETH relative performance versus BTC. In contrast, Solana sustained high transaction volumes and daily active users, materially expanded stablecoin supply, generated meaningful protocol revenue even after speculative activity normalized, and secured U.S. spot ETF approval, reinforcing institutional accessibility. BNB Chain capitalized on prevailing market narratives and its strong retail transaction base to drive high on-chain spot and derivatives activity, large stablecoin settlement flows, and real-world asset (RWA) deployments, with BNB emerging as the best-performing major crypto asset. A key signal from 2025 is that L1 differentiation increasingly hinged on the ability to monetize recurring flows – trading, payments, or institutional settlement – rather than simply maximizing raw transaction counts.

- Ethereum's Layer 2 (L2) ecosystem accounted for over 90% of Ethereum-related transaction execution in 2025, supported by protocol upgrades that expanded blob capacity and lowered data availability (DA) costs. As execution migrated off-chain, the key focus was whether this scale could translate into sustained usage, fee generation, and economic alignment with the base layer. Under this lens, outcomes diverged sharply: activity, liquidity, and fee generation concentrated among a small number of optimistic rollups, notably Base and Arbitrum, as well as select app-specific chains with clear use cases and strong UX, while many others experienced sharp declines in usage once incentives faded. Zero-knowledge (ZK) rollups continued to make progress on prover efficiency and decentralization milestones but remained an order of magnitude behind optimistic rollups in total value locked (TVL) and fee generation. Fragmentation across more than 100 rollups, diminishing incentive effectiveness, and uneven sequencer decentralization remain among the binding constraints.

- In 2025, DeFi took one more step in transitioning to "structural institutionalization," focusing on capital efficiency and compliance. TVL stabilized at US$124.4B, with capital composition shifting significantly toward stablecoins and yield-bearing assets rather than inflationary tokens. A historic milestone occurred as RWA TVL (US$17B) surpassed DEXs, driven by the adoption of tokenized treasuries and equities. Simultaneously, the U.S. GENIUS Act provided regulatory clarity for stablecoins, propelling their market cap over US$307B and establishing them as essential global settlement infrastructure. Functionally, DeFi matured into a cash-flow powerhouse. Protocol revenue surged to US$16.2B, comparable to major TradFi institutions, turning governance tokens into productive "blue chip" assets. On-chain execution also gained dominance, with DEX-to-CEX spot trading ratios peaking at nearly 20%.

- 2025 marked the breakthrough year when stablecoins went mainstream. Total market capitalization surged nearly 50% to over US$305B, fueled by landmark regulatory clarity from the GENIUS Act and institutional entry. Daily transaction volumes soared 26% to an average US$3.54T – dwarfing Visa's US$1.34T and proving stablecoins' superiority for fast, borderless payments. The momentum came from a wave of new heavyweights: six new stablecoins (BUIDL, PYUSD, RLUSD, USD1, USDf, and USDtB) each crossed the US$1B market cap threshold, bringing fresh competition and real-world utility. Together, these developments set the stage for sustained stablecoin expansion across payments, savings, and fintech use cases.

- Consumer crypto entered a defining era: blockchain infrastructure reached maturity, and the focus shifted decisively toward real-world applications and seamless execution. Leading this transition were neobanks and fintech platforms–both Web2 giants and Web3 natives–that are quickly evolving into full-fledged, bank-like services

built on blockchain rails. While enthusiasm for crypto gaming and social apps cooled during the year, deeper integration of blockchain into global payments and fintech laid critical groundwork for a new wave of truly native networks to emerge in these sectors, designed from the ground up around transparency and verifiability. As the industry pivots from infrastructure-building to application-driven growth, its core mission is evolving: moving beyond decentralization for its own sake toward the deliberate design of trustworthy, verifiable systems that inspire confidence in both consumers and institutions alike.

- Frontier Tech in 2025 focused on the convergence of AI agents, on-chain payments, and decentralized coordination of real-world infrastructure. The most tangible advance was agentic payments becoming usable at internet scale via an HTTP-native settlement standard (reviving the 402 “Payment Required” path), enabling pay-per-call monetization for APIs, data, and automated workflows; by year-end, this rail had processed 100M+ payments, surpassed ~US$30M in cumulative volume, sustained >1M daily transactions, and saw agents drive over 90% of flows. In parallel, decentralized physical AI (DePAI) gained traction as an extension of DePIN toward coordinating autonomous machines, though progress in 2025 was constrained less by token design and more by data quality, sim-to-real gaps, capital intensity, and safety and regulatory requirements. By comparison, DeFAI and DeSci remained exploratory, with limited evidence of durable economic output relative to agent-native payments and early machine-economy use cases.

- Institutional adoption was defined by crypto being embedded into core financial workflows rather than accessed purely through price exposure. Banks moved closer to mainstream crypto-backed lending, signaling greater acceptance of BTC (and selectively ETH) as finance-grade collateral within custody and compliance frameworks, while regulated crypto ETFs expanded in breadth and structure, reinforcing ETFs as the preferred institutional access route. Tokenized money market funds emerged as a credible RWA tokenization use case, gaining traction as on-chain cash equivalents due to faster settlement, collateral mobility, and auditability. At the same time, corporate digital asset treasuries (DATs) scaled sharply in footprint, but 2025 highlighted growing sustainability pressure as leveraged treasury vehicles underperformed simpler, yield-bearing ETF alternatives – underscoring a shift toward infrastructure- and yield-driven adoption over pure asset accumulation.

- Global crypto regulation matured along divergent yet complementary paths: the U.S. advanced innovation through the GENIUS Act (July), establishing the first federal stablecoin framework; Europe implemented MiCA with rigorous licensing; Hong Kong solidified its hub status via the Stablecoin Ordinance and supportive tax incentives; Singapore reinforced high standards with stricter compliance and licensing rules (June). Internationally, commitments to the OECD's Crypto-Asset Reporting Framework (CARF) accelerated, setting the stage for standardized tax transparency and cross-border information exchange.

- Moving into 2026, several key themes are particularly exciting to us, and we anticipate significant progress in these areas throughout the year. These themes span various narratives and sectors, such as those related to the macro environment and Bitcoin, institutional adoption, policy and regulation, stablecoins, tokenization, decentralized trading, prediction markets and more.

02 / Overview

2025 marked a pivotal year in cryptocurrency's journey toward mainstream adoption. The global crypto market capitalization breached the US$4T threshold for the first time, while Bitcoin (BTC) reached an all-time high of US$126,000.

Figure 1: Total crypto market capitalization decreased by 7.9% throughout 2025

Source: Coinmarketcap, Binance Research, as of December 31, 2025

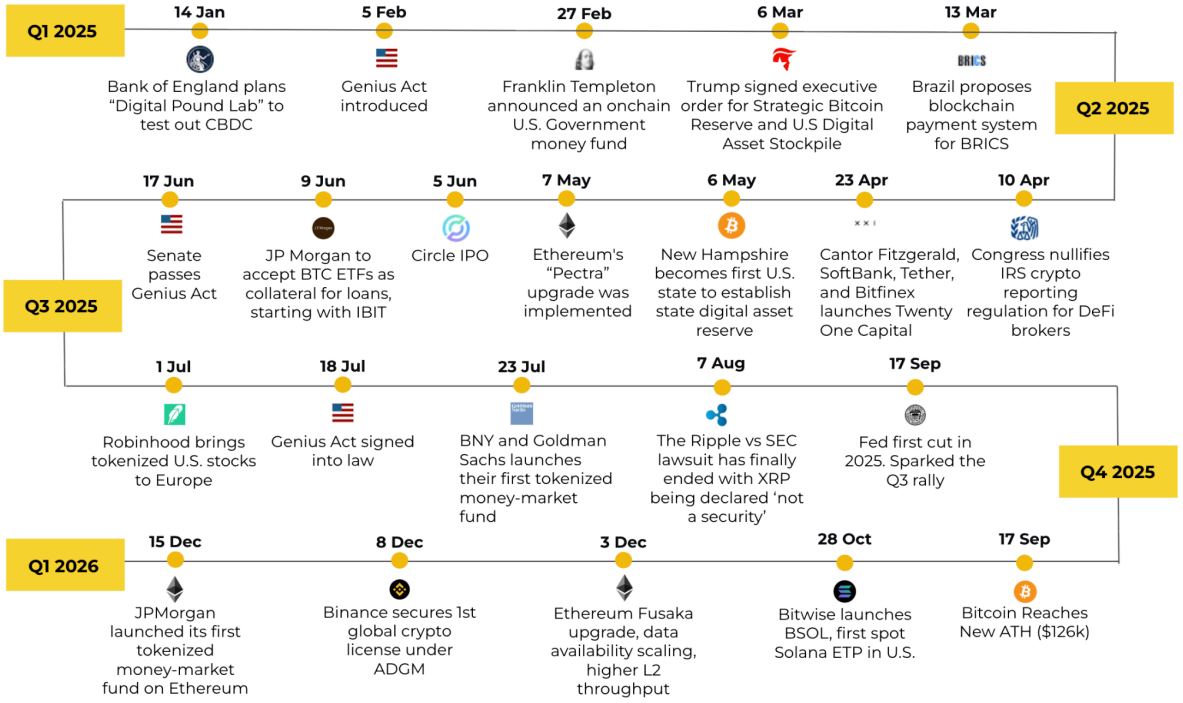
The year was characterized by powerful tailwinds and headwinds operating in tandem. On the positive side, an improving regulatory landscape-particularly the passage of comprehensive stablecoin legislation -and accelerating institutional adoption provided fundamental support. Traditional financial institutions embraced crypto products, exchange-traded products surpassed US$175B in assets, and stablecoins achieved mainstream status with transaction volumes rivaling Visa.

However, these positives were offset by escalating geopolitical tensions and macroeconomic uncertainty, which weighed heavily on investor sentiment throughout the year. The interplay between these competing forces drove exceptional volatility.

Following 2024's remarkable 96% surge, crypto markets in 2025 exhibited a dramatic 76% intra-year trading range, with total market capitalization oscillating between a low of approximately US$2.39T in April and a peak near US$4.22T in October. Despite the milestone achievements and infrastructure maturation, the market ultimately closed the year down 7.9%, reflecting the challenging risk environment that dominated the second half.

The year's price action underscored crypto's evolution: increasingly integrated with traditional finance (TradFi) and sensitive to macro factors, yet still capable of significant volatility amid structural growth.

Figure 2: Timeline of notable events in 2025



Source: Binance Research, as of December 31, 2025

Looking ahead, we are closely monitoring developments in global monetary policies, updates on trade tariffs, institutional participation, the sovereign adoption, the growing convergence of crypto and artificial intelligence, and the emergence and resurgence of crypto-specific market narratives. Additionally, following the success of Circle, we anticipate a wave of new cryptocurrency IPOs in the near future.

03 / Macro and Markets

3.1 From “Data Fog” to “Risk Reboot”

Looking back from the end of 2025, global markets spent the year navigating through “data fog.” A new conservative U.S. administration triggered broad repricing, while U.S. government shutdown created critical data gaps as trade policy whipsawed throughout the year – most notably with the “Liberation Day” tariff shock. Sharp swings in AI also added another layer of volatility. Together, these forces defined 2025.

The high-rate regime of the past two years has suppressed the velocity of capital. In 2026, however, as a “policy triumvirate” takes fuller shape – fiscal expansion (e.g., the implementation of the OBBBA), monetary easing (a more dovish Fed leadership), and deregulation – global capital is likely to shift from “potential energy” to “kinetic energy.”

For crypto, the macro backdrop is moving **from uncertainty toward a more expansionary regime**, with higher policy clarity. While **2025 can be viewed as digital assets’ “ First Year of Industrialization,”** unclear regulation has still constrained mass adoption. Unlike prior cycles driven largely by retail sentiment, the next bull market is likely to be powered by a dual engine of sovereign-scale liquidity and enterprise-grade use cases – arguably the most important headline for crypto in 2026.

3.2 From “AI Mania” to “Fiscal Rewiring”

The year featured not only a technological “Sputnik moment,” but also maximum-pressure trade dynamics, intense domestic political brinkmanship (including a government shutdown), and the passage of a major fiscal bill (OBBBA). These events laid the groundwork for what could become a more bubble-prone regime in 2026.

Q1: Infrastructure Buildout vs. Cost Shock

Q1 was dominated by AI, but the market swung violently from euphoria over “limitless spending” to fear of a disinflationary or cost shock.

- **“Project Stargate”**
    - In January, President Trump, together with Masayoshi Son (SoftBank), Larry Ellison (Oracle), and Sam Altman (OpenAI), announced a US$500B AI infrastructure initiative.
    - The initiative reinforced the framing that **“compute is national power”**, triggering a surge across the tech complex and igniting a government-backed CapEx boom.
    - **AI x Crypto** was also lifted as investors searched for Web3 AI applications, though many valuations later deflated due to insufficient real adoption.

- **“DeepSeek Monday”**
    - One week after Stargate, China’s DeepSeek released a high-performance, ultra-low-cost model. Markets suffered a “Black Monday” as the Magnificent 7 sold off, briefly challenging the moat narrative and the hardware arms-race logic.
    - Crypto did not escape the sell-off, as markets saw its first major drawdown of the year, with total market cap falling from US$3.66T to US$2.42T (-34%).

Q2: Tariff Volatility and “Liberation Day” – The Stagflation Shadow

In Q2, the macro narrative rotated from tech to trade, and inflation concerns resurfaced.

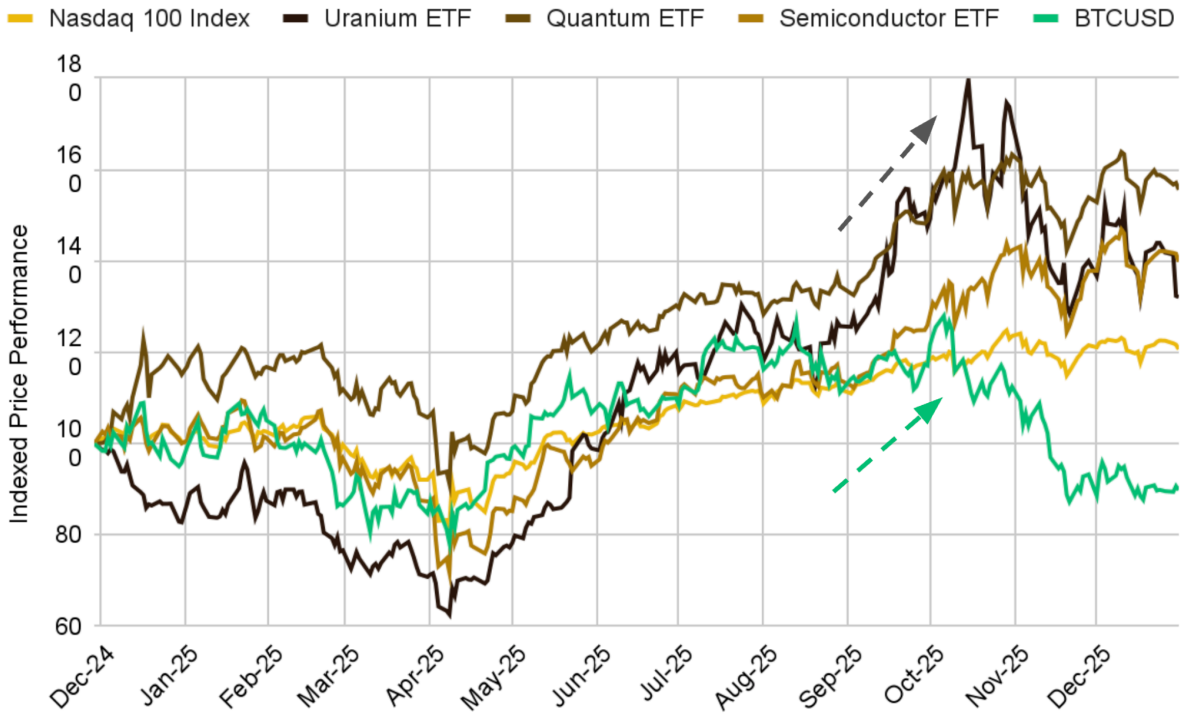
- **“Liberation Day” (April 2)**
    - The U.S. formally announced a new, aggressive multi-country tariff regime. 2025 became a peak year for the average effective tariff rate. The VIX hit its annual high during the episode, as rising supply-chain costs fueled a brief stagflation trade.
    - In response to this, **Bitcoin displayed strong “digital gold” behavior** – benefiting alongside precious metals as a hedge against trade fragmentation and fiat purchasing-power erosion. From April to July, both assets rose by 40%+.

Q3: Bubble Diffusion – Frontier Tech and Regulatory Progress

With mega-cap tech consolidating at elevated levels, capital searched for new alpha and the market entered a “pockets of froth” phase. Crypto also saw massive inflows (**US$11B into BTC/ETH ETFs in July, a record**) and new all-time highs.

- **Rotation into Energy and Frontier Tech**
    - **Spillover flows moved into “AI enablers”**, producing localized speculative bubbles in nuclear and quantum themes. Markets increasingly recognized that AI is not only about chips – its growth also hinges on energy supply, propelling nuclear equities into meme-trade territory.
    - With overall market sentiment soaring, Bitcoin’s ATH also appeared around late Q3 to early Q4 at approximately US$126K, showing strong connection between traditional and crypto markets.

Figure 3: Rising TradFi speculative activity coincided with BTC ATH



Source: TradingView, Binance Research, as of December 31, 2025

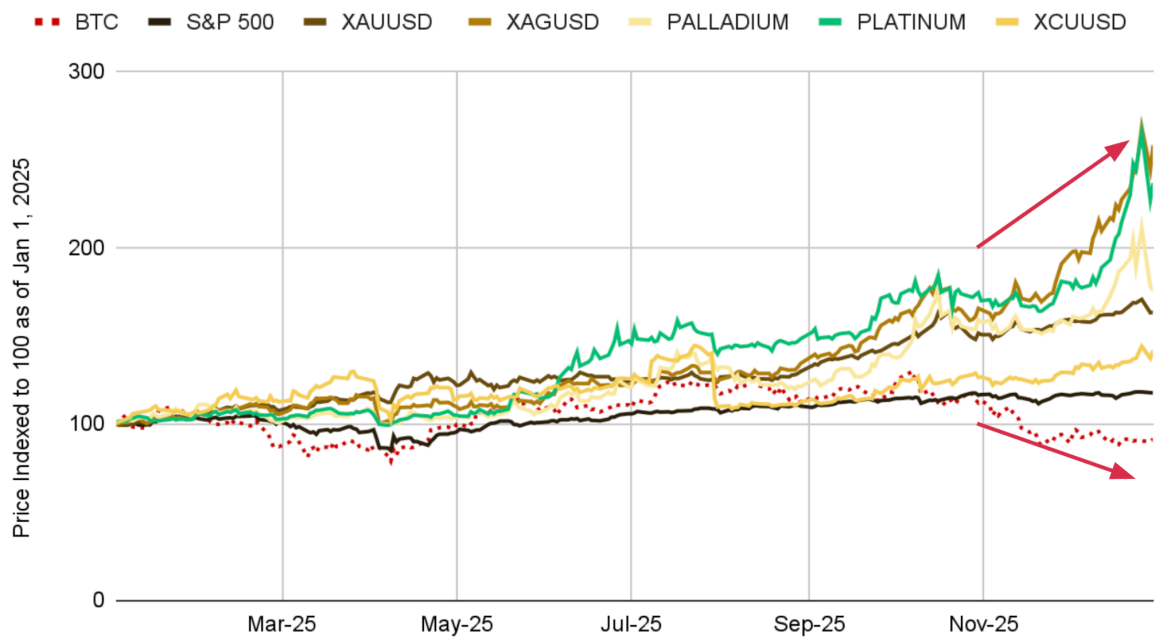
- **Regulatory Breakthroughs**
    - The U.S. passed the GENIUS Act and advanced the RFIA / CLARITY package – foundational compliance steps for the industry. The former addresses "money on-chain," while the latter aims to clarify "**assets on-chain**." While still under Senate review, passage is widely expected in Q1 2026.
    - **GENIUS Act (effective July 18)**: Guiding and Establishing National Innovation for U.S. Stablecoins Act* – the first federal-level stablecoin framework, widely seen as a "green light" for institutional participation.
- **Passage of the OBBBA**
    - The One Big Beautiful Bill Act (OBBBA) was signed into law on July 4, 2025. The bill includes tax relief for low- and middle-income households and incentives for corporate investment, which should – at least in theory – improve 2026 growth expectations.
    - Markets largely interpreted it as a new round of fiscal expansion. Still, with most implementations pushed into 2026, near-term impulse was limited. **Crypto's response was positive**: BTC gained ~3% 2 weeks after the bill was signed.

Q4: Crypto Decoupling-Data Fog and a Policy Turn

Data chaos became a key theme in Q4. Despite solid corporate earnings, political gridlock created a data vacuum, forcing markets to fly blind. After the government reopened, crypto decoupled: it remained weak while equities and metals rebounded sharply.

- **U.S. Government Shutdown (November)**
    - After budget talks broke down, the U.S. entered its longest shutdown on record. Key macro data releases paused for nearly two months, deepening the “data fog.” With no anchor for Fed policy expectations, volatility rose. Yet the extreme political pressure also accelerated an eventual resolution.
    - During the shutdown, total crypto market cap fell from US$4.28T to US$3.35T. Hopes that RFIA/CLARITY would pass by year-end ultimately did not materialize, which also weighed on the market.
- **Crypto Decoupled with Metals**
    - Metals led 2025 with new highs driven by a perfect storm: revived demand from Fed cuts and AI-driven industrial use, supply squeezes (notably silver), and geopolitical shifts emphasizing supply chain security. Central banks and governments actively controlled metal supplies, adding a sovereign premium.
    - BTC, despite sharing macro drivers like fiat debasement and geopolitical instability, did not rally alongside metals in Q4. The difference is sovereign participation: metals benefitted from central bank buying and export controls, while BTC lacks this "sovereign put" as a strategic reserve asset.
    - This gap may close as U.S. legislation moves to institutionalize a Strategic Bitcoin Reserve, shifting from seized assets to active government purchases. Moreover, countries such as Brazil, Pakistan, and Russia are also considering implementing Bitcoin reserves. This list is expected to grow longer over time. As these policies evolve globally, Bitcoin’s strategic status could increasingly catch up to that of metals.

Figure 4: Metals extended year-end gains as cryptos decoupled



Source: Tradingview, Binance Research, as of December 31, 2025

3.3 Outlook: The Policy Triumvirate

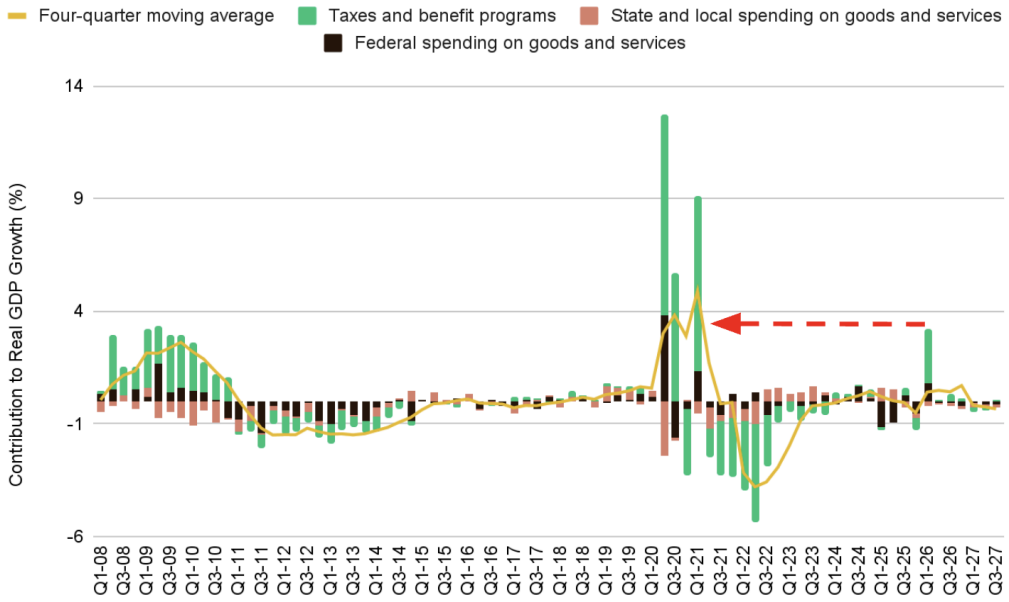
Core Macro Theme: A Three-Tailwind Policy Setup

While crypto sentiment was soft in Q4, the 2026 narrative may shift from 2025's "data fog" toward a policy-implementation-driven "risk reboot." The key drivers are a three-part policy engine: fiscal stimulus, monetary easing, and deregulation-all broadly supportive for risk assets, especially crypto.

1. Fiscal stimulus-Large-Scale Cash Injection

- **Key Tools**
    - OBBBA + tariff-based transfers + MBS purchase + BTC reserve legislation.
- **Macro View**
    - Although the **OBBBA** was signed in July, a structural refund component **(~US$100–150B) is expected to land in Q1 2026**.
    - **Tax relief to support consumption:** increases household disposable income, partially offsetting tariff-driven cost pressures.
    - **Corporate investment incentives:** tax benefits for CapEx, particularly in tech/AI infrastructure; may equate to **US$160B+** in effective cash support; continued AI CapEx strength could underpin earnings and confidence.
    - Due to delayed federal spending recovery, the OBBBA tax cuts are driving expenditures. Fiscal policy is expected to **boost GDP growth by ~2.3% in Q1'26**, marking the **largest single-quarter fiscal impact since Q1'25**. Given the lag in economic transmission, the effect is likely to persist year-long.

Figure 5: Fiscal impulse in 2026 Q1 approaches its highest level since early 2021



Source: Hutchins Center, Binance Research, as of December 31, 2025

- President Donald Trump called on Jan 2026 for the purchase of **US$200B in mortgage bonds (MBS)** in an effort to decrease home loan costs. This initiative closely resembles the Federal Reserve's post-2008 financial crisis policy of purchasing MBS to stabilize the market. Although details remain unclear, Fannie Mae and Freddie Mac currently have about $200B in combined capacity for mortgage investments. Since this does not require Congressional approval, the likelihood of it occurring in 2026 is high.

- **Implications for Crypto**
  - Tariff-related downside has been heavily debated and may be largely priced in; attention may shift to tangible fiscal support.
  - **Household cash boosts:** historically (e.g., 2020–2021), direct fiscal injections into households have tended to spill into higher-risk retail markets (meme coins, NFTs) faster than central-bank liquidity. Trump has claimed American families could save **US$11,000-US$20,000 per year** under the package-uncertain in practice, but three near-term fiscal items merit attention:
    - **Retroactive personal income tax relief:** households could receive US$100B+ in refunds in Q1 2026, averaging US$1,000–US$2,000 per household (per Treasury Secretary Scott Bessent estimates).
    - **Targeted redistribution of tariff revenue:** e.g., US$2,000 transfers to households with income below US$75K, equivalent to roughly US$150B in additional support.
    - The widely discussed de minimis **crypto tax exemption** (sub-US$300 transactions) was removed from OBBBA; Republicans may reintroduce it in 2026 as a standalone efficiency/cost-of-living measure.
  - **Demand for Fiat Debasement Hedges:** the structural expansion of the fiscal deficit to fund the OBBBA continues to erode the credit foundation of fiat currency, reinforcing Bitcoin's core narrative as the premier "anti-debasement" asset. It is crucial to note that the fiscal impulse in **2025** was actually **neutral to mildly contractionary**, with the deficit narrowing from **US$1.83T (2024)** to approximately **US$1.78T**.

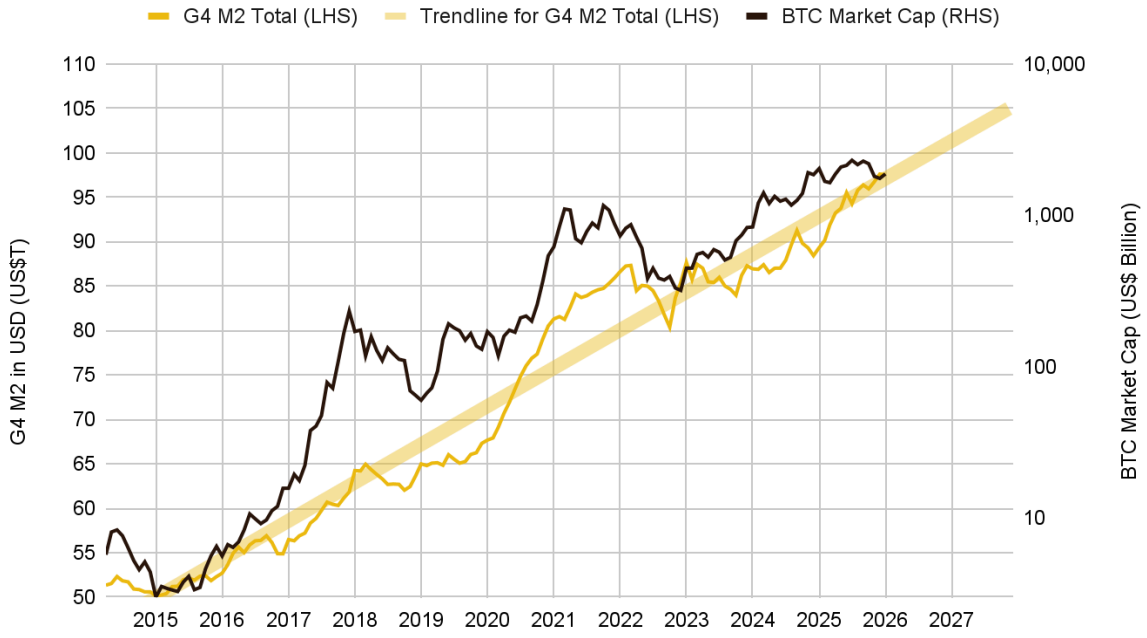
    Despite the noise surrounding new policies, tariffs, and the government shutdown, 2025 lacked net new stimulus, leaving the crypto market driven primarily by sentiment rather than liquidity flow. The regime shifts in **2026**, where the deficit is projected to breach **US$2T**. This represents a net liquidity injection of roughly **US$225B** year-over-year (YoY) equivalent to six months of Federal Reserve balance sheet expansion at current rates.
  - **Expansion of the Strategic Bitcoin Reserve:** While 2025 saw the establishment of a reserve framework via POTUS's executive order, the current inventory consists solely of seized assets rather than open-market purchases. The Republican agenda for 2026 aims to codify this reserve into law, potentially authorizing the use of fiscal funds for direct acquisition. This

would institutionalize the strategy and solidify the U.S. position as a "Bitcoin Superpower."

2. Monetary Easing ("The Monetary Pivot")-Rate Cuts and "QE Lite"

- **Pathway**
    - Continued Fed cuts and a restart of balance-sheet expansion.
- **Macro View**
    - **Rate Normalization:** with tariff inflation likely past its peak, inflation pressure may ease further in 2026, allowing 2+ rate cuts, potentially bringing policy rates toward ~3%.
    - **Balance-sheet Expansion:** the December FOMC announced an RMP starting Dec 12 at US$40B in the first month, likely remaining elevated into April 2026 before slowing. Combined with US$15–20bn/month in MBS/agency reinvestments, a US$500–600B liquidity impulse from the Fed in 2026 looks plausible.
    - Even if long-end yields remain sticky, easier monetary conditions should reduce funding costs and support higher risk-asset valuations.

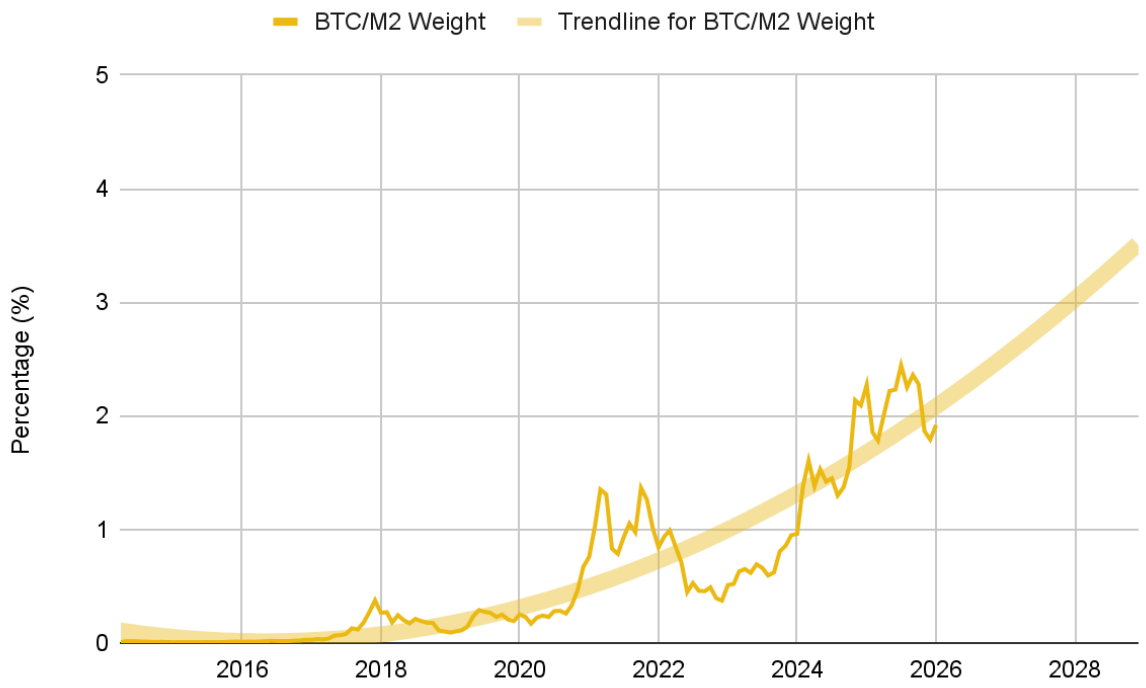
Figure 6: M2 across the U.S., China, EU, and Japan projected to reach US$105T by 2028 at the current pace



Source: Fred, Binance Research, as of December 31, 2025

- **Implications for Crypto**
    - **BTC-to-M2 Ratio:** Currently, Bitcoin's market cap accounts for approximately 2% of the M2 money supply of the G4 countries (United States, Eurozone, Japan, and China). This ratio has doubled compared to five years ago. Based on the growth trend over the past decade, it is projected that by 2028, this ratio could rise to around 3%. This implies that, all else being equal, the baseline price of Bitcoin could approach approximately US$160,000.

Figure 7: BTC/G4 M2 projected to approach ~3% by 2028 based on historical growth

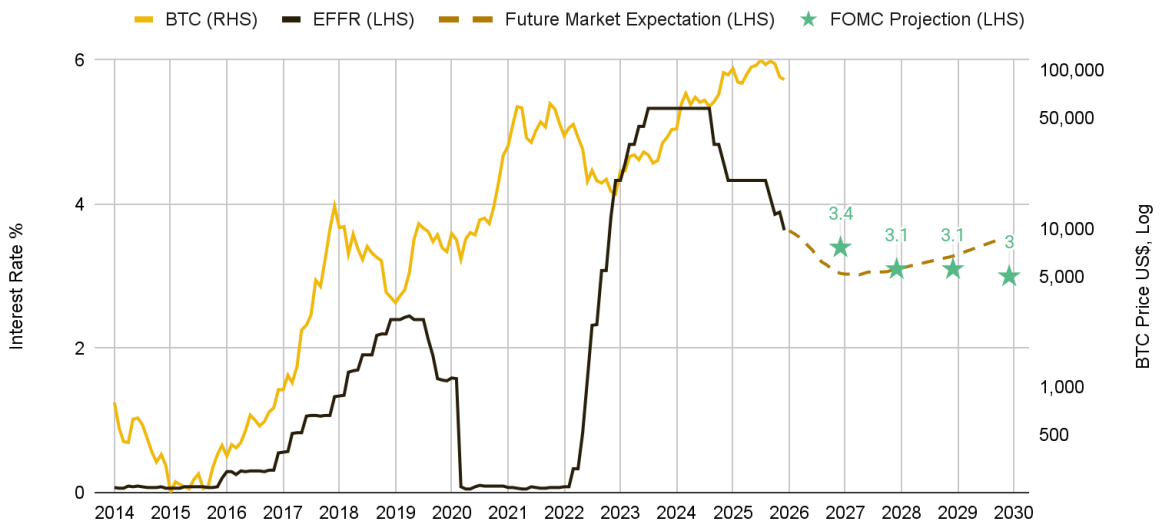


Source: Fred, Binance Research, as of December 31, 2025

- **Liquidity gates reopening**: falling funding costs are a clear catalyst for liquidity-sensitive crypto assets and could revive leverage demand in DeFi. As shown in the figure above, the futures market participants are betting on a faster cut. The market believes the Fed is underestimating economic fragility or that the 2026 leadership changes will lead to a significant dovish shift while the FOMC Dot Plot signals a gradual easing path.

- **Politicization of Fed appointments**: the administration may have strong incentives to engineer easier conditions into late 2026 to support asset prices and voter confidence.

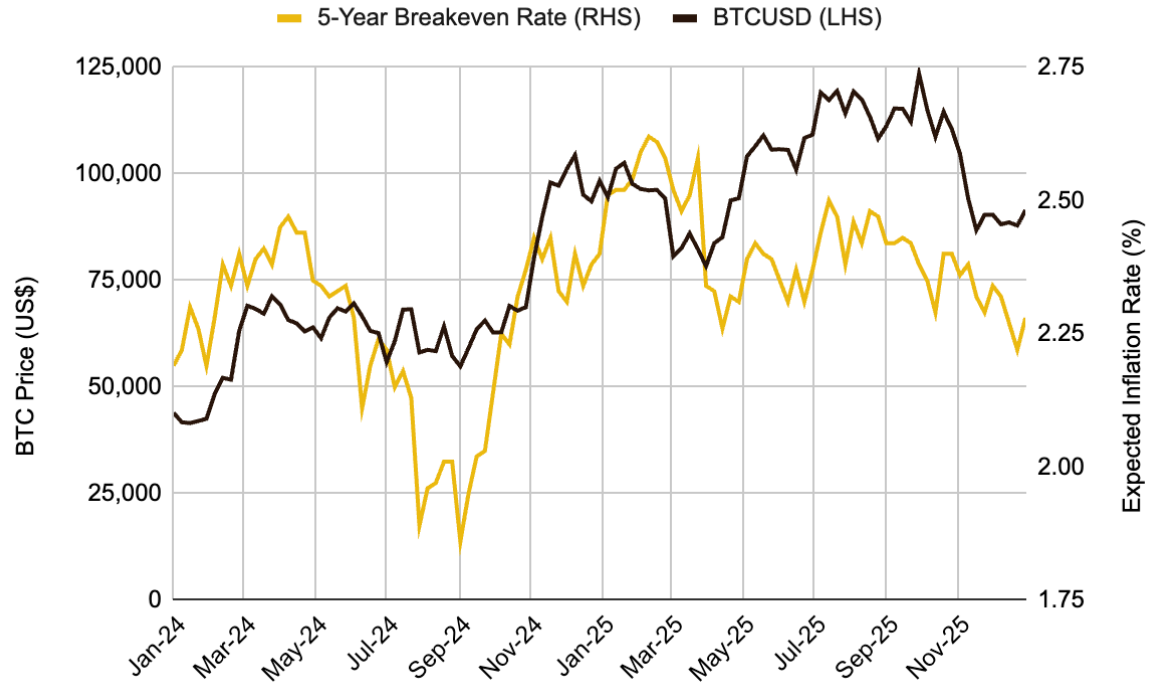
Figure 8: Markets pricing a more dovish policy rate path over the next two years



Source: Tradingview, Binance Research, as of December 31, 2025

- **Watch inflation expectations:** liquidity is most bullish when accompanied by stabilizing or rising inflation expectations. In 2025, we saw easing alongside falling inflation expectations, and crypto underperformed in Q4-consistent with that dynamic. When there is little demand for a strong inflation hedge, Bitcoin's buying activity also decreases accordingly.

Figure 9: Year-end crypto weakness coincided with a decline in inflation expectations

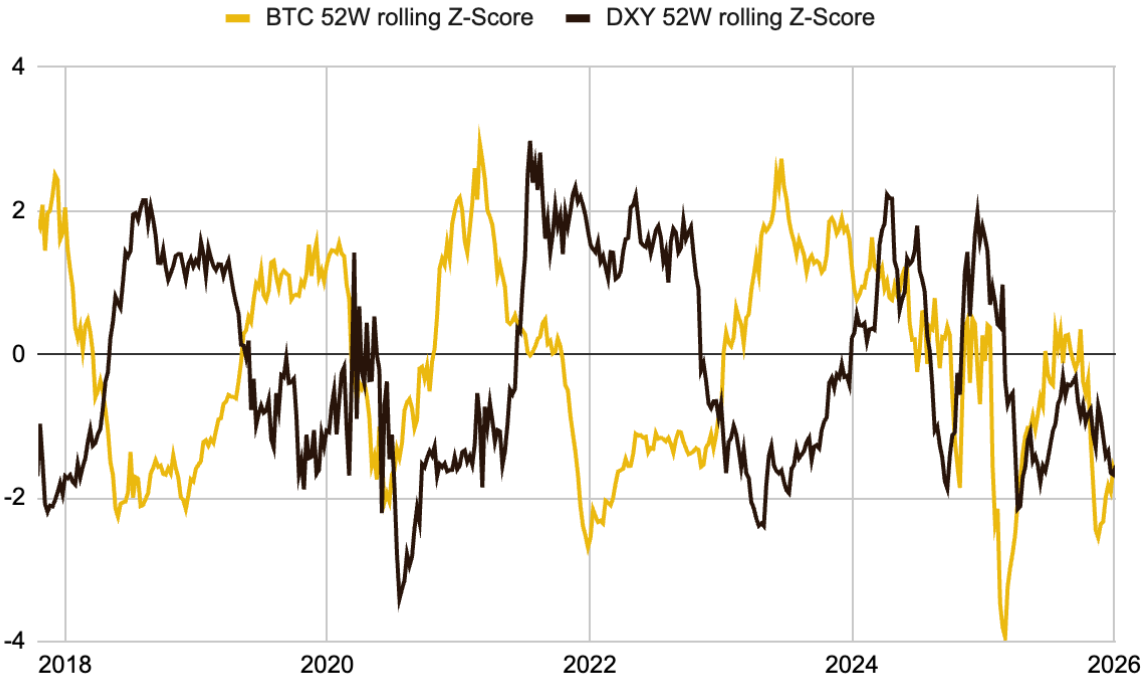


Source: Tradingview, Binance Research, as of December 31, 2025

- **Weaker Dollar (USD):** Most institutions expect USD weakness in 2026. Historically, BTC and the DXY have exhibited an inverse momentum for most periods, which is intuitive from an FX and liquidity perspective. Over the past year, however, that correlation appears to have flipped.

  A key driver has been the strengthening regulatory momentum across 2024–25, which has materially legitimized participation in digital assets and accelerated their penetration into tradi-fil channels. As a result, BTC has become less sensitive to the USD cycle, weakening the conventional negative relationship. That said, a weaker dollar still tends to be a tailwind for BTC in most regimes - and that tailwind may become more pronounced and policy-consistent as a 2026 trend.

Figure 10: BTC asset performance has historically improved during periods of U.S. dollar weakness



Source: Tradingview, Binance Research, as of December 31, 2025

3. Deregulation and Greater Legislative Clarity - The Return of Animal Spirits

- **Macro View**
  - **Financial and M&A Rebound:** The Trump administration is inclined to ease capital constraints on Wall Street in 2026, which could revive long-dormant M&A and IPO activity and reawaken market "animal spirits."
  - **Sentiment Spillover:** The upside from deregulation in traditional capital markets is also likely to spill over into crypto, as liquidity pools and risk appetite increasingly transmit across the two markets.

- **Implications for Crypto Markets**
    - **A Step-Change in Compliance:** This is arguably the biggest difference versus prior cycles. With the GENIUS Act establishing a stablecoin regulatory framework and the potential passage of RFIA/CLARITY to clarify SEC/CFTC jurisdiction and on-chain issuance rules, regulation could shift from a "headwind" to a "moat."
    - **RWA Acceleration:** Even without full regulatory clarity in 2025, tokenized real-world assets expanded rapidly - on-chain equities grew from US$270M to US$780M, and on-chain bonds from US$4.2B to US$9.8B, far outpacing broader crypto market growth. If RFIA/CLARITY passes in 2026, RWAs could scale explosively, drawing more capital and activity on-chain and reinforcing overall market expansion.
    - **DeFi Formalization:** Under this macro-policy regime, DeFi is positioned to make a meaningful leap in institutionalization and regulatory alignment.

Key Risks That Cannot Be Ignored

Despite tailwinds, crypto in 2026 still faces macro risks. We highlight three structural pressures: inflation persistence, tech valuation sensitivity, and geopolitical/regulatory fragmentation.

1. Elevated Real Rates and Opportunity Cost

Inflation stickiness is a primary risk. If long-term inflation expectations fall slowly – or re-accelerate – long-dated Treasury yields may stay high, raising the opportunity cost of holding blockchain assets.

Figure 11: The 10-year U.S. Treasury range remained stable over the past year despite an additional 75 bps of rate cuts

Source: Tradingview, Binance Research, as of December 31, 2025

Even with 75bp of Fed cuts this year, the 10-year yield is largely unchanged versus pre-cut levels, hovering around ~4.13%. Bond funds attracted massive inflows (~US$600B), implying on-chain assets/protocols must offer meaningfully higher risk premia to retain capital - potentially slowing total value locked (TVL) growth or pulling liquidity back toward bonds and money-market funds.

For many valuation frameworks, the 10-year yield, not the policy rate, is the discount-rate denominator. If it fails to fall, early-stage projects without cash-flow support will face tighter valuation ceilings.

2. Tech Correlation and Uncertainty in the AI CapEx Cycle

Crypto remains highly correlated with the Nasdaq 100 (NDX). The scale of AI infrastructure CapEx and the uncertainty around future ROI can trigger greater volatility compared to 2025.

