Summary

Given that account 0x7a16ff8270133f063aab6c9977183d9e72835428 has been actively repaying its USDT debt since the Vyper hack, Gauntlet recommends a structured, scheduled approach to further lower CRV LT on v2 Ethereum and derisk v2 exposure to CRV. As a heads-up, @ChaosLabs is intending to repost the previouslycanceled AIP that plans to reduce CRV LT from 0.55 to 0.49. We are aligned with reposting this AIP.

Below, Gauntlet provides a structured approach for LT reductions moving forward. Our approach aims to

- Minimize a similar risky scenario as the one experienced in the days after the Vyper exploit.
- Provide visibility in the DAOs intentions and roadmap with respect to CRV on v2.

We present two schedules

to the community with different levels of restrictiveness to proactively derisk the position.

Considerations

While liquidations are the critical component to reducing potentially unhealthy loans, they do increase sell pressure of the collateral and reduce the buffer towards liquidation, which may drive the possibilities for bad debt during times of low liquidity. We highlight the three main pillars for the safety of a position. Ideally, each pillar should strengthen against bad debt accrual for the next phase of LT reduction to commence.

Size

- this is the potential severity of magnitude for bad debt.

Price

- this is the buffer towards bad debt accruing.

Liquidity

- this is the mitigating factor that can reduce bad debt, if the buffer is shrinking.

Schedules

To account for the tradeoffs described above, that occur with LT reductions, Schedule 1 requires more conditions surrounding the debt size, market price, and liquidity to be satisfied before commencing the next LT reduction,

as compared to Schedule 2. As a result, Schedule 1 necessarily assumes stronger market conditions and safer user positioning before further derisking.

- In each schedule, we aim to put up AIP for next LT reduction on Wednesday, in order to be executed the following Monday, to avoid weekend changes.
- We aim to end the scheduled LT reductions when total borrows for the account drop below the maximal debt able to be borrowed against CRV on v3 Ethereum, which is the debt ceiling of $5m.

We refer the community to the below appendix for additional color on these schedules.

Schedule 1

Each week, put up AIP on Wednesday to reduce LT by 5% if the following conditions are met

- (size) amount of remaining debt has been cut by 10%
- (price) new HF is greater than 1.6 (historical maintained HF without derisk measures) + 17% buffer (representing a 3 standard deviation daily CRV price move)
- (liquidity) rolling averaged DEX liquidity (proxied by 2pct depth) > 90% DEX liquidity from previous week

Schedule 2

Each week, put up AIP on Wednesday to reduce LT by 5% if

- (price) new HF is greater than 1.6 (historical maintained HF without derisk measures) + 17% buffer (representing a 3 standard deviation daily CRV price move)

and one

of the following conditions are met.

- (size) amount of remaining debt has been cut by 10%
- (liquidity) rolling + snapshotted DEX liquidity has stabilized > 90% average liquidity compared to previous week

For additional color, here are the necessary HF the account should have to commence the next phase of LT reduction, pertaining to both Schedule 1 and Schedule 2.

LT

LT_reduction

pct_buffer

min_maintain_HF

new_HF

HF_needed

0.49

0.06

0.17

1.6

1.93

2.16

0.44

0.05

0.17

1.6

1.93

2.15

0.39

0.05

0.17

1.6

1.93

2.17

0.34

0.05

0.17

1.6

1.93

2.21

0.29

0.05

0.17

1.6

1.93

2.26

0.24

0.05

0.17

1.6

1.93

2.33

0.19

0.05

0.17

1.6

1.93

2.44

0.14

0.05

0.17

1.6

1.93

2.62

Next steps

We welcome community feedback and aim to proceed to Snapshot on August 9th, 2023.

Appendix

Why do we recommend a buffer to the user’s HF after an LT reduction?

- We do not want to create excess risk resulting from LT reductions.
- Because HF = supply * LT / current borrow, the user’s new HF is new_HF = old_HF * (new_LT / old_LT).
- Given that our targeted LT reduction is -5% each week, the user’s HF is more heavily impacted at each iteration of LT reduction.
- We target constant LT reduction of -5% each week, rather than a proportional-based LT reduction, to focus on more quickly derisking the position.
- Given that our targeted LT reduction is -5% each week, the user’s HF is more heavily impacted at each iteration of LT reduction.
- We target constant LT reduction of -5% each week, rather than a proportional-based LT reduction, to focus on more quickly derisking the position.

This table shows that user HF is more heavily impacted each iteration of LT reduction.

LT

LT_reduction

HF

new_HF

0.49

0.06*

1.9

1.69

0.44

0.05

1.9

1.68

0.39

0.05

1.9

1.66

0.34

0.05

1.9

1.62

0.29

0.05

1.9

1.57

0.24

0.05

1.9

1.50

0.19

0.05

1.9

1.40

0.14

0.05

1.9

1.22

(*) This intended AIP will reduce CRV LT from 0.55 to 0.49

- We set the buffer to be 3 * the daily Garman Klass volatility for CRV to give sufficient room against liquidations.
- The GK annualized volatility over the past month is ~105%, suggesting a daily volatility of ~5.5%.

- The GK annualized volatility over the past month is ~105%, suggesting a daily volatility of ~5.5%.
- We identify the minimum HF threshold to be the minimum HF sustained by the position before intervention since November 2022, which is ~1.6.

HF trends, position activity since Nov 2022: