State of Bitcoin Yield

From $3B to $330B: Bitcoin DeFi's Institutional Boom Is Just Beginning

A massive shift is underway as institutional investors embrace Bitcoin yield.





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Executive Summary

Secure, sustainable, and scalable Bitcoin yields are the holy grail of blockchain finance, yet history urges caution and many current opportunities offer either low returns or excessive risk. Bitcoin DeFi is emerging as a promising alternative, while Bitcoin staking, which helps power Bitcoin DeFi, may be the most viable path to safe and sustainable yields at scale. Both remain in their early stages, and Bitcoin DeFi dApps are in limited, yet growing supply. Finally, by analyzing other DeFi and staking ecosystems and applying that data to Bitcoin, the scale of potential yield opportunities becomes clear and immense.

Note: Please note that all data in this report is as of 3/24/2025.

A word from Core Ventures and Hex Trust

Core Ventures — the Bitcoin-driven venture arm of the Core Foundation—and Hex Trust—a leading digital asset financial services institution—have produced this white paper to explore the evolving landscape of Bitcoin yield. Our goal is to provide a comprehensive analysis of Bitcoin yield mechanisms, from traditional on-chain and off-chain strategies to the emerging innovations within Bitcoin DeFi and staking.

Through this report, we aim to highlight the opportunities and challenges facing institutional investors in Bitcoin yield generation, while showcasing the potential for BTCfi and Bitcoin staking to redefine Bitcoin's role beyond passive asset storage. As this sector continues to evolve, we look forward to supporting institutions with the infrastructure, security, and insights needed to participate in this new frontier of Bitcoin finance.

— Core Ventures & Hex Trust

About Core Ventures

Core Ventures is a Bitcoin-driven venture fund. Bitcoin is the most secure, trustless, and widely adopted digital asset. As demand and utility continue to grow, we believe it represents the single largest opportunity for builders in blockchain to tackle.

Supported by the Core Foundation, we combine proven founder, operator, and investor experience with unparalleled ecosystem distribution and resources to accelerate teams and their vision.

We invest in and partner with long term, mission-driven founders building products that align with Core's vision of expanding Bitcoin's utility and impact.

About Hex Trust

Established in 2018, Hex Trust is a leading digital assets financial institution providing custody, staking, and markets services to builders, investors, and service providers.

As the Bitcoin ecosystem evolves, it presents significant opportunities for institutional investors seeking secure and sustainable yield. Hex Trust is uniquely positioned to connect institutional investors with these emerging opportunities by supporting both the protocols driving Bitcoin innovation and the investors looking to participate. Through our expertise in custody and yield-generating solutions, we enable clients to engage with the growing Bitcoin DeFi and staking landscape with confidence and security.

Historical Analysis

Bitcoin's Early Years (2009-2014)

2009-2013:

- Bitcoin serves purely as a passive asset with no popular yield mechanisms.

2013:

- The first centralized BTC lending platforms (e.g., BTCJam) emerge, enabling peer-to-peer lending.
    - **BTCJam Failure (2017):** Shut down due to high default rates and regulatory issues, proving unsecured BTC lending unsustainable.

2014:

- Mt. Gox collapse delays institutional confidence in BTC lending.

Rise of CeFi Yield Platforms (2015-2019)

2015-2016:

- Genesis Trading launches institutional BTC lending; Bitfinex introduces P2P BTC margin lending.

2017-2019:

- BlockFi, Celsius, and Nexo drive BTC yield adoption, offering interest-bearing accounts with yields ~6-8%+, fueled by institutional borrowing and, in well-known cases, fraudulent practices.

The DeFi Boom & Emergence of On-Chain BTC Yield (2020-2021)

2020:

- Wrapped BTC (WBTC) brings Bitcoin to Ethereum, enabling **BTC yield farming**.

2021:

- BTC yield expands across many DeFi platforms (BadgerDAO, Thorchain, Curve, Aave, Yearn Finance, Thorchain, among others).

Key Drivers of High BTC Yields:

- **Liquidity mining incentives** drove high APYs.
- BTC bridged to Ethereum enabled **BTC-based yield strategies**.

Peak Yields:

- BTC farming exceeded **10-20% APY**, largely driven by protocol incentives.

The Yield Decline (2022-Present)

2021-2022: Sporadic DeFi Exploits

- **BadgerDAO Hack (Dec 2021):** $120M lost in an exploit, shaking trust in BTC yield farming.
- **RenBTC Collapse (Nov 2022):** Lost peg after Alameda Research's collapse.
- **Thorchain Exploits (2021-2022):** Multiple hacks led to platform shutdowns and losses.

