

Vision

⋮

Financial services are primed for rapid and transformative changes. We foresee a more agile, transparent and decentralized alternative to traditional finance emerging to provide a friction-less finance where global supply/demand of capital and assets are managed in perfect equilibrium.

In this utopian world of finance, capital and assets are exchanged on/off-chain seamlessly. A global community of auditors will assess the risk of assets, and the loan will be fulfilled by lenders who understand the risk/return profile. In addition, lenders will be equipped with comprehensive analytical tools and complete sets of verifiable on-chain data to make informed decisions. Smart contracts will automate the entire funding and settlement process, fully emulate the existing banking services at no additional cost or the need to be overcollateralized.

Bringing TradFi and DeFi

For DeFi to continue its growth trajectory, we need to move towards a world where businesses can access loans without excessive collateral. DeFi must allow real businesses to collateralize tangible assets with real cash flows, and ultimately reach a [credit-based lending](#) model on DeFi.

We are convinced that the current DeFi market is focused only on the needs of the 1%.

However, the most disruptive end-game is to reach the 99% within the rest of the industry. NAOS Finance was founded with the intention to accelerate the process and to lead the transformation of decentralized finance.



NAOS Explainer Video

Protocol Design



NAOS is a lending protocol that bridges TradFi and DeFi, allowing real businesses to access liquidity from DeFi without overcollateralization.

Borrowers collateralize assets off-chain and provide fixed interest payments on-chain. All assets undergo rigorous risk assessments and are insured. Lenders supply stablecoins and receive fixed yields generated from real world assets.

Instead of holding the community responsible for asset onboarding decisions, NAOS works with third-party auditors to assess borrowers and establish [credit scores](#) based on loan performances.

The credit score system serves as the basis for governance, allowing the community to make informed and benchmarked decisions for subsequent borrower onboarding.

How Does the Protocol Work

:

Borrowers submit loan proposals through **NAOS governance**.

Approved borrowers begin auditing, where financial and operating data are evaluated and credit scored. Audited data and credit score are then presented to the community for a final vote. Once approved, the borrower launches a junior pool with a predetermined [coverage ratio](#).

Lenders can either participate in a specific asset ("**Junior**") pool or in the index ("**Senior**") pool that allocates funds proportionally across all asset pools.

NAOS currently only service [debt obligations](#) and collaterals ("**RWA**") with fixed [principal values](#), including [supply chain financing](#), [corporate loans](#) and [receivables](#).

Stakeholders

:

The NAOS lending process involves different stakeholders such [lenders](#), [borrowers](#), [auditors](#) and [insurers](#).

More stakeholders will be involved in the protocol governance in the near future.

Borrowers



Borrowers receive on-chain loan facilities by collateralizing RWA off-chain. Prior to launching a pool on NAOS, borrower's financial and operating data are evaluated and rated by auditors.

Approved borrowers are bound by comprehensive legal agreements to fulfill and meet [debt obligations](#).

Auditors



Auditors assess borrower and loan risks, governance approval is required before pool launch on NAOS.

Auditors are compensated for successful pool launches and continual monitoring of loan performance.

NAOS plans to decentralize the risk assessment process by providing easy access to borrowers' credit ratings.

Insurers



Insurers work closely with Auditors to evaluate loan proposals, and assume [first-loss](#) (“**Insurance**”) in case of default.

NAOS works with a third-party insurance protocol (“**Tidal Finance**”) to provide insurance coverages for each junior pool.

Lenders



Lenders supply liquidity to Index (“Senior”) and Junior (“Junior”) Pools for RWA yields. Each junior pool represents a unique asset type from a single borrower, and the Index Pool allocates capital proportionally to all junior pools.

Junior pools serve as first-loss-guarantee in case of default, and provide higher RWA yields. All lenders are required to complete a one-time [KYC](#) process prior to lending.

Identity Verification



NAOS is a permissioned DeFi protocol designed to be compliant with anti-money laundering (“**AML**”) regulations, which requires participants to complete identity and background checks (“**KYC**”).

In this way, NAOS enables compliance-conscious institutions to enter DeFi.