- **AI CapEx**: In the late 1990s, the telecom and IT industries rapidly expanded as companies built infrastructure like fiber optics and broadband. However, many investments failed to deliver expected returns, leaving some firms heavily indebted and facing write-downs and restructuring when demand growth fell short. A similar pattern could emerge in today's AI boom, where failed competitors or redundant investments may lead to valuation adjustments. Bank of America now sees global hyperscale spending rising 67% in 2025 and another 31% in 2026 to US$611 billion(~1.2% of U.S. GDP).
- **Beta Contagion**: if AI application revenues undershoot expectations and tech valuations correct, crypto - as a high-beta asset - may experience outsized volatility. Many "AI+Crypto" tokens are tightly coupled to hardware leaders such as NVDA, increasing spillover risk from an equity sentiment reversal.
- **Liquidity Resonance**: during deleveraging, liquid crypto assets are often sold first to meet margin calls. Any meaningful tech drawdown can trigger correlated algorithmic selling.

3. Fragmented Regulation and Liquidity Depth

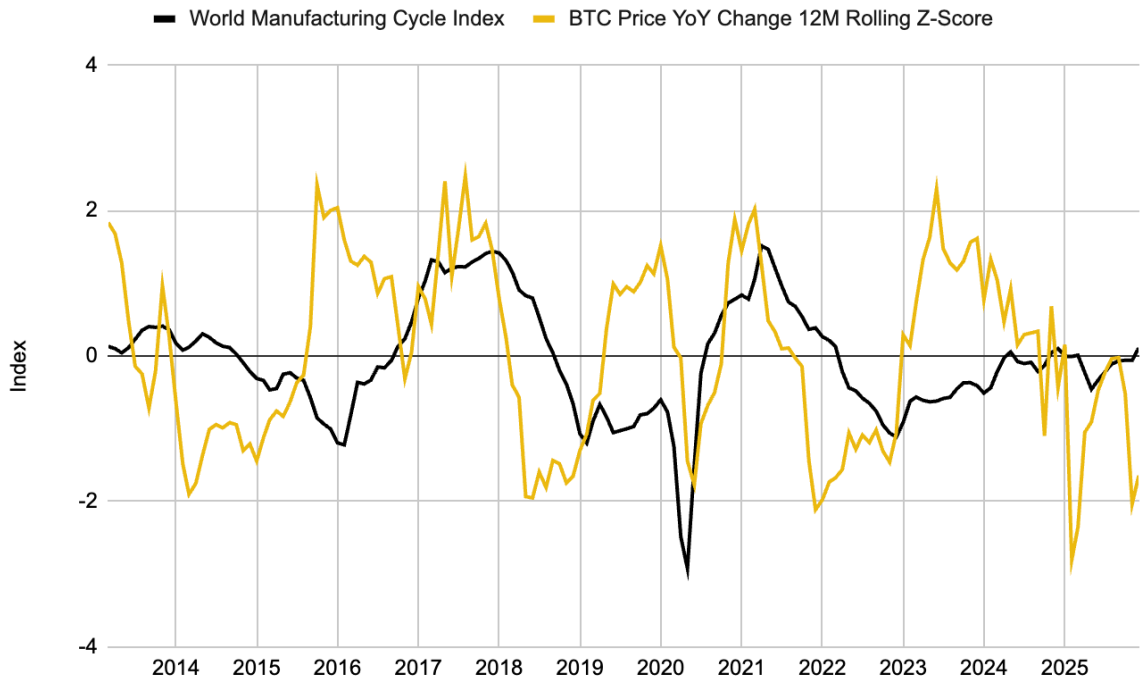
A multipolar geopolitical world is a long term theme for crypto or any other asset as well as divergent regulatory regimes can segment liquidity.

- **Splintered compliance pools**: with Europe's MiCA, evolving U.S. frameworks, and varied Asian approaches, global crypto liquidity may fragment into separate "compliant pools." Inconsistent standards for stablecoin issuance, privacy protocols, and AML can inhibit cross-border capital mobility and reduce overall market depth and efficiency.
- **Temporary failure of safe-haven behavior**: while Bitcoin has long-term censorship-resistant properties, early stages of geopolitical shocks often trigger "dash for cash," leading to indiscriminate selling across assets - including gold and BTC. Tensions can also constrain certain fiat rails, affecting stablecoin peg stability.

3.4 Where Are We in the Macro Cycle?

As an emerging asset class, Bitcoin's price cycle is far from an isolated event; it is closely linked to the global macroeconomic cycle. We compared the World Manufacturing Cycle Index, a macro indicator representing the health of the global real economy, with the rolling Z-Score of BTC's price. The Z-Score here measures how much the year-over-year percentage change in Bitcoin's price deviates from its 12-month average, which can be understood as the "acceleration" or "momentum" of Bitcoin's price movement. Data shows Bitcoin leads the real economy by about 8 to 12 months.

Figure 12: BTC has historically acted as a leading indicator of the global macro cycle



Source: FRED, Binance Research, as of December 31, 2025

Current Cycle Position: On a Delicate Edge Between Expansion and Contraction

Our model indicates that the cycle bottomed in February 2025 (around -2.8). Since then, the indicator has clearly rebounded, recovering to near zero by September 2025. As one of the assets most sensitive to global liquidity – effectively a high-beta proxy–Bitcoin often reflects early shifts in macro liquidity conditions and investor risk appetite. This move suggests that market participants believe the worst has passed, liquidity is healing, and risk appetite is returning.

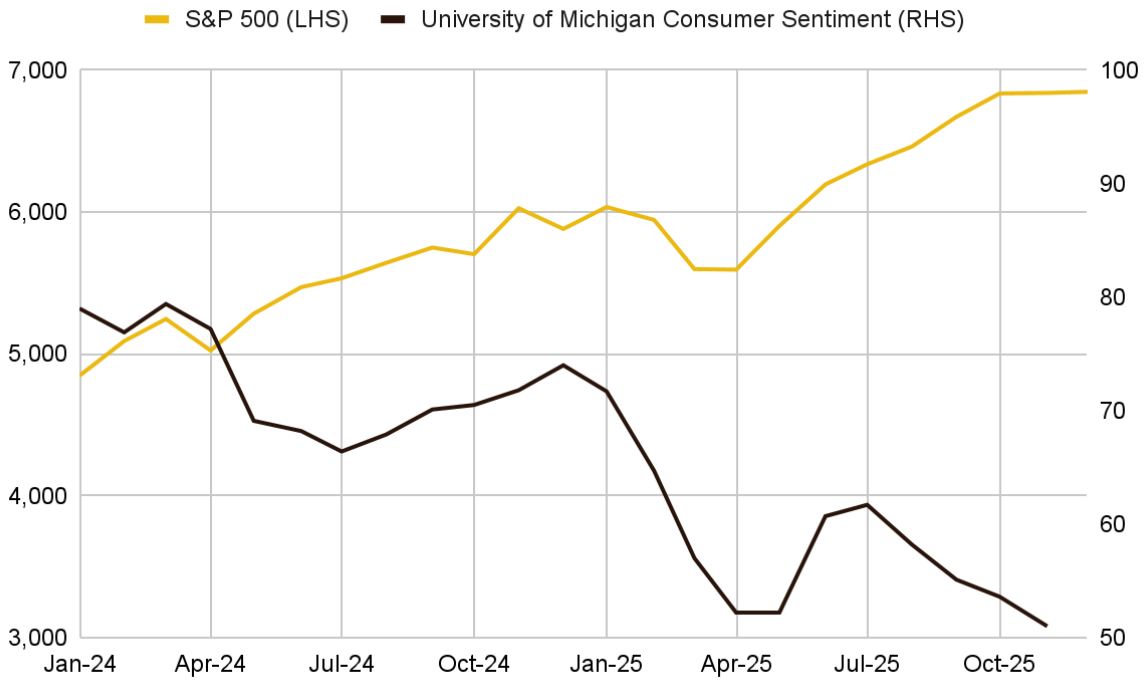
However, the market experienced a sharp pullback again in October–November, producing two readings below -2 within the same year – something never seen in Bitcoin's history since 2013. This underscores the elevated uncertainty among participants regarding the economic outlook and geopolitical risks.

Against this backdrop, PMI also declined and then recovered over the year, oscillating within a narrow range around zero. This signals an economy perched on a fine line between expansion and contraction, closely mirroring the market's highly polarized

expectations for next year–for example, equity indices hitting new highs while consumer confidence sinks to new lows.

Nevertheless, we believe market divergence creates the optimal window for strategic allocation. Weakness in certain data points offers investors an opportunity to acquire high-quality assets at a relatively low cost.

Figure 13: Growing divergence between financial markets and household conditions



Source: University of Michigan, Binance Research, as of December 31, 2025

3.5 Central Bank Policies and the Liquidity Wave

2025 Review: The Era of Fragmentation and "Hawkish Holds" (Headwind for Crypto)

In 2025, global central bank policies were characterized by asynchronous normalization and policy uncertainty, creating a choppy environment for crypto assets. The Federal Reserve spent much of the year battling sticky "last mile" inflation and tariff-driven volatility, forcing it into a "hawkish cut" that kept long-term rates elevated and capped crypto upside to some extent. While the ECB and PBoC eased, they did so reactively to combat weakness rather than proactively stimulating growth, offering little net liquidity impulse. The BoJ's shift away from negative rates further drained global carry-trade liquidity. For the crypto market, this meant valuation was driven primarily by idiosyncratic narratives (e.g., AI, ETFs) rather than a broad liquidity tide, resulting in high volatility and a lack of sustained momentum.

2026 Outlook: The Return of "Synchronized Injection" (Tailwind for Crypto)

Heading into 2026, the monetary policy backdrop is shifting decisively toward a coordinated liquidity expansion, creating the most favorable monetary setup for crypto since 2020-2021. The Fed's pivot from data-dependence to active stimulation (aiming for a ~3% neutral rate and restarting balance sheet expansion) serves as the primary engine for this trend. Crucially, this dovish turn is likely to coincide with continued accommodation from the PBoC and a cessation of tightening fears from the ECB, forming a synchronized global easing cycle. This environment is defined by falling opportunity costs for capital, a structurally weaker USD, and an abundance of fiat liquidity seeking yield–historically correlates perfectly with exponential growth phases in the crypto cycle. The "sovereign liquidity put" is effectively back in play.

Figure 14: G4 central bank policy summary

	2025 Policy Rate	Status Heading into 2026	2026 Policy Outlook	Core Drivers and Key Risks
Federal Reserve (Fed)	~4.00% - 4.25%	Dovish Pivot (Resumed cuts in Dec; Balance sheet expansion restarted)	Aggressive Easing Targeting ~3.00% via multiple cuts; QE Lite to inject ~$500-600bn liquidity.	Drivers: Post-shutdown growth support; OBBBA fiscal accommodation. Risks: Sticky inflation from tariffs; re-acceleration of core CPI.
European Central Bank (ECB)	1.75% (Deposit Facility)	Accommodative (Consistent cuts through H2 2025)	Rate Stabilization / Fine-tuning Pause likely as inflation stabilizes near 2%; focus shifts to structural growth reforms.	Drivers: Weak Eurozone growth; avoidance of deflation. Risks: Global trade fragmentation impacting EU exports; wage growth stickiness.
Bank of Japan (BoJ)	0.75%	Gradual Normalization (Slow hikes continued)	Pause / Slow Tightening Potential hike to ~1.00% if domestic demand holds, but wary of global slowdown.	Drivers: Sustainable wage-price spiral; normalizing real rates. Risks: Yen volatility; bond market stability amid higher yields.
People's Bank of China (PBoC)	3.00% (1-Year LPR)	Targeted Easing (Liquidity injections via RRR cuts & special lending facilities)	Structural Support Further RRR cuts likely; fiscal-monetary coordination to support local debt & consumption.	Drivers: Stabilizing property market; combating deflationary pressure. Risks: Capital flight pressure; efficacy of transmission to real economy.

Source: Bloomberg, Binance Research, as of December 31, 2025

04 / Bitcoin

Bitcoin's performance in 2025 reflected a **maturing market structure** rather than a repeat of earlier adoption-driven cycles. Throughout the year, Bitcoin (BTC) continued to lead the broader crypto market in both capital allocation and narrative relevance. Price action was anchored by periodic moves to new all-time highs (ATHs) and subsequent consolidations, with broader risk sentiment and macro conditions playing a larger role. Institutional participation deepened through regulated investment channels, most notably spot ETFs and other TradFi-linked products, even as early year momentum in corporate treasury adoption slowed.

At the network level, fundamentals revealed a growing divergence. Market capitalization and network security continued to strengthen, reinforcing Bitcoin's role as a long-term store-of-value asset. In contrast, on-chain activity and fee revenue trended lower, reflecting reduced transactional intensity and evolving usage patterns. Together, these dynamics highlight a defining feature of 2025: Bitcoin's expanding integration into global financial markets alongside a gradual decoupling from its earlier transaction-led economic model.

4.1 Key Metrics

After surging to ~US$126,000 in early October to set a record high, BTC ended the year just below the US$90,000 mark – roughly flat to slightly down versus its start of year price. Its market capitalization hovered near **~US$1.8T** by end of year, keeping BTC firmly among the **top ten global assets by value** (below precious metals like gold but comparable to large tech companies). Trading volumes remained elevated, with median daily volumes of approximately **US$50.4B** over the year.

Network fundamentals also grew stronger: total hash rate reached new levels above **1 zettahash per second (ZH/s)** during Q3 (over 1,000 EH/s, a first for the network) before a late-year dip after peaking on 19 October. At the same time, mining difficulty rose past **150T** by year-end (about **36.4%** higher than a year ago), underscoring sustained miner investment and competition. In contrast, **on-chain usage trended downward**: while daily transaction counts rose on the year to **474.4K** (7DMA), it still falls short to the 600K+ seen in prior years. Daily active addresses similarly slipped to **642.3K** (7DMA) from 766.4K a year ago, in general reflecting quieter on-chain activity outside of major liquidity events. Average transaction fees hovered below US$1 for much of H2 (down from the brief fee spikes of early 2025) due to block capacity.

Together, these metrics paint a picture of declining base layer congestion even as BTC's market size and security reach new heights, highlighting increased holding and off-chain activity (e.g. via ETFs) rather than on-chain transacting.

Figure 15: Bitcoin metric performance year-on-year

	31-Dec-22	31-Dec-23	31-Dec-24	31-Dec-25	% change (1Y)
Market Cap (US$B)	312.3	827.8	1,829	1,748	**-4.4**
Trading Volume (US$B)	14.0	22.8	43.6	33.8	**-22.5**
Transactions (7DMA, K)	246.1	557.0	351.1	474.4	**35.1**
Active Addresses (7DMA, K)	879.1	800.1	766.4	642.3	**-16.2**
Average Tx Fee (US$)	1.2	18.4	1.9	0.7	**-63.2**
Hash Rate (EH/s, 7DMA)	253.1	508.8	796.9	1,070.7	**34.4**
Mining Difficulty (T)	35.4	72.0	108.7	148.3	**36.4**

7DMA = 7-day moving average
Source: CoinMarketCap, The Block, Blockchain.com, Binance Research, as of December 31, 2025

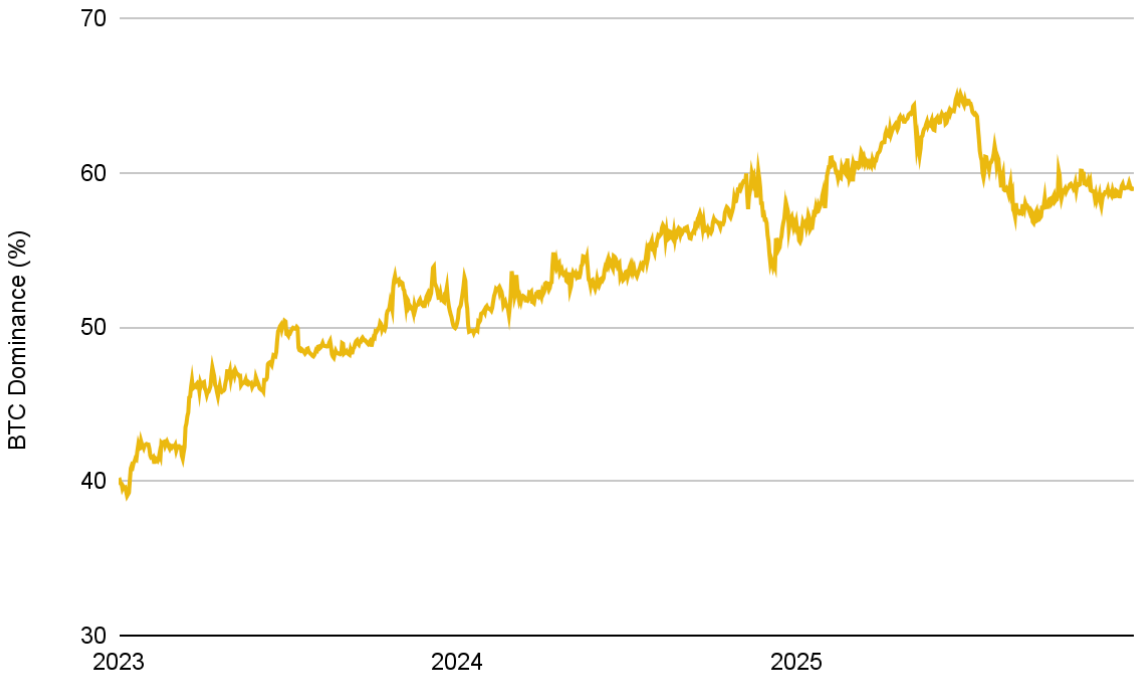
Bitcoin Dominance

As a reminder, Bitcoin dominance measures the relative market share of Bitcoin compared to the rest of the market. This is calculated using Bitcoin's total market capitalization (market cap) over the total market cap of all cryptocurrencies combined.

Bitcoin's dominance of total crypto market capitalization remained significantly higher in 2025 than in previous cycles. After **peaking at ~65%** in June (a four-year high), Bitcoin's market share held around the **58–60%** level through the year-end. This sustained dominance reflects how capital inflows concentrated in BTC outpaced the broader market – driven by long-term holder accumulation, altcoin market weaknesses, and Bitcoin's expanding integration with traditional finance (TradFi).

As a result, incremental inflows from both institutional and retail participants were directed primarily toward BTC, while many **altcoins continued to lag**, pushing altcoin dominance to a five-year low by late 2025. This shift reinforced a **BTC-led market structure**, consistent with a liquidity-driven cycle in which capital favored the most established and widely held asset amid a more uncertain macro backdrop.

Figure 16: Bitcoin's market dominance trended upward throughout 2025, holding near 60% by year-end – a marked shift toward BTC-led market structure this cycle



Source: Glassnode, Binance Research, as of December 31, 2025

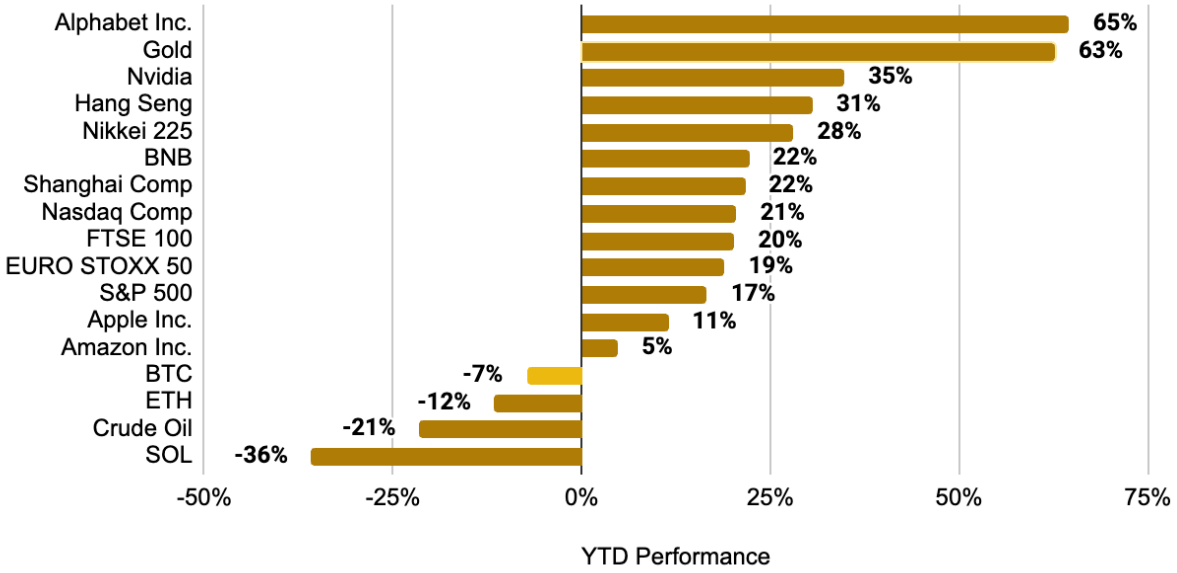
Performance Versus Traditional Assets

BTC entered 2025 following one of its strongest years on record and ended the year modestly lower, marking its **first annual decline since 2022**. The path through the year, however, was shaped by macro volatility rather than a steady deterioration in fundamentals. After an early-year drawdown amid macro shocks, BTC rallied to new highs before consolidating lower into year-end.

In relative terms, BTC's performance fared worse versus most traditional risk assets. U.S. equities delivered modest gains, with many technology stocks (bar Alphabet) ending lower to their early year peaks as enthusiasm around AI-related themes cooled. **Gold and other metals were the clear outperformers**, posting strong gains and breaking successive ATHs, reinforcing their role as the market's preferred defensive exposure during periods of uncertainty. In this context, BTC's key signal in 2025 was not outright defensive performance, but **persistence as a liquid, investable macro asset** that continued to attract attention and capital even when risk appetite fluctuated.

Bitcoin's scale remained central to this positioning. With market capitalization remaining near the **US$1.8T** mark, BTC continued to sit alongside the largest public companies by value, reinforcing its relevance for institutions where market size, liquidity, and accessibility shape allocations. The expansion of regulated access channels also supported incremental participation, even as some earlier sources of demand, such as corporate treasury activity, appeared less prominent than in prior market phases.

Figure 17: BTC traded as a macro-sensitive, high-beta asset amid divergent performance across global markets

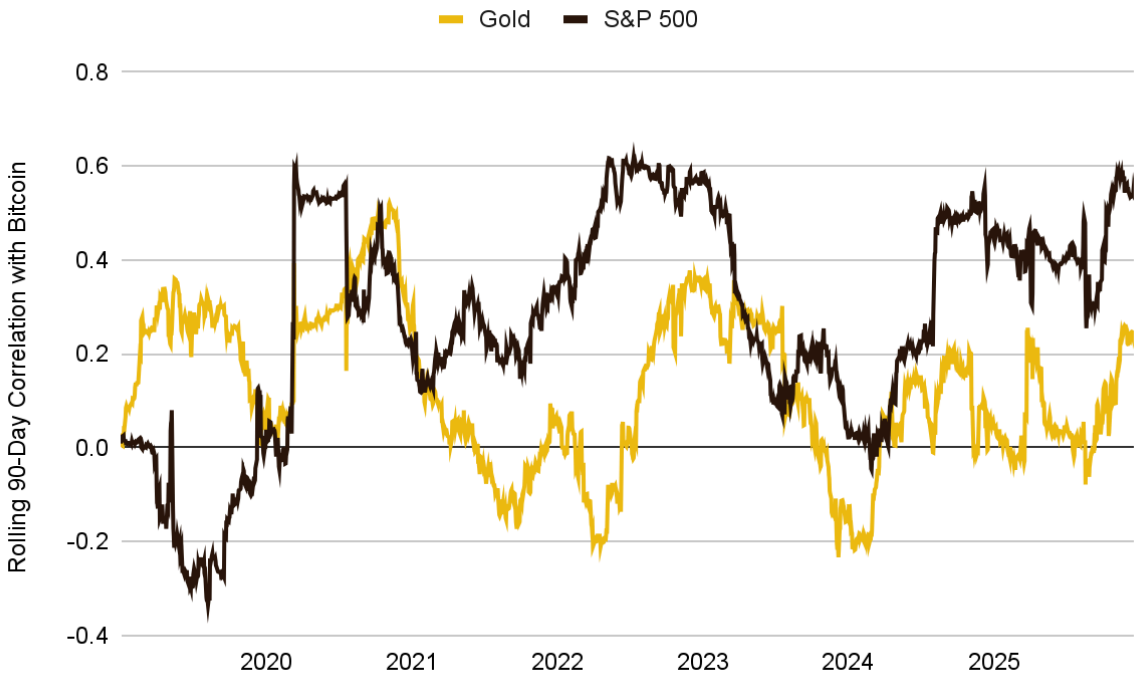


Source: Yahoo Finance, Binance Research, as of December 31, 2025

Bitcoin's correlation to traditional markets became a focal point in 2025, as overlapping investor bases and macro narratives led to closer alignment with equities at times. Notably, during risk-off episodes such as the April tariff shock and the October rate scare, Bitcoin's correlation with the S&P 500 spiked markedly (reaching ~0.6 on a 90-day rolling basis in November). Over the year, Bitcoin's correlation with equities strengthened significantly, averaging **~0.43** with the S&P (versus ~0.27 in 2024). This higher correlation was attributed to the influx of traditional retail and institutional investors who treated crypto more like a risk asset, as well as the influence of macro factors (e.g. Fed policy, AI stock volatility) that simultaneously drove equities and BTC. At the same time, Bitcoin's correlation with classic defensive assets remained modest and volatile – for example, the BTC–gold correlation averaged **~0.1**, and oscillated between positive and negative levels over the year.

Yet, **while short-term risk sentiment now impacts BTC** (blurring the crypto–equity divide during market stress), **over longer horizons BTC continues to exhibit behaviour as a distinct asset**. Its low long-term correlation (historically ~0.2–0.3 to equities) persisted, and in periods of stabilization BTC often decoupled and traded on its own drivers. This was especially evident after the spring sell-off, when BTC began rising even as broader markets fell. Given this dynamic, this year has shown that BTC can provide diversification benefits, but its correlation regime can shift quickly depending on the macro backdrop. Going into 2026, many expect these correlation spikes to be episodic rather than permanent, given Bitcoin's unique supply dynamics and adoption curve.

Figure 18: Short-term correlation between BTC and equities increased in 2025, while correlation with gold fluctuated, even as long-term correlations remained modest



Source: TradingView, Binance Research, as of December 18, 2025

An additional signal of Bitcoin's market maturation in 2025 was the normalization of volatility. Realized BTC volatility converged toward levels comparable with major high-growth technology equities. By year-end, BTC's 90-day realized volatility hovered in the ~35–40% range, broadly in line with many major tech stocks during comparable periods. This compression reflects a deeper liquidity pool, increased institutional participation, and a growing share of longer-horizon capital, reinforcing Bitcoin's transition from being a purely reflexive, retail-dominated asset to one increasingly integrated into global risk portfolios.

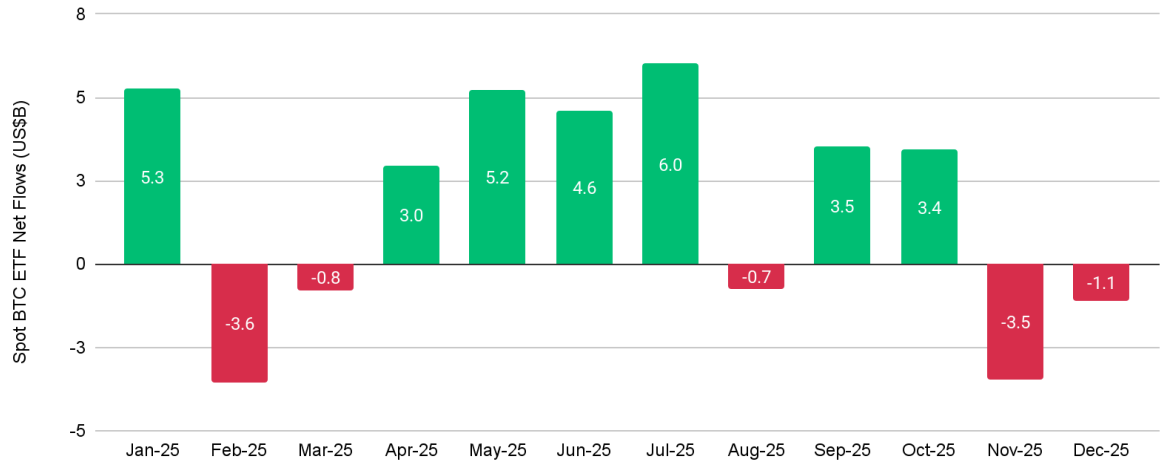
Spot ETFs

One of the defining themes of 2025 was the **scale and persistence of capital flows into U.S. spot BTC ETFs**, which proved substantially larger than early market expectations. While November and December saw weaker flows amid softer risk sentiment and lower year-end liquidity, demand for regulated BTC exposure remained robust. By year-end, net inflows across U.S. spot BTC ETFs exceeded **US$21.3B**, highlighting sustained participation from traditional and institutional investors.

Although ETF flows were **sensitive to macro narratives**, with brief outflows during periods of sharp price weakness, including the October drawdown, they tended to resume quickly once conditions stabilized. As a result, spot ETFs emerged as a recurring source of incremental demand, contributing meaningfully to market liquidity. More broadly, these ETFs have **unlocked new pools of capital for BTC** and become an increasingly important part of price discovery and capital rotation. Flow patterns in 2025 showed a clear relationship with market sentiment: periods of strong inflows often

coincided with positive price momentum, while outflows tended to cluster around drawdowns. In this sense, ETF activity now functions as a visible sentiment barometer for traditional capital entering the BTC market, even if it does not act as a primary price driver.

Figure 19: Spot BTC ETFs have attracted over US$21.3B in net inflows YTD

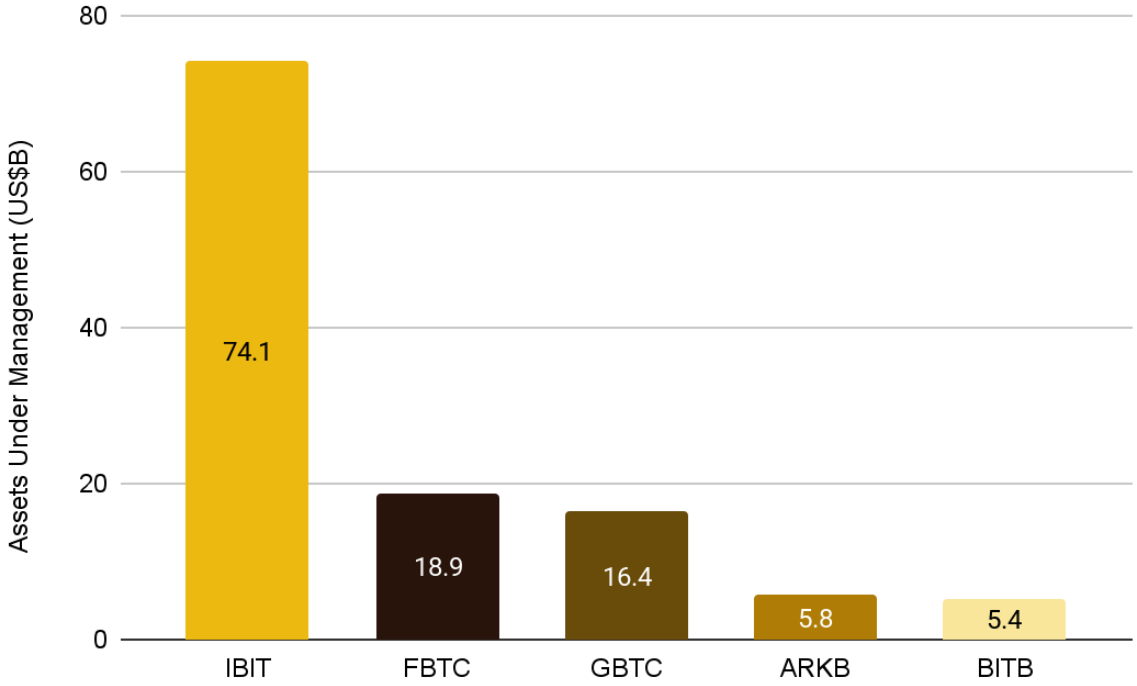


Source: Farside Investors, Binance Research, as of December 31, 2025

A notable feature of the ETF landscape in 2025 was consolidation around the lowest-cost and most liquid products. **BlackRock's iShares Bitcoin Trust (IBIT) dominated flows in 2025**, accounting for the majority of net inflows as competing products saw lighter activity or modest redemptions. Grayscale's GBTC and several smaller issuers struggled to attract comparable demand. This concentration has **increased the market impact of a small number of large ETFs**, whose combined holdings now run into the several-hundred-thousand BTC range, making their creation and redemption activity increasingly relevant for marginal liquidity and short-term volatility.

By year-end, IBIT had attracted near **~US$25B** in net inflows, exceeding the rest of the spot BTC ETF market combined and **ranking among the top ETFs globally** by net inflows in 2025 across all asset classes. This occurred despite BTC ending the year below its earlier highs, highlighting the persistence of demand from longer-horizon investors. Notably, IBIT attracted more net inflows than the largest gold ETF (GLD) over the same period, even as gold delivered strong price gains, suggesting that ETF buyers increasingly view spot BTC exposure as a strategic allocation rather than a pure short-term trade.

Figure 20: BlackRock's IBIT U.S. spot BTC ETF market dominance grew further in 2025



Source: The Block Data, Binance Research, as of January 8, 2026

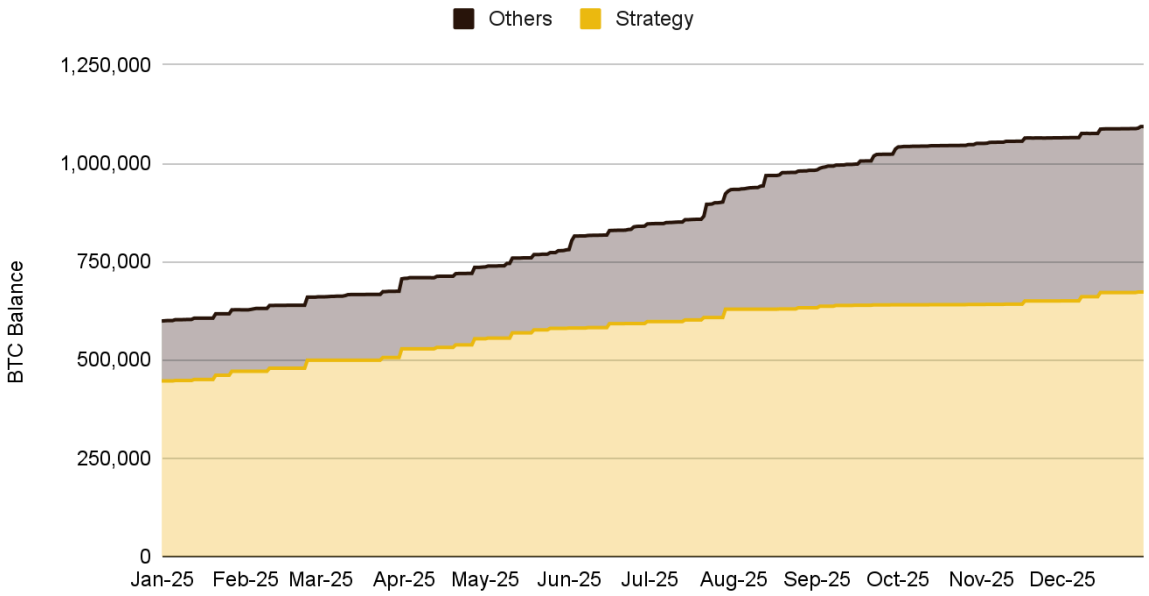
Looking ahead, 2025 marked only the **first full year of U.S. spot BTC ETF availability**, and adoption is likely to broaden further. A key catalyst would be deeper integration of BTC ETFs into major wealth management and retirement platforms, including wirehouse brokerages and defined-contribution plans, which would materially expand the accessible investor base. Internationally, momentum also accelerated, with jurisdictions such as the UK, Australia, and Hong Kong moving toward their own spot BTC ETF offerings, raising the potential for cross-border demand spillovers.

Finally, innovation around ETF structures remains an area to watch. While U.S. issuers have thus far products limited to certain types of exposure, there is growing interest in mechanisms that could introduce yield-enhancing features, such as covered call strategies, collateralized lending overlays or even indirect staking income. Any such developments could further increase the attractiveness of these ETFs, while also deepening their role within traditional portfolio construction.

4.2 Corporate BTC Adoption

Corporate Bitcoin adoption accelerated meaningfully in 2025, marked by a sharp increase in public companies adding BTC to their balance sheets and the continued evolution of the **"Bitcoin treasury" model**. At the time of writing, **194 publicly listed companies** now collectively hold near **~1.1M BTC** (worth approximately US$100B), up from roughly 80-85 companies and ~598K BTC a year earlier. Public companies now hold about **5.5%** of Bitcoin's total supply, surpassing several forecasts that had expected corporate holdings to cross the 1M BTC threshold only in 2026.

Figure 21: Public company BTC holdings soared in 2025, surpassing 1M across 190+ firms (~5.5% of supply)



Source: Bitcoin Treasuries, Binance Research, as of December 31, 2025

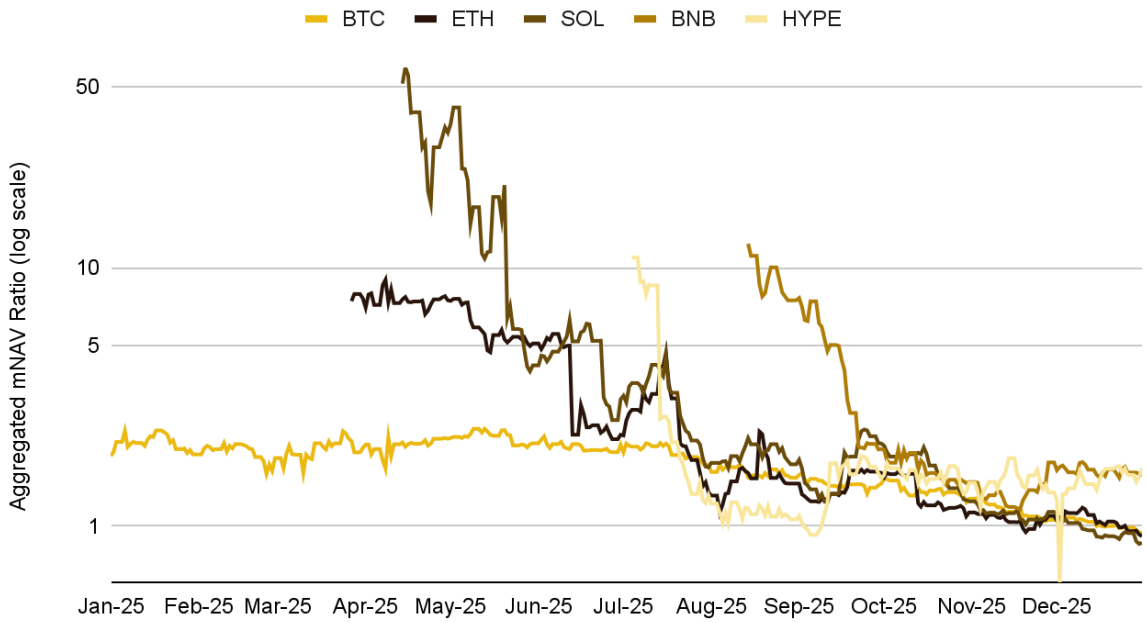
This growth was led by Strategy (formerly MicroStrategy), which remained by far the largest corporate holder. By year-end, Strategy had accumulated **672.5K BTC**, increasing its holdings by roughly 226.1K BTC during 2025 alone. Its position now represents around **3.4%** of total Bitcoin supply. Beyond Strategy, more than **100 new companies** disclosed new BTC holdings of over **268.7K** during the year, spanning multiple sectors and geographies. On average, public companies acquired over **41K BTC per month**, particularly during the first half of the year when prices were rising.

Several structural drivers underpinned this renewed momentum. First, treasury upside and macro considerations played an important role. With BTC reaching new highs in 2025, corporate finance teams increasingly viewed BTC as a way to enhance returns on idle cash, while ongoing inflation concerns, fiat currency volatility, and geopolitical risks kept the **"digital gold" narrative** relevant. Second, regulatory and accounting clarity improved materially. New U.S. accounting rules allowing fair-value treatment of digital assets reduced the asymmetric impairment risk that had previously discouraged balance-sheet adoption, making BTC a more palatable treasury asset for boards. Third, institutional-grade custody and infrastructure continued to mature, with broader availability of insured custody, improved audit familiarity, and growing bank involvement reducing operational friction for corporate holders.

That said, 2025 also highlighted the **risks associated with the growth of Digital Asset Treasury (DAT) holding companies** - in this case firms whose primary strategy is leveraged BTC accumulation. While these entities collectively added substantial BTC to their portfolios, their equity performance diverged sharply from BTC in the second half of the year. As BTC pulled back from its highs, the shares of highly leveraged BTC-focused companies fell more sharply, eroding earlier valuation premiums. Strategy's stock, for example, declined more than 60% from its July peak by late December and traded at a negative NAV premium (~13% discount). Smaller BTC-holding firms that raised capital via

PIPE (private investment in public equity) deals saw similar pressure, with share prices retreating toward issuance levels. Comparable dynamics have begun to emerge among DAT-style vehicles outside of BTC as well, suggesting that leverage-driven treasury strategies across digital assets are similarly sensitive to drawdowns and shifts in risk appetite.

Figure 22: DAT companies are being stress-tested, as their mNAV ratios begin to consolidate



Source: Artemis, Binance Research, as of December 31, 2025

This shift reflected **growing investor caution toward paying large premiums** for publicly traded BTC proxies, particularly amid concerns around dilution, rising leverage costs, and potential index exclusions (with MSCI signaling scrutiny of companies whose balance sheets are heavily crypto-weighted). Additionally, as BTC-heavy treasury stocks underperformed, market sentiment became increasingly sensitive to the scale of their BTC holdings, fueling concerns that prolonged weakness could translate into selling pressure. In practice, however, there was no clear evidence of large-scale liquidations by major corporate treasury holders.

Together, these dynamics produced a clear divergence: BTC holdings on corporate balance sheets reached ATHs, while the equity valuations of BTC-heavy companies underperformed BTC itself. This dynamic may encourage some treasury-focused firms to moderate leverage, diversify funding structures, or emphasize balance-sheet sustainability. Notably, Strategy established a **dedicated U.S. dollar reserve** to cover debt service and preferred dividends for over three years, signaling a move toward longer-term balance-sheet resilience without forced BTC liquidation. As of early January 2026, the reserve totaled ~US$2.25B.

Even so, if the growth trends observed this year persist, the **broader trajectory of general corporate BTC adoption remains positive**. Each additional firm adopting BTC, whether a mid-cap software company or a fintech startup, reinforces a network effect of legitimacy. The pace of adoption will depend on macro conditions and whether market volatility

causes boards to pause, but evidence so far suggests a gradual **“domino effect”** remains in play. As more recognizable firms add BTC to their balance sheets, peer pressure and competitive positioning may continue to support adoption, particularly if BTC re-enters a stronger price trend. In this sense, 2025 may be remembered as the year corporate BTC exposure transitioned from a niche strategy to a broadly considered treasury option.

4.3 Bitcoin Ecosystem

Bitcoin ecosystem developments remained a secondary narrative, as market dynamics were overwhelmingly shaped by holding behavior and TradFi-linked access, particularly through spot ETFs and institutional custody channels. Unlike prior periods marked by ecosystem-led bursts of activity - such as **Ordinals-driven fee spikes** or early **Bitcoin DeFi (BTCFi) expansion** - 2025 did not produce a dominant on-chain or Layer 2 (L2) adoption cycle. Instead, the year was characterized by continued experimentation, infrastructure maturation, and selective milestones, with most activity laying groundwork rather than driving near-term demand or usage.

Scaling Without a Breakout

Bitcoin L2s and scaling efforts in 2025 reflected incremental technical footsteps rather than fully-fledged adoption-led growth. Progress remained firmly in a development phase, with limited user adoption and modest economic activity. The focus shifted away from throughput narratives toward reducing trust assumptions and improving Bitcoin-native liquidity designs, rather than competing directly with smart-contract L1s.

A notable milestone came from the Stacks ecosystem, where the removal of the sBTC supply cap in September marked a transition from constrained testing toward open minting and redemption of BTC-backed assets within the network. While usage remained small relative to Ethereum-based DeFi, the change materially lowered barriers for Bitcoin-native liquidity experimentation.

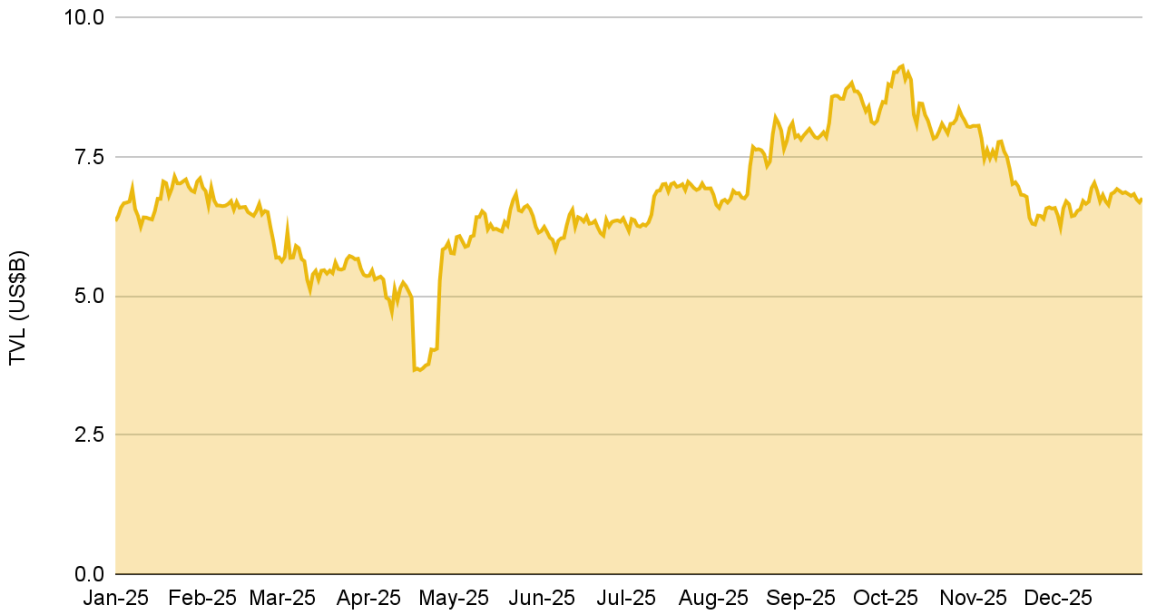
In parallel, research around BitVM progressed from conceptual work toward early implementations. Projects such as Bitlayer demonstrated Bitcoin-anchored bridges and rollup-style constructions using BitVM-based fraud-proof frameworks. Adoption remained limited, but 2025 established BitVM as a potentially credible technical direction for extending Bitcoin’s functionality without altering the base protocol.

Overall, 2025 did not deliver a breakout Bitcoin L2, but it narrowed the design space around Bitcoin-anchored execution, modular scaling, and non-custodial bridges, setting the stage for clearer winners to emerge in future cycles. The key question going forward is whether these L2s can convert into sustained usage. In particular, the market will test whether BTC-native bridges and execution layers can attract durable liquidity without custodial wrappers or incentive mechanisms, and whether the ecosystem begins to consolidate around a small number of credible designs rather than fragmenting further.

BTCFi in Search of Sustainable Traction

BTCFi remained one of the most discussed themes in Bitcoin's orbit, but 2025 was more about groundwork and experimentation than broad user migration. Despite an up-and-down year, BTCFi TVL ended at approximately **US$6.8B**, representing a modest **6.5%** increase YTD. **The key signal is still penetration**, where progress here was characterized by early momentum followed by stabilization, rather than full-fledged expansion. **Most BTC remains idle relative to supply**, and BTCFi remains underutilized in proportion to Bitcoin's value. Some industry commentators continue to cite multi-billion-dollar BTCFi TVL figures, but the more relevant point is that adoption remained resilient during periods of price weakness, while still early and sensitive to trust assumptions, user experience, and regulatory framing.

Figure 23: BTCFi TVL had an up-and-down year but ended at US$6.8B, modestly up 6.5% YTD



Source: DefiLlama, Binance Research, as of December 31, 2025

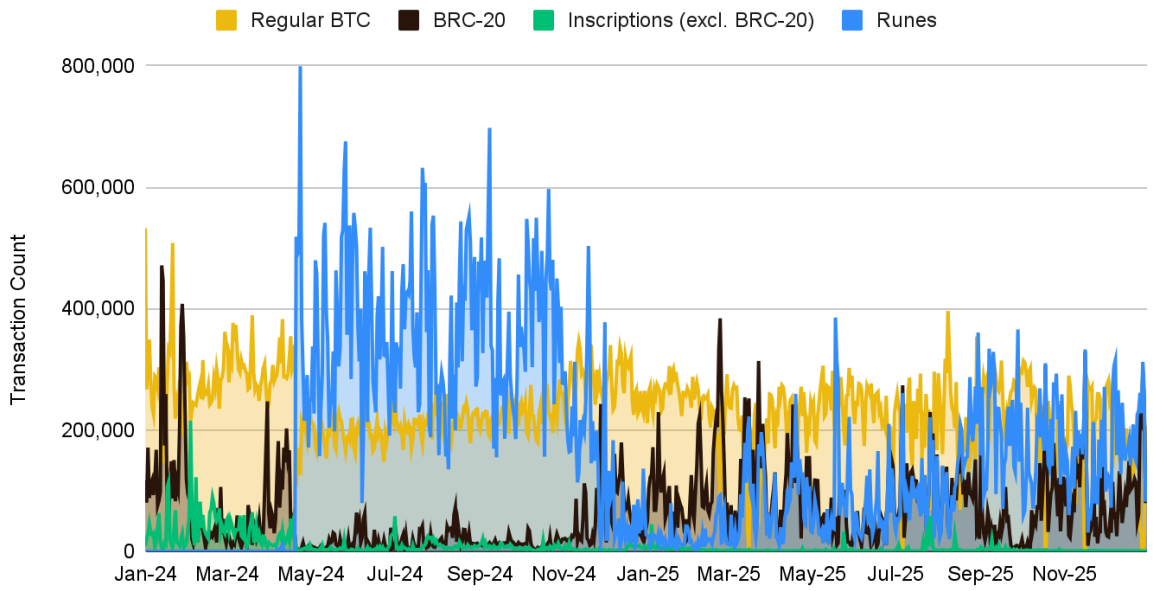
Importantly, the **internal composition of BTCFi shifted** during the year. Rather than speculative yield strategies gaining traction, 2025 saw greater emphasis on Bitcoin as economic security and collateral, most notably through staking frameworks. Babylon's Genesis launch marked a meaningful step toward using BTC to secure external networks, expanding Bitcoin's role beyond passive holding without requiring base layer changes.

Despite these developments, BTCFi did not become a material driver of Bitcoin demand, fees, or price formation in 2025. Most BTC liquidity continues to remain idle or accessed primarily through custodial and TradFi-linked structures. While the opportunity to make BTC productive remains substantial, adoption is still early. Looking ahead, BTCFi's evolution will hinge on whether security- and collateral-based use cases can scale beyond early adopters and integrate more meaningfully with institutional or settlement-driven flows. Absent that, BTCFi risks remaining a niche extension alongside holding- and ETF-based exposure.

Base Layer Activity Normalizes

Token activity on Bitcoin's base layer cooled materially from prior peaks, but 2025 was not a straight-line unwind. After the peak phase in 2024 faded, Runes and BRC-20 reappeared in intermittent bursts throughout 2025, at times briefly overtaking regular BTC transfers by transaction count, while non-BRC-20 inscriptions remained comparatively muted. These spikes reflected **short-lived speculative cycles** rather than a return to sustained base layer demand.

Figure 24: Bitcoin transaction share has shifted back toward regular BTC overall, with Runes and BRC-20 contributing intermittent spikes



Source: Dune Analytics (@murchandamus), Binance Research, as of December 31, 2025

The partially renewed activity in Runes and BRC-20 during 2025 was **driven by cost conditions and transaction design rather than a step-change in adoption**. Periods of lower fee pressure made high-frequency, low-value token interactions economical, particularly for standards that mechanically generate multiple on-chain transactions per unit of economic activity. The growing use of sub-sat fee transactions further enabled low-cost churn, allowing transaction counts to rise even as active and new address growth remained relatively flat. This effect is more visible in token standards with inherently noisier transfer patterns, helping explain why both Runes and BRC-20 - historically the dominant share of inscription traffic - reappears in transaction-share data without implying sustained economic adoption.

Importantly, these bursts did not translate into persistent congestion. While short-lived spikes periodically lifted transaction counts, they were absorbed without a sustained increase in baseline mempool pressure or transaction fees over the course of the year. Outside of episodic surges, Bitcoin's blockspace in 2025 remained largely and consistently dominated by standard BTC transfers, reinforcing a broader **normalization in transaction composition** even as BTC's price advanced.

This pattern underscores the **structural constraints of Bitcoin's base layer**. While capable of supporting novel token formats, fragmented tooling, inefficient transfer mechanics, and limited programmability constrain the viability of sustained, high-volume token activity on Layer 1 (L1). The intermittent resurgence of Runes and BRC-20 inflated transaction counts without meaningfully expanding the active user base, fee generation, or economic throughput.

The broader implication is that **Bitcoin's market value and network security continued to strengthen even as general base layer activity remained flat**. If tokenization and programmable use cases persist, they are more likely to consolidate in upper-layer or external execution environments capable of supporting BTC-linked assets without reintroducing sustained L1 congestion. The key signal to monitor is whether any standardized framework for BTC-linked assets can gain traction in programmable environments while preserving credible trust minimization.

Fees, Miner Economics, Security and Development

Fee Dynamics and Miner Economics

With speculative activity fading, 2025 reinforced that Bitcoin's fee environment remains largely event-driven. Ecosystem developments across L2s, BTCFi, and tokens did not generate persistent block-space demand or materially alter miner revenue dynamics. Fees stabilized at low levels, leaving **miner economics primarily linked to BTC price** rather than usage intensity. This outcome underscored a recurring structural reality: **ecosystem expansion alone has yet to translate into sustained Bitcoin fee markets**.

Despite the limited contribution from fees, miners continued to explore incremental revenue opportunities. Throughout the year, merge-mined sidechains, emerging L2 settlement concepts, and early discussion around Bitcoin-adjacent MEV-like dynamics gained some attention. While Bitcoin's design constrains traditional MEV relative to smart-contract platforms, awareness increased around how transaction ordering, inscription-related block-space auctions, and potential L2 fee-sharing mechanisms could, over time, modestly influence miner incentives. None of these developments, however, had a material impact on miner revenues in 2025.

Looking ahead, the key question is whether future ecosystem growth, particularly via L2 settlement, security-sharing models, or asset issuance, can meaningfully increase base layer fee demand, or whether fees will remain episodic and tied to bursts of speculative activity.

Security Considerations and Post-Quantum Readiness

Beyond protocol economics, 2025 also saw increased attention on Bitcoin's cryptographic security in the context of advances in **quantum computing**. While quantum-related risks remain non-imminent, they have become more relevant for institutions assessing Bitcoin as a multi-decade asset, particularly as regulators in the U.S. and EU began outlining **post-quantum cryptography (PQC)** migration expectations for critical infrastructure over the coming decade.

The primary theoretical quantum risk to Bitcoin lies in **transaction signature security** rather than mining efficiency. Bitcoin's reliance on ECDSA for signatures means that

sufficiently powerful quantum systems could, in theory, compromise exposed public keys, particularly in reused or legacy script types. While the probability of such scenarios remains low, a meaningful share of BTC supply would ultimately benefit from migration to quantum-resistant schemes under a future-ready security model.

Importantly, **mitigation efforts** have focused on preparation rather than urgency. Several technical proposals and research directions have emerged to address this risk in a gradual, opt-in manner. These include BIP-360 (Pay-to-Quantum-Resistant-Hash), which keeps public keys off-chain until spend time; BIP-347 (OP_CAT re-enablement) to support hash-based one-time signatures; and Hourglass-style mechanisms, which rate-limit spends from vulnerable outputs to stabilize transition periods. Moreover, practical measures around address hygiene, handling of exposed UTXOs, and wallet-level tooling are increasingly viewed as low-friction ways to improve quantum readiness without forcing disruptive protocol changes.

As with prior security transitions, the binding constraint is less technical feasibility and more coordination, tooling, and user readiness (areas that continued to progress quietly in 2025).

Development and Governance

Protocol development remained active despite the absence of consensus changes. **No consensus upgrades were activated on Bitcoin in 2025**, though developer activity stayed elevated across multiple research tracks, including covenants, script enhancements, off-chain computation, and cryptographic tooling. Progress was concentrated in testing and experimentation rather than deployment, consistent with Bitcoin's conservative governance model.

Innovation continued to favor opt-in and off-chain approaches, prioritizing extensibility without compromising base layer robustness. The longer-term relevance of Bitcoin native developments will depend on whether any proposal matures into a broadly supported upgrade case. In the absence of clear economic necessity or sustained ecosystem pressure, activation timelines are likely to remain gradual, reinforcing Bitcoin's long-standing preference for stability over rapid iteration.

05 / Protocol Layer

In 2025, the Layer 1 (L1) landscape became more polarized, with activity and relevance **consolidating around a small number of networks** that demonstrated sustained usage, clear economic function, or institutional accessibility. Ethereum remained the largest L1 by market value, developer activity, and DeFi, in a year shaped by the Pectra and Fusaka upgrade cycle. Solana recorded one of the strongest operational years, translating high throughput and consumer-oriented applications into sustained on-chain activity, while also becoming the third crypto asset to receive approval for a U.S. spot ETF. BNB Chain also had strongest outcomes in 2025, sustaining high retail activity while expanding across derivatives, stablecoins, and real-world assets, alongside strong relative performance of its native token. Outside this core group, outcomes across other alternative (alt) L1s were more mixed, with progress concentrated in specific niches rather than broad ecosystem expansion.

Figure 25: Summary of key metrics for major L1s as of the end of 2025

	Ethereum	BNB	Solana	Tron	Avalanche	Sui
Market Cap (US$B)	358.6	118.5	70.6	27.1	5.4	5.4
Trading Volume (US$B)	16.5	2.5	3.3	0.4	0.2	0.5
2025 Revenue (US$B)	0.25	0.027	0.18	3.5	0.008	0.017
Daily Txs (M)	2.1	18.7	238.5	11.0	2.8	3.8
Daily Active Addresses (M)	0.7	4.5	2.1	3.0	0.03	0.6
Average Tx Fee (US$)	0.15	0.04	0.002	0.63	0.002	0.003
Staking Ratio	29.7%	18.4%	68.6%	46.1%	45.9%	75.2%
Total Developers	10,760	1,161	4,036	465	690	1,070
DeFi TVL (US$B)	68.8	6.6	8.0	4.4	1.3	0.9

Source: CoinMarketCap, Token Terminal, Artemis, Block Explorers, stakingrewards.com, Electric Capital, DeFiLlama, Binance Research, as of December 31, 2025

By year-end, chain metrics revealed a clear **divergence between scale, usage, and monetization**. Ethereum continued to dominate in aggregate value, with a market capitalization of over **~US$350B** and **~US$68.8B** in DeFi TVL, alongside the largest developer base at roughly **~10,760** developers. However, Ethereum's base layer processed only **~2.1M** transactions per day, highlighting its relatively limited execution footprint in 2025.

In contrast, Solana consistently handled **~100M+** daily on-chain transactions - ending the year at **238.5M** - and supported over **2.1M** daily active addresses, reflecting strong consumer and application-driven demand. BNB Chain similarly sustained high activity, with **~18.7M** daily transactions and approximately **~4.5M** daily active users by year-end, underscoring its mass-market reach. Developer counts outside Ethereum and Solana remained materially smaller, with BNB Chain at ~**1,161** developers, Sui at **~1,070**, and Avalanche at **~690**, reinforcing the continued concentration of ecosystem development among a small number of L1s.

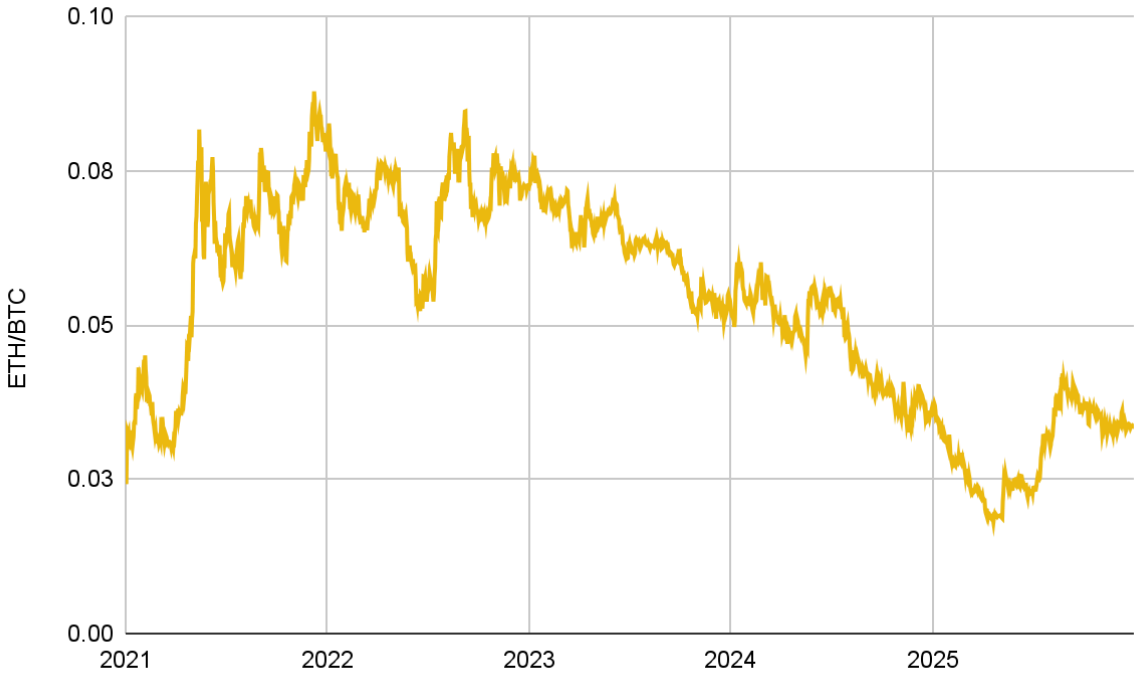
Protocol revenue dynamics in 2025 further clarified where durable economic demand resided. Tron once again stood out as the highest-revenue L1, generating over **~US$3B**, driven overwhelmingly by stablecoin settlement flows. Solana's revenue peaked earlier in the year during periods of heightened speculative activity, before normalizing toward year-end at approximately **~US$180M** - still ranking among the highest outside of Ethereum and Tron.

Despite elevated transaction volumes across several networks, fee generation and token performance remained uneven, with many alternative L1 assets underperforming BTC over the year. This divergence reinforced a central 2025 takeaway: while throughput and activity mattered, sustained **protocol-level value capture remained concentrated** in networks tied to recurring stablecoin and payment flows, large retail distribution, institutional-grade access, or the ability to capture durable application narratives (such as DEXes, prediction markets, RWAs, or launchpads/memecoins).

5.1 Ethereum

Ethereum's 2025 was a year of several key upgrades but also asset-level scrutiny. ETH underperformed BTC on a relative basis for much of the year, with the ETH/BTC ratio spending extended periods near five-year-low averages and reinforcing a dynamic where BTC dominated market and institutional attention. The ETH/BTC ratio slid to the **low-0.02s** by mid-year before staging only a partial rebound into Q3 that failed to hold into year-end. The market message was clear: even with Ethereum retaining L1 leadership in DeFi depth and developer activity, **marginal risk appetite continued to concentrate in BTC's macro and ETF-led narrative** for most of the year.

Figure 26: The ETH/BTC ratio saw sharp swings in 2025, including a five-year low, and ended the year at 0.033



Source: Glassnode, Binance Research, as of December 31, 2025

The persistence of ETH/BTC weakness through 2025 is notable because it coincided with no corresponding deterioration in Ethereum's network role. Instead, the performance reflects a **repricing of what "fundamentals" mean for Ethereum** in an evolving rollup-centric architecture. As execution activity continued shifting off mainnet, investors increasingly anchored ETH valuation to fee burn, staking yield, and the degree to which L2 usage ultimately translates into ETH demand. In that framing, 2025 forced a tougher comparison versus networks with simpler economic stories: payment-settlement chains that directly monetize flows, or high-throughput chains where usage and token demand appeared to move more tightly together.

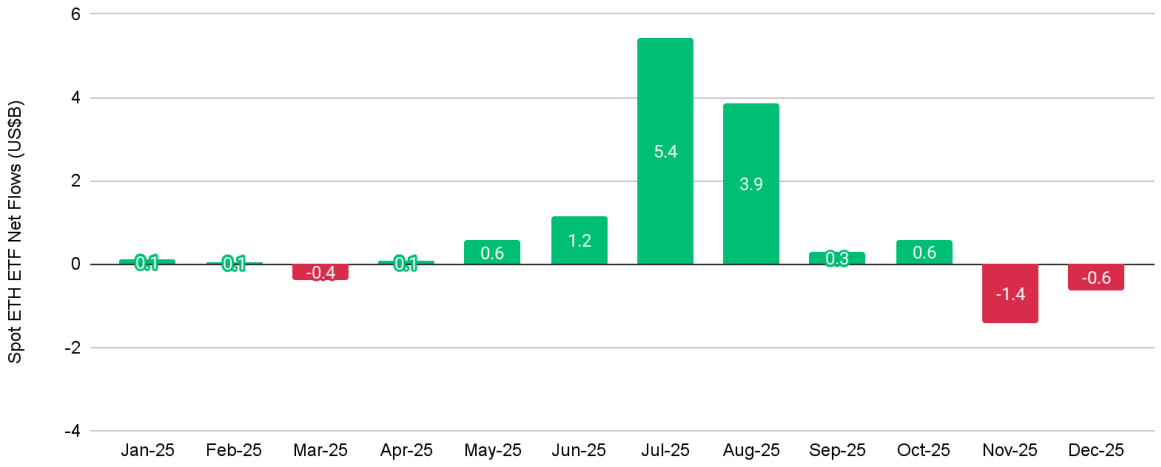
ETH also showed greater sensitivity to macro risk resets than BTC, repeatedly stalling or reversing during periods of volatility. This reinforced ETH's positioning as a higher-beta institutional allocation, with renewed inflows more dependent on easing financial conditions, risk appetite, and balance-sheet capacity than BTC's comparatively more defensive market perception.

Institutional ETH Demand and Regulatory De-Risking

Institutional engagement with Ethereum broadened materially in 2025 and did so across multiple vectors, not just ETFs. Spot ETH ETFs continued to grow throughout the year, with cumulative net inflows increasing steadily and secondary-market liquidity deepening. While ETH ETFs did not fully match BTC ETFs in cumulative size, the gap narrowed meaningfully in 2025, particularly during periods where ETH-specific regulatory clarity improved. Importantly, ETH ETF ownership diversified beyond hedge funds and proprietary trading desks to include registered investment advisers and other

long-horizon investors, indicating a growing shift toward structural allocation for ETH as an asset class.

Figure 27: Spot ETH ETFs have attracted more than US$9.7B in net inflows, with the bulk coming mid-year



Source: Farside Investors, Binance Research, as of December 31, 2025

Beyond ETFs, regulation also boosted Ethereum's staking value. The cleanest structural catalyst was the SEC Division of Corporation Finance statement on protocol staking (May 29, 2025), which clarified the view that certain protocol-level staking activities tied to network consensus are not securities transactions within the scope addressed. This mattered because it **separated Ethereum's native staking mechanics from regulatory pressures** applied to certain staking-as-a-service structures, reducing a lingering overhang for many investors that value ETH as a yield-bearing asset.

Corporate ETH adoption also expanded in structure and implementation, with the number of participating firms increasing to over **60** by year-end. Several publicly listed firms adopted **ETH-centric treasury strategies**, explicitly staking holdings rather than treating ETH as idle balance-sheet exposure. This distinction is critical: unlike BTC treasuries, which are primarily passive, ETH treasuries increasingly functioned as yield-generating infrastructure exposure. While still early-stage relative to BTC corporate adoption, this development broadened ETH's institutional narrative beyond price appreciation to include on-chain cash flow and participation in network security.

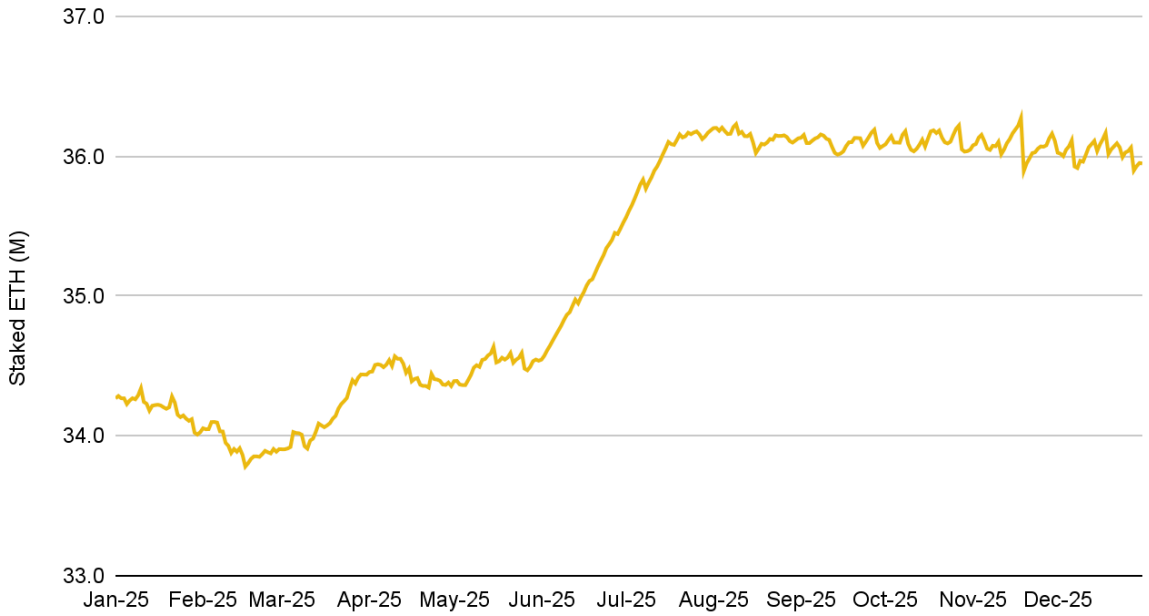
Alongside these developments, real-world asset (RWA) tokenization emerged as a more durable source of structural demand. By year-end, Ethereum retained a majority share of tokenized asset issuance, including treasuries, on-chain funds, and regulated yield products. This reinforces Ethereum's role as a prime settlement layer for institutional tokenization, supporting steadier blockspace demand that is less dependent on speculative trading activity and less correlated with market cycles.

Pectra and Fusaka

The Pectra upgrade in May 2025 represented Ethereum's most consequential protocol milestone since the Merge, but its significance lay less in raw throughput and more in structural improvements. On the staking side, the **increase in maximum effective balance** per validator (**from 32 ETH to 2,048 ETH**) fundamentally altered the economics of large-scale participation. By enabling consolidation, Ethereum reduced operational overhead, alleviated network messaging strain, and improved the feasibility of future consensus upgrades that would have been increasingly constrained by an ever-expanding validator set.

This resulted in a **positive impact in Ethereum's on-chain staking metrics**: total staked ETH climbed to new highs and ended the year at **35.9M**, or approximately **29.8%** of circulating supply. The increase points to rising conviction in ETH's yield potential and network security, while further reducing its market liquid supply. This change also reframed decentralization debates in 2025. Validator count growth alone was no longer treated as a proxy for decentralization; instead, attention shifted toward stake distribution, operational resilience, and upgrade viability. Pectra implicitly acknowledged that unmanaged validator proliferation could become a bottleneck rather than a strength, particularly as Ethereum advances toward more demanding roadmap items.

Figure 28: Staked ETH rose to new highs in 2025, ending the year at ~35.9M ETH, or roughly 29.8% of circulating supply



Source: Beaconchain, Binance Research, as of December 31, 2025

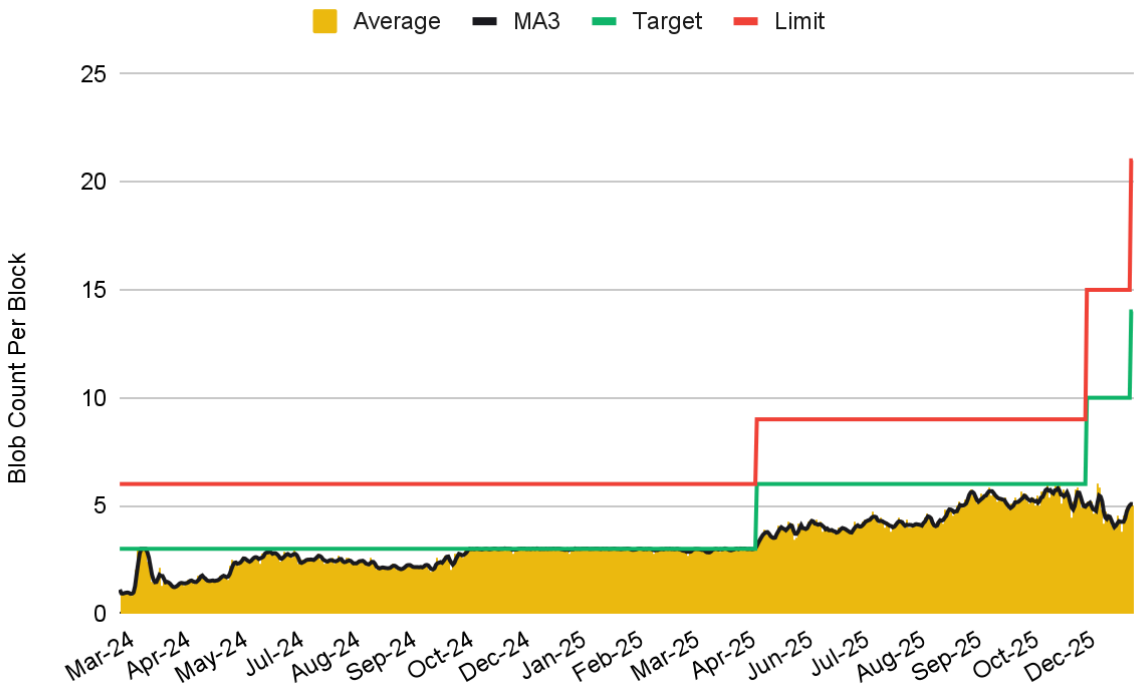
However, 2025 also surfaced a second-order constraint in Ethereum's staking architecture: exit liquidity. During periods of stress, **validator exit queues** extended from hours to weeks, temporarily trapping liquidity and complicating risk management for large staked positions. While manageable under normal conditions, these dynamics highlighted the importance of liquidity buffers, particularly for institutional staking exposure.

Pectra also introduced **account abstraction enhancements** that, while not yet fully visible in 2025 usage metrics, carry strategic significance. By allowing externally owned accounts to temporarily execute smart contract logic, Ethereum reduced friction around gas sponsorship, transaction batching, and alternative authentication methods. These changes improve wallet flexibility and usability, particularly for institutional and enterprise use cases where operational complexity and UX have historically limited adoption.

On the data availability (DA) front, Pectra **expanded Ethereum's blob capacity** by raising both blob targets and limits, removing a binding constraint to rollup operations. Prior to the upgrade, sustained L2 activity frequently pushed blob usage close to target levels, causing blob fees to respond sharply to incremental demand. This forced rollups to operate with limited headroom, increasing data posting costs and introducing timing sensitivity around when batches were submitted to the base layer. Following the upgrade, blob usage moved structurally below both target and limit thresholds. This created durable headroom for rollups to post data consistently without triggering fee escalation. As a result, rollups were able to smooth batch submission schedules, reduce latency risk, and operate with greater cost certainty. **L2 networks were the primary beneficiaries**, as lower and more stable DA costs translated directly into cheaper and more predictable transaction fees for end users.

This headroom was reinforced later in the year by **Fusaka**, which further expanded blob capacity even though utilization had not yet reached prior ceilings. Blob targets and limits were raised in steps — from 3/6 earlier in the year, to 6/9, then to 10/15, and finally to **14/21** by year-end — while average blob usage (MA3) peaked around **~5–6 blobs per block**, remaining well below both target and limit levels. Capacity was therefore expanded ahead of demand rather than in response to congestion, signaling a deliberate shift toward maintaining persistent spare capacity at the DA layer.

Figure 29: Blob capacity increases removed binding constraints, allowing sustained L2 data posting to scale well below target and limit thresholds



Source: Dune Analytics (@hildobby), Binance Research, as of 8 January, 2026

However, this expansion surfaced a **second-order dynamic** that became increasingly central in the second half of the year. Blob supply grew faster than rollup demand, **compressing blob fees** and **reducing the base layer's direct fee contribution from L2 activity**. As execution continued to migrate to rollups, debates around fee routing, blob pricing, MEV capture, and L2 alignment moved to the forefront of Ethereum's macro narrative. The market increasingly priced the risk that Ethereum could continue to scale operationally while ETH's direct economic linkage to activity weakened, shifting Ethereum's primary challenge away from competition with alt-L1s toward the internal tension created by its own scaling success.

Fusaka also introduced a set of targeted adjustments to manage both the economics and risk profile of this expanded capacity. The introduction of a **blob fee floor** via EIP-7918 prevented blob fees from collapsing toward zero during periods of low demand, preserving a baseline level of fee contribution from rollup activity. In parallel, the activation of **PeerDAS** (EIP-7594) enabled DA sampling that significantly reduced bandwidth and storage requirements for nodes, increasing Ethereum's long-term throughput ceiling while preserving decentralization.

Beyond economics, Fusaka strengthened Ethereum's upgrade flexibility and execution layer foundations. **Blob Parameter Only (BPO)** change paths allowed blob targets and limits to be adjusted without full hard forks, reducing coordination risk and improving responsiveness to shifts in rollup demand. Alongside these changes, execution layer optimizations lowered gas costs and improved computational efficiency for complex workloads, laying important groundwork for future transitions toward Verkle trees and more stateless node architectures.

In macro terms, Fusaka marked the transition from "scale first, ask questions later" to "scale, but preserve investability". For further details, check out our report on this topic, Pectra and Fusaka Upgrades: What does it mean for Ethereum?

Glamsterdam

Looking ahead, Ethereum's next major planned upgrade, **Glamsterdam**, is targeting a 2026 release and remains in active design and governance discussion. While the final scope is still evolving, the upgrade is intended to build on Pectra and Fusaka by improving execution efficiency, scalability, and decentralization resilience. Unlike earlier upgrades that primarily expanded capacity, Glamsterdam is oriented toward consolidating Ethereum's execution and sequencing architecture in response to risks that became more visible in 2025, particularly MEV concentration, latency constraints, and the demands of institutional-scale usage.

A central focus of Glamsterdam is deeper protocol-level proposer–builder separation (PBS). By embedding PBS more directly into the protocol, Ethereum aims to reduce builder centralization risk, mitigate censorship vectors, and limit the systemic impact of MEV extraction on block construction. This reflects a broader shift in priorities: MEV is no longer treated as a peripheral concern, but as a core protocol-level risk as staking participation, validator consolidation, and institutional activity continue to scale.

Glamsterdam also emphasizes execution efficiency over raw throughput. Proposals under discussion include expanded access lists and execution-layer changes that enable greater transaction parallelization, increasing effective throughput without raising block size or

hardware requirements. In parallel, reductions in slot time are being evaluated to lower confirmation latency, improving performance for rollups, financial applications, and other latency-sensitive workflows that increasingly dominate Ethereum activity.

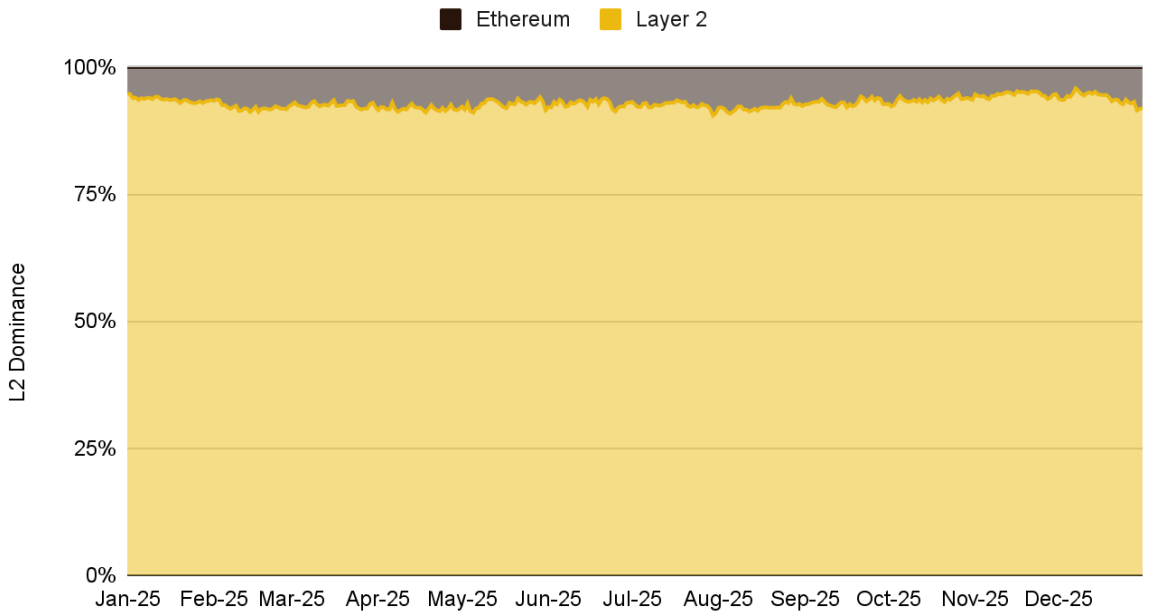
Collectively, Glamsterdam reflects Ethereum's continued shift toward incremental, modular upgrades that improve performance and robustness without disrupting existing applications.

Layer 2

Ethereum's L2 ecosystem remained the **dominant driver for its network activity**, but the **nature of that dominance shifted** meaningfully in 2025. While L2s continued to absorb the overwhelming majority of execution, the sector transitioned from a phase defined by incentive-led growth into one increasingly shaped by economic sustainability, capital efficiency, and alignment with Ethereum's base layer economics. This evolution is critical to understanding Ethereum's broader macro positioning: scaling success was no longer the question - who captures value, and under what conditions, became the central issue.

Among the largest L2s analyzed, rollups consistently accounted for over **90%** of Ethereum-related transaction activity by year-end. To put in perspective, this even understates the extent of execution migration, as including a broader set of L2s would only push that share higher. However, this headline figure also masks a growing divergence beneath the surface. **Activity and fee generation became increasingly concentrated** among a small number of players with strong distribution and organic demand, while a long tail of L2s struggled to retain users once incentive programs faded.

Figure 30: L2 dominance consistently remained above 90% in 2025

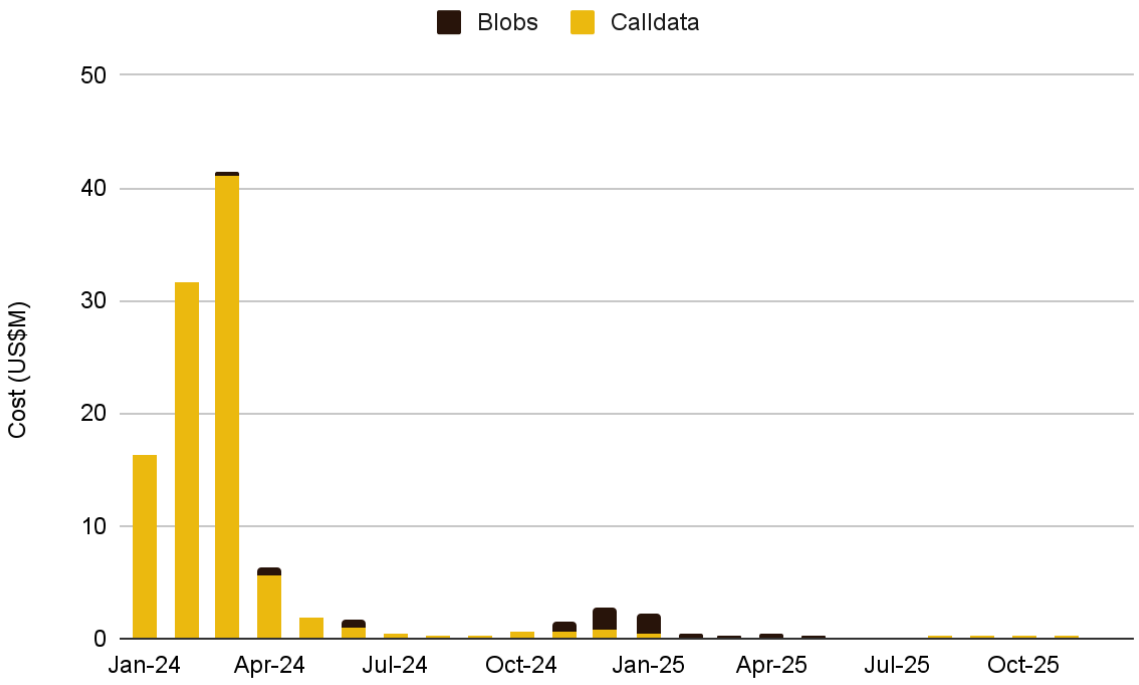


Note: Layer 2 data reflects a selected set of major rollups
Source: Dune Analytics, Binance Research, as of December 31, 2025

Another consequential L2 narrative was not throughput, but value flow. As rollups optimized blob usage and compressed posting costs, Ethereum's DA revenue declined, particularly during low-demand periods. While this was directionally good for users and rollup margins, it did expose a structural asymmetry: Ethereum absorbed the security and coordination burden of scaling as L2s captured the majority of user-facing fees. By mid-2025, Ethereum's monthly DA fee revenue had fallen sharply, intensifying debate around whether the base layer risked becoming **economically commoditized** despite growing usage.

This tension directly informed protocol-level responses later in the year. As stated earlier in the report, the Fusaka upgrade's introduction of a blob fee floor marked a shift away from fully subsidized L2 DA toward **preserving economic participation for the base layer**, while remaining consistent with Ethereum's rollup-centric roadmap. Importantly, this move reframed the debate: Ethereum was no longer relying on voluntary alignment from L2s alone, but asserting pricing power at the protocol level.

Figure 31: Ethereum's DA fee collections from rollup activity fell to just US$110.5K in December, compared to US$2.7M in the same month last year



Source: Dune Analytics (@niftytable), Binance Research, as of December 31, 2025

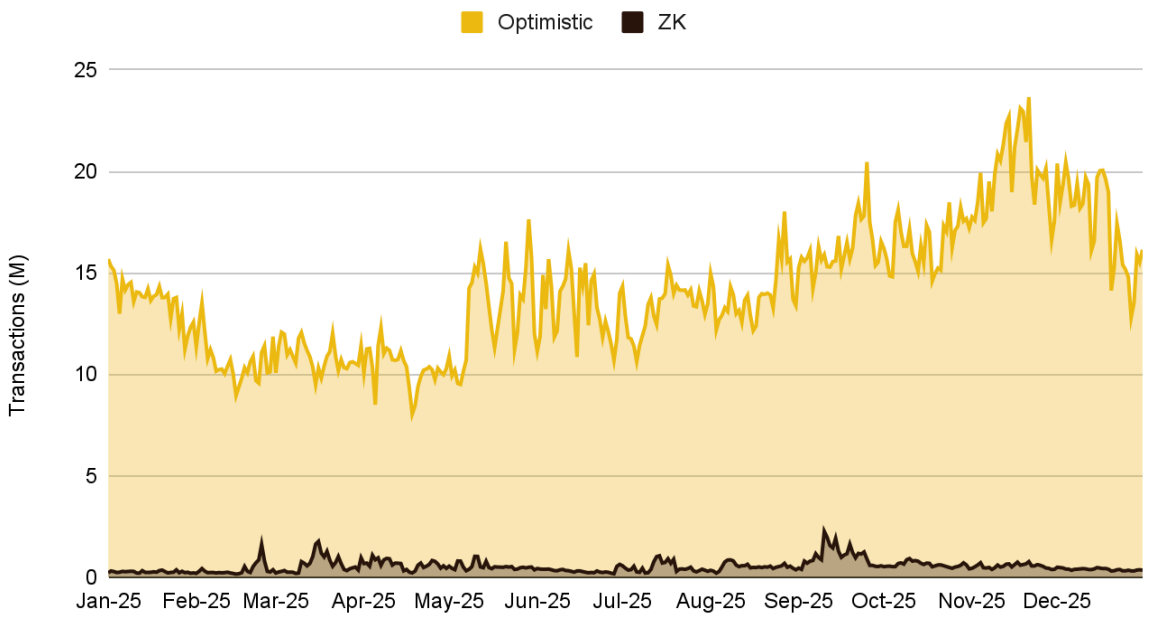
The largest contributors to the L2 growth trend continue to be optimistic rollups, which significantly lead in both user activity and liquidity depth. In contrast, zero-knowledge (ZK) rollups made continued architectural progress but faced higher cost structures and a slower path toward comparable liquidity.

In particular, Base emerged as the standout beneficiary of 2025's retail and on-ramp dynamics. Tight integration with Coinbase, frictionless fiat access, and consumer-facing applications allowed Base to consistently sustain high daily activity without heavy fee subsidies. Crucially, Base demonstrated that **L2 scale can coexist with positive unit**

economics, generating transaction fees well in excess of its DA costs paid to Ethereum. This positioned Base less as a speculative rollup and more as a credible competitor to mid-tier alt-L1s for retail flows.

Arbitrum maintained its position as the largest rollup by total value secured (TVS), though liquidity growth flattened as capital fragmented across an expanding universe of app-specific rollups, including those built on the OP Stack. OP Mainnet increasingly ceded activity to its broader Superchain ecosystem, illustrating how modular scaling can dilute activity at the canonical chain level even as aggregate usage grows. The key takeaway from 2025 was that optimistic rollups able to monetize distribution and charge non-zero fees without incentives emerged stronger, while others increasingly resembled infrastructure providers competing on thin margins.

Figure 32: Optimistic rollups continue to dominate the L2 market, accounting for over 97% of daily L2 transactions



Note: Data reflects a selected set of major rollups
Source: Dune Analytics, Binance Research as of December 31, 2025

On the other end of the L2 spectrum, ZK rollups made tangible technical progress in 2025, but economic constraints continued to limit their competitive positioning. Starknet's SN Stack, ZKsync's Atlas upgrade, and Scroll's progression to Stage 1 decentralization all represented meaningful architectural milestones. However, prover cost intensity and operational complexity remained structural headwinds, particularly relative to optimistic rollups with simpler execution paths. Despite improvements in throughput and latency, most **ZK rollups struggled to translate technical gains into durable liquidity**.

