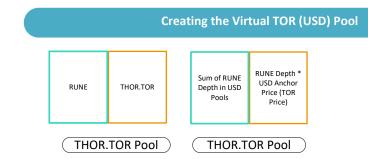
Topics

What is TOR - THORChain's Stablecoin Loan opening and closure process Min amounts for Loans Liquidity Traps Network protections (Conf counting and outbound delay) Why no interest, no liquidations and time limits

Complex stuff - Lending Risks. - Circuit Breaker - Effects in bull and bear markets

Effects on the network (Depth, Volume and Bond)

Take away points



RUNE

(ETH)

USDC (ETH)

Liquidity Pool

RUNE

However, depth is reduced exponentially based on recent trade volume.

Pricing RUNE Currently

THOR.TOR Price = Median USD Price from the below

*specifically it is the inverse of the Median of each assetPrice

Liquidity Pool Liquidity Pool

RUNE

USDC (AVAX) RUNE (BNB)

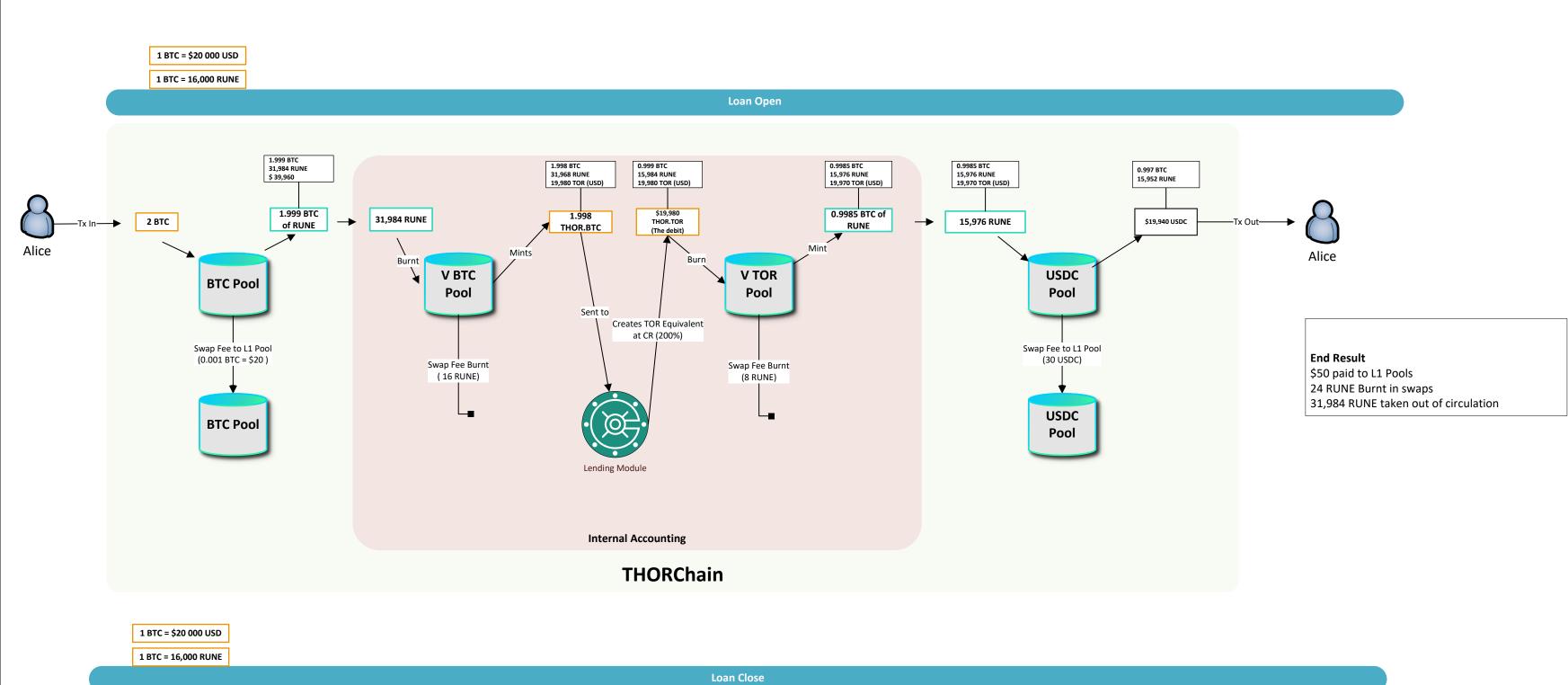
Liquidity Pool

Alice' is a BTC holder

She deposits 2 BTC worth \$40,000 Her collateral is 1.998 BTC The collateralisation Ratio is 200% Debit issued is 0.999 BTC in TOR (\$19,980 USD)

Alice wants the loan in USDC.