NAOS partners with [Securitize](#), [Sumsb](#), [Synaps](#) and [Binance](#) for identity verification. All lenders are encouraged to complete the one-time KYC process with Securitize and Synaps, or can simply log into the accounts if already registered.

If you already have Binance Account Bound (“**BAB**”) token in the wallet, you may skip KYC, add your wallet address to the whitelist and begin lending on NAOS.

US citizens must also be verified as accredited investors before becoming lenders.

Index and Junior Pools

:

An approved borrower assigned with a **coverage ratio** may set up a Junior Pool, and access liquidity from the Index Pool. Each junior pool represents a unique borrower, asset type and loan terms. The Index Pool, similar to an [Exchange Traded Fund \(“ETF”\)](#), is a communal pool that allocates [liquidity](#) to each Junior Pool automatically according to the specified [coverage ratio](#).

The Index Pool is the [senior tranche](#) of the [loan facility](#), and the Junior Pool is the [junior tranche](#) of the [loan facility](#). In case of default, the Junior Pool takes [the first loss](#).

For example, a borrower approved for a \$1,000,000 loan facility with 20% coverage ratio may set up a \$200,000 Junior Pool ($\$200\text{K} / \$1\text{M} = 20\%$ coverage), and access the remaining \$800,000 from the Index Pool. The Junior Pool provides 20% downside protection (20% coverage) in case of default.

Lenders may supply capital to any Junior Pool (borrower) directly for higher yield/risk, or diversify risk exposure by lending to the Index Pool for lower yield/risk.

Borrowers may launch Junior Pools denominated in USDC, BUSD or USDT, and will receive allocation from the index pool denominated in the same currency. For example, a Junior Pool denominated in USDC will only receive allocation from the USDC Index Pool.

cRWA, bRWA and tRWA

:

Lenders receive LP tokens (“**cRWA**” for USDC; “**bRWA**” for BUSD, “**tRWA**” for USDT) when supplying capital to the respective index pools. The LP tokens are interest-accruing ERC-20 tokens, which can be staked to earn NAOS rewards or redeemed (principle + interest) for stablecoins.

As the borrowers continue making interest payments, the value of the LP token increases at the stated APY.

For example, a lender supplying \$1,000 USDC to the index pool with 10% APY will receive 1,000 cRWA tokens at \$1 per cRWA. As the interest accrues over the year, the lender is able to redeem 1,000 cRWA for \$1,100 USDC at \$1.1 per cRWA.

Pool Economics

:

Depending on the loan terms, borrowers may have different interest payment allocations for index/junior pools. NAOS charges 10% of the total interest payment for protocol reserve.

For example, a \$1m pool paying 10% nominal interest rate may represent 7% APY for the Index Pool and 15% for the Junior Pool, net of service fee to protocol reserve.

Lender Incentive Rewards

:

Index Pool lenders stake **“x”RWA** tokens for NAOS token reward. The NAOS token reward has a 6 month vesting period, lenders may claim the reward in full after 6 months, or claim at any time before 6 months by forfeiting a portion of the reward. The mechanism is designed to incentivize long-term contributors and their capital commitments.

For example, a lender is scheduled to receive 1,000 NAOS rewards every month. The lender receives the full 6,000 NAOS rewards when claiming after 6 months. If the lender claims the reward after 3 months, only 1,500 ($3000 \times 3/6$) NAOS reward will be granted.

Junior Pool lenders receive NAOS token rewards automatically and are not subjected to vesting. The NAOS token rewards are distributed at the stated APY when the interest payments are received.

For example, for a \$1m junior pool with 10% nominal interest and 5% NAOS reward, \$50K NAOS reward will be distributed when the full \$100K interest payment is received. When only \$50K interest payment is received, only \$25K NAOS reward will be distributed.

Fund Redemption

⋮

NAOS maintains a cash reserve (“**cash drag**”) in the Index Pool to provide liquidity for withdrawal. Lenders may access liquidity from the Index Pool at any time. When the withdrawal demand exceeds the reserve amount, a queuing system is in place for lenders to indicate the desired withdrawal amounts.

Each lender may only submit one request at a time, it may be the full or partial invested capital, and is able to adjust (“**update**”) the withdrawal amount or cancel redemption (“**cancel**”) prior to distribution.

For example, a lender supplied \$10K in the borrowing pool and is redeeming \$5K. A \$10K reserve allows the lender to receive the redeemed amount in full.

However, if there is only \$3K in the reserve, the lender will be able to redeem \$3K immediately, and be in queue for the remaining \$2K. Once the remaining \$2K is redeemed, the lender will need to submit another withdrawal request for the remaining amount.

Following the above example, if a 2nd lender requests for withdrawal for \$5K, the 2nd lender will be in queue until the first lender has fully redeemed \$5K, and be the first in-line for the next \$5K interest payment or when new capital entering the pool.

Liquidation

:

Borrowers are required to make monthly interest payments, with a 14 day grace period for late payments. In addition to interest payments, penalties are charged during the [grace period](#).

Liquidation process is not initiated if a borrower meets the interest and penalty requirements within the grace period.

If the borrower fails to meet the interest and penalty payments after the grace period, the total value of the loan will be written off, the value of **“x”RWA** will decrease proportionally, and the liquidation process will be initiated.

During the liquidation process, NAOS will tap into the insurance coverage to recover a portion of the fund immediately, and increase the value of **“x”RWA** by the same amount.

The default loan will enter off-chain legal proceedings, recouped capital will be returned to the pool, and increase the value of **“x”RWA** by the same amount.

In the case of default, insurance coverage and junior pool will assume [first-loss](#) to protect Index Pool lenders.

NAOS Token

:

- Contract addresses ("**ETH**"): 0x4a615bB7166210CCe20E6642a6f8Fb5d4D044496
- Contract addresses ("**BNB**"): 0x758d08864fB6cCE3062667225ca10b8F00496cc2

The NAOS Finance token ("**NAOS**") has the following utilities:

Yield Boosting: Similar to Curve Finance, NAOS rewards long-term stakeholders locking tokens in the Boost Pool. Lock periods of 3, 12, 24 and 48 months are available, which can boost yields up to 2.5x.

Governance: Lock NAOS token in the boost pool to receive veNAOS governance token. veNAOS holders vote on all protocol matters including, but not limited to, new product features, protocol upgrades, borrower onboarding, loan terms and partnership priorities.

Team will gradually implement other token utilities on the roadmap:

Service Fee Reduction: NAOS charges a 0.5% service fee on total withdrawal amount for protocol reserve. Lenders may reduce service fee by holding veNAOS.

Borrower Staking: Approved Borrowers will have a cap on loan facility. To increase the borrowing limit, Borrowers are required to stake NAOS tokens as reserves. The higher the borrowing limit, the more staked NAOS token is required.

Auditor Participation: To ensure the independence of Auditors, NAOS Protocol does not encourage Borrower bribes. Instead, staked tokens from Borrowers are pooled as reward for successful Auditor evaluations. In the case where more Auditors are available than the borrowing demand, Auditors may need to stake NAOS tokens to be selected.

More NAOS token utilities to come.

Governance



NAOS believes the future of the protocol lies in the hands of our community. Given the complexity of the business model, we believe it's in the best interest of our community to ease into governance with a structured infrastructure in place.

We envision the protocol to be fully decentralized and automated, in which a borrower is able to submit a loan proposal, assess by experienced auditors, before entering governance vote.

Instead of leaving the community to do the heavy-lifting of evaluating a borrower's financial statements and operating data on the get-go, NAOS strives to build a transparent, standardized and intuitive [credit rating](#) system for all borrowers. As the protocol grows with more lending data, a more refined credit model will enable our community to make informed decisions.

NIP and NOP Processes

:

NAOS Onboarding Proposal ("**NOP**") is the process for borrowers looking to launch asset pools, and NAOS Improvement Proposal ("**NIP**") is the process for product and protocol related suggestions.

Though the NAOS team is currently leading most of the development and asset onboarding process, our goal is to fully decentralize the decision making processes without team interference.

All NAOS token holders are eligible to participate in the governance of NAOS Protocol. We value the opinions of long-term stakeholders, when it comes to proposal voting, veNAOS holders are granted with additional voting rights according to their lock up period.

Tokenomics



Total Token Supply

The maximum token supply is capped at **300,000,000 NAOS tokens**.

