

The Ampleforth community is proposing the addition of the low-volatility AMPL/WETH/BTC “Trinity” pool (1,2,3) as collateral for borrowing on the Aave platform.

The Trinity pool is one of the lowest-risk sources of collateral for lending/borrowing because of the unique elastic “rebase” properties of the Ampleforth protocol; this has historically maintained a near-0.0 correlation with the marketcap of the two current largest crypto-currencies, Ethereum and Bitcoin (7).

Borrowing against Trinity poses a significantly lower liquidation risk than borrowing against any one of the three assets it contains. A user may choose to borrow against the pool if he or she believes that one of the assets may outperform the other two, making the pool ideal for ETH/WBTC swing traders. Many other use cases that require a stable collateral are also possible.

Here, we summarize the assessment of Trinity in the context of the Aave Risk Assessment Framework (4) for the inclusion of a new asset and conclude that the addition of Trinity as collateral will contribute to the strength and resiliency of the Aave protocol.

## Smart Contract Risk.

Trinity has been active as a multi-asset balancer pool for just over 100 days (3). Despite the relatively short period of time the pool has been active, we judge the smart contract risk associated with it to be minimal.

1. The underlying Balancer Labs code has been rigorously audited and battle-tested. Over 1031 transactions utilizing this pool have been executed since origination, an average of about 10 per day.
2. AMPL has a multi-year track record of successful smart contract developments.

## Counter-Party Risk.

Trinity is governed by an autonomous smart contract written by Balancer Labs and deployed by the Ampleforth team. The underlying currencies, Ethereum, WBTC, and Ampleforth, are widely considered to be quality projects, with cautious deployment, deep-dive audits, and sufficient decentralization. Trinity presents no more counter-party risk than using any of the assets individually as collateral.

Of most recent notable mention, the Ampleforth team has taken another important step toward decentralizing the protocol by removing the team’s ability to censor AMPL transactions and pause the rebase function.

## Market Risk.

Trinity presents significantly lower market risk than the individual tokens composing it because it is a weighted combination of three assets, one of which, AMPL, exhibits near-0 market capitalization correlation with either of the other two (7).

Trinity currently holds \$9.2 million USD in liquidity distributed across 168 owners and has posted an average daily volume of just over \$200k USD in the last 30 days(2). 99.8% of the Trinity tokens are locked in the Ampleforth Geyser, where they are earning passive rewards and users are incentivized to provide liquidity for longer periods of time to maximize rewards. The liquidity risk is expected to continue to decline as traders take advantage of the unique three-way arbitrage opportunity presented every 24 hours before and after the Ampleforth rebase (7).

The volatility risk of the Trinity pool was back-tested by computing the expected 24 hour/weekly/monthly price change of the pool as the weighted product sum of the underlying assets using historical data from June 2019 through March 2021 (6). The volatility risk was found to be <1 and decrease with increasing window size for the Trinity pool. The volatility risk at the sampled time windows was lower than that of Ampleforth, Ethereum, and Bitcoin on their own.

## Impermanent Loss

The risk of impermanent loss of the Trinity pool is significantly lower than providing liquidity for ETH/AMPL or WBTC/AMPL in a 50:50 ratio (8). The unique arbitrage opportunity offered by rebase is expected to attract significant trading volume to the pool, offering holders an opportunity to earn greater returns on trading fees.

## Conclusion

The Trinity Balancer Labs liquidity pool is an optimal source of collateral for borrowing, exhibits low smart contract risk, very low counter-party risk, and minimal market risk compared to borrowing against its constituent assets. The Ampleforth community enthusiastically recommends including this pool as collateral in the Aave protocol.

## References

1. [Trinity Balancer Pool \(ACCP-2\)](#)

2. [Trinity Pool on Balancer](#)
3. [Etherscan: Trinity Balancer Pool Token](#)
4. [Methodology - Risk](#)
5. [AMPL Talk — Elastic Finance - Lending](#)

## **Acknowledgements**

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