Overview

Following the successful launch of Aave V3 on the Ethereum network, an observation period spanning two months, and a <u>Snapshot poll gauging community preferences</u>, Chaos Labs has prepared a comprehensive set of recommendations aimed at facilitating a seamless and successful migration from Aave V2 to V3 on Ethereum. These recommendations are based on a thorough analysis of the adoption patterns and feedback gathered during the observation period and are designed to help maximize the benefits of the new platform while minimizing the potential for any associated risk. By offering these recommendations, Chaos Labs seeks to provide a valuable resource for the community and support the continued growth and development of the Aave ecosystem.

As we mentioned in our <u>previous post</u>, the migration from Aave V2 to V3 on Ethereum is regarded as a multi-phase and goal-driven process. In this regard, the present post endeavors to outline the initial objectives and necessary measures that must be taken to achieve them. Given the process's iterative nature, each step's success will be evaluated. The subsequent steps will be determined based on the impact of the previous steps to ensure that they are positive and contribute significantly to the desired outcomes.

The main goals of the migration are as follows:

- Define the asset list for V3, as well as the associated risk parameters.
- Specifically, this entails establishing a list of assets that meet the defined criteria for inclusion, as well as determining the appropriate settings for key parameters such as Loan-to-Value (LTV) ratios, Liquidation Thresholds (LT), Liquidation Bonuses (LB), and supply and borrow caps. We aim to achieve this goal within two weeks from the opening of this proposal to community discussion.
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 the appropriate settings for key parameters such as Loan-to-Value (LTV) ratios, Liquidation Thresholds (LT),
 Liquidation Bonuses (LB), and supply and borrow caps. We aim to achieve this goal within two weeks from the opening
 of this proposal to community discussion.
- Make the necessary listings and risk settings on V3 to allow for liquidity migration.
- This process will begin once the desired state of V3 is agreed upon by the community and will involve the implementation of specific listings and risk settings based on the recommendations outlined in this proposal. Through these efforts, we aim to ensure a seamless and efficient migration process, enabling users to continue leveraging the benefits of the Aave protocol while also taking advantage of the new and enhanced features offered by V3.
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- Measure Impact and Propose new steps.
- Achieving a successful and seamless migration from Aave V2 to V3 on Ethereum is an ongoing process that requires
 continuous evaluation and adjustment. In light of this, we have developed a plan to measure the impact of the initial
 settings implemented in the V3 ecosystem and propose new steps every few weeks. This will enable us to identify
 potential issues or obstacles that arise during the migration process and to make informed decisions about the
 necessary next steps. Ultimately, our goal is to achieve active migration management until liquidity in V3 surpasses
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 necessary next steps. Ultimately, our goal is to achieve active migration management until liquidity in V3 surpasses
 that of V2.

We are pleased to provide the community with a review of the current state of the migration and provide our recommendations for the assets and risk parameters of V3 together with the associated risk considerations.

The Current State of the Migration

An examination of the active and frozen assets on Ethereum V2 reveals that out of a total of 20 active assets and 17 frozen assets, 10 assets have already been listed on V3, and three assets have passed the snapshot vote (UNI, SNX, and MKR). These assets account for 98.12% of the total supply and 98.64% of the total borrowed amounts on V2.

An analysis of the growth patterns of Aave V2 and V3 on Ethereum since the launch of V3 reveals that there has been a significant increase in the growth of V3, which has been accompanied by a corresponding decrease in Aave V2.

27 January
29 March
Aave V2 Ethereum TVL (Including Borrowing)
\$5.8B
\$6.1B
Aave V3 Ethereum TVL (Including Borrowing)
0

Overall Crypto Market Cap

\$1.05T

\$935M

\$1.18T

While the Total Value Locked (TVL) of both Aave V2 and V3 on Ethereum has increased steadily over time, it is important to discount the growth in the overall cryptocurrency market capitalization in order to gauge the actual growth rates of these deployments. By doing so, we can obtain a more accurate picture of the performance of Aave V2 and V3 on Ethereum, as well as the progress of the ongoing migration.

