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Summary

This proposal aims to articulate the process and value prop of bridging GHO to IBC connected ecosystems such as Cosmos and Polkadot. These ecosystems would greatly benefit from the support of a decentralized stablecoin that can bring liquidity and crosschain activity.

Objective

The objective of this proposal is to introduce the opportunity to make GHO crosschain into the Cosmos and Polkadot ecosystems to create an incentive loop to grow the demand for GHO, hence increasing the amount of collateral on AAVE.

Motivation

There are 3 main benefits to getting GHO to these ecosystems. The main factors are

- Increase demand for GHO hence increasing the total supply
- Give Cosmos/Polkadot a decentralized alternative to USDC/USDT
- Cross pollinate Cosmos and Polkadot to AAVE ecosystem

Background

Cosmos and Polkadot collectively have a market cap of over $8 billion but lack defi activity due to the lack of strong assets generating yield. On top of that existing bridging mechanisms rely heavier on the centralized side ranging from multisigs to permissioned validators that control the bridging components. Bridging through IBC allows us to migrate GHO in the most secure and trust minimized process by solely relying on the light clients and cryptographic proofs. More on IBC soon.

Specification

To strategically bridge AAVE's stablecoin, GHO, to both Cosmos and Polkadot ecosystems, we'd use the Inter-Blockchain Communication (IBC) protocol—a framework allowing seamless interactivity between disparate blockchains. Initially, we'd establish an IBC connection between Ethereum and Cosmos, enabling GHO's transfer and utilization across chains in the Cosmos ecosystem. We already have Cosmos connected to Polkadot in production so we can allow for asset transfers once the assets are in the Cosmos ecosystem. Our parachain would communicate with the Cosmos IBC, forming a relay that ensures GHO's interoperability across all three blockchains. Through this method, GHO would gain vast market access, enhancing its liquidity and usability while expanding its influence

Identified Pools with bluechip ecosystem assets (with possible incentivized emissions)

- GHO / USDC on Osmosis
- GHO / USDC on Moonbeam
- GHO / Atom on Osmosis
- GHO / Dot on Moonbeam
- GHO / Osmo on Osmosis

Next steps

1. Gather community feedback on this TEMP CHECK
2. If community consensus is reached, escalate this proposal to TEMP CHECK Snapshot stage
3. If the snapshot outcome is YAE, allocate GHO into the pools

Disclaimer

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The migration of moving GHO into Cosmos ecosystems will be facilitated through IBC and Composable Finance. More information on IBC and Composable Finance below

Security Considerations

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Composable IBC is designed to be trust-minimized and does not rely on third-party intermediaries or centralized control. This eliminates the potential risks associated with trust assumptions and enhances the overall security of cross-ecosystem bridging. Users can confidently transfer assets and data between different blockchains while maintaining control and security. However the potential risks always linger and for an IBC bridge to be compromised there'd have to be a 51% on either of the connected chains. Fortunately, Cosmos, Ethereum, and Polkadot have huge staked budgets that fortify their security.

Detailed IBC Overview

The Inter-Blockchain Communication Protocol (IBC) is a protocol designed to facilitate the authentication and transportation of data between two blockchains. It operates with a minimal set of functions defined in the Interchain Standards (ICS). Importantly, IBC does not limit the network topology or consensus algorithm of the blockchains it connects, making it versatile and adaptable for use with a wide range of blockchains and state machines. The following features highlight key benefits to utilizing IBC:

i) Permissionless and Secure: IBC offers a permissionless way to relay data packets between blockchains, unlike most trusted bridging technologies. The security of IBC relies on the security of the participating chains.

ii) Modularity and Composability: IBC separates the transport layer (TAO) responsible for secure connections and data authentication from the application layer, which defines how data packets are packaged and interpreted. This modularity enables composability and the ability to design applications on top of IBC.

iii) Light Clients and Relayers: IBC relies on light clients and relayers to ensure the validity of cross-chain transactions. Relayers are responsible for scanning the state of participating chains, constructing datagrams, and executing them on the receiving chain. Light clients efficiently verify the relevant state of the counterparty blockchain.

iv) Security: IBC's security is based on trusting the consensus of the connected chains. It also implements fault isolation mechanisms to limit damage in case of malicious behavior.

About Composable

Composable was the first company to connect a non Cosmos chain through IBC. This was through a custom mechanism to connect Polkadot and Cosmos. Our goal is to bring IBC everywhere, hence connecting to all chains. Connecting to Ethereum will be a major push in the terms of secure interoperability as we are moving away from centralized solutions and empowering users.

Conclusion

This proposal outlines the process of bridging AAVE's stablecoin, GHO, to IBC connected ecosystems like Cosmos and Polkadot to enhance DeFi activities therein. By leveraging the Inter-Blockchain Communication protocol, it aims to facilitate GHO's cross-chain transactions, boosting its demand and collateral utility on AAVE. Initial seeding of $500k GHO into liquidity pools with strong assets is planned to minimize price risks and maximize yield. The proposal emphasizes trust-minimized, secure asset transfers across ecosystems, awaiting community feedback to progress to the TEMP CHECK Snapshot stage for further approval.

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References

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