2022: CeFi collapses trigger an industry-wide liquidity crisis.

- **Celsius (July 2022):** Froze withdrawals; bankruptcy followed. ($4.7B in user funds lost).
- **BlockFi (Nov 2022):** Collapsed after FTX exposure.
- **Voyager Digital (July 2022):** Lost $670M due to Three Arrows Capital default.
- **FTX (Nov 2022):** Not a BTC yield provider but its implosion wiped out multiple platforms.

Why BTC Yields Collapsed in DeFi:

- **End of liquidity mining:** Protocols stopped issuing unsustainable incentives.
- **Market downturn:** Lower trading activity reduced lending and liquidity fees.
- **CeFi failures:** Decreased BTC borrowing demand and risk appetite.
- **Improved BTC custody solutions:** Institutions relied less on DeFi for liquidity.
- **BTC Yields Stabilized at Lower Levels (2023-Present):**
- **Typical yields:** <1% APY, suffering from demonstrated risks and demand outstripping supply.

The Current State of Bitcoin Yield Demand

Despite the decline in Bitcoin yields following the failures of past yield booms, **demand for BTC yield remains strong** among institutional investors, corporate treasuries, high-net-worth individuals, and retail audiences. These entities continue to seek structured yield opportunities, driven by the need to enhance returns on their BTC holdings without selling their principal.

Sample Institutional Strategies Yield

- **MicroStrategy's Yield Innovation**
  - Led by **Michael Saylor**, MicroStrategy, the largest corporate holder of Bitcoin, is pioneering ways to generate BTC-based yield.
  - Recently announced a **$250M convertible preferred securities offering** with an **8% yield**, appealing to investors seeking Bitcoin exposure with reduced volatility.
- **Hilbert Capital's Bitcoin Credit Hedge Fund**
- Founded by **Richard Murray** (ex-Brevan Howard), Hilbert Capital launched a **$180M BTC credit hedge fund** in partnership with Xapo Bank.
- The fund targets **family offices and publicly listed companies**, offering structured lending strategies to generate BTC yield.

State of Bitcoin Yield Opportunities

Traditional On-Chain Methods

While Bitcoin yields have declined significantly from their peak, there are still **traditional on-chain methods** for earning yield, primarily through **lending** and **liquidity provision**. These options, while relatively stable, offer **fairly low yields unless users take on higher risk**.

1. Lending: Minimal Yield

Bitcoin holders can lend their assets on major DeFi platforms to earn passive income, though **APYs are now near-zero** for well-established protocols.

- **Aave V3 WBTC Pool (Ethereum): TVL:** $3.2B | APY: 0.02%
- **Venus Core BTCB Pool (BNB Chain): TVL:** $680M | APY: 0.03%

- **Aave V3 CBBTC Pool (Ethereum): TVL:** $919M | APY: 0%
- **Compound V2 WBTC Pool (Ethereum): TVL:** $246M | APY: 0.01%

2. Liquidity Provision: Medium Yield

Providing liquidity in **automated market makers (AMMs)** like Uniswap allows BTC holders to earn trading fees but comes with **impermanent loss and smart contract risks.**

- **Uniswap V3 WBTC-USDC (Ethereum):** TVL: $135M | APY: 21.99%
- **Uniswap V3 WBTC-WETH (Ethereum):** TVL: $76M | APY: 4.70%

As a whole, traditional on-chain Bitcoin yield **exists but is highly constrained**. Lending offers stability but negligible returns, while liquidity provision can generate yield but introduces **greater risk and volatility**.

Off-Chain Methods

Beyond on-chain methods, **off-chain yield opportunities** remain available, particularly for institutions and high-net-worth individuals. These methods often provide **higher yields but come with counterparty risks**.

1. Centralized Bitcoin Lending: Higher Yields, Custodial Risk

BTC holders can deposit assets into centralized platforms, which lend to institutions or traders. Many centralized platforms have offerings, with some of the leaders including:

- **Nexo:** Up to 6% APY on BTC deposits
- **YouHodler:** Around 4% APY on BTC deposits
- **Ledn: Rates vary** based on market conditions
- **Binance Earn:** Rates vary, typically ~1-2% APY, with higher rates for locked savings
- **Crypto.com Earn:** Rates vary, typically up to 5% APY for flexible terms

Centralized Bitcoin lending comes with higher APYs than many on-chain lending protocols, but with added counterparty and custodial risk, with withdrawal restrictions possible.

