

GLASSNODE INSTITUTIONAL RESEARCH

# Generating Yield on Bitcoin

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A Landscape Report for Institutional Holders

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## SCOPE

Credit, basis, options and on-chain yield, measured in BTC

PRODUCED IN COLLABORATION WITH

XAPO  BANK  
EST. 2013

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**ABOUT THIS REPORT**

This report maps the yield strategies available to institutional Bitcoin holders across four categories, credit and lending, basis and derivatives arbitrage, volatility and options, and on-chain approaches. For each, it examines how returns are generated, what yields are realistic, and what the principal risks are. All strategies are evaluated in Bitcoin terms. One credit vehicle is examined as a worked example; commercial disclosure is on the back cover.

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# The Holder's Question

Most institutional Bitcoin is held passively, in vehicles that charge for the wrapper and pay nothing on the position. This part sets out who holds, what yield means when it is measured in coins, and the four routes to it.

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  - 02 The Passive Holding Default
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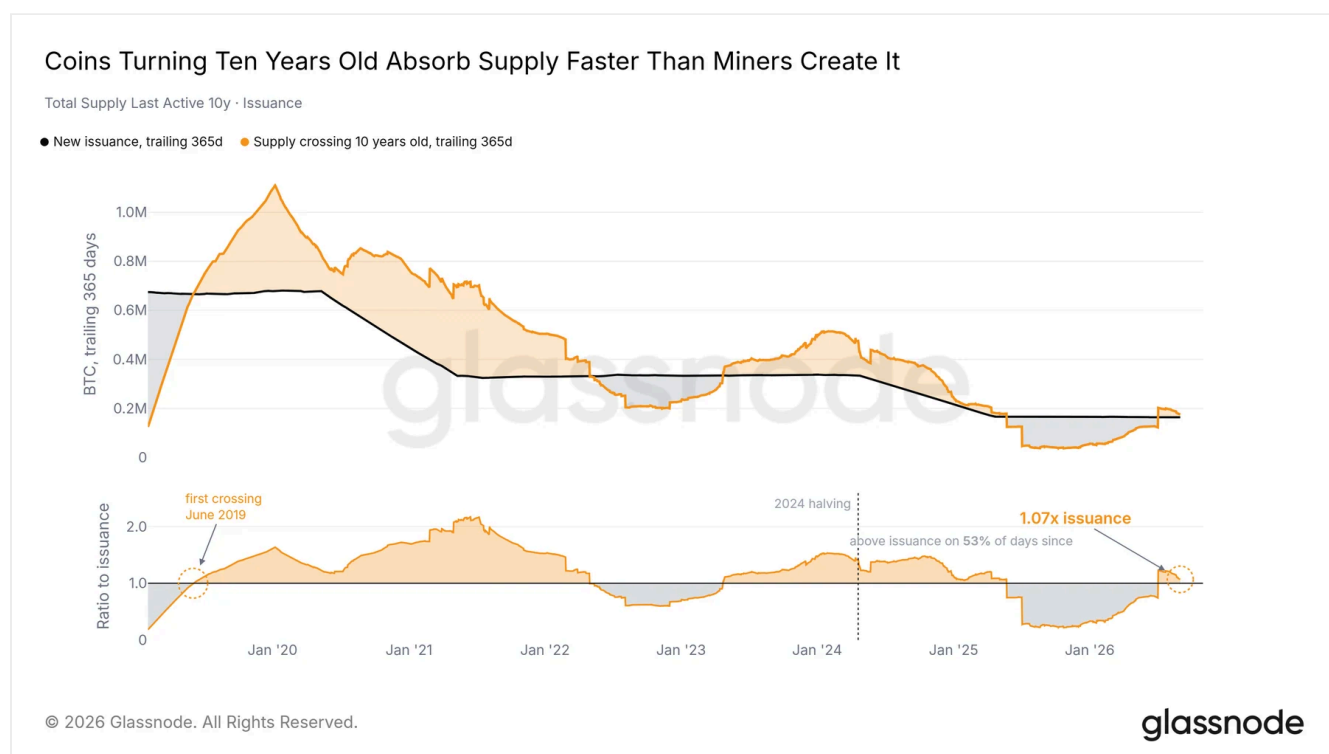


“These products do what they say: they provide price exposure to Bitcoin. They do not generate income.”

## 01

# Introduction

About 65% of all circulating Bitcoin supply is classified as illiquid, held by entities with no observable pattern of spending. Long-term holders control roughly 14.7 million BTC, close to three quarters of circulating supply. Ancient supply, coins that have not moved in more than ten years, now exceeds 3.5 million BTC: over the trailing year it absorbed roughly 175K BTC against 164K BTC of new issuance. That crossing first appeared in June 2019 and has held on just over half of the days since the 2024 halving.



**Decade-old coins absorbed supply faster than miners created it over the trailing year; the crossing first appeared in June 2019 and has held on just over half of the days since the 2024 halving.**

Supply this concentrated in long-horizon hands raises a practical question: what can an institutional holder earn on a position they intend to keep for five to ten years, and how do the available strategies differ in mechanics, yield, and risk?

This report maps the yield strategies available to institutional Bitcoin holders across four broad categories: credit and lending, basis and derivatives arbitrage, volatility and options, and on-chain approaches. For each category, the report examines how returns are generated, what yields are realistic, and what the principal risks are. It concludes with a quantitative illustration of how yield compounds over a multi-year holding horizon, and a comparative framework for allocators evaluating these strategies.

The report is produced by Glassnode in collaboration with Xapo Bank, whose Bitcoin credit fund is included as a worked example within the credit and lending section. Commercial disclosure is provided at the end of this document.

## 02

## The Passive Holding Default

Most institutional Bitcoin holders hold passively. The vehicle of choice for institutions entering Bitcoin through regulated channels has been the spot exchange-traded fund. US spot Bitcoin ETFs, launched in January 2024, took in roughly \$107B in their first year, a pace few products in asset management history have matched. Total assets across the complex peaked near \$168B in early October 2025 and stood at approximately \$97B at the start of September 2026; coin holdings fell only about 3% from the end of 2025, so the decline in dollar terms is mostly price.

