

TL;DR

Proposal to swap the current xSUSHI price adapter feed for the Chainlink calculated xSUSHI/ETH feed, on Aave v2 Ethereum, in order to optimize gas cost and follow good practices.

Rationale

When xSUSHI was listed on Aave v2 Ethereum, it was not the norm for Chainlink to provide price feeds calculated off-chain, on tokens whose prices depend on an underlying, like in the case of xSUSHI and SUSHI.

Because of that, an [adapter price feed](#) was set up to price xSUSHI, using the SUSHI/ETH Chainlink feed and the ratio SUSHI/xSUSHI under the hood.

Even if this is valid and at the moment completely functional, there are 2 aspects by which it is way less optimal than an off-chain calculated equivalent feed, in practice doing the same calculation:

1. Gas-wise

. Every time the protocol queries the price of xSUSHI, the adapter needs to do the calculation from SUSHI/ETH and the SUSHI/xSUSHI ratio, which is relatively gas expensive.

1. Additional unnecessary risk

. Even if not applicable at the moment, with xSUSHI not enabled to borrow on Aave v2 Ethereum (and even frozen), as described [here](#), if borrowing would be enabled by any chance by mistake, that could lead to troubles, which can be fully removed by swapping to the calculated price feed.

The proposal

The action to be executed is really simple, and given its fully technical nature, we don't think Snapshot is required, only the on-chain governance proposal.

The payload will simply consist of calling the AaveOracle

of Aave v2 Ethereum and replacing the current feed of xSUSHI with [its calculated version](#).

In order to get extra assurance we did back-testing comparing both price feeds (working adapter vs off-chain calculated feed) for the last past year, in intervals of 2 hours, with the following results:

- In 24.88% of the cases, both prices differ by less than 0.1%.
- In 55.63% they differ between 0.1% and 1%.
- In 19.49% they differ between 1% and 2%.

Given the 2% default Chainlink deviation on both the SUSHI/ETH and calculated xSUSHI/ETH, and as expected, the swap should not create any meaningful problem.

Still, same as with any other asset, we encourage people using xSUSHI on the protocol to keep a healthy Health Factor, as if the swap will act as another price update, which could lead to liquidation with HF really close to 1 (e.g. 1.001)

Next steps

We will be submitting a governance proposal during the following days, for the community to approve the price feed swap.