2. Bitcoin-Backed Loans: Access Liquidity, Risk of Liquidation

Users post BTC as collateral for loans, allowing them to **retain exposure while borrowing cash**.

- **Coinbase Borrow:** Loans in USDC against BTC holdings
- **Unchained Capital:** Multisig-secured loans
- **YouHolder:** Loans with high loan-to-value (LTV) ratios
- **Crypto.com:** Loans up to 50% loan-to-value (LTV)

Bitcoin-backed loans enable low-interest borrowing without selling BTC, but come with liquidation risk if Bitcoin's price drops.

3. Institutional Bitcoin Yield Products: Structured, Accredited Investor Focused

Some institutional Bitcoin holders use sophisticated financial strategies including **Bitcoin-backed structured products** to generate yield.

- **MicroStrategy:** Issued $250 million in convertible preferred securities with an 8% yield, leveraging its substantial Bitcoin holdings to provide returns to investors.
- **Various Structured Products:** Financial institutions create structured products that offer exposure to Bitcoin with predefined risk and return profiles. These products can include features like capital protection, yield enhancement, or leverage, catering to specific investment objectives.
- **Valour's Yield-Bearing BTC ETP:** Leveraging Self-Custodial Bitcoin Staking enabled by the Core blockchain, DeFi Technologies' subsidiary, Valour Inc. introduced the first yield-bearing BTC ETP on a regulated exchange, allowing institutional investors to get access to yield-bearing Bitcoin.

These opportunities enable higher, structured returns for institutional players, but often come with limited access.

Bitcoin DeFi (BTCfi)

The Leading Bitcoin DeFi Chains

Bitcoin DeFi (BTCfi) is growing rapidly despite still being in its infancy. Currently, BTCfi <$2.5B in TVL, with a plurality locked on the Core blockchain, the leading BTCfi chain in terms of activity. The promise of these chains is applying Bitcoin's security to Ethereum-style DeFi ecosystems, with novel opportunities for both Bitcoin yield and active Bitcoin usage. The five leading BTCfi chains in terms of TVL are:

- **The Core Blockchain** (TVL: $548M)
- **BSquared** (TVL: $331M)
- **Bitlayer** (TVL: $255M)
- **BOB** (TVL: $247M)
- **Rootstock** (TVL: $192M)

Leading Bitcoin DeFi Yield Protocols

Bitcoin-native DeFi protocols are emerging to provide **lending, borrowing, and liquidity solutions**, allowing BTC holders to generate yield while maintaining exposure to Bitcoin.

1. Colend: Core's Native Borrow/Lend Protocol

- **Description:** The primary lending and borrowing platform on the Core Blockchain.
- **TVL:** $135M+
- **Top Pools:**
  - **SOLVBTC.M:** $43M TVL | 0.02% APY
  - **WBTC:** $1.3M TVL | 2.13% APY.

2. Avalon Finance: Cross-Chain Liquidity Hub

- **Description:** A Bitcoin LSDFi and CeDeFi lending platform spanning Core, BOB, BSquared, and Bitlayer.
- **TVL:** $146M on BOB, $109M on Merlin, $105M on Bitlayer, and $75M on Core.
- **CeDeFi Yields:** Supports assets like SolvBTC, PumpBTC, UniBTC with structured yield products.
    - CeDeFi (Centralized-Decentralized Finance) blends DeFi's accessibility with CeFi's structured financial products, allowing yield generation with various risk exposures.

3. BitFLUX: Bitcoin's Curve Equivalent on Core

- **Description:** A Bitcoin-native AMM facilitating low-slippage swaps between Bitcoin-pegged assets.
- **TVL:** $101M
- **Top Pools:**
    - **solvBTC.b <> solvBTC.core <> WBTC:** $21M TVL | 0.43% APY
    - **nBTC <> BTCB <> pumpBTC:** $35M TVL | 0.07% APY

4. Sovryn: Rootstock's Bitcoin DeFi Hub

- **Description:** A non-custodial DeFi platform on Rootstock offering BTC lending, borrowing, and margin trading.
- **TVL:** $70M
- **Top Pools:**
    - **RBTC:** $3.2M TVL | 0.28% APY
    - **SOV <> RBTC:** $2M TVL | 3.18% APY

Bitcoin Staking

Bitcoin staking represents the most promising approach to **secure, sustainable, and scalable BTC yield**. Unlike lending or liquidity provision, staking allows BTC holders to earn yield **without counterparty risk or reliance on excessive leverage**.