Growth during January 27th - March 29th

Aave V2 TVL net Growth

-5.9%

Aave V3 TVL net Growth

+14.4%

V2+V3 TVL Net Growth

+8.5%

An analysis of the inflow of funds into Aave V3 on Ethereum reveals that the platform is attracting capital from both Aave V2 and new sources. This trend suggests that users are increasingly migrating to the new deployment while also indicating that the deployment is successfully attracting new users and increasing its overall market share.

Aave V3 TVL growth since launch

Source: Defillama

Aave V2 TVL growth since V3 launch

Source: Defillama

Crypto Market Cap Growth Since V3 Launch

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Source: coinmarketcap.com

Looking deeper at the data, we can see that the majority of the TVL and borrows come from LSD collateral and ETH borrowed against it. This is a result of the high capital efficiency on LSD positions enabled due to the E-Mode category on V3.

If we discount the growth attributed to LSD E-Mode, the net growth of V3 is much smaller. When examining the capital efficiency of collateral on V2 vs. V3, terms are considerably favorable on V2. One exception is CRV, where LT and LTV are higher, but its supply is very low, probably because of the fact that CRV suppliers also supply other assets whose LT is

lower on V3, and isolation mode prevents cross-collateralization.
LTV (V3)
LT (V3)
Total Supply (\$M) (V3)
LTV (V2)
LT (V2)
Total Supply (\$M) (V2)
DAI
64
77
20
75
87
324
USDC
74
76
102
80
87.5
701
USDT
Not Collateral
Not Collateral
Not Collateral
Not Collateral
LUSD
Not Collateral
Not Collateral
Not Collateral
Not Collateral
AAVE
60
70
4.04
66

Moving forward with the migration process

Since the significant assets have already been listed on V3, the next steps are as follows:

- 1. Agree on the remaining assets to be listed on V3 and list them with proper risk settings.
- 2. Adjust parameters on both V2 and V3 to promote the migration of the listed assets.

To address the assets in a structured manner, we have divided them into four groups:

- 1. Assets already listed on V3, where we need to adjust the risk parameters accordingly.
- 2. Assets not yet listed that we recommend listing in Isolation Mode.
- 3. Assets not yet listed that we recommend not listing on V3.
- 4. Stablecoins.

E-Mode as a growth engine, less relevant to the migration of assets

While stablecoin E-Mode introduces new opportunities for Aave users, we see it as part of the growth of V3 but not a significant part of the migration from V2 to V3. This is because there is barely a use case for stable-stable positions on V2.

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Screen Shot 2023-03-29 at 17.55.12

1194×734 14.1 KB

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Risk Parameter Changes

Chaos Labs proposes a combination of increasing capital efficiency on V3 and decreasing capital efficiency on V2 as the most efficient approach to changing risk parameter settings:

- Increasing capital efficiency on V3
- Use Chaos Cloud Simulations to run simulations and set higher LT and LTV. The parameters set at the launch of V3 Ethereum were intentionally conservative, and we believe they can be increased.
- Decreasing capital efficiency on V2
- After exploring several options, we propose a gradual increase of the Reserve Factor and a change of the interest rate
 curves for all assets. This approach will prevent any shocks that could trigger instant liquidations or prevent users from
 accessing the pools. It also gives users sufficient time to migrate their funds without incurring significant losses.
- · Retiring ineffective risky assets
- Assets that we recommend not listing on V3, which are currently frozen on V2, will remain in that state while their reserve factor gradually increases.

Assets already listed on V3

The migrated assets account for 98% of the assets used across all positions for both supply and borrow. Therefore, setting efficient and safe parameters for these assets is the primary consideration for migrating V2 liquidity to V3. To facilitate this, we will run Chaos Cloud simulations in the next 2 weeks and propose optimal risk settings.

Along with the new risk settings, we recommend increasing the Reserve Factor and updating the interest rate curves for all assets every two weeks. This will allow suppliers enough time to migrate their liquidity to V3 and give protocols on top of Aave V2 an opportunity to make necessary adaptations.

