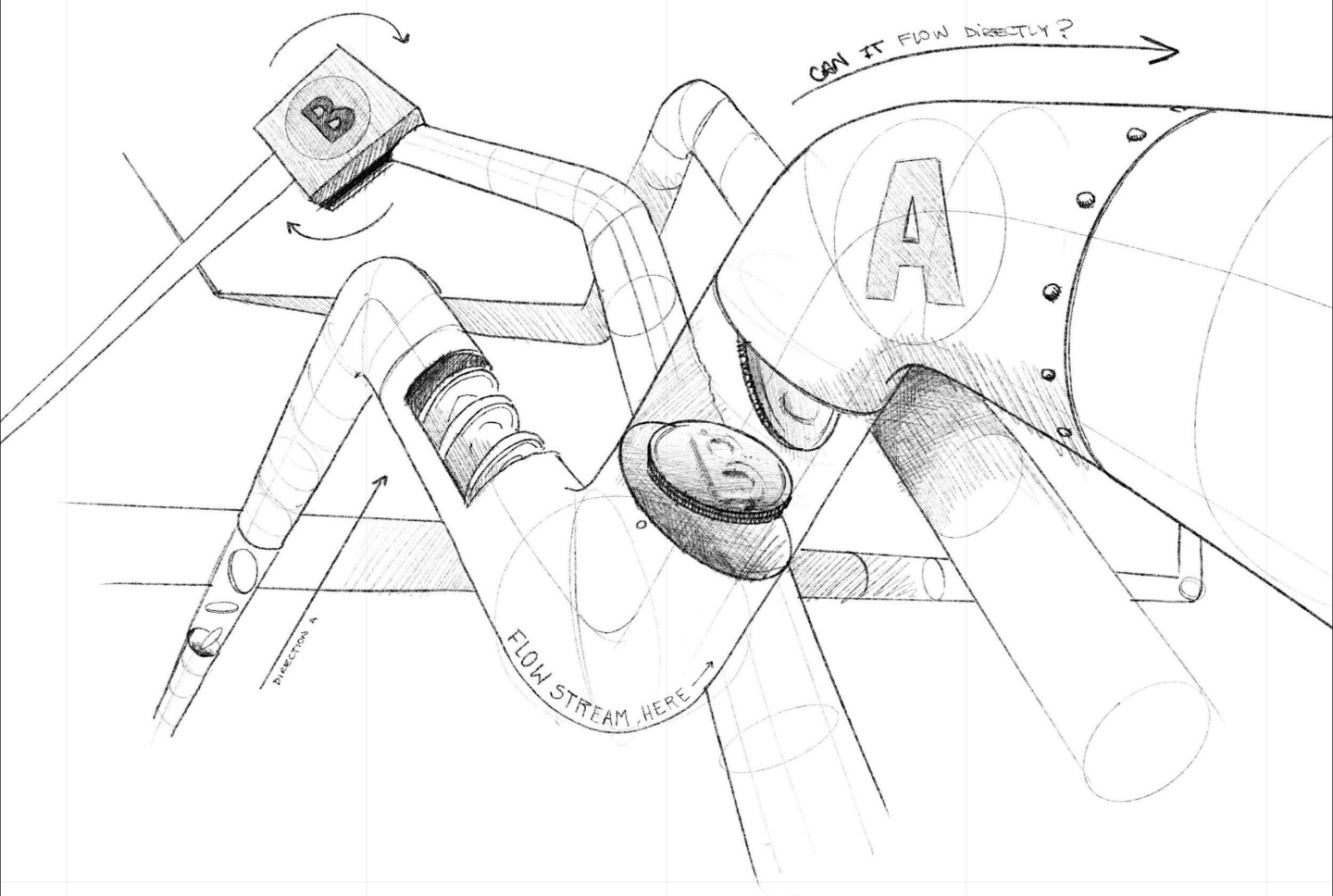




The Ten Commandments of Liquidity Incentives

A \$3.92 Billion Education in DeFi Capital Retention



Key Summary Statistics



Study Scope

- Sample size: 160 DeFi liquidity incentive programs
- Time period: 2020-2025
- Total starting TVL: \$9.51 billion
- Total ending TVL: \$5.84 billion
- Average starting TVL per program: \$59.5 million



Retention Outcomes

- Median TVL retention: 52.7% (30 days post-incentive)
- Median TVL loss: 47.27%
- Mean retention: 68.7%
- Programs experiencing net outflows: 78.1%
- Total confirmed mercenary capital: \$3.92 billion minimum



Distribution Characteristics

- P25 retention: 17.6%
- P75 retention: 94.9%
- Median mercenary capital per failed program: \$2.0 million

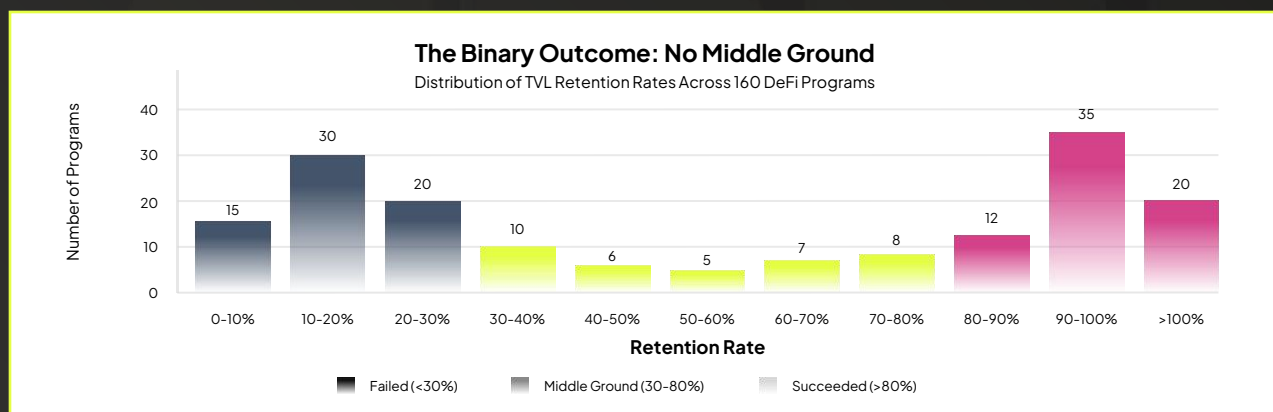
Executive Summary

The numbers tell a stark story of systemic capital flight in decentralized finance. Across five years and 160 programs, protocols discovered that attracting liquidity and retaining it are fundamentally different challenges.

While the average program launched with nearly \$60 million in deposits, the median outcome was pretty catastrophic: losing half of all capital within a month of ending token rewards.

Yet within this expensive education lies a pattern that separates spectacular success from total failure. The data reveals a bimodal distribution where programs either achieve retention above 90% or collapse below 25%, with very little middle ground. This isn't random; it's predictable based on adherence to ten fundamental design principles derived from billions in departed capital.

The protocols that understood these principles transformed mercenary farmers into committed stakeholders, converting temporary subsidies into permanent value creation. Those that ignored them joined the 78% majority that hemorrhaged capital when the music stopped. The choice between these outcomes isn't about luck, timing, or market conditions. It's about design.



Setting the Stage: Understanding the Battlefield

Before we reveal the 10 commandments, we must first establish the terminology and context that makes this analysis possible.

Total Value Locked represents the total dollar value of assets deposited in a protocol's smart contracts.

When we reference **Start TVL**, we mean the 30-day average TVL immediately before incentive programs start, smoothing daily volatility to establish a reliable baseline.

End TVL captures the 30-day average after the program concluded and markets settled, revealing the true sticky liquidity that remained.

The **Retention Ratio** tells us what proportion of liquidity survived the transition, calculated as End TVL divided by Start TVL. A retention of 1.0x means perfect capital preservation; 0.5x means half fled; 2.0x means the protocol doubled its liquidity despite ending incentives.



The **Net Sticky Change** shows the absolute dollar difference between ending and starting TVL. Positive values indicate growth; negative values reveal capital flight.

Mercenary Capital describes liquidity that enters protocols purely for yield extraction and exits immediately when incentives decline.

Our \$3.92 billion figure represents the conservative lower bound of definitively mercenary liquidity across all programs studied, calculated as the sum of all negative net sticky changes where Start TVL exceeded End TVL.

Token Incentives or Liquidity Mining refers to rewards paid in the protocol's native token to attract liquidity providers, functioning as customer acquisition costs in the DeFi economy.

With our terms defined and battlefield mapped, we present the ten commandments that determine whether your liquidity program joins the 22% that succeed or the 78% that fail.

The First Commandment: Thou Shalt Create Protocol-Native Utility

This commandment reigns supreme across our 160-program dataset, with programs featuring protocol-native utility achieving average retention of 0.89x versus 0.45x for those without.

