

## Overview

This is a review of Phoenix Labs' proposal to increase the mainnet Spark D3M debt ceiling capacity.

## Purpose

Spark mainnet deployment has seen steady growth over the past month. In particular, there has been significant migration from core Maker vaults, including a migration of over 70,000 ETH and 50 million DAI debt from a 7 Siblings affiliated account. While the D3M maximum debt ceiling (line) is unlikely to be hit immediately, Maker governance will be mostly idle through December so any D3M adjustments that may be needed to support user growth through year end should be implemented proactively.

## Growth Rate Evaluation

Ideally, the proposed D3M line

parameter selected will provide sufficient capacity to meet demand through year end, until Maker governance is able to make further parameter adjustments in January 2024. To evaluate this, we can look at historical growth trends on Spark as well as potential sources of borrowing demand driven by migrations from Maker core vaults.

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Source: [Makerburn](#)

Looking at the Spark D3M since launch, we see that the increase in D3M line from 20 million to 200 million DAI in early August was quickly exhausted, partly driven by farming of the EDSR (which was 8% at the time). After the subsequent increase to 400 million DAI in mid September, demand has still grown but at a more gradual pace. A 7 Siblings affiliated wallet recently migrated 73 million DAI debt over to Spark from a Maker core vault, but Spark has seen steady growth even excluding this large migration.

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Source: [Block Analitica Spark Dashboard](#)

Over the past month, total DAI borrowed has grown from roughly 188 million to 305 million DAI, for a total increase of 117 million DAI. Excluding the 7 Siblings wallet, other user growth has totalled 44 million DAI. Extrapolating these growth rates into the future suggests total DAI borrowing demand of between 393 million and 539 million DAI by early January, which will be the next opportunity to make routine D3M parameter changes through governance.

Looking at the [7 Siblings wallet](#) we can see a total of 129 million DAI debt on Spark collateralized by ETH and wstETH, but an additional 309 million DAI debt remaining on Maker core vaults. This user has demonstrated a willingness to migrate positions over the Spark so we may see more of this debt move from core vaults over the holiday period.

The potential [addition of WBTC as a collateral asset](#) on Spark may drive significant growth both from migrations and new user acquisition. WBTC on Spark will benefit from lower borrowing costs (5.53% versus 5.61-6.36% on Maker core), while also having competitive collateralization requirements comparable to WBTC-B (133% liquidation ratio on Spark vs 130% for WBTC-B). While Spark does not have the OSM delay on liquidations, overall the offering is highly attractive and we can expect a decent share of the ~81 million in DAI debt from Maker core to shift over to Spark, in addition to any net new usage.

RETH may also see some migration, as roughly 7.3 million DAI debt from RETH-A remains on Maker core and this vault type is expected to be offboarded early in the new year. All together, we have a pool of reasonably likely debt migration of nearly 400 million DAI inclusive of 7 Siblings, WBTC, and RETH.

Considering both recent organic growth rates seen on Spark as well as historical and potential future migration activity from Maker core, an increase in the maximum D3M debt ceiling (line

) from 400 million to 800 million DAI is appropriate to service potential demand through the beginning of January 2024.

## Risk Analysis

The risk profile of current DAI borrowing positions on Spark is fairly conservative, with an aggregate of ~\$375 million in excess collateral backing the ~305 million DAI debt. Collateral mix is fairly well balanced as well, with 55% backed by wstETH, 10% by rETH, and most of the remainder backed by ETH. Gnosis has removed their treasury position so only an insignificant amount of DAI borrowings remains backed by GNO.

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Source: [Block Analitica Spark Dashboard](#)

129 million of the DAI borrowings (~42%) is attributable to 7 Siblings. While they have relatively lower health factors (below 2 on each account), they have significant stablecoin assets that can be used to reduce leverage on short notice, as well as a large amount of unencumbered volatile assets that could be pledged as collateral.

This also indicates that the remaining accounts on Spark have a relatively higher collateralization level than the overall aggregate of 1.94. The remaining positions excluding 7 Siblings have an aggregate health factor of 2.29, and can withstand a collateral price drop of ~56% on average before facing liquidation. There is only negligible liquidatable DAI debt until ETH, wstETH, and rETH face at least a 25% decline in price, so even on a per position basis the market is fairly well hedged against risk overall.

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We remain confident that LTV and liquidation threshold parameters are appropriate across collateral assets. These values are somewhat more conservative than comparable parameters on Aave v3 and are unlikely to lead to bad debt accumulation even with growing total debt exposure and severe market volatility.

## Specification

Increase the Spark D3M maximum debt ceiling (line  
) from 400 million DAI to 800 million DAI.

## References

- [Proposal to Adjust SparkLend Parameters](#)
- [makerburn.com](#)
- [Spark | Block Analitica](#)
- [DeBank | The Web3 Messenger & Best Web3 Portfolio Tracker](#)