

Ethena: Shorting Levered Beta in a Deleveraging Market
Short Investment > \$1B MC



John Beecher, Prashanth Bhaskara, Franklin Liu, Victor Song
jsbeecher@uchicago.edu, pbhaskara@uchicago.edu, franklinliu@uchicago.edu, victors@uchicago.edu
University of Chicago

Franklin Templeton Research Competition, MBC 2025

Executive Summary

Ethena Labs has become one of the largest issuers of stablecoins, scaling USDe to a \$14.8B peak market cap in 2025 by offering users a high-yield, delta-neutral carry trade backed by perpetual futures funding and staked collateral. This model is strongly pro-cyclical; it thrives when risk appetite and thus leverage expand, and contracts sharply when liquidity and open interest collapse. Since the October 10th liquidation cascade, these dynamics have reversed. Perpetual funding rates turned negative, open interest compressed by 60% on Hyperliquid [1], and USDe supply has since fallen from ~\$13.8B to ~\$7.5B as of November 23rd [2].

ENA, Ethena's governance and incentive token, is structurally exposed to this deleveraging cycle. Our factor analysis shows ENA behaves like a leveraged basket of small-cap crypto beta, with returns primarily driven by market and size factors ($R^2 \approx 0.62$). With our Hidden Markov Model currently suggesting a bearish regime shift, the expected near-term drift of these factors is negative. This positions ENA as one of the most vulnerable large-cap tokens in a risk-off environment.

At the same time, ENA faces a heavy supply overhang. Only ~39% of total supply is circulating, with ~333M ENA (i.e, 4.65% of the current circulating supply) unlocked every month [3]. This supply is allocated mostly to investors and core protocol contributors. With Q4 2025 cumulative revenue sitting slightly above \$400k through late November (compared with \$10.18m in the previous quarter), we expect limited natural demand to absorb these unlocks [7]. High-velocity insider supply is arriving exactly when the protocol's fundamentals and market regime are weakening.

In this context, ENA functions less like a governance asset and more like a high-beta instrument tied to reflexive perp funding conditions. Ethena's core system has demonstrated strong performance in expansionary regimes, but in the current deleveraging environment, the combination of contracting USDe demand, collapsing protocol earnings, and concentrated insider unlocks creates a structurally challenged setup for ENA's valuation. These dynamics make ENA an appealing short candidate under the competition's "Short Position > \$1B MC" criteria. We recommend initiating a 1–3 month tactical short in ENA perpetual futures, targeting the December–February unlock window.

Protocol Introduction

Ethena Labs is a DeFi protocol that issues USDe, a "synthetic dollar" backed by on-chain crypto collateral and hedged with short perps position on centralized and decentralized exchanges. By running a roughly delta-neutral book by longing spot collateral and shorting perps, Ethena keeps the backing portfolio stable in dollar terms while staying decentralized. Users can stake USDe into sUSDe to receive the yield generated by this strategy, sourced from perps funding rates, staking rewards on the underlying, and on-chain lending. The ENA token is the governance and incentive asset for this system and is designed to behave as a claim on Ethena's growth and fee income. This design made Ethena a leading provider of yield-bearing dollars during the 2024–2025 period of elevated leverage and positive funding rates.

Regime Identification via Hidden Markov Model (HMM)

From late 2024 through early October 2025, crypto has traded in an extremely risk-on environment. On October 5, 2025, total crypto market MC reached all-time highs of roughly \$4.2 trillion, with Bitcoin moving to ~\$126k and accounting for well over half of total market value. This move was driven by strong ETF inflows, aggressive basis trades, buildup of leverage across perps markets, and an overall positive sentiment from traders.

This setup flipped violently on October 10-11, 2025, when the largest single-day liquidation cascade in history wiped ~\$19bn in leveraged positions, forcing the market into a sharp deleveraging as liquidity issues arose [1]. The entire crypto market has subsequently been consistently selling off, and on November 21, 2025, the market experienced a second major leg of stress. Bitcoin fell below \$82k, trading in the low \$80k range after losing more than $\frac{1}{3}$ of its value from the October peak. Total crypto MC has compressed to around \$2.9 trillion, roughly 30% below the early October highs. The market has transitioned from an over-levered euphoric regime into a deleveraging, high-volatility environment where marginal flows are dominated by risk reduction rather than large speculative influx.

