Gauntlet recommendation to lower stMATIC, MaticX nonemode LT

Summary

Gauntlet recommends lowering stMATIC, MaticX non-emode LT to improve the risk profile associated with MATIC LSTs.

Reducing MATIC LST non-emode LT to lower borrowing power can help combat the following.

- Risks of reduced WMATIC supply in the future, which may cause long-term growth risk for Polygon v3
- The staking yield from stMATIC and MaticX can offset borrowing costs for stablecoins.
- As a result, without sufficiently lower non-emode borrowing power for LST (or some other tradeoff), this may cause
 users to migrate their collateral from WMATIC to stMATIC or MaticX for stablecoin borrowing.
- WMATIC supply is incredibly important to the sustainability of Polygon v3 as the source of lending for LST-WMATIC recursive strategies.
- The staking yield from stMATIC and MaticX can offset borrowing costs for stablecoins.
- As a result, without sufficiently lower non-emode borrowing power for LST (or some other tradeoff), this may cause
 users to migrate their collateral from WMATIC to stMATIC or MaticX for stablecoin borrowing.
- WMATIC supply is incredibly important to the sustainability of Polygon v3 as the source of lending for LST-WMATIC recursive strategies.
- · Risks of reduced capacity for recursive LST WMATIC borrowing
- Risks associated with increased stablecoin borrowing against LST collateral, amidst decreasing MATIC LST liquidity

We welcome the commmunity to read our below analysis for more color.

Recommendations

We present two options for the community.

Option

stMATIC LT changes

MaticX LT changes

stMATIC LTV changes

MaticX LTV changes

1

 $0.65 \to 0.60$

 $0.67 \rightarrow 0.62$

 $0.50 \to 0.45$

 $0.58 \to 0.45$

2

 $0.65 \to 0.56$

 $0.67 \rightarrow 0.58$

 $0.50 \to 0.40$

 $0.58 \to 0.40$

For transparency, we recommend gradually reducing stMATIC and MaticX LT to 0.37, roughly half that of WMATIC LT. The above recommendations will be the first iteration of our recommendations.

Option 1 will liquidate 1 account with ~\$10 of borrows, option 2 will liquidate ~\$26k worth of borrows as of data on 2023-09-15. See the appendix for the full breakdown of accounts.

Analysis

Higher non-emode borrowing power for LST may disincentivize WMATIC collateralized stablecoin borrowing.

- Collateralizing WMATIC to borrow stablecoins represents a method for users to obtain leverage and has traditionally been the largest use case outside of emode for Polygon v3.
- Since MATIC LST naturally capture MATIC staking interest, collateralizing MATIC LST to borrow stablecoins is a superior strategy to collateralizing WMATIC to borrow stablecoins.
- · Accrued staking yield can offset the cost to borrow stablecoins.
- Without lower non-emode borrowing power for LST (or some other tradeoff), users may be incentivized to migrate their WMATIC - stablecoin positions into MATIC LST - stablecoin positions.
- This has empirically begun happening with whale user 0x1e5b92c66e4cad7963e8dacf1e8d642304c172c8.
- Accrued staking yield can offset the cost to borrow stablecoins.
- Without lower non-emode borrowing power for LST (or some other tradeoff), users may be incentivized to migrate their WMATIC stablecoin positions into MATIC LST stablecoin positions.
- This has empirically begun happening with whale user 0x1e5b92c66e4cad7963e8dacf1e8d642304c172c8.
- Across Polygon v3, WMATIC supply has ~35% from 70m to 45m over the past few months.

As a result, lowered WMATIC supply hinders LST - WMATIC recursive borrowing.

- Smaller WMATIC supply indicates less WMATIC borrow can be taken out before rates spike due to slope 2.
- Gauntlet has highlighted decreasing emode borrowing and the associated added risk in outoriginal WMATIC IR recommendations.

Decreasing LST liquidity increases the risk profile for LST collateralized stablecoin borowing.

 Decreasing liquidity for MATIC LSTs increases their risk profile, especially since they are collateralizing more stablecoin borrows. This decreasing liquidity may impact healthy liquidations during high volatility. Reducing MATIC LSTs LT will lower the borrowing power of these LSTs outside of emode and thus improve their risk profile.

Next steps

Welcome community feedback and aim to put up snapshot with the above two options on 2023-09-26.