TVL and fee generation remained an order of magnitude below leading optimistic rollups, reinforcing a key 2025 insight: **technical superiority alone does not guarantee economic relevance**. Many users and developers continue to gravitate toward rollups that minimize friction and deliver immediate UX improvements, even if trust assumptions remain imperfect. To combat this, many **ZK rollups increasingly pivoted** toward niche

positioning: payments, enterprise settlement, or privacy-adjacent use cases, rather than direct competition for general-purpose DeFi liquidity. This reality became most explicit with Polygon's decision to sunset its zkEVM, underscoring that **sustained losses at the protocol layer were no longer acceptable** in a capital-constrained environment.

Looking beyond the optimistic-ZK dynamic, the second-order story that mattered in 2025 was fragmentation, especially as the L2 space crossed a structural threshold. With 100+ rollups and appchains live or in development, **fragmentation emerged as a defining macro constraint**. Stack proliferation made deployment easier, but it also diluted liquidity and made interoperability, sequencing standards, and capital stickiness more important than raw chain count. While efforts to solve this were progressed, overall L2 capital efficiency remained constrained. Cross-rollup liquidity was still largely mediated by bridges with varying trust assumptions, and composability across L2s remained limited.

Figure 33: Major Ethereum L2s by Type, Sequencer Status, TVS, FDV, Token Float, Fees, Active Users

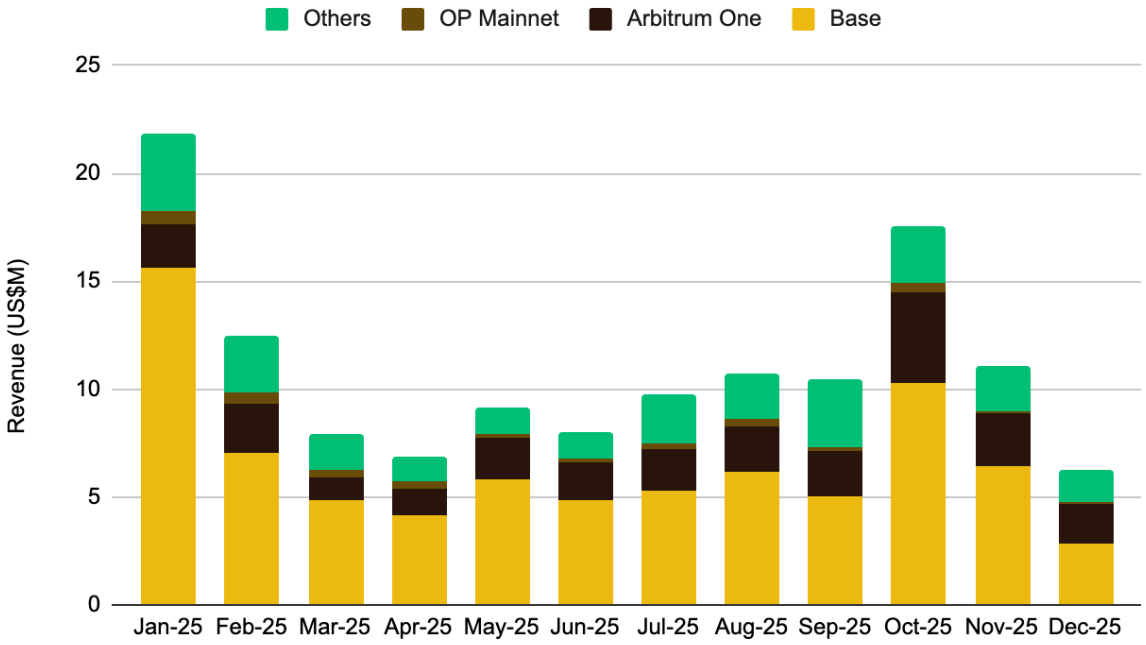
Logo	Name	Type	Status	TVS (US$)	FDV (US$)	Float	Fees (US$M)	DAU (K)
	Arbitrum One	Optimistic	Stage 1	18B	2.06B	57%	24.3	286.3
	Base	Optimistic	Stage 1	12.7B	-	-	72.5	1,100
	OP Mainnet	Optimistic	Stage 1	2.4B	1.36B	45%	3.5	79.8
	Mantle	Other	Pre-Stage 0	1.59B	6.08B	52%	0.9	25.9
	Starknet	ZK	Stage 1	789.3M	815.5M	50%	1.0	37.5
	Linea	ZK	Stage 0	667.6M	479.9M	22%	3.9	35
	Ink	Optimistic	Stage 1	540.8M	-	-	0.2	70.9
	World Chain	Other	Pre-Stage 0	535.3	5.7B	27%	1.6	36.1
	ZKsync Era	ZK	Stage 0	501M	726.7M	51%	0.9	14.1
	Katana	ZK	Stage 0	347.6M	-	-	0.09	1.2
	Unichain	Optimistic	Stage 1	224M	4.92B	71%	3.4	35.1

	BoB	Optimistic	Stage 0	180.2M	113.1M	22%	0.3	4.7
	Scroll	ZK	Stage 1	128.7M	79.4M	19%	0.4	6.5

Note: The table is not intended to be a comprehensive list of all L2s
Source: L2Beat, Coinmarketcap, Artemis, Growthepie, Binance Research, as of January 10, 2026

Fragmentation also impacted incentive dynamics and economic concentration, with liquidity continuing to cluster around a handful of dominant L2s. While many rollups scaled transactions, only a handful generated durable fee revenue. This divergence exposed the limits of incentive-driven growth and placed greater emphasis on sustainable business models. Rollups reliant on aggressive gas rebates or yield programs experienced sharp activity declines once incentives tapered, reinforcing a core lesson: **incentives can bootstrap usage, but they rarely create durable demand**. Sustainable L2s are those with identifiable user segments, rather than generic execution layers.

Figure 34: Transaction fee revenue in 2025 remained concentrated among a few dominant L2s, reflecting where real usage and sustainable fees persisted



Source: growthepie, Binance Research, as of December 31, 2025

Against this backdrop, the L2 competitive set continues to evolve toward explicit economic frameworks rather than purely technical positioning. OP Stack style ecosystems and app-specific rollups increasingly normalized structured fee-sharing models, reinforcing that **"rollup economics" is now firmly part of the design surface**, not an afterthought. At the same time, **sequencer decentralization remained uneven**, and 2025 did not fully resolve the gap between today's centralized operators and the longer-term trust-minimized end state. Most major rollups continued to operate with centralized or semi-centralized sequencers, with only incremental progress toward permissionless models. This leaves the **L2 sector entering 2026 in a more selective phase** and with a clearer set of market tests: sustain usage without heavy incentives, improve

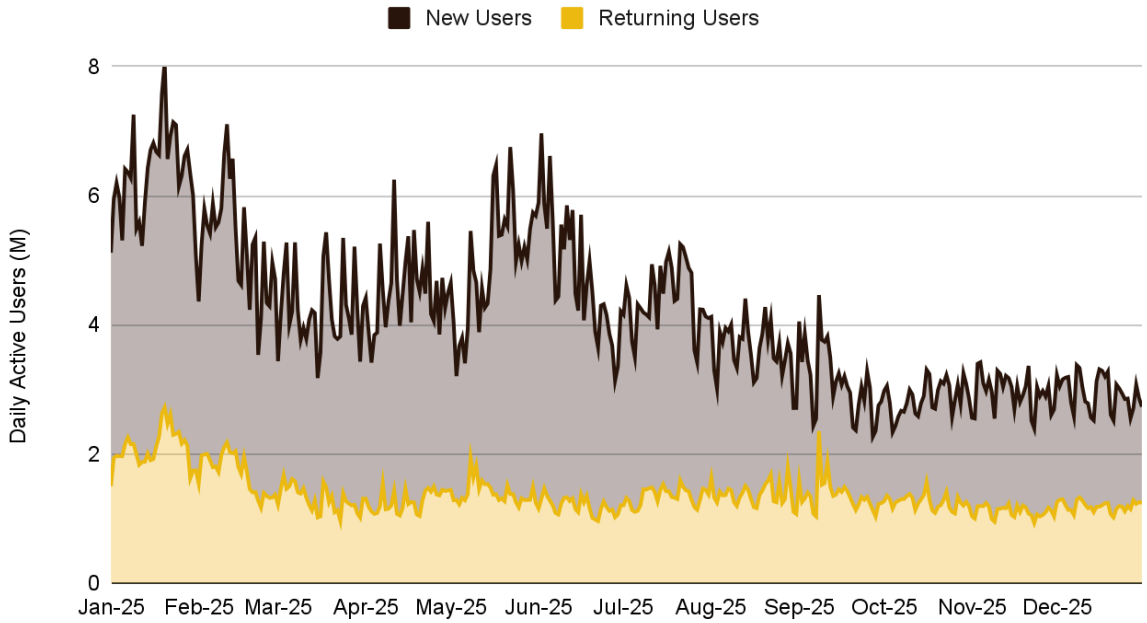
interoperability without further fragmenting liquidity, and demonstrate credible decentralization paths that can satisfy both crypto-native trust assumptions and institutional risk frameworks.

Looking ahead, three themes will define the next phase: First, **economic alignment**, whether through fee floors, ETH-denominated fees, or sequencing architectures, will increasingly shape protocol design. Second, **consolidation pressure** is likely to intensify as marginal rollups struggle to justify independent existence. Third, **interoperability and liquidity coordination** will determine whether Ethereum's rollup ecosystem evolves into a coherent execution layer or remains a fragmented collection of semi-sovereign chains. In that sense, 2025 marked the end of Ethereum's "scale at all costs" phase for L2s. The ecosystem proved it could scale. The open question entering 2026 is whether it can do so without diluting the economic gravity for itself and of the base layer that secures it.

5.2 Solana

Solana had a strong full-year 2025, emerging as one of the strongest L1s both fundamentally and market-wise. The year began with Solana riding momentum from narratives across DeFi, Stablecoins and Memecoins, and it ended with the network achieving major milestones like a U.S. spot ETF approval. Notably, Solana's on-chain metrics stayed robustly high throughout 2025, indicating sustained usage beyond just speculative trading. Daily active addresses averaged **~4.2M** (with **~1.4M** returning daily users on average), indicating a large, stable base of users engaged in various applications. For comparison, that's an order of magnitude above most other L1 active users. Solana consistently handled high daily transaction volumes, regularly processing roughly **100M+** transactions per day in H2. Much of this load came from high-frequency applications (like DEXes, launchpads, trading bots, payments), all of which Solana's low fees and parallel execution capabilities were well suited for.

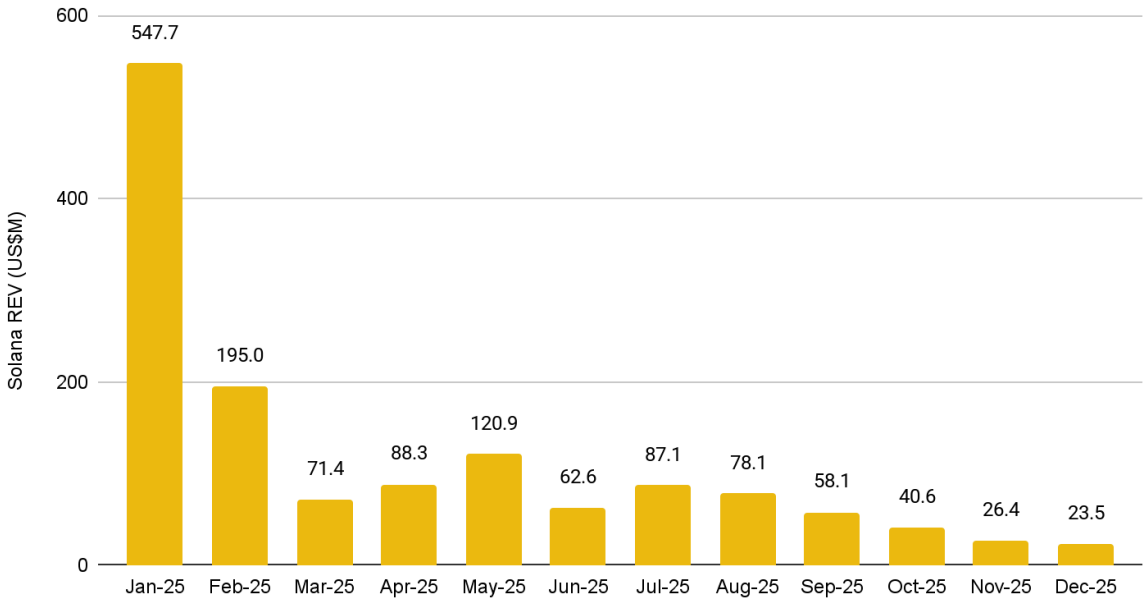
Figure 35: While Solana's DAUs saw a slight downward trend, its core returning users stayed relatively stable despite cooling meme coin activity and macro volatility



Source: Artemis, Binance Research, as of December 31, 2025

One telling metric was protocol fees and economic value. Earlier in the year, amid memecoin frenzy, Solana's daily fees (plus MEV) spiked to ATHs. By mid-year, as memecoin activity normalized, daily fees settled typically between US$0.5-1M. While still higher than most L1s, the drop from January's high to end-year was substantial–Solana's monthly Real Economic Value (REV) fell from near ~US$550M in January to just **~US$23.5M** in December–reflecting that a chunk of early-year volume was lower-value "spam" transactions which didn't translate to persistent fee revenue. But importantly, even at these fee levels, Solana is generating meaningful revenue for validators, suggesting that **even beyond hype cycles, Solana is moving to generate real, paid usage** – a strong sign for network sustainability.

Figure 36: Solana's monthly real economic value has declined sharply since the start of 2025, falling from near US$550M in January to just US$23.5M in December



Source: Artemis, Binance Research, as of December 31, 2025

Expanding On-Chain Economy

DeFi on Solana showed resilience and growth. TVL fluctuated with token prices but held around **US$8B** at year-end. Solana's DEX ecosystem also thrived: by mid-2025, **Solana's weekly DEX volume exceeded Ethereum's**, hitting over **US$20-30B** per week. On peak days, Solana DEX volumes even approached the lower bound of daily spot volumes seen on CEXes. This was partly due to a vibrant ecosystem of early token opportunities and launchpads like Pump.fun but also DEXes and aggregators like Jupiter, Raydium and Drift, which collectively facilitated a large number of trades. Adding to this, Solana benefited from a significant influx of bridged liquidity, with nearly **US$6B** net inflows YTD, (the majority of which entered earlier in the year), indicating external capital coming in to chase varying trade opportunities.

Perhaps what truly differentiates Solana now is its **traction in consumer and real-world applications**, not just DeFi. The Decentralized Physical Infrastructure (DePIN) sector on Solana continued to flourish: Wireless networks, decentralized maps and other real-world infrastructure-based applications all showed healthy growth. The key trend: these

networks are transitioning from pure token incentives to real cash flows, with users paying for bandwidth, AI compute, or geolocation data while receiving token rewards for hardware contributions. Users in these networks pay in fiat or stablecoins, which then flow partially into token buybacks or rewards – an emerging token-positive economy.

Solana also pushed ahead in wallets and mobile. Phantom wallet continued to dominate, at one stage reaching over **17M** monthly active users and managing **US$25B** in assets. Its multi-chain expansion ironically brought more users into Solana's orbit by virtue of Phantom's competitive UX in the wallet space. After pre-orders for the Solana Seeker phone topped **150,000** units, it started shipping globally in August. While modest compared to major phone providers, it's still a big deal for crypto–a phone deeply integrated with Solana decentralized applications (dApps), Seeker aims to lower the barrier for mobile Web3 usage. Though, there are still some reservations on how far this market can grow given the **complexities associated in disrupting existing mobile phone markets**. This was reflected in Solana mobile discontinuing support for the Saga model, suggesting that crypto-native smartphones are more likely to function as complementary products rather than viable standalone offerings.

Payments and stablecoin adoption on Solana were another highlight. **Solana's circulating stablecoin supply more than doubled** from **~US$5.1B** in January to **US$13.5B** by year-end. **USDC led the charge** (as a result of growing partnerships with Circle), with near **~70%** share of Solana's stablecoins. Solana's high throughput and negligible fees make it ideal for stablecoin payments: Solana Pay saw growing merchant interest (especially for cross-border settlements in USDC).

Figure 37: Solana's stablecoin market cap has grown significantly in 2025, rising from US$5.1B to US$13.5B by year-end

	Name	Stablecoin Market Cap (US$B)
	Ethereum	165.5
	Tron	82.9
	BNB Chain	15.2
	Solana	13.5
	Base	4.7

Source: DeFiLlama, Binance Research, as of January 10, 2026

SOL Meets TradFi

A key milestone and external validation for Solana came from institutional channels in 2025 with the launch of the first U.S.-listed Solana ETF products. While the Solana ETF market remains early, many TradFi observers have pointed to the potential for altcoin ETFs - led by Solana, to attract investor interest over time, with Solana-focused products likely representing a meaningful share of any such flows. So far, the early interest has been positive–Solana's ETF launches have collectively pulled in over **US$800M**.

Beyond ETF products and price exposure, **Solana's integration into TradFi has also introduced institutional investors to protocol-level yield**. Following the launch of Bitwise's Solana Staking ETF (BSOL), Solana-linked ETFs began incorporating staking rewards, enabling holders to indirectly earn approximately ~6–7% APY. This yield component differentiates Solana ETFs from non-yielding spot crypto ETFs and has been cited by some TradFi observers as a potential driver of more durable investor interest over time.

Meanwhile, Solana also gained mindshare as a crypto treasury asset for listed companies. Forward Industries emerged as the largest public SOL holder with roughly 6.8M SOL, followed by Solana Company (~2.3M SOL), DeFi Development Corp. (~2.2M SOL), and Upexi (~2.0–2.2M SOL), among others. These moves echoed elements of the Bitcoin MicroStrategy playbook, but applied to Solana. While still early (these aren't household corporate names), they set examples that holding SOL as a treasury asset - and even leveraging Solana for core business functions (such as Upexi using Solana for stock transfer) - is feasible. Combined corporate SOL treasuries across these issuers now represent billion-plus dollar balance sheets, pioneering the use of SOL as a strategic reserve and yield-generating asset. Unlike Bitcoin-focused treasury strategies, several Solana treasury holders actively stake their SOL or operate validator infrastructure, **positioning SOL as a productive reserve rather than a purely passive holding**.

Solana also popped up in other TradFi contexts: for example, Franklin Templeton used the Polygon chain for some funds earlier, but indicated exploring Solana for faster settlement of certain tokenized money market funds. Together, these developments show increasing cross-pollination between TradFi and Solana.

The Arrival of Firedancer

A central infrastructure milestone for Solana in 2025 was the **mainnet introduction of Firedancer**, an independent validator client developed by Jump Crypto. Following extensive testnet validation and phased Frankendancer deployments, Firedancer entered mainnet beta in December under a deliberately constrained rollout. While early adoption was limited by stake and did not materially alter network-level performance, the launch marked **Solana's first credible move away from a single-client validator model**, directly addressing a long-standing structural risk.

Firedancer's significance lies less in immediate throughput gains and more in failure-mode reduction. Historical Solana disruptions were driven primarily by software monoculture and execution-path fragility under bursty workloads, rather than consensus failure. By introducing a **fully independent C++ validator implementation**, Firedancer materially reduced correlated client risk and lowered the probability that isolated bugs could cascade across the validator set.

From an execution perspective, Firedancer reinforces Solana's thesis that base layer scalability can be achieved through hardware-efficient execution rather than protocol fragmentation. Its emphasis on parallelism, deterministic packet handling, and tighter memory utilization validates a **scaling path that preserves shared state and synchronous composability**, even though these characteristics did not translate into higher realized throughput in 2025.

Overall, Firedancer's impact was structural rather than performance-driven. While it did not eliminate peak-period congestion, it coincided with broader protocol refinements that improved Solana's behavior under load and helped the network avoid chain-halting outages throughout 2025. Beyond resilience, these changes carry second-order market-structure implications: more predictable execution and lower outage tail risk reduce the need for conservative fee buffers during demand spikes, supporting greater price stability and strengthening Solana's ability to attract institution-compatible, CEX-adjacent order flow. The key variable into 2026 remains stake-weighted adoption, which will determine whether these **structural gains translate into sustained network-level improvements**.

Alpenglow

While Firedancer addresses execution layer resilience, Solana's next major upgrade point sits at the **consensus layer**. The **Alpenglow** upgrade, approved by validators in September 2025 and targeting mainnet activation in early 2026, represents the next major redesign of Solana's consensus architecture since inception. Alpenglow replaces Proof-of-History and Tower BFT with a streamlined, latency-optimized design focused on faster finality, lower coordination overhead, and improved fault tolerance.

At its core, Alpenglow introduces a new voting mechanism that batches cryptographic proofs and removes redundant validator communication, reducing block finality from seconds to the low hundreds of milliseconds. This materially improves Solana's suitability for real-time financial applications — such as high-frequency trading, on-chain derivatives, prediction markets, and payment routing — where confirmation latency, not raw throughput, is the binding constraint.

Complementing this is a redesigned data propagation layer that replaces Solana's multi-stage broadcast model with more direct validator-to-validator relays. This reduces bandwidth overhead, improves message reliability, and increases the network's ability to tolerate validator failures or malicious behavior without degrading liveness. Importantly, these changes also lower validator operating costs by removing vote fees and simplifying consensus logic, helping counter long-term validator consolidation pressures.

5.3 BNB Chain

BNB Chain's 2025 story was the combination of faster execution, rising on-chain trading flows and an institutional RWA push that brought marquee TradFi issuers onto the chain, The L1 doubled down on being one of the highest-throughput major EVM environment, while using several initiatives to reduce onboarding friction (especially for stablecoin users) and improve trader experience. By year-end, **BNB Chain grew into a multi-vertical ecosystem** (DeFi, AI, payments), but the economic center of gravity remained high-frequency consumer usage and DEX-heavy activity.

The results of these developments were an increasing user base and expanding on-chain activity. By year-end, daily transactions reached **~15.2M** and daily active users **~2.7M** – placing it firmly among the top L1s in both metrics. Remarkably, DEX volumes on BNB Chain increased by **~164%** YTD, with activity peaking above **US$7B** around mid-year. This surge was partly driven by a series of incentive programs and narrative waves that BNB Chain was able to capitalize on. BNB Chain's strategy of being retail-focused and quick on aligning to market narratives continued to yield results in terms of raw activity. This growth is directly reflected in its native token price performance, as **BNB ended the year as one of the best performing out of the class of major crypto assets**.

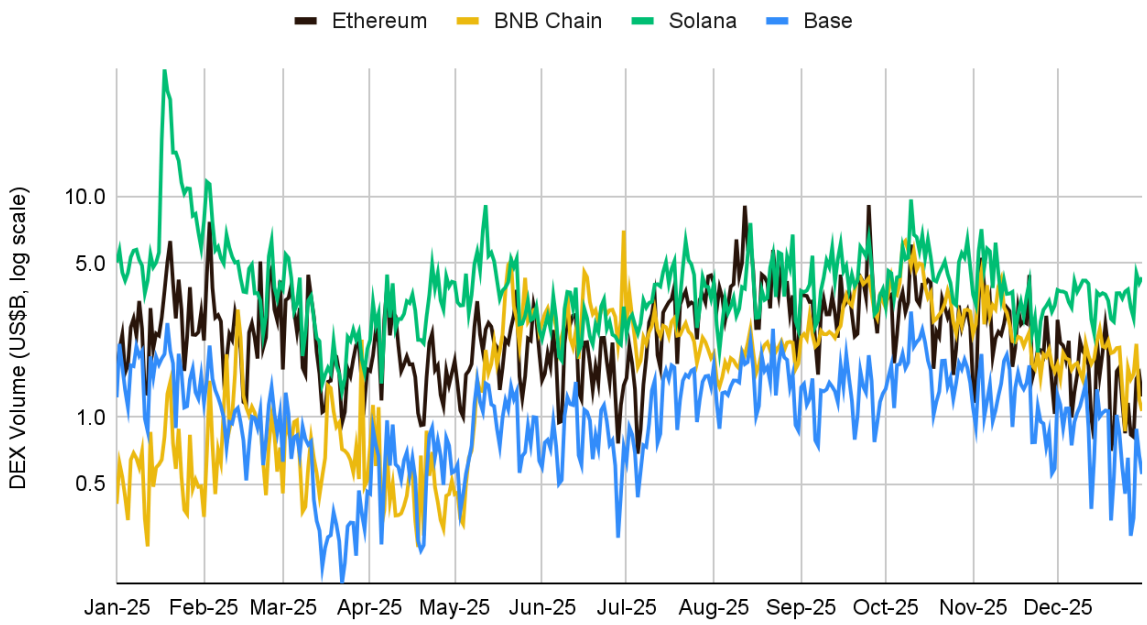
On-Chain Trading as a Key Growth Vector

BNB Chain's largest recurring economic engine in 2025 remained on-chain trading. Specifically, the L1 leapfrogged others in terms of DEX trading volume, with liquidity highly concentrated around PancakeSwap. In this regard, PancakeSwap functioned not just as a DEX, but as a key liquidity venue, onboarding retail flows, memecoin trading, and long-tail token activity. Much of this growth is attributed to its growing DeFi ecosystem and being able to capitalize on leading market narratives.

Beyond spot trading, a meaningful development was the **increasing prominence of perpetual DEX activity**. In particular, Aster became one of the most visible brands to emerge in the **"perps UX meets retail scale"** category. Their success pertains to being a perp/spot DEX with multiple trading modes, including extremely high leverage modes and yield-bearing collateral features. The growing behaviour of high-frequency trading added a second trading pillar beyond spot DEX volumes.

The significance here is structural in nature. Derivatives generate far higher transaction intensity per unit of capital than spot markets, making them well-suited to BNB Chain's execution-first design. By year-end 2025, on-chain perps were an increasingly important contributor to BNB Chain's transaction and fee footprint, positioning the ecosystem as a serious on-chain alternative for leveraged trading.

Figure 38: BNB Chain DEX volumes hit new highs in 2025, with peak daily volumes exceeding US$7B mid-year



Source: Artemis, Binance Research, as of December 31, 2025

Prediction markets emerged as another important on-chain market primitive. BNB Chain actively positioned itself as a viable execution layer for prediction markets by addressing two core bottlenecks: transaction cost and oracle resolution reliability. As such, BNB Chain's ecosystem gained access to prediction market activity from leading platforms such as Polymarket, and from natively launched projects like Opinion, which also reached meaningful trading volumes.

From an ecosystem perspective, prediction markets matter because they combine high transaction frequency, event-driven liquidity spikes, and broad retail participation - all characteristics that align closely with BNB Chain's strengths. While still smaller than spot and perps in absolute volume, prediction markets broadened the chain's market-driven use cases beyond pure asset trading.

Institutional RWAs, Payments and TradFi Partnerships

Unlike earlier cycles where RWA positioning was mostly narrative, **BNB Chain's 2025 delivered concrete institutional integrations**. On 13 May, VanEck launched VBILL, its first tokenized fund, via Securitize, with support for BNB Chain included at launch. In September 2025, BNB Chain announced that Franklin Templeton's Benji Technology Platform onboarded the L1, framing it as an expansion of tokenized finance rails into the ecosystem.

The clearest late-year flagship was BlackRock's BUIDL: BNB Chain announced on 14 November, that BlackRock's USD Institutional Digital Liquidity Fund (BUIDL), tokenized by Securitize, launched on BNB Chain with interoperability via Wormhole, and it was also made usable as collateral in Binance institutional contexts. This is a major full-year point because it **upgrades BNB Chain's RWA narrative** from **"builder initiative" to "blue-chip**

issuer deployment”, and it tightens the link between on-chain tokenized T-bill products and institutional trading workflows.

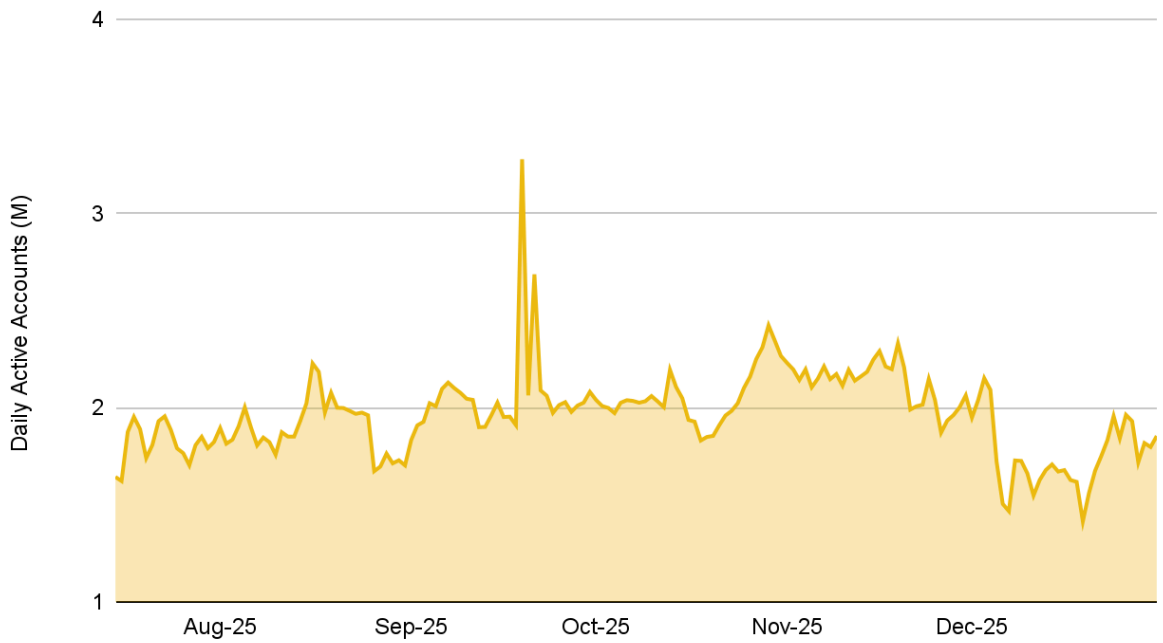
Underlying this RWA expansion was **BNB Chain’s stablecoin-driven liquidity base**. Throughout 2025, the network consistently ranked among the largest chains by stablecoin supply and transfer volume, reinforcing its role as a low-cost settlement layer for capital moving between exchanges, wallets, and on-chain venues.

This liquidity foundation was further strengthened by UX-focused design choices: gas abstraction initiatives reduced the need for users to hold native tokens purely to transact, lowering onboarding friction and improving usability for payments and institutional flows alike. In a year marked by uneven speculative activity, stablecoin usage provided a durable baseline of on-chain demand, supporting both RWA settlement and broader financial activity.

The One-BNB Stack: opBNB, and Greenfield

BNB Chain’s 2025 narrative also leaned heavily into its “**One BNB” multi-network architecture**. By late December, BNB Chain continued to show large user and transaction volumes across its multi-stack ecosystem, reinforcing that opBNB functioned as active throughput platforms. Specifically, opBNB was able to maintain an average of **~2M** daily active users, with daily transaction counts generally ranging between **3–4M**.

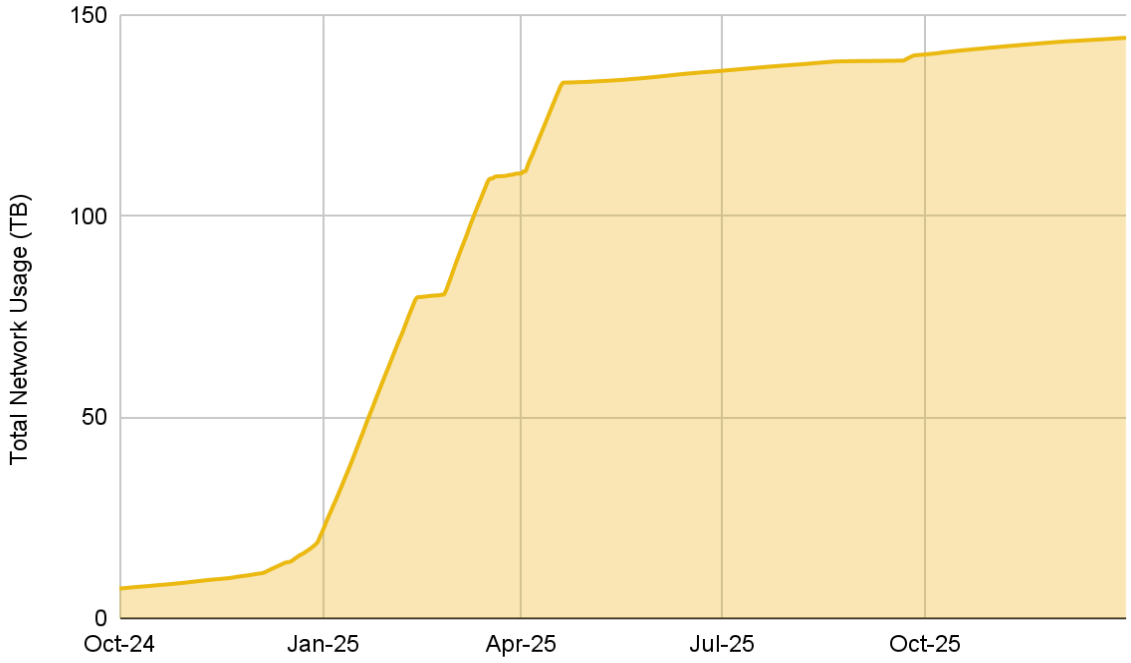
Figure 39: opBNB’s daily active accounts remained relatively stable in H2 2025, averaging approximately ~2M



Source: opBNBScan, Binance Research, as of December 31, 2025

Greenfield also remained a strategic pillar as BNB Chain pushed beyond pure execution into a "compute + data" stack for consumer apps, AI/data experiments, and content-heavy use cases. By year-end, Greenfield hosted approximately **144 TB** of stored content, recorded nearly **35M** transactions, and supported over **115K** unique addresses to date.. These figures represent notable growth from prior year levels and reflect increasing adoption among AI, cloud, and data-economy applications. These trends position Greenfield as a complementary data layer for AI, RWA, and tokenization projects.

Figure 40: BNB Greenfield's network usage has grown by approximately 565% since the start of the year



Source: GreenfieldScan, Binance Research, as of December 31, 2025

Core Protocol Upgrades and Performance

A defining technical theme was **BNB Chain's push toward sub-second block production and faster finality**, delivered through a tightly sequenced upgrade cadence. **Pascal** (mainnet 20 March) advanced the L1's EVM feature set with EIP-7702 support, enabling temporary contract code for EOAs and strengthening the foundation for account-abstraction-style UX patterns and sponsored transaction flows. **Lorentz** (mainnet 29 April) implemented BEP-520, reducing block intervals to 1.5 seconds, while **Maxwell** (mainnet 30 June) cut block times further to 0.75 seconds, emphasizing faster responsiveness and validator performance at higher block production frequencies. These upgrades were complemented by the ongoing **Fermi** upgrade, which extended the performance trajectory by pushing effective block times toward ~0.45 seconds and improving validator-to-validator communication and finality stability.

Collectively, these upgrades **directly targeted BNB Chain's primary demand surface**: high-frequency retail usage, including DEX trading, stablecoin transfers, and other latency-sensitive transaction flows. In these environments, perceived latency and failed or

slow confirmations translate immediately into UX costs. The full-year takeaway is that BNB Chain's 2025 upgrade cadence was unusually cohesive, with protocol speed, UX primitives, and ecosystem programs all aligned around a single objective: cheap, fast, retail-friendly execution at scale. Looking ahead, the next upgrade leg is expected to continue this trajectory by lowering latency further, strengthening inter-validator communication, and sustaining throughput under peak trading conditions rather than simply increasing nominal transactions per second (TPS).

Beyond raw performance, **BNB Chain also advanced its client and execution stack** to support sustained scale. The network expanded beyond a single client implementation by rolling out **Reth-based** full and archive node clients alongside its Geth stack. These changes materially improved synchronization speed, archive-node stability, and overall infrastructure resilience, while laying the groundwork for validator-grade Rust clients planned for 2026. At the execution layer, optimizations such as **Super Instructions** improved EVM efficiency, while the introduction of **Scalable DB** re-architected the storage layer to address long-term state growth. By enabling distributed and sharded state handling, Scalable DB reduced the risk that expanding on-chain state erodes execution performance as activity scales.

In parallel, BNB Chain placed explicit emphasis on **transaction fairness**. Coordinated changes spanning mempool handling, validator behavior, and ecosystem-level tooling materially reduced malicious MEV during peak trading periods, improving execution quality and reducing adverse selection for both retail and institutional flows during high-volatility episodes.

Looking into 2026, the setup is straightforward. The key question is whether BNB Chain can convert its 2025 gains, particularly institutional RWA traction and on-chain derivatives momentum, into durable liquidity depth and product-market fit beyond cyclical retail trading waves. On the technical front, the published Tech Roadmap 2026 signals **continued focus on network reliability and scaling**, suggesting the next phase is about sustaining performance as activity expands rather than merely achieving sub-second blocks. On the ecosystem side, the highest-impact watch items are whether tokenized treasury products become meaningfully composable with DeFi collateral and trading workflows, whether perps platforms such as Aster generate sticky, non-incentivized volume, and whether the "One BNB" stack retains consumer applications that might otherwise migrate to higher-throughput non-EVM environments.

06 / Decentralized Finance

6.1 The Big Picture

The year 2025 marked a historic turning point for the Decentralized Finance (DeFi) sector, signifying the completion of its transition from "wild speculation" to "**structural institutionalization**." High-inflation token incentives and retail-driven speculation have become rarities, replaced by "capital efficiency and compliance" as the market's core themes. No longer just an on-chain capital system parallel to the real world, DeFi began to generate substantive value entanglements with the global macroeconomy through Payment Finance (PayFi), the deep integration of Real World Assets (RWAs), and the rise of AI Agents.

Figure 41: Major DeFi metrics 6M/12M change

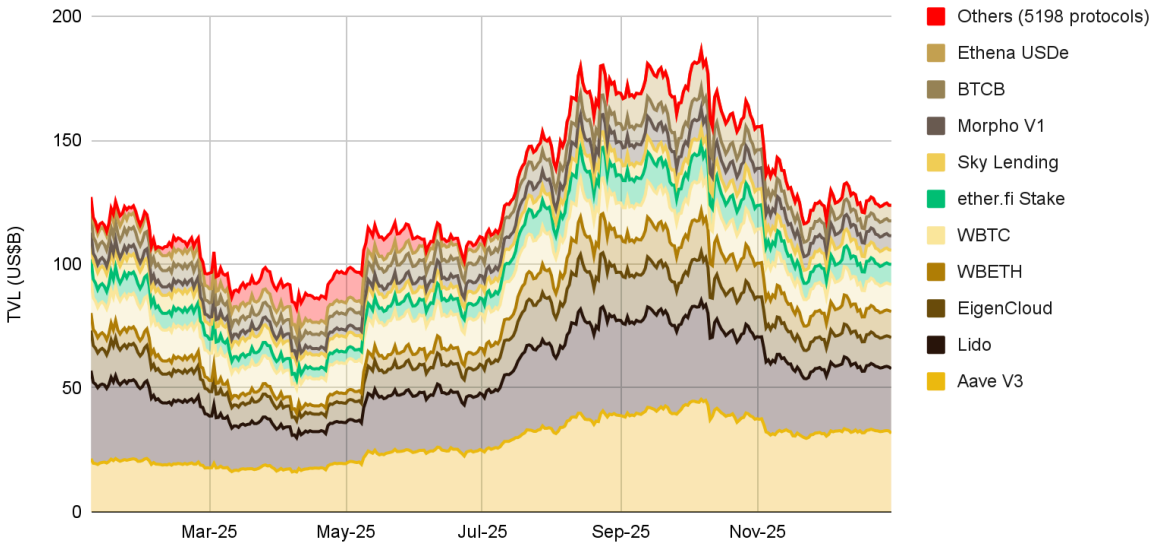
Metric	Dec 31 2025	% change (6M)	% change (12M)
DeFi TVL (US$B)	124.4	-17.9%	-11.2%
DeFi Dominance	3.8%	-8.4%	+5.6%
Monthly Active Users (M)	353	-8.9%	-5..6%

Source: Defillama, Tokenterminal, Binance Research, as of December 31, 2025

Benefiting from the structural inflow of institutional capital, the diversification of yield-bearing assets, and clearer regulatory frameworks, the irrational exuberance supported by token price bubbles diminished significantly in 2025. Consequently, despite a global macroeconomic environment challenged by geopolitical tensions and uncertainty, the DeFi sector demonstrated resilience and differentiated growth.

By year-end, the ecosystem's Total Value Locked (TVL) stabilized at approximately **US$124.4B**. While this represents a retreat from mid-year highs, the composition of capital has undergone a qualitative leap - weighting has shifted heavily toward stablecoins and tokenized sovereign debt rather than highly volatile, inflationary governance tokens.

Figure 42: TVL by protocols

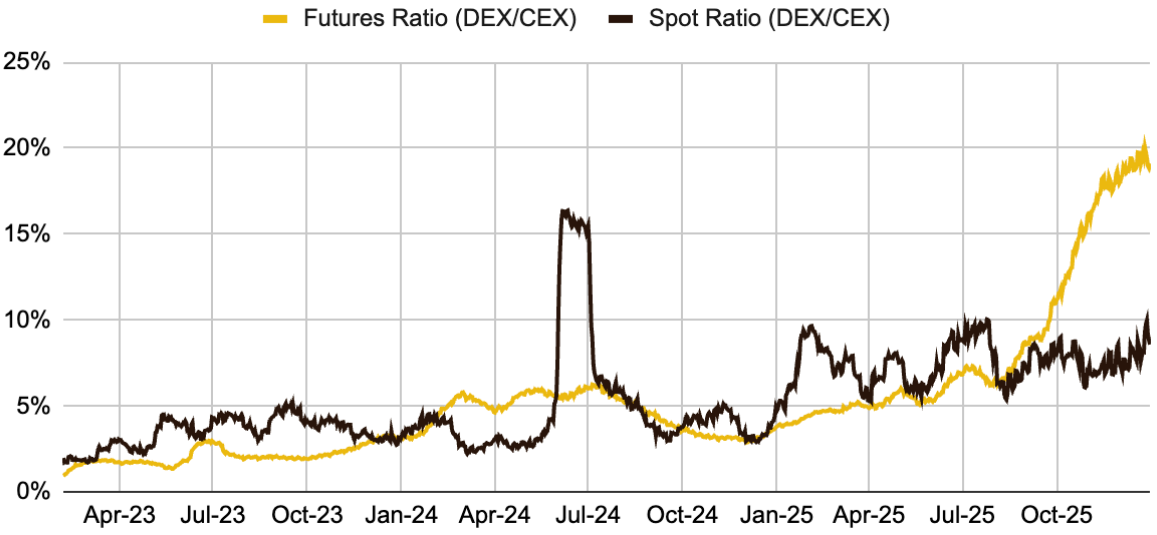


Source: Defillama, Binance Research, as of December 31, 2025

The most profound metric of 2025 was not asset prices, but user engagement. Monthly Active Addresses interacting with decentralized protocols remained at a high level of 300 to 390 million for most of the year. This phenomenon indicates that user engagement has decoupled from drastic asset price fluctuations; DeFi is becoming a daily financial tool.

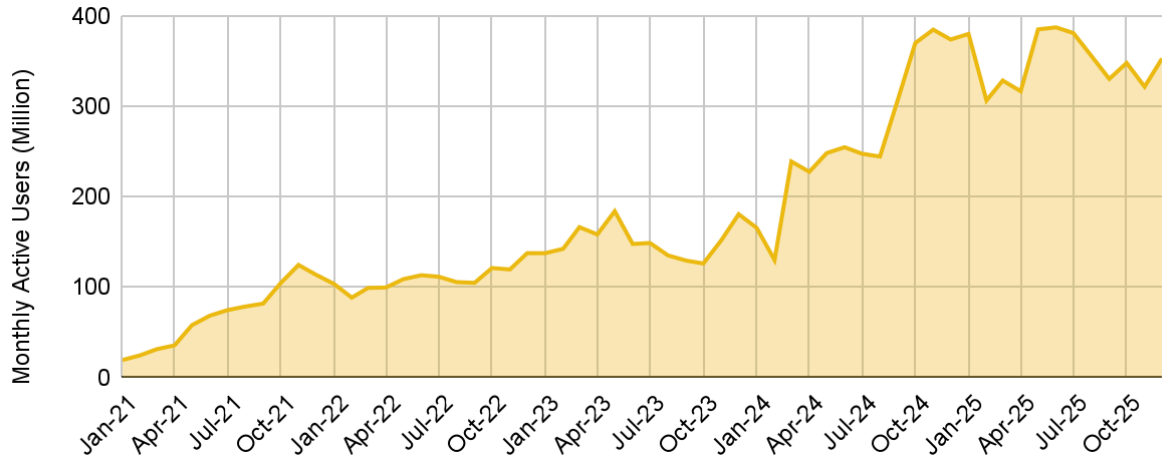
Driven by this massive user base, the ratio of spot trading volume on Decentralized Exchanges (DEXs) to Centralized Exchanges (CEXs) reached historic levels - peaking at nearly 20% for Spot and 10% for Futures at the end of 2025. This structural shift sends a powerful signal: for one-fifth of global cryptocurrency trading volume, on-chain execution has become the default choice.

