title: [TEMP CHECK] Safety Module Upgrade Part IV - Incentives Management Upgrade

author: @Llamaxyz - @dydymoon & @TokenLogic

created: 2023-04-13

Summary

This publication focuses on how incentives are distributed to reduce the overall AAVE spend and enhance the profitability of the Aave DAO.

Abstract

The current SM incentives budget is 1100 AAVE/day. These rewards allow Aave to attract deposits, where up to 30% can be used to insure the protocol in case of shortfall event. At the moment, 100% of these incentives are spent in liquidity mining from the Ecosystem Reserve, which represents \$89.3K daily or \$32.6M yearly expense for the DAO.

This publication presents the community with an opportunity to reshape how AAVE incentives are distributed to significantly improve Aave's economics and enhance the capital efficiency of the SM.

- · Increased Backstop Value
- · Decreased AAVE Spend
- · Increased Yield for depositors
- · Improved Profitability and Financial Sustainability

This publication focuses on how incentives are distributed to reduce the overall AAVE spend without exceeding the current AAVE budget & shares the estimated results from the strategy.

Rationale

A quick recap of proposed from the current design so far:

- Part I SstkABPT update proposal (Part I)
- Support of the migration to a new BPT B-80-AAVE-20wstETH
- Support of the migration to a new BPT B-80-AAVE-20wstETH
- Part II Categories implementation (Part II)
- Single assets, volatile BPTs and stable BPTs.
- Single assets, volatile BPTs and stable BPTs.
- · Part II- Slashing update (Part II)
- Each category will have a different max slashing parameter
- Each category will have a different max slashing parameter
- Part III -BPT positions staked on the SM smBPTs (Part III)
- Create gauges for smBPTon staked assets and enable users to receive to avoid incentives dilution, Introduce smBPT wrapper, and explain Aura Finance strategy to receive BAL & AURA rewards.
- Create gauges for smBPTon staked assets and enable users to receive to avoid incentives dilution, Introduce smBPT wrapper, and explain Aura Finance strategy to receive BAL & AURA rewards.

This publication presents a revised outlook on how the majority of the current AAVE budget could be distributed as vote incentives for smBPT gauges. Additionally, the DAO could decide to optimize its strategic voting power to reduce the SM costs.

Do note the APR generated from depositing into the SM has dependencies such as the BAL, AURA and AAVE token prices. If this proposal is approved, several solutions can be explored to reduce this risk. If it becomes unprofitable over time because of BAL or AURA prices, a fallback option can be added to switch back to the current LM design if needed until

finding a better optimization.

The design is flexible enough to accommodate various market conditions and for Aave to pivot from AAVE to GHO rewards over time. This represents a shift on the base incentives from Aave governance token distribution to yield derived from cash flow sustained by the business. This will allow to improve the fallback option to always optimize the best yield between direct profit sharing distributed or used to leverage more yield through votes incentives.

veBAL Voting Power

Llama recently published a proposal to deploy the BAL holdings. This proposal will help provide a better understanding of why Llama recommended the community to vote for acquiring veBAL.

Overview of the veBAL position if locked today:

ETH needed and the LP tokens amount received are verified with Balancer Tools.

The table above shows how much weekly BAL emission is controlled, assuming the DAO uses only its owned veBAL voting power (i.e. without creating vote incentives). These calculations are based on the BAL emission in April 2023: 121,930 BAL/week instead of 145,000 until March 2023.

Aave DAO voting power is a good start and can be utilized to support, not limited to, the below strategies:

- · Help sustain the Safety Module yield
- · Grow and sustain the GHO liquidity
- Boost the Staked aTokens gauges
- · Redirect incentives on existing Balancer pools
- · Optimize the yield on treasury strategies

However, due to the limited veBAL holding size relative to Aave's aspirations, the community will need to choose between the choices above. Several other possibilities to increase the strategic voting power accumulation in addition to the reserve factors earnings are presented below:

- Deploy treasury strategies to farm BAL/AURA with stables & ETH
- · Acquire more BAL/start acquire AURA with the treasury to lock it
- Potential Grants from Aura & Balancer

Safety Module Cover Overview

Assuming that 100% of the Aave TVL was covered by the SM, the DAO would pay 30,02% on its insurance.