New Asset Listings

The following list shows the V2 assets not yet listed on V3 with Chaos Labs' recommendation for their listing:
Token
Recommendation
1Inch
List in Isolation Mode
ENS
List in Isolation Mode
BAT
List in Isolation Mode
CVX
List in Isolation Mode
ENJ
List in Isolation Mode
MANA
List in Isolation Mode
AMPL
Exclude from V3
KNC
Exclude from V3
RAI
Exclude from V3
REN
Exclude from V3
RENFIL
Exclude from V3
XSUSHI
Exclude from V3
YFI
Exclude from V3
ZRX
Exclude from V3
Assets Migrated to Isolation Mode
The following assets listed on Aave V2 are traded with low volumes and market cap. Therefore, we recommend listing them in Isolation Mode. As mentioned earlier, these assets account for less than 2% of supply and borrowing, and we do not believe that the risk of listing them outside of Isolation Mode is justified.
1Inch

ENS

BAT

CVX
ENJ
MANA
180 days Average market cap
\$375M
\$372M
\$377M
\$355M
\$382M
\$1B
180 days Average daily trading volume (CeFi & DeFi)
\$34M
\$51M
\$38M
\$7M
\$36M
\$141M
1INCH
ENS
BAT
CVX
ENJ
MANA
daily annualized volatility
72.84
106.79
77.16
99.07
86.32
97.54
30-day annualized volatility
71.30
88.48
78.21
71.34
80.25
82.48

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biggest single-day price drop
-22.04%
-33.99%
-20.18%
-31.07%
-24.59%
-31.56%
1INCH
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1434×445 137 KB
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cdn.com/business20/uploads/aave/original/2X/d/d9ca43a761401c5e4de7507d5789de434aa0fddd.png)
ENS
Untitled (43)
1268×453 136 KB
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cdn.com/business20/uploads/aave/original/2X/5/54f3fbd1b0d24599e01449c4cd77d3c3af27c7c7.png)
CVX
Untitled (44)
1269×445 131 KB
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cdn.com/business20/uploads/aave/original/2X/1/137fb8b43cd5f53ca84884ea308c3288c0270551.png)
ENJ
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Untitled (45)
1324×450 150 KB
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cdn.com/business20/uploads/aave/original/2X/c/c5c7e19022d0b207f9972ea141311e005f1c561b.png)
MANA
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1234×451 110 KB
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cdn.com/business20/uploads/aave/original/2X/e/e44c7cebeba14aff5fdd711b6b3e90f6c32a16ea.png)
BAT
Untitled (47)
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Using Chaos Labs' interim methodology for new asset listing and Isolation Mode methodology to determine the debt ceiling we recommend the following parameter settings:

1Inch
ENS
BAT
CVX
ENJ
MANA
Recommended LT
67%
49%
70%
54%
63%
53%
Recommended LB
8.5%
8.5%
6%
10%
10%
8.5%
Recommended Debt Ceiling
\$4.5M
\$3.9M
\$3.5M
\$7.8M
\$3.5M
\$3.6M

Assets Recommended to Delisting

There are 9 non-stablecoin crypto assets listed on Aave V2, with a combined borrow of \$1.2M (0.07% of the total borrows on Aave V2) and a combined supply of \$27M (0.44% of the total supply on Aave V2). However, these assets are currently frozen. After observing their liquidity and market cap, we recommend not listing them on Aave V3.

AMPL	
BAL	

KNC

RAI
REN
RENFIL
XSUSHI
YFI
ZRX
180 days Average market cap
\$45M
\$236M
\$113M
\$10M
\$95M
-
\$79M
\$235M
\$186M
180 days Average daily trading volume (CeFi & DeFi)
\$0.7M
\$10M
\$25M
\$0.6M
\$23M
-
\$0.1M
\$43M
\$18M
Stablecoins
Of the 6 stablecoins listed on Aave V2 and not listed on V3 we recommend the following:
Token
Recommendation
FEI
Exclude from V3
sUSD
Exclude from V3
BUSD
Exclude from V3
FRAX

