This is the first of Gauntlet's Quarterly Market Risk Reviews with the goal of keeping the community informed of market risk pertaining to Aave V2. This quarterly review complements Gauntlet's previous monthly risk reviews. Over the last quarter (90 days), Gauntlet has executed seven (7) sets of parameter recommendations as part of our <u>Dynamic Risk Parameters</u> engagement. In addition, another set of parameter recommendations is currently live for voting, <u>AIP-45</u>.

Old Liq.Bonus/LTV/Liq_Threshold (Aug 27th, 2021) **New Liquidation Bonus** New Moderate LTV New Moderate Liq_Threshold USDC (5%, 82.5%, 85%) WETH (5%, 80%, 85%) 82.5 REN (9%, 55%, 60%) 7.5 YFI (12.5%, 45%, 60%) 7.5 50 65 MKR (10%, 65%, 70%) 8 ZRX (8%, 60%, 70%) 7.5 75 UNI (10%, 60%, 70%) 8.0 WBTC (9%, 70%, 75%)

6.5

CRV (12.5%, 40%, 55%) 10 45 60 XSUSHI (12.5%, 35%, 60%) 10 45 ENJ (10%, 50%, 60%) 60 70 AAVE (8%, 60%, 70%) 7.5 MANA (8%, 60%, 65%) 7.5 65 70 SNX (9%, 20%, 45%) 7.5 30 55

Gauntlet's Aave <u>Risk Dashboard</u> is live and running daily updates. The community should use the dashboard to better understand our methodology, recommendations, and how Gauntlet's recommendations help reduce risk and increase capital efficiency for the protocol. We are particularly keen on iterating on this dashboard and would love feedback via this <u>Google Form</u>.

Monthly Risk Reviews

Market Risk Monthly: Updates and Review

Market Risk Monthly: Updates and Review (October 2021)

ARC

Liquidation Bonus Updates

LTV and Liquidation Threshold Levels 2021-08-26

Liquidation Bonus Updates 2021-09-14

Risk Parameter Updates 2021-09-30

Risk Parameter Updates 2021-10-07

Risk Parameter Updates 2021-10-21

Snapshot

Should liquidation bonuses be reduced for ten (10) Aave V2 assets?

Passed with 10.66k AAVE Yae (99.78%)

What should be the LTV/Liquidation Threshold level for Aave V2?

• Moderate Level chosen with 132.58k AAVE Yae (53.98%)

Should liquidation bonuses be reduced for eleven (11) Aave V2 assets?

Passed with 27.79k AAVE Yae (99.99%)

Should thirteen (13) total risk parameters across nine (9) Aave V2 assets be adjusted?

Passed with 15.1k AAVE Yae (99.01%)

Should thirteen (13) total risk parameters across eleven (11) Aave V2 assets be adjusted?

Passed with 1.89k AAVE Yae (92.36%)

Should nine (9) total risk parameters across eight (8) Aave V2 assets be adjusted?

Passed with 1.31k AAVE Yae (90.68%)

Should four (4) total risk parameters across three (3) Aave V2 assets be adjusted?

Passed with 1.07k AAVE Yae (92.15%)

AIP

AIP-34: Liquidation Bonus Updates

Passed with 493.3k AAVE Yae (100.0%)

AIP-36: LTV and Liquidation Threshold Updates to Moderate Levels

Passed with 509.4k AAVE Yae (100.0%)

AIP-38: Liquidation Bonus Updates for eleven Aave V2 assets

Passed with 425.2k AAVE Yae (100.0%)

AIP-39: Risk Parameter Updates for Aave V2 assets

Passed with 331.5k AAVE Yae (100.0%)

AIP-40: Risk Parameter Updates 2021-10-07

Passed with 561.3k AAVE Yae (100.0%)

AIP-42: Risk Parameter Updates 2021-10-14

Passed with 655.8k AAVE Yae (100.0%)

AIP-43: Risk Parameter Updates 2021-10-21

Passed with 386.5k AAVE Yae (100.0%)

Highlights

- Average of 14% reduction in Value at Risk (VaR) with expected savings to users of \$3,834,112 on Black Thursday volatility equivalent days
- Have saved Aave protocol users \$303,139 in liquidations as a direct impact of lower liquidation bonuses, which
 equates to \$1,651,429 on an annualized basis. It is important to note that this time frame experienced relatively low

levels of asset volatility.

In addition, the community has asked for more explanation on the calculation of VaR. Our VaR metric for a single asset can be explicitly calculated as the sum of the insolvent value (USD) and the total liquidation volume (USD) for that asset in a simulation run. Insolvent value is defined as the total borrow value minus the total collateral value for any account where the total borrow value is greater than the total collateral value. Because we run many simulations, the VaR metric for each asset displayed on our dashboard for will be the 95% percentile value. The VaR for the entire system will be the sum of the VaR values acress each asset.

Market Statistics

The images below include market statistics for the largest assets on Aave V2. Gauntlet is closely monitoring market behavior and did not observe particularly unusual market behavior over this past quarter. We would, however, note that collateral usage for WETH and USDC has declined due to large liquidity providers pulling supply.

Volatility

Daily volatility for Aave V2's largest collateral assets.

Correlations

Correlation matrix for Aave V2 assets.

Average Daily Trading Volume

Average daily trading value in USD for Aave V2's largest collateral assets.

Collateralization Ratio

Collateralization ratios (collateral divided by debt) for Aave V2's largest collateral assets.

Collateral Usage

Collateral usage in USD for Aave V2's largest collateral assets.

Utilization Rate

Utilization ratios (borrow divided by supply) for Aave V2's largest collateral assets.