The following is a risk analysis and review of integration details for Ethena's USDe stablecoin (referred to by Ethena as a "synthetic dollar") as collateral via the Morpho Blue lending protocol.

Morpho Risk Factors

Technical Implementation

The Morpho Blue lending protocol and accompanying Metamorpho vault aggregation protocol has only been on mainnet for a few months, and to date has reached roughly $250 million in total deposits. As the protocol is relatively new and has not held significant TVL for a long period, there may be more risk of technical faults compared with more time tested protocols. However, Morpho Blue and Metamorpho have very compact codebases (~600 LOC and ~800 LOC respectively) with simple logic, which limits the surface area of potential faults.

Maker also has DDM / conduit deployments which introduce some degree of technical risk. These components will be audited and thoroughly reviewed before deployment of funds to minimize likelihood of faults.

Rate Models and Liquidity

The standard Morpho Blue interest rate model uses an automation scheme to adjust borrow rates according to supply and demand of liquidity. In addition to the standard utilization based rate model, borrow rate at optimal utilization is continuously updated if utilization is above or below target, with a maximum rate of change of 2x up or down per 5 days. The borrow rate at 100% utilization is 4x the optimal borrow rate.

If sUSDe yield changes rapidly, this could result in periods of very high or low utilization. In case of rapid yield increases (greater than 4x from baseline), the market could be stuck at 100% utilization for a multi day period until optimal borrow rate adjusts sufficiently higher. On the other hand, if sUSDe yield falls sharply, the market could sit at very low levels of utilization for a multi day period while borrowing rates adjust down.

Given the potential for divergence between optimal borrow rate and sUSDe yield (or USDe implied yield from shards), we should expect that the total earnings from the Morpho vault will have some amount of drag on efficiency; when yield increases quickly the borrow rate will be artificially capped, while during rapid yield drops utilization will be well below the optimal ratio. However, the only conditions that would negatively impact Maker risk is when yields increase very quickly, which reduces the vault's liquidity profile. Rapid declines in yield are risk neutral.

Metamorpho Curator Operations

Metamorpho vaults rely on curators to manage allocation of funds across pools within pre-set caps. Typically, this role is managed via multisig to maintain agility, while the process of setting caps is done with a more deliberate governance process including timelock delays and potentially veto rights. The DAI vault is planning to use a multisig to manage allocation within caps set by Maker governance. While failure of the curator multisig should not result in loss of funds, because they can only be moved to whitelisted pools within defined limits, it could lead to temporary interruption of service, with funds not being actively rebalanced to maximize performance.

Ethena and USDe Risk Factors

Custody

Ethena makes use of off exchange custody providers to manage its collateral for perp hedging positions. This reduces counterparty risk exposure to exchange hacks, credit events, and insolvencies. However, there remain certain custody related risk factors that could impact USDe value.

Off exchange custody providers have strong track records and operational standards, but they could still fall victim to a hack or other adverse event that could result in losses or interruption in service. Funds are expected to be held in segregated accounts within bankruptcy remote legal structures (to both the exchanges and the custodian's general operations), but in some cases the protection from creditors may be challenged, and in the case of severe mismanagement or fraud by custody solution providers or exchanges Ethena may still face losses despite these protections. Custodians are also accountable to various jurisdictions and could be forced to censor transactions or freeze assets based on court orders or other legal processes. They are located outside of the US, but may still be forced to comply with US government requests in some circumstances.

Because off exchange custody arrangements are fairly new, there are limited examples of the arrangements working in practice. The most notable success story is when Coinflex went under and became inaccessible to users, Copper users received 100% of their funds, including unrealized profit/loss, within days. This is a significant, demonstrable benefit versus direct exchange exposure, where Coinflex creditors are still locked in a bankruptcy process.

Example: Copper Clearloop

- Copper has never been hacked or lost users' funds

- Copper users' funds were wholly available within days of Coinflex's (exchange) failure
- Copper users' funds are a part of a bankruptcy-remote trust, meaning in the event of Copper's failure, users' funds are not a part of the Copper estate

Exchanges post collateral with Copper ahead of time to ensure users' PnL is settled each cycle. This enables Copper to ensure users receive their PnL even if an exchange refuses to settle. Ethena retains the ability to dispute erroneous exchange settlement requests.

However, in less binary outcomes, it is not clear how any disputes between exchange and user would be adjudicated, and disputes could theoretically result in funds being frozen or unavailable for prolonged periods. Custodians may struggle to safeguard against potential for faulty notices or requests from integrated exchanges, for example liquidation notices that request a transfer of Ethena's collateral to cure debt, though each solution either protects against this up front via dispute systems or has curing mechanisms for faulty notices or requests.