### The ETF Drawdown Is Price, Not Redemptions

US Spot ETF Assets - US Spot ETF Weekly Net Flows



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**Assets peaked at \$168.2B in October 2025; net outflows since account for \$5.8B of the roughly \$71B decline, and the rest is price.**

These products do what they say: they provide price exposure to Bitcoin. They do not generate income. Management fees across US spot Bitcoin ETFs now range from 0.14% at the lower end to 1.50% for the largest legacy trust, a differential that compounds over a multi-year horizon; section 9 quantifies the gap. Fee pressure has been constant: roughly \$25B has left the highest-fee vehicle since its January 2024 conversion, and the fee floor fell again in April 2026.

The rotation shows in the holdings: since the start of 2025 the legacy trust shed roughly 75K BTC while the largest low-fee fund added 229K BTC and now holds close to 62% of the complex.

Passive holding has a logic: Bitcoin's price history has rewarded holders who resist the urge to trade, and many institutional allocators built their Bitcoin thesis on long-term price appreciation rather than income. It still carries an opportunity cost. For a holder with a five-to-ten-year horizon, the question is whether returns on the position can improve without compromising the original thesis.

Institutional yield products now exist across several risk categories; the sections that follow examine each in turn.

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## 03

### Defining Yield on Bitcoin

Yield on Bitcoin refers to any mechanism by which a Bitcoin holder earns additional Bitcoin on their existing position beyond simple price appreciation. It is distinct from fiat-denominated yield in that the return is measured in BTC terms: the goal is to hold more Bitcoin at the end of a period than at the beginning, without having purchased additional coins.

This distinction is material for long-term holders. A strategy that generates 3% annual yield in BTC terms on a 100 BTC position delivers 3 additional BTC per year. Over five years, with compounding, that grows to roughly 15.9 BTC of additional coins. Over ten years, the figure is roughly 34 BTC.

Every strategy involves some combination of counterparty risk, liquidity constraint, complexity, or upside sacrifice. The four category sections that follow set out those trade-offs.

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## 04

### Four Routes to Bitcoin Yield

Bitcoin yield strategies fall into four broad categories, differentiated by their risk profile, the source of return, and the infrastructure required to access them. Realistic net yields across these categories range from below 1% at the most conservative end to 20% or more in short-lived, market-dependent windows. The comparative framework in section 10 provides a side-by-side view.

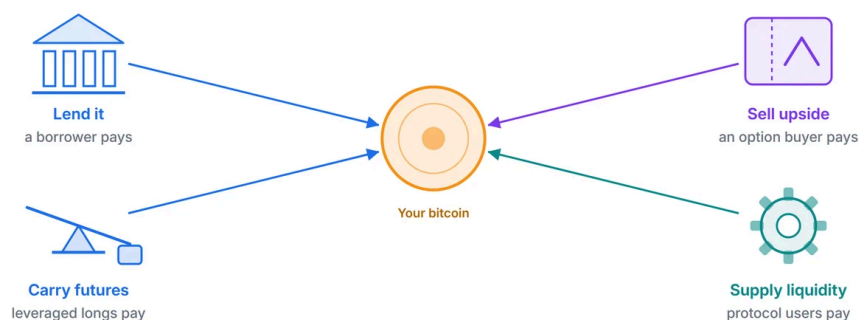
Credit and lending strategies deploy Bitcoin capital into the credit markets, earning interest from borrowers. Basis and derivatives strategies exploit the premium at which Bitcoin futures trade relative to spot. Volatility and options strategies earn premium income by selling the right to buy or sell Bitcoin at predetermined prices.

On-chain strategies use Bitcoin, in wrapped token form or natively, to participate in lending pools, staking protocols, and payment networks.

The categories are not mutually exclusive, and some products combine several. This report treats each independently.

### Every Yield Has a Payer

Bitcoin pays nothing by itself. Each route is a deal with someone.



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**Bitcoin pays nothing on its own. Each route is a deal with a counterparty: a borrower, an option buyer, leveraged longs, or the users of a protocol.**





# Four Routes

Credit, basis, options and on-chain. Each route is examined the same way: how it works, what it realistically nets across a cycle, and where its risk sits.

- 
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  - 06 Basis and Cash-and-Carry Strategies
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- 

“A distribution is not a yield.”

## 05

## Credit and Lending Strategies

### HOW IT WORKS

Bitcoin lending involves deploying BTC capital to creditworthy borrowers in exchange for interest. Institutional lending structures typically fall into one of two models. In the secured model, the lender receives collateral, usually additional Bitcoin or cash, against the loan. Loan-to-value ratios in institutional secured lending typically range from 30% to 50%, providing a buffer against price volatility. In the unsecured model, loans are made to borrowers on the basis of credit assessment rather than posted collateral, which demands stronger counterparty due diligence and, in some cases, partial credit guarantees from third parties.

The lending market contracted sharply after the 2022 failures of Genesis, Celsius, BlockFi, and Voyager Digital. Galaxy Research estimates the combined CeFi loan book peaked at \$34.8B in the first quarter of 2022, then collapsed to a trough of \$6.4B as leveraged counterparties defaulted. The recovery has been substantial but incomplete: CeFi borrows stood at \$13.5B at the end of the first quarter of 2025 and \$23.0B at the end of the second quarter of 2026, still roughly a third below the 2022 peak. The broader crypto-collateralised lending market, including DeFi, peaked at \$78.7B in the third quarter of 2025 and has contracted for three consecutive quarters since, to \$56.2B, a decline Galaxy characterises as orderly deleveraging rather than a repeat of 2022.

