

Simple Summary

After conducting research, we provide 2 options for borrow and supply cap changes for the Aave community.

These options depend on different assumptions that would be valuable for the community to align on.

Motivation

This set of borrow and supply cap recommendations will use the methodology outlined in our [borrow and supply cap methodology](#).

One major consideration in our conservative recommendations is the frequency of liquidators using local-chain liquidity for liquidations.

For Avalanche, in the last 6 months, 69.4% of liquidations involved a swap using on-chain liquidity. For Optimism, over the previous 6 months, 96.2% of liquidations involved a swap using on-chain liquidity. These indicate that on-chain liquidity will play an important role in the success of liquidations and insolvency mitigation. However, cross-chain liquidity considerations would allow for more aggressive caps. The table below will present both the conservative and aggressive values.

We highlight below the cap recommendations that are below the current levels of market supply and borrow.

TL;DR - if the community believes in the assumption that local-chain liquidity is necessary for risk mitigation in the Aave protocol, then the levels of current supply and borrow in the Avalanche and Optimism V3 markets pose outsized market risk. The empirical data suggests that local-chain liquidity is indeed important for risk mitigation. However, there are tradeoffs here as well. There is a case to be made by community members focused on growth that the presence of Aave itself on these chains will, in the long term, lead to more activity and DEX liquidity on Avalanche and Optimism. We hope that this initial post clarifies the risk tradeoffs.

Tradeoffs

Conservative Recs:

- Holistically mitigate the insolvency risk by factoring a wide array of market risks, including:
- Liquidity concentration risk (total and per chain). If protocols allow excessive amounts of a token as either supply or borrow, market makers and users may not have enough access to the token to buoy its liquidity in times of market stress.
- Overall DEX liquidity and volume. While the previous point addresses liquidity across each chain and all chains, maintaining robust DEX liquidity is also essential for liquidators.
- Insolvency risk as estimated by our simulations. We can limit insolvency risk by setting caps that limit the Value at Risk (VaR), as calculated in our simulations, in relation to total reserves held in a protocol.
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- Insolvency risk as estimated by our simulations. We can limit insolvency risk by setting caps that limit the Value at Risk (VaR), as calculated in our simulations, in relation to total reserves held in a protocol.
- Utilize conservative liquidity assumptions, which, as shown above, is what liquidator behavior empirically suggests is appropriate.
- However

, conservative recommendations would freeze supply for nearly all markets.

Aggressive Recs:

- Increase insolvency risk levels from the market risks listed above (liquidity concentration risk, DEX liquidity, etc.).
- Open the protocol to greater risk of price manipulation attacks, especially on illiquid tokens. These attacks rely on a minimum number of tokens to supply or borrow in order to be profitable.
- Rely on the assumption that liquidators are able and willing to use cross-chain liquidity. The protocol faces insolvency risk if this assumption does not hold.

- However

, aggressive recommendations would allow for more growth on the protocol.

Alternative Options:

- For assets that are not highly utilized, freeze the supply (by setting the conservative supply caps). For assets that generate revenue (majors like ETH and WBTC), allow for a level of organic growth (take on greater risk).
- Delist the higher-risk assets from the protocol.

Other considerations:

- Migrating user positions from V2 to V3.
- If we observe more empirical evidence for cross-chain liquidity, we can relax the assumption that liquidators heavily rely on local-chain liquidity.

Aave V3 Parameter Changes Specification

Gauntlet Recommendations vs. Current Parameters

Gauntlet Recommendations with Liquidity Inputs

Notes

- Values highlighted in red denote our borrow and supply cap recommendations that are less than the current borrow or supply, respectively. While these recommendations would effectively freeze certain markets, they would also mitigate risks we have highlighted in our [methodology](#). Rows highlighted in blue are stablecoins.
- Bridged assets

: There are slight modifications to the supply cap methodology for specific bridged assets. For BTC.b's aggressive supply cap, given our current methodology, the suggested supply cap would have been less than 2800 BTC.b. Given the liquidity and trading volume of the underlying asset BTC, we updated BTC.b's aggressive cap higher to encourage protocol usage and growth.

- Interplay with other risk parameters

: The focus of our supply cap methodology is around liquidity and on-chain supply. Asset volatility, asset correlations, and user behaviors are the focus of our LTV, LT, and LB recommendation methodology. Therefore simulated insolvency risk is not a focus of our supply cap methodology but is a consideration. We will also take isolation mode and potential debt ceiling values into account, but for consistency, the supply caps for USDT, FRAX, and MAI will be shown.

- Stablecoins

: We do not think borrow caps on stablecoins will significantly impact the risk profile of the protocol. In addition, there is a significant capital efficiency consideration with allowing for high utilization of stablecoins for suppliers.

- Staking derivative tokens

: For AVAX, the borrow caps that our methodology suggests are lower than the current borrow on the protocol. For staking assets in general, there is a distinct use case for borrowing the asset. However, this increased borrow interest does not offset potential liquidity risks for the underlying asset nor the staked asset (recall stETH-ETH price deviations and the potential impact on those reserve pools). We note that given liquidity considerations, both the aggressive and conservative borrow cap recommendations for AVAX will be lower than the current borrow.

Next Steps

- Welcome community feedback.

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