Figure 43: Total DEX-to-CEX 30-day rolling ratio



Source: Defillama, Binance Research, as of December 31, 2025

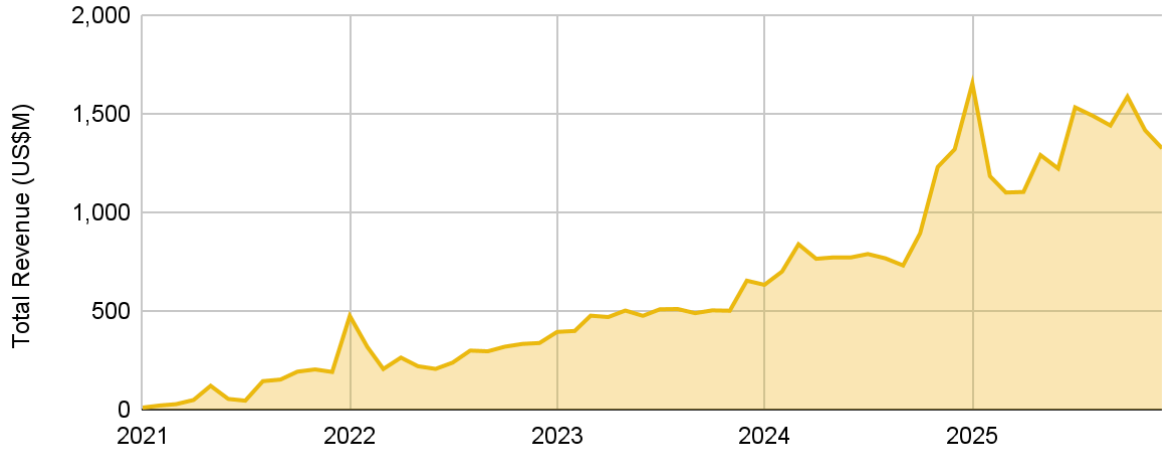
Figure 44: Total Monthly Active Users of Decentralized Protocols



Source: Defillama, Binance Research, as of December 31, 2025

Furthermore, 2025 marked the "Year of Protocol Revenue." As top-tier protocols like Uniswap and Aave formally activated fee switches or implemented token buybacks, governance tokens began transforming from mere voting rights into productive assets with Discounted Cash Flow (DCF) value. Simultaneously, AI Agent-driven "Agentic Finance" is reshaping the mechanisms of liquidity generation and distribution.

Figure 45: Total monthly revenues of decentralized protocols



Source: Defillama, Binance Research, as of December 31, 2025

Finally, 2025 witnessed the landmark "RWA Flippening." In December, the TVL of Real World Asset (RWA) protocols officially surpassed that of Decentralized Exchanges (DEXs), becoming the fifth largest category in DeFi with distributed asset value breaking US$19B. This marks the end of the "crypto silo" era; DeFi is now confirmed as an extension of global financial pipelines, rather than an isolated testing ground.

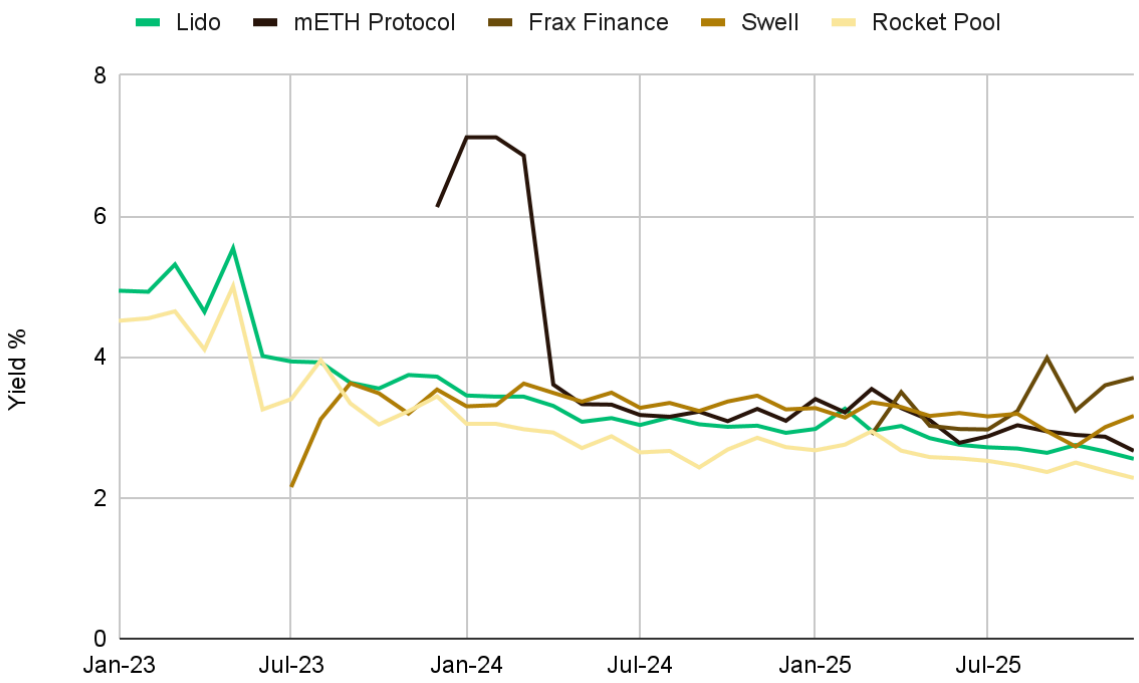
6.2 Core Market Data & Liquidity Revaluation

Structural Recovery of TVL

Ending 2025 at **US$124.4B**, TVL showed resilience against Q4 market volatility and "black swan" stress tests, further validating DeFi's reliability as financial infrastructure. Current liquidity is no longer sustained by inflationary mining rewards but by three core pillars:

1. **Native Yield:** Ethereum staking and restaking yields serve as the crypto-native risk-free rate.

Figure 46: Crypto-native "risk-free rate" are around 3%



Source: Defillama, Binance Research, as of December 31, 2025

2. **RWA Collateral:** Tokenized treasuries and private credit introduce real-world cash flows.

3. **Institutional Stablecoins:** Compliant, highly liquid stablecoins act as the lifeblood connecting TradFi and DeFi.

Stablecoins: The New Dominant Settlement Layer

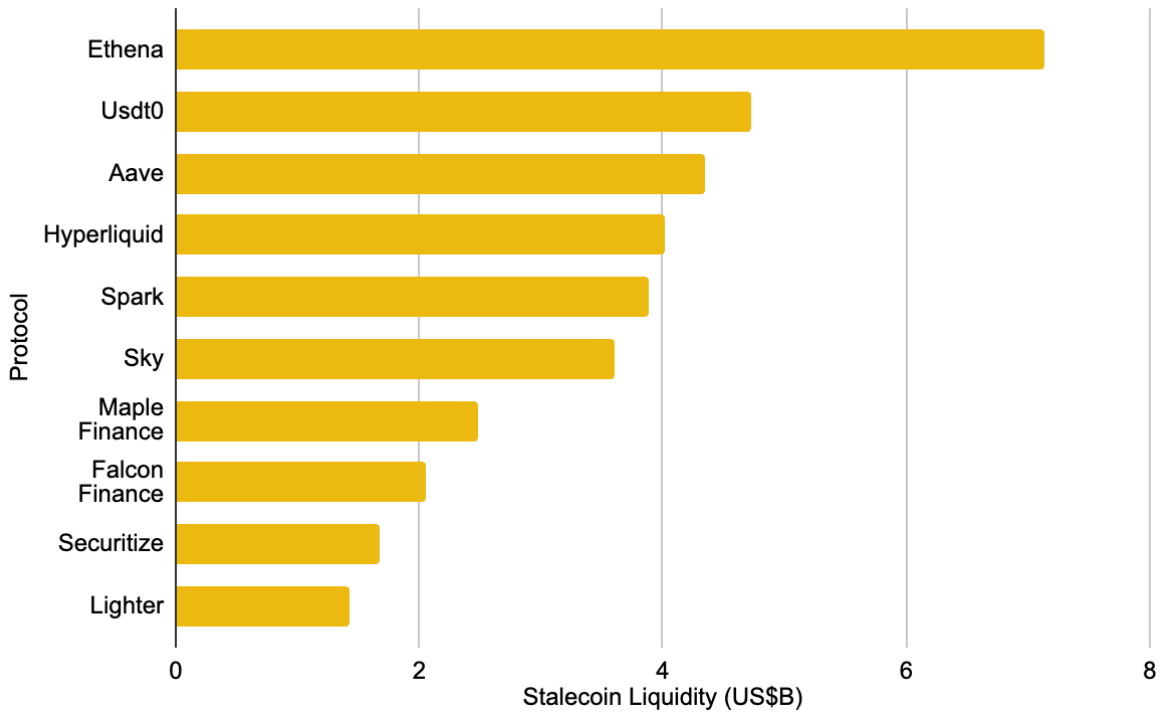
2025 established stablecoins as "internet fiat."

- **Market Cap:** Surpassed **US$307.5B**, a historic high.
- **Dominance:** Tether (USDT) retains dominance with **60.8%** market share (~US$187B), followed by Circle (USDC) at ~US$75.2B.

- **Transaction Volume:** On-chain volume in 2025 rivaled - and in certain months exceeded - the combined volume of Visa and Mastercard. Stablecoins have evolved beyond exchange liquidity into a global financial rail for cross-border payments, payroll, and B2B settlement. PayPal's PYUSD growth to US$3.6B further validates fintech adoption.

- **Defi usage:** For stablecoins in the DeFi landscape, the current pattern is shifting from a "USDT/USDC duopoly" to a multi-layered, yield-generating system. Data shows that although traditional lending protocols like Aave still hold a large existing market share, the growth momentum has clearly shifted towards RWAs (Real-World Assets) and synthetic stablecoins. The "yield-generating attribute" has become a key competitive advantage, with Ethena's explosive growth being the most representative example. By offering "internet bond" yields through a delta-neutral strategy, Ethena has reinvented the role of stablecoins in the on-chain world. Emerging protocols such as Usdt0 and Hyperliquid have shown strong performance, with the former's liquidity at year-end even surpassing many mature lending versions. This reflects users' migration from Ethereum mainnet to high-performance L1/L2 chains in pursuit of higher capital efficiency and derivative trading opportunities.

Figure 47: Top 10 protocols by stablecoin liquidity



Source: Defillama, Binance Research, as of December 31, 2025

The Regulatory Watershed

On July 18, 2025, the U.S. President signed the **Guidance and Establishment of National Innovation for United States Stablecoins Act (GENIUS Act)** into law. As the first comprehensive federal crypto legislation, it serves as a decisive industry watershed.

Key Provisions & Impact:

- **Rigid Reserve Constraints:** Issuers must maintain 1:1 high-liquidity reserves (cash or short-term Treasuries) with monthly disclosures and third-party audits. This forced an exit of sub-par issuers, consolidating the market around major players like USDT and USDC.
- **Bankruptcy Remoteness:** In the event of issuer bankruptcy, stablecoin holders are granted priority claim status over other creditors. This removed the primary compliance barrier for institutional treasury allocation on-chain.
- **End of Algorithmic Stablecoins:** The act effectively prohibits uncollateralized algorithmic stablecoins within the regulated system.

While the GENIUS Act (and subsequent RFIA/CLARITY Act) exacerbates the bifurcation between "Whitelisted DeFi" (compliant) and "Dark DeFi" (permissionless), it provides the necessary legal certainty for trillion-dollar institutional entry.

6.2 Sub-Sector Spotlight: The Structural Shift of Alpha

Figure 48: Despite mid-year recovery, only a few sectors show annual TVL growth

	Liquidity		Diversity	
Sub-Sector	**TVL ($B)**	**YTD (%)**	**Project Count**	**Top Project Dominance**
Lending	62.03	29%	469	51.1% Aave V3
Liquid Staking	55.42	-5%	256	47.1% Lido
Bridge	47.15	21%	130	23.2% WBTC
Restaking	18.91	-21%	14	66.6% EigenLayer
Real-World Asset (RWA)	17.02	139%	121	13.4% Tether Gold
Decentralized Exchange (DEX)	16.44	-26%	1,740	12.9% Uniswap V3
Basis Trading	11.02	47%	32	57.2% Ethena
Liquid Restaking	10.65	-27%	28	76.2% Ether.fi
Yield	9.12	12%	531	41.1% Pendle
Collateralized Debt Position (CDP)	8.65	-15%	199	67.0% Sky
Synthetics	4.88	-8%	115	38.4% Synthetix
Derivatives	3.51	-32%	359	32.5% Jupiter
Cross Chain	2.15	13%	88	19.8% Stargate
Insurance	0.95	-11%	45	44.3% Nexus Mutual
Options	0.78	-19%	92	28.6% Lyra
Prediction Market	0.54	233%	69	67.8% Polymarket
Farm	0.42	-45%	612	15.4% Beefy
Launchpad	0.28	-22%	104	31.2% DAO Maker
Privacy	0.15	-35%	38	52.1% Railgun

Please note: The above table does not comprise an exhaustive list of DeFi sub-sectors. Where TVL is hard to measure or highly dispersed, the top project's market share is used instead

Source: DefiLlama, RWA.xyz, Binance Research, as of December 31, 2025

2025 was a year of significant capital rotation where "old guard" DeFi primitives (DEXs, Derivatives, Restaking, Farms) faced liquidity contractions, while specialized, high-utility sectors (Prediction Markets, RWA, Basis Trading) saw rapid expansion. While total DeFi

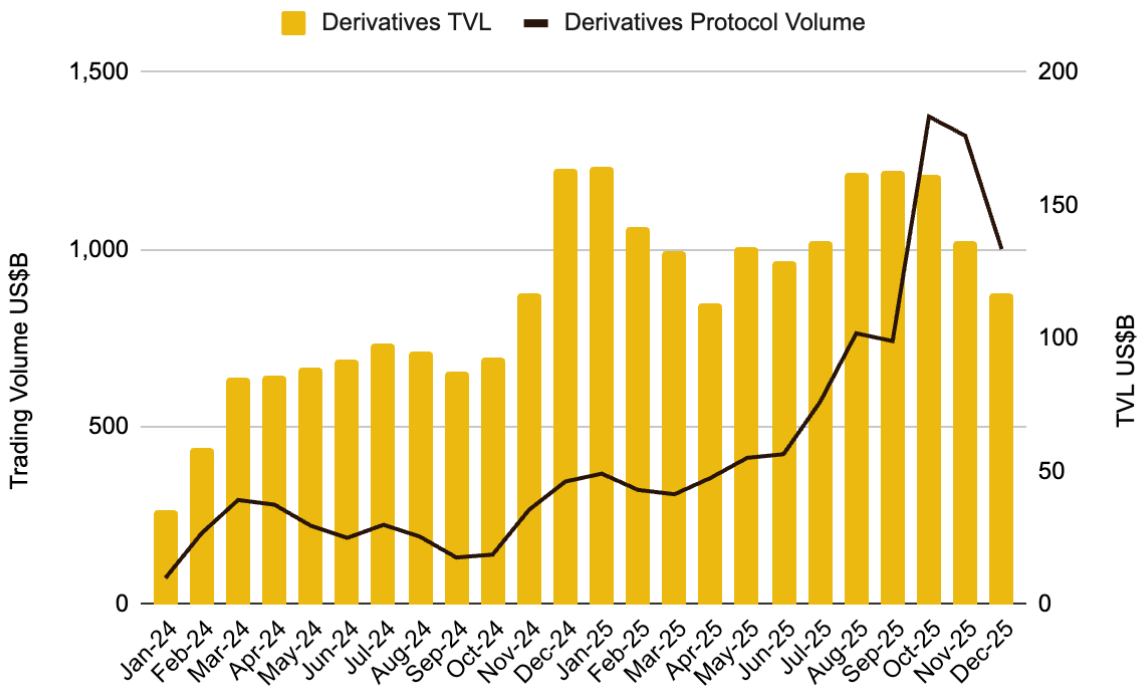
TVL remained relatively stable, capital became increasingly concentrated in sectors with clear external demand or specific yield mechanisms.

Market performance in 2025 demonstrated that simple **Beta** returns (passive market tracking) no longer satisfy professional investors. True **Alpha** has migrated to protocols capable of capturing real revenue through technical innovation or business model restructuring.

Derivatives: From TVL Dependence to Execution Primacy

The derivatives sector in 2025 exhibits a seemingly paradoxical yet landmark structural transformation: while leading platforms like Hyperliquid and Aster maintained exceptionally high trading volumes, traditional TVL metrics failed to scale proportionally, with some early vault-based platforms even experiencing capital outflows.

Figure 49: Derivatives TVL and trading volume divergence in 2025



Source: DefiLlama, Binance Research, as of December 31, 2025

This phenomenon should not be interpreted as a bearish signal, but rather reflects a generational leap in underlying technological architecture that has fundamentally transformed capital efficiency:

1. Infrastructure Paradigm Shift: The market has migrated from liquidity pool-dependent AMM or vault models (which require LPs to bear directional risk and lock substantial capital) toward exchange-grade Central Limit Order Book (CLOB) systems. Next-generation platforms like Hyperliquid, Aster, and Lighter employ on-chain orderbooks or hybrid architectures where professional market makers provide liquidity, supporting high-throughput trading without requiring massive pre-committed TVL.

2. Margin System Optimization: The evolution from isolated margin to cross-margin and unified collateral frameworks allows unrealized PnL to offset losses across positions. Combined with more sophisticated liquidation mechanisms and price oracles, the same capital base can now support higher effective leverage and market depth. Notably, Open Interest expanded from approximately $30 billion in 2024 to nearly $90 billion in 2025, confirming market-scale expansion under improved capital efficiency.

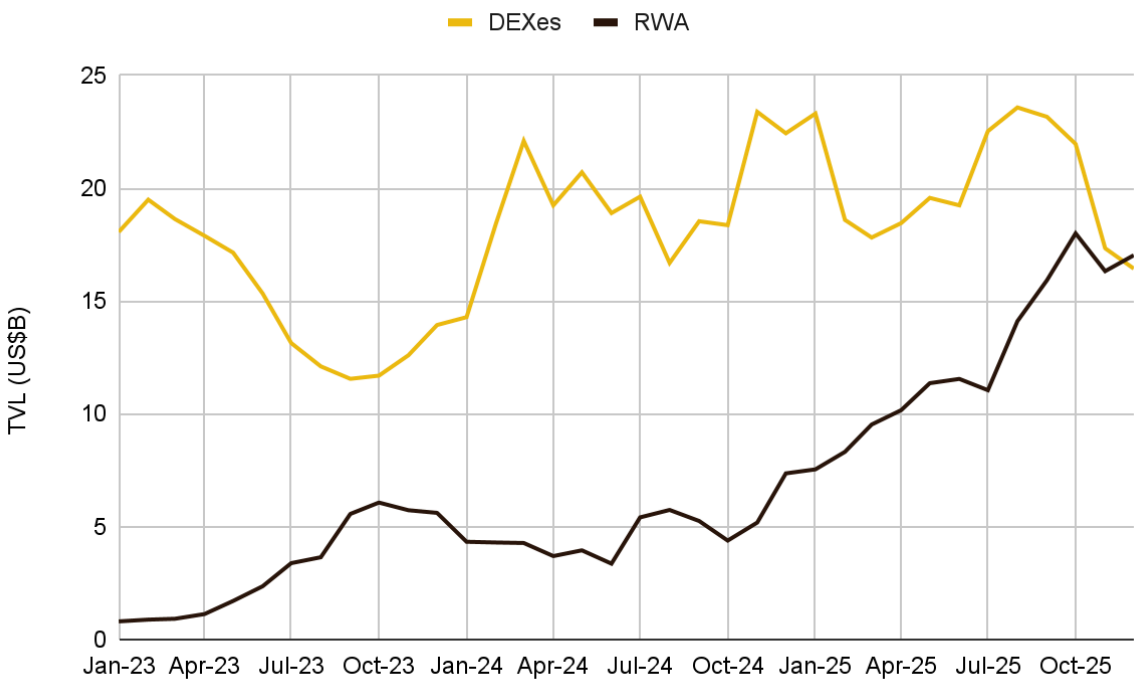
3. Liquidity Provision Professionalization: Orderbook-based models introduce RFQ layers, solver incentives, and MEV protection mechanisms, enabling institutional market makers to manage inventory and hedge exposures more efficiently – substantially reducing the idle capital ratio required to achieve comparable liquidity depth.

The essence of this transformation is the evolution from "capital-stacking liquidity" to "execution-quality-driven liquidity" – where competitive focus has shifted from "how much TVL is locked" to "how tight are the spreads, how low is the latency, how robust is the liquidation infrastructure." This marks a defining characteristic of derivatives of DeFi maturing toward institutional-grade infrastructure.

Real World Assets (RWAs): A Historic Flipping

On December 29, 2025, the sector witnessed a milestone: **RWA Protocol TVL officially surpassed Decentralized Exchange (DEX) TVL**, reaching **US$17B** and becoming the fifth-largest category in DeFi.

Figure 50: 2025 saw the RWA sector surpass DEXes in terms of TVL

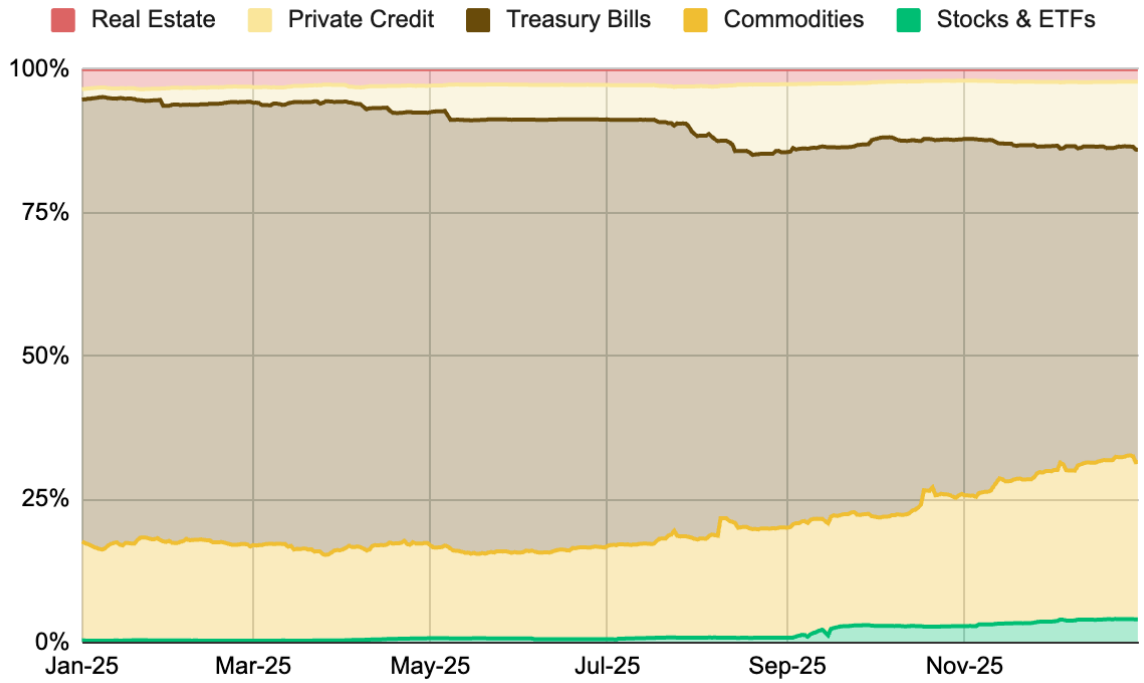


Source: DefiLlama, Binance Research, as of December 31, 2025

Growth Drivers & Asset Structure: While partly due to Q4 altcoin weakness, this "flippening" was primarily driven by macro factors meeting on-chain demand:

- **Tokenized stocks** emerged as the standout performer in the Real-World Asset (RWA) sector during 2025. The segment experienced rapid growth, with market capitalization surging 2,695% year-to-date to reach a record high of approximately US$1.2B by December 31, 2025. This expansion significantly outpaced other tokenized categories such as commodities (225%) and tokenized funds (148%).

Figure 51: Although the total value of tokenized stocks & ETFs is smaller than other RWAs, it shows the strongest momentum



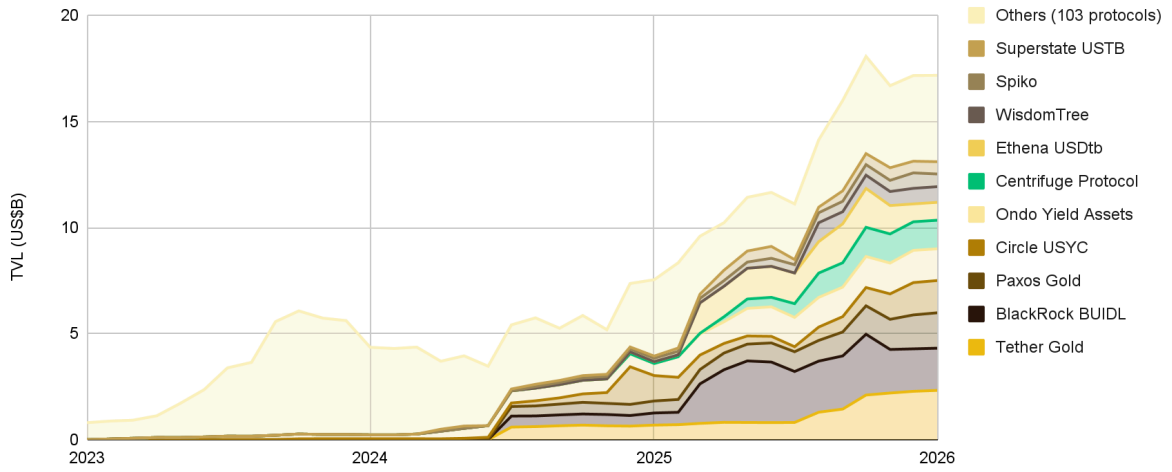
Source: DefiLlama, Binance Research, as of December 31, 2025

- **Tokenized Treasuries as Bedrock:** With the global easing cycle, stable risk-free rates became scarce. Tokenized Treasuries (e.g., BlackRock BUIDL, Ondo OUSG, Franklin Templeton BENJI) became the premier haven for on-chain idle capital. These assets are now widely accepted as premium collateral in lending markets. Additionally, CEXs introduced wrapped products based on these primary market tokens, lowering the barrier for retail access to U.S. Treasury yields.

- **Monetization of Commodities:** Gold tokens (XAUT, PAXG) reached a combined market cap near **US$4B**, progressively replacing traditional ETF functions due to 24/7 liquidity and hedging properties.

- **Private Credit & PayFi Convergence:** On-chain private credit expanded beyond crypto market making into trade finance and accounts receivable, creating strong synergy with the PayFi narrative.

Figure 52: Top RWA protocols in terms of TVL



Source: DefiLlama, Binance Research, as of December 31, 2025

Decentralized Exchanges (DEX): Volume & Revenue Surge

While DEXs ceded the TVL ranking to RWAs, 2025 marked a definitive shift in **trading volume** and **revenue capture**: the DEX-CEX volume ratio reached 20% - a significant leap from the ~3% levels of 2024. This indicates that while CEXs remain dominant, on-chain execution has high stickiness and is no longer a fringe market.

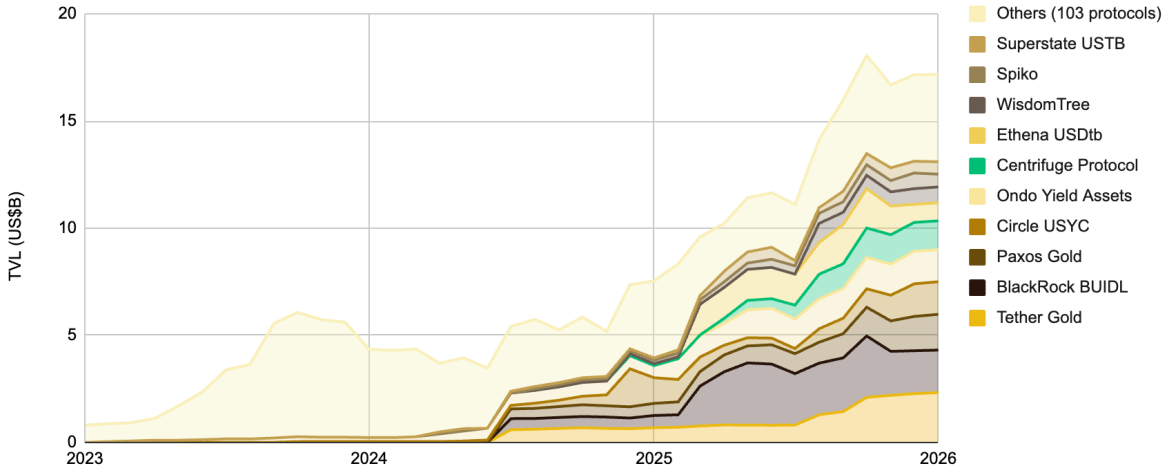
Key Drivers:

- **On-Chain Asset Origination:** Major new assets (akin to IDOs led by CEXs) increasingly launched on-chain first, forcing alpha-seeking capital into the DEX ecosystem.
- **Execution Quality:** The proliferation of **Intent-based** architectures (e.g., CoW Swap, UniswapX) drastically reduced slippage and MEV (Maximal Extractable Value) loss, offering execution quality comparable to, or better than, CEXs.
- **Privacy:** Rising demand for privacy drove volume toward permissionless venues.

Protocol Revenue Stratification: DeFi's "Blue Chip" Moment

2025 ended the "unprofitable protocol" narrative. Top-tier protocols demonstrated immense cash flow generation, often eclipsing the Layer 1 blockchains they operate on. The total revenue of DeFi protocols **reached US$16.2B in 2025**, representing a 60% increase compared to 2024. This figure is not merely significant; it places a decentralized, leaderless ecosystem on par with the world's most entrenched financial institutions.

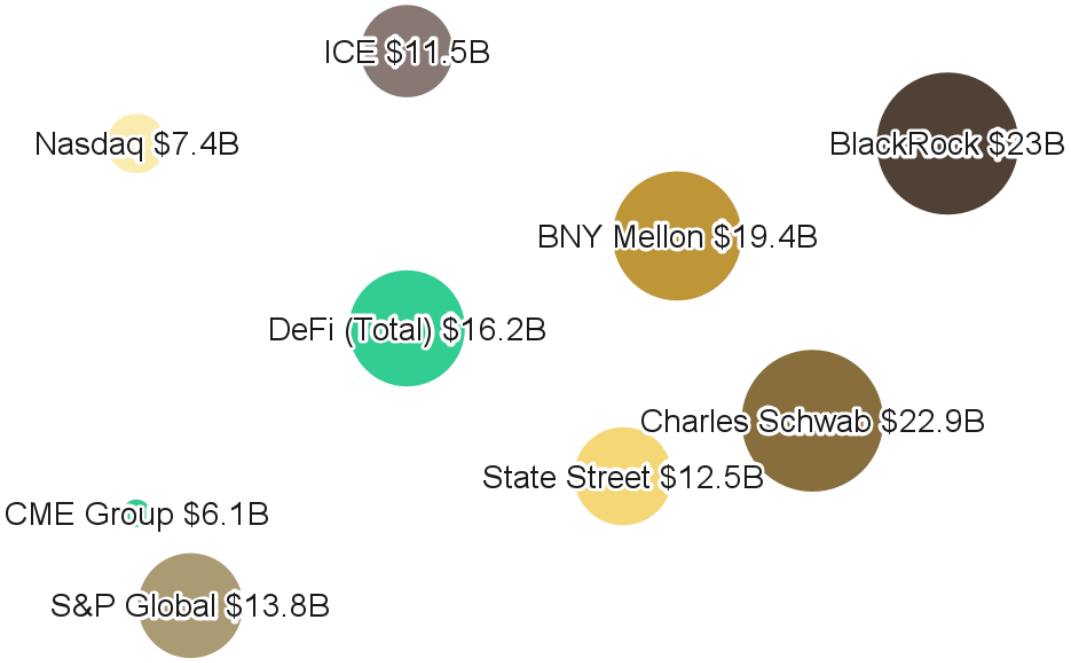
Figure 53: DeFi monthly revenue in 2025 reached a record high of US$1.65B



Source: DefiLlama, Binance Research, as of December 31, 2025

At this scale, DeFi revenue is now comparable to BNY Mellon (US$19.4B) and sits within striking distance of industry titans like BlackRock and Charles Schwab. However, the most profound indicator of this shift is infrastructural: DeFi's revenue now eclipses the combined annual earnings of Nasdaq and CME Group (approx. US$13.5B). By outperforming the traditional pillars of global equity and derivatives trading, DeFi has proven it is no longer a niche experiment, but a cash-flow-positive powerhouse operating at the level of a top-tier Fortune 500 enterprise.

Figure 54: The blue chip moment – DeFi revenue rivals Wall Street titans



Source: DefiLlama, Binance Research, as of December 31, 2025

The Billion-Dollar Club:

- **Meteora (Solana):** The breakout star of the year, generating **US$1.25B** in annualized protocol fees.
- **Jupiter (Solana):** Followed closely with **US$1.11B**.
- **Uniswap (Ethereum):** The perennial DEX leader generated **US$1.06B**.

Other Notable Performers:

- **Aave:** Generated ~US$809M, solidifying its lead in lending.
- **Hyperliquid:** The derivatives protocol recorded over US$800M in annualized revenue.

Economic Reality: Value capture is shifting from the "block space" layer to the "liquidity and execution" application layer. Users are proving willing to pay premiums for superior liquidity and execution rather than just gas fees.

Figure 55: Top 5 revenue protocols

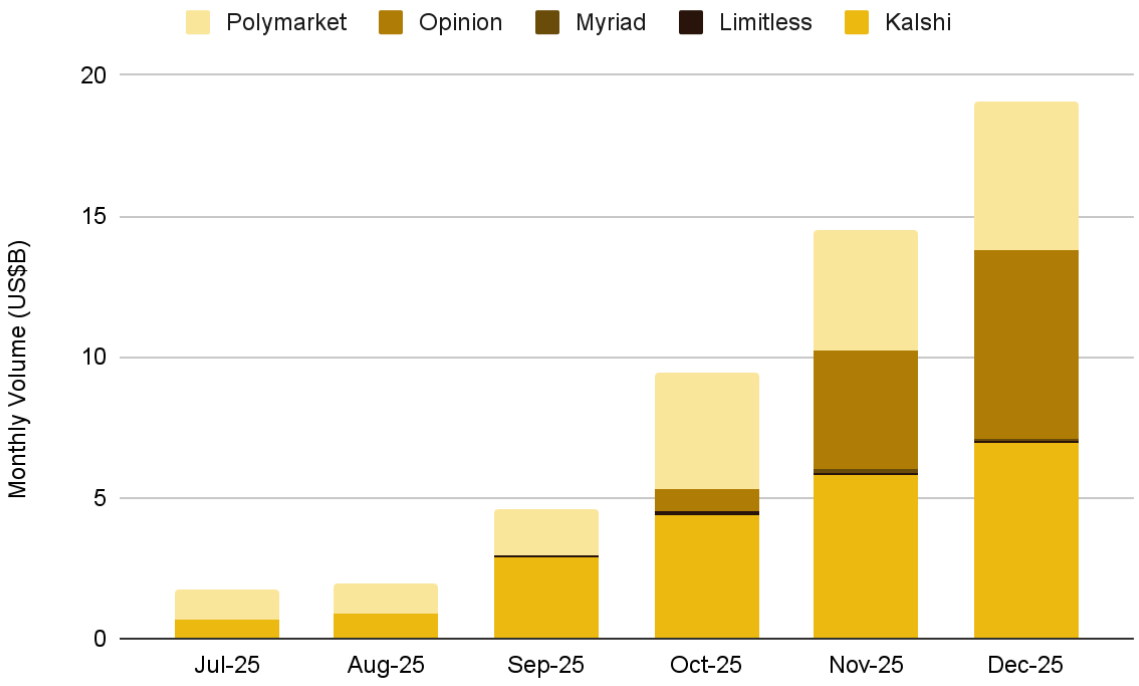
Protocol	Sector	2025 Est. Fee Revenue	Network	Primary Revenue Driver
Meteora	Liquidity/DEX	**US$1.25B**	Solana	DLMM model efficiency in volatile assets
Jupiter	Aggregator/Perps	**US$1.11B**	Solana	Aggregated routing & high-leverage perps
Uniswap	DEX	**US$1.06B**	Eth/Multi	Massive long-tail volume & V3/V4 pool fees
Aave	Lending	**US$809M**	Multi-chain	Institutional demand & RWA collateral
Hyperliquid	Derivatives	**US$800M+**	Hyperliquid L1	High-frequency trading & market maker activity

Source: DefiLlama, Binance Research, as of December 31, 2025

Prediction Markets: Rising Macro Hedging Tools

Prediction markets experienced explosive growth this year, forming a consolidated duopoly between **Polymarket and Kalshi**, which together accounted for **US$51B** in trading volume. Notably, **BNB Chain-based Opinion**, as a rising newcomer, quickly captured one-third of the market share, with trading volumes reaching around **US$7B** in December. This growth reflects heightened investor interest in the prediction market space amid rapidly evolving regulatory, macroeconomic, and geopolitical landscapes.

Figure 56: Prediction markets experienced explosive growth in 2025



Prediction markets are no longer seen merely as betting platforms; they have begun to be recognized as macro hedging tools. At the same time, real-time odds from prediction markets are increasingly cited by mainstream media and financial analysis institutions as more forward-looking indicators compared to traditional polls.

Notable Themes for this sector:

- **Mainstream Integration:** Polymarket's integration with X (Twitter) and data inclusion on Bloomberg Terminals marked the transition from "betting tool" to **"News 2.0" Infrastructure**. Market-Implied Probability is now widely cited by institutions as superior to traditional polling.
- **Polymarket:** Annual volume exceeded **US$27B**. Beyond the U.S. election, it successfully expanded into sports, geopolitics, and science, becoming a global "truth discovery engine."
- **Kalshi:** Following its legal victory against the CFTC, the compliant U.S. platform saw exponential growth, with an annualized volume run rate reaching **US$24B**.

DeFAI: The Bubble and Rebirth

In 2025, the convergence of AI Agents and Cryptocurrency (DeFAI) experienced the market's most violent volatility. This was not merely hype surrounding "AI tokens," but a radical experiment in on-chain production relations.

Figure 57: AI Sector Volatility: Market Cap and TVL Divergence

Source: DefiLlama, Binance Research, as of December 31, 2025

Valuation Collapse and Market Clearing

Early in 2025, the market assigned a massive premium to the "AI Agents with Wallets" narrative. These tokens largely relied on absurd, AI-generated content to capture attention. However, as the year progressed, the market aggressively pivoted toward **Utility Agents**, and the speculative froth faced a brutal value regression.

- **Virtuals Protocol (VIRTUAL):** As a factory for AI agent issuance, VIRTUAL hit an All-Time High (ATH) of **US$5.07** on January 2, 2025. By year-end, it traded in the **US$0.64–0.88** range, suffering a drawdown exceeding **83%**.

- **ai16z:** Once hailed as the exemplar of AI investment DAOs, its market cap reached billions in early 2025 but collapsed to approximately **US$50M** by year-end.

Reasons for the Crash:

- **Utility Gap:** Most agents remained "tweeting bots" lacking the capability to generate actual economic value.

- **Liquidity Drain:** As capital rotated into BTC and stablecoins, high-risk DeFAI assets suffered the first wave of liquidity withdrawals.

- **Valuation Overhang:** Early valuations severely overdrew growth expectations for years to come.

Survivor Logic: From "Attention" to "Utility"

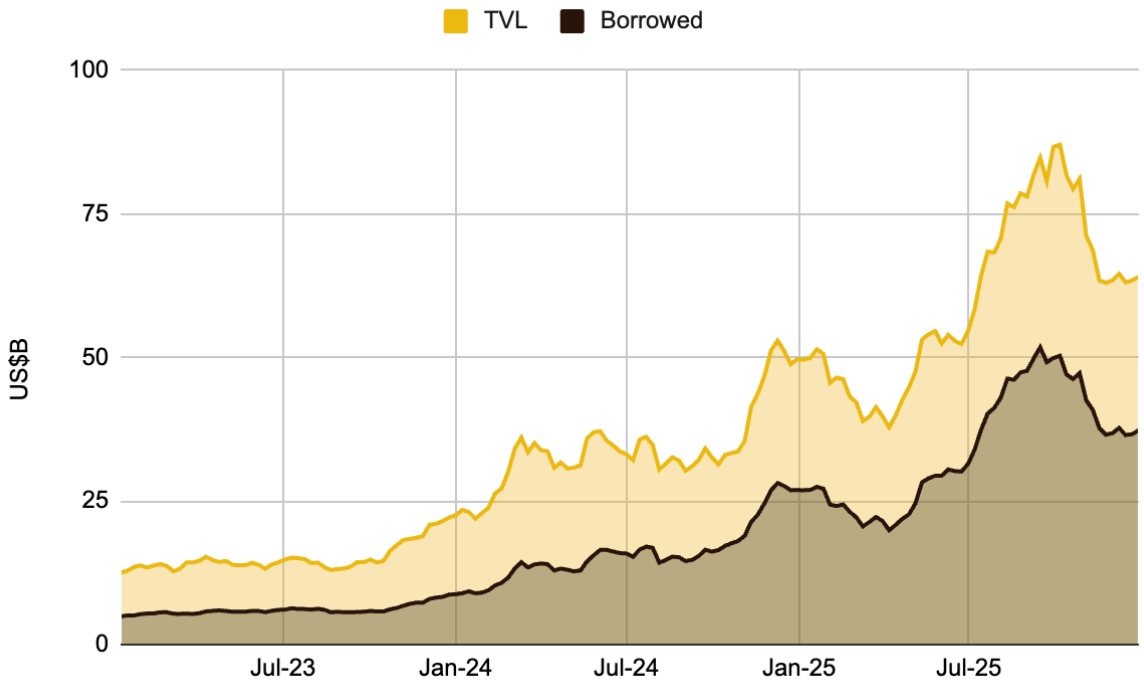
Despite the price collapse, the DeFAI sector has not perished; it has entered a pragmatic "Utility Verification Period." Survivors have demonstrated a clear **"Service-as-Revenue"** model. The market is shifting from "speculating on AI concepts" to "utilizing AI services." The winners of the future will be agents capable of autonomously executing complex financial operations (e.g., on-chain arbitrage, yield farming management) and generating verifiable cash flow, rather than mere chatbots.

We are witnessing the birth of **"Agentic Finance."** Autonomous AI agents are becoming independent economic entities. For instance, on the Gnosis Chain, AI-initiated transactions are noted to make up over 39% of all Safe (smart account) transactions. In one specific use case, AI agents accounted for over 340K monthly transactions in prediction markets and 35%+ of all SAFE transactions on Gnosis Chain. This signals that AI is utilizing multi-sig and smart account infrastructure at scale to manage assets.

Lending: Structural Evolution, Record Growth, and Deepening CeFi-DeFi Integration

The lending sector experienced a significant structural evolution, characterized by TVL growth and a deepening integration with centralized and consumer-facing financial products. The year began with a total TVL of ~US$48B. By the end of 2025, the sector showed a notable expansion, peaking in October with TVL exceeding US$91B. Active borrowing grew from US$26B at the start of the year to over US$36.9B by December 31.

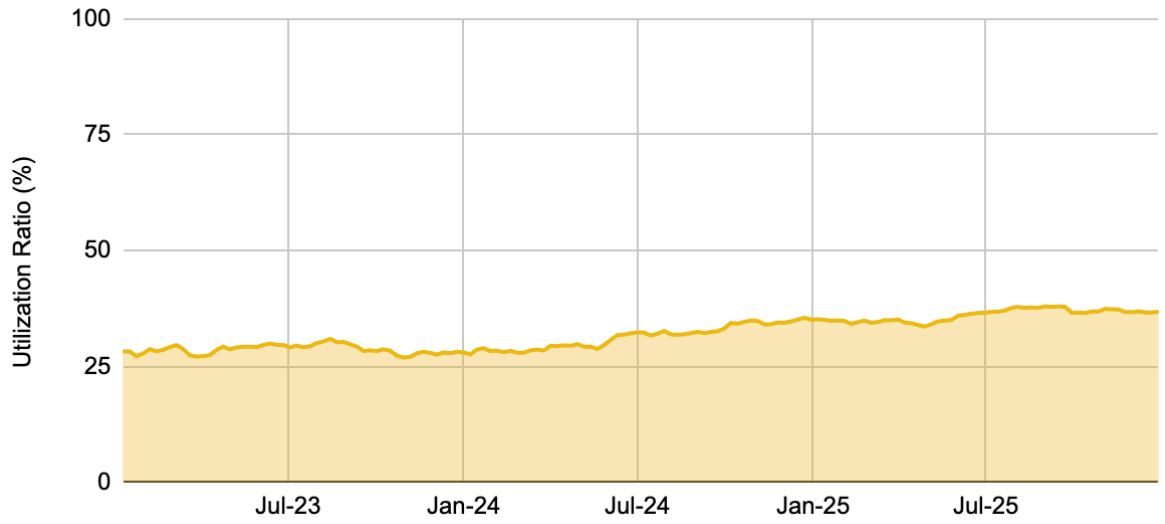
Figure 58: Total TVL and borrowed value of lending protocols reached ATHs this year



Source: DefiLlama, Binance Research, as of December 31, 2025

A key indicator of health was the Utilization Ratio, which has been steadily increasing, averaging 36% throughout the year compared to 29% in 2023, showing that capital wasn't just being parked but was actively utilized for credit and the category is becoming more capital-efficient over time.