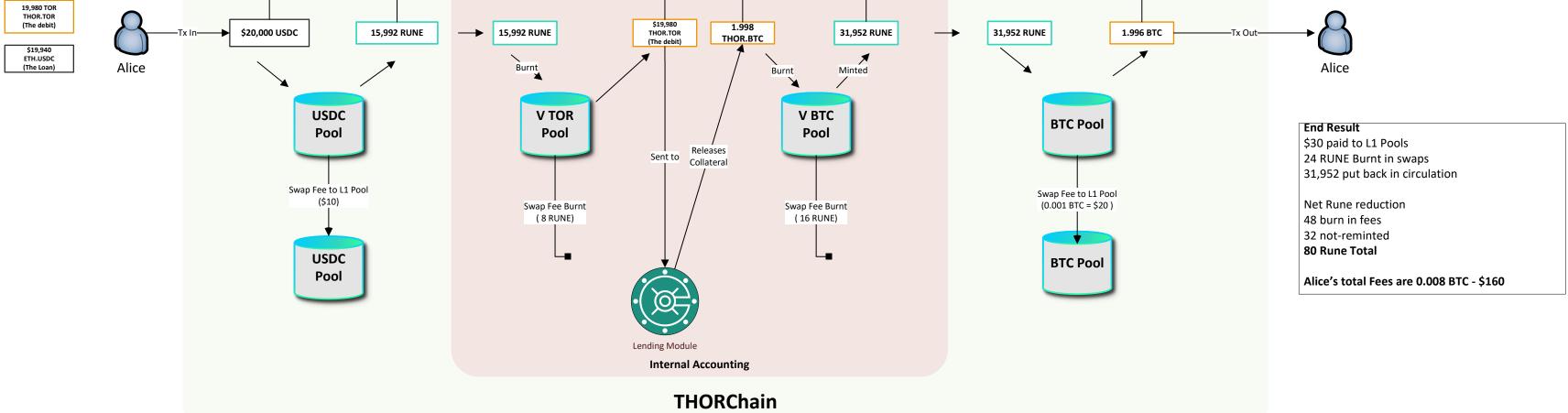
Alice's will receive 0.997 BTC worth in USDC (19,940)



 1.000 BTC
 0.9995 BTC

 16,000 RUNE
 15,992 RUNE

 20,000 TOR (USD)
 19,990 TOR (USD)

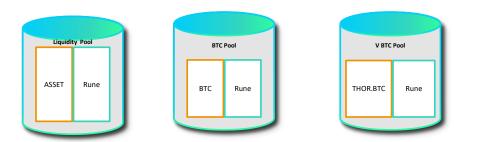


Liquidity Traps

Understanding XYK

https://medium.com/phoenix-finance/ understanding-the-xyk-model-of-pooled-liquidity-7340fdc20d9c https://haseebq.com/what-explains-the-rise-ofamms/ https://blog.chain.link/automated-market-makeramm/

How depth effects slip



Virtual Pool Depths

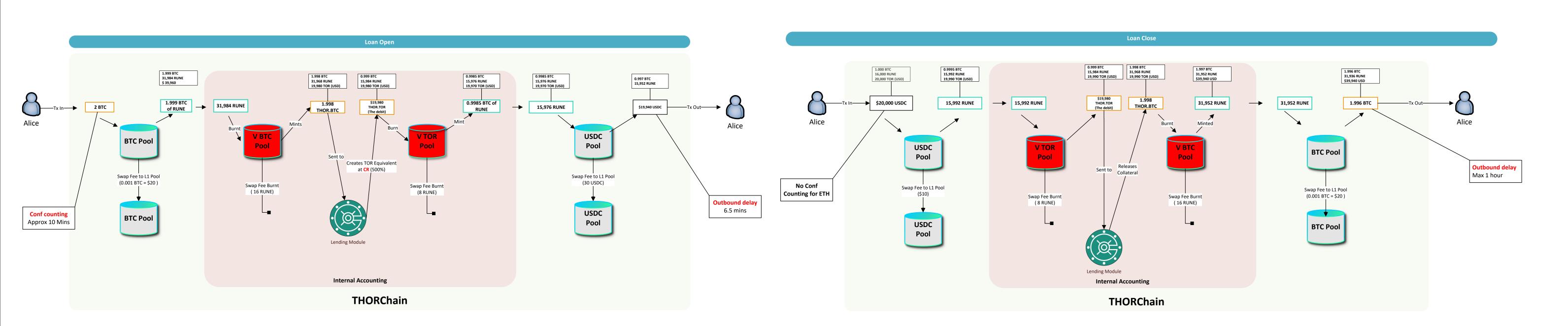
Depth is reduced exponentially based on recent trade volume. Price in either direction reduce the depth, e.g % Movement overall. 2% increase then 3% decrease = 5% overall.