The surviving market is structurally different from its predecessor: lower LTV ratios, explicit restrictions on rehypothecation, more conservative counterparty selection, and a clear shift toward institutional rather than retail lending. Concentration remains high, though the leaders have rotated: Tether, Galaxy Digital and Ledn held roughly 89% of the CeFi loan book at the end of 2024; by the second quarter of 2026 the top three were Tether, Maple and Nexo, together holding about 75%. New entrants include Cantor Fitzgerald, which announced a \$2B Bitcoin financing business in July 2024 and executed its first trades in May 2025, and several regulated European and Swiss banks now offering Bitcoin-backed lending to private clients.

### YIELD PROFILE

Institutional BTC credit strategies targeting low-risk, short-duration, well-collateralised or selectively unsecured lending to high-quality counterparties generate net annual yields in the range of roughly 2% to 6%, with conservative unsecured lending clustering toward the lower half. Returns in this range are consistent and relatively stable compared to strategies that depend on market conditions such as volatility levels or futures premiums.

### KEY RISKS

Counterparty default is the primary risk. The 2022 market demonstrated that even apparently sophisticated borrowers can fail rapidly when Bitcoin prices decline and leverage is high. The market response, tighter underwriting, lower leverage, and selective counterparty lists, has reduced but not eliminated this risk.

Liquidity risk is also material: institutional Bitcoin lending vehicles commonly impose redemption notice periods of 30 days or more, though terms vary widely, and some funds offer redemption on as little as five business days' notice. Regulatory treatment of crypto asset lending and custody continues to evolve across jurisdictions.

## 06

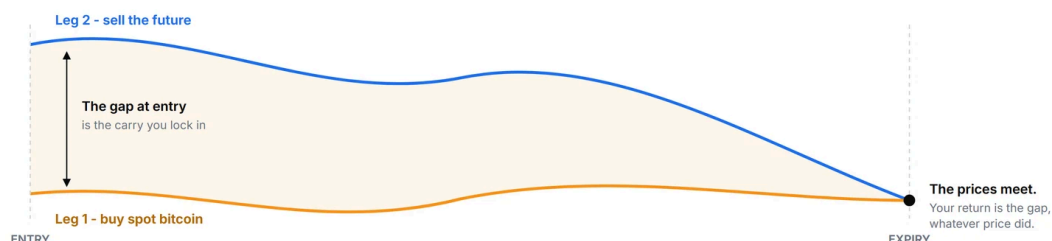
## Basis and Cash-and-Carry Strategies

### HOW IT WORKS

The Bitcoin basis trade exploits the premium at which Bitcoin futures contracts trade relative to the spot price. When futures are in contango, a holder can purchase Bitcoin in the spot market and simultaneously short an equivalent position in Bitcoin futures, locking in the spread between the two prices. As contracts approach expiry, the futures price converges toward spot, and the trader collects the initial spread as profit. The strategy is market-neutral: it earns the convergence of the basis, not the direction of Bitcoin's price.

#### The Cash-and-Carry Trade, in One Picture

Buy spot, sell the future at a higher price, hold both to expiry. The gap between them is the yield.



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**Both legs held to expiry lock in the entry gap, whatever the price does in between.**

The CME became the hub for institutional basis trading after the spot ETFs launched in January 2024 and created a regulated, convenient instrument for the spot leg. Six of the US spot Bitcoin ETFs strike their net asset value on the CME CF Bitcoin Reference Rate, and CME futures settle to a variant of the same index, which minimises tracking error between the two legs. An investor who holds a spot ETF and shorts CME futures is running the basis trade in its most accessible form.

### YIELD PROFILE

Basis yields are highly variable and driven by market sentiment rather than structural fundamentals. Across offshore venues, the three-month annualised basis peaked near 29% in late March 2024 in the wake of the ETF launch, the highest reading since the 46% of the 2021 cycle (front-month measures approached 25% in February 2024, per CF Benchmarks).

The premium widened again as Bitcoin approached \$100,000 in November 2024, topping out in the mid-teens on the rolling three-month measure, and institutional positioning peaked with it: CME open interest reached a record 218K BTC in late November 2024, per CoinGlass.

The unwind since has been comprehensive. CME open interest fell through 2025 from 175K BTC in January to roughly 123K BTC by late December, its lowest level since February 2024; in the same week Binance overtook the CME as the largest Bitcoin futures venue by open interest, ending a leadership run that had held since November 2023. CME positioning kept falling through the first half of 2026 to a trough near 103K BTC. The premium followed the same path. The three-month annualised basis has compressed to roughly 4.5% as of early September 2026 and has spent nearly half the days since the start of 2025 below 5% annualised. For roughly three quarters of 2026's trading days it has sat below the two-year Treasury yield, an inversion with only one precedent on record. The basis trade offers very high yields in specific market environments, but those yields are not persistent, and for most of 2026 the trade has not paid a premium over cash.

### The Carry Beats Cash Only When the Market Runs Hot

Futures Annualized Rolling Basis (3M) · US 2y Treasury Yield



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**Red stretches mark the carry paying less than a two-year Treasury, roughly three quarters of 2026's trading days; the 46% and 29% peaks both came in momentum phases.**

### KEY RISKS

The basis trade is often described as risk-free arbitrage, and the description is misleading. The short futures position is marked to market daily: if Bitcoin rises sharply before expiry, losses on the futures leg trigger margin calls and can force liquidation before the trade converges.

Research from the Bank for International Settlements finds that at ten times leverage, the futures leg of a cash-and-carry position would have been liquidated in more than half the months in its sample, and that a 10% rise in carry predicts a 22% rise in liquidations of short futures positions over the following month. Historically the futures leg had to be margined in US dollars, forcing traders to fund both legs separately; since February 2026 a CFTC no-action position has allowed futures commission merchants to accept Bitcoin, ether and payment stablecoins as margin collateral, though the mark-to-market mechanics of the trade are unchanged.

Roll costs must also be managed as contracts expire and positions are rolled forward. In low-contango environments, roll costs can erode returns to the point where the strategy yields little or nothing net. The basis trade is conditional: rich during periods of strong momentum, near zero or negative in flat or falling markets, including the current one.

