The Dual-Track Era of Onchain Equities

Derivatives Expansion, RWA Foundations, and Cross-Market Arbitrage

Coinfound Co., Ltd.

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Amber J[1] **and Janus R**[2]

[1]**amber@coinfound.org**
[2]**iresearch@coinfound.org**

Takeaway

1. On-chain equities are evolving from a single product into an ecosystem with a modern financial market structure: the asset layer and the trading layer have clear divisions of labor and interlock with each other, forming a self-amplifying flywheel.
2. The asset layer solves the problems of property rights and compliance: who can hold it, how it is custodied, and how it is recognized within jurisdictions. This layer is inherently heavy, slow, and has high barriers to entry, making it prone to centralization toward a few top-tier platforms, with liquidity skewing toward "institutional availability."
3. The trading layer resolves liquidity and price discovery: derivatives extend trading from working days to 24/7, pushing execution efficiency to the extreme and manifesting risk appetite through leverage and funding rates, making it lighter, faster, and more explosive.
4. When both tracks are established simultaneously, on-chain equities are no longer merely "stocks on the blockchain," but rather a fertile ground for institutional-grade strategies. The most typical scenario is cross-track arbitrage: establishing a compliant base position with spot RWAs and building an equivalent hedge on the derivatives side, reducing directional exposure to a minimum, and shifting yield generation toward capturing funding rate differences and structural premiums. While not risk-free, this pushes on-chain equities from a simple spot-holding

logic toward a paradigm closer to a Prime Brokerage system. Capital can utilize the same underlying asset for hedging, carry trades, and cross-market pricing, thereby giving trading activities a sustainable underlying rationale.

5. Therefore, this report focuses on why on-chain equities inevitably form a flywheel in the form of a "dual-track era": on one side is the asset foundation shaped by compliance and property rights, and on the other is the liquidity engine driven by derivatives. The former determines the ceiling, while the latter determines the slope. As compliance paths gradually clarify and settlement frictions continue to decline, the most likely evolutionary route for on-chain equities is to shift from a tool-type asset in a niche market toward a 24/7 cross-market risk transfer network. Next, we will unfold along this structure: from the top-tier logic and infrastructure boom of the asset layer to the liquidity explosion and derivative innovation of the trading layer, and how institutions and professional players can build scalable arbitrage and allocation frameworks between the two.

Figure 1. （Source：CoinFound）

Contents

1 Key Signals Intelligence

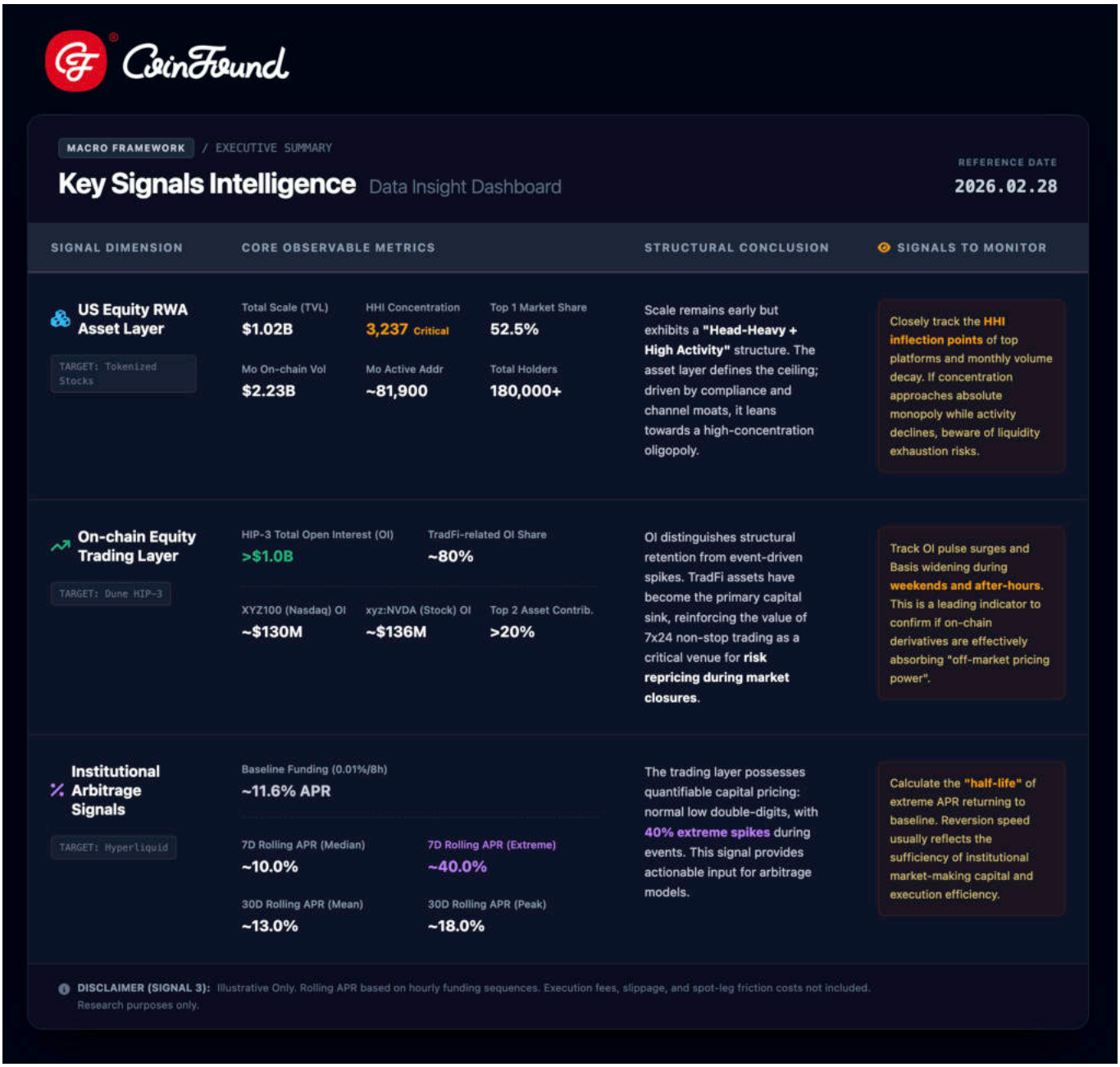

Figure 2. Source: CoinFound

2 Macro Introduction: Web3 Financial Equalization and the Ultimate Evolution of Capital Efficiency

2.1 Asset Famine and the Awakening of Real Yield

The global macroeconomy is deep in a paradigm shift of liquidity. Since 2022, the Federal Reserve's aggressive rate hike cycle has led to a surge in traditional risk-free yields. Traditional financial assets, represented by US Treasuries, have absorbed massive global liquidity, with the real yield of 10-year Treasury Inflation-Protected Securities (TIPS) climbing all the way from negative territory to highs above 2%. This macroeconomic backdrop directly led to a structural inversion between decentralized finance (DeFi) base yields and traditional finance (TradFi) yields. Over a period of two years, Ponzi economic models relying purely on token inflation incentives were completely abandoned by the market, and crypto-native capital began seeking safe havens and yield-generation in TradFi assets that possess external real cash flows.

However, entering late 2024 and 2025, as the Fed officially initiated a rate-cut cycle and the macroeconomy showed signs of cooling, US real yields resumed a downward trend. Market expectations of the Fed's easing pace will further compress the interest margin of USD reserve assets. At this critical turning point, the DeFi market ushered in a comprehensive awakening of "Real Yield." Issuers and protocols can no longer rely on simple yield subsidies but are forced to compete fiercely on capital efficiency, underlying asset scale, and global distribution channels.

Against this backdrop, the RWA industry is undergoing a paradigm shift from "experimental pilots" to "scale production." Marked by BlackRock's BUIDL fund, Ondo Finance's global layout, and investment banks like JPMorgan shifting from early trials to deep applications on public ledgers, institutional drive has become the core engine of RWA growth. Accompanied by global investors' sustained preference for US Equities, stablecoins and Tokenized Real-World Assets (RWAs) have gradually evolved into a universal settlement layer connecting consumer finance with institutional liquidity. The market has developed a massive "asset famine" anxiety for assets capable of crossing bull-bear cycles and possessing real external macro Beta yields, laying an irreversible macroeconomic foundation for introducing high-quality traditional yield-bearing assets like US equities on-chain. However, to truly bring these traditional high-quality assets on-chain and unleash their full potential, regulatory ice-breaking and a generational upgrade of underlying infrastructure are indispensable.

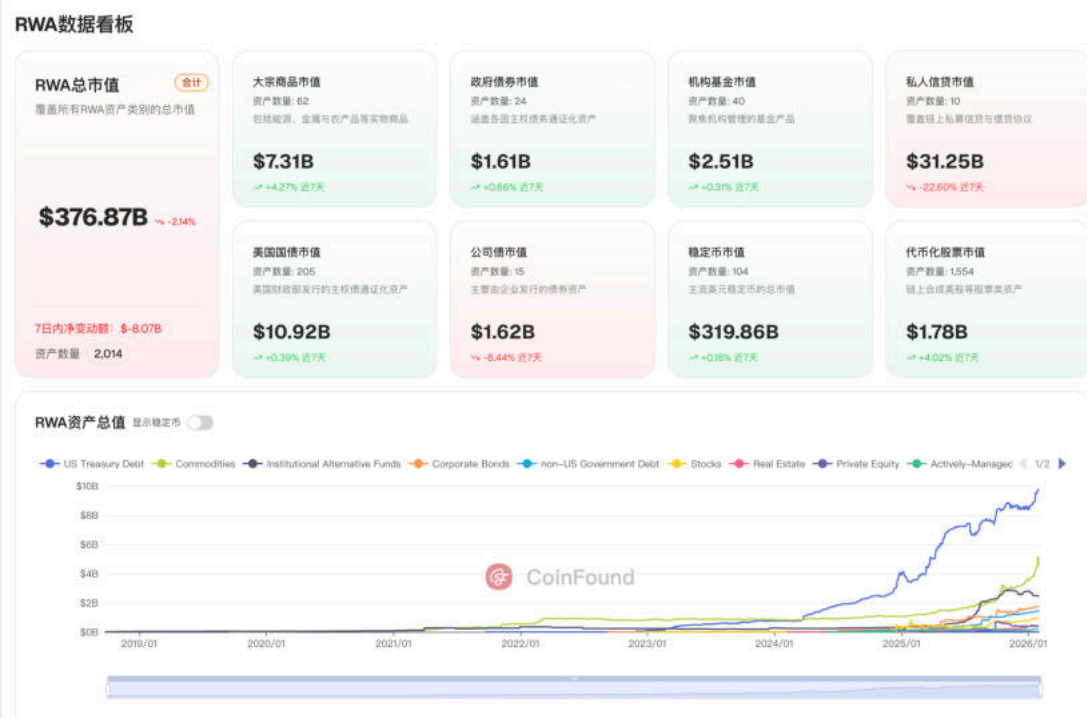

Figure 3. Source: CoinFound

2.2 Regulatory Inflection Point and Compliance Foundation: Centralized Outburst of Institutional Dividends

Supporting the transfer of liquidity is an epic reversal in global regulatory logic starting in 2025. The introduction of the SEC's Innovation Exemption and the official implementation of the *GENIUS Act* cleared institutional obstacles for secondary market liquidity of on-chain securities assets. Meanwhile, the DTCC's "No-Action Letter" regarding on-chain settlement essentially defaulted to acknowledging Distributed Ledger Technology (DLT) as a supplement and upgrade to the traditional T+2 system.

This compliance process has received the most direct feedback at the market level. Circle's (CRCL) stock price surged 35% in a single day after releasing its latest earnings report. This is not only a victory in corporate financial metrics but a revaluation of the "infrastructure premium" of the entire on-chain US equity ecosystem. The report showed USDC circulation grew by 72% year-over-year, while On-chain Volume recorded a staggering 247% increase. As the "blood" of the on-chain US equity and RWA ecosystem, USDC's dominant position in settlement, collateral, and Perpetual Contract (Perp) margins directly proves that underlying liquidity is expanding exponentially. Behind this superficial valuation re-rating is actually a systemic restructuring of the frictional costs of the traditional financial system by on-chain infrastructure. As the regulatory floodgates open, the real revolution has just begun.