The First Commandment: Protocol-Native Utility

Winners Create Utility, Losers Rent Liquidity

WITH PROTOCOL-NATIVE UTILITY

0.89x

Rocket Pool

9.23x



Start: \$278.6M

End: \$2.57B

+\$2.29B net sticky liquidity

Compound

22.83x



Start: \$284.8M

End: \$6.5B

+\$6.22B net sticky liquidity

Liquity Stability Pool

1.23x



Start: \$1.65B

End: \$2.03B

+\$380M net sticky liquidity

Alpaca Finance

1.53x



Start: \$1.05B

End: \$1.61B

+\$558M net sticky liquidity

WITHOUT PROTOCOL-NATIVE UTILITY

0.45x

Uniswap 1.2 Grants

0.20x



Start: \$4.68B

End: \$920M

-\$3.76B mercenary exodus

Quickswap

0.17x



Start: \$295.3M

End: \$49.4M

-\$245.9M mercenary exodus

Trader Joe

0.16x



Start: \$750M

End: \$118M

-\$632M mercenary exodus

Benqi

0.14x



Start: \$755.4M

End: \$102.6M

-\$652.8M mercenary exodus

The message is unambiguous: liquidity without purpose is **merely rented, never owned**. When liquidity directly powers core protocol mechanics like lending markets, liquid staking tokens, perpetual futures funding, or stablecoin stability, it generates sustainable revenue independent of token emissions. This creates what we call "structural stickiness" where even when incentive APR drops to zero, a floor yield remains from real economic activity.

Retention for programs with protocol-native utility	0.89x
Retention for programs without protocol-native utility	0.45x

Consider  extraordinary journey from \$278.61 million to \$2.57 billion, achieving 9.23x retention and adding \$2.29 billion in net sticky liquidity. This wasn't accident but architecture. As a decentralized Ethereum staking platform that allows users to stake as little as 0.01 ETH and earn rewards through liquid staking tokens (rETH),  made staking accessible without requiring 32 ETH or technical expertise.

Node operators earn approximately 7-20% APR depending on their RPL collateral ratio and Ethereum network conditions, but the extraordinary retention occurred because node operators were economically aligned to perform well for stakers, earning rewards for staked ETH, commission on pool staked ETH, and RPL rewards.

The protocol created genuine utility where liquidity providers weren't just farming RPL tokens; they were essential infrastructure operators earning multiple independent revenue streams from ETH staking yields, node operator commissions, and RPL token rewards.

 **Compound's** COMP Liquidity Mining program demonstrated similar dynamics, growing from \$284.8 million to \$6.5 billion for 22.83x retention and adding \$6.215 billion in net sticky liquidity. When you lend cryptocurrency on Compound, you receive corresponding cTokens and immediately begin earning interest on your crypto. Even without COMP incentives, lenders continued earning interest from genuine borrower demand. The protocol began distributing 1,116,310.81 COMP across ETH, DAI, USDC, USDT, BAT, REP, WBTC and ZRX markets, proportional to the interest being accrued in each market, but the core value was the lending utility itself, creating sustainable revenue independent of token emissions.

Even  Liquity, with zero formal incentives, grew from \$1.65 billion to \$2.03 billion for 1.23x retention, adding \$380.1 million through liquidation gains alone. Users can deposit LUSD tokens to the Stability Pool and make the protocol more robust against ETH price drops, with Stability Providers incentivized by liquidation gains and LQTY token rewards. The retention occurred because liquidations happen just below a collateral ratio of 110%, so stability providers most likely experience a net gain whenever a Trove is liquidated, with the value of received collateral regularly exceeding the lost LUSD. This created protocol-native utility where liquidity providers earned from essential protocol operations rather than artificial subsidies.

 Alpaca Finance achieved 1.53x retention on the typically mercenary BNB Chain, growing from \$1.048 billion to \$1.607 billion and adding \$558.4 million because leveraged yield farming created genuine utility beyond token distribution. The protocol provided infrastructure for leveraged positions, creating demand that persisted beyond ALPACA token incentives.

But what happens when this commandment is violated? The data is equally instructive.  UNISWAP L2 Grants program, despite operating on major chains with strong ecosystems, collapsed from \$4.68 billion to \$920 million for just 0.20x retention, losing \$3.76 billion. In 2022 and 2023,  UNISWAP conducted an incentives experiment in which UNI incentives were distributed to liquidity providers of specific Uniswap pools on Optimism.

Existing research concluded that the programs did not retain liquidity after incentives ended. The massive failure occurred because the fact that the program ran on a less active L2 (Optimism) for a pre-announced brief time likely prevented the liquidity→volume bootstrapping mechanism from delivering a stronger impact.

The program lacked demand-side coordination; it was purely supply-side focused without synchronized product launches, integrations, or user acquisition campaigns. Previous analysis pointed primarily to LPs removing liquidity immediately after the end of the program as evidence that the program had failed, demonstrating the importance of pairing liquidity incentives with actual demand growth.

Without protocol-native utility tying liquidity to core functions, even the Uniswap brand couldn't prevent massive capital flight.

Similarly,  QUICKSWAP fell from \$295.3 million to \$49.4 million for 0.17x retention, losing \$245.9 million when token incentives were the only attraction.

The contrast is stark: protocols that embedded liquidity into their core economic engine saw retention above 0.90x, while those treating liquidity as decoration rather than infrastructure consistently fell below 0.45x.

The commandment's lesson is clear: design your incentives to bootstrap liquidity that powers your protocol's engine, not decorates its dashboard.

The Second Commandment: Thou Shalt Not Cliff, But Taper

The architecture of reward distribution matters as much as the rewards themselves. Programs with sophisticated mechanics like vesting, tapering, and dynamic adjustments achieved 0.81x average retention versus 0.45x for basic, front-loaded distributions. Abrupt endings create abrupt exits, making the transition mechanism critical for retention success.

To understand these mechanics, imagine the difference between jumping off a cliff versus walking down a gradual slope.

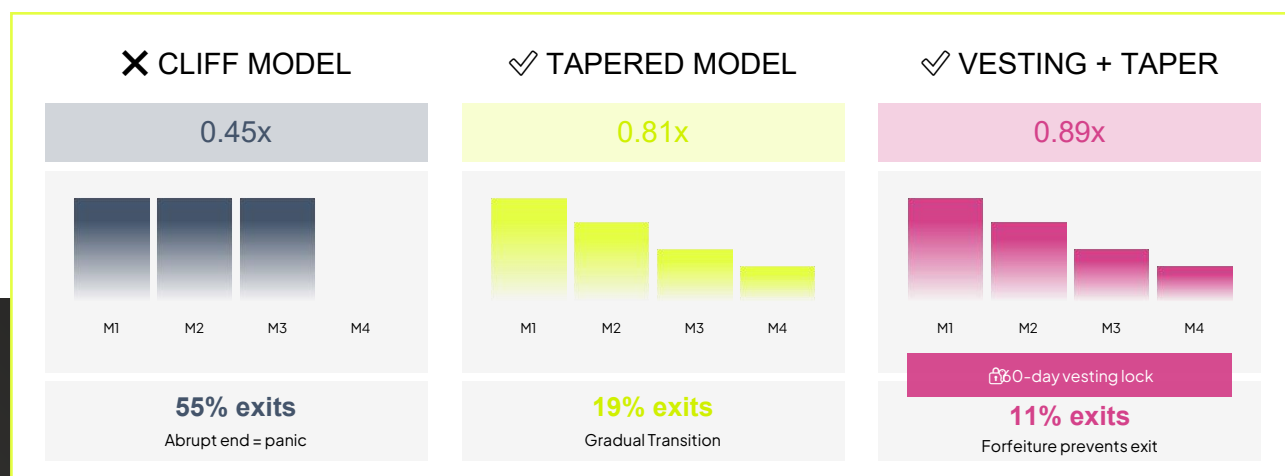
A cliff program might distribute 1000 tokens per day for 90 days, then suddenly drop to zero on day 91. A tapered program might start at 1000 tokens per day, reduce to 750 after 30 days, then 500 after 60 days, and finally 250 in the last month. The total tokens distributed might be similar, but the psychological and economic impact is profoundly different.

Vesting adds another layer of sophistication by delaying when earned rewards can be claimed. For example, tokens earned in month one might only become claimable in month three, creating a rolling incentive to remain in the pool. If you leave early, you forfeit unvested rewards. This transforms a simple farming decision into a complex calculation of opportunity cost.

Dynamic adjustments take this further by linking emission rates to performance metrics. If a pool achieves certain volume thresholds, emissions increase. If activity drops, emissions automatically reduce. This creates a feedback loop where successful pools earn more rewards, while unsuccessful ones naturally wind down without sudden shocks.