## 07

## Volatility and Options Strategies

### HOW IT WORKS

Options-based Bitcoin yield strategies generate income by selling the right to buy or sell Bitcoin at predetermined prices. The most common institutional approach is the covered call: a holder of Bitcoin sells call options against the position, receiving the option premium as income in exchange for agreeing to sell at the strike price if the market rises that far before expiry. The premium provides a buffer against declines and generates income on an otherwise passive position.

### The Covered Call

You keep the coins and sell the right to everything above a set price.



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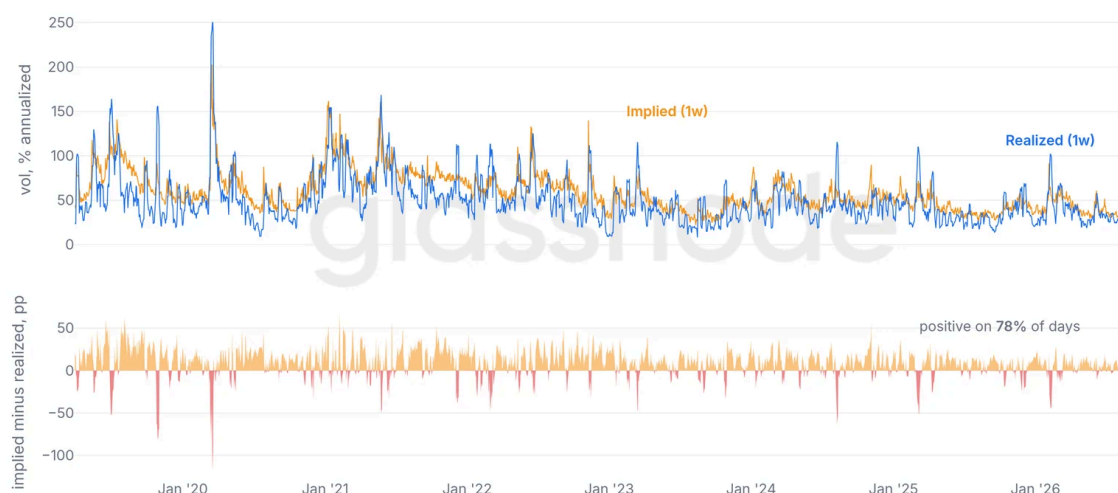
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The premium arrives up front, the holder's gain stops at the strike, and everything above it belongs to the buyer.

The structural source of income is the volatility risk premium: the volatility priced into Bitcoin options has persistently exceeded the volatility Bitcoin then realises. Since 2019, one-week implied volatility has closed above one-week realised volatility on 78% of days, with a median spread of roughly 7.7 percentage points over the trailing two years. Anchorage Digital's research puts Bitcoin's upside volatility risk premium at roughly two to three times what major equity indices deliver. This consistent overpricing of forward volatility is the edge option sellers collect, though it is not unconditional: as of early September 2026 the one-month premium is inverted, with implied volatility at 35.5% against realised volatility of 44.3%, while the one-week tenor plotted below is still positive, at roughly 4 percentage points.

### Options Have Overpriced Realized Volatility Nearly Four Days in Five

Options ATM Implied Volatility (1 Week) - Realized Volatility (1 Week)



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**The lower panel is the premium options priced over what Bitcoin then delivered: positive on 78% of days since 2019.**

### YIELD PROFILE

Headline numbers in this category need translation before use. Retail covered-call ETFs advertise very large distribution rates: the largest Bitcoin income ETF has run a distribution rate near 27%, and one covered-call product distributes above 70% annualised. Those figures are distribution rates, not returns: the distributions have been classified largely as return of capital, and over the twelve months to mid-2026, in a falling market, the two funds just described delivered NAV total returns of roughly -42% and -36% respectively. A distribution is not a yield.

The institutional benchmark sits far lower. The only published systematic backtest of BTC covered-call writing (Anchorage Digital, May 2026, covering October 2021 to April 2026) finds the strategy roughly flat over the full period when run mechanically, and roughly 5% annualised when run with regime filters, with median outcomes between 4% and 6% across rolling three-year windows. BlackRock's covered-call Bitcoin ETF, launched on Nasdaq in June 2026, targets a 15% to 25% annualised distribution by writing calls on a quarter to a third of its underlying position while retaining most upside participation; its long-run total return remains to be demonstrated. Option premium is real income, but across a full cycle the realistic net yield of a disciplined covered-call program is mid-single digits, not the distribution rates on fund fact sheets.

#### KEY RISKS

The primary trade-off is upside capture. When Bitcoin rallies sharply, the short call either forces the sale of Bitcoin at below-market prices or must be bought back at a loss. Covered-call investors keep Bitcoin's downside while giving up much of its upside in strong markets; in BTC-accumulation terms, a badly timed program shrinks the position in exactly the years that reward holding.

Volatility compression is the second headwind, and it is specific: the volatility the options market prices has fallen from a one-month implied average of 55.5% in 2024 to roughly 41% this year, while three-month realised volatility has averaged close to 44% in 2026, near its 2023 level. The premium sellers collect has narrowed more than the risk they carry. Bitcoin's implied volatility index still stands near 38 against an S&P 500 VIX that has averaged around 20 over the long run, so the market remains a richer venue for option selling than equities, but the edge is thinner than it was.

## 08

### On-Chain and DeFi Strategies

#### HOW IT WORKS

Bitcoin's base layer does not support smart contracts, so participation in decentralised finance requires Bitcoin to be represented on a smart-contract-capable chain. The wrapped-Bitcoin complex now totals roughly 314K BTC: WBTC, custodied since August 2024 under a multi-jurisdiction arrangement between BitGo and Bit Global, at about 116K BTC; Coinbase's cbBTC, launched September 2024, at about 99K BTC and at its all-time high; Binance's BTCB at about 65K BTC; and a tail of smaller wrappers. Once wrapped, BTC can be supplied to lending pools, used as collateral, deployed into liquidity positions, or staked through restaking protocols. Bitcoin Layer 2 networks (Stacks, Rootstock, BOB) pursue programmability closer to the base layer, though aggregate Bitcoin L2 value locked contracted by roughly 74% through 2025 and remains small.