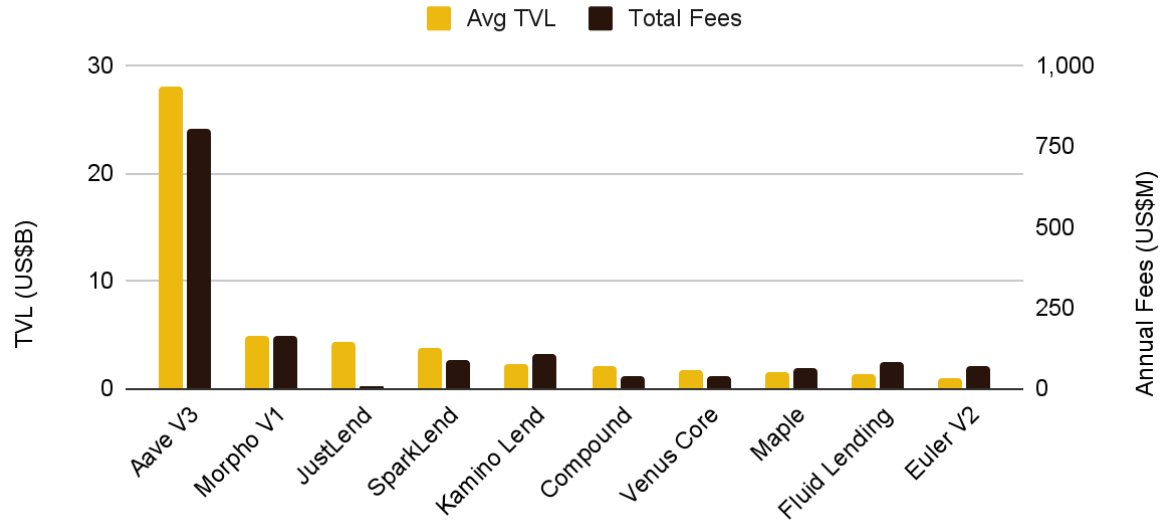
Figure 59: The Utilization Rate of lending protocols has been steadily rising



Source: DefiLlama, Binance Research, as of December 31, 2025

Led by protocols such as Aave V3, which maintained a dominant US$28B average TVL, the industry transitioned from a niche speculative tool into a highly efficient, transparent, and modernized global credit infrastructure. At the same time, the number of active lending protocols grew from 410 to 469 over the year, indicating a healthy, competitive landscape.

Figure 60: Aave still holds the dominant market share, but smaller protocols demonstrate higher capital efficiency (higher fee/TVL ratio)



Source: DefiLlama, Binance Research, as of December 31, 2025

The "bridge" between DeFi and centralized/consumer products became a core structural transition for the sector in 2025:

- **CeFi-DeFi Hybrids:** Financial institutions increasingly partnered with DeFi platforms to use tokenized Real-World Assets (RWAs) as collateral. This addressed SME financing gaps by leveraging DeFi's efficiency over traditional banking costs.
- **Consumer Accessibility:** Lending protocols were deeply integrated into mainstream wallets, allowing users to borrow or earn crypto with a "consumer-product" level of UX, benefiting from lower fees and faster settlements.
- **Institutional Adoption:** Major players like Franklin Templeton amended institutional funds to support stablecoin reserves and on-chain cash use. Protocols like Euler V2 refocused specifically on institutional needs following their 2025 recovery. Its TVL steadily grew from about US$110M at the beginning of the year to a peak of over US$2.2B in October.

6.3 Outlook: Intelligent Finance & Compliant Assets

Looking toward 2026, DeFi will fully exit its "wild west" era, entering the age of **"Intelligent Finance"** driven by two engines: **Machine Intelligence** and **Compliant Assets**.

1. **Stablecoins: The Path to Trillion-Dollar Scale**

Protected by the legal framework of the GENIUS Act, stablecoin market capitalization is projected to surpass **US$1.9T** by 2030.

- **Bank Entry:** With clear compliance paths, 2026 will see traditional commercial banks directly issuing or supporting stablecoins, challenging the Tether/Circle duopoly.
- **Yield-Bearing Standard:** RWA-backed stablecoins (e.g., Treasury-backed) will become the standard for corporate treasury management, replacing traditional demand deposits.

2. **Machine Customers Dominating the Market**

The "Agent Economy" will move from narrative to mainstream. While 2025 saw DeFAI token prices crash, on-chain agent activity did not cease. Within a few short years, **DEX trading volume contributed by AI agents is expected to exceed that of humans.**

- **Infrastructure Demand:** This will catalyze immense demand for low-latency networks (e.g., Solana) and standardized machine payment protocols (e.g., x402 standards). AI agents require the ability to pay and settle with each other in milliseconds - speeds unattainable by human operators.

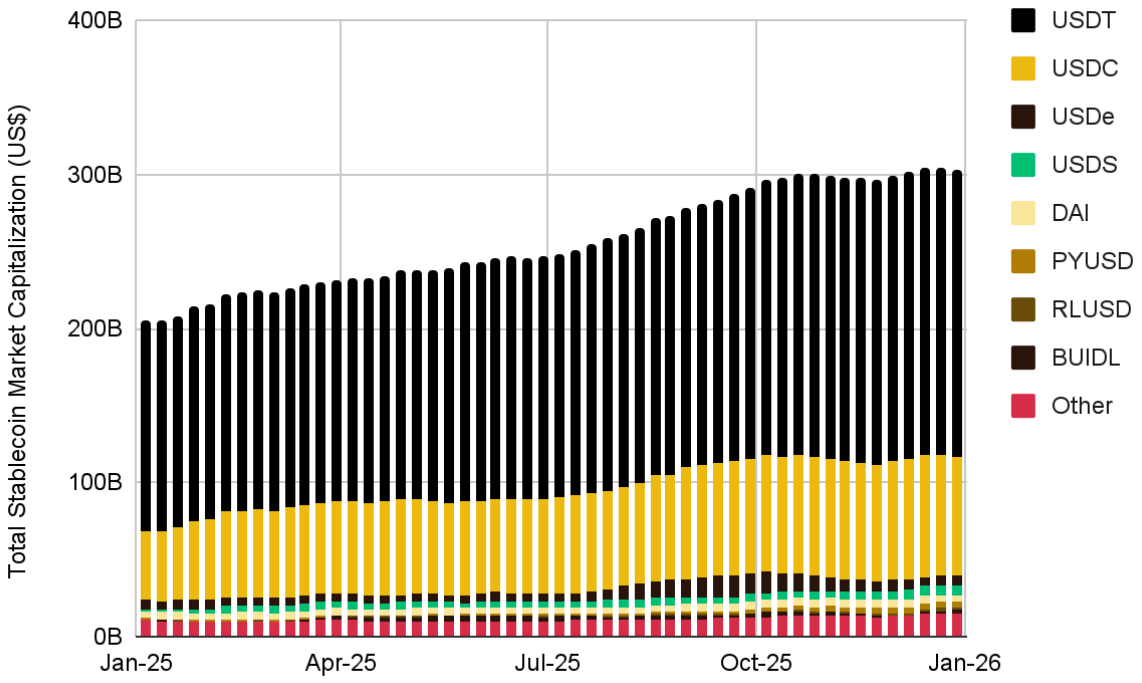
The crypto market of 2026 is one of **purification**. The noisy bubbles have burst, leaving behind a hardened bedrock. For investors, the opportunity no longer lies in hunting the next 100x Meme coin, but in focusing on the **core infrastructure** that facilitates the economic activity of AI agents, bridges Real World Assets, and generates positive cash flow.

07 / Stablecoins

7.1 Market Overview

2025 has probably been **the greatest year for stablecoins in their short ~13 years of existence**, and will likely be recognized as the year that stablecoin adoption went mainstream. Growth across major metrics like total stablecoin market capitalization, stablecoin transaction volumes, and institutional adoption has been rapid over the course of 2025.

Figure 61: Total stablecoin market cap exceeded US$300B in 2025, ending the year at US$305B, rising ~49% on the year



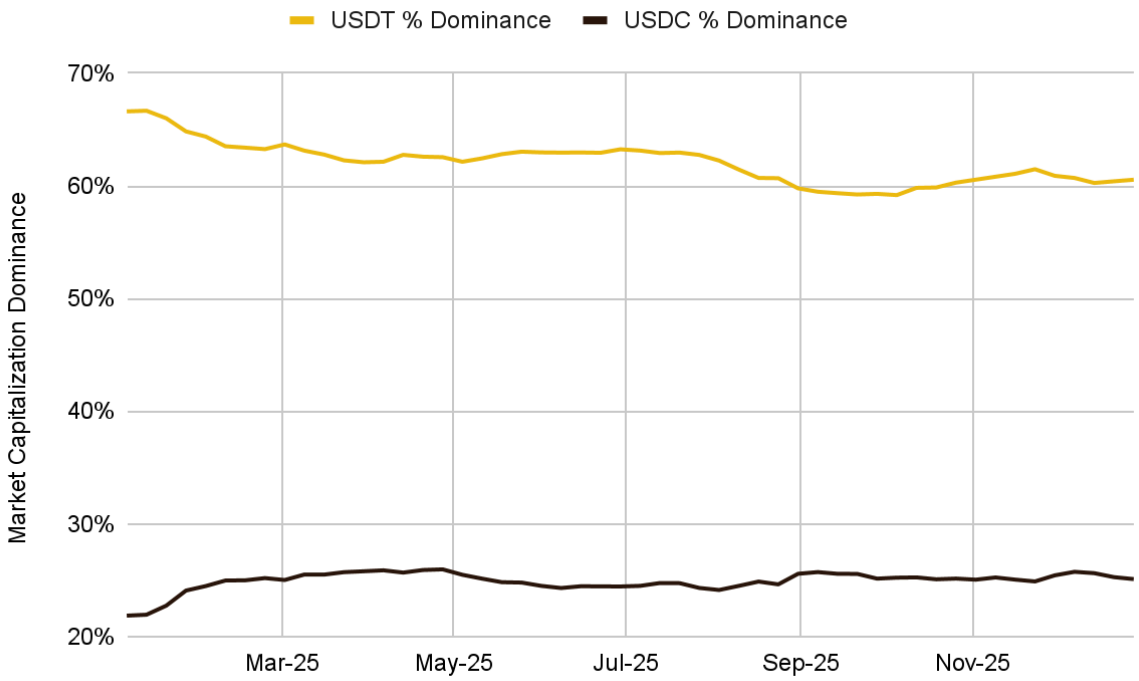
Source: Artemis, Binance Research, as of 31 December 2025

Citigroup projects the accelerating growth of stablecoins to continue, predicting a total stablecoin market size of US$1.9T by 2030 as their base case – a CAGR of ~58% over the next four years.

Among the fastest-growing stablecoins in 2025 was Ethena's USDe, which expanded from US$5.9B at the start of the year to a peak circulating market capitalization of US$14.8B in October. Growth was driven primarily by strong retail demand for high yields (reaching **~20% APR at times**) alongside powerful network effects enabled by an expanding distribution funnel. Following the post-October market drawdown, USDe's circulating supply retraced to approximately US$6.4B, yet it still ended the year as the third-largest stablecoin by market capitalization.

Despite the emergence of newer entrants, the stablecoin market remains highly concentrated: **Tether and Circle continue to dominate supply**, with USDT and USDC ending the year at roughly **61%** and **21%** of total circulating market share, respectively.

Figure 62: USDT and USDC continue to dominate, accounting for 61% and 21% of the circulating stablecoin market capitalization respectively at year end

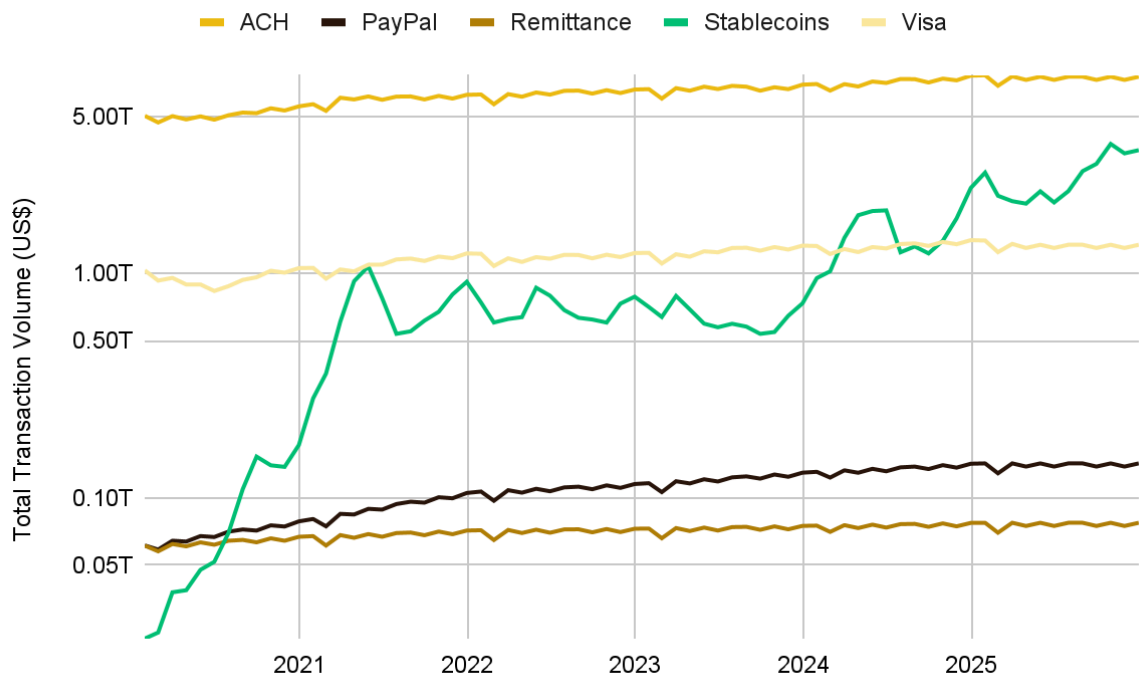


Source: Artemis, Binance Research, as of 31 December 2025

While USDT and USDC remain dominant, the balance of power within the stablecoin duopoly has begun to tilt. **USDC gained share at USDT's expense**, rising from **22% to 26%**, while **USDT fell from 67% to 61%** by year-end. This shift reflects a structural rebalancing from offshore liquidity toward **regulatory alignment**. Following the passage of the U.S. **GENIUS Act**, institutions increasingly favored USDC as a "flight-to-quality" asset, reinforcing its role as the settlement layer for regulated ETFs and tokenized Treasury vehicles such as BlackRock's BUIDL. By contrast, although Tether reached new highs in absolute market capitalization, its relative dominance eroded amid **MiCA-driven exchange restrictions in Europe** and a broader institutional rotation toward audited, onshore alternatives. The resulting swing marks a maturing stablecoin market, one where growth is driven less by raw liquidity and more by **compliance and regulatory interoperability**.

Stablecoin transaction volumes have also been increasing rapidly in comparison to other settlement mediums, rising to become the second largest by monthly volumes, only second to the Automated Clearing House (ACH) of the United States.

Figure 63: Stablecoin average monthly volumes (30 Day Rolling) are rapidly growing, having firmly surpassed Visa's in 2024, ending 2025 at US$3.5T



Note: Chart includes stablecoin trading volumes
Source: Artemis, Binance Research, as of 31 December 2025

In 2025, stablecoins processed **a record ~US$33T in annual transaction volume**, reflecting **~72% year-on-year growth**. This far exceeded Visa's annual transaction volumes, of approximately US$16T. Moreover, with a total market capitalization of ~$300B in 2025, stablecoins achieved an **annual monetary velocity** (transaction volume divided by average supply) of **~110x**. In plain terms, the **average stablecoin dollar turns over once every ~3.3 days**.

This significantly **outpaces traditional systems**: USD M2 velocity remains low at around **1.4x annually**, while high-frequency payment networks like Visa – processing ~US$14T in volume – imply an effective **"velocity" closer to 50x** for traditional fiat payment systems. Stablecoins thus demonstrate **roughly twice the circulation speed** of leading traditional rails.

Their **24/7 operation**, **near-instant settlement** (often under seconds), and **programmable features** on distributed ledgers enable far higher efficiency for trading, DeFi, remittances, and emerging Internet-native commerce – positioning them as a potentially superior medium of exchange for the digital economy.

Looking to ride the accelerating stablecoin wave, payment giants **the likes of Visa, Mastercard, Stripe, and Klarna** all announced significant stablecoin-related developments, recognizing the revolutionary potential for stablecoin and blockchain technology to increase speeds, reduce costs, and eliminate longstanding friction points for global payments, particularly cross-border payments.

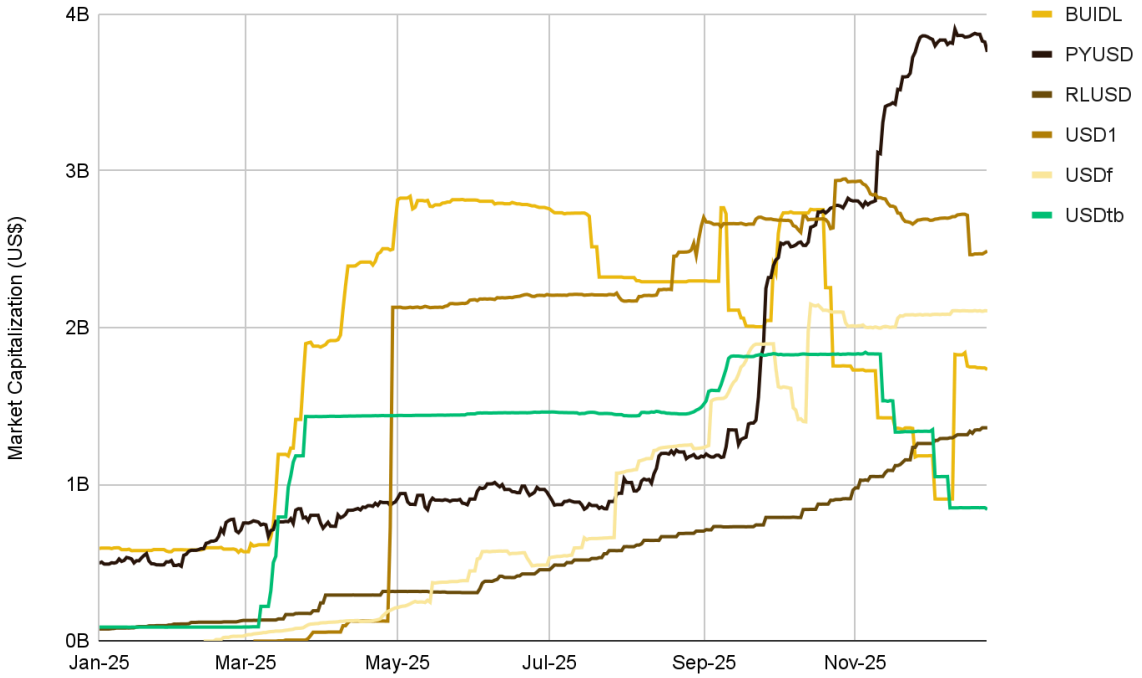
Figure 64: Notable stablecoin product launches and announcements in 2025

Company		Product	Date Announced/Launched
	World Liberty Financial	USD1 stablecoin	Mar 2025
Klarna.	Klarna	KlarnaUSD stablecoin	Nov 2025
stripe	Stripe	Tempo L1	Private Testnet - Sep 2025 Public Testnet - Dec 2025
	Cloudflare	NETdollar stablecoin	Sep 2025
	Tether	Plasma L1	Sep 2025
	Circle	Arc L1	Private Testnet - Aug 2025 Public Testnet - Oct 2025
qivalis	European Banking Consortium (Qivalis)	MiCAR-compliant euro stablecoin	Dec 2025
SoFi	SoFi Technologies	SoFiUSD stablecoin	Dec 2025
SONY	Sony Bank	USD-denominated stablecoin	Announced - Dec 2025 To Launch - Early 2026
VISA	Visa	USDC Settlement in the U.S.	Dec 2025
JPMorgan Chase & Co.	J.P. Morgan	“MONY” Tokenized Money Market Fund`	Dec 2025

Note: Coverage in this table is non-exhaustive
Source: Artemis, Binance Research, as of 31 December 2025

Stablecoin users continue to show strong demand that matches the growing supply of innovative stablecoin projects and products. In 2026, **six new stablecoins surpassed the US$1B market capitalization milestone,** highlighting a **robust appetite for diverse stablecoin solutions** tailored to meet the needs of different audiences. This dynamic growth underscores the evolving landscape and increasing adoption of stablecoins across the market.

Figure 65: Six new stablecoins cross the US$1B market capitalization mark



Source: Artemis, Binance Research, as of 31 December, 2025

(1) **BUIDL (BlackRock USD Institutional Digital Liquidity)**
BUIDL crossed US$1B by redefining what an institutional stablecoin is meant to be: **on-chain collateral, rather than retail-focused money**. In 2025, BlackRock integrated BUIDL directly into major DeFi venues like Aave and Maker, enabling institutions to earn Treasury yield while using BUIDL for liquidity, leverage, and settlement. Its success established tokenized Treasuries as the natural reserve asset for regulated on-chain finance, catalyzing broader institutional entry into RWAs.

(2) **PYUSD (PayPal USD)**
PYUSD reached **scale primarily through distribution and user experience**. In 2025, PayPal continued to lower the UX barrier by deepening PYUSD's integration across its consumer ecosystem, including enabling Venmo users to hold and transfer PYUSD with minimal exposure to on-chain complexity. Beyond payments, PYUSD increasingly functioned as programmable settlement capital, used in pilot initiatives and partner programs to fund capital-intensive workflows such as compute, commerce, and platform incentives. This evolution signals an important shift: from stablecoins as simple payment instruments toward **stablecoins as operating capital embedded directly into digital platforms**.

(3) **USD1 (World Liberty Financial)**
USD1 demonstrated how narrative, geopolitics, and distribution can accelerate adoption. In 2025, it became the fastest stablecoin to surpass US$3B, driven by overtly political, "patriotic" positioning. Its defining milestone was adoption as the primary settlement asset on the Canton Network, used by large global asset managers - positioning USD1 as a SWIFT-adjacent digital dollar for institutions and sovereign actors seeking USD exposure without traditional rails.

(4) **USDtB (by Ethena)**
USDtB marked Ethena's move from synthetic dollars toward **institutional-grade, cash-equivalent money**. Launched in 2025, USDtB is fully backed by short-duration U.S. Treasuries via BlackRock's BUIDL, functioning more like a tokenized money market fund than a crypto-native stablecoin. Within **Ethena**, USDtB serves as the **risk-off counterpart** to USDe, anchoring conservative capital while enabling seamless movement into Ethena's higher-yield liquidity stack.

(5) **RLUSD (Ripple USD)**
Ripple's RLUSD **focusses narrowly on bank-to-bank cross-border settlement**. Launched in 2025, it leveraged Ripple's 500+ banking relationships and replaced XRP in low-volatility corridors where predictability mattered more than speculation. RLUSD positioned stablecoins as institutional settlement infrastructure, laying the **groundwork for on-chain interbank lending** via the upcoming XRPL Lending Protocol.

(6) **USDf (Falcon USD)**
USDf became the leading yield-bearing stablecoin by embracing balance-sheet diversity. In 2025, its **"Universal Collateral" model allowed minting against tokenized gold, bonds, and other stablecoins**, pushing supply beyond US$1B. A brief mid-year de-peg, which was resolved transparently, ultimately strengthened credibility. USDf's trajectory signals the emergence of stablecoins as programmable credit instruments, extending on-chain dollar creation beyond banks and large institutions.

The "New Big Six Stablecoins" that crossed US$1B in 2025 did so for very different reasons – **collateralization (BUIDL), retail distribution (PYUSD & USDtB), geopolitics (USD1), banking rails (RLUSD), and yield engineering (USDf)** – underscoring that the next phase of growth may be about *specialization*, not necessarily one-size-fits-all digital dollars.

The Stablecoin Stack

Stablecoins are quickly becoming a standalone vertical within the crypto industry. Within the modern stablecoin ecosystem as of 2025, there exist **four major categories of players** that make up the layers of the stablecoin technology stack. This year especially, we have seen many of these players begin to expand their respective businesses to encompass more products and functionality, in an effort to own more of the stack:

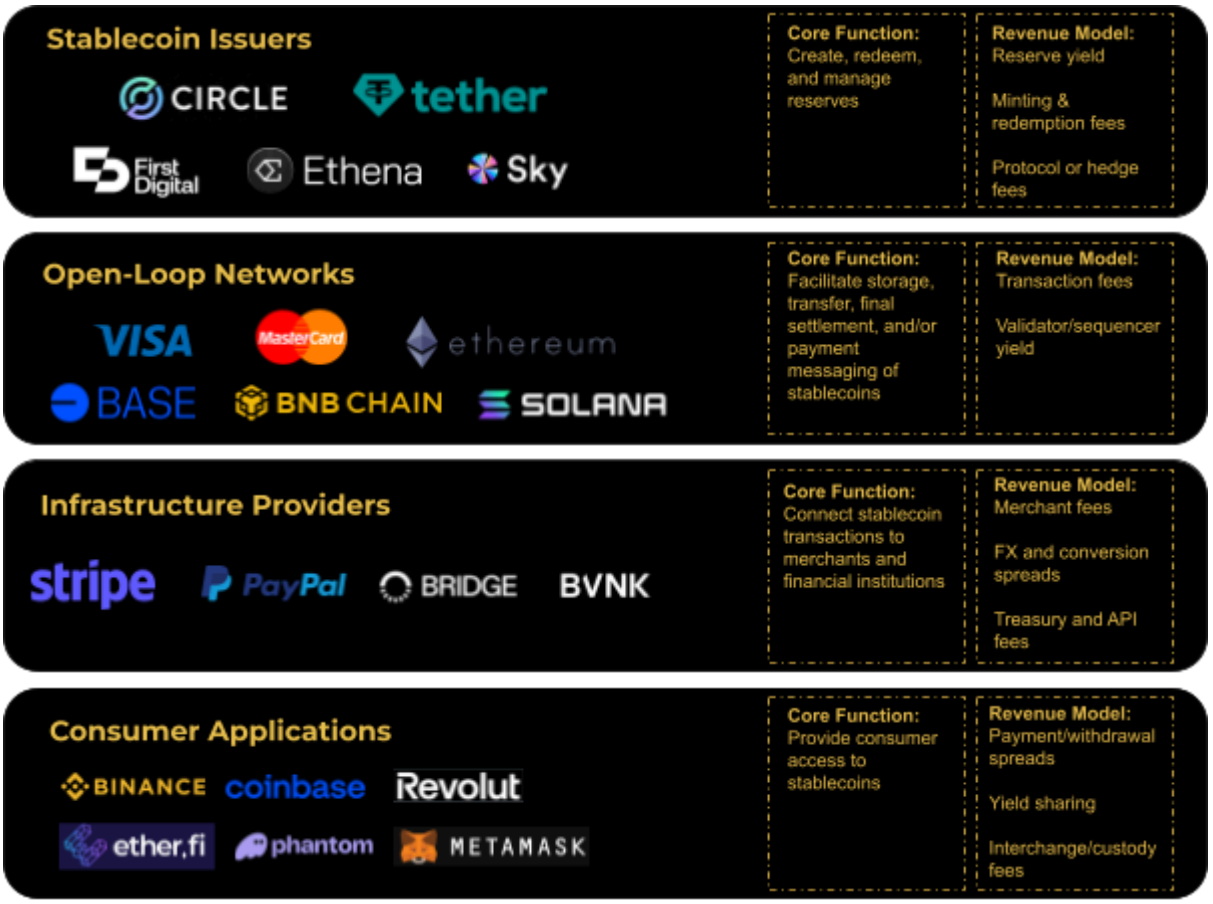
1. **Stablecoin Issuers** like Tether, Circle, Sky protocol, and Ethena protocol manage the creation and redemption of stablecoins. To date, these have been reported to be the **most profitable** players, with **Tether reportedly expecting US$15B** in profits in 2025, largely via the risk-free interest rate from T-bills on their US$180B in circulating USDT supply.

2. **Network Providers** consist of blockchains like Ethereum and Solana which facilitate storage, transfer, and settlement of stablecoins. Recent entrants also include payment-specific blockchains like **Tether's Plasma, Circle's Arc, and Stripe's Tempo**. Visa and Mastercard have also begun to play in this space as centralized payment network providers, facilitating payments using stablecoins via their established card networks.

3. **Infrastructure Providers ("Payment Service Providers")** include both the fintech companies from the traditional payments space like Stripe and Paypal, but also new stablecoin-focused players like Bridge (which was acquired by Stripe in late 2024), and BVNK which **Citi Ventures invested in October 2025** at an estimated US$750 million valuation. These companies provide necessary infrastructure to facilitate the acceptance and usage of stablecoins by merchants and businesses around the world.

4. **Consumer Applications (Exchanges, Neobanks, and Wallets)** are the consumer-facing part of the stack, providing the **bank-app equivalent for stablecoin savings and payments**. This category encompasses the largest centralized crypto exchanges, all of which have launched **in-app payments features** for spending of stablecoins and other cryptocurrency (**Binance** was the earliest to launch in 2020, followed by **Coinbase** in 2022, and **Kraken** in 2025). Decentralized neobank projects like **Ether.fi and Mantle** also support banking-like savings and payments features for stablecoins.

Figure 66: The 2025 Stablecoin Technology Stack



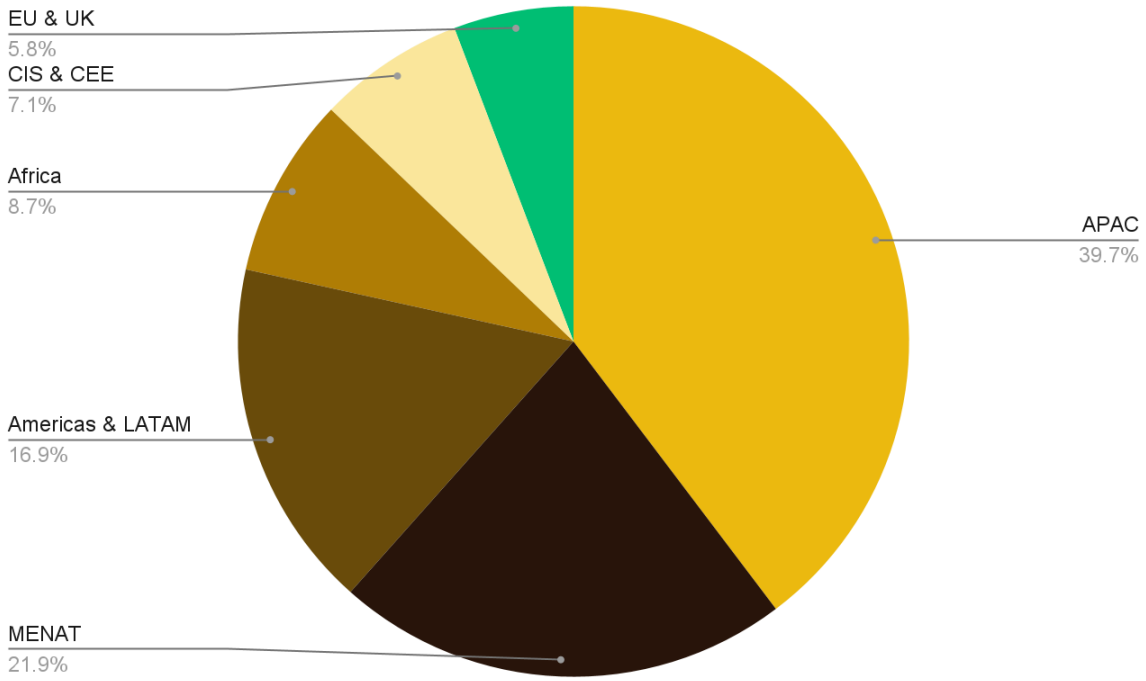
Source: Binance Research

7.2 Stablecoins Around the Globe

Retail Users in Developing Regions

For the past few years, stablecoins have been key instruments allowing individuals in developing countries to access a stable, USD-denominated instrument for preservation of wealth. Taking Binance Pay's volumes (of which ~99% is stablecoin-based) by regional breakdown, we can see that **developing regions like Asia and MENAT account for the majority of stablecoin payment volumes** (39.7% and 21.9% respectively) on the Binance platform.

Figure 67: For Binance Pay users, developing regions Asia and MENAT lead in terms of stablecoin payment volumes



Source: Binance Research, as of 2025

Stablecoins have emerged as a **powerful tool for financial inclusion**, enabling the ~1.3 billion unbanked adults worldwide – **roughly 21% of the global adult population** – to access digital savings, payments, and transfers via just a mobile phone and internet connection.

This **impact is strongest in emerging markets**, where high inflation, currency volatility, and limited banking infrastructure drive adoption in developing regions. This largely **squares up with the regional breakdown** of Binance Pay volumes, where stablecoins can serve as a low-cost, stable alternative for remittances, hedging, and everyday commerce.

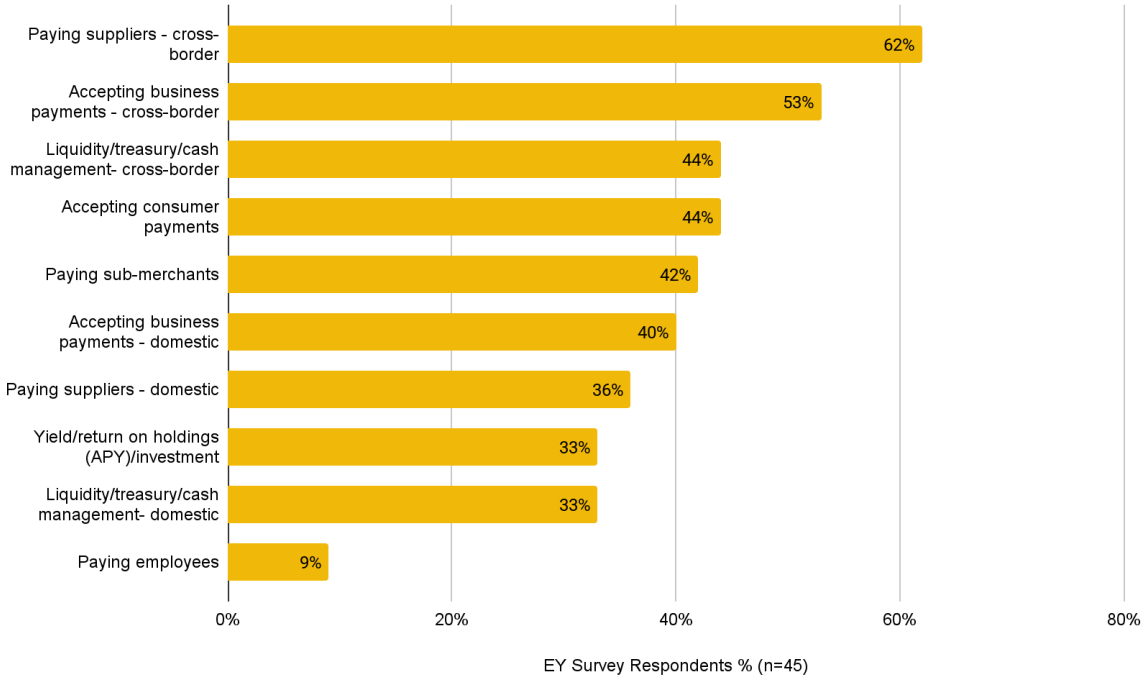
As the industry matures – with clearer regulations like the U.S. GENIUS Act boosting legitimacy and institutional integration – we are likely to **see growing uptake in developed regions too**. This could shift transaction volumes toward more balanced

geographic distribution, expanding stablecoins **from niche utility** in underserved markets **to broader infrastructure** for the global digital economy.

Institutional Users in Developed Regions

In 2025, stablecoins have evolved into regulated financial instruments, gaining traction not only among emerging markets but also within developed countries and institutional sectors. According to a 2025 Ernst & Young survey, **institutions increasingly view stablecoins as a critical solution for enhancing cross-border payment efficiency**, underscoring their growing role in the global financial ecosystem.

Figure 68: A survey by EY finds that for businesses, payments to suppliers and acceptance of business payments across borders is the key modern use case for stablecoins



Source: EY Parthenon, Binance Research, as of 2025

2026 will likely be a year of convergence, as both regulated institutions and underbanked populations begin to converge onto global, borderless, stablecoin technology rails. The impact on the **global payments industry** is profound and immediate. Stablecoins and blockchain technology are slashing the cost of cross-border payments – delivering near-instant, low-fee (often sub-1%) transfers compared to traditional rails' 6-7% fees and multi-day delays – particularly in remittances, B2B flows, and emerging markets.

Among incumbents, **Stripe** and **PayPal** are positioned to benefit most. Both are actively building infrastructure to drive stablecoin adoption, capitalizing on their vast distribution networks and compliance foundations. Stripe has integrated support for major stablecoins (like USDC across multiple chains), enabled subscriptions, and launched tools for custom issuance. PayPal's **PYUSD** has grown significantly, reaching around

US$3.6-3.7B in circulation, powering merchant tools and bridging fiat-crypto ecosystems. These platforms are poised to capture substantial share from legacy systems.

Retail-focused banks will likely feel the **first wave of displacement**, as customers – especially in high-inflation or underbanked regions – migrate to faster, cheaper, higher-yielding stablecoin alternatives. Payment card networks like **Visa** and **Mastercard** are adapting proactively rather than facing outright obsolescence. Visa enables USDC settlement and supports stablecoin-linked cards in 40+ countries, while Mastercard expands multi-stablecoin B2B tools. They retain advantages in consumer protections, credit features, and ubiquity, evolving into hybrid networks that blend stablecoin efficiency with traditional strengths.

In the longer term, 2026 may be remembered as the **concrete starting point** of a broader revolution across the entire financial industry, as individuals and businesses increasingly adopt blockchain rails as the **default mechanism** for financial transactions, fundamentally transforming payments, treasury, and beyond.

Non-U.S. Stablecoins

As of early 2026, **USD-pegged stablecoins command nearly 99% of the ~US$300 billion** total stablecoin market capitalization, with USDT and USDC alone dominating through unparalleled liquidity, global trading pairs, and entrenched network effects in DeFi and cross-border payments. However, sustained regulatory clarity – such as the EU's MiCA framework, which has already **doubled euro-stablecoin market cap** to around **US$685 million** while surging transaction volumes ninefold – and parallel developments in Asia could accelerate the adoption of non-USD alternatives.

Figure 69: High-profile non-USD stablecoin projects announced in 2025

Currency	Key Initiatives Announced
Japanese Yen (JPY)	**JPYC Stablecoin Launch:** JPYC received approval from the FSA, launching the first yen-pegged stablecoin in **October 2025**.
European Euro (EUR)	**Bank Consortium Stablecoin:** Nine European banks announced a plan in **September 2025** to launch a MiCA-compliant Euro stablecoin.
UAE Dirham (AED)	**Sovereign-Backed Stablecoin:** The sovereign wealth fund **ADQ** and **First Abu Dhabi Bank** announced plans for an AED-pegged stablecoin in **April 2025**.
Indian Rupee (INR)	**Asset Reserve Certificate (ARC):** Fintechs are developing a model for an INR-pegged token backed by Indian Government securities.
Other Frameworks	**Bahrain & Canada:** Both jurisdictions introduced or advanced regulatory frameworks in **2025** to permit the issuance of their respective national fiat-backed stablecoins.

Source: Binance Research

This gradual diversification may **begin to chip away at the dollar's virtual monopoly**, fostering regional sovereignty in payments, hedging against local currency risks, and

enabling compliant tokenized finance, though **meaningful erosion remains a long-term prospect** amid USD's overwhelming dominance.

7.3 Outlook

The "Stablecoin Interoperability War" Begins

Stablecoin adoption is already global and accelerating, but the ecosystem remains **structurally fragmented**. Especially as more major brands begin to issue their own stablecoins, the next phase of competition will be about **who controls interoperability** – the rails that allow stablecoins to move seamlessly across **banks, chains, and issuers**.

Three layers of infrastructure are emerging as the key battlegrounds. Projects focused on these are providing the shovels to the ongoing "stablecoin gold rush":

1. **Stablecoin ↔ Fiat On/Off-Ramps**
   Despite on-chain liquidity depth, most real-world economic activity still begins and ends in fiat. Efficient, compliant, and geographically broad on/off-ramps determine where stablecoins can be used at scale. Providers that can abstract away banking complexity whilst maintaining regulatory coverage and instant settlement will control the primary gateway between traditional finance and on-chain dollars.

2. **Cross-Stablecoin Liquidity**
   Stablecoin markets remain siloed by issuer, creating friction between USDT, USDC, PYUSD, FDUSD, and others. Unified liquidity layers that enable near-frictionless 1:1 swaps between stablecoins will be critical for payments, treasury management, and DeFi capital efficiency. In practice, this layer functions as a **foreign exchange market for digital dollars**, and the platforms that aggregate this liquidity gain powerful network effects.

3. **Cross-Chain Stablecoin Liquidity**
   Stablecoin usage is increasingly multi-chain, but liquidity is still fragmented across L1s, L2s, and app-specific chains. Cross-chain liquidity solutions – whether via native bridges, canonical mint-and-burn models, or chain-agnostic settlement layers – are essential to enabling stablecoins to behave like truly global, always-on money rather than chain-bound assets.

The next winners in stablecoins will not merely issue tokens, but **own the connective tissue** that make stablecoins feel **truly fungible, borderless, and invisible** to the end user. This "interoperability war" will determine which platforms capture the payment flows, treasury balances, and ultimately, economic rent that will form the backbone of the Internet economy of the future.

Neobank Explosion, Stablecoin Yields Go Mainstream

Today it is **easier than ever for companies to launch bank-like wallet applications** built on open, permissionless stablecoin and blockchain rails. For consumer-facing companies, this enables a **brand new set of finance-related touchpoints** with their end users, potentially transforming any trusted consumer brand into a retail bank. Blockchain technology will exponentially speed the growth of embedded finance.

As of 2025, blockchain and stablecoin infrastructure has matured to the point of being able to support global transaction volumes from both institutional and retail users. From 2026 onwards we will begin to see the applications of the future fuel the mass global proliferation of blockchain infrastructure throughout all sectors of the digital economy.

This growth will be driven by two major factors:

1. **For Merchants & Institutions**: The adoption of stablecoins by major institutions for settlement of payments. Particularly for cross-border payments, this could **instantly increase profit margins by 2% or more**. Once major, global, household names like YouTube or Netflix begin accepting payments in stablecoin (particularly if the transactions are on-chain), the stablecoin revolution will be complete.

2. **For Consumers**: Consumers around the globe will be drawn to stablecoin-based banking and fintech applications for the **higher savings yields** they can offer. Stablecoin-based neobanks, by nature of their being built largely on existing blockchain infrastructure, will likely have **lower overhead costs than traditional banks**. This, combined with the reduction of financial intermediaries enabled by blockchain technology, means these stablecoin neobanks will be able to **pass on higher savings yields to their consumers**. The growth of yield-bearing stablecoins will also accelerate this trend, as these become easily-integratable yield engines for any aspiring new consumer finance application.

Yield-bearing Stablecoins

One of the major driving factors for the mass adoption of stablecoins, especially on the consumer front, will be widespread access to attractive stablecoin yields.

Figure 70: The yield bearing stablecoin ecosystem is rapidly growing, signifying a sustained appetite for investment and experimentation

Source: StableWatch

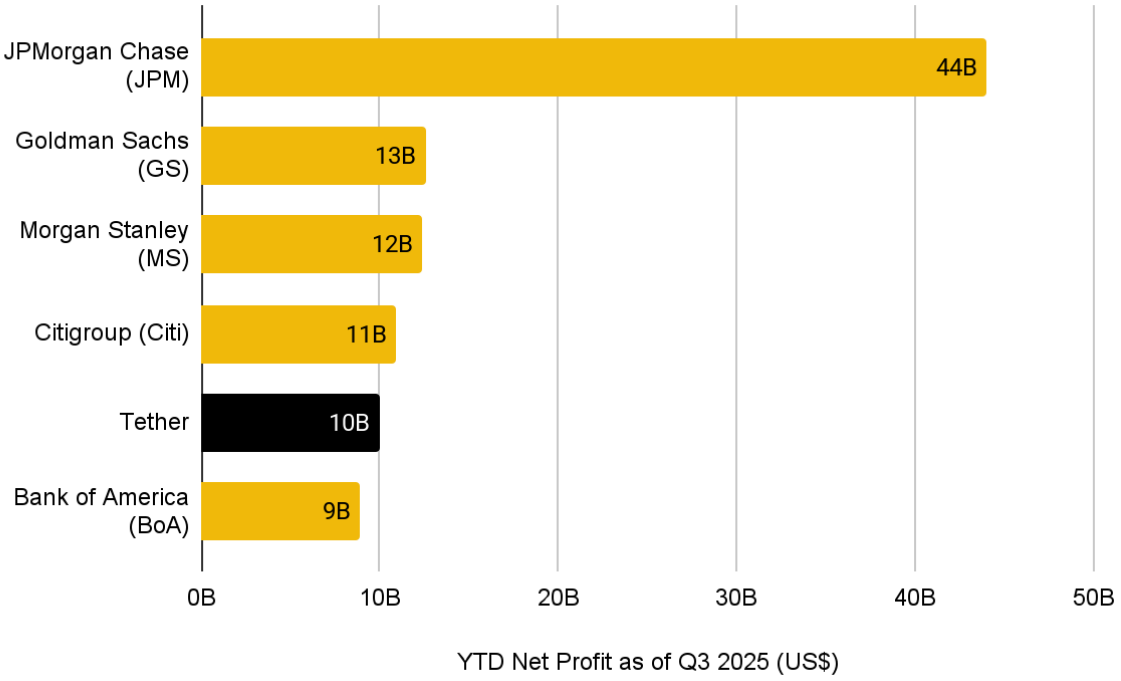
Yield-bearing stablecoins are designed to transfer the yield generated by its underlying collateral – **typically low-risk, interest-bearing assets** – directly back to the token holder, creating an asset that functions as both a stable unit of exchange and a productive instrument. Today, the term "yield-bearing" encompasses two distinct risk models:

1. **Tokenized Real-World Assets (RWAs)**: The most prevalent modern form, where fiat collateral is invested in highly liquid, income-generating assets like U.S. Treasury bills or Money Market Funds (MMFs). The yield is passed to the holder, often via auto-compounding the token's value (**e.g. Mountain Protocol's USDM**).

2. **Decentralized Yield Strategies**: These include over-collateralized stablecoins (like the current **DAI/USDS** model) or synthetic dollar protocols (like **Ethena's USDe**), which generate yield through on-chain strategies like staking, lending, or derivatives hedging.

For many years, **Tether (issuer of USDT), has profited massively** from the risk-free interest earned on the reserves backing USDT's US$187B circulating market capitalization.