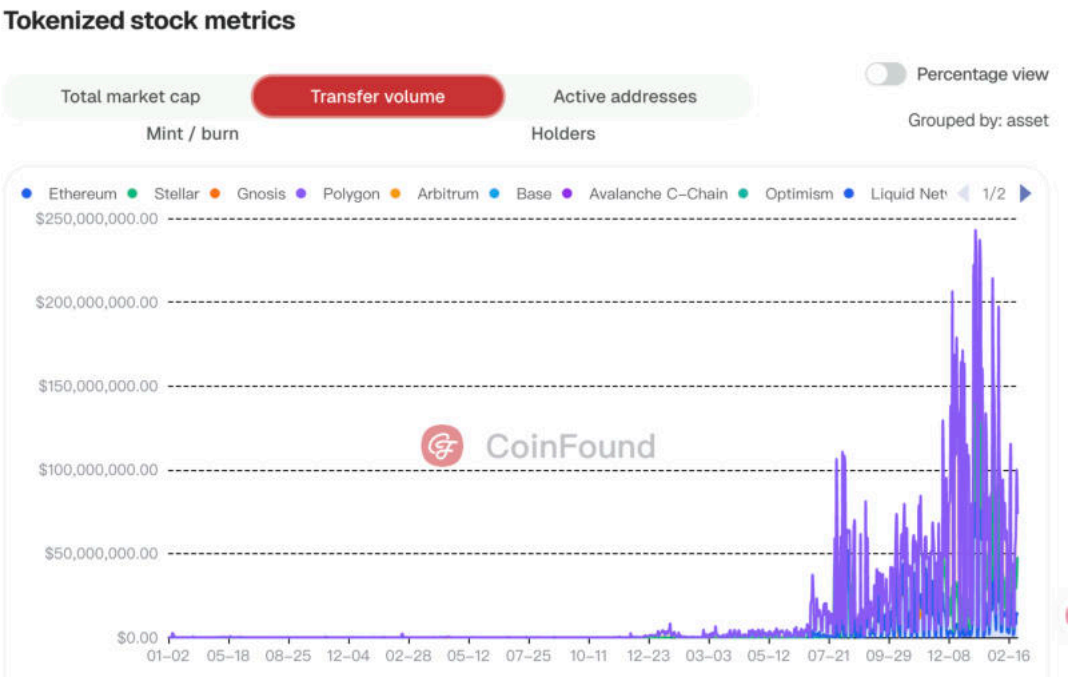

Figure 4. Source: RWA Data Dashboard from CoinFound represents overall RWA Market Cap at 377.53B$ with Tokenized Stocks at 1.77B. $

2.3 Dimensional Reduction of US Equity Infrastructure: Atomic Settlement and the Cross-Asset Margin Revolution

The valuation flywheel validated by Circle is underpinned by a paradigm leap in financial infrastructure. Bringing US equities on-chain is by no means simple "asset relocation" or putting information on the blockchain, but a dimensional reduction strike (overwhelming disruption) by underlying financial infrastructure against the traditional clearing and custodial system. Its core driving force lies in eliminating the frictional costs of the traditional financial system and unleashing unprecedented capital efficiency.

The traditional US equity market relies on highly centralized and structurally complex clearinghouses (like DTCC) and custodian banking systems. This system operates on a T+1 or T+2 settlement cycle and is restricted by extremely strict trading time windows (9:30 AM - 4:00 PM EST). This siloed market structure not only results in massive idle capital costs but also creates fatal liquidity faults during non-trading hours. In contrast, on-chain equities utilize smart contracts and DLT to achieve an atomic settlement mechanism where trading is settlement, thoroughly extending asset circulation and trading times to 24/7. This not only eliminates access barriers for cross-time-zone global investors but also provides an uninterrupted liquidity haven and risk-hedging channel for global capital during macroeconomic black swan events or when traditional markets are closed on weekends/after-hours. Once the 24/7 clearing foundation is laid, the release of capital efficiency is also reflected in the paradigm innovation at the collateral level. Early prosperity in the Web3 market heavily relied on high-volatility gaming within crypto-native assets (e.g., BTC, ETH). However, with the expansion of crypto asset volume and the depletion of incremental funds, breaking the boundaries of native assets became an inevitable evolution for the industry. By bridging US equities on-chain, traders can utilize

the Unified Margin Accounts of decentralized platforms to integrate crypto spot, tokenized Treasuries, US equities, and even FX into a single collateral pool. This cross-asset unified margin system dramatically reduces the chain-reaction liquidation risks triggered by drastic price fluctuations of a single asset. Institutions and high-net-worth individuals can use highly liquid US tech stocks as margin to long Bitcoin, or use tokenized Treasuries to hedge the exposure of high-volatility altcoins. This mechanism marks Web3's formal evolution from a single "token speculation casino" into a full-dimensional, high-precision macro financial market.

3 Ecological Divergence: The Dual-Track Game of RWA Foundation and Synthetic Leverage

As the dimensional restructuring of infrastructure and the cross-asset margin system lay the technical cornerstone, the on-chain migration of US equity assets has shown specific ecological divergence. With macro assets moving on-chain on a large scale, the current on-chain US equity market has evolved into a "dual-track parallel" landscape that is distinctly divided yet highly complementary. Within the massive RWA ecosystem—currently exceeding $376 Billion ($376B+) in Total Value Locked—the carrying methods of US equity assets are undergoing profound structural differentiation: one track is centered on Spot RWAs backed by 1:1 physical stocks, and the other is a Decentralized Derivatives track dominated by synthetic assets and perpetual contracts. These two tracks not only differ fundamentally in underlying logic but also form a perfect ecological closed-loop in capital efficiency and liquidity capture.

On the Spot RWA track, the core paradigm is 1:1 Backed Tokenized Spot Equities. This model takes compliance and balance sheet isolation as its highest principles. By establishing a Special Purpose Vehicle (SPV) or trust structure, it purchases and holds real underlying spot stocks (like Tesla, Nvidia) in the traditional financial market, and then completely maps their economic benefits (including dividends and stock splits) into on-chain tokens. The fundamental value of this model lies in property rights confirmation and true exposure, providing Web3 capital with a "Compliant Beta" that can be held without crossing the fiat chasm. According to the latest market data, the overall market cap of Tokenized Equities has strongly broken through the $1.7 Billion$(1.7B) mark, becoming one of the fastest-accumulating and most institutionally endorsed sub-sectors in the RWA space.

However, while ensuring compliance and property rights, this heavy-asset model inherently forms an extremely high barrier to entry. Alongside its explosive growth, the Spot RWA track also exhibits extreme head effects and market monopoly characteristics.

By introducing the Herfindahl-Hirschman Index (HHI) for quantitative perspective, the current HHI of the tokenized US equity market has far exceeded the absolute warning line of 2,500 points, presenting a highly concentrated oligopolistic morphology. Among them, relying on its first-mover compliance advantage and highly robust cross-chain liquidity deployment, Ondo Finance single-handedly occupies over 50% of the absolute share of the tokenized stock market. This extremely high concentration profoundly reveals the core commercial barriers of the RWA track: compliance licenses, the penetration of traditional brokerage underlying channels, and enterprise-grade custody networks constitute extremely deep moats. Empowered by network effects, top platforms can gather more market makers and complete deep integrations with blue-chip DeFi protocols, thereby continuously squeezing the survival space of tail-end competitors on the liquidity front.

Faced with the heavy-asset thresholds and centralized compliance trends of the spot track, the market has evolved another light-asset path that requires no physical custody. Forming a sharp contrast with the RWA track, which emphasizes heavy-asset property rights and compliance access, the Decentralized Derivatives (Synthetic Perps / Options) track has embarked on a soaring light-asset journey of Non-custodial operations. The derivatives track completely strips away the physical delivery and ownership attributes of the underlying stocks, relying instead on high-frequency oracle price feeds to peg traditional US equity spot prices in real-time. In this track, traders no longer need physical

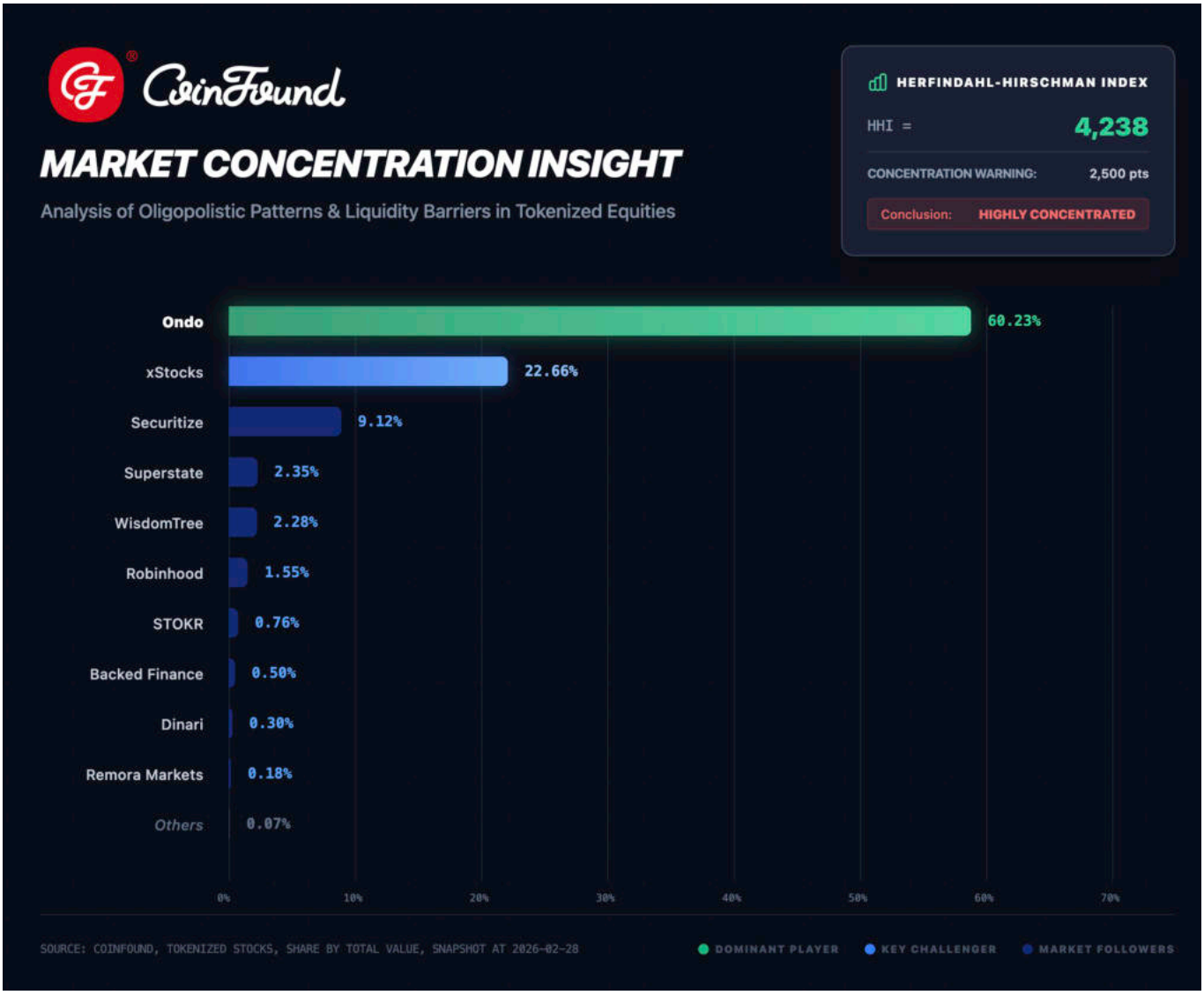

Figure 5. Source: CoinFound. Scope: Scope: Tokenized Stocks. Metric: market share by Total Value (USD), snapshot at 2026-02-28. HHI computed as sum of squared market shares (percentage points); "Others" aggregates remaining platforms.An HHI below 1,500 typically indicates a low-concentration market; 1,500–2,500 indicates moderate concentration; and above 2,500 indicates high concentration. Accordingly, an HHI above 2,500 is generally considered "highly concentrated," meaning shifts in the leading players' market shares can materially alter overall market structure.

stocks as underlying support; instead, they use stablecoins or even crypto-native assets as unified margins to directly participate in synthetic perpetual contracts or options gaming. Accompanied by breakthroughs in underlying public chain performance and the maturation of omnichain orderbooks, the trading volume (Perps Volume) of on-chain US equity derivatives is in an exponential climbing phase that ignores cycle fluctuations.