1. Core: The Only Live Bitcoin Staking Protocol

Core is the first - and so far the only - operational **Bitcoin staking protocol**, offering live yield to stakers. Currently, **over 6K BTC is staked**, with maximum yields at 5%+, paid daily in **liquid CORE tokens**. This staking model is fully self-custodial. CORE token yield derives value from fees generated on Core's leading BTCfi platform in addition to long-term block rewards.

2. Babylon: Bitcoin Re-Staking in Beta

Babylon has attracted significant attention, locking **~53K** Bitcoin in its staking window, which has since been closed. While future rewards may be introduced, Bitcoin staked on Babylon does not currently generate yield, as the protocol is not yet live. Furthermore, Babylon's product is classified as Bitcoin Re-Staking because the protocol lacks a native Bitcoin DeFi platform to subsidize yield allocations. Instead, Babylon's staked Bitcoin will be used to secure external chains, designed to subsidize yield via exogenous rather than endogenous sources. Furthermore, as opposed to chains like Core, Babylon's Bitcoin locking mechanism does involve slashing risk, meaning stakers could lose their principal under certain conditions.

Sustainability and Scalability of Bitcoin Staking

A key question for the future of Bitcoin staking is **whether yields will decline over time**, as seen in **traditional DeFi lending and LP rates**. The difference lies first in **where staking rewards come from**. Unlike lending-based yield models, which depend on borrower demand, or short-term liquidity incentives, **Core's staking rewards are fueled by the growth of BTCfi, which is among the fastest-emerging sectors in crypto**.

However, **BTCfi growth is not the only source of sustainability**. In order to facilitate long-term alignment between Bitcoin and Core yields, the Core blockchain recently introduced **Dual Staking, which unlocks Bitcoin yields at scale** for stakers committed to growing the BTCfi pie.

What is Dual Staking?

Dual Staking is a **feature whereby Bitcoin stakers who also stake the protocol's native asset (CORE) receive access to tiers of higher Bitcoin staking rates**. While base rates may compress over time, rewarding CORE stakers with scalable rewards ensures that attractive Bitcoin staking yields are always available for those aligned most with the enabling protocol.

Size of the Opportunity

Bitcoin DeFi

Bitcoin DeFi is still in its infancy, as shown by **BTCfi TVL** relative to Bitcoin's total market cap. Currently, **BTCfi TVL is ~$2.2B**, which is **~0.13% of Bitcoin's $1.75T market cap**. By comparing this to Ethereum, we can extrapolate the **potential size of BTCfi over the next decade**.

Ethereum **DeFi TVL is ~$49B**, which represents **~19% of Ethereum's $253B market cap**. If BTCfi TVL grows to Ethereum's **19% ratio**, then the present size of BTCfi's potential market is **$330B+**. If Bitcoin's market cap were to reach **$10T**, BTCfi TVL could **easily expand to $1.9T**.

Bitcoin Staking

For comparison, **Ethereum has 34.2M ETH staked** out of **122.7M total ETH**, meaning **27.8% of ETH is staked**, representing **$71.6B in value**. If Bitcoin staking reached the same level of adoption, **5.5M+ BTC** would be staked, constituting **$486B+ in value**.

For comparison, **Ethereum has 33.8M ETH staked** out of **122.7M total ETH**, meaning **27.6% of ETH is staked**, representing **$90.5B in value**. If Bitcoin staking reached the same level of adoption, **5.27M BTC** would be staked, constituting **$508B in value**.

Since Bitcoin staking also **drives growth in BTCfi assets like CORE**, the total value of the space could **far exceed these estimates**, even without significant Bitcoin price appreciation.

Conclusion

The rapid evolution of Bitcoin yield mechanisms has ushered in a new era of opportunities. Advancements, such as the Taproot upgrade in November 2021, have significantly enhanced Bitcoin's scripting capabilities, paving the way for decentralized applications (DApps) directly on the Bitcoin blockchain. This development has been instrumental in accelerating the Bitcoin DeFi (BTCfi) movement, enabling more complex financial interactions and broadening the scope of decentralized services available to users.

The emergence of Bitcoin staking protocols, such as Core, has introduced new avenues for generating yield. These platforms allow Bitcoin holders to stake their assets, securing decentralized networks while earning rewards, all while maintaining self-custody.

