Introduction

B.Protocol is a decentralized backstop protocol. We are live over MaekrDAO for one month, backstopping around $11m of ETH collateral and $4m of DAI debt. A first successful demonstration was done during the sharp market crash on the 26/11.

B.Protocol introduces the concept of relying on committed liquidators, who get priority in the liquidation process, in return to their commitment.

Currently we are an opt-in system, where users can decide to manage their accounts with us, and give priority to the liquidators. B.Protocol liquidators in return share some of their proceeds with the users who give them the priority.

In this write-up we propose to experiment a native integration between B.Protocol and the Aave, by on-boarding a new collateral type, namely USDC-B, which will be natively backed by a strong commitment from B.Protocol backstop.

A success of such an experiment could benefit Aave to give a better value proposition to the users, namely x10 long position on USDC, and could pave the way for more collaterals to be backed by B.Protocol with high leverage opportunities.

In the next Section we present a proposed set of parameters, then we propose a way to commit on liquidations, and finally we raise topics for further discussion.

Risk parameters

- Loan To Value 88% (as opposed to 80% of USDC)

- Liquidation Threshold 90% (as opposed to 85% of USDC)

- Liquidation Bonus 5% (like USDC)

- Reserve factor 10% (like USDC)

- Maximum total supply - controlled by the DAO, initially $5m.

Committed Backstop design

For simplicity we describe a system with a single liquidator. Scaling the system for multiple liquidators, in a permissionless way, will be handled by B.Protocol, and it is not in the scope of this writeup (we presented some ideas on how to achieve fairness here).

Initialization:

the liquidator opens an account with $0.5M USDC deposit, and 0 debt. We denote this liquidator's account with la

. Liquidator can withdraw collateral or increase his debt, only if his net position (collateral minus debt) is over $0.5M (according to Aave price feed).

Liquidation

: when calling liquidationCall

to an unsafe account a

which has USDC collateral, then if $a==la$

, or la

does not have a net position of $0.5M, then a

is subject to a standard liquidation process.

Otherwise, half the debt of a

(denoted by d

) and $1.05d$

worth of USDC collateral are shifted to la

(using flashloan).

The liquidationCall

function in this case is callable by anyone. And the callee will be incentives to call it.

Discussion

The expected course of events is that after a liquidation, the liquidator will take action to rebalance his new position, by repaying the new debt. In the long run, if he fails to do it, he risks being liquidated himself.

Given each user position is 110% over collateralized, an initial deposit of $X would in ideal situations be sufficient to backstop $10X of debt. Indeed, at a worst case an unsafe account has a

collateral of $5M of USDC collateral and $4.5m of dai debt. This position could be thrown at la

making a safe account with $5.5m collateral, and $4.5m debt…

The proposed mechanism does not give mathematical certainty for the solvency of the system, however, insolvency would result in the liquidator losing his initial $0.5M deposit.

Over time the liquidator initial deposit might depreciate in value, and in this case his incentive to retop it is that in the meantime he will not be able to handle new liquidations. This mechanism design give rise to a more committed liquidator, which allows increasing the current USDC 85% liquidation threshold (where liquidators are not committed) to 90% liquidation threshold for USDC.

All the parameters presented here are very preliminary and subject to discussion. The development of bootstrapping of such protocol could be subsidized by B.Protocol, however it is important to generate a long term framework that will allow liquidators to profit. Hence, over time it might be needed to relax the capital requirements, or offer additional incentives to the backstop.

Operating within the framework of B.Protocol, who will integrate with additional lending platforms, will give rise to better capital efficiency for the liquidators, which could result in stronger commitment (i.e., capital) from their side.

Summary and open questions

The proposed collateral would benefit Aave users, as it will allow better leverage (which is currently not available at any existing DeFi platform). It is our belief that this will be obtained without additional risk to the Aave system, and moreover, it will actually increase its stability during sharp market movements.

The success of this experiment could lead the way to more higher leveraged assets, which could increase the total TVL in Aave, and help prevent future Black Thursday events.

This post is a call for discussion on:

1. what is needed to get the community consent for such a new collateral.

2. missing technical details.

3. Starting with a different collateral, e.g., ETH, WBTC or USDT, is also something that is up for discussion.