## The Wrapped-Bitcoin Market Rotated Rather Than Left

Wrapped BTC (WBTC) Balance · Circulating Supply (cbBTC)



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**After the 2024 custody scare, wrapped-Bitcoin holders rotated from WBTC to cbBTC rather than exiting wrapped Bitcoin.**

Two mechanisms operate natively, without wrapping. Lightning Network routing nodes earn fees by forwarding payments, and the operator retains custody throughout, with coins locked in payment channels rather than transferred to a custodian. The scale, however, is small: the entire public Lightning Network holds roughly 3.8K BTC of capacity, under 0.02% of circulating supply, and capacity has fallen by about a third from its late-2025 peak. Bitcoin staking via Babylon, whose staking mainnet launched in August 2024, locks BTC in native scripts to provide economic security to other networks; it currently secures roughly 39K BTC, about \$3.1B, at a staking yield of 0.04% to 0.60% per year.

### YIELD PROFILE

Yields across this category span two orders of magnitude, and the largest venues pay the least. Wrapped Bitcoin supplied to Aave's Ethereum pool, the largest single WBTC lending market at roughly \$2.6B, earns 0.005% because borrowing utilisation sits near 3%: almost nobody borrows Bitcoin on-chain, which reflects its role as a store of value rather than a working asset. Compound's WBTC supply rates range from roughly 0.1% to 1.5% depending on utilisation, and WBTC posted as collateral in its newest markets earns nothing. Babylon's staking yield currently runs at 0.04% to 0.60%. The higher numbers in this category come from active operation; passive supply pays little. Block reported a 9.7% annualised yield on its own corporate Bitcoin routed through Square's Lightning infrastructure, a figure that rests on Block's own fee schedule and payment flow. LQWD Technologies, a specialist Lightning operator, reported an 8.9% weighted annualised yield over a 60-day test on a book of just over 47 BTC.

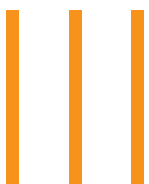
These are operator returns requiring active channel and liquidity management, not deposit rates, and the capacity constraint binds: an allocation of institutional size would itself be a large fraction of the entire routing network.

#### KEY RISKS

Wrapping introduces custodial and governance risk that native holding does not carry. The WBTC episode of 2024 illustrates it: after BitGo announced a custody restructuring involving an entity linked to Justin Sun, Coinbase, which had launched cbBTC in September 2024, suspended WBTC trading that December, citing the control risk. Holders rotated rather than exited: cbBTC has grown from a standing start to about 99K BTC while WBTC supply has fallen by about a quarter, leaving the two within 15% of each other. Custodial governance for any wrapped token remains a structural risk to evaluate independently of the yield on offer.

Smart contract risk is the second material concern. DeFi protocols are governed by code, and code contains vulnerabilities: access-control failures were the dominant attack vector across crypto in 2024, driving roughly \$1.7B of losses across DeFi, CeFi and gaming per Hacken, with DeFi-specific losses of \$474M that year. Composability means a failure in one protocol can cascade into others. Principal loss from an exploit is a different class of risk from yield underperformance, and due diligence should treat it separately.





# The Allocator's View

What the routes compound to over a decade, how they compare side by side, and the questions a mandate has to settle before choosing between them.

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**09** The Compounding Effect for Long-Term Holders

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**10** Comparative Framework

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**11** Considerations for Allocators

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“Credit pays for a counterparty’s promise; options pay for upside foregone; basis pays for leverage demand while it lasts; on-chain operations pay for work.”

## 09

## The Compounding Effect for Long-Term Holders

Compounding is where yield matters for a long-term holder. Consistent annual yield adds BTC each year, and those coins earn yield in every year that follows. Over a decade the gap between passive and yield-generating holding is measured in tens of coins per 100 held.

The following illustrations use an initial position of 100 BTC and a ten-year horizon, with yield received in Bitcoin and compounded annually. No assumption is made about Bitcoin's fiat price trajectory.

**Passive holding.** A holder who makes no yield-generating decisions still pays for the wrapper. Through an ETF charging 0.25% annually, a 100 BTC position erodes to roughly 97.5 BTC in effective terms over ten years; at the cheapest current fee of 0.14%, to about 98.6 BTC; at the 1.50% legacy-trust fee, to about 86.0 BTC.

**Credit and lending (3% net).** At a 3% net yield, the conservative end of the 2% to 6% credit range and the rate section 3 uses, 100 BTC compounds to roughly 134 BTC over ten years. Against the 0.25% ETF holder, the differential is roughly 37 BTC per 100 BTC of starting position. This illustration assumes the yield is sustained and no credit losses occur over the full period; the two exposures also differ materially in risk and liquidity terms, as discussed in Section 12.

**Basis (conditional).** At the 20% annualised rates seen in peak windows, 100 BTC would compound to roughly 619 BTC over ten years; those windows have historically lasted months, not decades, and the basis has spent most of 2026 below Treasury yields. A managed program averaging 5% to 10% across cycles would produce roughly 163 to 259 BTC, and the range is wide because the strategy is conditional.

**Options (4% to 6% net).** At the 4% to 6% band supported by systematic backtests, a disciplined covered-call program produces roughly 148 to 179 BTC over ten years, before accounting for the upside sacrificed in strong years, which section 11 quantifies.

**On-chain operations (4% to 10%).** Lightning routing at the operator returns reported in 2025 would produce roughly 148 to 259 BTC across the 4% to 10% range. These returns require active management, carry technology and, for wrapped routes, custodial risks not present off-chain, and at current network scale they are niche allocations rather than institutional-size deployments.