The Second Commandment: Emission Distribution Matters

How You End Determines How Much Stays



The Impact of Distribution Design



The above visual representation shows why sophisticated distribution mechanics are so critical. The cliff model creates a binary decision point where liquidity providers face an immediate 100% APR loss.

The tapered model smooths this transition, giving time for fee revenue and other yield sources to partially replace emissions. The vesting addition creates economic lock-in through forfeiture risk, achieving nearly 2x the retention of simple cliff models.

 **DeFi For All** program exemplified masterful execution, maintaining its \$702.1 million base while adding \$29 million for 1.04x retention through phased distribution across multiple partner integrations. Rather than facing a binary on/off moment, the program succeeded through phased reward distribution across multiple partner integrations rather than ending abruptly. Emissions tapered in sync with app adoption across the  **ecosystem**, avoiding liquidity cliffs and allowing organic growth to replace incentive dependency.

 **DeFi Incentive Program** achieved 1.39x retention, growing from \$97.4 million to \$135.1 million and adding \$37.7 million through a year-long program that succeeded through milestone-based disbursements. The program ensured incentives continued only when TVL and activity thresholds were met, keeping LPs actively engaged longer and allowing the ecosystem time to develop sustainable demand.

The beauty of proper mechanics shows in  steady growth from \$150 million to \$153 million for 1.02x retention, adding \$3 million.  Finance combines the best of  , Convex and  , designed to serve as Optimism's central liquidity hub. The modest but positive retention came from weekly veVELO votes that dynamically adjusted emissions toward pools with the highest governance backing, keeping rewards aligned with demand. veVELO can only receive fee income from the liquidity pool where it votes, making veVELO more inclined to vote for liquidity pools with better trading volume performance, forming a positive cycle for the platform.



Even  Finance, starting from just \$10 million, achieved 3.10x retention growing to \$31 million and adding \$21 million. Despite starting small and eventually peaking at \$1.25 billion during the program,  maintained net positive retention in the long tail after peak TVL due to ongoing program structure that sustained engagement through gradual wind-down rather than abrupt termination.

But violations of this commandment led to catastrophic failures.  Protocol's Epoch 4 Emissions collapsed from \$20.7 million to \$5.5 million for just 0.27x retention, losing \$15.2 million. The discrete epoch structure with hard cut-offs created an APR cliff that liquidity providers fled from immediately. Chronos's STIP Emission Program on Arbitrum declined from \$1.87 million to \$1.10 million for 0.59x retention, losing \$770,000 when its abbreviated window and abrupt end produced a clear post-program drop where fees couldn't fill the gap.

❖ VELOCORE zkSync LP Program fell from \$600,000 to \$300,000 for 0.50x retention, losing \$300,000 when its short epoch with limited coordination failed to establish durable routing. When incentives faded abruptly, there was no fee base to hold liquidity. The pattern repeats across all programs with cliff structures: immediate and severe capital flight averaging 0.45x retention compared to 0.81x for those with proper tapering mechanics.

The lesson: treat your emission schedule as a glide path, not a cliff.

The Third Commandment:

Thou Shalt Respect Risk-Adjusted Returns

Asset selection shapes retention destiny with mathematical precision. Blue-chip and stable pairs averaged 0.87x retention in our dataset, while volatile-alt pairs collapsed to 0.42x. This dramatic difference persists even when incentive APRs are identical, revealing a fundamental truth: impermanent loss is permanent exodus.

The Third Commandment: Asset Risk Determines Retention

Impermanent Loss is Permanent Exodus

● Stable Pairs (>0.80x) ● Blue-chip Pairs (0.50–0.80x) ● Volatile Pairs (<0.50x)

Stable Asset Pairs – Average: 0.87x Retention

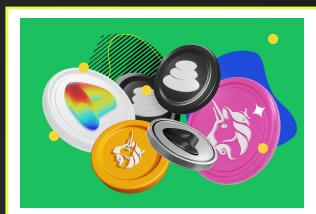
Balancer	26.34x	+\$891.8M gained
Curve	1.83x	+\$680M gained
Liquity	1.23x	+\$380M gained

Blue-chip Pairs – Mixed Results

Pangolin	1.60x	+\$77.3M gained
PancakeSwap	0.52x	-\$1.61B lost

Volatile Alt Pairs – Average: 0.42x Retention

Quickswap	0.17x	-\$245.9M lost
Trader Joe	0.16x	-\$632M lost
Stargate	0.14x	-\$395.9M lost
Benqi	0.14x	-\$652.8M lost



Curvepools are optimized for similar-asset pairs such as USDC/USDT/DAI or ETH/stETH, and each user receives a share of newly minted CRV proportional to the amount of LP tokens locked. Even after CRV rewards declined, the stable-stable focus meant low slippage and consistent aggregator routing, with swap fees remaining attractive.

Balancer achieved an extraordinary 26.34x retention, growing from \$35.2 million to \$927 million and adding \$891.8 million through a sophisticated approach. veBAL (vote-escrow BAL) is a vesting system based on Curve veCRV mechanism which locks 80/20 BAL/WETH Balancer Pool Tokens for a maximum of 1 year. The extraordinary retention came from veBAL holders voting on which liquidity pools receive BAL liquidity mining incentives, with the flow of incentives fully controlled by veBAL holders.

The veModel aligns incentives of token holders with the long-term success of  Balancer, with protocols looking to increase their liquidity competing for limited BAL emissions with bribes.

The cautionary tales are equally instructive and devastating.  **TraderJoe** JOE Liquidity Mining collapsed from \$750 million to \$118 million for 0.16x retention, losing \$632 million despite high nominal APRs.  **TraderJoe** is an automated market maker (AMM) that focuses on trading on Avalanche, founded in 2021 by anonymous developers. The DEX offers services related to lending, borrowing, liquidity pools, leverage trading, yield farming, NFTs, staking, and a launchpad. The massive failure occurred despite being on a strong ecosystem because providing liquidity on concentrated liquidity exchanges can come with Impermanent Loss risk, which occurs when the prices of assets in the pool deviate from their initial prices and is highest during volatile times. The AVAX/JOE pairing created severe impermanent loss during volatile market conditions. The more volatile the assets are in the pool, the more likely it is that you can be exposed to impermanent loss, and despite liquidity incentives and fees generated by activity on the platform, returns couldn't offset the impermanent loss destruction when AVAX experienced high volatility.

 **PancakeSwap** lost \$1.61 billion falling from \$3.39 billion to \$1.78 billion for 0.52x retention.

 **PancakeSwap** is an automated market maker (AMM) and decentralized exchange (DEX) launched in 2020, initially used for swapping BEP-20 tokens on the BNB Smart Chain (BSC) but has since expanded to other chains. The massive failure occurred despite BNB being a large-cap asset because pairing with CAKE's volatility and weaker external volume meant LPs left quickly when incentives tapered. Another risk for liquidity miners is called impermanent loss, which arises if the prices of tokens change from when you add them. Despite  **PancakeSwap** transitioning to a deflationary token model called "Ultrasound CAKE" where over 102% of minted CAKE is burned weekly, the CAKE token's volatility created impermanent loss that destroyed LP returns when combined with insufficient fee generation to compensate.

The pattern extends beyond DEXs. **BENQI** Lending and Liquid Staking program on Avalanche crashed from \$755.4 million to \$102.6 million for 0.14x retention, losing \$652.8 million when volatile asset exposure combined with market risk-off sentiment. Even stacked yields couldn't compensate for the underlying asset risk.  **QUICKSWAP** hemorrhaged from \$295.3 million to \$49.4 million for 0.17x retention, losing \$245.9 million as volatile pairs created a death spiral of impermanent loss and exits.

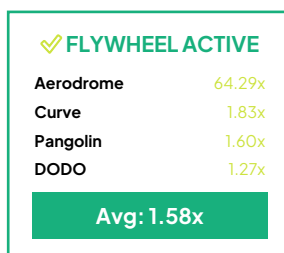
 multi-chain program fell from \$461.8 million to \$65.9 million for 0.14x retention, losing \$395.9 million when cross-chain bridge risks compounded with volatile asset exposure. The data reveals an iron law: programs with stable or blue-chip pairs consistently achieve retention above 0.80x, while those with volatile pairs rarely exceed 0.50x retention regardless of incentive size.

This commandment demands strategic pair selection. Choose your battles based on risk-adjusted returns, not headline APRs.