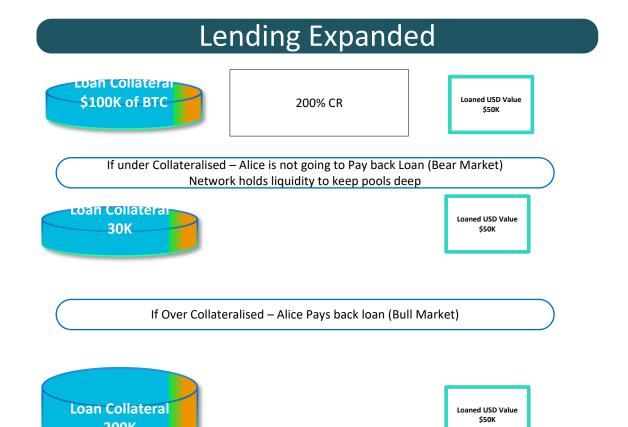
Price manipulation Protection

Exponential depth reduction examples *: Price moves 5% (up + down), then the v pool depth is reduced 5% Price moves 20% (up + down), then depth is reduced 50% (double slip) Price moves 40% (up + down), then depth is reduced 80%

* Haven't got the exact formula yet but virtual pool depth reduction based on recent L1 pool trade is exponential not linear.

So lets talk liquidity traps





The Complex Stuff

2 Factors working on the RUNE Price 1. Buy pressure of RUNE by ARBs

200K

2. Burning RUNE to reduce the supply,

Asset to RUNE Ratio is key to its success. RUNE Burnt should be less than RUNE minted.

If ASSET Price goes up and RUNE price the same AND/OR RUNE price drops and Asset is static then Risk of RUNE increase – CR mitigates this. The higher the CR, the more this has to happen before more RUNE is created.

If RUNE price goes up and Asset price stays the same AND/OR Asset price drops and RUNE price is static then More RUNE will be burnt than created. Higher CR amplifies this.

Lending in Bull and bear Markets RUNE market cap is smaller than BTC, so it will outperform in a bull market and under perform BTC in a bear market. People will redeem their loans in bull market and hold their loans in a bear (as the collateral will be less than

their loan amount). Understanding Risks

With the original THORChain AMM, the rune price didn't matter too much.

Synths and now Savers makes the RUNE price matter. The more savers, the more risk of IL, e.g. more the price matters

- POL mitigates this risk. Caps avoid the risk from eventuating by preventing the pools form becoming insolvent aka fractionally reserved with regard to the synth required collateral.

Lending is price sensitive to RUNE, can cause more RUNE minting thus decrease the price of RUNE - CR mitigates the risk and the circuit breaker is the contingency to the risk.

As THORFi develops, it becomes more price sensitive.

Note: Even a loan increased supply by 100 RUNE, it took the burned RUNE (31K odd on our example) out of supply for the term of the loan.

Circuit Breaker If RUNE Minting gets out of control (hits 500M) circuit breaker kicks in. Circuit Breaker

Loans can be redeemed closed but RUNE is taken from the Reserve, not minted.
 Currently a 15M buffer between circulating supply and 500M

Analogy THORChain is a casino and it has stacked the odds in its favour. E.g. Odds and Evens is not 50/50 as 00 everyone looses.

THORChain does not have to win on every table (and it won't), just has to win overall on the floor. If THORChain starts to lose, it will suspend trading and pay everyone out.

TLDR: If things go south, TC takes the risk, not the user.

Network Effects (Depth Volume and Bond)

https://medium.com/thorchain/thorchains-next-phase-adoption-growth-scaling-b82062b19569

Swapping Process BTC.BTC RUNE RUNE ETH.ETH **BTC Pool** ЕТН Fees ſ -Deposits BTC— \bigcirc BTC Pool ETH Pool Saver Synth Vault Arb Process (reverse the swap) Adds Liquidity— BTC.BTC ETH.ETH RUNE Reserve Liquidity Providers ETH .iquidity Provider BTC Pool ETH Pool THORChain Reserve ETH

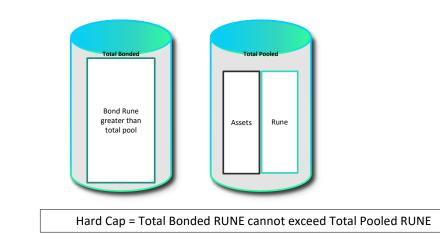
The Numbers

https://docs.google.com/spreadsheets/d/1RiLhm56H2McuaLYB5oYhiQCML14Mwmv42up108MMc68/edit#gid=1025060146



Lending is a new design to Defi.
 Has built in protections in addition to existing network protections.
 Leverages existing Pools and Slip protections.
 While aimed to be deflationary, risk of being increasing supply – within upper limit protection.
 Design is not 100% finalised. Mimir settings not finalised, this the amount of risk cannot be quantified yet.
 CR controls the inflection point for supply increase. E.g. starting out at 900% CR provides great protection.
 If the circuit breaker is hit, loan closure will be supported – users will not be left hanging.
 Mass entry or exit protection – v pool depth reduction causing high slip.





https://docs.thorchain.org/network/incentive-pendulum