(1.43% of the TVL is currently covered and the DAO which pays 30,02% APR on these funds). The new strategy aims to increase the Safety Module coverage above 2.00% while also reducing insurance costs by at least 30%.

Incentives Distribution Upgrade

Note that all TVLs below have been added to estimate the max capacity of the SM with the current budget by maintaining the APR in range.

Single Assets

This publication features continuing the rewards with 25% of the current budget for single assets. At a later date, the community can explore progressively replacing AAVE with GHO rewards.

• AAVE: TVL Estimation used for the upcoming calculations:

60% of the current stkAAVE TVL

We estimate a reduction of the TVL due to the APR lowered by the budget reallocation

(200 AAVE/day until GHO is live vs 550 AAVE/day at the moment.) .

ETH / stETH: TVL Estimation used for the upcoming calculations:

75k ETH / stETH

(Llama proposes to allocate a budget of 75 AAVE/day to reward ETH and/or stETH deposits until GHO is live)

This means reducing the liquidity mining by focusing it on single assets only, since it's not possible to add gauges for it. The remaining AAVE currently being spent in LM to incentivize both veBAL & vIAURA voters on Warden Quest, which allows to redirect rewards on smBPTs gauges, in a better proportion than LM.

What is Warden Quest?

Warden Quest by Paladin, offers a new approach to Gauge Weight vote acquisition for Curve & Balancer. Instead of offering an arbitrary amount of rewards to influence voters, Quest allows players to set parameters & rewards for each weekly vote period.

After the rewards distribution to voters, if the total budget wasn't spent (i.e.,if the objective wasn't reached), Quest creators can redeem the unspent budget minus the fees.

Additionally, Quest now offers the possibility for vIAURA holders to claim rewards from veBAL quests, allowing Aave DAO to create vote incentives for both at once.

Finally, with the estimated budget of this post, Quest fees would be at 2,8% instead of 4%.

Note: This proposal doesn't plan to create vote incentives on the StakedATokens gauges, but the DAO could vote to do it later. In such a case, the Quest weekly volume would lead to the lowest fee possible: 2%. More information on Warden Quest can be found here.

Volatile & Stable BPTs

The SM Upgrade strategy aims to maintain the volatile BPTs APR in the 8 to 12% range, and the stable BPTs APR in the 18 to 22% range. The BAL & AURA rewards could be distributed weekly to SM depositors.

- B-80AAVE-20wstETH: Max TVL estimation used: \$100M
- B-80GHO-20wETH: Max TVL estimation used: \$50M\$
- B-GHO-3Pool: Max TVL estimation used: \$100M

These estimations demonstrate the possibility of reaching the APR targets outlined above.

The vIAURA votes amount needed is defined by a target in veBAL votes, which is why the total exceeds 100% of the vIAURA supply. The veBAL votes target can be reached by creating vote incentives for veBAL, vIAURA, veTETU and sdBAL, all supported on Quest.

Note: veTETU vote incentives would require more management as veTETU on Polygon, so we've excluded it from this proposal for now. sdBAL vote incentives are also excluded because of the small veBAL holdings.

(Yellow cells are manually added & Orange cells are max estimated TVL. The remaining data are calculated or imported from Etherscan and CoinGecko data in real time, so numbers are changing very often depending on all the variables).

smBPTs Quests Results Overview

The cost per vIAURA/round is from Llama Airforce.

The vIAURA votes are priced 2% above the last round's prices, as this market does fluctuate a lot (1 round = 2 weeks). Aave would need to control ~30,08% of the veBAL voting supply on the SM gauges to reach the target APRs shown above.

