Summary

Aave Companies is proposing to the DAO the introduction of a native decentralized, collateral-backed stablecoin, GHO, pegged to USD.

With community support, GHO can be launched on the Aave Protocol, allowing users to mint GHO against their supplied collaterals. GHO would be backed by a diversified set of crypto-assets chosen at the users' discretion, while borrowers continue earning interest on their underlying collateral. As described below, all decisions relating to GHO will be in the hands of Aave Governance.

If approved, the introduction of GHO would make stablecoin borrowing on the Aave Protocol more competitive, provide more optionality for stablecoin users and generate additional revenue for the Aave DAO by sending 100% of interest payments on GHO borrows to the DAO.

Introduction

In the last couple of years, stablecoins have reached a central position in the space, now standing at an approximate $150B market capitalization. Stablecoins provide a fast, efficient, borderless and stable way to transfer value on the blockchain. Decentralized stablecoins add transparency and censorship resistance to this list of benefits – an integral part of web3.

The usage of stablecoins will only continue to grow as cryptoassets become further integrated with a user base that is less crypto-native. Decentralized stablecoins provide censorship-resistant fiat-denominated currency on the blockchain.

Introducing, GHO, a decentralized multi-collateral stablecoin that is fully backed and native to the Aave Protocol.

How would GHO work?

As a decentralized stablecoin on the Ethereum Mainnet, GHO will be created by users (or borrowers). As with all borrowing on the Aave Protocol, a user must supply collateral (at a specific collateral ratio) to be able to mint GHO. Correspondingly, when a user repays a borrow position (or is liquidated), the GHO protocol burns that user's GHO. All the interest payments accrued by minters of GHO would be directly transferred to the AaveDAO treasury; rather than the standard reserve factor collected when users borrow other assets.

GHO introduces the concept of Facilitators. A facilitator (e.g., a protocol, an entity, etc.) has the ability to trustlessly generate (and burn) GHO tokens. If this proposal is approved, then any facilitator would have to be approved by Aave Governance. Various facilitators will be able to apply different strategies to their generation of GHO.

For each Facilitator, Governance will also have to approve something that we call a bucket. A bucket represents the upward limit of GHO a specific facilitator can generate.

If enacted, this proposal will activate the first facilitator: the Aave Protocol - specifically the AAVE market on Ethereum. Governance will be able to determine and assign this facilitator a specific bucket capacity to bootstrap the GHO liquidity and the GHO market.

The Aave <> GHO integration

The Aave – GHO integration employs the same mechanisms as any other asset listed on the Aave Protocol – a specific GHO aToken and GHO Debt Token will be deployed. These tokens can be registered, upon approval of the proposal, for the GHO token on the Aave Ethereum market.

GHO Interest rates

Borrow interest rates for GHO will be determined by the AaveDAO, with a stable rate that may be adapted depending on market conditions. This design retains the Aave Protocol's borrow interest rate model flexibility, and it will be possible in the future to implement any interest rate strategy the Aave community sees fit.

A Discount Model for GHO

Given the nature of the asset, this integration allows for innovative features that provide greater utility for governance and community participants. The initial implementation of GHO includes a Discount Strategy mechanism. The initial discount strategy allows for Safety Module participants (stkAAVE holders) to access a discount on the GHO borrow rate. In the first implementation, the strategy will set a certain amount of GHO at discount per stkAAVE supplied, and a discount on the interest rates that can vary from 0% (no discount) to 100% (full discount). These parameters are controlled by Aave governance.

We have put together a sheets page here where you can play around with different interest and discount rate models to give

you a better idea of the mechanisms behind them.

Aave V3 and GHO, a Match Made in Heaven

Using isolation mode, users can generate GHO with a broad range of assets that are currently supported on the Aave Protocol whilst keeping it collateralized and reducing risk. Supply and borrow caps also help reduce risk.

E-Mode acts as a stabilizing factor in market volatility due to its higher LTV. For example, in the event of a market downturn, GHO demand increases as the price of collateral contracts and users borrow more GHO using other non-volatile collateral assets to repay their positions. This would increase the amount of GHO that enters the market and reduce demand. Stablecoin holders can also access GHO with a rate close to 1:1 with zero slippage thanks to E-Mode.

Portal will provide the ideal path forward to scale GHO in the heterogeneous multichain world. Using portals, GHO can be distributed trustlessly across networks whilst being minted on Ethereum, which has higher security, by simple message passing, without the need to use bridges, reducing the overall risk. Whilst the implementation of GHO proposed here does not include this burn/mint and messaging implementation, the next facilitator implemented and activated by the Aave community may allow the redistribution of GHO tokens on various networks, and automatically supply them into the markets where the feature is activated.

Although the Ethereum market is still running the V2 version, an upgrade to the V3 codebase is expected in the upcoming months.

Further Utility for Governance

Holders of stkAAVE can mint GHO at a discounted rate, meaning they will pay a lower interest rate on the GHO that they borrow. Therefore, there is an incentive to help secure the Aave Protocol as AAVE is staked (stkAAVE) into the protocol's Safety Module.

As people mint GHO through the Aave Protocol and any other facilitators, we expect the Aave DAO to receive a substantial amount of revenue in the form of fees. Instead of LPs receiving most of GHO's borrow interest paid, this interest is fully collected by the DAO. This increase in revenue can be used to innovate, support contributors in the ecosystem, bolster the treasury during market downturns or anything else the DAO decides.

Following the introduction of GHO, the DAO will also be able to decide GHO's native interest rate and change it over time through a governance process, which will be outlined in an upcoming proposal. This means that GHO's monetary policy will be controlled in a decentralized way by AAVE governance.

Importantly, the Aave Protocol should remain as inclusive as possible with a variety of stablecoins available for supply and borrowing. Expanding the protocol's stablecoin pools to include GHO will add optionality and diversification for Aave users and help contribute to the sovereignty of the protocol. GHO will also have a stable interest rate, adding certainty for borrowers.

GHO to market

We envision GHO adoption both inside and outside of the crypto-native community.

Given the low transaction fees on L2s and their growing adoption, we believe there is an opportunity for GHO to have widespread usage on L2s.

Moreover, grants and hackathons can be directed towards developing and integrating payment methods for GHO which have use cases both for crypto-native as well as more mainstream users.

GHO will provide a level of security and decentralization that is inclusive for crypto-native users while also using a growth strategy that emphasizes its use cases for a growing mainstream audience. This strategy should be focused on use cases such as payments whilst taking advantage of the growth and potential of L2s. Grants and hackathons – decided by the Aave Grants DAO - will be a key part of the strategy to build out these mainstream use cases.

Community Snapshot Votes

A Snapshot will follow this ARC to determine whether the community wants to move forward with GHO.

If the community votes positively for the deployment of the protocol creating the ability for users to mint GHO, a recommended starting interest rate and discount rate will be proposed (please comment below with any recommendations), both of which can be changed through governance over time with contributors such as Gauntlet and others potentially playing a key role.

Deployments of GHO on the Aave Protocol across other chains will require further governance approval.

In the future, the community will also be able to decide whether to provide retroactive funding to those who contributed to the creation of GHO and how much funding to provide.

If approved by the community, various audits – by OpenZeppelin and PeckShield – will occur in the coming weeks.

Conclusion

This ARC is focused on introducing and getting community feedback on Aave's native decentralized USD pegged stablecoin, GHO.

GHO will be:

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Decentralized

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Over-collateralized by assets that continue to earn yield

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Backed by multiple types of collateral available on the Aave Protocol

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Governed by the Aave community

We look forward to hearing community feedback on GHO and all aspects of this proposal.

Ready, Set, GHO