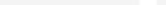
A hand-drawn sketch of a mechanical assembly. The drawing includes several components and flow indicators:

- Component A:** A large, curved, cylindrical part on the right side of the sketch.
- Component B:** A small, square block with a circular feature, located at the top left. It has curved arrows indicating rotation.
- Component C:** A vertical cylindrical part in the center, with a circular feature near the bottom.
- Component D:** A horizontal cylindrical part extending from the center towards the right.
- Component E:** A vertical cylindrical part on the left, with a circular feature near the bottom.
- Component F:** A horizontal cylindrical part extending from the center towards the left.
- Component G:** A small, circular component located between the center and the left side.
- Component H:** A small, circular component located near the bottom center.
- Component I:** A small, circular component located near the bottom left.
- Component J:** A small, circular component located near the bottom right.
- Flow Indicators:**
 - An arrow labeled "FLOW" points upwards along the left vertical cylinder (E).
 - An arrow labeled "FLOW/STREAM HERE" points downwards along the central vertical cylinder (C).
 - An arrow labeled "CAN IT FLOW DIRECTLY?" points to the right, above the large curved component (A).
- Other Labels:**
 - A large letter "A" is drawn on the curved component (A).
 - A large letter "B" is drawn on the square block (B).
 - A large letter "C" is drawn on the central vertical cylinder (C).
 - A large letter "D" is drawn on the horizontal cylinder extending to the right (D).
 - A large letter "E" is drawn on the left vertical cylinder (E).
 - A large letter "F" is drawn on the horizontal cylinder extending to the left (F).
 - A large letter "G" is drawn on the circular component between the center and left (G).
 - A large letter "H" is drawn on the circular component at the bottom center (H).
 - A large letter "I" is drawn on the circular component at the bottom left (I).
 - A large letter "J" is drawn on the circular component at the bottom right (J).

The Liquidity-to-Volume-to-Fee Flywheel



✖ FLYWHEEL BROKEN	
Evmos	0.03x
Aurora	0.21x
Harmony	0.36x
Celo	0.42x
Avg: 0.44x	

's ascent from \$8.4 million to \$540 million for 64.29x retention, adding \$531.6 million, wasn't accident but architecture.  is a ve(3,3) METADex on Base that combines features of  **UNISWAP v2 and v3**,  Curve Finance and Convex into a single streamlined protocol.

It serves as the central trading & liquidity marketplace on Base, generating more than \$100m in yearly revenue, all of which is distributed to token holders. The extraordinary success came from 100% of the protocol revenue being distributed to veAERO lockers depending on the pool they vote for, with revenue coming from trading fees and incentives. 100% of the trading fees generated by  are distributed weekly to veAERO holders, with voting for pools that attract more liquidity and trading volume increasing total protocol fees. The ve-gauge voting system allows protocols to get ~2x \$ worth of emissions compared to the incentives they deposit—if they deposit \$10k worth of incentives, they would receive ~\$20k worth of token emissions, creating a powerful flywheel where deep liquidity attracted trading volume, which generated fees, which attracted more votes and liquidity.

 Curve Finance built its empire on this principle, growing from \$820 million to \$1.5 billion for 1.83x retention and adding \$680 million. The stable-stable focus meant low slippage and consistent aggregator routing, with swap fees remaining attractive even as CRV rewards declined. The efficient algorithms for similar assets created sustainable fee generation that could partially replace emissions.

 PANGOLIN captured Avalanche DEX flow through depth improvements, growing from \$129.6 million to \$206.9 million for 1.60x retention and adding \$77.3 million. On Avalanche,

 PANGOLIN captured aggregator flow through depth improvements, producing meaningful fee yield that persisted after emissions. The protocol's focus on routing efficiency on AVAX allowed it to maintain strong fee APR. DODO maintained growth from \$30.2 million to \$38.3 million for 1.27x retention, adding \$8.1 million through smart design. DODO's success came from incentivizing pools that were already strong RFQ (Request for Quote) candidates, so routing persisted via DODO's PMM (Proactive Market Maker) order flow engine and kept LP returns viable even after incentives tapered.

But what happens when this commandment is violated? Programs that attracted massive TVL without converting it to volume suffered catastrophic failures.  Evmos DeFi Incentives program collapsed from \$2.8 million to just \$76,000 for 0.03x retention, losing \$2.72 million. Despite incentives, the liquidity never captured meaningful routing or generated fees. Aurora's Ecosystem DeFi Incentives fell from \$76.2 million to \$15.8 million for 0.21x retention, losing \$60.4 million when idle liquidity found no productive use.

 Harmony DeFi Boost dropped from \$10 million to \$3.6 million for 0.36x retention, losing \$6.4 million as liquidity sat unused without aggregator integration. Celo's DeFi Incentive Campaign declined from \$55.3 million to \$23.5 million for 0.42x retention, losing \$31.8 million when depth improvements failed to attract routing. These programs all made the same fatal error: they funded depth without ensuring it would be used.

The contrast with successful implementations is striking. Programs achieving the flywheel averaged 1.58x retention compared to just 0.44x for high-TVL programs without meaningful post-incentive volume. The commandment is unforgiving: fund depth that gets used, not depth that sits idle.

The Fifth Commandment: Thou Shalt Coordinate Supply With Demand



Programs that synchronized liquidity incentives with demand-side growth achieved 0.88x retention versus 0.46x for supply-only initiatives. Liquidity without users is charity, not investment. This isn't about hoping users appear; it's about ensuring they're already arriving when liquidity lands.

Near Proximity program achieved 2.33x retention, growing from \$72.5 million to \$168.7 million and adding \$96.2 million by perfectly orchestrating incentives with ecosystem development. The program's success came from perfect timing, wherein incentives coincided with major launches like Ref Finance upgrades and Burrow lending integration, expanding actual yield opportunities in parallel with liquidity mining rather than hoping demand would materialize later.

 **MANTLE** EcoFund achieved 6.64x retention, growing from \$5.3 million to \$35.2 million and adding \$29.9 million through similar coordination. Liquidity mining was aligned with ecosystem seeding for  **MANTLE** -native protocols, ensuring sustained demand after incentives via integrated product pipelines. The coordination ensured liquidity had productive work from day one.

Linea Surge campaign achieved 3.33x retention, growing from \$2.1 million to \$7 million and adding \$4.9 million through strategic timing. Launch incentives ran alongside key integrations into multi-chain DeFi apps and marketing to drive bridge inflows, sustaining usage post-incentive. The program successfully synchronized supply and demand.

The failures tell a devastating story of misalignment.  **UNISWAP** L2 Grants program, despite operating on major chains with strong ecosystems, collapsed from \$4.68 billion to \$920 million for just 0.20x retention, losing \$3.76 billion. In 2022 and 2023, Uniswap conducted an incentives experiment in which UNI incentives were distributed to liquidity providers of specific Uniswap pools on Optimism. The massive failure occurred because the fact that the program ran on a less active L2 (Optimism) for a pre-announced brief time likely prevented the liquidity→ volume bootstrapping mechanism from delivering a stronger impact. The program lacked demand-side coordination—it was purely supply-side focused without synchronized product launches, integrations, or user acquisition campaigns.

Velocimeter Season 4 Emissions collapsed from \$2.6 million to \$500,000 for 0.19x retention, losing \$2.1 million when short-season emissions lacked any follow-through on demand. THENA's veTHE Wars Rounds crashed from \$62 million to \$4.6 million for 0.07x retention, losing \$57.4 million despite governance locks because no underlying demand materialized to use the liquidity.

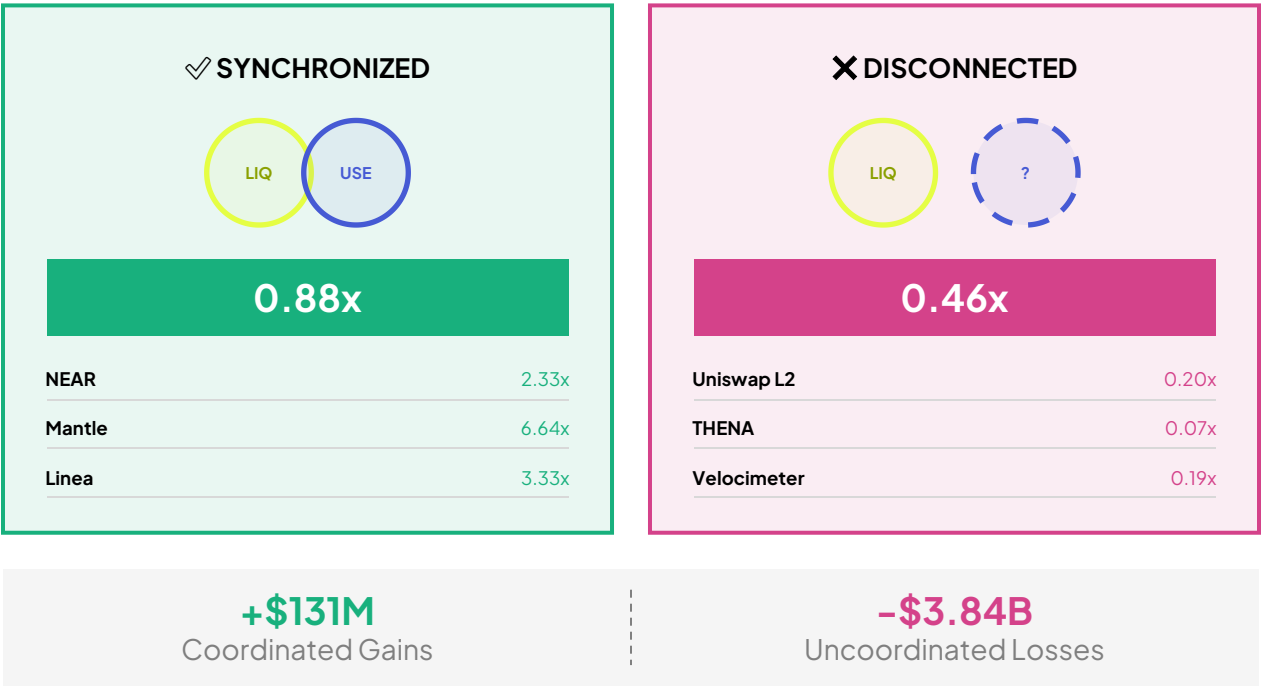
 **gTrade** GNS Liquidity Mining fell from \$52.4 million to \$30.9 million for 0.59x retention, losing \$21.5 million when trader activity failed to materialize alongside liquidity incentives. The perpetual platform had liquidity but no traders to use it.