In order to formalize calendar periods for deleveraging market conditions, we construct a data-driven regime view using a HMM that classifies returns into latent regimes with distinct means and volatilities. HMMs classify returns into latent regimes with distinct means and volatilities. In this framework, a ‘bullish’ regime is characterized by positive expected returns and low volatility, whilst a ‘bearish’ regime exhibits a negative mean and high volatility. Using Artemis data, we fit a HMM to daily returns of a broad crypto market factor from 2018 onwards, mimicked by a weekly rebalanced, long-only MC-weighted portfolio of the top 10 assets by market cap.

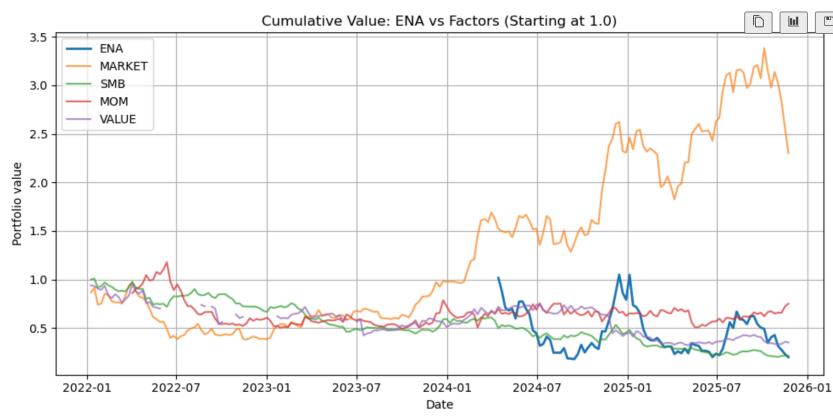
| Regime | Ann. Return | Ann. Volatility | Total Return | Count |
|----------|-------------|-----------------|--------------|-------|
| Regime 1 | -45.71% | 93.15% | -95.12% | 1232 |
| Regime 2 | 84.96% | 40.05% | 2290.82% | 1507 |
| Regime 3 | 349.55% | 234.28% | 27.18% | 135 |

Based on their return and volatility profiles, regime 1 and 2 emerge as clear candidates for bearish and bullish regimes, respectively. The HMM also identified a third regime, which are extreme tail events and exhibit substantially higher volatility that seem to capture rather rare shocks, separate from the typical bull and bear regime.

If we consider the classification by the HMM for 2025, we appear to have entered another bear market at the start of November, which is consistent with our market regime analysis. Moreover, the HMM allows us to estimate the length of a bear regime. Conditional on the current bear regime that has persisted for the last 18-days, the expected length is 40 days, which supports our recommended 1-3 month investment time horizon.



Factor Analysis



data and established methodologies, and utilize weekly log returns in order to better fit model assumptions and maintain consistency with our proposed investment horizon.

```
==== ENA LOG RETURNS ~ market + SMB + MOM + VALUE ====
OLS Regression Results
=====
Dep. Variable: ENA_log_ret R-squared: 0.620
Model: OLS Adj. R-squared: 0.601
Method: Least Squares F-statistic: 32.62
Date: Sun, 23 Nov 2025 Prob (F-statistic): 4.03e-16
Time: 14:27:03 Log-Likelihood: 59.671
No. Observations: 85 AIC: -109.3
Df Residuals: 80 BIC: -97.13
Df Model: 4
Covariance Type: nonrobust
=====
      coef  std err      t    P>|t|    [0.025    0.975]
const  -0.0189  0.014  -1.349   0.181   -0.047   0.009
market  1.6711  0.252   6.619   0.000    1.169   2.174
smb    0.9222  0.269   3.432   0.001    0.387   1.457
mom   -0.0033  0.256  -0.013   0.990   -0.513   0.507
value   0.3192  0.244   1.307   0.195   -0.167   0.805
=====
```

characteristics. In other words, ENA is largely a high-beta expression of systematic risk, rather than a token whose performance is dominated by project-specific alpha. Considering our earlier market regime analysis and expectation of a continued bear regime, these results indicate losses in the near future and place ENA as a natural candidate for a short position.