The parallelism of these two tracks is by no means a zero-sum game of existing funds, but rather the cornerstone and bilateral complement for building the next generation of financial Lego ecosystems, jointly fulfilling the cross-asset collateral vision described in Chapter 1. Spot RWAs (such as 1:1 pegged S&P 500 ETFs or tech giant tokens) provide a solid spot pricing anchor for the entire ecosystem and are introduced into lending and trading protocols as the highest-grade yield-bearing collateral. The derivatives track, based on this foundation, endows capital with extremely high leverage multipliers and short-selling mechanisms, satisfying the cross-market arbitrage needs of quantitative institutions without enduring the high financing costs of traditional brokers. Spot establishes the security boundary of assets, while derivatives unleash the ultimate efficiency of capital. This dual-track fusion of "Spot Base + Synthetic Upper Layer" is reshaping the global asset pricing and distribution network, sized in the trillions of dollars, with an irreversible posture.

4 Asset Layer: The Regular Army Narrative and Infrastructure Boom of US Equities RWA

Entering 2025 and early 2026, RWAs ushered in a thorough explosion from conceptual non-standard assets to standardized, institutionalized assets, with Total Value Locked breaking through the multi-billion dollar magnitude, providing a solid and compliant underlying asset base for on-chain derivatives and liquidity protocols. According to the latest on-chain monitoring data in Q1 2026, the number of holders of Tokenized Equities has broken the 180,000 mark, and the monthly on-chain transfer volume reached a staggering $2.23 Billion ($2.23B). This marks that US Equity RWAs have officially moved from niche experiments into mainstream financial markets. Meanwhile, looking at the absolute scale of asset accumulation, the total size of Tokenized Stocks has exceeded $1.7 Billion ($1.7B), corroborating with on-chain activity indicators: the total size defines the boundary of the "allocable asset pool," while the number of holders and monthly transfer volume delineate the expansion speed of "true adoption." This point is critical because it means the growth of US Equity RWAs is no longer just static holdings by a few institutions, but is beginning to exhibit on-chain circulation and turnover structures closer to financial productization, providing a more stable spot anchor for subsequent collateral, lending, and derivatives pricing.

4.1 From US Treasuries to US Equities: The Inevitable Transmission of RWA Evolution

The process of onboarding assets onto the blockchain follows an extremely strict risk curve transmission logic. The first phase was the rise of Tokenized Treasuries and money market funds, such as BlackRock's BUIDL and Franklin Templeton's FOBXX (Benji token). These assets formed the "risk-free foundation" on-chain, rapidly swelling to billions of dollars in a short time and occupying half of the RWA market. However, as the global macro interest rate environment fluctuates, the profit-seeking nature of capital inevitably spills outward along the risk curve, seeking assets with higher Alpha potential or higher yield requirements within a given risk level. Tokenized US equities, corporate bonds, and ETFs (such as S&P 500 Index fund SPY, Nasdaq 100 QQQ, and star individual stocks like NVDA, TSLA, AAPL) therefore became the inevitable next stop in RWA evolution. These assets not only provide long-term appreciation space for the on-chain environment but also introduce highly deep underlying collateral for DeFi protocols through 1:1 real asset backing.

4.2 Dissecting the Structure: Understanding the Underlying Logic of US Equity RWAs

Bringing US equities—which are strictly regulated by the SEC and globally—onto public blockchains is a highly challenging legal, technical, and compliance engineering feat. Its underlying architecture directly determines asset legality and investor asset security.

Currently, the mainstream RWA issuance architecture highly relies on Special Purpose Vehicles (SPV) or trust models, thereby building a bridge between traditional legal systems and digital ledgers. Under the SPV model, the issuer sets up an independent bankruptcy-remote company, which is responsible for purchasing and holding the underlying US equity spot in the traditional financial market. Subsequently, this SPV issues digital tokens mapping its asset rights

Figure 6. Source: CoinFound

via smart contracts. The core legal significance of this architecture lies in "Bankruptcy-remoteness," meaning that even if the issuer entity goes bankrupt, the stock assets held within the SPV legally still belong to the on-chain token holders. This architecture is currently widely adopted by mainstream platforms like Remora and Backed/xStocks, ensuring that investors' rights are unaffected by the issuer's entity credit under extreme market pressure.

However, legal isolation alone is insufficient to meet securities compliance requirements; adapting technical standards is the next hurdle that must be overcome. When carrying assets with obvious securities attributes like US equities, the most popular ERC-20 standard in the DeFi world exposes a fatal underlying flaw: it is completely Permissionless. This means any address can freely receive and transfer ERC-20 tokens, directly violating Anti-Money Laundering (AML) and Know Your Customer (KYC) regulations that global financial institutions must obey. If stock tokens representing US public companies flow into wallets of sanctioned countries or individuals, the issuer will face devastating legal and compliance blows.

This directly catalyzed the rise of a new generation of RWA-exclusive token standards, such as ERC-3643 (T-REX Protocol). Distinctly different from ERC-20, ERC-3643 is a Permissioned Token Standard. Its core embeds a decentralized identity system named ONCHAINID at the smart contract level. In actual operation, every token transfer not only checks the balance but also invokes identity verification logic: the smart contract will only allow the transfer to execute if both the sender's and receiver's wallet addresses have completed trusted KYC verification, and their jurisdiction complies with the asset's Offering Rules. Additionally, this standard grants issuers high-level mandatory intervention permissions, including freezing suspicious assets, and burning/recovering tokens when user private keys are lost. This "recoverable, controllable, and whitelisted" mechanism perfectly matches traditional financial regulation's rigid demands for securities' "controllability," becoming the technical cornerstone for the mass issuance of US Equity RWAs.

Once the legal architecture and technical standards establish the compliance transfer foundation, how to synchronously process dynamic real-world Corporate Actions becomes the final puzzle piece to ensure the accurate mapping of asset value. The real financial market is not static trading but full of complex corporate actions. When Apple issues a quarterly dividend, or Nvidia executes a 10:1 stock split, if on-chain tokens cannot synchronously reflect these changes, it will lead to severe mispricing or loss of investor assets.

The core to solving this complex problem lies in the high-order computing capabilities of Oracles and the deep system integration with APIs of licensed custodian banks. Taking Ondo Finance's Global Markets platform as an example, its system achieves real-time data synchronization with underlying traditional licensed custodians holding the actual stocks via customized APIs. When the underlying stock company announces and actually pays a fiat dividend, the custodian receives the funds, triggering the smart contract mechanism to automatically calculate the exact share of each on-chain token holder. Through an auto-execution distribution mechanism, the equivalent amount of stablecoins (or reinvested tokens) is accurately airdropped into compliant users' wallets at extremely low friction costs, with corresponding withholding taxes deducted. For more disruptive stock split events, top-tier oracle networks like Chainlink have developed a "Staged Multiplier System." From the announcement day (T-2), effective day (T0), to the market reopening (T+1), the smart contract dynamically and seamlessly adjusts the value multiplier of the on-chain token based on real-time price feeds from the oracle. This ensures the total net asset value in investors' wallets transitions smoothly before and after the split, maintaining the absolute continuity of market maker pricing and preventing chain-reaction liquidations caused by data faults.

4.3 Inventory of Leading Icebreakers

In the highly potential track of Tokenized US Equities, multiple compliant forces are fiercely competing. Ondo Finance (Global Markets), as the undisputed absolute leader, has seen its total RWA value strongly surpass $2 Billion ($2B), firmly holding the top spot in single-platform market share. Ondo's strategic advantage lies in its acquisition of licensed Broker-Dealers and Alternative Trading Systems (ATS), building a full-chain compliance closed-loop from asset generation to trading.

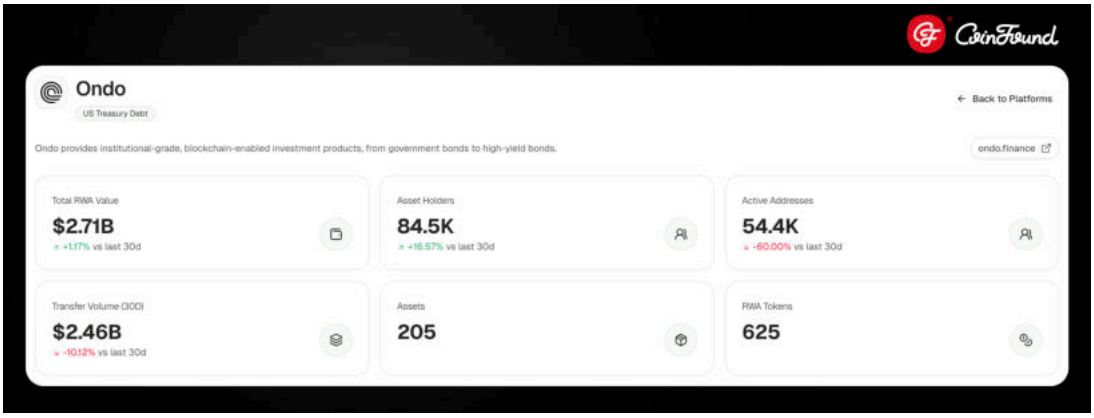

Figure 7. Source: CoinFound

When we zoom in further on the competitive landscape of "Tokenized Stocks Issuance and Distribution Platforms," we find that market top-heaviness is not just a concentration of share, but the result of three different platform paradigm divisions. Based on Total Value statistics as of Feb 28, 2026, Ondo Global Markets leads absolutely with about 60.23% ($605M), xStocks ranks second with about 22.66% ($227.6M), and Securitize accounts for roughly 17.11% ($172M), reflecting the independent weight of compliant securities issuance and secondary infrastructure in this track. Behind the differences in market share are three distinct "methods of organizing compliance and liquidity."

- Ondo Global Markets functions more like an issuance and liquidity distribution layer geared towards on-chain composability. Its tokenized stocks are explicitly described as total return tracker tokens, emphasizing that the economic exposure to the underlying public traded assets includes corporate actions like dividends, and it provides on-chain fund entry/exit channels via investment and redemption mechanisms. It is also more aggressive in multi-chain deployment and asset coverage (e.g., announcing 200+ tokenized US stock & ETF assets upon its Solana launch), reinforcing its scale advantage on the "asset supply side." The advantage of this path is being closer to DeFi's composability and liquidity orchestration; the trade-off is higher compliance thresholds and scarcer channels, hence making it easier to form a first-mover-driven centralized head.
- xStocks is closer to a "distribution-centric tokenized stock standard." Its publicly disclosed Total Trading Volume (TTV) has exceeded $25 billion (covering both centralized and decentralized trading, plus mint/redemption activities) achieved in less than 8 months. This means its expansion relies more on standardized product forms and the scaled replication of distribution networks, rather than just static asset accumulation. Structurally, xStocks strongly emphasizes 1:1 full collateralization and a compliant issuance framework, describing itself as transferable on-chain securities or tracker certificates fully collateralized by underlying assets. In other words, xStocks' core competency is productizing "compliance-ready tokenized stocks" and distributing them at scale, thereby rapidly expanding trading activity and reach.
- Securitize's positioning leans towards "compliant securities issuance and secondary trading infrastructure for institutions." Its value is manifested more in compliance credentials, institutional partnerships, and full-lifecycle capabilities, rather than the on-chain turnover of a single stock token. Public information highlights that Securitize covers SEC-registered broker-dealers, digital transfer agents, fund management, and an SEC-regulated ATS. It has tokenized billions of dollars in assets and partners with multiple top asset managers. This gives it independent weight in the "compliance moat" dimension, but its liquidity morphology is closer to the centralized matching and access management of traditional compliant markets, rather than fully open on-chain liquidity diffusion.