## 10

## Comparative Framework

The table below summarises the four strategy categories across the principal dimensions of interest to institutional allocators. It is a starting point for due diligence rather than a ranking; the yield column states what each strategy realistically nets across a cycle, not its best month.

| STRATEGY                      | TYPICAL NET YIELD      | YIELD SOURCE                         | LIQUIDITY                                        | KEY RISK                                 |
|-------------------------------|------------------------|--------------------------------------|--------------------------------------------------|------------------------------------------|
| <b>Credit and lending</b>     | 2% to 6%               | Borrower interest                    | 30 days or more, varies                          | Counterparty default                     |
| <b>Basis / cash-and-carry</b> | 0% to 25%, conditional | Futures contango                     | Immediate                                        | Margin calls, basis collapse             |
| <b>Volatility / options</b>   | 4% to 6% net           | Option premium                       | Immediate, at the cost of closing the short call | Upside sacrifice, volatility compression |
| <b>On-chain / DeFi</b>        | 0% to 10%              | Routing fees, borrower fees, staking | Variable                                         | Smart contract, custodial governance     |

Credit and lending offers stable, persistent yield at a moderate level, with counterparty quality as the central variable. When that risk is managed through careful underwriting and a short list of counterparties, the strategy can deliver consistent, predictable returns; when it is not, the 2022 episode shows how fast apparent strength unwinds. Unsecured structures carry no collateral backstop, so the credit process itself is the protection, and allocators should evaluate it with fixed-income rigour.

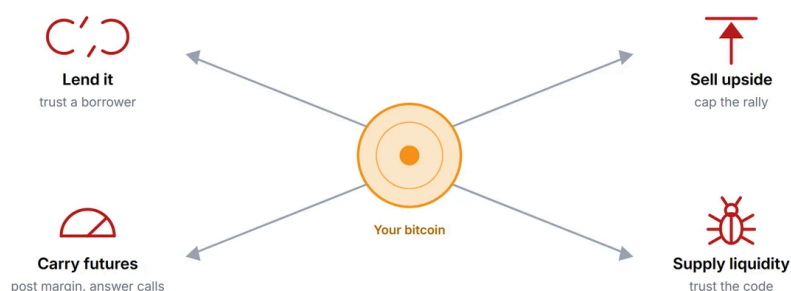
Basis strategies have a different profile. Their headline yields during momentum phases are among the highest available in Bitcoin, the strategy is market-neutral by design, and capacity is deep on regulated venues. The costs are conditionality and margin management: the premium disappears for long stretches, as 2026 demonstrates, and the levered short leg carries the liquidation risk the BIS research quantifies. Basis suits allocators with derivatives infrastructure and a mandate for absolute return, not those seeking dependable income.

Options strategies involve a trade-off that different mandates will price differently. The premium income is real and the volatility risk premium has been persistent, but realistic net outcomes cluster in mid-single digits across cycles, and the strategy sacrifices upside exactly when Bitcoin rewards conviction. For allocators whose objective is distributable income, a covered-call program is a legitimate mechanism; for allocators whose objective is BTC accumulation, distribution rates that look attractive in fiat terms translate poorly, and several retail products have destroyed capital in NAV terms while distributing it.

On-chain strategies offer qualitatively different attributes: self-custody, permissionless access, and in the Lightning and native-staking cases, yield without transferring coins to a custodian. The passive versions currently pay close to nothing; the active versions pay operator returns for operator work. The risks are technical and recurring: exploits, custodial governance failures on wrapped structures, bridge risk. Institutional due diligence here is security due diligence.

### Every Yield Gives Something Up

Each route is paid for something the holder hands over.



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Each route is paid for something the holder hands over: a borrower's promise, the rally above the strike, margin at a venue, or trust in code.

## 11

### YIELD DENOMINATION MATTERS

## Considerations for Allocators

All strategies in this report are evaluated in Bitcoin terms. An allocator whose objective is to accumulate as many Bitcoin as possible will evaluate them differently from one maximising fiat income. Strategies that sacrifice upside, such as covered calls, can perform poorly on a BTC-accumulation metric even when they look attractive on a fiat-yield basis.

Consider a concrete year. An investor holding 100 BTC runs a covered-call program yielding 15% in premium, with calls struck 20% above the market, in a year when Bitcoin rises 80%. The 15% premium is a gross figure, well above the net outcomes the backtests in section 7 report, chosen so that the mechanics are visible; the example also assumes the whole position is overwritten. The position is called away at the strike, delivering the premium but missing the remaining 60 percentage points of appreciation on the called portion. The passive holder of the same 100 BTC participates in the full move and ends the year with the value of 180 starting-price units against the covered-call holder's 135. The covered-call investor received more income; the passive investor accumulated more value.

Which outcome is preferable depends on the investor's objective; settle that question before selecting a strategy.

**LIQUIDITY TERMS  
CONSTRAIN  
TACTICAL  
FLEXIBILITY**

Most institutional Bitcoin yield products impose redemption notice periods of 30 days or more. Allocators who may need to rebalance quickly, or liquidate in response to client redemptions, should model liquidity terms before committing capital.

**THE REGULATORY  
ENVIRONMENT IS  
EVOLVING**

Under the OECD's Crypto-Asset Reporting Framework, 76 jurisdictions have committed to implement automatic exchange of crypto account information. The first wave of 46, including all EU member states, the United Kingdom, the Cayman Islands and Gibraltar, began collecting data on January 1, 2026 for first exchanges in 2027; a further 29 jurisdictions follow in 2028 and the United States in 2029. In England and Wales, the Property (Digital Assets etc) Act 2025, in force since December 2025, confirms that digital assets can be objects of personal property rights as a third category of personal property, a clarification that strengthens the legal footing of custody and collateral arrangements. Allocators should model the reporting and legal treatment in their specific jurisdictions before selecting a strategy.

