

UniCast: hooking on forward-looking events

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Uniswap Hooks Incubator, June 2024

LP fees and positions should dynamically incorporate forecastable, forward-looking information to avoid predictable divergence loss

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Context:

- **Volatilities rise predictably** during expected events like CPI releases, Fed rate announcements, SEC ETF approval dates, and TradFi “off-market” hours.
- **Price changes are predictable** and LP “impermanent losses” are permanent for tokens with coupon payments, such as liquid staking rebasing, bond coupons, and equity dividends.

Problem:

- **Arbitrageurs capture** all expected price and volatility changes **at the expense of LPs**.
- These predictable arbitrages **harm liquidity**, lead to MEV leaks, and deter swappers due to poor liquidity

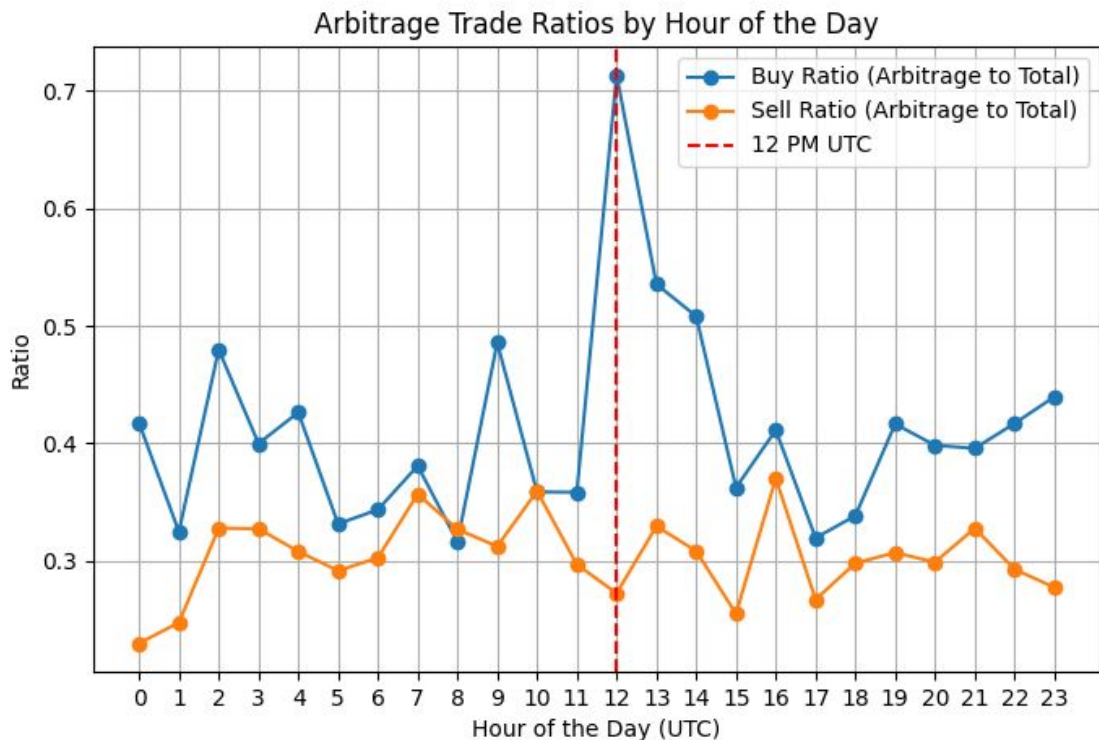
Solution:

UniCast: A hook that adjusts LP fees and positions by incorporating:

- **Forward-looking volatility** to enable dynamic fees and shift value capture from arbs to LPs
- **Forward-looking price changes** to **rebalance** LP positions

Motivation: Arb trade volume to buy wstETH vs wETH **doubles** around daily stETH rebasing (coupon payment) at ~12 pm UTC daily