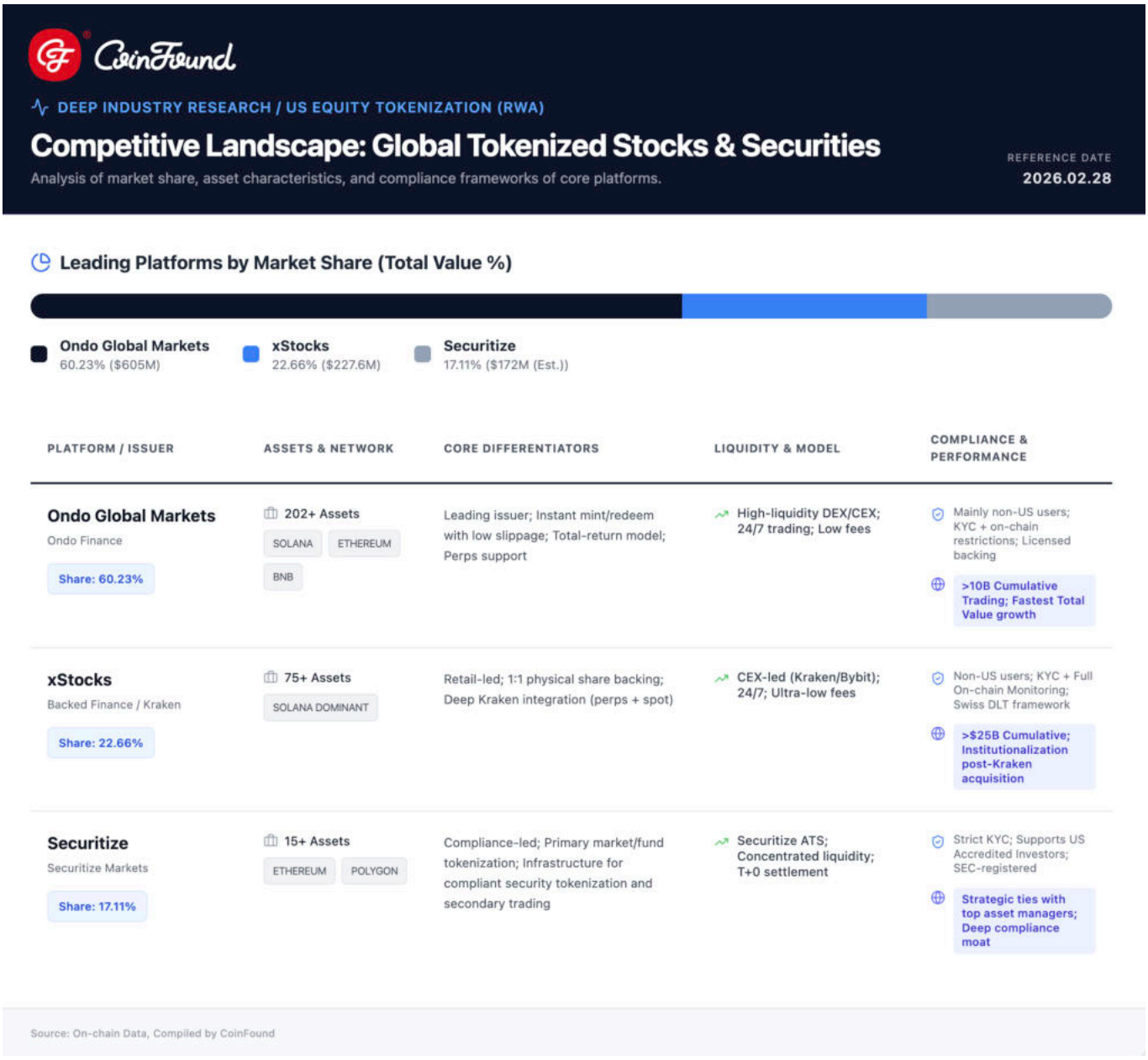

Figure 8. Source: CoinFound

5 Trading Layer: The Liquidity Surge of Decentralized Derivatives (On-chain equities)

If RWA provides the underlying title confirmation of assets, then Decentralized Derivatives (Perpetual DEXs) construct the superstructure that carries high-frequency trading and risk transfer. In the trading layer, derivatives requiring no physical delivery are becoming the main driving force of the on-chain US equity explosion. This track is undergoing a leapfrog evolution from "crypto-native" to "compliant and institutionalized." Currently, key platform camps have begun to take shape, including Hyperliquid known for its omnichain orderbook performance, Orderly Network focusing on the liquidity layer, GMTrade delving into specialized markets, and Ondo Perps and Kraken which recently achieved major milestones. In particular, Kraken's launch of tokenized US equity perpetual contracts based on the xStocks framework on its derivatives exchange in Feb 2026—offering eligible non-US customers 24/7 trading, up to 20x leverage, and covering NVDA, AAPL, TSLA, GOOGL, as well as Nasdaq and S&P index contracts—marks that US equity derivatives have begun entering global crypto trading infrastructure with clearer compliance forms.

It is necessary to point out simultaneously that this product line is not exclusive to on-chain platforms; Centralized Exchanges (CEXs) are in parallel patching the "US equity derivatives 24/7" supply, further proving the demand side is not a niche. Binance Futures announced the listing of TSLAUSDT Equity Perpetual, settled in USDT with up to 5x leverage, explicitly tracking the Nasdaq Tesla stock price. OKX also opened stock perpetual trading for HOOD, TSLA, MSTR in Feb 2026, settled in USDT with up to 5x leverage. Bybit provides stock CFD products covering AAPL, TSLA, NVDA through its TradFi sector, supporting USDT margins and up to 5x leverage.

Because the supply side is expanding synchronously across multiple platforms, Chapter 4 of this report will still focus on on-chain US equity derivatives. The core reason is not "whether there is a product," but "where the expansion slope comes from." The advantages of CEXs mainly lie in their compliance shells and distribution efficiency, while the structural advantages of on-chain Perp DEXs are concentrated in the long-tail expansion speed brought by permissionless listings, transparent funding rates as real-time feedback on capital prices, and instant repricing capabilities during traditional market closure windows like weekends and emergencies. In other words, the entry of Kraken and multiple CEXs proves the demand for 24/7 US equity derivatives is validated, but whether the on-chain trading layer can form a sustained liquidity flywheel depends on whether it can transform "permissionless supply" and "observable capital prices" into scalable depth and replicable trading paradigms.

5.1 Bidding Farewell to ”Vaporware” Accusations: Pricing and Risk Control Mechanisms of Derivatives

Early on-chain synthetic assets were often accused by the traditional finance world of being "vaporware passing the parcel" due to a lack of deep support from real assets and precise risk control models. Today, the new generation of on-chain US equity derivatives achieves near-perfect risk transfer and asset pricing through rigorous mathematical models, the performance revolution of underlying public chains, and extreme risk control architectures. The current trading focus is highly concentrated on highly liquid blue-chip underlying assets such as S&P 500 (SPY), Nasdaq 100 (QQQ), Nvidia (NVDA), Tesla (TSLA), and Apple (AAPL), which constitute the absolute core of on-chain US equity trading volume.

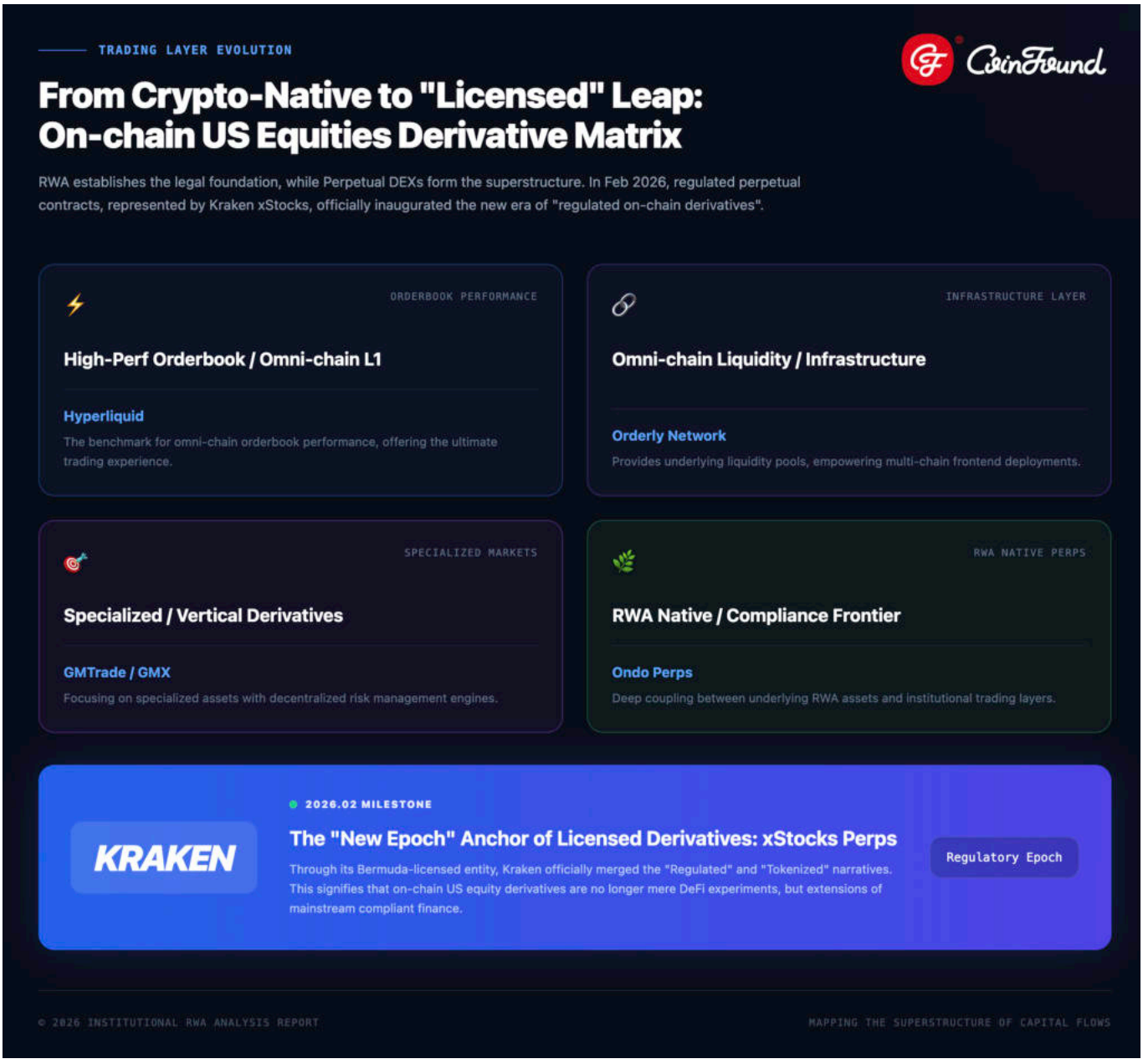

Figure 9. Source: CoinFound

When carrying US equity underlyings (especially highly volatile assets driven by macro news like NVDA, TSLA), the choice of underlying liquidity architecture directly determines the life or death of the protocol. Automated Market Maker (AMM) mechanisms, represented by Uniswap, have extremely high operational efficiency when handling highly correlated trading pairs or crypto-native assets; their advantage lies in providing passive liquidity for long-tail assets without requiring professional market makers. However, AMM's limitations are thoroughly exposed when handling instant pulse movements of US equities triggered by earnings reports or macroeconomic data releases. Because its pricing relies on passive reactions to asset ratios in the pool, it is highly prone to severe slippage, and Liquidity Providers (LPs) can be wildly devoured by high-frequency arbitrageurs through impermanent loss.

In contrast, customized Layer 1 Omnichain Orderbook models, represented by Hyperliquid, demonstrate overwhelming advantages. Hyperliquid, through its proprietary HyperBFT consensus mechanism, achieves sub-second finality and massive throughput capable of processing 100,000 orders per second natively on its L1 blockchain. For US equity derivatives, the orderbook model can attract High-Frequency Trading (HFT) firms and quantitative funds to provide microsecond-level liquidity, compressing the Bid-Ask Spread to extremely narrow levels comparable to centralized exchanges like Nasdaq. This is the only viable solution for carrying mainstream US equity underlyings and attracting institutional capital.