List in Isolation Mode **GUSD** List in Isolation Mode **USDP** List in Isolation Mode FEI Exclude from listing due to inability to hold the peg and low market cap that does not show any signs of recovery **FEI Price** Screen Shot 2023-03-28 at 20.02.05 841×483 28.2 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/0/07913cfc32be7da18f9de8149ecdc5ff732537e9.png) **FEI Market Cap** [Screen Shot 2023-03-28 at 19.24.41 857×487 24.3 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/3/37553efcdc606a347d83b0eaf873d3061c345343.png) sUSD Exclude from listing due to low market cap that does not show any signs of gaining more traction and does not hold the peg very well sUSD Price [Screen Shot 2023-03-28 at 20.01.26 837×482 30.9 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/c/c76d049fd4cfd9f2f4581d90c14e1778d0e79f54.png) sUSD Market Cap [Screen Shot 2023-03-28 at 20.01.35 841×482 31.2 KB 1(https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/6/6ea3cc00569c7fbfef946619d2db542d7099ccd5.png)

BUSD

BUSD maintains its peg quite decently and, until recently, displayed firm adoption and growing market cap. While we do not account for regulatory risk, the outcome of recent events has caused a significant decrease in market cap. Therefore we recommend not to list BUSD on V3 at this point and reconsider the listing of BUSD in 4-8 weeks based on market behavior.

BUSD Price

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828×468 31 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/b/b2ad10c5a20aa4dbd16c14362999eb0de9efcc4a.png) **BUSD Market Cap** Screen Shot 2023-03-29 at 14.28.04 828×475 23.5 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/d/df9115233bd23954710ed2f4eaac7dd320c64e9d.png) **FRAX** FRAX maintains its peg reasonably, and given a fair market cap of over \$1B and sufficient liquidity, we recommend listing it in isolation mode. **FRAX Price** Screen Shot 2023-03-29 at 15.06.20 845×480 30.5 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/4/4191967d1d31702392836b137d1d02de5bf69895.png) FRAX Market Cap Screen Shot 2023-03-29 at 15.08.48 833×476 22.4 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/b/bb333be32c6ea8a124052f81d4136b774e54ff39.png) **GUSD** GUSD maintains its peg reasonably, and given a growing market cap, we recommend listing it in isolation mode. **GUSD Price** Screen Shot 2023-03-29 at 15.17.05 827×483 32.1 KB](https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/4/4d7a7d4d0d6bd9c6af0de4f82700e02c57a9960a.png) **GUSD Market Cap** Screen Shot 2023-03-29 at 15.17.15 833×474 25 KB 1(https://europe1.discoursecdn.com/business20/uploads/aave/original/2X/f/f52495b2fcfe9812a79dbc15127213158e49ead6.png)

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USDP

USDP maintains its peg reasonably, and given a growing market cap, we recommend listing it in isolation mode.

USDP Price
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USDP Market Cap

[

Screen Shot 2023-03-29 at 15.21.52

835×478 28.5 KB

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cdn.com/business20/uploads/aave/original/2X/a/a27a633070431201de6aae212dd67b81434ae2ae.png)

Dual Risk

One of the important risk controls introduced in V3 is the Supply and Borrow caps. Unfortunately, we can only govern the supply and borrowing amounts on V3, while the supply and borrowing of the same assets on V2 are uncapped. This may expose the entire Aave protocol to greater collateral and borrowing exposure than intended, as long as supplying collateral and borrowing of an asset is still available on Aave V2.

Technically, the only way to mitigate this risk is to freeze those assets on V2. However, we do not recommend taking this approach as we view it as too aggressive, especially for protocols built over Aave V2. It is also important to note that even this approach will leave some residual exposure to the assets already collateralized and borrowed. Since the downside of such an approach is too great, we believe that the best risk-reward weighted approach will be to set the long-term supply and borrow caps on V3 while increasing the reserve factor and updating the interest rate curves on V2, and gradually making it less attractive. This approach may create increased exposure for a limited period of a few months. However, this increased exposure will be limited in time and partially compensated by the increased reserve factor proceeds.

Next Steps

Based on community discussion around this proposal, we will proceed with implementation as follows:

- 1. Proposal to list the new assets on V3 in Isolation Mode.
- 2. Proposal to list stablecoins on V3.
- 3. Proposal to update risk parameters of currently listed assets on V3.
- 4. Proposal to update reserve factors and interest rate curves on V2.

After implementing all updates, we will evaluate the progress of the migration and make additional recommendations accordingly.