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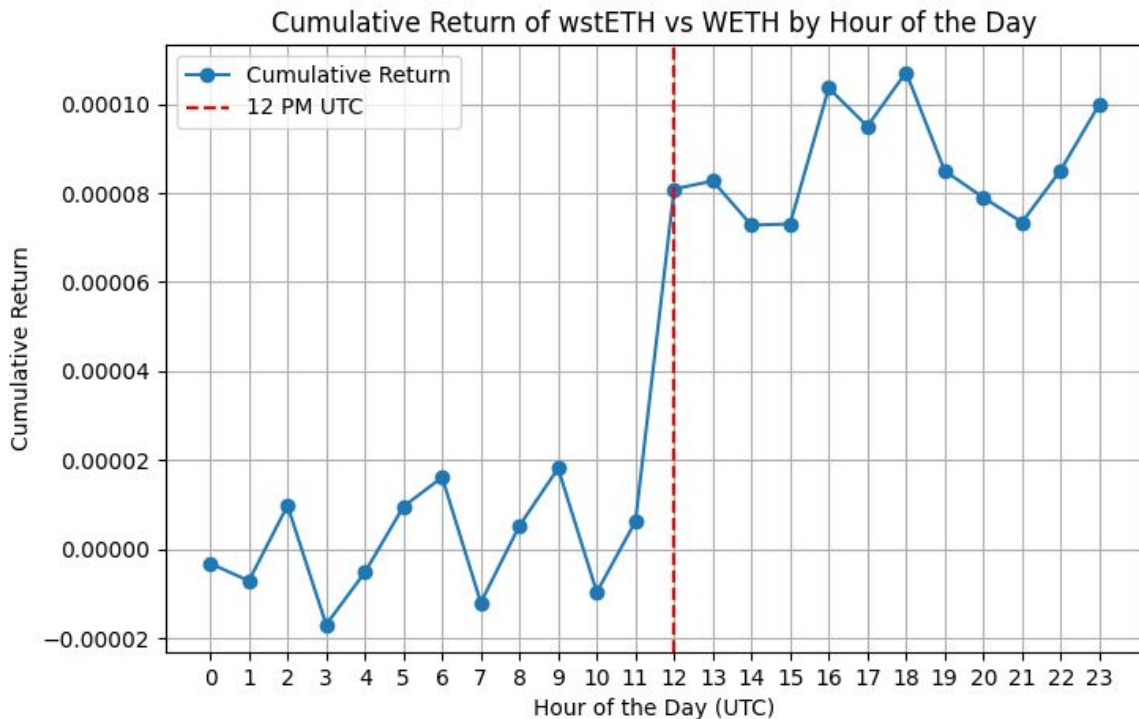


Arb trades are those executed by top 10 swapper addresses in the wstETH/wETH 1 bps pool; [code](#)