**TRACK RECORDS ARE  
SHORT**

Most Bitcoin yield products have track records of two years or less, so stress-test evidence is limited and no product has yet been evaluated across a full cycle in both directions. The 2022 collapse of the leveraged lending market is a standing reminder that short records in benign conditions can obscure structural weaknesses. The October 2025 liquidation event and the drawdown that followed it have since provided the first severe live test for the current generation of products.

**DIVERSIFICATION  
ACROSS STRATEGY  
TYPES MAY BE  
APPROPRIATE**

The four categories have different risk drivers: credit risk, basis compression, volatility compression, and smart contract failure are largely uncorrelated. A portfolio that combines exposures, sized to risk tolerance, may deliver steadier aggregate yield than concentration in any single strategy. The right entry point depends on existing infrastructure: credit strategies parallel fixed-income underwriting, basis strategies suit derivatives desks, and on-chain approaches reward technical capability. The case study that follows examines one vehicle at the conservative end of the spectrum.



# IV

## A Worked Example

One vehicle at the conservative end of the credit range, read with the same tests the report applies everywhere else.

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### 12 Case Study: The Xapo Bank Byzantine BTC Credit Fund

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“It is an illustration, not a recommendation.”

## 12

## Case Study: The Xapo Bank Byzantine BTC Credit Fund

### OVERVIEW

The preceding sections treated credit as a category. This section examines one vehicle in detail: the Xapo Bank Byzantine BTC Credit Fund, a Bitcoin-denominated credit vehicle operating since September 2024. Its design matches the framework above, primarily unsecured lending, narrow counterparty selection, short durations, and returns measured in BTC, which is why it serves as the report's worked example. It is an illustration, not a recommendation.

The fund is registered with and regulated by the Cayman Islands Monetary Authority (CIMA) under the Mutual Funds Act. Hilbert Capital acts as external and independent investment manager; custodial services are provided by Xapo VASP Limited, itself regulated by the Gibraltar Financial Services Commission; and NAV Fund Services (Cayman) Ltd. administers the fund. The fund runs at 1x leverage, with no additional borrowing. The strategy was piloted with Xapo's own Bitcoin before it opened to external co-investment. The fund is accessible to professional investors in the United Kingdom and qualified institutional investors in other jurisdictions.

The mandate targets net returns of roughly 2% to 4% per year, paid in Bitcoin, from short-duration loans to a small set of institutional borrowers. That target places the fund at the conservative end of the credit range identified in section 5: it accepts a modest headline yield in pursuit of consistency and capital preservation.

### TRACK RECORD

The figures that follow are the fund's own; its fact sheet presents them as indicative, unaudited valuations across all share classes rather than official net asset value. The fund has operated for 23 monthly periods through July 2026. Monthly net returns have stayed inside a band of 0.17% to 0.26%, equivalent to annualised net returns of roughly 2% to 3%, inside the fund's 2% to 4% target range. Full-year 2025 net performance was 2.78%. Over the twelve months to July 2026, net returns were 2.56% for the distributive share class and 2.59% for the accumulative class. No loan has defaulted since inception. The fund manages approximately 4,678 BTC as of its latest internal report.

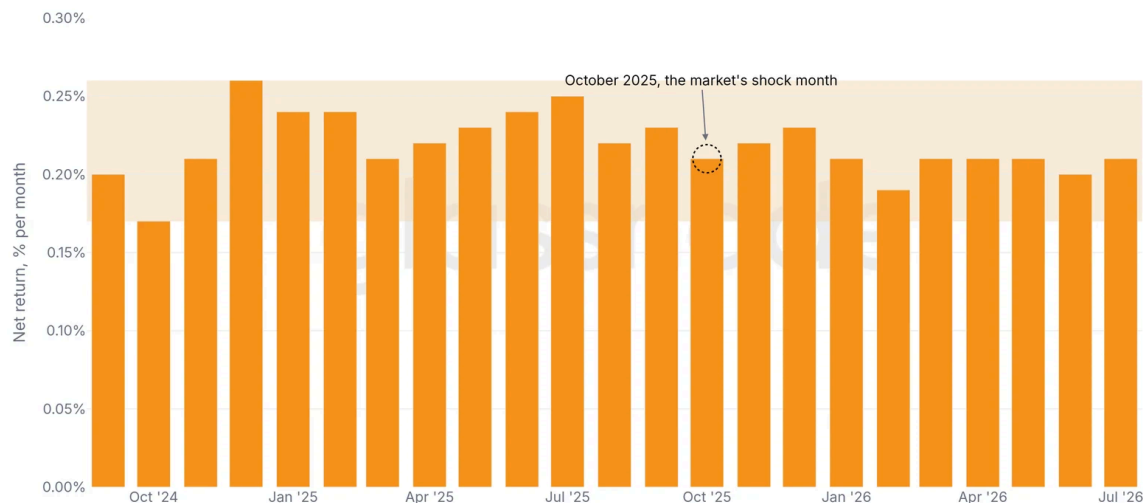
The fund attributes the month-to-month variation to deployment levels and loan timing rather than credit events, and the band has held through very different market conditions. The record now includes both the run to the October 2025 high and the drawdown that followed.

### THE CREDIT PROCESS

The fund's protection against default is counterparty selection rather than collateral. Lending is primarily unsecured, to institutional borrowers with strong balance sheets. As the fund describes it, lending decisions run through a six-stage credit framework, managed by Hilbert Capital as external investment manager, that governs every decision from counterparty identification through to ongoing monitoring.

## Every Monthly Net Return Has Landed Between 0.17% and 0.26%

Xapo Byzantine BTC Credit Fund Monthly Net Return



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**Twenty-three monthly periods, every one inside the 0.17% to 0.26% band, the October 2025 shock month included.**

Borrowers are screened against entry criteria, scored on their own risk management, and stress tested for their capacity to absorb severe market shocks. An investment committee at Hilbert Capital approves each name; deployment starts below approved limits and scales only with demonstrated repayment behaviour; and monthly monitoring reduces exposure when communication response times deteriorate. Loan durations are typically weeks to a few months, which keeps the portfolio responsive to changing credit conditions.