 **Equilibria Finance** vePendle Round 3 Bribes declined from \$145.1 million to \$90.44 million for 0.62x retention, losing \$54.66 million when bribe income couldn't compensate for the absence of real underlying demand.



The Fifth Commandment: Coordinate Supply With Demand

Liquidity + Users vs Liquidity Alone



The data reveals that well-coordinated programs averaged 0.88x retention while uncoordinated supply-side-only programs averaged just 0.46x. This commandment requires treating incentives as ignition, not fuel.



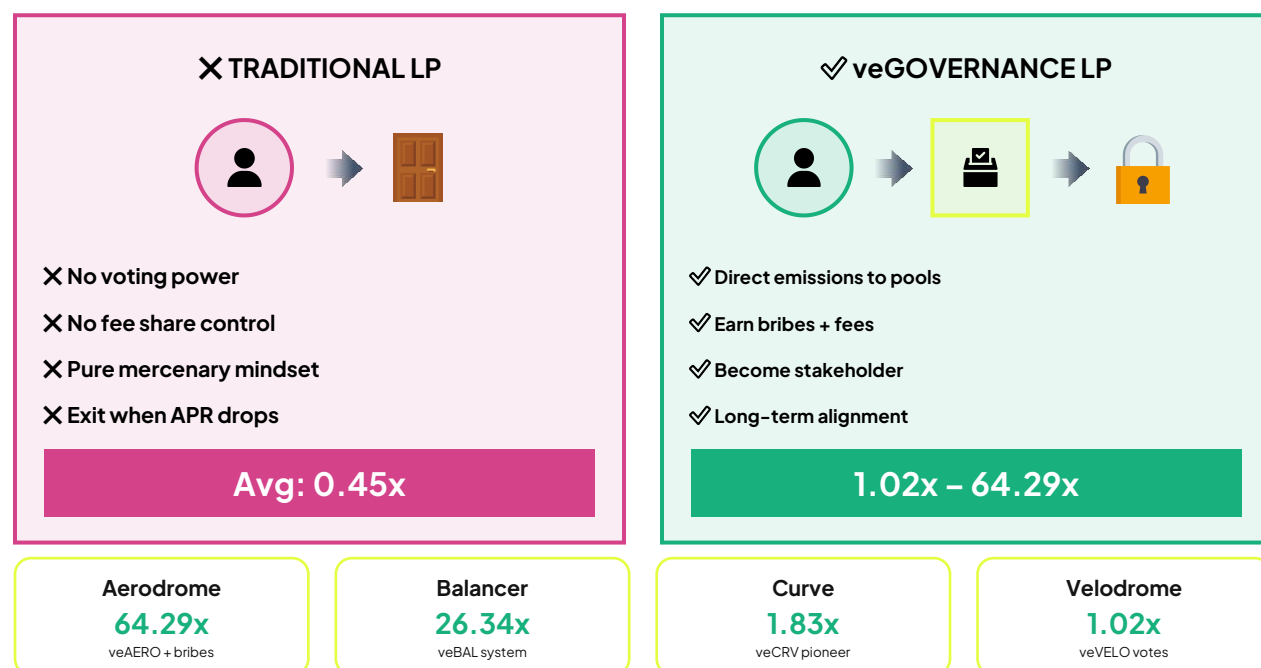
The Sixth Commandment:

Thou Shalt Make Liquidity Providers Governors

Governance-linked liquidity models transform mercenary providers into invested stakeholders. Those who control the future stay for it. While impact varies with implementation quality, successful ve-models achieve retention ranging from modest (1.02x) to extraordinary (64.29x), depending on underlying demand and design sophistication.

The Sixth Commandment: Make LPs Governors

The Sixth Commandment: Make LPs Governors

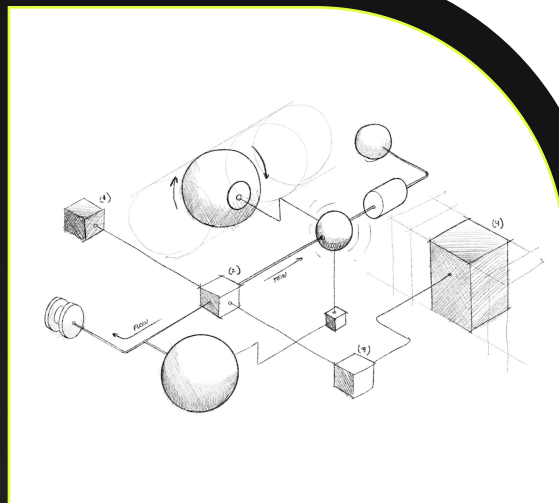


💡 **Key Pattern:** Governance transforms mercenary LPs into invested stakeholders. Even modest implementations (Velodrome 1.02x) beat traditional models. When combined with bribes and fee sharing (Aerodrome 64.29x), retention becomes extraordinary.

🌈 Curve Finance pioneered this model, achieving 1.83x retention as liquidity providers became politically invested stakeholders, growing from \$820 million to \$1.5 billion and adding \$680 million. Users can allocate their veCRV towards one or more liquidity gauges. Gauges receive a fraction of newly minted CRV tokens proportional to how much veCRV the gauge is allocated. The weight vote for any one gauge cannot be changed more often than once in 10 days. The veCRV lockups and gauge voting channeled emissions to strategic stable pools, and even as CRV rewards moderated, routing and fee APR supported retention through the governance-directed system.



 **Balancer** veBAL system achieved 26.34x retention, growing from \$35.2 million to \$927 million and adding \$891.8 million by creating extraordinary stakeholder alignment. veBAL holders decide which pools receive BAL liquidity mining incentives, with voting happening on mainnet. VeBAL holders can vote for any combination of gauges, allocating their voting power as they see fit. The veBAL system aligned long-term lockers with pool selection, and LST-blue-chip pairs benefited from both governance-directed emissions and organic routing, compounding stickiness over the multi-year program.



 **AERODROME** 64.29x retention, growing from \$8.4 million to \$540 million and adding \$531.6 million, came from combining ve-mechanics with aggressive bribe markets and strategic gauge voting. The veAERO system plus active gauge markets concentrated rewards into winning pairs, which then captured aggregator routing and sustained fee APR. The combination of governance locks, bribe markets, and fee distribution created multiple revenue streams that made exit economically irrational.

Even modest implementations showed positive effects.  **velodrome** maintained steady growth from \$150 million to \$153 million for 1.02x retention, adding \$3 million through governance innovation. veVELO holders influence the distribution of VELO emissions to liquidity pools by voting during weekly epochs. In return, voters receive trading fees and other incentives from the pools they support, aligning governance with rewards. Weekly governance cycles reallocated emissions toward demand, keeping core pools relevant and avoiding sharp post-program unwinds.

Yet governance isn't magical when underlying demand is absent. THENA collapsed to 0.07x retention, falling from \$62 million to \$4.6 million and losing \$57.4 million despite extensive ve-mechanics because no underlying demand existed to convert governance games into sustainable APR. Despite extensive ve-locks and governance mechanisms, THENA collapsed because no underlying demand existed to convert governance games into sustainable APR. The governance locks became a prison rather than a commitment device when external volume remained thin.

 **Equilibria Finance** 0.62x retention, declining from \$145.1 million to \$90.44 million and losing \$54.66 million, proved that the vePendle bribe mechanism wasn't sufficient when base demand softened. Governance and bribe income couldn't offset the impact of declining underlying demand, proving that governance amplifies demand but cannot create it from nothing.