We examine ENA's weekly returns in proportion to the asset's sensitivity to systematic risk measures by performing a factor model analysis on assets with a market cap > \$1B MC, focusing primarily on Market, Size,Value, and Momentum factors. We construct factor-mimicking portfolios using Artemis's

Conditioning on Ethena's complete history, the factor model explains around 62% of the variation in ENA's weekly return. More importantly, ENA loads primarily on the market and size factors (betas of 1.67 and 0.922 respectively). The statistical significance of these results indicate that ENA trades like a leveraged small-cap market proxy. Its returns are primarily driven by broad crypto market moves and size effects, not by idiosyncratic, momentum, or value

Tokenomics & Unlocks

ENA has a fixed supply of 15bn tokens, allocated primarily to insiders and ecosystem incentives: 30% core contributors, 27% ecosystem development, 25% investors, 15% foundation, 3% airdrops. As of November 21, 2025, Messari shows that only around 39-42% of this supply has vested, with roughly 7.4bn ENA circulating and the remaining 7.6bn locked across team, investor, and foundation allocations. In other words, a slight majority of ENA's supply is yet to come to market.

The near-term unlock profile is especially heavy, following a monthly unlock schedule. Messari's schedule shows events of 333m ENA (around \$86m at current prices) on December 6, 2025, January 6, 2026, and February 6, 2026, with a similar pattern continuing through 2027. Each monthly unlock represents around 2.2% of total supply and 4.65% of the current float, and the recipients are ~81.2% core contributors, early investors, and the foundation with the remainder for ecosystem development. There is no broad, retail-style distribution.

Nansen estimates that Ethena faces over “~\$60m monthly from team and investors which are massively in profit, despite these price levels” [5] and Messari data shows Ethena raised a \$6.5M seed (July 2023), a \$14M extended seed at roughly a \$300M post-money valuation (February 2024), and a \$100M private token sale in February 2025, with additional strategic rounds thereafter. ChainBroker reports private-sales at \$0.02 [4]. Today, ENA trades at a token price around \$0.23, implying that early equity and token investors are still up by an order of magnitude on their entry valuations, even after the recent drawdown.

In this context of double-digit multiples for insiders and a protocol already seeing net redemptions and TVL compression, we think upcoming unlocks are more likely to translate into incremental sell pressure than into additional long-term locked holdings. ENA is entering a dense vesting period in a deteriorating fundamental setting, along structural supply overhang and shrinking demand base adding to sell pressure.

Risks

Ethena has introduced mitigants that lower tail risk, but they do not remove it. Monthly custodian attestations show that USDe remains fully backed and slightly over-collateralized. As of October 26, 2025, attestations reported about \$13.7bn in backing assets versus 10.4bn USDe outstanding (~0.7% surplus collateral). After the October depeg, Ethena also proposed a new backstop that would allow up to 1.2% of backing assets (~\$95m) to be used to buy back and burn USDe if it trades below \$0.99, aiming to limit depegs during future liquidations. These tools make insolvency less likely, but they also commit resources to peg defense and can compress long-run fee margins, which is especially important when thinking about ENA as an equity-like claim on protocol cashflows.

The main risk to our short ENA thesis is a regime reversal back to risk-on conditions in global markets, and subsequently crypto markets. Artemis data shows that even after the October shock, Ethena still controls roughly \$9bn in TVL and \$9bn in total USDe supply (adjusted free-float supply ~\$3.7bn), down sharply from peaks but far from zero. Net deposits flipped to -\$4.75bn on October 10-11, and stayed negative until the past week, showing a possible reversal in redemptions. Artemis also shows that sUSDE revenue is still roughly \$600k/day in mid-November, meaning the synthetic-dollar carry trade still remains attractive to many users. In this case, if perp funding and staking yields remain elevated, Ethena’s ecosystem could stabilize faster than expected. [6]

Timing our proposed short also poses some risk. ENA’s vesting schedule releases ~333m ENA per month, and these occur in lump sums on the 6th of each month. For the rest of the month, supply remains the same, making the exact timing and magnitude of realized sell pressure a factor in the timing and implementation of a short position.

