Build the Following Savings Protocol on the Near Protocol (Layer One Blockchain)

The most important thing in Protocol is the safety of all users and of the Protocol itself.

In our saving protocol, it’s same.

All users have the option to deposit several L1 assets.

They are separated in 2 types:

Type 1: Stable Coins Type 2: Other Assets

All stable coins are generating 10% APY.

All other assets (wBTC, ETH, wNear) are generating 5% APY.

The interest rewards are accumulated and paid in the staked asset. For example: Someone deposits USDT, so he will receive interest in USDT, which will be added to his staked balance daily and auto-compounded.

For example: Someone deposits wNEAR, so he will receive interest in wNEAR, which will be added to his staked balance daily and auto-compounded.

A User deposits 10 wBTC, then the smart contract mints 10 “reserve wBTC tokens” which the user is receiving (vouchers). The wBTC are going into the Savings Protocol Wallet.

Now there are 2 scenarios:

He leaves the wBTC in the Savings Protocol to collect the daily auto compounded interest (Explained below)

He withdraws the wBTC by clicking on “withdraw”. In the case he swaps his 10 “reserve wBTC tokens” (vouchers) from his wallet to his 10 wBTC + his occurred interest. (If any interest was occurred) (The user can withdraw at any time)

Regarding Scenario 1:

The smart contract automatically adds the daily interest payment to all users balance once per

day at 12am UTC time.

All users that deposit before 12am UTC, have to wait up until 12am UTC and then 24 hours until their first interest is added to their balance.

For example: Someone deposits at 4pm UTC, he needs to wait until 12am UTC (8 hours wait) and then another 24 hours to receive his first daily auto-compounded interest payment.

Another example: Someone deposits at 1am UTC, he needs to wait until 12am UTC (23 hours wait) and then another 24 hours to receive his first daily auto-compounded interest payment.

Another example: Someone deposits at 11:50pm UTC, he needs to wait until 12am UTC (10 minutes wait) and then another 24 hours to receive his first daily auto-compounded interest payment.

And after the first interest payment is added to the user’s savings balance, the 24 hour cycle continues until he withdraws all of his saved balance OR if he deposits an additional amount, then his entire saved balance is treated as his first deposit and the rule above applies.

This is due to the safety and fairness of the savings protocol so that no one can cheat the protocol.

For testing purposed we can set the time period temporarily a lot lower.

If someone has a better idea on how to structure the timings of this protocol, then please let me know. (telegram ID: @tomio0411, Gmail Address: shimizutomio111@gmail.com)

Another more user friendly variation is that all interest payments are calculated instantly without any delay, which probably only works if each deposit has its own time tracker. This would be amazing if we can do this instead if it’s safe and feasible.

This is how Interest payments are added to the users balance:

As explained above, the user received reserve tokens in return for his deposited asset.

Once per day following the rule above, the smart contract automatically mints new reserve tokens (his daily interest amount) which are automatically added to the users reserve token balance.

Maybe we will find a security issue, because the the reserve token balance is bigger after the first interest payment as the the original asset balance of the user.

Maybe we can solve this issue by adding an “update balance function” which causes a very small deposit (interaction) with the smart contract to synchronise the accurate balance, before the user is able to withdraw his total deposit balance + his earned interest.

Maybe we find a more genius way to solve this problem.

All interest is being generated manually by the team by allocating the funds to various first third generation yield farms and arbitrage staking delegations.

This means that we do not have to do any work regarding this.

The only interaction with the protocol wallets for each respective asset are deposits and withdrawals from our side.

For Dapp

On the “dashboard page” the user can see the metrics beyond his deposits. (That mean that the dashboard gives an overview over the entire Savings Protocol) The first chart on the “dashboard page” is showing the TVL of the Savings Protocol.

In the second box of the “dashboard page”, the TVL refers to each assets respective TVL of the entire Savings Protocol.

The last chart on the “dashboard page” is showing the TVL of the entire Near Protocol blockchain.

On the “My Page” and “Earn” page, the user only sees metrics specific to his balances.

All balances and metrics displayed on the Dapp/Savings Protocol are based on the “Reserve Token” balances.

The displayed balances are increasing on a daily bases with the interest that is being added once per day.

This means that the user can see his balances increasing live while being in the Dapp/Savings Protocol.