Moreover, the brilliance of the design of on-chain US equity perpetual contracts lies in completely stripping away asset ownership and income rights. Through "Oracle Price Feeds + Global Multi-Asset Collateral," platforms can achieve seamless price risk transfer without holding physical stocks at the base layer. Such products generally possess core features like 24/7 uninterrupted trading, 10-50x high flexible leverage, and dynamic Funding Rates determined by supply-demand gaming. Taking platforms like Hyperliquid, Orderly Network, and GMTrade as examples, their contracts have no expiration date and do not require 1:1 underlying spot pegging. Instead, they rely on oracle systems to obtain real-time US equity spot prices (Oracle Price) from external traditional markets like Nasdaq. To meet the asset management needs of institutional investors, new-generation protocols widely support Multi-asset Collateral, allowing users to use USDC, BTC, ETH, or even yield-bearing RWA assets (like Ondo's USDY) as margin. This design massively boosts capital efficiency, enabling investors to flexibly gain US equity exposure without selling off their core base positions.

Through the funding rate mechanism, when the Mark Price of the derivative deviates from the spot oracle price, the side with the advantage among longs and shorts must pay a fee to the disadvantaged side, forcing the derivative price to continuously converge toward the true spot price. Under cross-margin or isolated-margin leverage, the user's USDC or any supported EVM crypto asset can serve as collateral, perfectly achieving the transfer of value exposure. In essence, this plays the same role as a Total Return Swap in traditional finance, but removes the credit risk of all centralized intermediaries.

5.2 Explosive Growth of Leading Platforms like Hyperliquid

With the maturation of RWA synthesis technology in 2025, the synthetic exposure of individual US stocks, mainstream indices, and commodities is becoming the strongest source of incremental growth in the Perp DEX sector, with its growth slope far exceeding that of traditional crypto assets. This transition from "Crypto-only" to "Pan-Asset

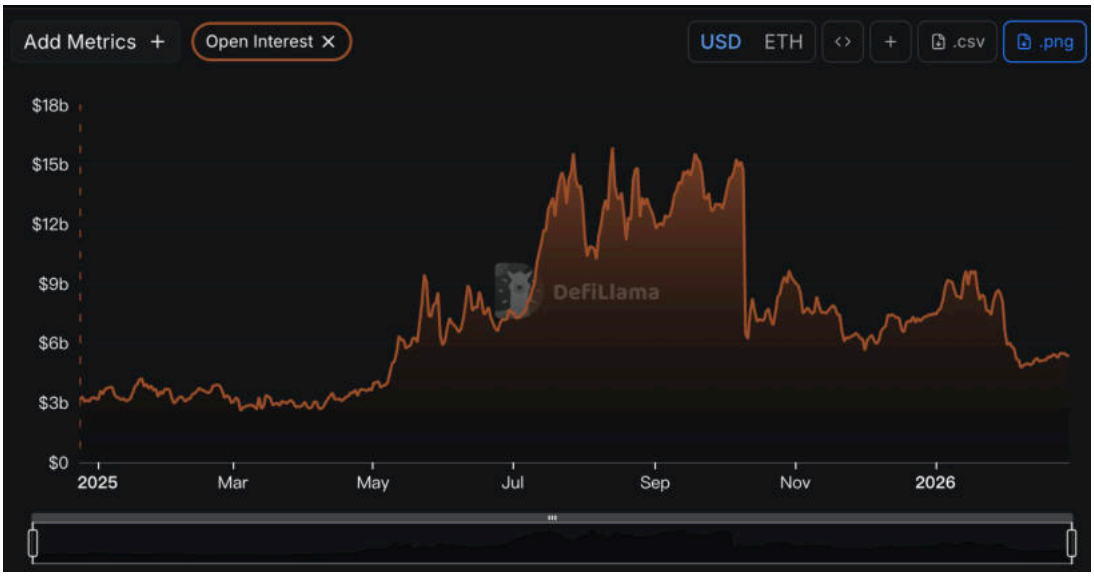

Figure 10. Source: CoinFound.DefiLlama chart showing Hyperliquid Open Interest surging past $15 Billion in Oct.2025.

Synthetization" is not just an increase in trading targets, but a dimensional reduction strike against the traditional brokerage system by on-chain financial infrastructure.

Empirical data shows this sub-market's explosive power is astonishing. In December 2025, the global on-chain RWA-based perpetual contract monthly trading volume was still at a scale of $11.8 billion. However, entering January 2026, this figure soared to $31 billion with a month-over-month growth rate of 162%. This vertical growth curve reflects the intense thirst of global capital for synthetic gaming on highly liquid US equity assets on-chain. As of early February 2026, the cumulative trading volume of traditional asset (Equities/Commodities) perpetual contracts carried by core architectures represented by Hyperliquid alone had broken through $40.6 billion, demonstrating an extremely strong capital agglomeration effect and liquidity thickness.

In the evolution of platform mechanisms, Hyperliquid's introduction of HIP-3 (Permissionless Perpetual Market Framework) became a milestone watershed. Prior to the introduction of this framework in October 2025, asset listings highly relied on centralized decisions by the protocol team. HIP-3 allows third-party liquidity providers and builders (like TradeXYZ or Ventuals) to autonomously deploy US equity oracle feeds and establish markets. This shift from "official listing" to "ecological co-building" caused the variety of on-chain equities and traditional assets to quadruple in just three months. Data shows that 24/7 permissionless global access not only eliminates physical time zone restrictions but also creates a significant premium effect during traditional US market closure periods. On-chain prices during weekends can usually prematurely reflect market pricing preferences for unexpected macro events.

In terms of the structural distribution of asset composition, the market exhibits a significant step-by-step evolution. Driven by macroeconomic data fluctuations and risk aversion in early 2026, commodity contracts like gold and silver contributed the main explosive volume initially, but tech giant individual stocks like NVDA, TSLA, and the synthetic index XYZ100 tracking Nasdaq 100 are rapidly taking over market dominance. What is particularly noteworthy is that Pre-IPO company assets like OpenAI and SpaceX have gained extremely high activity on-chain through synthetic

contracts. Such exposure, extremely scarce in traditional secondary markets, has become a core path for on-chain derivatives to capture excess returns.

The essence of market competition is evolving from simple "trading volume competition" to "position stickiness (Open Interest, OI)." Although competing products like Lighter, Aster, or edgeX attempt to drive up volume through zero fees or short-term incentive schemes (e.g., Lighter's 30-day volume once breached $200B), looking at the OI metric —which reflects true institutional holding—Hyperliquid still holds about 70% of the absolute market share across the network. Its OI scale has stably remained around $5.4 billion long-term, peaking at $15.3 billion. In contrast, competitors' extremely high trading volumes juxtaposed with low OI (usually only $1.1B to $1.7B) profoundly reveals the fundamental difference between "true arbitrage demand" and "wash trading driven by incentives" in the US equity derivatives track.

Focusing on TradFi, this article pays more attention to the trajectory of TradFi asset OI lift under the permissionless framework, because OI can distinguish between "event-driven volume spikes" and "structurally sustained capital retention." The original design intention and growth driver of Hyperliquid HIP-3 came from the permissionless deployment of TradFi/RWA perps, and merely 5 months post-launch, its OI rapidly climbed to the billion-dollar level. Tracking data shows that Hyperliquid's HIP-3 market OI broke $1 Billion in Feb 2026, with the US equity sector's synthetic index tracking Nasdaq 100 (XYZ100) at $130M, and Nvidia's synthetic asset (xyz:NVDA) OI at $136M; these two alone account for over 20%. TradFi assets overall account for 80% of HIP-3 OI. As the absolute core asset of HIP-3, TradFi drives the explosive growth, platform diversification, and 24/7 uninterrupted trading narrative of HIP-3. During weekends or major geopolitical events (like US/Israel strikes on Iran), HIP-3 has already become the primary source of liquidity during market closures. It can be said that the moat constructed jointly by permissionless frameworks, ultra-low latency, and accurate mapping of RWA prices is substantially transforming on-chain US equity derivatives from a mere speculative tool into the core hub of the next generation of global asset swap clearing networks.

HIP-3 Summary | HIP-3 Metadata

Deployer	Market	OI	24h Vol	Vol / OI	OI Cap	OI Fill %	Max Leverage	marginMode	growthModeOn?
trade.xyz	GOLD-USDC	$214.42m	$122.32m	0.57	$500.00m	42.88%	25	Cross/Isolated	false
trade.xyz	SILVER-USDC	$171.32m	$144.13m	0.84	$500.00m	34.26%	25	Cross/Isolated	true
trade.xyz	NVDA-USDC	$136.55m	$14.88m	0.11	$250.00m	54.62%	20	Cross/Isolated	true
trade.xyz	XYZ100-USDC	$130.03m	$77.94m	0.60	$300.00m	43.34%	30	Cross/Isolated	true
trade.xyz	MU-USDC	$47.80m	$2.91m	0.06	$150.00m	31.87%	10	Cross/Isolated	true
trade.xyz	SNDK-USDC	$34.04m	$787.14k	0.02	$100.00m	34.04%	10	Cross/Isolated	true
trade.xyz	COPPER-USDC	$33.72m	$7.61m	0.23	$300.00m	11.24%	20	Cross/Isolated	true
trade.xyz	CL-USDC	$32.95m	$3.45m	0.10	$100.00m	32.95%	20	Cross/Isolated	true
Dreamcash	USA500-USDT	$30.71m	$22.63m	0.74	$50.00m	61.42%	20	Isolated	true
trade.xyz	GOOGL-USDC	$28.94m	$1.56m	0.05	$100.00m	28.94%	10	Cross/Isolated	true
hyENA	BTC-USDe	$28.40m	$18.01m	0.63	$75.00m	37.86%	40	Cross/Isolated	false
trade.xyz	TSLA-USDC	$14.91m	$5.40m	0.36	$100.00m	14.91%	10	Cross/Isolated	true
trade.xyz	CRCL-USDC	$10.23m	$4.62m	0.45	$50.00m	20.47%	10	Cross/Isolated	true
trade.xyz	HOOD-USDC	$10.14m	$4.36m	0.43	$25.00m	40.54%	10	Cross/Isolated	true
trade.xyz	MSTR-USDC	$9.60m	$3.31m	0.34	$50.00m	19.20%	10	Cross/Isolated	false
trade.xyz	AMZN-USDC	$8.95m	$1.42m	0.16	$50.00m	17.89%	10	Cross/Isolated	true
trade.xyz	PLTR-USDC	$8.51m	$6.91m	0.81	$50.00m	17.02%	10	Cross/Isolated	true
Dreamcash	SILVER-USDT	$6.79m	$21.12m	3.11	$20.00m	33.97%	20	Isolated	true
Markets	US500-USDH	$6.40m	$4.82m	0.75	$25.00m	25.60%	25	Isolated	true
trade.xyz	EUR-USDC	$5.98m	$7.79m	1.30	$25.00m	23.93%	50	Isolated	true
trade.xyz	SKHX-USDC	$5.81m	$615.74k	0.11	$25.00m	23.25%	10	Cross/Isolated	true

Figure 11. source: Dune

5.3 The Ultimate Form of Capital Efficiency

The reason why on-chain derivatives can form a dimensional reduction strike against the traditional brokerage system lies in their killer feature: the extreme squeezing and releasing of "capital efficiency." Compared to traditional US brokers like Interactive Brokers or Futu, retail and institutional traders face extremely harsh regulatory constraints and high capital costs. Under the US Federal Reserve's Reg T rules, investors holding stocks overnight must meet a 50% initial margin requirement, meaning they can only get a maximum of 2x leverage. Even for Portfolio Margin accounts available to high-net-worth clients with account equity over $100,000, the maximum leverage ratio only hovers around 6-8x. More fatally, leveraged borrowing at traditional brokers incurs high interest rates, fluctuating between 4.81% and 12.45% across different tiers.