Investment Proposal

We recommend a tactical short in ENA over a 1 - 3 month horizon, primarily aiming at the December - February unlock window. ENA trades like a high-beta, funding-sensitive proxy for the crypto market, while Ethena's core product (USDe/sUSDE) is already in a deleveraging regime with shrinking supply and TVL and ENA faces ~333m tokens of monthly unlocks to primarily insider wallets who are largely in profit even at current prices. In this environment, we see ENA as offering asymmetric downside relative to other large-cap tokens, making it an attractive short into upcoming unlocks and continued market stress.

| Case | MC (circulating) | % Change | Price (ENA) | Probability |
|-----------------------------|------------------|----------|-------------|-------------|
| Bull | \$2.22bn | 25% | \$0.30 | 20% |
| Base | \$1.18bn | -34% | \$0.16 | 55% |
| Bear | \$0.67bn | -62% | \$0.09 | 25% |
| Current | \$1.78bn | | \$0.24 | |
| Probability Adjusted Return | | \$0.17 | | |

Bull Case: Crypto markets snap back into a risk-on regime as BTC pushes ATH and perp funding turns strongly positive. We see ENA pushing moderately to ~\$0.30.

Base Case: Markets remain in mild bear/neutral regime as funding normalizes lower and USDe supply and

Athena TVL grind sideways or downwards. 1bn ENA unlocks over the next three months, and we see ENA price fall to ~\$0.16. We believe this scenario is most likely.

Bear Case: A deep deleveraging occurs as BTC and majors rapidly sell off, on-chain longs are flushed out, and USDe supply and Ethena TVL fall substantially further in reaction. Monthly unlocks land into thin liquidity and risk increases. We see ENA price fall to \$0.09 in this case.

Practically, we would implement the trade via linear short exposure in ENA perps on a liquid venue, collateralized in stablecoins other than USDe, and Kelly-size our allocation according to our proposed probabilities.. We would look to take some profit or reduce if (i) USDe supply and ENA TVL clearly re-accelerate, or (ii) our regime and factor analysis indicate a shift towards a positive-drift bull regime.

Conclusion

Ethena and ENA are essentially a pure bet on the synthetic-dollar carry trade staying big, profitable, and popular. That trade has already started to unwind: USDe supply has fallen sharply since October, protocol earnings have collapsed, and our HMM / factor analyses points to a deleveraging regime rather than another extended leg of euphoric highs. Amidst all this ENA still carries a multi-billion dollar FDV, trades like a high-beta proxy on the market, and faces large monthly unlocks to insiders who are largely in profit. In this setup, we don't need Ethena to "blow up" for the short to be viable, but instead only look to continued de-risking and some compression in the funding-dependent, unlock-heavy token. Taken together with current conditions, we see ENA as mispriced relative to its risk profile and view a tactical short as an asymmetric way to express a bearish view on the synthetic-dollar carry trade and near-term crypto market sentiment.

Citations

- [1] The Defiant. “The Ultimate 10/10 Crash Autopsy.”, <https://thedefiant.io/newsletter/defi-daily/the-ultimate-10-10-crash-autopsy>
- [2] “USDe.” Artemis Analytics, <app.artemisanalytics.com/asset/usde?from=assets>.
- [3] “Ethena.” Messari, <messari.io/project/ethena>.
- [4] “Ethena.” ChainBroker, <chainbroker.io/projects/ethena/>.
- [5] Nansen. “*Stablecoin Growth: Where Do We Go From Here?*” Nansen Research, 24 Apr. 2025, <research.nansen.ai/articles/stablecoin-growth-where-do-we-go-from-here>.
- [6] “Ethena.” Artemis Analytics, <app.artemisanalytics.com/asset/ethena?from=assets&tab=overview>.
- [7] DeFi Llama. “Ethena”, <https://defillama.com/protocol/ethena>

Appendix

Our data analysis can be found @ <https://github.com/frank22lin/MBC-Research>.