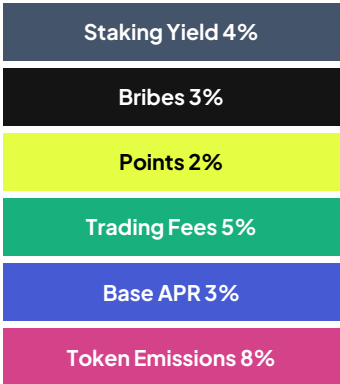
The Seventh Commandment: Thou Shalt Stack Yields Efficiently

Capital efficiency boosters show the widest retention range in our dataset, from 0.59x to 87.42x, because they amplify both successes and failures. Multiple income streams create multiple reasons to stay, but when properly implemented with genuine demand, stacked yields create powerful retention. When forced without underlying utility, they accelerate collapse.

The Seventh Commandment: Stack Yields Efficiently

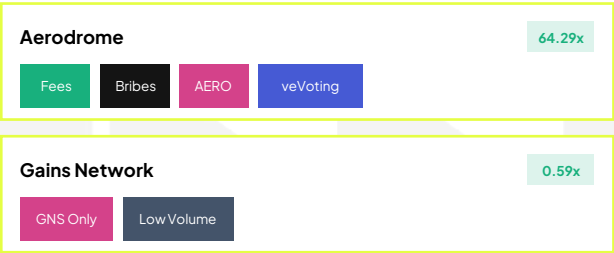
Multiple Income Streams = Multiple Reasons to Stay

✓ STACKED YIELDS



25% APR

0.76x



✗ SINGLE SOURCE



15% APR

0.48x



💡 Key Pattern: When token emissions drop from 8% to 0%, single-source programs lose everything. Multi-source programs still offer 17% from other yields, preventing mass exodus.

Swell Network's swETH program achieved 87.42x retention, growing from just \$4.72 million to \$412.6 million and adding \$407.88 million by stacking liquid staking yields with liquidity incentives and points programs. The LST and restaking meta produced extraordinary TVL expansion through stacked yields. Residual staking yield and downstream rehypothecation opportunities sustained participation long after initial programs ended, with multiple independent yield sources preventing binary exit decisions.

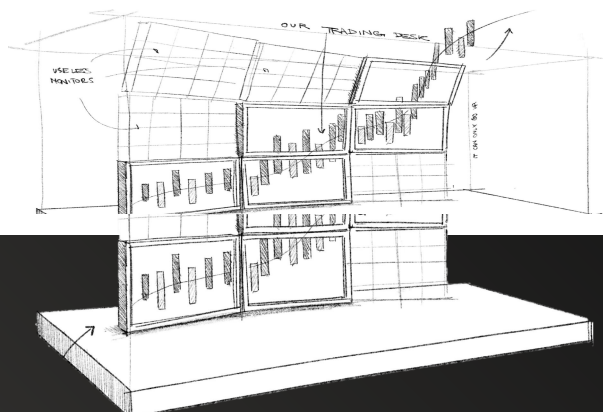
ether.fi achieved 14.65x retention, growing from \$247.86 million to \$3.63 billion and adding \$3.382 billion through similar stacking. Restaking plus integrations created a layered payoff stack combining ETHFI rewards, restaking yields, and LP incentives. The residual staking yield and utility of LRTs (Liquid Restaking Tokens) supported durability after the initial program phase through genuine capital efficiency gains.

MorphoveMorpho TVL Bootstrap grew from \$63.16 million to \$783.72 million for 12.41x retention, adding \$720.56 million. The modular lending architecture increased capital efficiency and flexibility, helping liquidity persist as emissions rotated through gauges and integrations. The efficient capital deployment created genuine utility beyond just token farming.

KAMINO Finance on Solana achieved 1.81x retention, growing from \$79.57 million to \$143.70 million and adding \$64.13 million through concentrated liquidity vaults that automated range management and fee capture. Strategy design and points accrued to higher yield without requiring active management from liquidity providers.

DeltaPrime Lending Yield Boost achieved 2.52x retention across multiple chains, growing from \$12 million to \$30.2 million and adding \$18.2 million. Leverage-enabled strategies amplified returns while the credit layer created both higher yield and operationally stickier position sets. The multi-leg positions created natural friction that delayed exits.

But efficiency without demand spells disaster. **gTrade** 0.59x retention, falling from \$52.4 million to \$30.9 million and losing \$21.5 million, showed that despite capital efficiency features and leverage capabilities, the program failed because the core demand layer (trader activity) softened. When perpetual trading volume declined, capital efficiency alone couldn't offset the lack of genuine fee generation from actual trading activity. The principle is clear: use capital efficiency to raise the floor, not mask the absence of foundations.

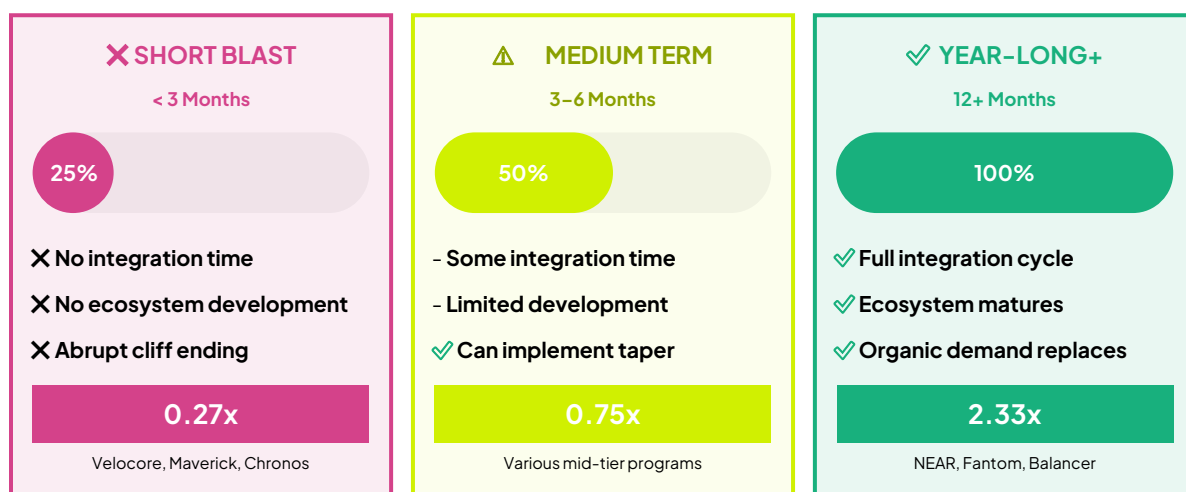


The Eighth Commandment: Thou Shalt Match Duration to Development

Program duration doesn't create demand, but proper calibration enables demand to develop. Time without progress is waste; progress without time is impossible. Year-long programs achieved significantly better retention than short blasts, but only when that time was used productively for integration and ecosystem development.

The Eighth Commandment: Match Duration to Development

Time Without Progress is Waste; Progress Without Time is Impossible



💡 Key Finding: Year-long programs achieve 8.6x better retention than short blasts (2.33x vs 0.27x). The extra time allows organic activity to develop and replace subsidy dependency.

 **fantom** year-long DeFi Incentive Program achieved 1.39x retention, growing from \$97.4 million to \$135.1 million and adding \$37.7 million by giving DEX and lending integrations time to mature. The year-long cadence gave DEX and lending integrations time to mature, helping fee APR and usage absorb liquidity after incentives. The extended timeline allowed organic activity to develop and replace subsidy dependency.

Near Proximity program achieved even better results with 2.33x retention, growing from \$72.5 million to \$168.7 million and adding \$96.2 million over a full year that overlapped with key launches. A full-year runway overlapped with key launches such as Ref Finance upgrades and Burrow lending, letting new utility catch the baton as emissions tapered. The timing alignment was crucial for sustained success.

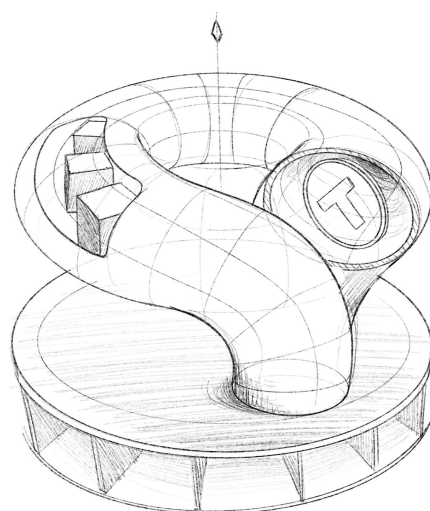
Balancer multi-year approach achieved 26.34x retention, growing from \$35.2 million to \$927 million and adding \$891.8 million by repeatedly reweighting toward productive pairs. Multi-year emissions combined with ve-governance allowed repeated reweighting toward productive pairs. The long horizon embedded LST and blue-chip routing over time, compounding retention through multiple cycles of improvement and optimization.