In contrast, on-chain decentralized derivatives platforms like Hyperliquid and its partner MetaMask Perps provide traders with unprecedented degrees of freedom. Traders do not need lengthy proof of assets to open a smart contract account; the on-chain protocol is open to any user with a crypto wallet, completely free of fiat capital or identity background restrictions. Meanwhile, targeting blue-chip US equities like NVDA, TSLA, AAPL, on-chain platforms offer up to 40x to 50x leverage, meaning a trader only needs 2% initial margin to leverage the full position. Furthermore, in terms of capital costs and settlement cycles, on-chain platforms display distinct advantages. Traditional brokers' leveraged borrowing entails 4.81% or higher annualized interest rates, while on-chain derivatives require no fixed borrowing interest; traders only bear dynamic funding rates determined by real-time long/short market dynamics. At the same time, on-chain settlement is an atomic operation based on smart contracts; closing a position instantly releases the USDC margin, thoroughly eliminating the T+1 or T+2 settlement cycles found in traditional finance and the resulting liquidity dead zones. This ten-fold leverage difference, coupled with completely eliminated centralized financing costs, constitutes the ultimate form of capital efficiency in today's financial world.

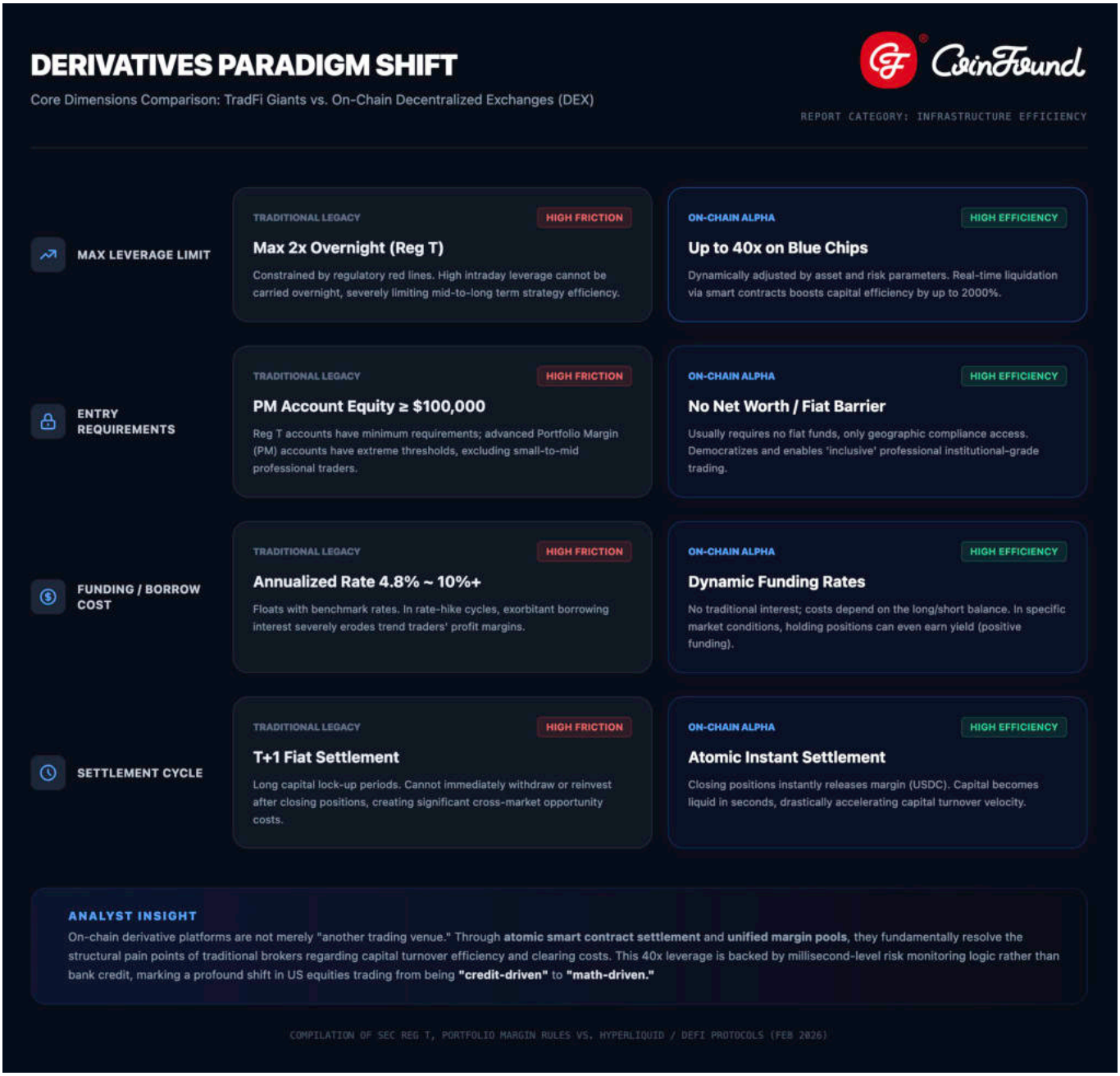

Figure 12. Source: CoinFound

6 Ecosystem Co-Prosperity: Arbitrage Models and Yield Practices of On-chain equities

When the title confirmation foundation of Spot RWA and the leverage superstructure of derivatives accomplish ecological coupling, an exclusive cross-market hunting ground for institutional-grade players is formed. The continuous deepening of decentralized derivatives markets, coupled with the increasingly mature RWA asset base, jointly gave birth to the favored hunting ground of institutional investors and quantitative hedge funds—extremely low-risk or near risk-free cross-market arbitrage strategy systems. In this dual-track prosperous ecosystem, capital flows are smoothing over every crack between traditional and modern finance.

6.1 Funding Rate Arbitrage: Stable Alpha Capture under Delta Neutrality

In the on-chain derivatives market, violent swings in retail sentiment often lead to systemic deviations in asset pricing. When retail investors are extremely bullish on a certain US stock (e.g., NVDA ahead of an earnings report expected to vastly beat estimates), massive leveraged long positions flood into the perpetual contract market, pushing the contract's Mark Price significantly higher than the spot oracle price. At this time, to maintain the price peg, the system will force the longs to pay a high Funding Rate to the shorts.

Opportunity Capture and Strategy Logic: Experienced institutions and professional investors will purchase the corresponding tokenized US stock (like bNVDA or NVDAon) on Ondo or Backed Finance as the spot long underlying, while simultaneously opening an equivalent short position (Short Perp) on derivative platforms like Hyperliquid. At this moment, the entire portfolio is directionally near Delta-neutral. The impact of extreme price fluctuations of the underlying stock on the portfolio's Net Asset Value is significantly hedged, and the portfolio's main exposure shifts to structural variables such as funding rates, basis, and execution friction. Meanwhile, as long as the funding rate is in the net-pay range for longs, the short position can continuously receive funding rate cash flows paid by crowded longs.

However, the funding rate is not unidirectional. If market dominance shifts from crowded longs to shorts, the rate may turn negative, and the arbitrageur will switch from receiving to paying, bringing episodic drawdown pressure. Notably, Hyperliquid's official documentation provides a structural baseline metric for funding: the interest rate component is preset at 0.01% per 8 hours, corresponding to 11.6% APR paid to shorts. This provides a mechanistic anchor point for the yield center in "normal ranges." Referring to the on-chain live-trading tracking of cross-platform funding rate arbitrage by professional quantitative firm Boros Fi: during normal phases, the yield of such strategies typically falls in the mid-single-digit to low-double-digit annualized range. But during extreme long-crowded windows like earnings seasons, the short-term rolling annualized readings can show significant spikes, briefly hitting over 40%. This aligns with the "normal smoothness, event spikes" yield distribution shown by our reproducible simulation model built on Hyperliquid's official funding rate mechanism. Ultimately, this yield model stems from structural pricing deviations formed by robust leverage demand in perpetual markets. It resembles a combination of "structural baseline yield + cyclical crowding premium," fundamentally different from the smooth interest curves of traditional interbank lending or typical DeFi staking.

Figure 13. Source: CoinFound

The chart above is based on a reproducible simulation framework grounded in Hyperliquid’ s official funding mechanics. We decompose funding into two components: a fixed interest component and a premium component. The fixed interest component is set by the protocol documentation at 0.01% per 8 hours and settled hourly, representing a structural baseline driven by the borrow-rate differential. The premium component captures deviations of perpetual prices relative to spot; it is modeled with regime drift and stochastic noise, with short “event windows” that inject temporary crowding shocks.

Using the resulting hourly funding series, we compute 7-day and 30-day rolling annualized returns. The 7-day window is designed to capture short-term crowding pulses, while the 30-day window reflects a smoother medium-term baseline. The results indicate that funding-rate carry tends to sit in a stable low–double-digit range under normal conditions, but can exhibit pronounced short-lived annualized spikes during event windows. These spikes are diluted in longer windows, implying that returns are jointly driven by a structural baseline and cyclical crowding premia, and that extreme annualized readings are primarily a short-horizon phenomenon rather than a persistent long-run yield.

6.2 Cross-Time Zone and Off-Market Basis Arbitrage: Dimensional Reduction Capture using Time Faults

Funding rate arbitrage captures sentiment deviations in the same space-time, while Web3’s 7x24 hour nature endows quantitative institutions with the ability to arbitrage across time faults. The traditional US equity market is deeply entrenched in a workday trading system, subject to closures during weekends, after-hours, and public holidays. Once a major macro news event (like geopolitical conflict, emergency rate cuts, or corporate scandals) breaks out during these non-trading hours, the accumulated trading sentiment cannot be released, and prices are highly prone to massive Gaps when the market opens on Monday. The "never sleep" feature of the Web3 network catalyzes unique cross-time zone Basis arbitrage opportunities for quantitative funds.

Opportunity Capture and Strategy Logic: Suppose on a Saturday, a macro news piece severe enough to impact a top US tech giant breaks. Traditional Nasdaq markets are closed, leaving traditional investors helpless. But at this time, the derivatives trading of the on-chain tokenized stock (e.g., TSLA perps on Hyperliquid) will reflect global panic or mania in real-time, and its mark price will rapidly deviate from Friday’s TradFi closing price. Astute cross-market arbitrageurs can utilize the on-chain derivatives market over the weekend to establish long or short positions early, capturing this significant futures-spot basis. Once the traditional market opens at 9:30 AM EST on Monday, massive traditional liquidity is released and rapidly closes the price gap between the two markets. Arbitrageurs can close their positions at this exact moment, locking in lucrative profits. This dimensional reduction strike, built on "time differences and clearing system differences," gives investors proficient in on-chain tools a natural informational and execution high ground over traditional retail investors.

