

Introduction

This post covers BA Labs' ninth parameter changes proposal as a member of the Stability Advisory Council. Final changes are pending approval by the responsible Stability Facilitators.

For further context, refer to BA Labs' previous Stability Scope Parameter Changes proposals below.

Previous Stability Scope Parameter Changes

- [Decentralized Collateral Scope Parameter Changes #1 - April 2023](#)
- [Stability Scope Parameter Changes #2 & Non-Scope Defined Parameter Changes - May 2023](#)
- [Stability Scope Parameter Changes #3 - June 2023](#)
- [Stability Scope Parameter Changes #4 - July 2023](#)
- [Stability Scope Parameter Changes #5 - August 2023](#)
- [Stability Scope Parameter Changes #6 - September 2023](#)
- [Stability Scope Parameter Changes #7 - November 2023](#)
- [Stability Scope Parameter Changes #8 - January 2024](#)

Each Core Stability Parameter update and its impact on protocol parameters is explained in further detail in the Analysis section below.

Summary Recommended Stability Scope Parameter Changes

The proposed parameter changes included in the screenshot below can be directly included in an executive vote by the Stability Scope Responsible Facilitator.

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Source: [#9 Stability Scope Parameter Changes](#)

Yield Benchmark Parameter Changes

- Decrease the Yield Collateral Yield Benchmark

by 0.02 percentage points, from 5.45% to 5.43%.

- Increase the Stability Collateral Yield Benchmark

by 0.87 percentage points, from 0.87% to 1.74%.

Base Rate Changes

- Increase the Base Rate

by 0.18 percentage points, from 4.05% to 4.23%.

Dai Savings Rate (DSR) Changes

- Increase the Dai Savings Rate (DSR)

by 0.18 percentage points, from 3.80% to 3.98%.

Enhanced Dai Savings Rate (EDSR)

- DSR utilization levels are still in Tier 1. Enhanced Dai Savings Rate (EDSR)

and effective DSR will remain at 5%.

Stability Fee Exposure Based Model Parameter Changes

- Decrease the ETH K

parameter by 6.31 percentage points, from 27.43% to 21.12%.

- Decrease the WSTETH K

parameter by 5.42 percentage points, from 12.46% to 7.04%.

- Increase the WBTC K

parameter by 0.43 percentage points, from 2.65% to 3.08%.

- Increase the Spark D3M K

parameter by 4.67 percentage points, from 15.53% to 20.20%.

- Decrease the Exposure Spread for ETH-A

, ETH-B

, ETH-C

, WSTETH-A

, and WSTETH-B

by 0.33 percentage points, from 1.49% to 1.16%.

- Decrease the Asset Spread for WSTETH-A

and WSTETH-B

by 0.17 percentage points, from 0.42% to 0.25%.

- Increase the Asset Spread for DIRECT-SPARK-DAI

by 0.24 percentage points, from 0.96% to 1.20%.

Stability Fee Changes

- Decrease the ETH-A

Stability Fee (SF) by 0.33 percentage points, from 6.74% to 6.41%.

- Decrease the ETH-B

Stability Fee (SF) by 0.33 percentage points, from 7.24% to 6.91%.

- Decrease the ETH-C

Stability Fee (SF) by 0.33 percentage points, from 6.49% to 6.16%.

- Decrease the WSTETH-A

Stability Fee (SF) by 0.51 percentage points, from 7.16% to 6.65%.

- Decrease the WSTETH-B

Stability Fee (SF) by 0.51 percentage points, from 6.91% to 6.40%.

- Decrease the WBTC-A

Stability Fee (SF) by 0.02 percentage points, from 6.70% to 6.68%.

- Decrease the WBTC-B

Stability Fee (SF) by 0.02 percentage points, from 7.20% to 7.18%.

- Decrease the WBTC-C

Stability Fee (SF) by 0.02 percentage points, from 6.45% to 6.43%.

- Increase the Spark DAI Effective Borrow APY by 0.24 percentage points, from 6.46% to 6.70%.

