Simple Summary

A proposal to adjust 4 total risk parameters, including Liquidation Threshold (LT) and Loan-To-Value (LTV), for USDC and DAI markets on Aave V2 Ethereum.

Abstract

Following recent market events, the AAVE community has decided to reduce the risk profile across many higher volatile assets by disabling borrow or freezing across v2 markets (AIP-121, AIP-124, and AIP-125)

After mitigating the immediate risk to the protocol with the above AIPs, Chaos Labs is exploring the impact and trade-offs of decreasing the Liquidation Thresholds and LTVs of USDC and DAI. Reducing capital efficiency on v2 assets will mitigate attack vectors while also serving as effective motivation to shift usage to v3, where users can enjoy the benefits of E-mode with enhanced risk techniques and mitigation methodologies.

As Liquidation Threshold reductions may lead to user accounts being eligible for liquidations upon their approval, we want to make the full implications clear to the community at each step. To best minimize this impact, we suggest reaching the desired settings by a series of incremental decreases

, following the Risk-Off Framework previously approved by the community, with a reduction of up to 3% in any given AIP. In an attempt to avoid liquidations, Chaos Labs will communicate the planned amendments 7 days before their on-chain execution via all available avenues (Twitter, forums, Nansen Connect, and Blockscan Chat).

Motivation

The priority of this proposal is not to optimize markets (capital efficiency); but rather to focus on the security and risk mitigation of the protocol. It will be followed up with additional proposals to update risk parameters to reflect the current market conditions accurately.

The goal of this ARC is two-fold:

- Reduce LTs → Reducing liquidation thresholds for USDC and DAI effectively reduces capital efficiency and increases the required capital for waging price manipulation attacks on Aave.
- Encourage user migrations to v3 → This also begins to pave the way towards migrating to v3, where these assets can be utilized in E-mode.

However, this is a significant change, and we wanted to present data to quantify and visualize the effect of such reductions on protocol users for community discussion. Specifically, we want to surface data around the liquidations this would trigger, as some are sizable and warrant a discussion of how these should be handled and if this is the most appropriate action forward.

- Decrease LT by 3%

→ as voted upon as the Rate of Change Consensus.

USDC

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$USDC

Liquidation Threshold

89% → 86%

Loan-To-Value

87% → 80%

Newly unhealthy accounts after reduction

168

Liquidation Value

~1.15M USD

User loss (penalty)

~50K USD

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DAI

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$DAI

Liquidation Threshold

90% → 87%

90% → 82%

90% → 80%

Loan-To-Value

74%

69%

67%

Newly unhealthy accounts after reduction

11

19

34

Liquidation Value

~1.8K USD

20K USD

850K USD

User loss (penalty)

~70 USD

~800 USD

34K USD

For $DAI, we present several options. We recommend abiding by theRate of Change framework, which dictates a maximum of a 3% reduced LT with minimal liquidations. However, given the market conditions, we would also like to present several other options that are more assertive and aim to reduce risk parameters in a more significant manner. Reduced capital efficiency on positions will mitigate risk vectors and also serve as an effective first step to encourage migration to v3 post-launch.

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Joint Reduction of $USDC and $DAI LTs

Below we present the simulation results of reducing LTs as follows:

- DAI: 90% → 87%
- USDC 89% → 86%, respectively.

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- The main item is to focus on accounts at risk that have supplied both USDC and DAI as collateral.
- 102 accounts in total have provided both $USDC and $DAI as collateral
- We see that the Liquidatable amount reducing USDC and DAI jointly is the sum of the amount separately.
- Therefore we can reduce both assets LT jointly without causing more liquidations.

Summary

Based on prior community discourse and market activity over the past few weeks, Aave should continue reviewing avenues to derisk all v2 markets with a specific eye on LTs & LTVs. Forced liquidations of user accounts are a major factor in deciding how and when to reduce these parameters to minimize negative user experience.

The risk parameter options are presented below:

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The effect of even small reductions is much higher for USDC than DAI, and the two changes should be viewed separately. We believe that the change to USDC is necessary, but the number of accounts and the amount of value to be liquidated may be too high for immediate action. DAI, on the other hand, can be reduced with minimal user impact and should be strongly considered.

We would appreciate community discussion and feedback on the appropriate path forward for each asset.