We also note that certain exchanges have potential overlapping relationships, interests, or common control with custody providers and/or liquid staking providers. Examples including Binance, Ceffu (now said to be independent but formerly doing business as Binance Custody), and WBETH, along with Bybit and Mantle METH. These overlaps could undermine the protections provided by off exchange custody by giving exchange operators additional leverage over Ethena collateral assets.

Trading Operations

Ethena carries out basis trading and other operations via sophisticated trading infrastructure. This involves reliance on price feeds, various technical/cloud infrastructure, linkages with custody providers and exchanges, and other dependencies. Key services going down could interfere with Ethena's trading activity, which may result in loss of funds depending on market conditions.

Ethena enables minting and redemptions using price feeds and other market data to evaluate the appropriate quote to give counterparties for minting and redeeming USDe, accounting for Ethena's own trading costs and market impact. Faulty data or compromised systems could result in Ethena's system giving bad quotes and leaking value. For now minting and redemptions are limited to whitelisted, fully-KYC'd parties which significantly reduces risk via known counterparties, but if this is opened up to a wider set of users in the future the risk of losing money increases. Based on current per block mint and redeem limits, Ethena could lose up to $750,000 per block ($225 million per hour) in a worst case where mint keys are fully compromised and give the worst possible quotes for both ; however this degree of loss is extremely unlikely as there are additional control mechanisms that can shut off mint and redeem operations, and bad quotes would more plausibly result in moderate value leakage, for example roughly $500,000 to $2 million per hour if quotes were 1-2% off market.

It is worth noting Ethena charges a slight markup for mint/redeem USDe requests given Ethena pays for the ETH gas of the transaction, execution costs on exchange, as well a small buffer in case of market volatility. The cost is calculated by summing the three components that contribute to the all-in minting/redeeming cost. This cost is passed onto users so Ethena minimizes risk of losses arising from slippage or bad pricing (losses could only result from significant and unexpected changes in market prices or conditions). This fee is a constant and is meant to protect the protocol against the possibility of continuous trading operation losses over time.

Authentication and Systems Integrity

While exchanges and custodians generally have reliable systems and key management practices, including cold storage, customers like Ethena may form a weak link in some cases, resulting in risk of loss. Ethena needs continuous and rapid access to funds to undertake hedging and trading operations, which limits the ability to have true "cold storage" practices for keys and other authentication materials. Compromise of exchange or custodian API keys, crypto wallets involved in system operations, physical authentication tokens, or internal communications methods could result in loss of funds. Insufficient internal controls and role based permissions could also cause losses via unauthorized actions or misappropriation.

Ethena may have some key man / bus risk factors, depending on how authentication and permissions are distributed across responsible team members and backed up. If key contributors become incapacitated or are out of touch for a period of time, funds could be lost or become temporarily unavailable, or it may not be possible to operate certain system components such as exchange accounts or on-chain addresses.

Ethena Entity Risk

Ethena is similar to an RWA project in some ways, as the underlying assets backing USDe are currently not secured on-chain but instead are held via legal entities. This allows Ethena to integrate with centralized exchanges and allow for the delta-neutral strategy to reach meaningful scale, which is not currently possible on decentralized perpetual exchanges due to limited liquidity and open interest. But this also introduces various additional legal risks, as the linkage between onchain USDe and off chain backing assets may be somewhat tenuous. Specifically, the tokens do not have clear legal rights to the underlying backing. Imbuing the tokens with more explicit and enforceable legal rights may create other problems if this brings the tokens under various investment regulatory schemes.

The sUSDe token similarly lacks explicit legal rights. As an example, shortly after public launch the Ethena team announced a change to sUSDe yield payments reducing payouts to a maximum of 15% annualized, before partially reversing the change to a compromise that was somewhat below the original payout scheme used during the private beta period. This indicates the team still exercises complete discretion and control over key operational processes, and users have relatively little protection against unexpected changes. This is somewhat mitigated by the presence of influential coinvestors in USDe/sUSDe, along with reputational stake of VC and Exchange investors on the Ethena Labs cap table, which may help prevent unreasonable actions by the core team. However, Ethena is planning to implement decentralized decision making processes at the conclusion of their shard campaign, which may help provide greater transparency and community input for important decisions.