Motivation: wstETH returns **jumps predictably** from arbs

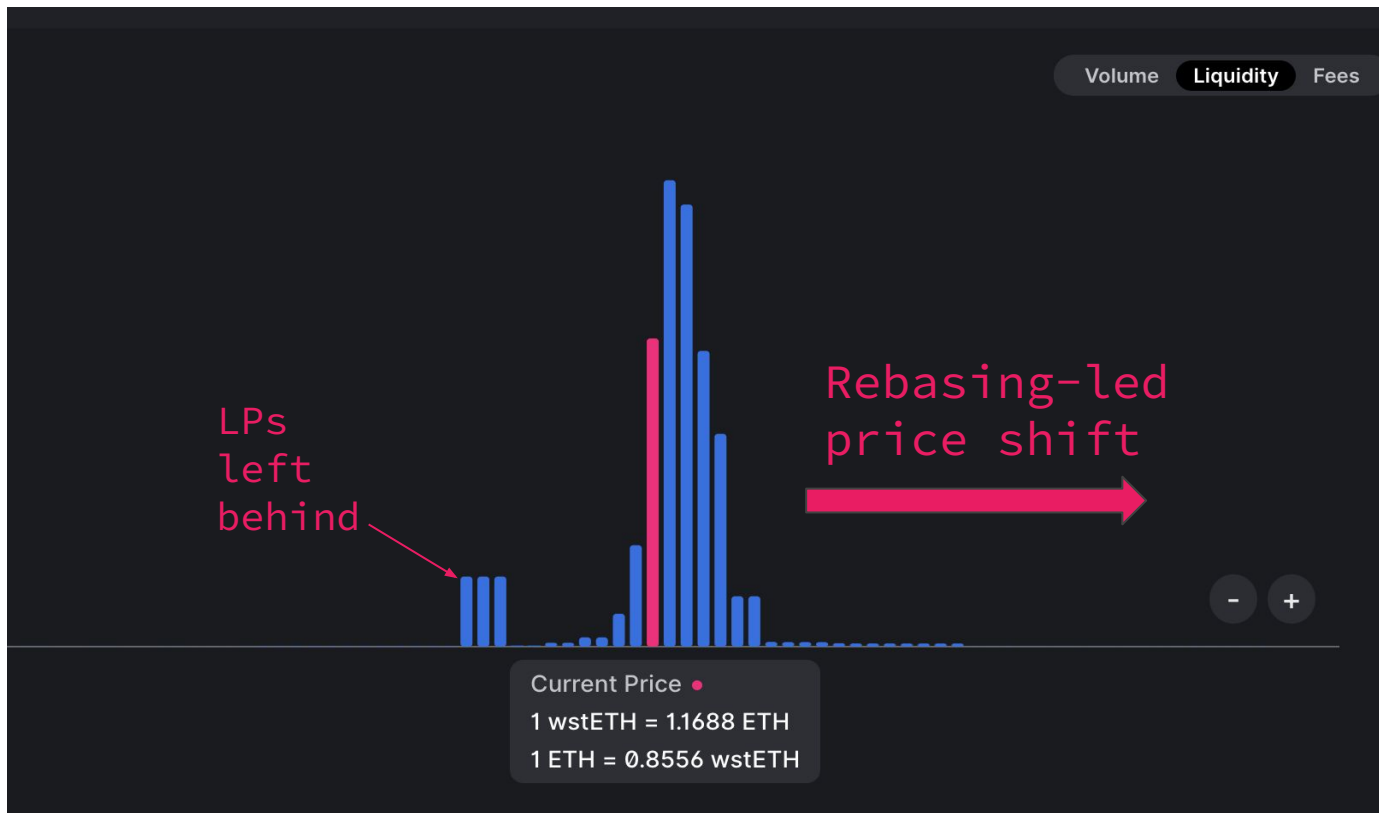
Dynamic fees can capture most of the expected price movements

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Data: wstETH/wETH 1 bps pool from July 2023 to June 2024; [code](#)

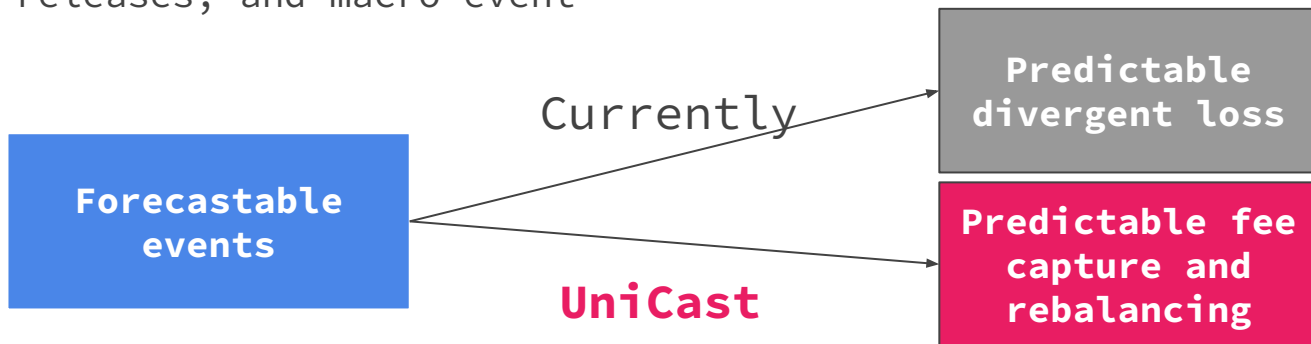
Essential Rebalancing: Ensuring LPs Stay in Range



UniCast reduces LP loss and increases liquidity

UniCast can be used immediately in DeFi and sets the standard for **RWA liquidity pools**:

- Incorporate forward-looking (implied) volatility from on-chain markets (Panoptics) and off-chain markets
- Accounting for predictable price changes due to rebasing (LSTs) and coupon/dividend effects (yield-bearing RWAs)
- Embedding differential fees for trading hours, economic stats releases, and macro event

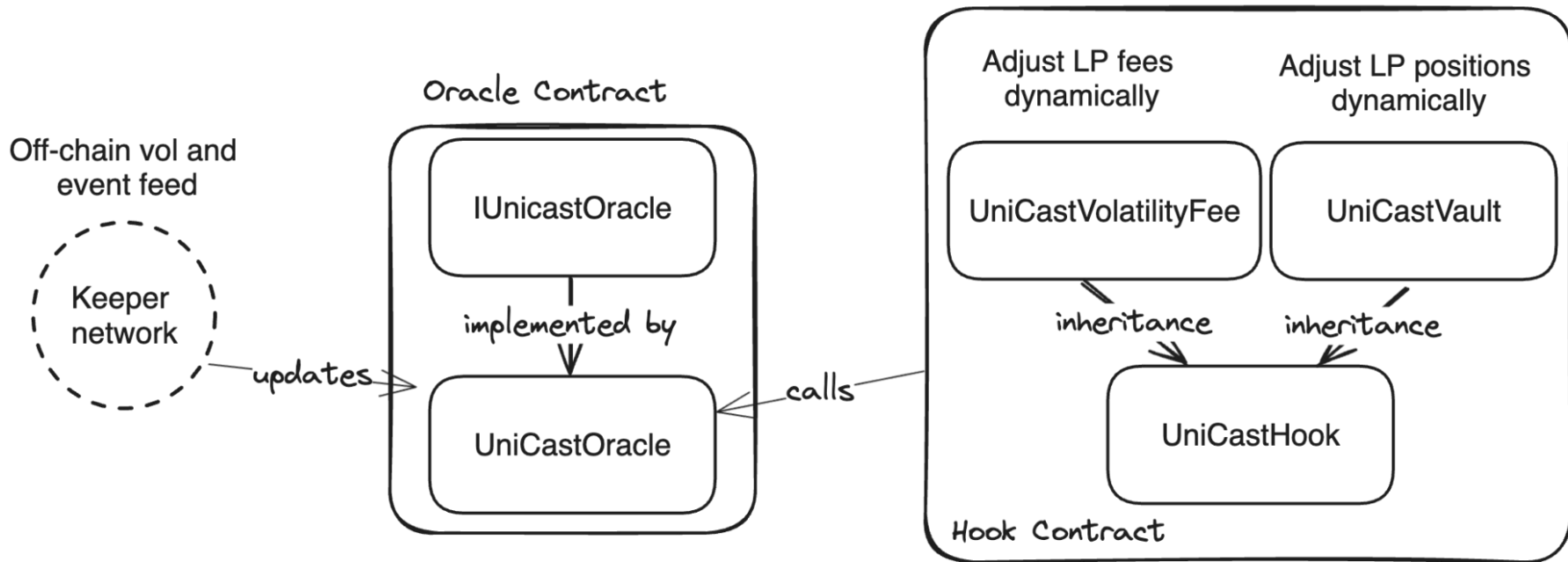


UniCast optimizes LP adjustments for RWA markets

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- **RWA** markets are estimated to reach over **\$16 trillion** by 2030 (BCG)
- Most RWA instruments yield dividends and their volatilities are influenced by events and trading hours
- UniCast expand Uniswap protocol's applicability in the RWA market