Appendix - Liquidated accounts

Option 1

Liquidated accounts

user_address

supply_balance_usd

borrow_balance_usd

hf

hf_new

supplied_symbols

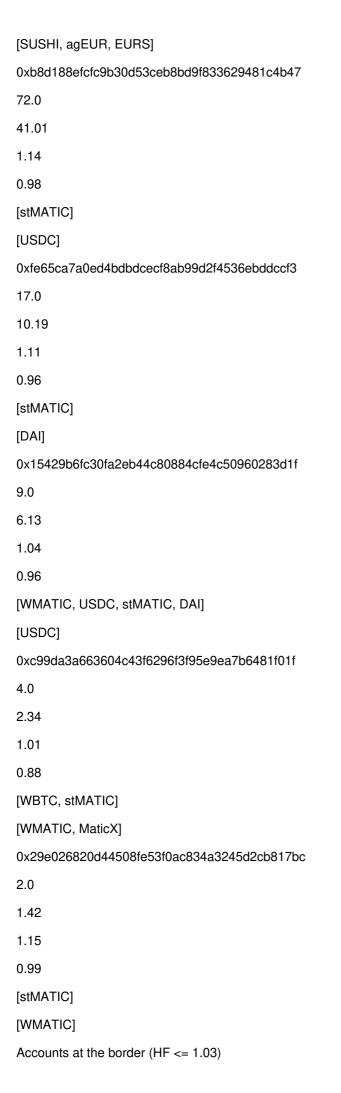
borrowed_symbols

0x15429b6fc30fa2eb44c80884cfe4c50960283d1f

```
6.13
1.04
1.00
[WMATIC, USDC, stMATIC, DAI]
[USDC]
Accounts at the border (new HF <= 1.03)
user_address
supply_balance_usd
borrow_balance_usd
hf
hf_new
supplied_symbols
borrowed_symbols
0x15429b6fc30fa2eb44c80884cfe4c50960283d1f
9.0
6.13
1.04
1.00
[WMATIC, USDC, stMATIC, DAI]
[USDC]
0x22bfb2e7d20546216982bcff13446d29eea359d4
359.0
219.15
1.08
1.00
[WMATIC, stMATIC]
[SUSHI, agEUR, EURS]
0xdbfe5e94a0208c5324c7e4396dcebd312af01b33
6.0
4.50
1.01
1.00
[USDC, stMATIC, AAVE]
[USDC, GHST, DAI]
0x167b799026473d79c2c75309b94a5648794e2a40
43729.0
25510.72
```

| 1.11 |
|--|
| 1.03 |
| [WMATIC, stMATIC] |
| [USDC] |
| 0xfe65ca7a0ed4bdbdcecf8ab99d2f4536ebddccf3 |
| 17.0 |
| 10.19 |
| 1.11 |
| 1.03 |
| [stMATIC] |
| [DAI] |
| 0xaa4f6ebddfecc945844a60d43415b5c3a53e803c |
| 0.0 |
| 0.08 |
| 1.07 |
| 1.02 |
| [WMATIC, MaticX] |
| [WSTETH] |
| 0xc47df064bdc1b2cbf6fd85aae4db8beaf7c350ac |
| 927.0 |
| 557.50 |
| 1.11 |
| 1.03 |
| [MaticX] |
| [USDC] |
| Option 2 |
| Liquidated accounts user_address |
| supply_balance_usd |
| borrow_balance_usd |
| hf |
| hf_new |
| supplied_symbols |
| borrowed_symbols |
| 0xc47df064bdc1b2cbf6fd85aae4db8beaf7c350ac |
| 927.0 |
| 557.50 |
| 1.11 |

| 0.96 |
|--|
| [MaticX] |
| [USDC] |
| 0x7c33692980c23c3df99a8cb2ae1405952a6afa3e |
| 151.0 |
| 89.17 |
| 1.13 |
| 0.98 |
| [MaticX] |
| [USDC] |
| 0x777863157576954417bf3bda95ad34dbbfe357c9 |
| 148.0 |
| 86.62 |
| 1.14 |
| 0.99 |
| [MaticX] |
| [USDC] |
| 0xd6ff66977fc45ad25d4f0d3db813d070606d8772 |
| 52.0 |
| 30.18 |
| 1.15 |
| 0.99 |
| [MaticX] |
| [DAI] |
| 0x167b799026473d79c2c75309b94a5648794e2a40 |
| 43729.0 |
| 25510.72 |
| 1.11 |
| 0.96 |
| [WMATIC, stMATIC] |
| [USDC] |
| 0x22bfb2e7d20546216982bcff13446d29eea359d4 |
| 359.0 |
| 219.15 |
| 1.08 |
| 0.94 |
| [WMATIC, stMATIC] |



```
user_address
supply_balance_usd
borrow_balance_usd
hf
hf new
supplied_symbols
borrowed_symbols
0xc70f26184fc556bbba9c3078ee35411e42e7b1ac
52639.0
30195.91
1.17
1.01
[MaticX]
[WMATIC]
0x82a2f9d1f005b0ed761dfa7285d3eef4e661a2b0
13.0
7.68
1.17
1.01
[MaticX]
[MaticX]
0xdbfe5e94a0208c5324c7e4396dcebd312af01b33
6.0
4.50
1.01
1.00
[USDC, stMATIC, AAVE]
[USDC, GHST, DAI]
0xd23b97041b323176c8b595c85b9851b91922e2a9
1.0
0.49
1.01
1.00
[WMATIC, WBTC, USDC, stMATIC, WETH, DAI, USDT]
[WBTC, GHST, WETH, USDT]
0x2c71c4909e6776c2f48f8999980a10ea1546f6d0
```

5.0

| 2.56 |
|--|
| 1.19 |
| 1.02 |
| [stMATIC] |
| [DAI] |
| 0x0ee01410d9ac0c4ba49a407fe857b5d30d217c21 |
| 9.0 |
| 5.10 |
| 1.19 |
| 1.03 |
| [stMATIC] |
| [USDC] |
| |