Exchange Failure

While Ethena uses off exchange custody solutions to safeguard collateral used on centralized exchanges, the failure of a supported exchange may still cause significant disruption and incur losses to the protocol. If an exchange fails, Ethena would be forced to re-enter short perp hedging transactions on other supported exchanges. Doing so in a short time period would likely cause significant market impact and trading costs. Additionally, if perps were trading below spot prices (which is likely during an exchange failure event) this would also represent a cost to Ethena while opening short positions. Ethena would also lose any unrealized profit from the failed exchange, and would bear price exposure from their last profit settlement on the old exchange until they were able to fully re-hedge their collateral on alternative exchanges. Depending on market conditions, losses could plausibly run up to 20% or more of the futures position size from the failed exchange.

In some cases, an exchange may remain solvent but particular futures and perps markets may incur significant position bankruptcies. If the bankruptcies exceed the exchange's insurance fund, this is typically dealt with via auto-deleveraging (ADL), where profits are clawed back from highly levered winning traders to cover losses from bankrupt accounts. Because Ethena settles PNL frequently (expected to be at least daily) and maintains very low leverage, typical ADL processes would not incur serious losses to the protocol. But if Ethena has accumulated high unrealized PNL (for example if the market crashed during the previous settlement period), losses might be substantial. Additionally, if total unrealized PNL is insufficient to cure the bankrupt accounts or if impacted exchanges change their ADL procedures, Ethena may face additional losses beyond their unrealized PNL. While collateral is held in off exchange custody, it may become inaccessible while exchanges and Ethena manage any potential disputes over ADL impacts, or parts of the collateral could be surrendered to the exchange to cover the clawback amount.

However, we note that the last ADL on a large cap asset contract on a major exchange was Bitmex's 2019 ADL event. Major exchanges were able to survive Black Thursday (12 March 2020) with Bitcoin's 50% daily drawdown without impacting perpetual users' positions. Exchanges also have generally robust insurance funds which provide additional protection on top of their standard risk management and liquidations infrastructure. Overall, the likelihood of ADL on an ETH or BTC contract on a major exchange impacting Ethena is considered very low. The types of market conditions that could cause such an ADL would also be likely to cause significant disruption and systemic risks across the crypto and defi space (e.g. market crashes as sharp as Black Thursday).

Perp Basis, LST Discounts, and Peg Stability

Ethena is set up to quote prices for minting and redemption transactions to ensure that the protocol does not lose money due to trading activity. Instead, users bear any additional cost of trading activity and slippage, or price divergences between perp and spot prices. This is generally positive for Ethena's solvency risk profile as it reduces risk of losing money from primary market operations. But, on the other hand this reduces the strength of USDe's peg to the dollar, particularly during volatile market conditions. When perp prices trade above spot, this would result in greater cost to redeem USDe (due to higher cost incurred by Ethena when closing short perp positions), while perps trading below spot would cause higher costs for minting USDe.

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Source: Velodata - ETH Perp Premium/Discount

Similarly, if an LST included in Ethena collateral trades at a discount due to liquidity conditions, this may result in higher costs to redeem USDe as the net asset value backing the protocol is temporarily depressed. Ethena seems to be holding an increasing share of backing in pure ETH rather than LSTs as it grows, which helps reduce the impact of LST liquidity risks. LST percentage of assets backing USDe is below 30% today and this is expected to continue decreasing while bull market conditions persist.

The result of both effects is that USDe may trade with a loose peg to USD during volatile market conditions and particularly during market crashes (which are typically associated with LST liquidity stress as well as spot vs perp dislocations).

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Source: Coingecko stETH

LST Solvency Risk

Ethena holds direct, non-overcollateralized exposure to liquid staking tokens including WBETH, STETH, and METH. If an integrated LST faces permanent impairment due to hacks, operational issues, or validator slashing, this would flow through directly into Ethena's collateral value. Losses in excess of Ethena's reserve fund would need to be recapitalized or socialized as losses for USDe holders. Historically we have not seen major LSTs incur losses but recent concern over client diversity and bugs has resurfaced the potential for tail risk events.

Negative Funding and Reserve Fund Depletion

Perps often trade with significant negative funding rates during downturns. Ethena does not pass negative funding on to USDe or sUSDe holders, instead covering this from accumulated reserve fund balances. If losses from negative funding exceed the reserve fund this could push the protocol into insolvency. However this is not considered a serious risk as losses would accumulate relatively slowly and users (including Maker collateral integrations) would have time to safely wind down exposure. Ethena could also shift backing into alternative assets such as stablecoins or RWAs, which goes against the protocol's stated mandate somewhat but would be a viable way to address persistent negative funding.