Stability Scope Bounded Mutable Alignment Artifact Changes

Assuming that the aforementioned changes are implemented, we also propose to incorporate these figures into the [MIP104: Stability Scope Bounded Mutable Alignment Artifact](#) as follows:

3.1.1A

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The Base Rate is:

- 4.23%

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3.2.1A

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The Dai Savings Rate is:

- 3.98%

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3.2.2A

□□□

Spark:

- K

= 20.20%

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3.2.2C

□□□

Spark Spread:

- Asset Spread is 1.20%

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14.1.1.1A

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The Stability Collateral Benchmark Yield is:

- 1.74%

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14.1.2.1A

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The Yield Collateral Benchmark Yield is:

- 5.43%

□□□

14.3.1.3.1A

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ETH:

- K

= 21.12%

WSTETH:

- K

= 7.04%

WBTC:

- K

= 3.08%

□□□

14.3.1.3.3A

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ETH-A Spread:

- Exposure Spread is 1.16%

ETH-B Spread:

- Exposure Spread is 1.16%

ETH-C Spread:

- Exposure Spread is 1.16%

WSTETH-A Spread:

- Exposure Spread is 1.16%
- Asset Spread is 0.25%

WSTETH-B Spread:

- Exposure Spread is 1.16%
- Asset Spread is 0.25%

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14.3.2.1: ETH-A

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Current ETH-A parameters are:

- Stability Fee: 6.41%

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14.3.2.2: ETH-B

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Current ETH-B parameters are:

- Stability Fee: 6.91%

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14.3.2.3: ETH-C

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Current ETH-C parameters are:

- Stability Fee: 6.16%

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14.3.2.4: WSTETH-A

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Current WSTETH-A parameters are:

- Stability Fee: 6.65%

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14.3.2.5: WSTETH-B

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Current WSTETH-B parameters are:

- Stability Fee: 6.40%

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14.3.2.6: WBTC-A

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Current WBTC-A parameters are:

- Stability Fee: 6.68%

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14.3.2.7: WBTC-B

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Current WBTC-B parameters are:

- Stability Fee: 7.18%

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14.3.2.8: WBTC-C

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Current WBTC-C parameters are:

- Stability Fee: 6.43%

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Analysis

Yield Collateral Yield Benchmark

As stated in article [14.1.2](#) in the Stability Scope, the Yield Collateral Yield Benchmark is approximately based on the 3-month US Government Treasury Bill. The 3-month US Government Treasury Bill rate is at the time of writing [5.43%](#). This represents a decrease of 0.02 percentage points compared to the [last update on January 17 2024](#).

BA Labs recommends the Stability Facilitators to decrease the Yield Collateral Yield Benchmark by 0.02 percentage points, from 5.45% to 5.43%.

Stability Collateral Yield Benchmark

According to [14.1.1](#) in the Stability Scope, the Stability Collateral Yield Benchmark is approximately based on the average yield earned on all Cash Stablecoins. The current list of Cash Stablecoins included in [7.2.1.3.1A](#) only includes USDC. As such, according to the calculation in the table below, the Stability Collateral Yield Benchmark should at the time of writing be 1.74%.

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BA Labs recommends the Stability Facilitator to increase the Stability Collateral Benchmark Yield by 0.87 percentage points, from 0.87% to 1.74%.

Base Rate

The current formula used to calculate the Base Rate is defined in [3.1: The Base Rate](#). Taking into account the changes in the Yield Collateral Yield Benchmark and the Stability Collateral Yield Benchmark, the new Base Rate is calculated in the table below.

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BA Labs recommends the Stability Facilitator to increase the Base Rate
by 0.18 percentage points, from 4.05% to 4.23%.

Dai Savings Rate (DSR)

The formula used to calculate the DSR is defined in [3.2: The Dai Savings Rate](#) as:

Base Rate - 0.25%

As such, the new DSR should be:

4.23% - 0.25% = 3.98%

BA Labs recommends the Stability Facilitator to increase the Dai Savings Rate (DSR)
by 0.18 percentage points, from 3.80% to 3.98%.

