Simple Summary

A proposal to adjust five (5) total risk parameters, including Liquidation Threshold and Liquidation Bonus, across five (5) Aave V3 Avalanche assets.

Abstract

Over the last several months, Gauntlet has been building the simulation infrastructure to support risk management for Aave V3 AVAX.

Our simulation engine has ingested the latest market data (outlined below) to recalibrate the Aave V3 AVAX protocol parameters.

Motivation

This set of parameter updates seeks to maintain the overall risk tolerance of the protocol while making risk trade-offs between specific assets.

Gauntlet's parameter recommendations are driven by an optimization function that balances 3 core metrics: insolvencies, liquidations, and borrow usage. Parameter recommendations seek to optimize for this objective function. Our agent-based simulations use a wide array of varied input data that changes on a daily basis (including but not limited to asset volatility, asset correlation, asset collateral usage, DEX / CEX liquidity, trading volume, expected market impact of trades, and liquidator behavior). Gauntlet's simulations tease out complex relationships between these inputs that cannot be simply expressed as heuristics. As such, the input metrics we show below can help understand why some of the param recs have been made but should not be taken as the only reason for recommendation.

For more details, please see <u>Gauntlet's Parameter Recommendation Methodology</u> and <u>Gauntlet's Model Methodology</u>.

Supporting Data on Aave V3 AVAX

Top 30 non-recursive and partially-recursive aggregate positions

Top AAVE.e non-recursive supplies and collateralization ratios:

Top DAI non-recursive supplies and collateralization ratios:

Top USDC non-recursive supplies and collateralization ratios:

Top USDT non-recursive supplies and collateralization ratios:

Top WTBC.e non-recursive supplies and collateralization ratios:

Aave V3 AVAX Parameter Changes Specification

Gauntlet's simulation engine will continue to adjust risk parameters to maintain protocol market risk at safe levels while optimizing for capital efficiency.

Our simulation analysis currently shows an opportunity to increase capital efficiency on Aave V3 AVAX without adding outsized market risk. The optimal parameters below will slightly increase the Value at Risk (in the worst-case scenarios, our simulations estimate that there will be <200k additional insolvencies, which is approximately 0.006%) while meaningfully improving the capital efficiency of the system (>2% increase in borrow usage in the system).

Although our simulation engine recommends the optimal values per the table below, we recommend implementing a phased approach for this initial set of V3 AVAX recommendations to gather more granular data including user elasticity, which can be used to further fine-tune V3 simulation models. The "Recommended Value" below are Gauntlet's recommendations for this ARC. Following the implementation of the recommended values, our daily simulations will inform future parameter changes.

Parameter

Current Value

Recommended Value

Optimal Value

AAVE.e Liquidation Threshold

70%

71.3%
73%
DAI Liquidation Threshold
80%
82%
88%
USDC Liquidation Threshold
85%
86.25%
90%
USDT Liquidation Threshold
80%
81%
84%
WBTC.e Liquidation Bonus
6.5%
6.25%
5.5%

Additionally, we look forward to launching a Risk Dashboard for Aave V3 AVAX in the near future, but the above details highlight key risk and capital efficiency metrics. Our parameter recommendation methodology remains in line with AAVE V2 with regards to balancing risk and capital efficiency, but simulation models have been customized to V3 AVAX specifically.

Next Steps

 Given that this is the first set of V3 Avalanche recommendations proposed by Gauntlet, we are providing more time for community discussion. We are targeting a Snapshot vote in 5 days, and voting will start 24H in the future and last for 6 days.

Quick Links

Gauntlet Aave V3 Integration Outline

Analytics Dashboard

Aave V2 ETH Risk Dashboard

Aave V2 Arc Risk Dashboard

Gauntlet Parameter Recommendation Methodology

Gauntlet Model Methodology

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