Figure 71: Tether's earning capacity ranks amongst the largest banks in the world, making stablecoin issuance a highly lucrative opportunity



Source: Company earnings reports, Binance Research, as of Q3, 2025

Tether's dominance has allowed it to **retain the lion's share of its reserve earnings**. However, as new stablecoin issuers begin to compete in the space, one of the major customer acquisition tools they have begun to use is the passing on of a portion of reserve interest earnings to stablecoin holders. For example, at the time of writing, Paypal's PYUSD rewards holders on their application with **~4% APR**. Similarly, World Liberty Financial recently began a **limited-time Binance Earn campaign** lasting until January 23, 2026, offering USD1 holders **20% APRs**. As competition continues to rise, we can expect to

see more of such campaigns proliferate (Tether-backed neobank **Plasma One will reportedly offer 10% APR** on USDT), benefiting consumers with higher, globally available USD-denominated savings rates.

Rising competition is expected to proliferate such promotional campaigns and structured rewards programs. **Blockchain's low operational overheads** – near-instant settlement, minimal intermediaries, and efficient reserve management – enable issuers, fintechs, and next-generation banks to **pass through a larger share of Treasury interest earnings** compared to traditional banking rails. This dynamic could deliver **sustainably higher, globally accessible USD-denominated savings rates**, especially in underserved regions.

As stablecoin and blockchain technology continue to proliferate the Internet economy, we will begin to see new financial products, features, and experiences that can only exist because of the interoperability of digital value and money that blockchains enable. Particularly as agentic commerce begins to take off, this trend will continue to accelerate, quickly bringing us into a world **where digital value and money flows as seamlessly as information on the Internet** does today. This opens the possibility for brand new ways for companies and individuals alike to profit from the ever-accelerating digital economy, as increased interoperability allows for the creation of new, embedded, digital-native markets.

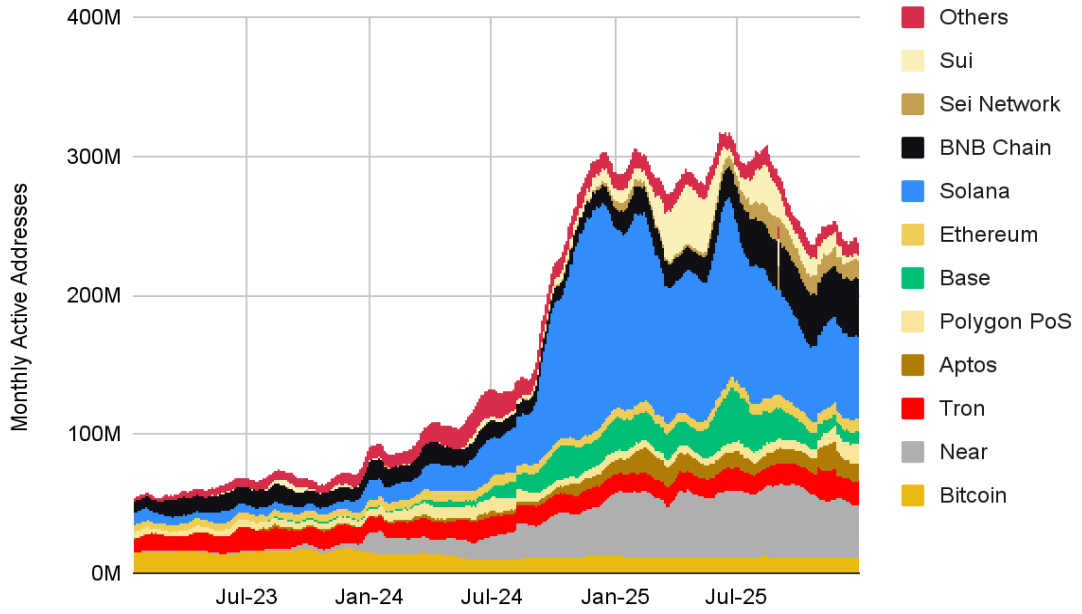
08 / Consumer Crypto

For the crypto industry, particularly on the consumer side, **2026 marks a key moment** where infrastructure maturity meets real-world execution. With regulatory clarity accelerating – evidenced by the GENIUS Act's implementation and anticipated market structure legislation – institutions are not just noticing blockchain but actively integrating it, from stablecoin settlements to tokenized assets. This creates a **prime opportunity for builders to deliver polished, consumer-grade products** that can serve blockchain's core advantages: faster transactions, lower costs, and true interoperability – to onboard the next billion users, all wrapped in intuitive experiences rivaling today's top apps.

Yet, while blockchain is often heralded as the "next Internet revolution," its transformative impact on today's Internet giants **may prove far more evolutionary than disruptive**. Unlike the original Internet, which upended pre-digital media empires, **blockchain emerges as a natural extension of the existing web** – layering programmable value atop the Internet's free flow of information. This positions entrenched platforms like Big Tech and Internet firms to adopt it as an **efficiency booster** for their existing vast networks (e.g., through crypto wallets, private chains, or on-chain payments), making it **a steep challenge for pure crypto-native startups to bootstrap entirely new consumer ecosystems** from scratch amid entrenched network effects.

For blockchain technology itself as a new emerging infrastructure network however, **growth has never been more obvious**. The most telling indicator of its global adoption is the **number of active on-chain addresses** – a metric that has quietly but consistently increased since the very first blockchain was launched, reflecting steady and sustained user engagement worldwide. We saw **monthly active addresses peak above 300M** in June, before coming back down to form a new, higher base of **~230M by year-end**.

Figure 72: Monthly active blockchain addresses remains in a consistent uptrend, peaking ~314 million in June 2025



Source: Artemis, Binance Research, as of December 31, 2025

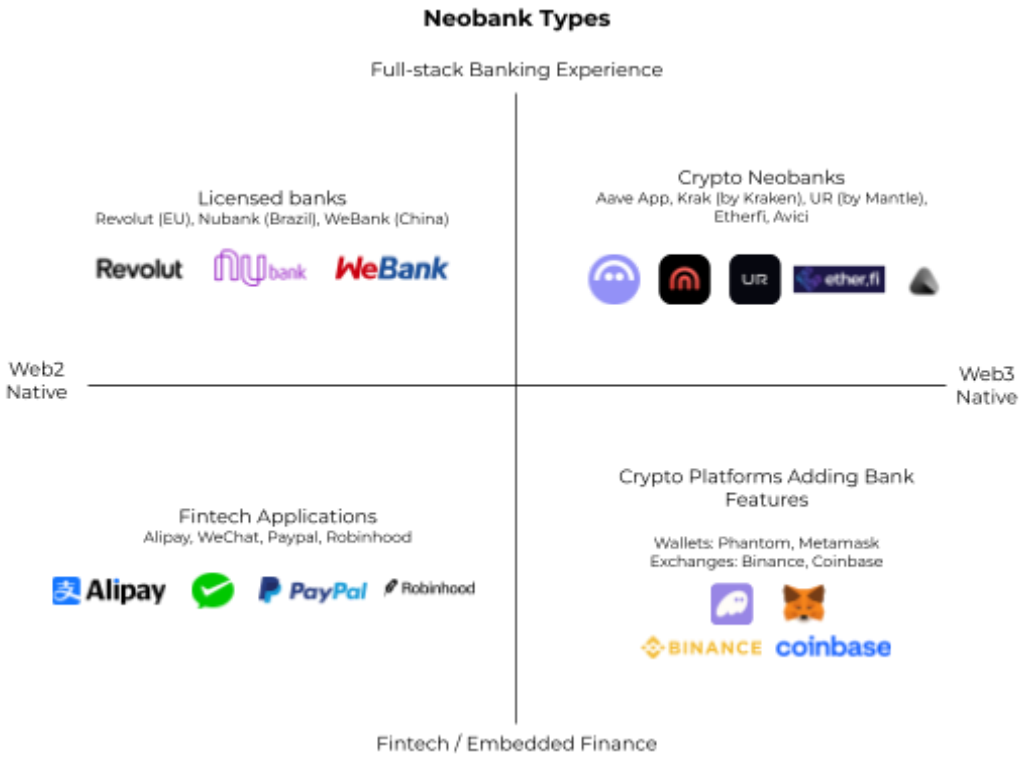
At its foundation, **blockchain is a peer-to-peer protocol** engineered to remove reliance on trusted intermediaries – primarily traditional financial institutions – for value transfer and digital coordination. **Each new active address expands the network's potential exponentially**, multiplying direct, trustless connections among participants.

This compounding effect generates **powerful network effects**: rising participation drives greater volumes of trustless interactions, accelerates innovation in decentralized finance, payments, identity, and related applications, and bolsters overall resilience. As active addresses maintain their upward trajectory, blockchain continues its transition from experimental technology to a **robust, established backbone** for secure, decentralized digital coordination – reflecting fundamentally organic, structurally driven adoption with increasing momentum.

8.1 Neobanks and Wallets

Amid intensifying competition from the Web2 Internet giants, **crypto-native wallets stand out as one of the stickiest product categories**. Brands like MetaMask and Phantom have built massive, loyal user bases – with **MetaMask boasting over 30 million** monthly active users and Phantom around **15-17M** – making them the default gateways for billions of on-chain interactions. CEXes have scaled even larger, with **Binance surpassing 300M** registered users and **Coinbase around 120M** by year-end. These consumer-facing crypto brands are **increasingly evolving into full-fledged neobank-like platforms**, offering banking, payments, cards, and yield products – all built on global, permissionless blockchain rails. Simultaneously, the **Web2 fintechs are also taking notice**, beginning to expand their product suite to include blockchain functionality.

Figure 73: The neobank landscape is rapidly evolving, as Web2 and Web3 consumer applications are beginning to cross-pollinate



Source: X (@arjunnchand), Binance Research

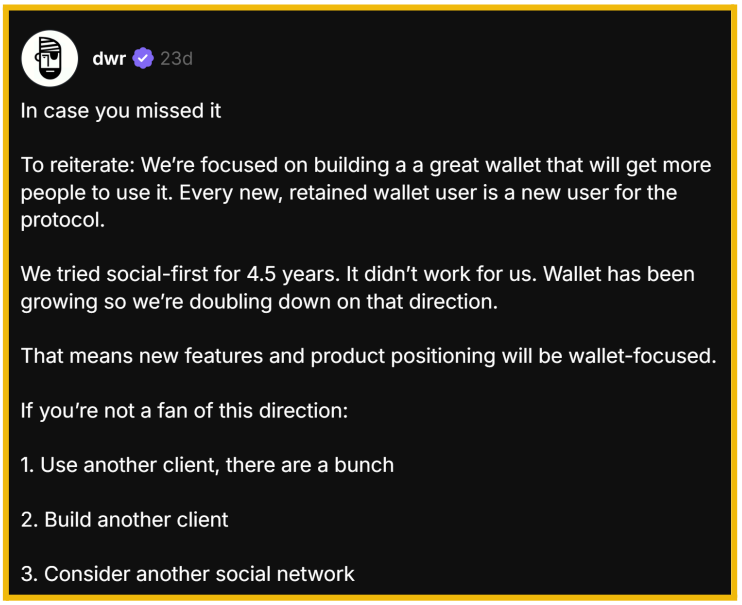
Blockchain has always been primarily an infrastructure layer, and consumers – quite reasonably – care little about the underlying technology powering their financial apps, social platforms, or games. **They simply want superior experiences at lower costs**. With blockchain scaling solutions now mature (L2s on Ethereum, high-performance chains like Solana, and emerging alternatives), these networks can finally support global-scale transaction volumes. This unlocks the **opportunity to build breakthrough consumer applications on open, peer-to-peer infrastructure**. As mentioned, the **clearest example of product-market fit in crypto today is the self-custodial wallet or "Web3 neobank"**. These tools serve as the primary interface for users to access the on-chain world – managing assets, interacting with dApps, and executing everyday financial actions.

This fact is **perhaps most evident in the state of decentralized social media** at the end of 2025. Despite years of experimentation and hype around on-chain social protocols (e.g., Farcaster, Lens), adoption remains niche, with most platforms struggling to retain beyond tens of thousands of daily active users. In contrast, **wallets like MetaMask and Phantom have become indispensable daily tools for millions**, demonstrating true retention and utility. Users may not care about "decentralization" in the abstract, but they repeatedly return to products that deliver seamless, self-custodial control over their digital lives. **Wallets have quietly become the killer consumer crypto app** – sticky, essential, and positioned to expand into broader financial services as infrastructure matures.

8.2 Social

Farcaster Pivots

Figure 74: Farcaster pivots from social-first platform to focus on crypto wallet product

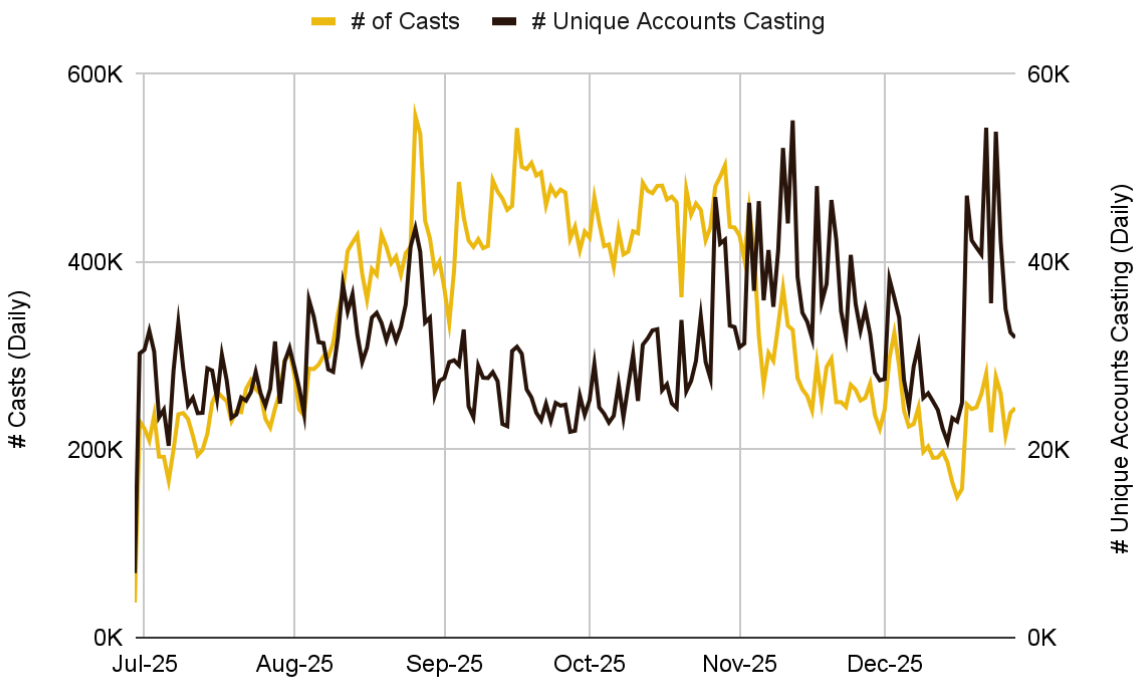


Source: Farcaster (@dwr), as of December 7, 2025

Farcaster, which gained some traction earlier this year, announced in December a **strategic pivot from its decentralized social platform to focus on crypto wallet**

functionality. After five years as a blockchain social network, co-founder Dan Romero explained in a series of posts that the team was unable to establish sustainable growth for the Twitter-like platform. On December 7, Romero stated that despite 4.5 years of a social-first approach, it did not meet expectations, while wallet adoption showed promising growth – prompting the team to double down on this new direction.

Figure 75: Farcaster social activity peaked in August, and has been showing signs of stagnation since



Source: Dune Analytics (@decasonic), Binance Research, as of December 31, 2025

Farcaster's recent pivot highlights a broader truth: in crypto's consumer layer, **crypto wallets are winning** – delivering real value, loyalty, and the foundation for the next wave of financial innovation.

Old Networks, New Technology

With **Farcaster's high-profile pivot** in late 2025 – shifting from a social-first protocol to a **wallet-driven model** – alongside the continued stagnation of projects like **friend.tech** (**largely abandoned since 2024**) and **Lens Protocol** (**still niche despite infrastructure upgrades**), the vision of fully decentralized social media platforms displacing incumbents like Facebook or X appears increasingly unlikely.

Pure-play on-chain social networks have struggled to overcome the formidable **network effects** of Web2 giants, where billions of users are locked in by habit, content libraries, and seamless experiences. Despite years of innovation – Frames, Mini Apps, portable profiles – decentralized platforms have failed to sustain mainstream traction, with daily active users often inflated by bots or fleeting speculation, rarely breaking beyond crypto-native circles.

Instead, as blockchain infrastructure matures and integrates deeper into the broader internet economy, the more probable path forward is **incumbent Web2 platforms adopting crypto features**. This reverse integration could start with seamless **stablecoin payments** and peer-to-peer transfers, evolving toward true data portability and self-custody – the very promises that decentralized startups championed but couldn't scale.

A prime example is Elon Musk's ongoing push to transform **X into an "everything app"**, with **X Money** rolling out payments, digital wallets, and financial services throughout 2025 and into 2026. While initial launches focus on fiat rails (partnering with providers like Visa), Musk's pro-crypto stance and the platform's massive user base position it ideally for future stablecoin or even native crypto integrations – delivering blockchain benefits without forcing users to abandon familiar interfaces.

This hybrid future aligns with user behavior: **most people prioritize convenience, low costs, and reliability over ideological decentralization**. As scaling solutions make on-chain experiences feel invisible, the winners may not be greenfield protocols, but the giants that layer crypto utility on top of their existing moats.

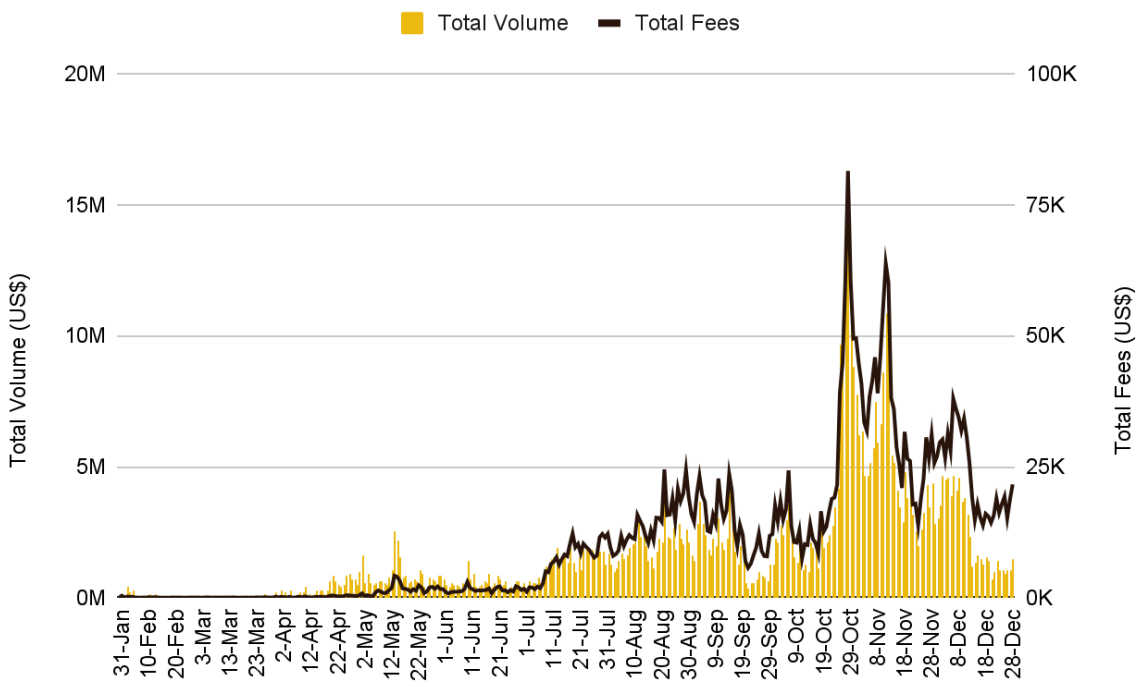
New Products, New Networks

Mass adoption of blockchain-based applications will not be fueled solely by the allure of **decentralization**. As with every breakthrough consumer product – from smartphones to streaming services – success hinges on delivering **innovative features**, superior functionality, and seamless experiences that **solve real problems or outperform incumbents** at lower costs.

This principle is playing out vividly in emerging categories like **prediction markets** (e.g., Polymarket's explosive growth in 2025, with volumes surpassing tens of billions during high-profile events) and **financialized social applications**. A standout example is **fomo**, the social-first crypto trading app launched in May 2025. Built by a team with pedigrees from Uniswap, OpenSea, dYdX, and Google, fomo quickly gained traction – surpassing **120,000 users by late 2025, backed by a US$17M Series A** from Benchmark.

The app eliminates traditional pain points with **gasless cross-chain swaps**, embedded self-custodial wallets, and intuitive social tools like curated feeds, friend discovery via X integration, and copy-trading top performers – all in a sleek, mobile-native interface. As attention economies and tokenized real-world assets dominate headlines, **fomo positions itself as the frictionless hub for discovering, trading, and socializing** around digital assets, onboarding everyday users without requiring blockchain expertise.

Figure 76: Activity on the fomo application reached a peak in October, and currently sees ~US$1M in daily trading volume



Source: Dune Analytics (@adam_tehc), Binance Research, as of December 31, 2025

Looking ahead, as **programmable digital-native money** – primarily stablecoins – permeates the broader internet economy, a wave of **embedded finance** innovations will emerge. Public blockchains' open, interoperable rails enable seamless integration of payments, yield, lending, and remittances directly into apps, platforms, and experiences. From neobanks and social apps to e-commerce and gaming, these features will feel invisible yet transformative – prioritizing convenience, speed, and cost savings over ideology. The result: blockchain utility baked into daily life, driving adoption through tangible benefits rather than abstract principles.

8.3 NFTs and Gaming

In 2025, both the NFT and blockchain gaming sectors endured substantial contraction, with NFT floor prices falling across the board, bringing the total market NFT capitalization to approximately US$2.5 billion. **GameFi investments declined 55%** year-over-year, and active wallets in blockchain gaming dwindled throughout the year, **falling another 4.4% in Q3 2025**, underscoring persistent challenges in user retention and monetization post-play-to-earn hype.

Yet, these verticals remain uniquely positioned to pioneer blockchain-native online networks in 2026 and beyond. **Gaming in particular fosters new social graphs with each successful title** – loyal communities orbiting titles, studios, and player economies – that can be natively tokenized from inception. Games and studios that **effectively integrate blockchains as digitally native financial layers** have the potential to supercharge their ecosystems, potentially unlocking new, sustainable, and equitable systems of distribution and monetization.

Adoption metrics betray the sector's high potential in 2025 however, as we saw both NFTs and Web3 game development take major hits over the course of the year. NFT prices fell ~69% on the year, to a measly US$2.5B (around half of the total market capitalization of CS2 skins).

Figure 77: NFT prices are down across the board, with total market capitalization ending the year down ~69%, falling to ~US$2.5B

Source: Coingecko, Binance Research, as of December 31, 2025

On the gaming front, 2025 saw a number of notable **project shutdowns**. Many of these projects raised upwards of US$10M.

Figure 78: 2025 saw many notable gaming projects shutdown, many of which raised over US$10M

Game Title	Genre	Amount Raised	Shutdown Date	Rationale
Deadrop	**Extraction Shooter**	**US$11M**	**30 Jan 2025**	Financial issues and internal turmoil, exacerbated by its co-founder Dr. Disrespect's departure in mid-2024
MetalCore	**Sci-Fi MMO**	**US$20M**	**March 2025**	Lack of funding
Ember Sword	**MMORPG**	**US$200M**	**21 May 2025**	Lack of funding
Nyan Heroes	**Hero Shooter**	**US$13M**	**16 May 2025**	Insufficient user engagement and funding challenges
Mojo Melee	**Strategy Auto-Battler**	**US$10.5M**	**1 July 2025**	Market challenges and lack of funding
Pirate Nation	**RPG**	**US$33M**	**18 Aug 2025**	Too costly, small player base

Source: Decrypt, Binance Research, as of 31 December 2025

The table above lists six notable titles that raised over US$10M each - rivaling mid-tier AAA budgets. Funding for these titles far exceeded typical indie costs (~US$300k) and approached AA levels, but unsustainable play-to-earn models, speculative NFT sales, blockchain friction, and a plunge in crypto VC interest dried up runways. The core issue was prioritizing token hype and quick cash grabs over engaging gameplay, proving that **massive funding cannot substitute for fun or genuine player retention** in a market that overly rewarded speculation over proven product quality.

The CS2 Skin Debacle

In an otherwise subdued year for crypto gaming, the most consequential moment for digital asset markets paradoxically came from **Counter-Strike 2**. On 22 October 2025, Valve's "**Re-Retake Update**" triggered a sharp repricing of CS2 skins, underscoring how fragile digital ownership remains in centralized ecosystems. By modifying the long-standing "Trade Up Contract" mechanic – allowing players to exchange five Covert items for a guaranteed knife or gloves – the update abruptly altered supply dynamics at the top end of the market.

The impact was immediate and severe. Aggregate CS2 skin market capitalization **collapsed from approximately US$5.9B to US$3.5B**, erasing over 40% of value in days, before gradually rebounding to around **US$5.6B** at the time of writing. Following the rebound, CS2 skins remain worth **more than twice the total NFT market** (currently ~US$2.5B), highlighting a striking statistic: the largest digital asset economy today operates entirely outside crypto rails, and is more economically significant than most on-chain gaming ecosystems.

Mechanistically, blockchains offer little incremental utility for a CS2 player buying or using skins – these assets already function like NFTs in practice, with open marketplaces, price discovery, and peer-to-peer trading. The failure, however, is not technical but **institutional**. The Re-Retake Update demonstrated that players ultimately hold *revocable licenses*, not property: years of accumulated value can be repriced overnight by a unilateral rule change.

This is where crypto gaming stands to reframe itself – not as a superior product per se, but as an **ideological and structural solution**. As speculative excess fades, blockchains increasingly position themselves as infrastructure for **credible digital ownership**, where asset rules are transparent, governance is constrained, and value cannot be arbitrarily diluted. The CS2 skin crash serves as a real-world stress test for centralized digital economies – and a reminder that the core promise of crypto gaming is not better graphics or faster trades, but a digital infrastructure solution enabling **durable, user-owned value in digital worlds**.

Games as New Networks

Games inherently forge vibrant networks of players, developers, and content creators, transforming solitary entertainment into collaborative ecosystems where skills, stories, and innovations flourish organically. When blockchains are woven in thoughtfully – prioritizing the cyberpunk ethos of fairness, transparency, and accessibility – these networks evolve beyond mere social hubs. Instead of exploitative play-to-earn schemes that plagued 2025's failures, **seamless on-chain mechanics enable true player agency**: verifiable ownership of assets, instant cross-border micropayments, and decentralized governance that lets communities vote on updates or monetize mods without intermediaries.

Looking ahead, **this fusion heralds a new era of "network-native" gaming**, where economic rails become as intuitive as jumping into a match. Imagine guilds funding expansions via shared treasuries, creators earning royalties on user-generated quests streamed globally, or AI-driven economies adapting in real-time to player behaviors – all on permissionless blockchains. By ditching hype-driven tokenomics for utility-first

designs, Web3 games could bootstrap self-sustaining worlds, attracting billions in the metaverse economy.

Fableborne is an example of a playable project that seems to have developed strong token and blockchain-aligned communities, attracting over 100,000 players to their mobile-first game.

Figure 79: Action RPG/Base Builder Fableborne entered open beta in December 2025, having attracted over 100,000 daily active users during prior seasons

Source: Play to Earn

Fableborne's success in 2025 demonstrates the potential for well-implemented Web3 mechanics to increase the retention and spending habits of players. Season 4, which took place in December 2025, displayed higher metrics across the board.

Figure 80: Fableborne's Season 4 demonstrated better retention and consumer spending metrics than similar mobile F2P games

Performace Metric	Mobile F2P Strategy Benchmark	Fableborne S4 KPI
Day 1 Retention	40%	63%
Day 3 Retention	25%	52.7%
Day 7 Retention	20%	41%
In-App Purchase (IAP) Conversion Rate	2.5 to 4%	5%
IAP Revenue per Download	0.9-1.5 USD	2.32
Avg Daily playtime per user	50 - 70 minutes	189 minutes
Avg Sessions per day	3 - 5	4.52

Source: Fableborne, Binance Research, as of December 2025

As blockchain technology increasingly integrates into mainstream technology and finance sectors, there is growing potential for the core cypherpunk and early cryptocurrency values – **fairness**, **transparency**, and **interoperability** – to spread more broadly. Gaming remains one of the few major entertainment verticals that has yet to see widespread, mature adoption of these principles at scale. However, as the sector evolves beyond early hype cycles and speculative models, blockchain-enabled gaming could introduce transformative innovations in:

- **true digital ownership** of in-game assets,
- deeper **user engagement** through meaningful ownership and agency,
- and novel, sustainable **revenue models** for developers and players alike.

This positions blockchain gaming as a promising frontier for realizing the original decentralized ethos in one of the world's largest and most culturally influential industries.

8.4 Blockchain Is Dead, Long Live Blockchain

From 2026 onward, the **distinctions between cryptocurrency, financial technology, and traditional technology are rapidly dissolving**. Blockchain will gradually no longer be positioned as a distinct or emerging industry; it is being **integrated as foundational infrastructure**. As on-chain settlement achieves greater speed, lower costs, and enhanced regulatory compliance, blockchain technology is receding into the background, **functioning as invisible financial infrastructure** rather than a visible product category.

This evolution parallels the trajectory of the internet. By the early 2010s, the phrase **"internet startup" had lost meaning – not because the internet failed, but because it became ubiquitous**. Similarly, in 2026, references to "blockchain applications" are giving way to sophisticated financial operating systems that leverage on-chain settlement for efficiency, auditability, and interoperability, while fully abstracting the underlying ledger from end users.

The Primary Catalyst: Agentic Commerce

The convergence is being accelerated by the rise of agentic commerce. As artificial intelligence systems transition from passive tools to autonomous economic participants, they **impose demands that traditional financial infrastructure was never designed to accommodate**. These agents require continuous transaction capabilities, micro-payments, and programmatic trust mechanisms, frequently operating without human intervention.

Legacy payment systems, such as credit cards and the Society for Worldwide Interbank Financial Telecommunication network, remain oriented toward human identity verification, batch processing, and operational hours. In contrast, stablecoins and modern L1 and L2 settlement networks **provide always-available, low-latency, machine-native payment rails**. These enable artificial intelligence agents to settle payments for compute resources, data, application programming interfaces, and services in real time.

The Outcome: The Institutionalization of Verifiable Trust

As blockchain, artificial intelligence, and financial technology converge, the industry's focus is **shifting from ideological decentralization to scalable reliability, accountability, and institutional integration**. The central challenge of 2026 is no longer decentralization at all cost, but the deliberate engineering of trust and verifiability within automated systems that consumers and institutions alike can adopt confidently.

The leaders in this next phase will not be those developing increasingly complex blockchains, but those who embed blockchain-enabled openness and interoperability so seamlessly into existing workflows that users remain unaware of the distributed systems beneath. The once-upon-a-time paraded notion – prominent during the 2024 memecoin cycle – that **tokens represented the core product** of the cryptocurrency industry has reached its expiration date. In its place emerges **a mature blockchain infrastructure that will quietly underpin the digital economy of the future**.

09 / Frontier Tech

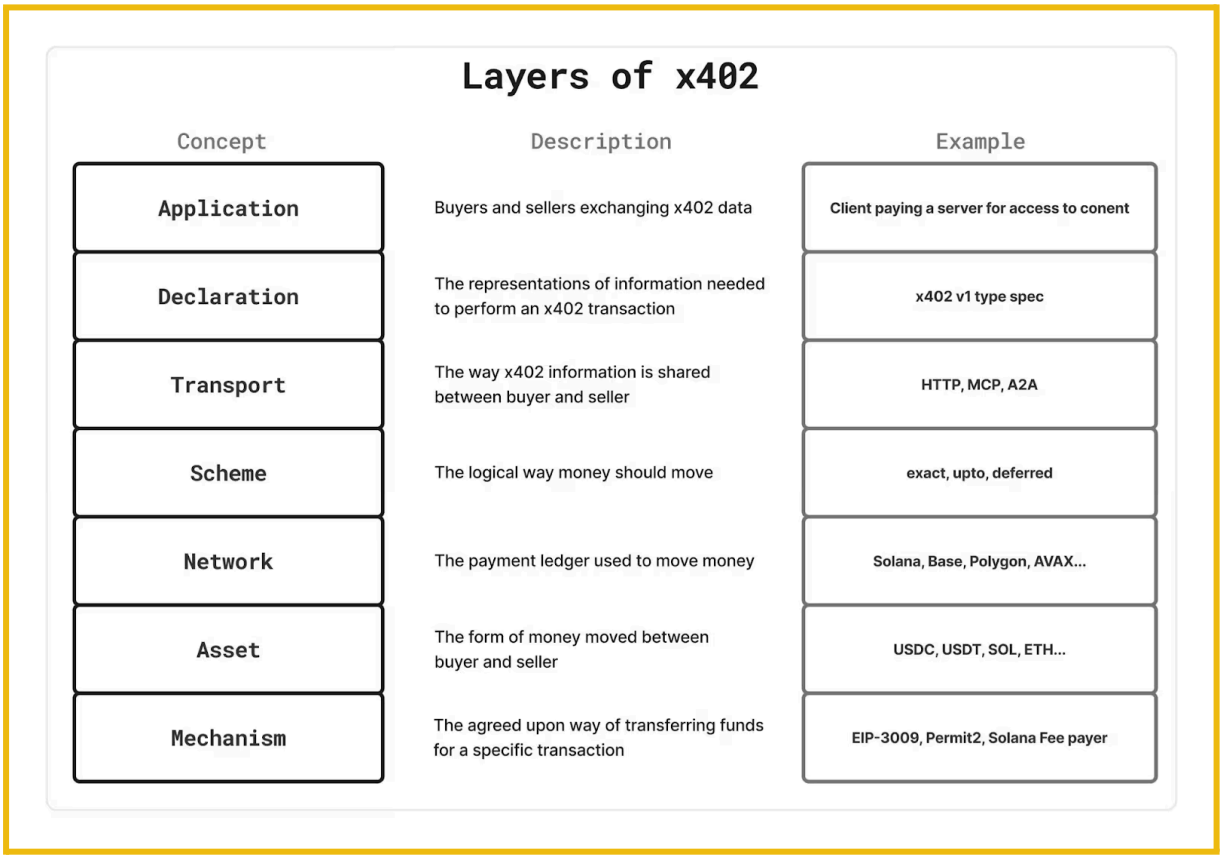
9.1 The x402 Protocol

Agentic Payments

AI agents are increasingly **serving as the primary interface** for applications, workflows, and automation; however, current internet billing models continue to charge based on human users rather than automated agents. Agents used to not be able to enter billing information or pass through paywalls, but with x402, **AI agents are now able to pay for anything**.

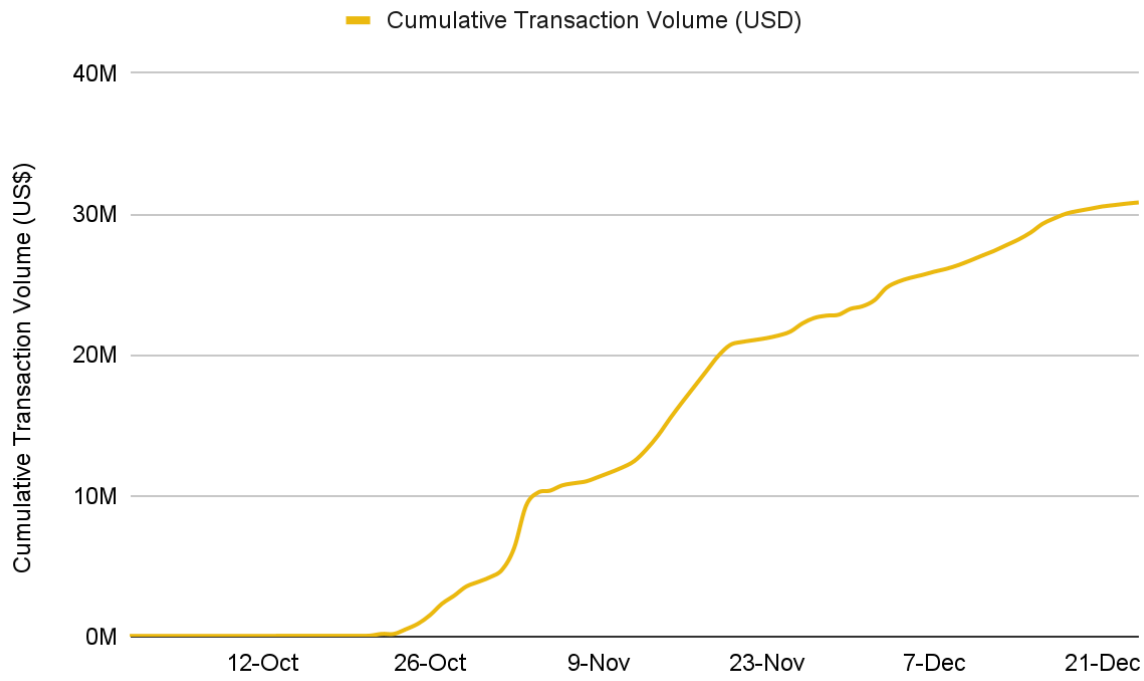
x402 integrates payments directly into the HTTP protocol, enabling any API to accept various tokens across multiple blockchain networks on a pay-per-call basis. With x402, the applications are now endless, ranging from pay-per inference AI models to metered data access and even agent-to-agent commerce.

Figure 81: Layers of x402



Source: x402.org, as of December 30, 2025

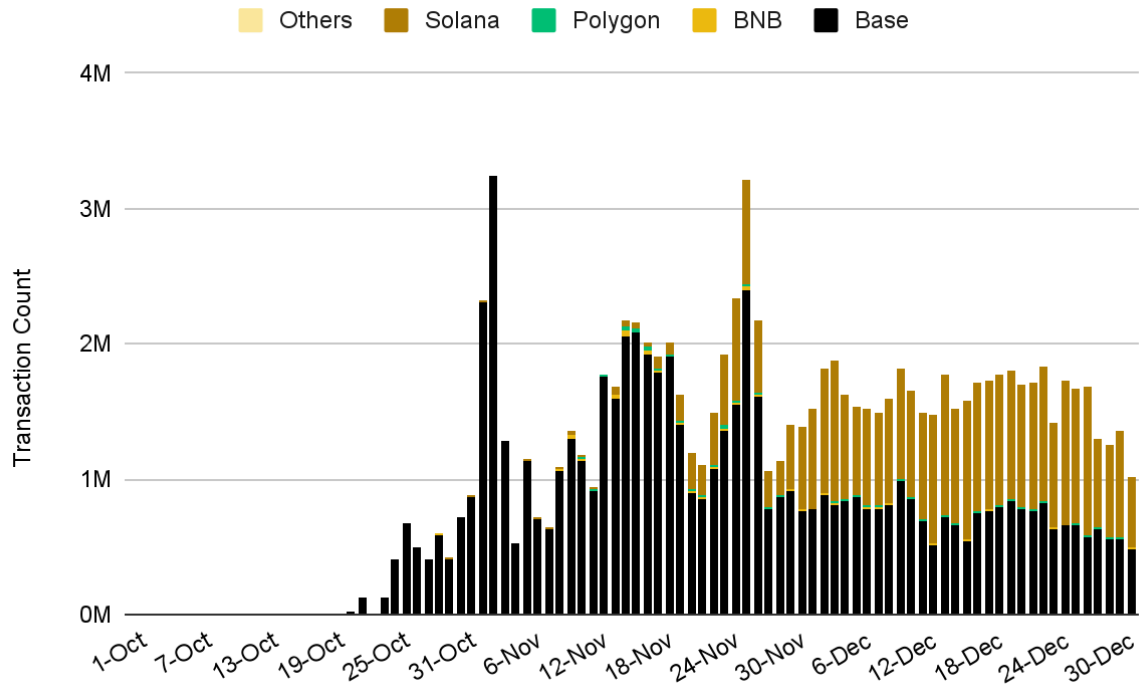
Figure 82: x402 cumulative transaction volume crossed US$30M, just 3 months after its launch



Source: Dune Analytics (@hashed_official), Binance Research, as of December 30, 2025

Despite launching in May this year, total transaction volumes have accelerated since October and have **crossed US$30M** in cumulative transaction volume. This shows that x402 is not just a proof of concept, but is gaining significant traction and adoption by users and various projects.

Figure 83: x402 transaction counts by different blockchain networks



Source: Dune Analytics (@hashed_official), Binance Research as of December 30, 2025

Base continues to be the leading blockchain for x402 transactions; however, since late November, **Solana has been gaining market share** and, by late December, surpassed Base in daily transaction volumes. Daily transactions have also grown steadily, **reaching consistently above 1M**. Facilitators play an important role to verify and settle the client's payment and to return results back to the server, acting as a standardized way for payments to be checked and confirmed across different platforms.

Among the facilitators, **Coinbase maintains a dominant position on Base**, while **Dexter and PayAI** remain strong contenders, actively operating on both Base and Solana networks. This competitive landscape among networks and facilitators benefits the sector by enabling agents to select and route transactions through providers that offer the most suitable features.

In terms of recipients, **Questflow** consistently demonstrates its position as the most decentralized platform, boasting the widest diversity of recipient users. This highlights the role of Questflow as an aggregator with an extensive and broad recipient network. By orchestrating a wide variety of AI agents on-chain, **Questflow enables seamless, automated workflows 24/7** for both consumers and businesses. This level of decentralization and operational continuity results in increased efficiency and flexibility in routing through multiple networks and interfaces, driving greater adoption within the x402 ecosystem.

x402 V2

Building on six months of real-world adoption, **x402 V2** significantly advances the protocol beyond single-call, exact payments by introducing wallet-based identity, automatic API discovery, dynamic payment recipients, multi-chain and fiat support via CAIP standards, and a fully modular SDK for custom networks and schemes. These enhancements make x402 more extensible, interoperable, and future-proof, enabling unified payment models and seamless wallet-based access for both agents and humans.

Since its launch in May 2025, x402 has **processed over 100 million payments** across APIs, applications, and AI agents, embedding payments directly into HTTP using the previously underutilized 402 status code. V2 refines the protocol architecture with clearer role definitions, streamlined data types, formalized extension mechanisms, and a modular, composable reference SDK – ensuring easier implementation and innovation without fragmentation.

Its core mission remains the same, which is to enable value to flow across the internet as effortlessly as information, empowering the next generation of the internet economy with a cleaner, more interoperable, and resilient payment infrastructure.

Future Outlook

Agents currently **account for over 90% of transaction flows** within the x402 ecosystem, predominantly handling the high volume of routine transactions, while human participants concentrate on larger, less frequent high-value purchases. Ecosystems and blockchain networks are rapidly embracing x402, as it introduces a machine-native revenue layer previously unavailable. Each new integration further broadens the network's scope, creating additional opportunities for agents to access diverse services and for service providers to monetize their offerings. Despite these significant

advancements, the space remains relatively concentrated with only a few key players. As the industry continues to scale, it is imperative to place increased emphasis on building trust and strengthening security within agent payment flows.

9.2 On-Chain Privacy

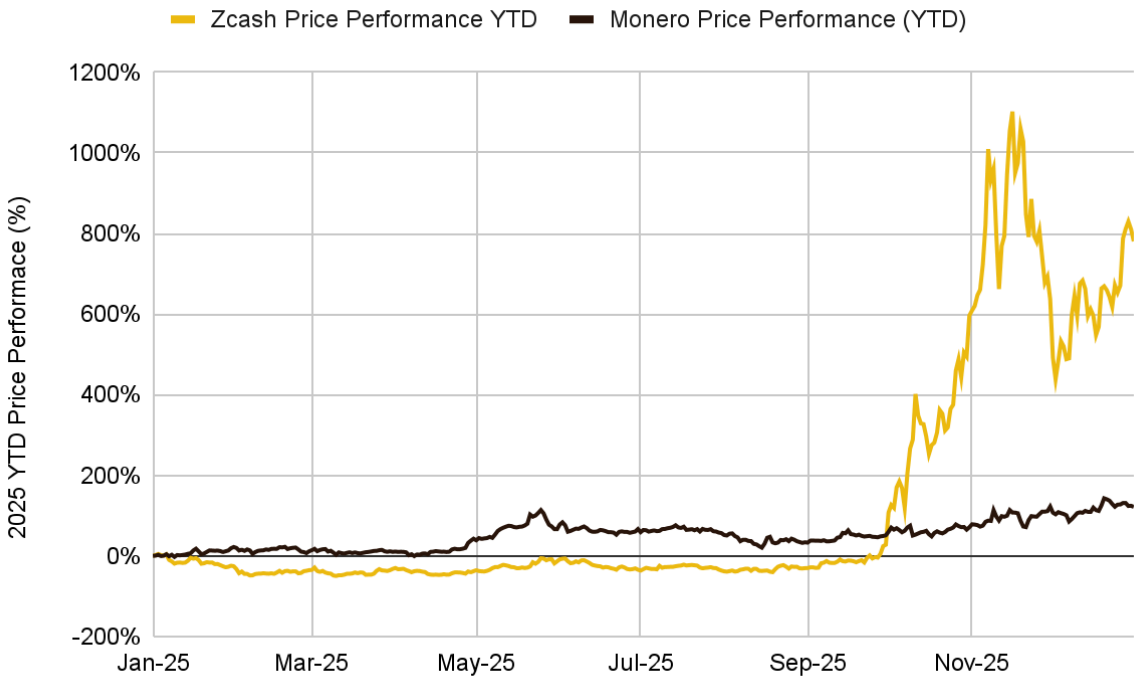
2025 marked a **pivotal resurgence in on-chain privacy**, driven by technological advancements, regulatory shifts, and growing user demand for confidentiality amid mainstream crypto adoption. As blockchain ecosystems mature, **privacy will evolve from a niche concern to essential infrastructure**, enabling secure, scalable applications while addressing compliance needs.