Contrast this with short, mistimed programs that created devastating failures.

VELOCORE zkSync LP Program lasted just weeks and collapsed from \$600,000 to \$300,000 for 0.50x retention, losing \$300,000 when the short epoch with limited coordination on zkSync didn't establish durable routing. When incentives faded after the brief program, there was no fee base or integrated demand to hold liquidity, resulting in immediate capital flight.

Chronos's abbreviated STIP program dropped from \$1.87 million to \$1.10 million for 0.59x retention, losing \$770,000 when the abbreviated STIP window and abrupt end on Arbitrum produced a clear post-program drop where fees couldn't fill the gap left by ended emissions. The insufficient timeline prevented sustainable demand development.

maverick discrete epochs created the worst outcome, falling from \$20.7 million to \$5.5 million for just 0.27x retention and losing \$15.2 million through hard stops. Discrete epochs with hard cut-offs created APR cliffs that liquidity providers fled immediately. Without tapers or synchronized integrations, TVL retraced catastrophically when the artificial support was removed.



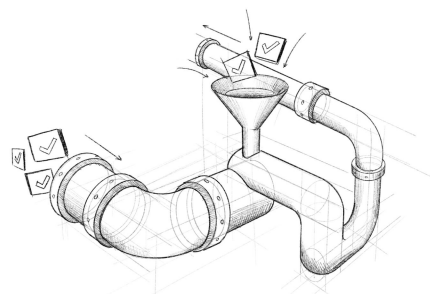
The Ninth Commandment: Thou Shalt Diversify Reward Sources

Multi-source reward programs achieved 0.76x retention versus 0.48x for single-source designs. Single points of failure create single moments of exodus. By layering tokens, points, fees, bribes, and staking yields, successful programs avoided binary exit triggers when any one source declined.

Linea Surge campaign achieved 3.33x retention, growing from \$2.1 million to \$7 million and adding \$4.9 million by combining immediate token rewards with points toward future airdrops and growing fee revenue from integrations. Points plus token emissions alongside growing integrations produced multiple payoffs. As emissions eased, usage expectations and points accumulation supported retention by diversifying reward timelines and sources.

Scroll Sessions grew from \$58.3 million to \$76.4 million for 1.31x retention, adding \$18.1 million through points that deferred exits while organic activity developed. Points deferred exits while organic activity on Scroll increased, allowing fees and integrations to shoulder more of the yield burden. The points system created medium-term retention bridges.

AERODROME extraordinary 64.29x retention came from masterfully orchestrating emissions, bribes, and fees into a unified but diversified yield stack.



Starting from just \$8.4 million and growing to \$540 million while adding \$531.6 million, a diversified stack of emissions, bribes via ve-gauges, and fee APR from entrenched routing created durable, multi-source returns. Each revenue stream supported the others through transitions, preventing single points of failure.

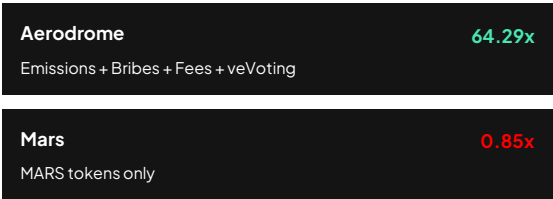
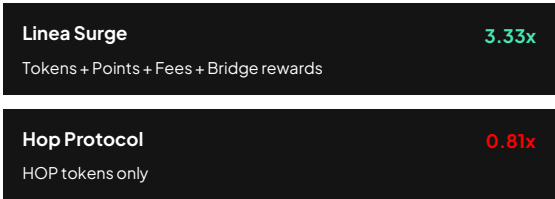
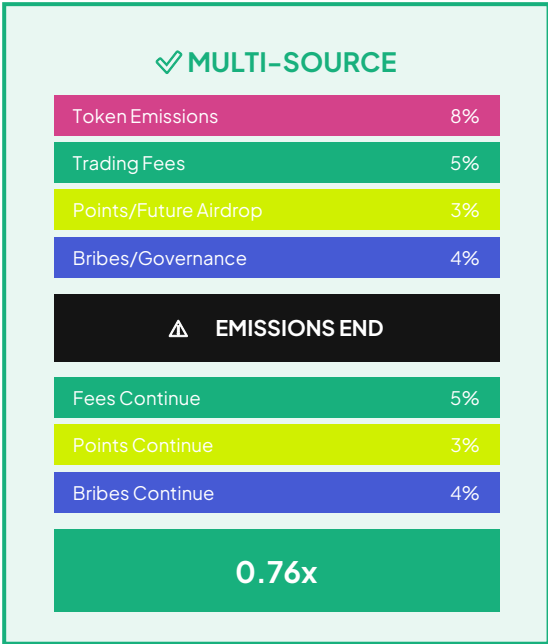
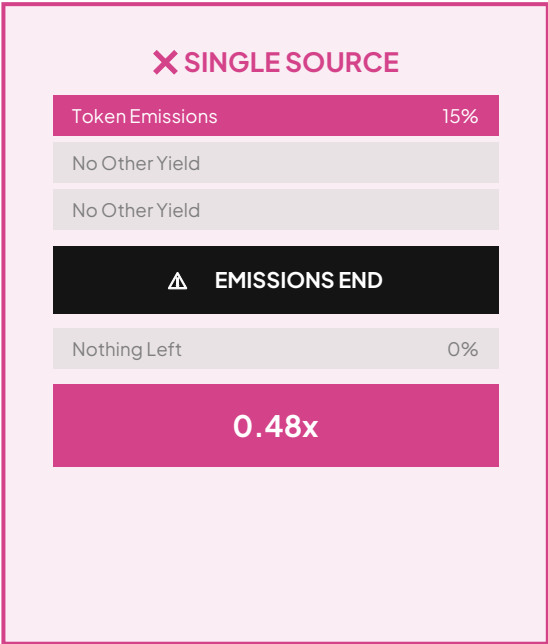
KAMINO Finance maintained strong growth from \$79.57 million to \$143.70 million for 1.81x retention, adding \$64.13 million through strategy vault fees plus points and automated range management that lifted non-incentive APR. The diversification across multiple yield sources slowed post-program outflows significantly.

Yet diversification without substance fails catastrophically. **Equilibria Finance** 0.62x retention, falling from \$145.1 million to \$90.44 million and losing \$54.66 million, proved that despite diversified sources including bribes and governance yield, the program failed when base demand softened. Multiple weak streams don't equal one strong river; each source must have independent value and genuine utility.

The single-source failures tell a consistent story. Programs relying solely on token emissions without any secondary yield sources averaged just 0.48x retention. Hop Protocol achieved only 0.81x retention despite operating on strong chains because it lacked yield diversification. Gravita and Nereus both achieved just 0.86x retention when single reward streams dominated. Mars managed only 0.85x retention on frontier chains with limited diversification options.

The Ninth Commandment: Diversify Reward Sources

Single Points of Failure Create Single Moments of Exodus



This commandment requires thoughtful construction: layer at least three independent yield sources, ensure one source can sustain attractive APR alone, and make each component meaningful enough to affect behavior independently.

The Tenth Commandment:

Thou Shalt Use Friction Wisely

Exit penalties and tenure boosts show highly variable impact because they amplify underlying dynamics rather than creating them. Friction without purpose creates resentment; friction with purpose creates commitment.

When paired with genuine utility, friction helps retention. When imposed on weak foundations, it merely delays inevitable collapse.

The Tenth Commandment: Use Friction Wisely

Friction Without Purpose Creates Resentment; Friction With Purpose Creates Commitment



Lock Periods

Time-based exit restrictions



Tenure Boosts

Rewards for staying longer



Exit Penalties

Costs for early withdrawal

✓ **FRICION + DEMAND**

Friction

 +

Demand

= **COMMITMENT**

Idle Finance	19.09x
Ramses	4.40x
Pickle	3.33x

✗ **FRICION + NO DEMAND**

Friction

 +

No Demand

= **PRISON**

THENA	0.07x
Velocimeter	0.19x
Equilibria	0.62x

✓ **NO FRICION + DEMAND**

Strong Demand

= **NATURAL STAY**

Compound	22.83x
Curve	1.83x

✗ **NO FRICION + NO DEMAND**

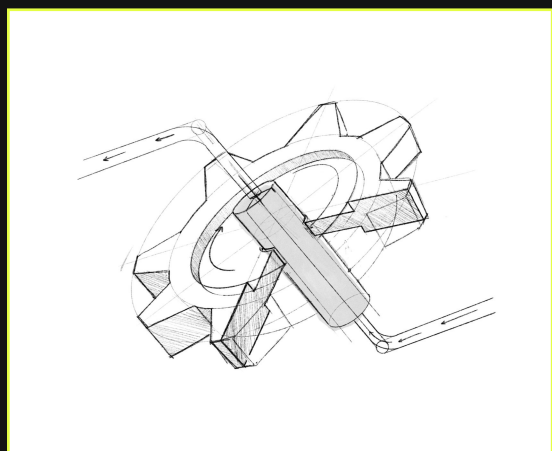
No Demand

= **INSTANT EXIT**

Evmos	0.03x
Aurora	0.21x

Idle Finance achieved spectacular 19.09x retention, growing from \$5.8 million to \$110.7 million and adding \$104.9 million through tenure-friendly vault mechanics that rewarded continued participation while aggregator integrations matured. Extraordinary growth came from tenure-friendly vault mechanics that rewarded continued participation while aggregator integrations matured. The friction wasn't punitive but aligned with natural usage patterns, creating genuine commitment.