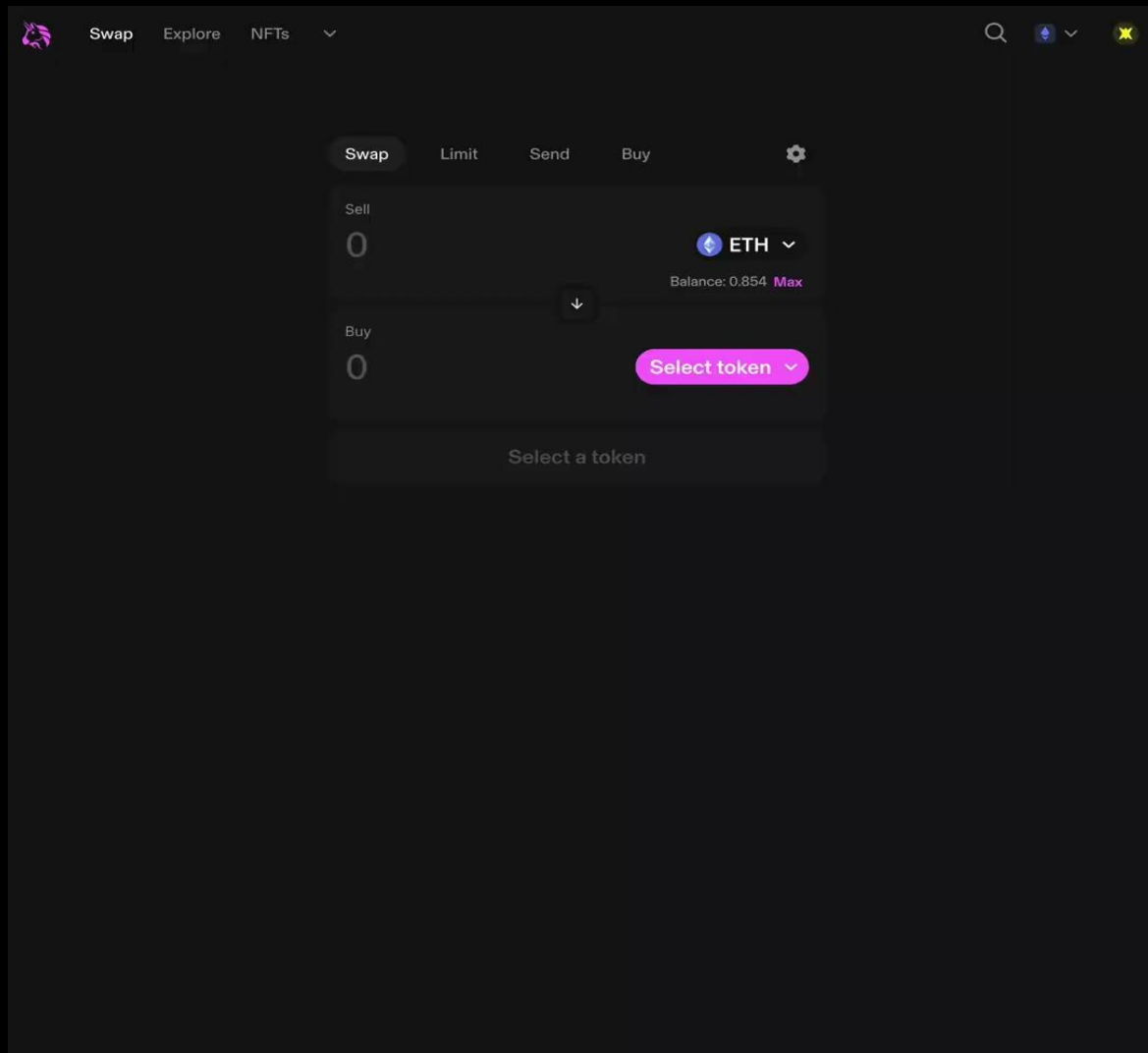
UniCast contracts



Github repos: [contracts](#), [front-end](#)

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UniCast: Enhancing Benefits for LPs, Swappers, and Issuers

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LPs

- Avoid predictable divergence loss with dynamic fee and auto-rebalancing
- Achieve higher overall returns



Swappers

Access the best liquidity with increased LP participation



Issuers
(LSTs or RWAs)

Higher auto-rebalancing liquidity and ability to incentivize deep liquidity through UniCast Vault contracts using points and token airdrops

Upcoming Enhancements in UniCast

1 Permissioning for RWA pools

UniCast will inherit access permissions for RWA tokens with permission controls.

2 LP vault incentive add-on

UniCast Vault to offer added features for issuers to deploy incentives for boosting liquidity and ensuring price stability for pegged pairs.