Maker Integration Review

Direct Ownership vs Overcollateralized Lending

Maker can add USDe exposure to the balance sheet either directly (via purchasing in an entity or a PSM swap facility) or through overcollateralized lending. Generally we believe that overcollateralized lending offers a better risk reward tradeoff and is both more resilient and scalable over the medium term. However, Maker may also seek to take on direct exposure in the near term as it may be faster to implement this than a DDM. Direct exposure, if any, should be limited in size to avoid excessive impact on capital at risk.

By introducing a buffer of user overcollateralization, Maker would only face losses that exceed this collateral requirement. This reduces exposure to some of the most prominent USDe risks including accumulation of negative funding costs and small LST or perp price divergences.

Overcollateralized lending offers a more robust liquidity profile to meet Maker's asset allocation needs. Directly holding sUSDe brings exposure to the various peg stability risks discussed above, and additionally there is a 7 day unlocking period to be able to withdraw from sUSDe, which creates additional liquidity and duration risk. While sUSDe can be sold without waiting for unlocking, there is very little secondary market liquidity. All of this means that Maker may be forced to sell holdings at a loss if it faces DAI liquidity constraints like we saw in the past few weeks. Overcollateralized lending externalizes these liquidity risks onto leverage users, who bear the short term liquidity and price risks of holding sUSDe. Maker would be able to address any liquidity needs by increasing borrowing costs, which incentivizes users to repay debt without incurring a loss to the protocol (in fact this may drive increased short term revenue until debt is repaid, which can fund other liquidity support measures like increased DSR).

Overcollateralized lending will result in somewhat lower yield earned on USDe exposure versus direct holdings, as borrowers will only be willing to open and maintain positions when the borrowing cost is far enough below Ethena yield to achieve their target rate of return. But as long as user return expectations are not unreasonably high, this will still achieve a healthy yield to the protocol all while incuring significantly less risk.

Asset Selection

The core yield bearing asset of Ethena is sUSDe, which receives a portion of protocol yield generated by perp basis trading activities. However, during Ethena's launch period USDe also effectively earns a rate of return via Ethena's "Shard" program, which is a points program in anticipation of a governance token airdrop. While sUSDe seems likely to be the best candidate for asset allocation over the long term as it will continue to earn yield even when the points farming ends, in the immediate future USDe is also an attractive integration target as it is not subject to a lockup and bears lower liquidity risk.

For the launch of the Metamorpho vault, we recommend whitelisting pools for both sUSDe and USDe collaterals. Vault management can shift funds between these pools as appropriate to maximize revenues and conduct an orderly winddown of USDe pools if Ethena ends incentives.

Collateral Ratio Selection

Morpho Blue offers a range of collateral ratios when creating pools and allocating through vaults. Currently, the available

liquidation loan to value ratio (LLTV) options for pool deployment are 38.5%, 62.5%, 77%, 86%, 91.5%, 94.5%, 96.5%, and 98%. We have modeled potential value capture efficiency across LLTV options, accounting for Maker yield earned (per DAI borrowed) versus base Ethena yield as well as various user sensitivities such as expected return and user position buffer from LLTV.

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Chart

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Source: sUSDe Evaluation

Based on reasonable ranges of input values, LLTVs from 77% through 94.5% seem to offer the best tradeoff between value capture and risk mitigation. We see that LLTV's below 77% tend to result in very low expected return for Maker, as the leverage is not high enough to make the trade attractive without extremely low borrowing costs. For LLTV's above 94.5%, the marginal increase in yield earned is arguably not sufficient to justify the increase in risk.

We can review user behavior after launch to help tune asset allocations across pools and arrive at an optimal deployment strategy. For example, we can measure user return expectations by comparing sUSDe yield versus Morpho borrow cost and position leverage, which then becomes a valuable input to determine which pools offer the best risk vs reward efficiency. The below graph provides an example of measuring value capture efficiency against user expected returns for an 86% LLTV pool;

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Debt Ceilings and Vault Caps

We evaluate two types of exposure limits for the Morpho USDe facility, Maker's standard DC-IAM parameters, as well as Metamorpho vault market cap parameters. Metamorpho vault caps provide limitations on how curators can move funds between whitelisted markets, allowing for funds to be reallocated quickly and efficiently between individual collaterals and LLTVs via a multisig while still giving Maker governance ultimate control over maximum funds deployed per pool. These vault caps are further constrained by the overall DC-IAM limits that govern how much total DAI can be deployed into Morpho.