Zcash

Several **privacy tokens experienced a breakout in Q4 2025**, with Zcash leading the charge: its shielded pool supply **nearly tripled to approximately 4.8M ZEC** (around 30% of circulating supply), while fully private Z-to-Z transactions rose to 20% of network volume, up from single digits in prior years.

This fueled a **>1000% price rally in ZEC**, which peaked at a price of US$674, and a total market capitalization of ~US$11.5B, **briefly surpassing Monero in market cap dominance** (which currently sits at US$13B), before retracing to end the year at a market capitalization of ~US$8.7B.

Figure 84: Zcash experienced a historic rally in Q4 2025, rising over 1000% before retracing to end the year at a market capitalization of US$8.7B



Source: TradingView, Binance Research as of December 31, 2025

Privacy protocols also thrived; Railgun processed a **record-breaking US$1.6B** worth of shielded transactions in 2025, and its TVL doubled in H2 2025, **from ~US$53M to US$97M** by year-end. HoudiniSwap's volumes remained elevated throughout 2025, **averaging US$95M** in monthly volumes for the year, bringing cumulative volumes since its inception in 2023 to over US$2B.

Institutional and ecosystem-level innovations further accelerated progress. The Ethereum Foundation **established a dedicated privacy team**, and Paxos launched an institution-aimed **compliant private stablecoin (USAD)** in partnership with Aleo.

Regulatory tailwinds included the U.S. Office of Foreign Assets Control **lifting sanctions on Tornado Cash**, easing barriers for decentralized privacy solutions. Additionally, trusted execution environments (TEEs) gained traction, with **Oasis emphasizing verifiable off-chain compute** for confidential data processing.

From Feature to Necessity

The market is increasingly valuing on-chain privacy to **evolve from a feature to a necessity for mass adoption**. Looking ahead, these advancements position on-chain privacy as a strong enabler for real-world use cases like remittances, DeFi, and identity systems, balancing user protection with regulatory alignment. As adoption scales, particularly from the institutional side, we are likely to see continued innovation in modular privacy layers and cross-chain hubs.

9.3 Decentralized Physical AI (DePAI)

In 2025, **Decentralized Physical AI (DePAI)** emerged as one of the most promising new verticals in crypto, building on the DePIN foundation to bring decentralized coordination to active, real-world robots and autonomous machines. DePAI extends the DePIN model from passive resources (compute, storage, energy) to **agentic systems** – robots, humanoids, drones, and vehicles that sense, decide, and act in the physical world, coordinated and incentivized via blockchain tokens.

The concept gained mainstream attention after NVIDIA CEO Jensen Huang highlighted "Physical AI" at CES in January 2025, with Messari later formalizing **DePAI** as the decentralized counterpart. Breakthroughs in multi-modal vision-language-action (VLA) models – such as **Figure AI's Helix** released in February 2025 – enabled robots to understand natural language, interpret complex scenes, and execute dexterous tasks, accelerating real-world pilots in logistics, manufacturing, and delivery.

The DePAI stack rests on seven critical layers:

- **Hardware**: humanoid robots (e.g., Tesla Optimus, Figure fleet).
- **Software**: agentic AI for autonomous planning and execution.
- **Data**: crowdsourced real-world motion data (projects like NATIX, Hivemapper, Sapien).
- **Spatial Intelligence**: decentralized 3D world models (e.g., Auki's Posemesh).

- **Infrastructure**: DePIN networks supplying compute, energy, storage.
- **Machine Economy**: protocols for interoperability, incentives, and Proof of Physical Work (e.g., peaq).
- **Organizations**: DAOs enabling community ownership and governance (e.g., XMAQUINA).

While infrastructure has advanced, key challenges remain: high-quality data scarcity, bridging simulation-to-reality gaps, capital intensity, and regulatory/safety concerns. Still, DePAI in 2025 transitioned from idea to early operational reality–laying the groundwork for the **decentralized machine economy** where autonomous agents can create verifiable value, operate with sovereignty, and distribute rewards fairly to participants worldwide.

OpenMind: AI Robot Operating System

OpenMind is an **open-source operating system** designed for Embodied Intelligence and robotic control, with the ambition to create the world's first decentralized robot operating environment and development platform. The system comprises two primary components: **OM1, a modular, open-source AI agent runtime environment** designed to orchestrate perception, planning, and action pipelines for both physical and digital robots; and **Fabric, a coordination layer that integrates cloud computing resources, AI models, and physical robots** into a unified platform for seamless robot control and training.

OpenMind is currently in the **early phase of development**, characterized as "technically feasible but not yet commercially implemented." The project has established collaborations with open hardware partners such as Unitree, Ubtech, and TurtleBot, as well as academic institutions including Stanford, Oxford, and Seoul Robotics, primarily focusing on education and research validation. However, it has yet to achieve industrial adoption. So far, a test version of the application has been launched, though key features such as incentive and task functionalities remain in the initial stages of development. At present, OpenMind generates no revenue and is supported by approximately US$20M in early-stage funding.

Peaq: Machine Economy Infrastructure

Peaq is a L1 blockchain **tailored for DePINs and Machine Real-World Assets** (MRWAs). It facilitates the tokenization of physical devices and infrastructure, transforming them into autonomous economic agents capable of interacting, transacting, and generating revenue within a decentralized ecosystem – establishing a true "Economy of Things." Peaq currently supports a network of over 50 active projects and integrates more than 6 million machines, vehicles, and robots within its ecosystem.

Peaq is built on top of Parity's substrate framework, it offers both EVM compatibility and Rust-based WebAssembly smart contracts, catering to a broad range of developers. Its core network is optimized for high-volume, low latency operations, with a throughput of 10,000-100,000 transactions per second. In July, Peaq demonstrated Elastic Scaling on the network's testnet, achieving a peak transaction throughput of 49,407 transactions per second with a block time of 500 milliseconds. To tap on cross-chain collaboration, Peaq

has integrated with LayerZero to access liquidity and data from 90+ blockchains, enabling seamless omnichain interactions for its DePINs.

In H2, the Peaq network experienced **growing real-world adoption** marked by the launch of MachineX, the first DEX built on Peaq specifically for the machine economy. **MachineX collected US$29.8M** in revenue during the third quarter. Additionally, in November, the world's **first tokenized robot farm** was live on Peaq, distributing payments from the semi-automated vertical farm in Hong Kong to its token holders via the network. As the DePIN market matures, Peaq's specialized infrastructure, modular toolkit, and community-centric governance continue to position it as a potential leader in the sector. While the project is gaining momentum and traction, growth driven primarily by incentives via the Get Real campaign remains unsustainable, and it will require additional time to determine whether the revenue generated reflects genuine, sustained expansion.

Broader DePAI Momentum

In 2025, several projects demonstrated tangible progress in bridging DePIN infrastructure with real-world AI applications. **NATIX** advanced its DePAI vision through the VX360 device, enabling Tesla owners to contribute high-fidelity 360° driving footage for scalable visual datasets used in autonomy, smart cities, and Physical AI training – supported by **campaigns like VX360 Accelerate** (October–November 2025, offering discounts, $NATIX rewards, and airdrops for urban km uploads) that drove token burns, user growth (exceeding 255,000–257,000 contributors), and data crowdsourcing for safer AVs and robotics.

Aethir solidified its role in decentralized GPU compute, powering Physical AI and robotics workloads with expanding enterprise adoption, record ARR surpassing US$147M+ (with **Q3 2025 revenue at over US$39.8M**), and **projections** emphasizing decentralized networks for low-latency, resilient agentic systems and real-time processing in robotics scaling.

Regulatory tailwinds accelerated experimentation, notably through peaq's October 16, 2025 **MoU with Dubai's Virtual Assets Regulatory Authority** (VARA) at GITEX GLOBAL, which recognized the Machine Economy Free Zone (MEFZ) as a sandbox for on-chain robotics, DePIN, and tokenized machines – facilitating licensing guidance, data sharing, talent development, and compliant pilots in a leading innovation hub.

These developments underscore DePAI's shift toward operational pilots and ecosystem coordination, though large-scale humanoid deployments remain limited to controlled environments, with broader commercialization still on the horizon.

10 / Institutional Adoption

10.1 The TradFi-DeFi Convergence

In 2025, the financial landscape has shifted considerably where traditional finance and decentralized finance increasingly intersect and integrate. This blending is unlocking new opportunities for innovation, efficiency, and accessibility, reshaping how value is exchanged and managed across global markets.

Crypto as Collateral by TradFi

In recent developments, **five major U.S. banks** – Bank of America, JPMorgan, BNY Mellon, Wells Fargo, and Citibank – have launched or are piloting **Bitcoin-backed credit products**. These offerings allow clients to borrow cash while holding their Bitcoin long-term, thereby avoiding taxable sales. The integration of institutional-grade custody and compliance frameworks marks a significant milestone for mainstream crypto finance.

Analysts anticipate that other major financial institutions, including Charles Schwab, Goldman Sachs, and Morgan Stanley, are preparing to introduce similar Bitcoin-backed lending products. As institutional adoption continues to accelerate, **crypto-collateral lending is poised to become a standard feature** in private and commercial banking services across the United States.

- In October 2025, **J.P. Morgan reportedly commenced accepting actual Bitcoin and Ethereum as collateral** for loans, rather than solely synthetic exposure, marking a significant milestone in the recognition of cryptocurrency as a financial-grade asset within a major banking institution.

- In December, **Bank of America launched new Bitcoin-collateralized credit loans** tailored for its high net-worth and institutional clients.

Hybrid Data Feeds

We also saw more partnerships between TradFi institutions and native Web3 firms actively integrating and adopting blockchain technologies to power data feeds.

- **Chainlink integrated ICE Consolidated Feed data to derive foreign exchange and precious metals rates**, enabling their distribution on-chain through Chainlink Data Streams. This development represents a significant milestone in advancing the mainstream adoption of on-chain finance.

- Google enhanced its Google Finance platform by leveraging AI to introduce advanced research capabilities, alongside **integrating market data from leading prediction markets such as Polymarket and Kalshi**.

Crypto Linked ETFs

ETFs are a well-established traditional financial product, regulated and traded on conventional stock exchanges, familiar to institutional and retail investors alike. By combining elements of these and packaging it together with crypto-related assets, a hybrid financial product is created that leverages on the strength of both TradFi and DeFi. This convergence facilitates broader adoption, improved liquidity, and enhanced investor access to crypto markets through familiar TradFi infrastructure.

- **Crypto ETFs**: There are currently **155 crypto ETP filings** tracking 35 different digital assets, and this number is **expected to grow to 200 by mid 2026**, led mostly by Bitcoin, Ethereum, XRP and Solana. A compelling example of the synergy between DeFi's yield generation mechanism and TradFi's distribution channels is staking ETFs where investors can **participate in DeFi income streams** through trusted, regulated channels.

- **Index tracking Cryptocurrencies and Crypto-linked equities**: In collaboration with Dinari, a leading provider of tokenized U.S. public securities, S&P Global has developed the **S&P Digital Markets 50 index**, designed to comprehensively represent the crypto ecosystem by combining a diverse selection of cryptocurrencies and publicly traded crypto-linked equities into a single, unified benchmark, tracked via the creation of a token.

- **Basket of cryptocurrencies**: The **Galaxy Crypto Index Fund** is designed to offer investors exposure to the largest and most liquid segment of the cryptocurrency market. The fund's constituents and their weightings are selected from the top 25 cryptocurrencies by market capitalization, following the methodology and rules established by Bloomberg and is rebalanced monthly. This approach ensures that the **fund remains focused on leading digital assets** with significant market presence and liquidity.

10.2 On-Chain Money Market Funds

Tokenized money market funds (MMFs) are no longer theoretical concepts; they are fully regulated funds delivered through a faster, more flexible mechanism that is nearing widespread adoption. These MMFs are emerging as **next-generation cash equivalents**, offering institutions faster settlement, greater collateral flexibility, and improved auditability. It has become a primary driver of RWA tokenization, tripling in total assets from the year prior (cumulatively, over **US$9B of assets** has now been tokenized), fueled by strong interest from major financial players. **Recent pilots** this year by JPMorgan, Franklin Templeton, DBS, Ripple, UBS, Goldman Sachs, and BNY Mellon demonstrate growing momentum for on-chain liquidity tools in Treasury operations.

- JPMorgan Chase & Co. asset management arm is launching its first ever tokenized money market fund built on Ethereum, called the **My OnChain Net Yield Fund, or MONY**. The fund, open to qualified investors, allows them to earn yield while holding the token on the blockchain, with a minimum investment of US$1M.

- Franklin Templeton launched the **world's first U.S.-registered mutual fund** utilizing blockchain technology in 2021, followed by the first fully tokenized UCITS fund in Luxembourg in 2024, and obtained regulatory approval to introduce the first retail tokenized fund in Singapore in 2025 powered by the XRP ledger.

- The Bank of New York Mellon Corporation and Goldman Sachs collaborated to leverage Goldman Sachs' blockchain technology for recording customer ownership of select Money Market Funds. This partnership represents a significant advancement in **improving the utility and transferability of MMF shares**. It marks the first instance in the U.S. where fund managers have enabled **subscription to MMF shares through BNY's LiquidityDirectSM and Digital Asset platforms**, with the value of these shares represented via mirrored record tokenization using Goldman Sachs' DAP® technology.
- UBS Asset Management has launched the **"UBS USD Money Market Investment Fund Token" (uMINT)**, a money market investment product built on Ethereum distributed ledger technology. Introduced in November 2024, uMINT leverages blockchain to enhance accessibility and efficiency in money market investing.

Figure 85: Comparison between traditional MMFs and tokenized MMFs

Feature	Traditional MMF	Tokenized MMF
Settlement Speed	T+1 or T+2	Near real-time
Used as Collateral	Limited	Highly composable and can be utilized for DeFi
Audit Trail	Manual Reconciliation	Immutable and transparent on-chain
Yield	Yes	Yes
Programmability	None	Yes
Custody	Managed by Custodian	Managed by Custodian or self-custody
Transferability	Jurisdiction/Legacy rules	Embedded logic

Source: CFA Institute, Binance Research, as of December 31, 2025

Together, these blockchain-based MMF shares **enable near real-time transfers, enhanced collateral reuse, and streamlined compliance** through immutable records, while preserving yield and reducing cash drag. When effectively implemented, tokenized MMFs provide the benefits of yield generation, enhanced transparency, operational efficiency, and real-time liquidity, all within a familiar framework for institutional investors. However, widespread adoption faces challenges including custody and interoperability issues, regulatory uncertainty, and limited blockchain integration within existing financial infrastructure. Once these challenges are surpassed, tokenized MMFs are poised to play a key role in the broader financial asset tokenization market, acting as a bridge between

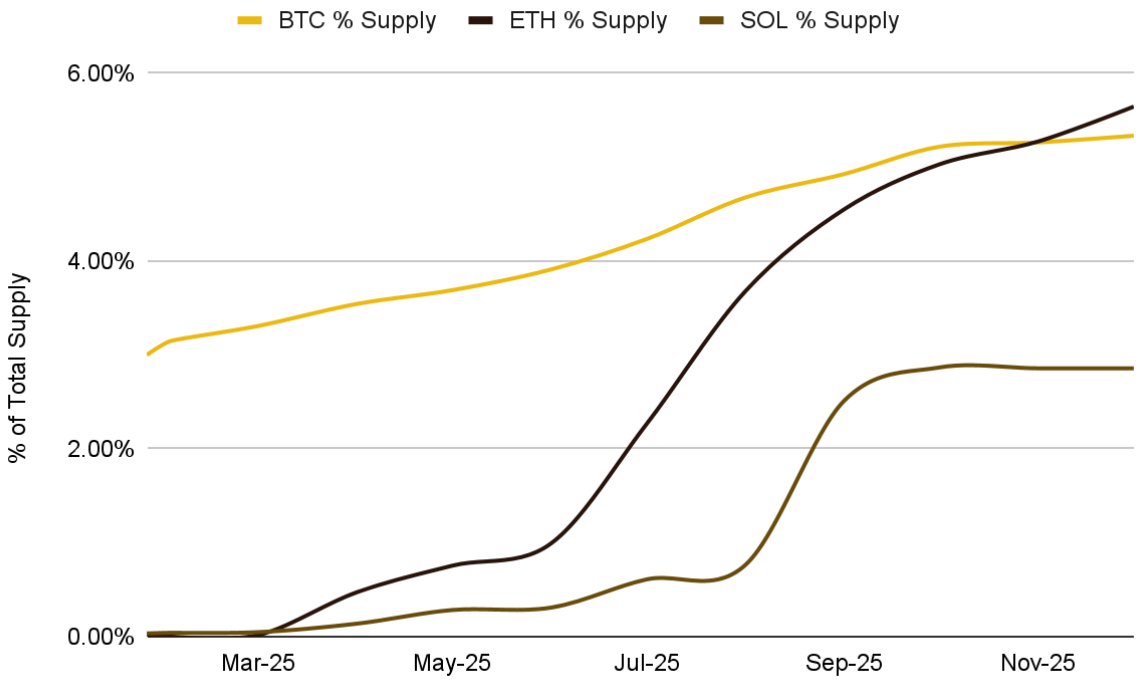
TradFi and the digital asset ecosystem, setting the standards for a more efficient, accessible and resilient way for cash management.

10.3 Digital Asset Treasuries

U.S. public companies are increasingly integrating digital assets into their corporate treasury strategies. Referred to as digital asset treasury (DAT) companies, these organizations are redefining their business models by **focusing on the long-term accumulation of substantial digital asset reserves** while implementing advanced, yield-enhancing trading strategies.

While DAT strategies are not new among U.S. public companies, the recent pace of capital deployment into these investments has been remarkable. In 2021, fewer than ten companies held Bitcoin in their treasuries. Today, this number has grown to **over 190 public companies** adopting DAT strategies, with the majority focusing on BTC treasuries and the rest concentrating on alternative digital assets. Collectively, these companies are estimated to hold over US$122B in digital assets.

Figure 86: Public-company ownership of digital assets increased materially in 2025, with ETH surpassing BTC as a share of supply



Source: Bitcoin Treasuries, Strategic ETH Reserve, Blockworks, Binance Research, as of December 30, 2025

2026 may be a challenging year for digital asset treasury companies as they **face market oversaturation and valuation pressure** with crypto prices being dampened and companies struggling to maintain market valuations above the value of their crypto holdings, risking a collapse. Numerous companies have adopted a strategy of merely

accumulating digital assets as a marketing tool, lacking solid financial frameworks to support sustainable growth. As a result, some have been compelled to liquidate assets to meet operational expenses, while simultaneously facing challenges in raising additional capital to expand their digital asset holdings. This underscores the inherent limitations of "buy and hold" approaches that do not incorporate yield-generating mechanisms.

The emergence of regulated, **income-generating crypto ETFs**–particularly following the relaxation of U.S. regulations permitting staking income – represents **a substantial competitive challenge**. Investors are increasingly favoring these more straightforward and transparent investment vehicles, compared to DAT companies, which act as leveraged exposure to the underlying volatile assets. Despite these challenges, **early entrants such as Strategy and Bitmine are well-positioned** to withstand market pressures due to their first-mover advantage and strong capital reserves. This financial strength enables them to acquire smaller, struggling DAT companies, thereby enhancing and consolidating their digital asset holdings.

11 / Regulation and Policy

The second half of 2025 represented **a watershed moment for the digital asset industry**. U.S. crypto policy has moved toward a **clearer federal architecture** with the passage of the GENIUS Act, while Congress continues to debate broader market-structure reforms and the European Union and major Asian hubs **transitioned from policy drafting to active market oversight**.

Figure 87: Major Crypto Regulation Policy Matrix

Parameter	United States	European Union	Hong Kong	Singapore
Regulatory Stance	**Operational Readiness:** Focus on rule-making for the GENIUS Act and SEC/CFTC re-alignment.	**Standardization:** Addressing differences in interpretation and supervisory practices across Member States to ensure a level playing field.	**Institutional Hub:** Pro-actively facilitating onboarding FRS (Fiat-Referenced Stablecoin) issuers under the new Ordinance.	**Consolidation:** High-bar compliance filtering for "quality over quantity" in the DTSP space.
Legislative Activity	**GENIUS Act Implementation:** Regulators (OCC/Fed) drafting final rules; **SAB 121** has been rescinded..	**DORA Enforced:** ICT risk standards became mandatory for all CASPs on **January 17, 2025**.	**Stablecoin Ordinance (Aug 1):** Official licensing began; mandatory HK incorporation for issuers.	**FSMA Part 9 (June 30):** Full enforcement for DTSPs serving overseas clients with no transition.
Stablecoin Framework	**Federal Standards:** 1:1 reserve mandate (USD/Treasuries); monthly audits became the industry benchmark.	**Compliant Rotation:** Non-MiCA tokens (like certain USDT pairs) faced de-facto delisting in favor of regulated EMTs.	**FRS Licensing:** Minimum HK$25M capital floor and par-value redemption rights for retail access.	**Strict Dual-Reg:** Stablecoin issuers now face both PS Act and FSMA oversight for global operations.
DeFi / NFTs	**Safe Harbor Pivot:** SEC exploring time-limited "maturity tests" for decentralized networks.	**Post-MiCA Prep:** The Commission continues to assess, pursuant to Article 142 of MiCA, whether additional measures may be warranted for areas not comprehensively addressed in the regulation (i.e.	**Web3 Support:** Launched sandboxes for DAO legal recognition and RWA tokenization.	**Perimeter Focus:** DEXes and DeFi front-ends required to comply with strict AML/KYC or cease SG operations.

		DeFi, lending and borrowing, NFTs, among others.)		
Market Impact	**TradFi Surge:** Increasing interest from TradFi into stablecoin reserves and custody.	**Passporting Success:** First wave of CASPs began cross-border operations under unified licenses.	**Regional Lead:** Increasing APAC dominance in net-new firm registrations for stablecoin-related businesses.	**Institutional Pivot:** Singapore's hub profile has evolved toward wholesale activity, reflecting both policy direction and market-led consolidation among retail-facing firms.

Source: Bloomberg, Binance Research, as of December 31, 2025

11.1 United States: A Landmark Shift

In the second half of 2025, the U.S. digital-asset policy environment entered a period of accelerated change, with heightened legislative activity and clearer signals of a potential shift toward a more structured federal framework. Under the current administration, policy messaging has increasingly emphasized regulatory clarity and innovation, alongside continued priorities around market integrity, consumer protection, and illicit-finance risk. Collectively, these developments reflect an effort to position the United States as a leading jurisdiction for responsible digital-asset activity.

- **The GENIUS Act (Signed July 18, 2025):** The *Guiding and Establishing National Innovation for U.S. Stablecoins Act* established the first federal oversight for "payment stablecoins." The Act mandates **100% reserve backing** in high-quality liquid assets (e.g. USD and short-term Treasuries) and **requires monthly public examinations**. The Act also clarified that qualifying payment stablecoins issued by permitted issuers are excluded from 'security' treatment under federal securities laws. The Act, alongside border market dynamics, were relevant factors for the global stablecoin market expansion to **US$308–310B** range by year-end.

- **DeFi Regulatory Relief & CRA Nullification:** In a major victory for decentralization, Congress utilized the **Congressional Review Act (CRA)** to formally nullify the IRS's December 2024 "broker reporting" regulations. This **removed the DeFi-specific broker reporting requirements** (including expected Form 1099-DA gross-proceeds reporting, which had been scheduled to phase in later), while broader digital-asset broker reporting rules for custodial intermediaries remain in place. The revocation **acknowledges that decentralized protocols do not fit the traditional broker model**, significantly reducing compliance burdens and preserving the sector's decentralized ethos.

- **SEC "Generic Listing Standards" for Spot ETFs:** In September 2025, the SEC approved a **rule change** for NYSE, Nasdaq, and Cboe, establishing **generic listing standards** for certain commodity-based trust ETPs holding spot commodities, including digital assets. This ended the decade-long case-by-case review process, reducing ETF approval timelines from 240+ days to a **maximum of 75 days**. This

streamlined pathway has triggered a surge in filings for diversified altcoin ETFs, including **Solana (SOL), XRP, and Dogecoin (DOGE)**.

- **Institutional Integration & SAB 121:** Regulatory clarity was supported by the SEC's issuance of SAB 122, which rescinded SAB 121, **easing a key balance-sheet recognition requirement** that increased capital and risk-management considerations for some custodians. In parallel, the GENIUS Act stablecoin reserve disclosure and assurance expectations **contributed to a more enabling environment for institutional participation** in U.S.-regulated digital assets products.

11.2 European Union: The MiCA Implementation Phase

As the *Markets in Crypto-Assets (MiCA)* regulation entered its second year of application, H2 2025 focused on operational convergence across the 27 member states.

- **Stablecoin Consolidation:** The market witnessed a "**MiCA-driven rotation**." Following the full enforcement of stablecoin rules, **exchanges increasingly delisted non-compliant stablecoins** for EEA users, contributing to greater reliance on MiCA-authorised stablecoin offerings. This created a bifurcated market where only "Asset-Referenced Tokens" (ARTs) and "E-Money Tokens" (EMTs) could be legally marketed to EU residents.
- **DORA Enforcement (January 17, 2025):** The *Digital Operational Resilience Act (DORA)* became fully enforceable. All licensed Crypto-Asset Service Providers (CASPs) are now required to meet strict cybersecurity, incident reporting, and stress-testing standards. Advanced testing requirements, including threat-led penetration testing (TLPT), apply to selected entities identified by competent authorities based on supervisory criteria, and **may contribute to elevated compliance costs, which influence M&A activity**.
- **Grandfathering Expiry:** Several jurisdictions, including Germany and Lithuania, began winding down their transitional **"grandfathering" periods**. This forced legacy firms – many of which had operated under older national regimes–to either secure a full MiCA license or cease operations by year-end.

11.3 United Arab Emirates: Binance Global License Under ADGM

In December 2025, Abu Dhabi Global Market's Financial Services Regulatory Authority (FSRA) **granted Binance full authorization** for its global platform, Binance.com, under a comprehensive framework – making it the **first major crypto exchange to achieve such licensing**.

Covering **exchange, clearing, brokerage, and custody activities** via three regulated entities (mirroring traditional financial market infrastructure with segregated roles for enhanced risk management and oversight), this milestone reinforces ADGM's position as a premier international hub for compliant digital-asset innovation. It provides regulatory

clarity, high standards for governance, consumer protection, and AML/CTF compliance, while enabling seamless global access and institutional participation.

Wider implications include accelerating **UAE's emergence as a leading crypto and fintech center** – bolstered by 0% tax advantages, streamlined processes, and alignment with international standards – potentially attracting more global players, sovereign capital, and tokenized asset flows, and serving as a benchmark for regulatory convergence in the Middle East and beyond.

11.4 Asia-Pacific: The Stablecoin Hub Strategy

Asian regulators focused on integrating stablecoins into the broader financial system to facilitate cross-border trade and institutional tokenization.

- **Hong Kong's Stablecoin Ordinance (August 1, 2025):** The **Ordinance** officially came into effect, establishing a mandatory licensing regime for fiat-referenced stablecoin (FRS) issuers. To protect consumers, the HKMA mandated that only FRS issued by **HKMA-licensed entities** can be offered to retail investors. Non-licensed issuers were restricted to professional investors only. These measures support Hong Kong's objective of providing a clear, prudentially anchored framework for stablecoin activity.

- **Singapore:** MAS brought into force the **Financial Services and Markets Act Part 9** licensing framework for Digital Token Service Providers (DTSPs). MAS has indicated it will set a high bar for licensing and will generally not issue licences for offshore-only operating models, meaning in-scope unlicensed firms are expected to wind down those activities. The framework is **designed to address AML/CFT and supervisory risks** associated with cross-border, internet-based services, complementing existing regimes for providers serving customers in Singapore under the PSA/SFA/FAA.

- **South Korea (Virtual Asset Reform):** Following developments in other major markets, the government **plans to legalize Spot Crypto ETFs** in 2026. In February, the FSC announced a roadmap to gradually **allow corporate participation**, including a pilot in the second half of 2025. This signaled the end of the long-standing "retail-only" era and enabled greater institutional participation in the domestic market.

- **Australia**: In H2 2025, Australia advanced crypto regulation with the release of the exposure draft of the **Treasury Laws Amendment (Regulating Digital Asset, and Tokenised Custody, Platforms) Bill 2025** on September 25. It proposes classifying digital asset platforms and tokenised custody providers under the Corporations Act 2001, requiring an AFSL with conduct, disclosure, custody, and consumer protection obligations. Consultation closed October 24, with final legislation expected in 2026. ASIC complemented this by issuing the **Stablecoin Distribution Exemption Instrument 2025/631** (September 2025) for class relief on distributing licensed stablecoins, and updated INFO 225 guidance on crypto-assets as financial products. These steps aim to align crypto with existing financial standards, enhance protections, and support innovation in tokenisation.

12 / Themes for 2026

Looking ahead, we are delighted to see the market's remarkable performance in the past year and are optimistic about the following themes for 2026.

1. **Macro: Policy-Driven Markets and the Fiscal-Administrative Pivot**

   The convergence of the upcoming U.S. midterm election cycle and evolving fiscal imperatives is set to materially influence market behavior. Historical precedent suggests incumbent administrations often face greater legislative resistance post-midterm, increasing incentives to accelerate policy agendas and secure economic stability earlier in the cycle.

   This political dynamic is reinforced by the monetary backdrop. With inflation easing and labor markets gradually cooling, the bar for the Federal Reserve to return to a sustained hawkish stance appears high. Unless inflation reaccelerates sharply and in a persistent, expectation-shifting manner, a delay to the easing cycle looks unlikely. As a result, policy balance continues to skew toward rate cuts and accommodative financial conditions, particularly in the presence of slowing growth and political pressure to support activity.

   i. **Markets Shift Toward Policy Beta**

      - **Reduced reliability of traditional valuation signals:** Asset pricing is becoming less anchored to organic business cycles and more sensitive to policy outcomes.
      - **Rising importance of administrative action**: Executive directives, regulatory decisions, and fiscal programs increasingly act as primary market drivers.
      - **Fiscal dominance**: Large-scale fiscal initiatives, including the potential "One Big Beautiful Bill's" US$2–3T expansion in federal spending, are near-term stimulative despite longer-term implications for debt sustainability and upward pressure on term premia.

   Together, these dynamics reinforce a policy-driven, pro-cyclical backdrop that favors risk assets even as structural concerns build beneath the surface.

   ii. **Administrative Intervention as Policy Transmission**

   Elevated price levels in core segments (food, shelter, and energy) remain a central concern for policymakers. Rather than suppressing demand through tightening, which carries recessionary risk, policy is increasingly shifting toward targeted supply-side intervention and direct fiscal support aimed at sustaining nominal purchasing power. Key areas to monitor:

- **Food and supply chains**: Intensified regulatory scrutiny around pricing behavior, competition, and supply chain control.
- **Housing and mortgage markets**: More aggressive use of Government-Sponsored Enterprises (GSE) balance sheets to support liquidity, alongside potential restrictions on institutional ownership of single-family housing.
- **Energy and strategic resources**: A pivot toward resource security, with greater emphasis on domestic access to oil, gas, and critical minerals, even at the expense of traditional diplomatic norms.
- **Fiscal transfers**: Mechanisms such as tariff-linked rebates or direct household support remain plausible, supporting consumption but increasing the risk of demand-pull inflation into H2 2026.

iii. **Blurring Fiscal and Monetary Boundaries**

- **Central bank independence**: Increased scrutiny of Federal Reserve leadership and mandate raises the risk of closer alignment between fiscal and monetary objectives.
- **Long-end intervention**: Quasi-QE may increasingly be implemented through administrative or balance-sheet channels (e.g., MBS purchase programs) rather than explicit FOMC programs.
- **Consumer credit distortion**: Proposals to cap borrowing rates (e.g., 10% credit cards rate cap) below market-clearing levels risk credit rationing, pushing lending activity toward non-bank and shadow lenders.

Together, these dynamics amount to a form of financial repression, where constrained pricing of risk paradoxically raises the effective cost of capital for lower-quality borrowers.

Overall, the combination of fiscal dominance and financial repression creates a structurally supportive backdrop for digital assets. Expansionary fiscal policy alongside suppressed real yields weakens traditional sovereign debt dynamics, while distortions in regulated credit markets increase the appeal of alternative financial rails.

Any dislocations in traditional lending may create arbitrage opportunities for DeFi protocols, while reinforcing the role of stablecoins as neutral, programmable liquidity instruments operating outside conventional banking constraints.

2. **The Great Energy Displacement**

Competition for electricity is emerging as a defining constraint for Bitcoin mining. As AI data centers scale rapidly, grid operators and policymakers are increasingly prioritizing power allocation toward higher value-added compute rather than hash-rate production. In several former mining-friendly regions, electricity capacity

is being redirected toward AI training and inference, reflecting a shift in how scarce grid resources are valued.

This substitution is driven by fundamentally different economics. Bitcoin mining remains highly price-sensitive, operating as an arbitrage between BTC prices and electricity costs, with profitability compressing quickly above roughly US$0.03–0.05/kWh or during price drawdowns. In contrast, hyperscale AI data centers monetize compute at far higher value per kWh, and the high opportunity cost of downtime (during large training runs) makes uptime non-negotiable, allowing them to tolerate materially higher power costs.

The near-term implication is a potential slowdown or flattening in global Bitcoin hash-rate growth as megawatt-scale capacity reallocates toward AI workloads. This does not pose a security risk given today's elevated hash-rate baseline, but it alters miner economics. Hybrid operators combining AI and mining may gain resilience by cross-subsidizing operations, while pure-play miners are increasingly pushed toward off-grid energy sources such as stranded gas, remote hydro, or intermittent renewables. This could potentially reinforce Bitcoin's "energy offtaker" green narrative over the long run.

3. **Crypto Policy as a Key Catalyst**

2026 is the year regulation moves from direction of travel to operational rules and licensing cliffs that determine which crypto businesses can scale. In the U.S., the main swing factors remain (1) how regulators implement the GENIUS Act in practice through bank and stablecoin-issuer approval processes and supervisory standards, and (2) whether market-structure legislation delivers workable clarity on DeFi, exchange registration, and custody, shaping how quickly products can expand beyond spot exposure. In Europe and the UK, the catalyst is execution: MiCA transition windows close across EU jurisdictions by mid-2026, while the UK advances a payments-focused regime centered on authorised stablecoins and regulated settlement pathways. Together, these shifts concentrate activity around authorised issuers, compliant stablecoin models, and regulated on-chain settlement and collateral use.

In parallel, tax friction is emerging as a practical constraint on retail adoption. In the U.S., the absence of a de minimis exemption continues to classify everyday crypto payments as taxable asset disposals, imposing administrative burden that discourages usage. While secondary to market-structure reform, the potential passage of a limited de minimis exemption would materially lower this barrier, helping crypto move beyond a pure "digital gold" narrative toward functional payment use cases.

Yet, policy momentum is not linear, and changes in political balance, regulatory leadership, or enforcement priorities could slow, delay, or partially reverse implementation in certain jurisdictions. In the U.S., for example, shifts in Congressional control following the mid-term elections, including reduced pro-crypto Republican influence in the House or Senate, could materially affect the pace and scope of market-structure and stablecoin rulemaking. Separately, continued positive policy commentary and exploratory initiatives across multiple

governments globally keep BTC on the agenda as a potential balance-sheet consideration, even if adoption remains selective and uneven.

4. **Institutional Rails Shape Crypto Adoption**

   Institutional participation is increasingly shaping and, in many cases, driving crypto markets through how crypto is accessed, allocated, and used via TradFi channels. The focus is where incremental capital is permitted to sit within existing financial infrastructure and how those rails continue to widen. This includes the continued scaling of broader wirehouse approval and product expansion, such as Morgan Stanley advancing spot crypto ETF access, and large platforms progressively reversing long-standing distribution restrictions, including Vanguard opening crypto ETFs to brokerage clients. Access is also widening across additional investor channels, such as retirement and 401(k) platforms, alongside deeper TradFi involvement through the launch, acquisition, or integration of crypto capabilities across custody, staking, and tokenization.

   Together, these shifts point to more persistent and structurally embedded capital flows, initially concentrated in BTC as a macro and portfolio asset, then selectively extending to ETH and a narrow set of large, regulated products. Over time, this capital is likely to filter into institution-ready on-chain sectors from tokenization, payments, and core DeFi, reinforcing a more segmented and maturity-driven crypto market structure.

5. **Corporate Treasury Strategies Face Reality Check**

   Corporate crypto treasuries are transitioning from a growth trade into a balance-sheet regime where structure matters more than conviction. As market-to-NAV premiums compress, the financing model that powered rapid treasury accumulation breaks: equity issuance becomes dilutive, leverage loses reflexivity, and refinancing risk turns binding. This dynamic has already surfaced during late-2025 as over-leverage across crypto markets were flushed when market sentiment turned and capital windows narrowed. Going forward, treasury vehicles with scale, conservative leverage, and access to non-dilutive liquidity can continue operating through volatility, while weaker structures are pushed into asset sales, consolidation, or closure.

6. **Stablecoins Approach Everyday Consumer Finance**

   2025 was the year stablecoins truly kicked off, but it is just the opening chapter in the much larger story of stablecoin – and blockchain – adoption. Looking to 2026 and beyond, the real momentum will come from stablecoins paired with neobank-like applications that bring them directly to everyday consumers worldwide. These intuitive, self-custodial platforms will quietly onboard huge populations onto global blockchain rails, drawn in by the openness, dramatically lower cross-border costs, and near-instant settlement times that traditional systems are simply unable to match. The combination is powerful:

   Programmable money + user-friendly distribution = the on-ramp that finally brings blockchain to the masses.

7. **Tokenization Moves From Supply to Workflows**

   Tokenization in 2026 is about utility, and not just supply. It is about whether tokenized assets become usable financial instruments that institutions can hold, move, and reuse without reverting to off-chain workarounds. Growth is most likely to concentrate where tokenization removes first-order frictions that matter: cash products (tokenized T-bills and money-market fund shares for treasury, settlement, and collateral buffers), collateral-grade public securities (tokenized equities and ETFs for margin portability), and private markets (private credit and fund interests where tokenization compresses onboarding, servicing, reporting, and transfer administration).

   The practical test in 2026 is execution. DTCC's SEC-backed DTC tokenization rollout expected in H2 2026 is a key marker that tokenized securities are entering production rails. What determines scale is whether the same instruments are reused for funding, collateral, and settlement rather than just being issued once and sitting idle.

8. **Derivatives Drive DEX Growth**

   DEX participation increased materially through 2025, reaching a record 20+% share of crypto trading by late-year, establishing a higher baseline for on-chain activity. Looking into 2026, the case for further DEX growth is concentrated in derivatives, and other exotic products. On-chain perpetuals in BTC and ETH have reached sufficient liquidity and depth to support repeat, event-driven trading, which is where incremental volume typically originates. This makes perpetual DEXes the primary driver of rising DEX ratios, particularly during periods of volatility.

   A secondary driver to watch is the growing linkage between on-chain trading and adjacent products such as yield and lending. Margin and idle balances used for trading can increasingly be deployed more efficiently, reducing the friction and opportunity cost of keeping capital on-chain. What may be interesting is the convergence of these functions at the interface level: while this integration has long existed on CEXes, some DEX platforms are only beginning to surface execution alongside native yield, borrowing, and basic hedging within a single workflow. However, meaningful frictions remain, including wallet UX under stress, fee predictability, and fragmented liquidity. As a result, while a superapp-style DEX appears directionally inevitable, in 2026 it remains early in practice.

9. **Public Chains, Private Data**

   As on-chain adoption broadens, privacy is shifting from a niche feature to a baseline requirement. Unlike traditional markets, where balances and payments aren't publicly visible, most blockchains expose transaction data by default, limiting enterprise and institutional use. In response, privacy-preserving techniques such as zero-knowledge proofs, fully homomorphic encryption, and private or permissioned L2s are gaining traction. These tools are expected to see wider deployment, enabling confidential transactions on public ledgers while preserving security, auditability, and regulatory compatibility.

10. **Prediction Markets Enter Next Phase of Growth**

    Prediction markets have moved decisively past the experimental phase. In 2025, trading volumes exceeded US$51B and open interest rose to roughly US$13B, with growth driven across a broadening set of markets. Economics-related contracts expanded sharply, alongside tech and science categories, reflecting wider participation and the early involvement of institutional media and data partners. Volume alone is no longer the open question.

    Looking ahead, the defining issue is whether prediction markets evolve from self-contained trading venues into inputs that other systems actually use. Growth is likely to concentrate along a few clear vectors. First, contract scope continues to widen into more ubiquitous areas where uncertainty is persistent and forecast horizons are short enough to support repeat usage. Key examples include macro data releases, rate paths, policy decisions, and corporate outcomes. Second, distribution and integration into existing workflows becomes critical. Prediction market outputs increasingly surface inside trading terminals, research dashboards, governance tools, and content platforms, rather than requiring users to engage through standalone venues.

    Third, product convergence accelerates, with prediction markets intersecting more directly with derivatives, structured products, automated strategies, and AI-driven agents that both consume and trade on probabilistic signals. Fourth, regulatory posture becomes a gating factor, shaping which jurisdictions, contract types, and distribution models can support institutional participation at scale. Finally, competition intensifies as new entrants and incumbents experiment with different market specializations, resolution and payout mechanics, and UX models, producing variations on the core prediction market structure rather than a single dominant format.

11. **Value Capture Moves Up Stream**

    2026 marks a structural shift in crypto economics: value capture continues to migrate away from base layers and toward applications. Trading venues, DeFi protocols, wallets, and consumer apps already account for the majority of on-chain fee generation, while L1s and L2s are deliberately compressing fees and reducing MEV to compete on cost and throughput. This improves usage but mechanically shrinks infrastructure take rates.

    As a result, value appears to increasingly accrue to applications that control distribution and order flow. The application-to-network revenue ratio is likely to widen further in 2026, reinforcing application-led value capture as base layers face structurally thinner monetization from increasingly commoditized blockspace.

12. **Flight to Quality**

    With markets having grown more selective and narratives proving harder to sustain valuations on their own, capital has become increasingly concentrated in assets with demonstrable usage and revenue. This shift became increasingly evident in 2025, with BTC reaching new ATHs without a broad lift across many

top-100 altcoins, a large share of which remain significantly below prior cycle peaks. Projects lacking sustainable economic activity, across L1s, L2s, and DeFi protocols reliant on incentives rather than organic demand, have continued to underperform. As capital concentrates into fewer viable projects, liquidity for weaker assets is deteriorating. This dynamic is likely to accelerate consolidation across the crypto ecosystem.

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14 / New Binance Research Reports

Monthly Market Insights - January 2026 Link
A summary of the most important market developments, interesting charts and upcoming events

Navigating Crypto: Industry Map Link
An overview of different verticals in crypto

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Binance Research is the research arm of Binance, the world's leading cryptocurrency exchange. The team is committed to delivering objective, independent, and comprehensive analysis and aims to be the thought leader in the crypto space. Our analysts publish insightful thought pieces regularly on topics related but not limited to, the crypto ecosystem, blockchain technologies, and the latest market themes.

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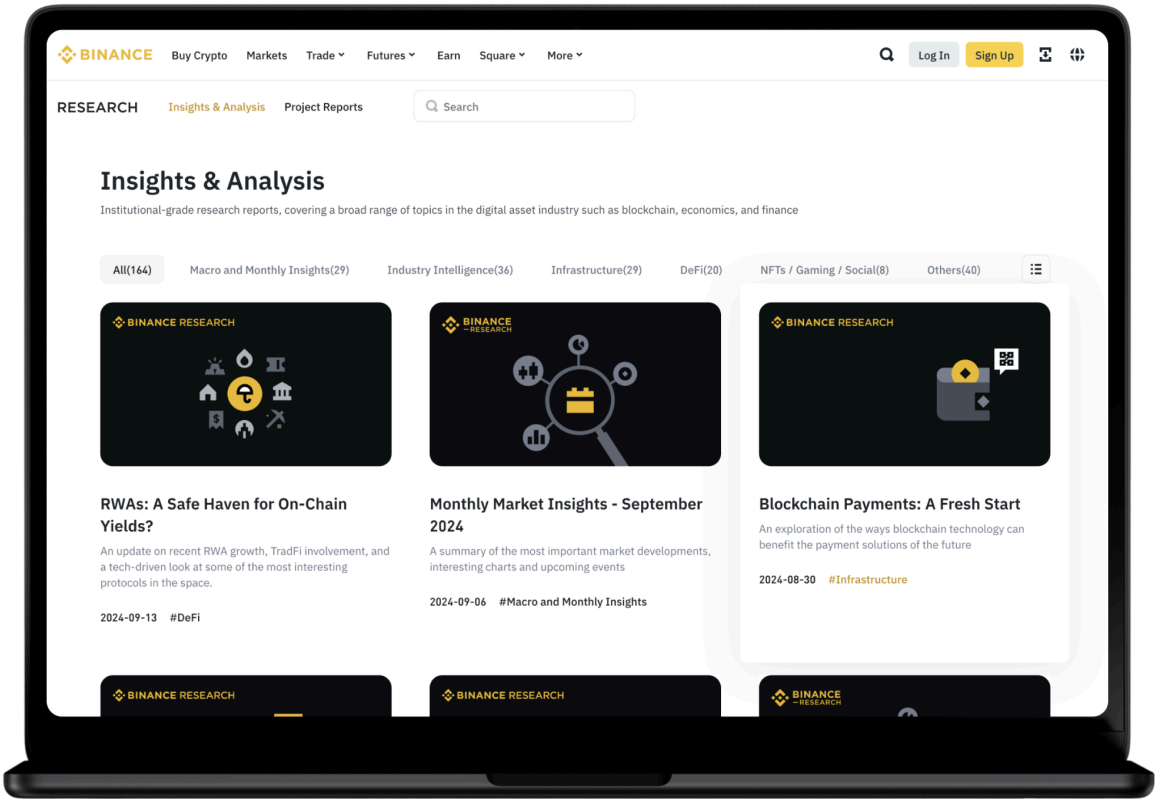

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