Concern 1 – POL with Synths







Current Synth Cap = 30%

POL Trigger = Cap - 5%

Proposed Synth Cap = 50%



Asym Add/Withdraw as required



Savers Vault



Burn RUNE to Mint Synth (e.g. BTC) using the standard slip, using the pool ratio at the time. E.g. 16,000 RUNE to 1 Synth BTC Mint RUNE to Burn Synth (e.g. Synth BTC) via the same method but the ratio can be different. E.g. 1 Synth BTC to 19,000 RUNE OR 14,000 RUNE

This difference in ration fixed real time as explained (arbs rebalancing the pools), so additional issues or surprises when redeeming.

Savers Vault

ETH Pool quidity Provide iquidity = 50% Total Pool Dept Asym Add/Withdraw as required THORChain Reserve Bulk \$RUNE

~140M RUNE

BTC Rune

Centralised Exchange

Rune BTC \$1.25 \$20,000

Centralised Exchange

Rune BTC \$1.25 \$40,000

יד Rune \$1.25 ETH

Other TC Pools

BTC Pool

Proposed Synth Cap = 50%

nths U

Alice

BTC Pool Swap In

BTC Pool Swap Out

Rune \$1.10 BTC \$40,500

Other TC Pools

Total Pool Dept

Savers Vault

uidity Provide

Asym Add/Withdraw as required

THORChain

Reserve

Bulk \$RUNE

~140M RUNE

uidity = 50%



THORFi Concerns Summary

Savers 1. LPers and Reserve lose out to provide room for savers 2. LPers and Reserve take on additional risk as the cap is raised 3. Cap will always be hit 4. Reserve is limited

Lending 1. More RUNE is minted when a loan is closed then when it was opened. 2. Reserve is the backstop if the circuit breaker is triggered

Lending + Savers 1. While unrelated, together they can double the negative effect on RUNE and the network. 2. Compound Savers and Lending Issues when price changes

Things to consider with this video

I have provided one very basic example using simple numbers to teach you the concerns however reality is not so simple. There is a lot of nuance and market behaviour to consider.

If I was to choose different numbers like 3x or more price change on RUNE:ASSET, instead of a 2x and a CR of 500% the change in inflationary pressure is significant different The relationship between the inputs and outcome is non linear because the effects compound.

Some effects are:

=> the reserve is selling RUNE into the pools to backstop synths => this causes RUNE price to decrease due to selling pressure due to the asym addition. => the amount of RUNE that will be burnt from the reserve for borrowers to exit is increasing, thus increasing the potential liability for the Reserve if the circuit breaker is hit. => last checked reserve emissions were like 66% of block and LP rewards - if nodes / LPs see their yield could go down 3x if the borrower liability on the reserve is realized and it drains the reserve, they may race each other out and sell their RUNE compounding the problem further

Also consider, new features introduce complexity and possible bugs that can result in exploits and down time, like any software program.

Questions for you (Put your answers in the comments section below)

1. Do you agree with these concerns, if so why and why not? 2. Under what conditions could the pool ratio change in the way I described or be worse? 3. What does this market history tell you about the likelihood of these scenarios happening? 4. Under what conditions has RUNE traded opposite to Bitcoin previously? Why did it happen? 5. Lending has specific parameters to make it safer, how do you decide what they are?

Of Odin Scaling Lending Safely

When/if lending launches, we'll need a means to scale it safely. In the beginning, we'd want to keep it relatively small, and over time scale it up as confidence increases. Here is a mathematically reasoned approach of how to launch lending "safely" without putting the reserve at much risk (or risk of hitting the circuit breaker).

If we want to get an idea of the most extreme downward motions in rune's history, we want to look at a A) a macro event. We want to look at rune's downward price change relative to bitcoin, since thats obviously where the risk is really going to be. A) when the market when from bull --> bear, we saw approximately a 6x price change in rune relative to bitcoin. BTC went from 60k --> 20k and rune went from \$20 --> \$1. That is about 6.5x price change for rune. B) When TC had multiple hacks, we obviously saw the rune price drop relative to bitcoin a lot, but we still saw a 3x price change (it hit \$3.5 but was ~\$10 a few days earlier)

0.2

So using historical data, we can make a reasonable max price change of 6x, but we're really only going to see that in bull --> bear scenario (which we won't see for many years, clearly). So I think its actually safe for us the 3x number for now, at least for 4 years. But by then, we'll clearly have market data to show how the feature performs (net inflation or deflation) and we can revaluate how we measure risk.

We have a 15m rune buffer between where we are now and the 500m supply cap. So a 3x downward price change, would mean we can lend out 5m rune (15m/3) which is about 25% of the pool depth. If we did this, a 3x price change would mean we'd mint back the 15m missing rune, and NOT need any rune from the reserve (or trigger the circuit breaker), so very low risk to the protocol/network.

This should cause rune's price to naturally out perform BTC. Obviously market buying 5m rune, will pump the price, and burning 5m rune will again pump the price, and the ratio in the btc pool shifts, and we can increase the cap, without changing our risk profile and taking on more risk than already agreed upon.

= current total btc collateral o = outstanding rune --> 500m - current rune supply br = bitcoin rune depth

ba = bitcoin asset depth

cap = ba / (br / (o / 3)) - c

We could make it pool specific relative to pool rune depth. So if btc has 3/4ths of the rune in all the lending-enabled pools, it gets 3/4ths of the outstanding rune (15m * 3/4 = 11.25m), which would become our o value. This computed cap value would be the max collateral that can be taken out, in which case, the max CR would be hit at this cap.

We can actually code this directly into the chain, and allow the network to auto-scale lending itself (up or down), without routine governance votes like we do with the synth cap. Governance can control the 3x number if we do want to increase or decrease risk.

Discussion in the 📕