6.3 ”Chained Yield” of RWA as Derivatives Margin: The Ultimate Form of Capital Efficiency

When cross-market and cross-time arbitrage strategies are skillfully utilized by institutions, the revolution in capital efficiency challenges the even deeper asset structure—how to make the "margin" itself generate yield? This is currently the most revolutionary practical application scenario for Web3 capital efficiency. In traditional centralized exchanges

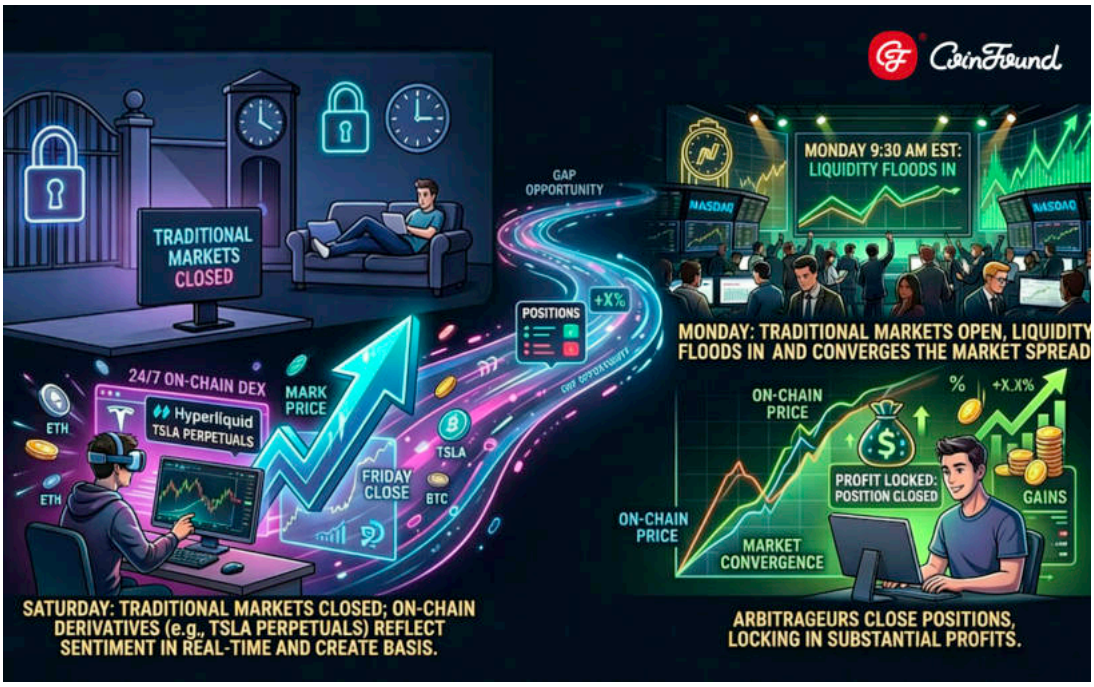

Figure 14

or brokerage accounts, fiat currency or stablecoins deposited by investors that are not part of lending usually belong to "dead money," generating no substantial yield. However, with the maturation of tokenized asset infrastructure, high-quality RWAs are endowed with the financial magic of acting as margin for derivatives trading, achieving continuous chaining of yields. Strategy Logic and Architecture Analysis: Institutional investors first hold tokenized money market funds with a high credit rating yielding about 3.5%-4% APY (e.g., Franklin Templeton's FOBXX / Benji token) or low-volatility tokenized S&P 500 ETF RWAs. Then, instead of shelving them, investors use them as Yield-Bearing Collateral to open high-leverage derivative long or short positions. Taking the "Off-exchange mirrored collateral" mechanism jointly launched by industry giant Binance and Franklin Templeton as an example, its business logic is exquisite: The Benji money fund tokens held by the institution do not need to be transferred directly to the exchange's centralized hot wallet at all, but are safely held in the account of an independent, compliant third-party custodian (like Ceffu). Binance's trading engine uses innovative MirrorX technology via APIs to read the asset balance in the custodian account in real-time, and maps its equivalent value into the client's trading account on Binance as buying power to open positions. This architecture brings a dual disruption: First, it thoroughly eliminates the centralized Counterparty Risk (such as hackings or platform collapses) of placing massive principals on an exchange. Second, while safely acquiring "TradFi Beta" (stable interest from underlying government funds), institutions utilize the mirrored quotas to pursue "DeFi Alpha" (highly leveraged derivative trading profits) on exchanges or on-chain protocols. This is not just a simple addition of yields; it is a geometric multiplication of capital utilization at the systemic level.

7 Endgame Logic: Prospects for the Dual-Track Flywheel of RWA and Derivatives

The true power of this dual-track model lies in the "Capital Efficiency Flywheel" it constructs: starting from 1:1 pegged Spot assets, evolving into yield-bearing Collateral, thereby supporting highly leveraged Perps Leverage, and finally achieving Yield Amplification. This process is pushing the functional boundaries of Web3 wallets straight into the core hinterland of traditional finance. When institutional investors can use tokenized US Treasuries or US equities as margin to execute 50x leveraged hedge trades without withdrawing funds, traditional brokerage intermediaries are thoroughly abstracted by the smart contract layer. This marks the market accelerating toward the era of the "Omnichain Prime Brokerage." In this new era, investors no longer face fragmented account systems; a unified on-chain identity and margin pool can cover the globe's core equities, fixed income, and derivatives. Its capital turnover rate and clearing speed will be a dimensional reduction strike on the traditional Wall Street system.

From a macro scale perspective, the market potential of this revolution shows a staggering ceiling. According to consensus forecasts by global leading consulting firms such as BCG, Ripple, and McKinsey, by 2030, the scale of Tokenized Equities RWA is expected to grow from the current $1 billion to a range of $20 billion or even $190 billion; while the broader RWA overall market size is expected to reach a staggering magnitude of $2 trillion to $18 trillion. The catalysts driving this growth have already emerged. On the one hand, Kraken's launch of regulated US equity perpetual contracts, as well as Ondo's compliance layouts in global markets, are attracting massive compliant capital to enter the market. On the other hand, traditional giants like the New York Stock Exchange (NYSE) exploring 24/7 trading models, and AI Agents maturing in automated on-chain high-frequency arbitrage and liquidity management, will inject unprecedented execution precision and breadth into the market.

For market performance over the next three to five years, we constructed a scenario analysis model based on two core variables: "Macro Liquidity" (rate cut expectations) and "Compliance Policy" (regulatory easing/tightening). This model determines the evolutionary slope of on-chain equities moving from a "niche market" to a "trillion-dollar infrastructure":

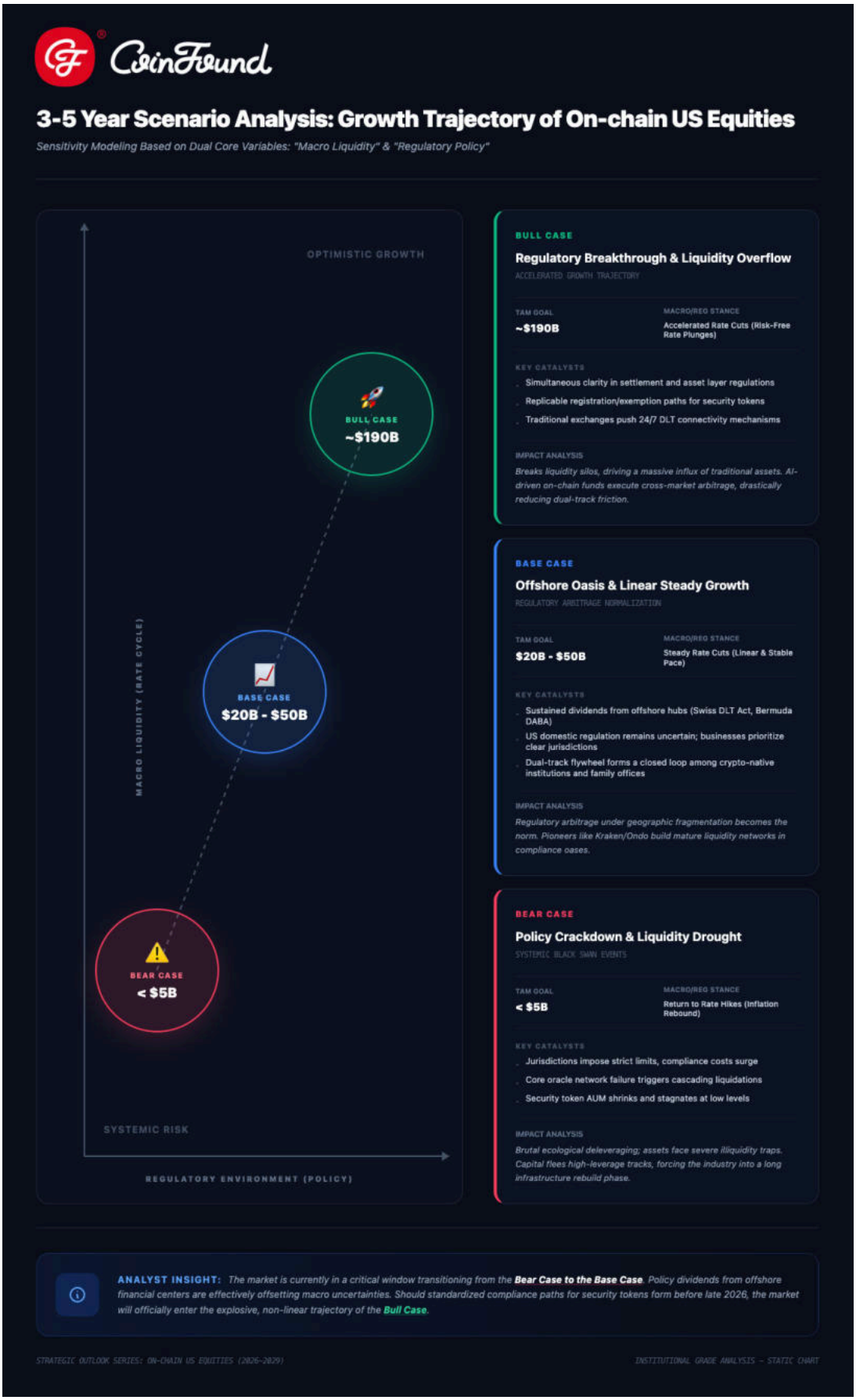

Figure 15. Source: CoinFound

8 Risks & Challenges: Liquidity Islands and Systemic Risks

Although the prospects of the dual-track era are painted magnificently, we must clearly recognize that the current on-chain US equity market is still in an early and fragile experimental phase. Behind the aggressive advancements lurk severe structural headwinds and underlying systemic risks, which could trigger chain reactions in the on-chain market at any time. On this journey toward omnichain finance, counterparty risks, oracle failures, liquidity fragmentation, and global regulatory grey areas constitute the Sword of Damocles hanging over the top of the dual-track flywheel.

8.1 Current Structural Dilemma of RWA: Liquidity Fragmentation and Custodian Crises Caused by Compliance

The biggest developmental paradox facing on-chain equities lies in the fundamental conflict between strict compliance requirements and the blockchain's pursuit of extreme liquidity. To satisfy the requirements of the SEC and other sovereign nations' securities regulators, the vast majority of US equity RWA assets are forcibly tagged with strict KYC, AML, and accredited investor whitelists (primarily executed via protocols like ERC-3643 mentioned earlier).

This means these tokenized securities simply cannot freely shuttle and trade among random retail investors in permissionless decentralized liquidity pools like Uniswap (the way Bitcoin or other on-chain tokens do). Objective data cruelly reveals this reality: Despite massive total RWA issuance volumes, those tokenized US equities restricted by strict access face a severe "price but no market" dilemma. Reports from academia and industry research institutions point out that most non-hot RWA tokens exhibit extremely low daily trading volumes, ultra-long average holding periods, and a scarce number of active independent holding addresses. Due to the lack of a prosperous secondary market maker ecosystem, this artificially set compliance barrier causes RWAs to easily suffer from severe Liquidity Fragmentation on-chain. Investors may even face up to 1% to 3% cross-chain pricing discrepancies for the exact same asset, and 2% to 5% liquidity friction costs. This significantly weakens the global unified capital network effect that blockchain should be proud of.

A deeper systemic hidden danger lies in Counterparty Risk and extreme reliance on centralized Custodians. Although the blockchain's distributed ledger achieves decentralized recording of ownership, the safekeeping of underlying physical stocks and the fiat receipt of dividends are still highly subject to traditional financial institutions. Once the underlying custodian bank faces liquidity depletion, or the SPV entity encounters regulatory surprise audits, on-chain RWA issuers are often forced to trigger "Redemption Halts." Under extreme macroeconomic panic sentiment, if institutional or retail token holders cannot smoothly redeem RWA assets back to fiat or extract physical stocks, this collapse of underlying trust will instantly cause a severe decoupling between the on-chain token's secondary market price and its Net Asset Value (NAV), further exacerbating the deterioration of liquidity fragmentation.