Enhanced Dai Savings Rate (EDSR)

According to [3.2.2: Enhanced Dai Savings Rate](#) the EDSR should remain at 5.00% up until DSR utilization surpasses 35% for a continuous time period of 24 hours (Tier 2). At the time of writing, the DSR utilization rate is approximately [23.6%](#). As such, no changes are needed.

The DSR utilization rate is under 35%. Hence, no EDSR (and thus effective DSR) changes should be made.

Native Vault Engine Collateral Parameters

Native Vault Engine Collateral in the Stability Scope include ETH-A, ETH-B, ETH-C, WSTETH-A, and WSTETH-B.

Current % Exposure (K)

At the time of writing, the Native Vault Engine Collateral exposures (K parameter) are:

- ETH K: 21.12%
- WSTETH K: 7.04%

BA Labs recommends the Stability Facilitator to perform the following changes to Native Vault Engine K parameters:

- Decrease the ETH K parameter by 6.31 percentage points, from 27.43% to 21.12%.
- Decrease the WSTETH K parameter by 5.42 percentage points, from 12.46% to 7.04%.

Stability Fees

Taking into account the updated ETH and WSTETH K parameters, the Stability Fees (SFs) for ETH and WSTETH-based collateral should be:

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Refer to [14.3.1.3: Stability Fee \(SF\)](#) to read more about how Stability Fees (SFs) are determined.

BA Labs recommends the Stability Facilitator to perform the following parameter changes to Native Vault Engine Collateral:

Stability Fee (SF) changes:

- ETH-A: Decrease the Stability Fee (SF) by 0.33 percentage points, from 6.74% to 6.41%.
- ETH-B: Decrease the Stability Fee (SF) by 0.33 percentage points, from 7.24% to 6.91%.
- ETH-C: Decrease the Stability Fee (SF) by 0.33 percentage points, from 6.49% to 6.16%.
- WSTETH-A: Decrease the Stability Fee (SF) by 0.51 percentage points, from 7.16% to 6.65%.
- WSTETH-B: Decrease the Stability Fee (SF) by 0.51 percentage points, from 6.91% to 6.40%.

Non-Native Vault Engine Collateral Parameters

Non-Native Vault Engine Collateral in the Stability Scope include WBTC-A, WBTC-B, and WBTC-C.

Current % Exposure (K)

At the time of writing, the Non-Native Vault Engine Collateral exposure (K parameter) is:

- WBTC K: 3.08%

BA Labs recommends the Stability Facilitator to perform the following change to the Non-Native Vault Engine K parameter:

- Increase the WBTC K parameter by 0.43 percentage points, from 2.65% to 3.08%.

Stability Fees

Taking into account the updated WBTC K parameter, the Stability Fees (SFs) for WBTC-based collateral should be:

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Refer to [14.3.1.3: Stability Fee \(SF\)](#) to read more about how Stability Fees (SFs) are determined.

BA Labs recommends the Stability Facilitator to perform the following parameter changes to Non-Native Vault Engine Collateral:

Stability Fee (SF) changes:

- WBTC-A: Decrease the Stability Fee (SF) by 0.02 percentage points, from 6.70% to 6.68%.
- WBTC-B: Decrease the Stability Fee (SF) by 0.02 percentage points, from 7.20% to 7.18%.
- WBTC-C: Decrease the Stability Fee (SF) by 0.02 percentage points, from 6.45% to 6.43%.

Spark D3M Parameters

Current % Exposure (K)

At the time of writing, the Spark D3M exposure is:

- Spark D3M K: 20.20%

BA Labs recommends the Stability Facilitator to perform the following change to the Spark D3M K parameter:

- Increase the Spark D3M K parameter by 4.67 percentage points, from 15.53% to 20.20%.

Spark DAI Effective Borrow APY

Taking into account the updated Spark D3M K parameter, the Spark DAI Effective Borrow APY should be:

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Refer to [3.2.2A](#) to read more about how the Spark DAI Effective Borrow APY is determined.

BA Labs recommends the Stability Facilitator to perform the following parameter changes to the Spark D3M:

Effective DAI borrow APY Changes:

- Increase the Spark DAI Effective Borrow APY by 0.24 percentage points, from 6.46% to 6.70%.