The committee is chaired and managed by Hilbert Capital, and every meeting is documented. The chief executive of Hilbert Capital, who chairs the process, is a former Managing Director of Credit Trading at Goldman Sachs with more than twenty years of credit markets experience. The fund presents this external governance structure as a deliberate design choice: it removes approval authority from the fund's commercial team and anchors it in a regulated, independent process. Allocators should still assess the independence of the committee, the consistency of the credit methodology across counterparties, and whether the stated process is followed in deployment decisions.

### THE OCTOBER 2025 EPISODE

October 2025 is the record's most direct stress test. On October 10, a tariff announcement set off the largest liquidation event in crypto market history: more than \$19B in leveraged positions were closed within 24 hours, and Bitcoin fell 14.5% from the Friday high to the following day's low. Total crypto market capitalisation fell by about \$350B on the day and by more than \$1T over the six weeks that followed.

Stress of this kind, instantaneous and correlated across the whole industry, is the scenario unsecured credit underwriting is designed for and rarely faces in live conditions.

The fund's October 2025 net return was 0.21%, inside its normal monthly band and equivalent to roughly 2.5% annualised. No defaults occurred, then or in the months after. The longer test is the drawdown since: Bitcoin remains roughly 38% below its October 2025 high as of early September 2026, and the fund's monthly net returns from January to July 2026 have held between 0.19% and 0.21%. One episode does not validate a credit framework, but it is a live data point on the central risk of the strategy type, through both the shock and the drawdown that followed.

#### TERMS

Subscriptions and redemptions are monthly, with 30 days' notice for redemptions. Management fees range from 0.50% to 0.70% per year depending on share class (institutional, or professional and eligible investors; accumulative or distributive), with a 10% performance fee above a high-water mark. Minimum subscriptions are the Bitcoin equivalent of \$120,000 for professional and eligible investors and \$500,000 for institutional investors. Net yield is paid in Bitcoin, so returns compound in the asset itself.

#### CONSIDERATIONS

The same tests applied elsewhere in this report apply here. The strategy is primarily unsecured: if a counterparty fails, there is little or no collateral to recover, and the credit process is the primary protection. The design philosophy, that counterparty quality is more protective than collateral under stress, is coherent and defensible, but it remains a thesis rather than a proven mechanism over a full market cycle. A book of short unsecured loans shows little return variance until a counterparty fails, so the smoothness of the record is not by itself evidence of credit quality; the credit process and the counterparty list are where that evidence sits. The track record, while clean, spans under two years and does not include a full credit cycle; the 2022 failures examined in section 5 occurred among lenders that also reported strong performance before their frameworks were tested at scale. And the headline yield is modest by design: basis strategies have produced far more in favourable windows, and covered-call overlays can distribute more, with correspondingly different risk and return-of-capital profiles.

For a holder whose objective is Bitcoin accumulation over a multi-year horizon, the compounding arithmetic of section 9 frames the decision. At the fund's full-year 2025 net yield of 2.78%, a 100 BTC position compounds to roughly 131.5 BTC over ten years. The same position held through a 0.25% fee ETF wrapper declines to roughly 97.5 BTC in effective terms, and to about 98.6 BTC at the cheapest 0.14% fee tier now available. The differential, roughly 33 to 34 BTC per 100 BTC of starting position, is the cost of leaving a long-horizon position idle. These illustrations assume the fund's net yield is sustained and that no credit losses occur over the full ten-year period. The comparison is between instruments with materially different risk and liquidity profiles. Unlike a spot ETF, the fund's strategy carries unsecured counterparty credit risk, and its 30-day redemption notice contrasts with intraday ETF dealing.

Whether that differential justifies the liquidity terms and counterparty exposure of a credit vehicle is the allocator's judgment to make; the comparative framework in section 10 is the starting point for that evaluation.

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# 13

## Conclusion

The four routes differ in what the holder is paid for. Credit pays for a counterparty's promise; options pay for upside foregone; basis pays for leverage demand while it lasts; on-chain operations pay for work. 2025-2026 gave each of those payers a live test, and the results sit in the sections above: a basis premium below cash for most of the year, an options premium that inverted by September, wrapped-coin holders rotating between custodians, and a credit market rebuilt on tighter underwriting that has not yet been through a default cycle in its new form.

For an investor holding 100 BTC over a ten-year horizon, the compounding illustrations in this report span roughly 134 BTC for a conservative credit strategy at 3% net, roughly 148 to 179 BTC for disciplined covered-call programs at 4% to 6%, and 163 to 259 BTC for managed basis or Lightning operations averaging 5% to 10% across cycles. The range is wide because the strategies differ in kind. The choice within it is the mandate's: what a position already held should earn, and what that earning gives up.

Further detail on any of the strategies or products referenced is available from Glassnode on request, subject to confirmation that the requesting party falls within a category of person to whom such information may lawfully be communicated.

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#### DISCLOSURE

This report has been produced by Glassnode in a paid research collaboration with Xapo Bank. Xapo Bank's Byzantine BTC Credit Fund is referenced as a case study within the credit and lending section of this report. The inclusion of Xapo Bank's product does not constitute an endorsement by Glassnode. All other products and providers mentioned are referenced for illustrative or comparative purposes only and do not represent endorsements. This report is for informational purposes only and does not constitute investment advice. Past performance data referenced herein does not guarantee future results. This report does not constitute an offer of, or a solicitation to acquire, any security or fund interest in any jurisdiction. Distribution of this report is restricted to the categories of person described in the important notice at the front of this document. Recipients must satisfy themselves that they fall within those categories and must not forward or otherwise distribute this report to any other person.

Data note: on-chain and derivatives figures are Glassnode data as of September 1, 2026 unless otherwise dated; third-party figures are attributed in the text and were verified against their sources in September 2026.