8.2 Oracle Hegemony, "Pulling the Plug", and Settlement Crises

Whether it's the pricing of decentralized derivatives or the execution of RWA corporate actions (like dividends and stock splits), the entire lifeline of on-chain equities is completely tied to the data accuracy and low-latency feed-

back of a few core Oracle networks like Chainlink. In financial system architectures, this constitutes an extremely dangerous Single-point Failure risk and "Oracle Hegemony." The core of the problem is that, to defend against oracle manipulation attacks by crypto market hackers, many platforms set rigid defense mechanisms. Take the HIP-3 custom oracle mechanism on decentralized platforms like Hyperliquid as an example: its system-level code stipulates that every time the oracle sends a price update, the maximum absolute change cannot exceed 1% of the previous on-chain mark price. This 1% hard limit is an excellent safety valve to prevent liquidations via "wicks" during crypto market calm periods. However, when carrying US equity underlyings, it can become a fatal time bomb. When traditional US equities experience major earnings releases or exploding macroeconomic data, "cliff-like gaps" often appear after hours (e.g., a giant's stock instantly plunging over 15% post-market). Faced with this real cliff price, an oracle speed-limited by 1% needs an extremely long time to gradually "crawl" the on-chain price to the true level. During this period, the on-chain derivative price will experience a disastrous and severe disconnect from the true external market price. Quantitative arbitrageurs will also find it difficult to effectively smooth out this irrational spread.

Besides the loss of fairness caused by front-end quoting disconnects, this architecture also harbors potential Settlement Risks. When oracle feeds fail or lag during violent fluctuations, the clearing engines of derivative platforms often execute forced liquidations based on incorrect price marks, or face the awkward situation of unrecoverable bad debts when settling long-short funding rates. Systemic bankruptcies triggered by single-point oracle failures will ultimately not only deprive traders of fair pricing rights but could even cause the underlying clearing engine to collapse, generating protocol-level bad debts and evolving into an actual on-chain "pulling the plug" crisis.

8.3 Regulatory Gaming and Structural Friction during the Policy Transition Period (Regulatory Heatmap)

The expansion of on-chain equities directly challenges sovereign states' traditional legal frameworks regarding the definition of securities, issuance, and cross-border capital flows, causing the global crypto regulatory map to exhibit drastic and fragmented policy temperature differences. Although, as stated in the first chapter, global regulatory logic is experiencing an epic positive reversal marked by the GENIUS Act and SEC innovation exemptions, during this "transition period" before policy dividends fully land and underlying technologies seamlessly connect, different jurisdictions' digestion capabilities for complex assets still constitute the core structural resistance.

Long-Arm Jurisdiction (Represented absolutely by the US SEC): Although during 2024-2025, US regulators released immense institutional goodwill and cleared basic legal blind spots for 1:1 spot RWA issuance through a series of bills, the SEC still strictly guards the red lines against "highly leveraged synthetic assets" and "unregistered complex derivative nesting." Today, although underlying tokenized US equities have welcomed the spring of compliant issuance, those on-chain US equity derivative business models involving cross-chain permissionless flows and multi-leverage nesting are still mired in a massive grey area of US securities law. Due to the lack of explicit written exemption clauses for high-order complex steps like smart contract automated execution and on-chain dividend tax withholding, this severe long-arm jurisdiction forces the vast majority of mainstream RWA issuance platforms (like Ondo Finance, Backed) to implement the strictest shielding blocks against US citizens and US IP addresses at the smart contract code level. This leads to an awkward short-term dilemma: "Policy catalysts are absorbing massive funds from Wall Street institutions, but draconian retail firewalls have physically isolated domestic retail investors," exacerbating the mismatch of global liquidity.

Meanwhile, across the ocean, the EU is attempting to establish a unified pan-regional regulatory framework through the Markets in Crypto-Assets regulation (MiCA). Although MiCA provides clear compliance paths for stablecoins (EMT/ART) and basic asset tokenization, huge controversies remain over MiCA's applicable boundaries for on-chain US equity portfolios that possess distinct derivative characteristics, embedded leverage, or complex yield distribution mechanisms. High compliance review costs and lengthy reporting cycles deter many startup protocols from entering the European market. This also means that during the early dividend phase of the MiCA framework, the European on-chain US equity market is prone to be monopolized by top-tier institutions with strong compliance capital, while small and medium protocols face high entry resistance.

Offshore and Innovation Sandbox Safe Havens: In stark contrast to the landing friction in the US and the cumbersome framework in the EU, several independent European countries and a series of astute offshore financial centers are frantically absorbing technologies and capital innovations squeezed out by mainstream markets during this "compliance transition period" via legislation. Switzerland, as a European crypto hub, long ago passed and updated the Distributed Ledger Technology (DLT) Act, which not only modularly and clearly defined payment tokens, utility tokens, and asset tokens legally, but also paved a national-level legal road for the bankruptcy isolation and ownership transfer of RWAs. At the same time, Bermuda, through implementing the Digital Asset Business Act (DABA), established a highly transparent, risk-tiered full support system, and even issued digital asset-exclusive banking licenses (like Jewel Bank), attempting to build itself into the preferred compliance channel for institutional capital entering Web3. Regions like the BVI have also successively launched VASP guidelines to clarify regulatory boundaries. This massive transnational regulatory arbitrage space dictates that before US and European mainstream regulatory frameworks thoroughly digest complex on-chain derivatives, the legal moats and infrastructure of on-chain equities —especially the highly efficient dual-track form—will primarily take root and flourish outside non-US sovereign legal systems.

8.4 Conclusion: Financial Great Migration from an Endgame Perspective

In summary, the grand blueprint of the "RWA + Derivatives" dual-track flywheel for on-chain equities will still face structured transitional challenges in the short term. From the strong regulatory headwinds trapped by the SEC's massive grey area and the EU's cumbersome MiCA framework, to the deep counterparty risks triggered by high reliance on centralized physical custodians; from potential oracle paralysis and clearing collapses triggered by extreme macro shocks, to omnichain liquidity fragmentation and "redemption meltdown" crises caused by artificial compliance whitelist barriers—these severe systemic friction resistances constitute the difficult problems that must be faced during the evolution process.

However, looking from the macro perspective of financial evolution history, all structural frictions often conceal the largest-level commercial restructuring dividends. It is precisely these hardcore regulatory and technological resistances that have built an unfathomable moat for this track. In the future endgame game, whoever can find the most exquisite balance between decentralized capital efficiency and centralized rigid regulation, between permissionless innovation and defense against single-point failures, will be the one who truly dominates this multi-trillion-dollar on-chain asset great migration.

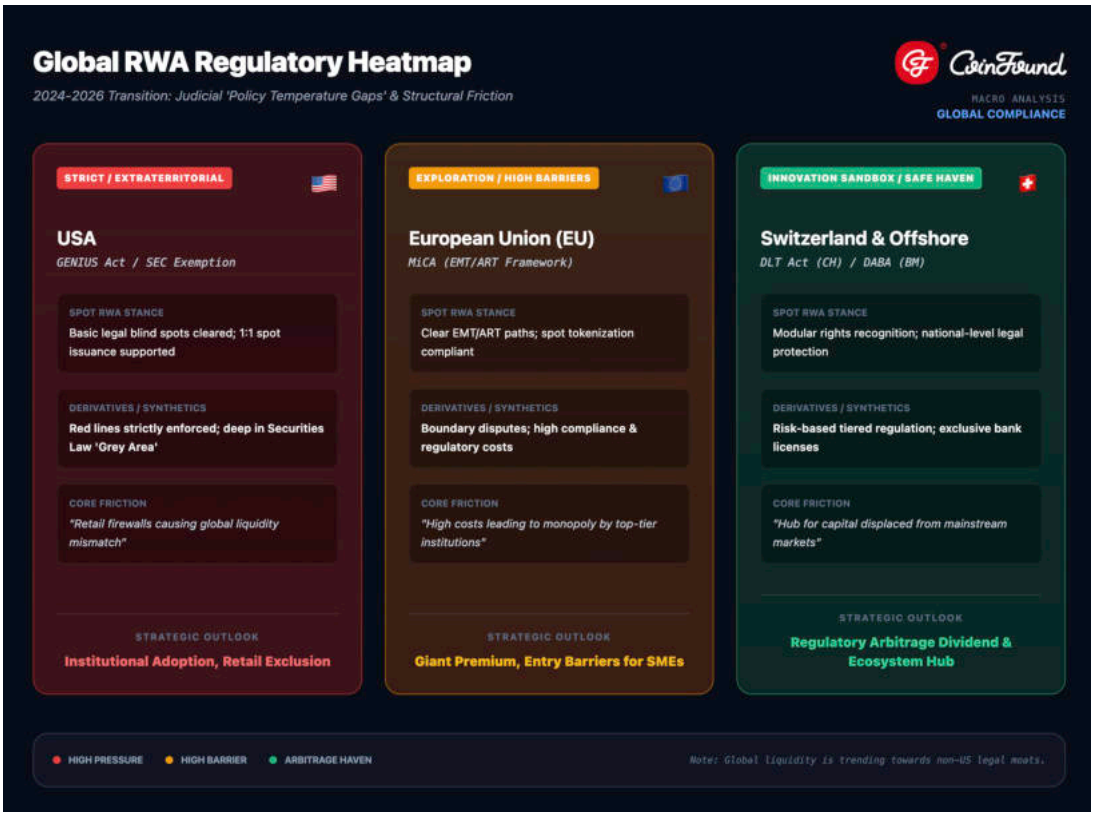

Figure 16. Source: CoinFound

The endgame of on-chain equities is absolutely not recreating a Nasdaq full of compromises on the blockchain. Rather, it is thoroughly dimensionally reducing the entire massive, inefficient, and fragmented traditional financial clearing system into lines of code in smart contracts. The nature of capital is like a surging river system; it will eventually overflow all the old dams restricted by time zones, geographies, and outdated systems. In this financial long march of rebuilding trust through code, the friction of the old order is exactly the stepping stone for the new paradigm. And those icebreakers who are the first to build lighthouses of compliance and liquidity at the intersection of the spot and derivatives dual tracks will inevitably possess the absolute power to define global financial pricing power for the next century.

9 Risk Warning

This report is drafted based on public data, industry interviews, third-party research, and reasonable analytical frameworks, aiming for research-oriented discussions. However, constrained by the market development stage and information disclosure conditions, the relevant conclusions still face the following main risks and uncertainty factors, which are hereby prompted:

1. Data Integrity and Statistical Caliber Risks: RWAs are still in a rapid evolution stage. Data regarding market size, circulation volume, and use cases mainly come from project disclosures, on-chain statistical tools, and

third-party research institutions. Different sources may vary in statistical calibers, calculation methods, and time dimensions. Some data may have lag, estimation, or insufficient sample coverage, thereby affecting the precision and comparability of the analytical results.

2. Asset Custody and Payment Execution Risks: The value foundation of RWAs relies on the true existence of off-chain physical assets, compliant custody, and executable redemption arrangements. Although mainstream projects usually introduce third-party custody and audit mechanisms, delays in redemption, restricted redemptions, or mismatches between on-chain liquidity and off-chain delivery capabilities may still occur under extreme market volatility, legal disputes, or cross-jurisdictional conflicts.

3. Technical and Systemic Operational Risks: RWAs generally rely on smart contracts, public chain infrastructure, cross-chain protocols, and oracle systems to operate. Their overall security depends on the synergistic stability of multiple technical components. Potential contract vulnerabilities, cross-chain mechanism failures, oracle data anomalies, or network congestion could adversely affect asset transfers, collateral liquidations, and payment settlement functions, triggering systemic risk spillovers.

4. Regulatory Policy and Legal Environment Uncertainty: RWAs involve the intersection of commodity attributes, securities attributes, and payment attributes. Different countries and regions exhibit significant differences in regulatory classification, compliance requirements, and policy rhythm. Future adjustments in regulatory frameworks, changes in law enforcement standards, or tightening of cross-border compliance requirements could substantially impact the issuance, circulation, custody, and usage scenarios of related products.

5. Market Liquidity and Price Volatility Risks: The secondary market for RWAs is still in its early stages of development. Its liquidity depth, participant structure, and price discovery mechanisms are not yet fully mature. Under specific market conditions, the trading prices of RWAs may deviate from the value of their underlying assets.

6. Research Assumptions and Forward-Looking Judgment Risks: Some analyses in this report are based on forward-looking judgments regarding industry development trends, technical paths, and policy directions. Relevant assumptions may be adjusted due to changes in macro environments, technological progress, or regulations, and actual results may differ from expectations.

7. This Report Does Not Constitute Investment Advice: This report is for research and information exchange purposes only and does not constitute any form of investment advice, offer, or commitment. Investors should combine their own risk tolerance, make independent judgments, and bear relevant risks on their own.