The table above demonstrates that Aura is way more interesting than Balancer without max boost. Creating the same vote incentives but farming on Balancer would not be profitable.

In this strategy, the SM depositors would earn \$194,000/round (\$97,000/week) in extra BAL & AURA rewards directed with votes incentives compared to AAVE tokens liquidity mining distribution.

While the TVL max estimations are high in this proposal, this helped define the max capacity of this strategy with the current budget, evaluate the yield possibilities, and learnt the communities sentiment. However, the goal is to progressively increase the TVL target & associated votes incentives budget.

The requested amount of votes and rewards requires an active management to optimize the Quests, which is why this publication leans away from using Snapshot to determine Aave's veBAL gauges votes and instead recommends considering different options to optimize the votes, which will be presented in the voting framework proposed in the coming days.

If the Quests are not filled, the unspent rewards can be redeemed by the DAO (minus the fees) and used for the next round. In this case, a fallback budget should be planned to temporarly compensate part of the yield in liquidity mining initially, then

in GHO over time. .

To avoid this to happen, the strategy considers paying slightly more per vote than the market based on previous round price, to align the economic interest of the protocol and the voters to make sure the votes target are reached. OTC deals could also be discussed with important voters in this ecosystem.

The AAVE amount spent in vote incentives in the table below is changing very often as defined by several parameters, such as the amount of votes required, the price for veBAL & vlAURA votes, the AAVE token price, the TVL in the smBPT gauges, and later on, governance updates on the SM design proposed if the budget is changed.

With the above estimations, there is a reduction of the daily LM budget, which can be accumulated as a fallback budget to avoid the unfavorable situation explained above.

As expected, the cover cost (insurance APR) is also reduced by half, which validates the last goal of this proposal.

The last table in Part IV and the 2 above demonstrate that with current market metrics & estimated TVL, the APRs reached on Aura are in the range expected, as well as the average insurance cost reduction from 30,02% to 17,23% and the cover increase from \$119M to \$175M.

Also, considering that this strategy will help with both growing the SM (TVL & Cover) and improving the liquidity for Aave tokens, other incentive budgets for GHO liquidity or liquidity mining on StakedATokens could be used for the same strategy.

Actions related to the strategic voting power and votes incentives management will be defined by the framework proposal defined in part V, such as:

- Lock veToken assets into Balancer and Aura to generate increased rewards.
- · Create votes incentives on Quest
- · Update the boost power, delegate or sell it on Warden if unused.
- · Vote on gauges & proposals decisions
- · Claim protocol fees

Technical Implementations:

- · Enable weekly distribution for Stable & Volatile BPT rewards
- Whitelist the AAVE token on Quest as reward (No extra proposal needed)
- Define the Aave voting framework (Part V)

Voting options:

YAE - Update the incentives management strategy

NAE - Continue classic liquidity mining

ABSTAIN

Disclaimer

The Llama is not compensated by any of the mentioned communities outside of Aave.

Llama is an unpaid delegate within the Balancer ecosystem. Some members of Llama are unpaid delegates in the Paladin ecosystem.

Members who contributed to this proposal are not angel investors or advisors to any of the mentioned communities but some do hold small holdings in those communities tokens.

Copyright

Copyright and related rights waived via CC0.

References

- 1. [TEMP CHECK] Safety Module Update Part I Migrate AAVE/wETH Balancer v1 Pool to Balancer v2
- 2. [TEMP CHECK] Safety Module Upgrade Part II Asset Diversity, SM Categories & Slashing Updates
- 3. [TEMP CHECK] Safety Module Upgrade Part III Enable gauges on BPT in Safety Module (smBPT)
- 4. [TEMP CHECK] Safety Module Upgrade Part IV Incentives Management Upgrade
- 5. [TEMP CHECK] Safety Module Upgrade Part V veToken Holding Management Framework
- 6. [TEMP CHECK] Safety Module Upgrade Part VI Future considerations