Pickle Finance's 3.33x retention, growing from \$26.1 million to \$86.9 million and adding \$60.8 million, came from aligning vault incentives with continued usage patterns. Yield-aggregator incentives associated with continued vault usage showed solid retention by aligning vault incentives with continued usage patterns rather than punitive measures. Ramses achieved 4.40x retention, growing from \$740,700 to \$3.26 million and adding \$2.52 million by matching lock requirements to realistic development timelines. The veRAM system aligned tenure-centric participation with targeted incentive windows, yielding strong post-program TVL relative to the start through governance-linked tenure rewards.



Even modest implementations like  **Velodrome** 1.02x retention showed positive effects when lock-derived influence and recurring votes encouraged continued participation. Lock-derived influence and recurring votes encouraged continued participation while emissions rotated. The weekly cycles created natural commitment periods without excessive friction.

But friction without demand creates disasters of epic proportions. THENA's collapse to 0.07x retention, falling from \$62 million to \$4.6 million and losing \$57.4 million, occurred despite extensive lock requirements because no underlying demand existed. Despite extensive ve-locks and governance mechanisms, THENA collapsed because no underlying demand existed to convert governance games into sustainable APR. The governance locks became a prison rather than a commitment device when external volume remained thin. Despite lock-oriented governance, thin external demand led to significant unwind. The locks couldn't compensate for the absence of genuine trading volume and fee generation.

 **Velocimeter** 0.19x retention, collapsing from \$2.6 million to \$500,000 and losing \$2.1 million, showed that short-season emissions with limited follow-through on demand failed to sustain capital after rewards receded. The friction couldn't buy enough time for real demand to materialize.

 **Equilibria Finance** governance locks couldn't prevent 0.62x retention, declining from \$145.1 million to \$90.44 million and losing \$54.66 million when base demand softened. The friction delayed but couldn't prevent the inevitable exodus when underlying economics failed.

Cross-Cutting Examples by Ecosystem Type

The ecosystem context matters profoundly, and frontier chain failures tell a consistent story of structural limitations overwhelming even well-intentioned programs.

Ecosystem Matters: Retention Heatmap Across Chains

Where You Build Determines If You Survive

Retention Rate :						
0-10% 10-20% 20-30% 30-40% 40-50% 50-60% 60-70% 70-80% 80-90% 90%+						
Ecosystem	DEX	Lending	Staking	Derivatives	Stableswap	Yield Agg
ESTABLISHED CHAINS						
Ethereum	183% Curve	2283% Compound	923% Rocket Pool	—	123% Liquity	1909% Idle
Base	6429% Aerodrome	1241% Morpho	—	—	—	—
BNB Chain	52% PancakeSwap	153% Alpaca	—	—	—	—
EMERGING CHAINS						
Avalanche	16% Trader Joe	14% Bengi	—	—	160% Pangolin	—
Polygon	17% QuickSwap	—	—	—	—	104% DeFi For All
Optimism	20% Uniswap L2	—	—	—	102% Velodrome	—
Arbitrum	19% Velocimeter	59% Chronos	—	59% Gains	—	—
FRONTIER CHAINS						
Evmos	3% DeFi Incentive	—	—	—	—	—
Aurora	21% Ecosystem	—	—	—	—	—
Celo	42% Campaign	—	—	—	—	—
Harmony	36% Boost	—	—	—	—	—

 collapsed from \$2.8 million to just \$76,000 for 0.03x retention, losing \$2.72 million because the chain lacked deep demand primitives, aggregator routing, or significant on-chain alternatives. When APR dropped, capital had nowhere productive to go.

Aurora's Ecosystem DeFi Incentives fell from \$76.2 million to \$15.8 million for 0.21x retention, losing \$60.4 million when, despite being an Ethereum-compatible chain, thin integration webs meant little recycling when incentives ended.

Celo's DeFi Incentive Campaign declined from \$55.3 million to \$23.5 million for 0.42x retention, losing \$31.8 million because limited ecosystem depth meant when one pool cooled, capital exited the chain entirely rather than rotating to other productive uses.

 DeFi Boost dropped from \$10 million to \$3.6 million for 0.36x retention, losing \$6.4 million as few deep demand primitives meant fee APR couldn't replace emissions, forcing outflows when incentive support ended.

The Path Forward: From Commandments to Action

The Ten Commandments Scorecard

Proof That Following The Rules Determines Success

✓ = Followed ✗ = Violated — = Not Applicable

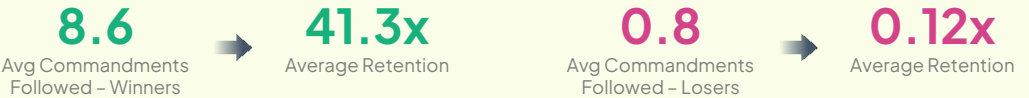
TOP 5 SUCCESS STORIES

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
Protocol	Retention	Net Change	Commandments (1-10)								Score
Swell Network	87.42x	+\$407.9M	✓ ✓ ✓ ✓ ✓ — ✓ ✓ ✓ ✓								9/10
Aerodrome	64.29x	+\$531.6M	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓								10/10
Balancer	26.34x	+\$891.8M	✓ ✓ ✓ ✓ — ✓ ✓ ✓ ✓ ✓								9/10
Compound	22.83x	+\$6.22B	✓ ✓ ✓ ✓ ✓ — ✓ ✓ — —								7/10
Rocket Pool	9.23x	+\$2.29B	✓ ✓ ✓ — ✓ — ✓ ✓ ✓ ✓								8/10

BOTTOM 5 FAILURES

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
Protocol	Retention	Net Change	Commandments (1-10)								Score
Evmos	0.03x	-\$2.72M	✗ ✗ — ✗ ✗ — ✗ ✗ ✗ —								0/10
THENA	0.07x	-\$57.4M	✗ ✗ ✗ ✗ ✗ ✓ ✗ ✗ ✗ ✓								2/10
Stargate	0.14x	-\$395.9M	✗ ✗ ✗ ✗ — — ✗ ✗ ✗ —								0/10
Trader Joe	0.16x	-\$632M	✗ ✗ ✗ ✓ — — ✗ ✓ ✗ —								2/10
Uniswap L2	0.20x	-\$3.76B	✗ ✗ — ✗ ✗ — ✗ ✗ ✗ —								0/10

THE CORRELATION IS UNDENIABLE

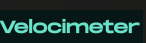


The verdict: Follow 7+ commandments and likely succeed. Follow 2 or fewer and guaranteed failure.

The data reveals a systematic pattern: protocols that succeeded created genuine economic utility where liquidity served essential functions and generated independent revenue streams, while failures treated liquidity as decoration rather than infrastructure, relying solely on token emissions without building sustainable demand or fee generation mechanisms. The retention bifurcation at 0.90x versus 0.25x is not random but predictable based on whether programs followed the ten commandments derived from this \$3.92 billion education in DeFi capital retention.

The successful programs didn't just attract capital; they transformed it.

 **AERODROME** 64.29x retention,  **Swell** Network's 87.42x growth,  **Compound** 22.83x expansion,  **Balancer** 26.34x multiplication: these aren't lucky outliers but predictable outcomes from following the commandments. They created protocol-native utility, designed sophisticated mechanics, respected risk-adjusted returns, and built genuine demand flywheels.

The failures ignored these laws and paid the price.  **Evmos** at 0.03x, **THENA** at 0.07x,  **TraderJoe** at 0.16x,  **QUICKSWAP** at 0.17x,  **Velocimeter** at 0.19x,  **UNISWAP** L2 at 0.20x, **Aurora** at 0.21x: these catastrophes were equally predictable. They rented liquidity without creating utility, imposed cliffs instead of tapers, ignored impermanent loss, and hoped demand would materialize without coordination.

The commandments are clear. The data is conclusive. The choice is yours: build liquidity systems that last, or rent capital that leaves. In the binary world of retention ratios, there is no middle path. Follow the commandments and join the 22% that succeed, or ignore them and join the 78% that fail. The \$3.92 billion in departed mercenary capital has already voted with its feet. The question is whether you'll learn from their exodus or repeat it.