The potential for growth in this sector is substantial. If Bitcoin DeFi adoption reaches levels comparable to Ethereum's DeFi penetration, the market could expand from the current $2.2 billion in total value locked (TVL) to over $330 billion. Similarly, widespread adoption of Bitcoin staking could unlock ~$500 billion in value, aligning with Ethereum's staking landscape.

For institutional investors, high-net-worth individuals, and corporate treasuries, these developments offer compelling opportunities to enhance returns on Bitcoin holdings without relinquishing ownership. The maturation of Bitcoin DeFi and staking protocols is poised to reshape the financial landscape, transitioning Bitcoin from a passive store of value to an active, yield-generating asset integral to decentralized finance.

Developments in this space will be watched with extreme interest.

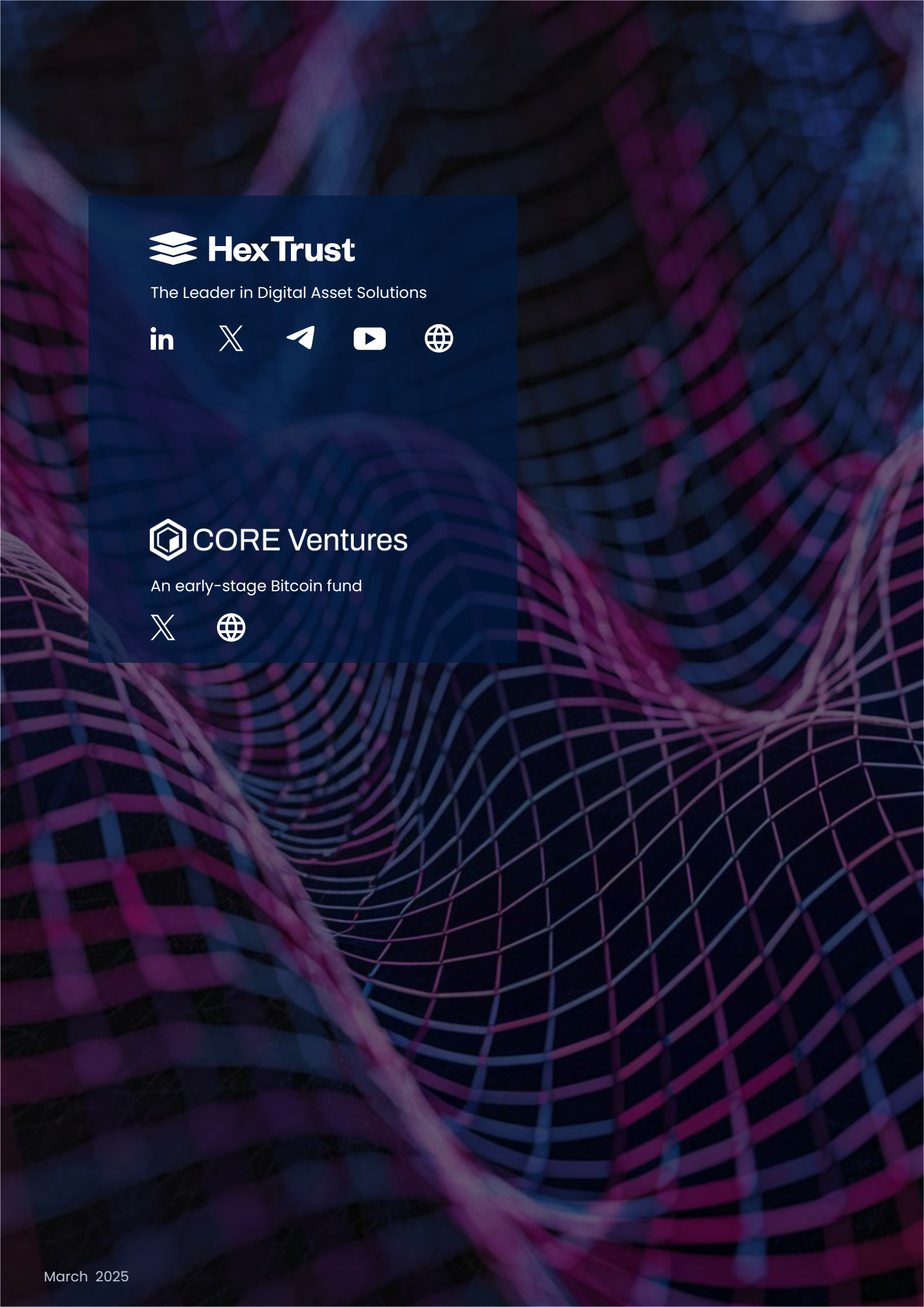
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