For Metamorpho vault caps, we propose caps depending on the LLTV of the pool. Allocating to pools with lower LLTV will not increase the overall risk of the vault, so there is no need to apply strict constraints. On the other hand, pools with the highest LLTVs do increase risk so this should be more firmly under the control of Maker governance by implementing tighter caps. At launch, we recommend the following pool caps (mirrored across both USDe and sUSDe pools): 1 billion DAI for 77% LLTV pools, 100 million DAI for 86% LLTV pools, 50 million DAI for 91.5% LLTV pools, and 10 million DAI for 94.5% LLTV pools.

DC-IAM parameters limit Maker's total exposure to Morpho USDe collateral lending across all pools included in the vault. The line

(absolute maximum value of DAI supplied), gap

(maximum increase in current exposure limit per period), and ttl

(minimum cooldown period between exposure limit increases) parameters should be tailored to limit risk while allowing for robust growth and revenue generation.

Total exposure to Ethena, and perp basis trading strategies as a whole, can be evaluated against liquidity and tail risk metrics to arrive at upper limits to exposure (line

). Key metrics considered include: perp market aggregated open interest and daily volumes, potential total size of basis trading positions, Ethena USDe circulating supply, DAI circulating supply and liquidity profile, and resilience against potential tail risk events. Generally, Maker should avoid making up to great a share of perp open interest, particularly when levels of basis trading activity are high, to minimize the potential for disruption if a large share of basis trading positions unwind in a short period of time. Additionally, Maker should limit total share of USDe circulating supply, again to limit disruption and stress on Ethena's trading infrastructure in the event this position needs to be quickly unwound. This is particularly important

given Ethena has almost exclusively seen inflows since launch, so their redemption processes are untested at scale. Finally, Maker should limit the share of DAI collateralization from USDe to minimize likelihood of protocol failure from a severe tail risk event. This is also important to maintain a strong sense of product and risk differentiation from Ethena; we should diligently avoid characterization as “wrapped USDe” as this will drive negative PR and is misaligned with DAI users’ demonstrated risk preference for DAI to be boring and predictable.

We recommend limiting line

based on the lowest of the following benchmarks:

- 10% of total perpetual futures open interest - based on ETH perp OI of between $6.5-10 billion (estimates vary based on included exchange list), this would result in up to 650 million to 1 billion DAI line

(generally the lowest credible estimate of OI should be used), this value could increase if additional assets such as BTC were used for basis trading

- 30% of USDe circulating supply, inclusive of Maker owned supply - with 1.2 billion USDe currently circulating, this would result in a maximum line

of up to 515 million DAI

- 20% of DAI circulating supply - based on current DAI supply of 4.7 billion, this would result in maximum line

of up to 950 million DAI

Note that the USDe circulating supply threshold only applies to exposure through Ethena, while the perpetuals OI and DAI circulating supply threshold should be applied to the sum of all perp basis trading exposures.

The gap

and ttl

parameters control the rate of exposure growth. Due to the nature of USDe and the proposed Morpho integration, it is expected that exposure will be at the maximum line

limit most of the time, based on Maker governance determined strategic asset allocation targets. So gap

and ttl

will not be quite as important as they are for volatile crypto collaterals, and we recommend setting them fairly conservatively: gap

of 10% of line

, and ttl

of 24 hours.

Launch Parameter Recommendations

Based on the above review of risk factors we recommend the following initial parameters:

- DDM DC-IAM Parameters:
- line

: 100 million DAI

- gap

: 100 million DAI

- ttl

: 24 hours

- line

: 100 million DAI

- gap

: 100 million DAI

- ttl

: 24 hours

- Metamorpho Vault Parameters:
- Market Caps:
- USDe 77% LLTV pool cap: 1 billion DAI
- USDe 86% LLTV pool cap: 100 million DAI
- USDe 91.5% LLTV pool cap: 50 million DAI
- USDe 94.5% LLTV pool cap: 10 million DAI
- sUSDe 77% LLTV pool cap: 1 billion DAI
- sUSDe 86% LLTV pool cap: 100 million DAI
- sUSDe 91.5% LLTV pool cap: 50 million DAI
- sUSDe 94.5% LLTV pool cap: 10 million DAI
- USDe 77% LLTV pool cap: 1 billion DAI
- USDe 86% LLTV pool cap: 100 million DAI
- USDe 91.5% LLTV pool cap: 50 million DAI
- USDe 94.5% LLTV pool cap: 10 million DAI
- sUSDe 77% LLTV pool cap: 1 billion DAI
- sUSDe 86% LLTV pool cap: 100 million DAI
- sUSDe 91.5% LLTV pool cap: 50 million DAI
- sUSDe 94.5% LLTV pool cap: 10 million DAI
- Recommended Vault DAI allocations:
- USDe 77% LLTV allocation: 5 million DAI
- USDe 86% LLTV allocation: 10 million DAI
- USDe 91.5% LLTV allocation: 35 million DAI
- USDe 94.5% LLTV allocation: 5 million DAI
- sUSDe 77% LLTV allocation: 5 million DAI
- sUSDe 86% LLTV allocation: 10 million DAI
- sUSDe 91.5% LLTV allocation: 35 million DAI
- sUSDe 94.5% LLTV allocation: 5 million DAI
- USDe 77% LLTV allocation: 5 million DAI
- USDe 86% LLTV allocation: 10 million DAI
- USDe 91.5% LLTV allocation: 35 million DAI
- USDe 94.5% LLTV allocation: 5 million DAI
- sUSDe 77% LLTV allocation: 5 million DAI
- sUSDe 86% LLTV allocation: 10 million DAI
- sUSDe 91.5% LLTV allocation: 35 million DAI
- sUSDe 94.5% LLTV allocation: 5 million DAI

- Market Caps:
- USDe 77% LLTV pool cap: 1 billion DAI
- USDe 86% LLTV pool cap: 100 million DAI
- USDe 91.5% LLTV pool cap: 50 million DAI
- USDe 94.5% LLTV pool cap: 10 million DAI
- sUSDe 77% LLTV pool cap: 1 billion DAI
- sUSDe 86% LLTV pool cap: 100 million DAI
- sUSDe 91.5% LLTV pool cap: 50 million DAI
- sUSDe 94.5% LLTV pool cap: 10 million DAI
- USDe 77% LLTV pool cap: 1 billion DAI
- USDe 86% LLTV pool cap: 100 million DAI
- USDe 91.5% LLTV pool cap: 50 million DAI
- USDe 94.5% LLTV pool cap: 10 million DAI
- sUSDe 77% LLTV pool cap: 1 billion DAI
- sUSDe 86% LLTV pool cap: 100 million DAI
- sUSDe 91.5% LLTV pool cap: 50 million DAI
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- USDe 94.5% LLTV allocation: 5 million DAI
- sUSDe 77% LLTV allocation: 5 million DAI
- sUSDe 86% LLTV allocation: 10 million DAI
- sUSDe 91.5% LLTV allocation: 35 million DAI
- sUSDe 94.5% LLTV allocation: 5 million DAI
- USDe 77% LLTV allocation: 5 million DAI
- USDe 86% LLTV allocation: 10 million DAI
- USDe 91.5% LLTV allocation: 35 million DAI
- USDe 94.5% LLTV allocation: 5 million DAI
- sUSDe 77% LLTV allocation: 5 million DAI
- sUSDe 86% LLTV allocation: 10 million DAI
- sUSDe 91.5% LLTV allocation: 35 million DAI
- sUSDe 94.5% LLTV allocation: 5 million DAI

During the launch phase of the morpho vault, we recommend a low maximum line to limit tail risk (bugs, unexpected market behavior, etc). We also recommend setting the gap equal to the line

so the entire amount can be deployed at once, and avoid any unintended impact on Morpho Blue's rate automation mechanism by frequently adding new supply to the market and pushing down the utilization ratio. Once the full amount is deployed, we will recommend to reduce the gap

to 10% of line

at the next executive spell. For the vault funds deployment across pools, we recommend allocating a small share of funds to each of the 77% and 94.5% LLTV pools, moderate amount to each of the 86% LLTV pools, and largest share of funds to each of 91.5% LLTV pools (which is expected to offer the best balance between risk vs return). We will monitor performance, user behavior, and efficiency metrics and optimize vault allocations over time, potentially removing liquidity from some LLTVs and shifting exposure between USDe and sUSDe pools.

A formal recommendation to the stability scope facilitators for approval and implementation is posted here.

References

Ethena docs: Ethena Labs Overview | Ethena Labs

Morpho docs: Morpho Blue | Morpho

Analysis workbook: sUSDe Evaluation

We would like to thank the Ethena Labs team for providing consistent communication and feedback during our review process.