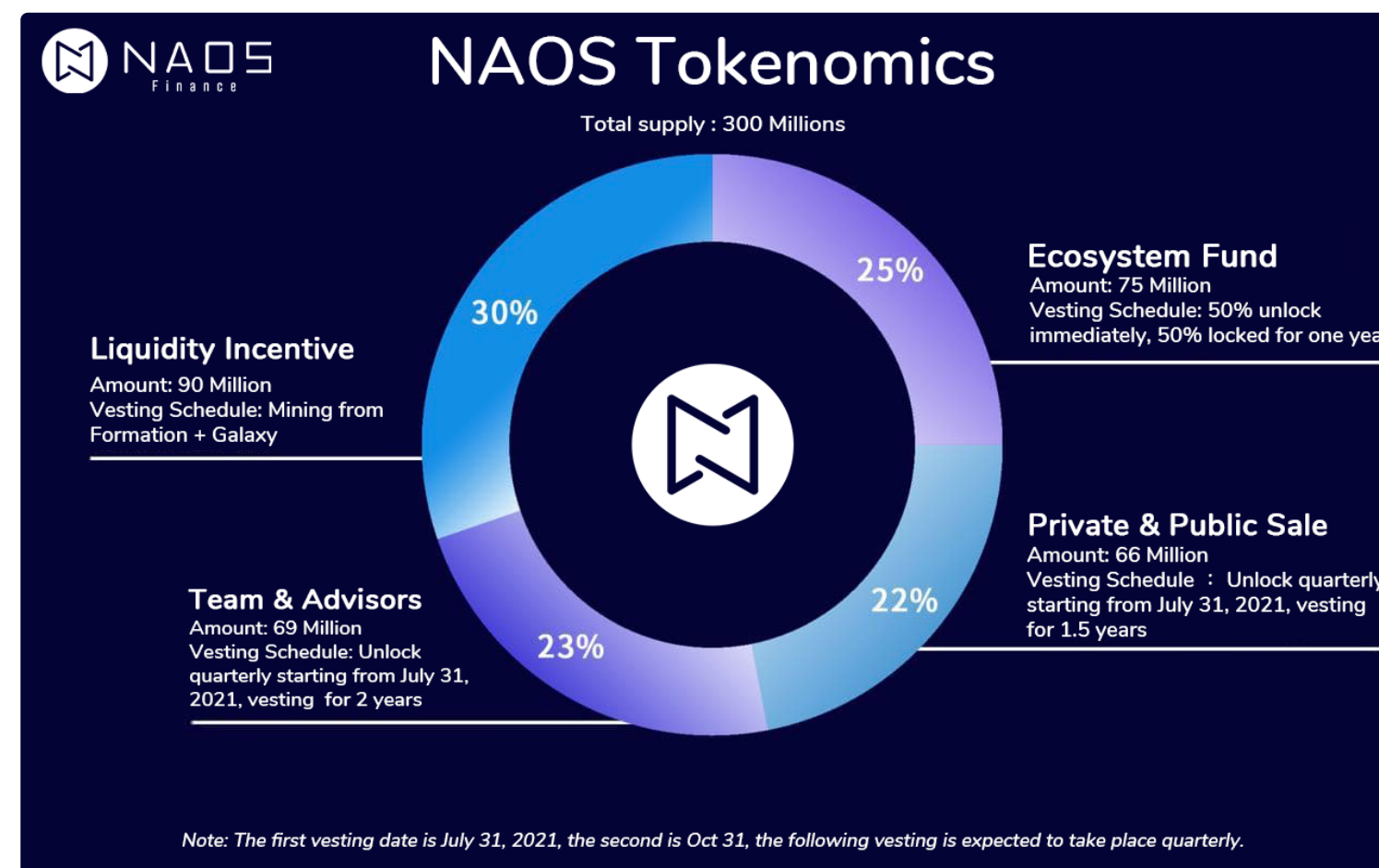
While there is no inflation, we'll defer to the community to decide whether incorporating inflation at a later time is in the best interest of NAOS.

Token Allocation

The vesting schedule started on May 1st 2021, with the following distribution:

- 30% Liquidity Incentive: emission begins on protocol launch
- 25% Ecosystem Growth: 50% vest immediately, and remaining unlock after 1 year
- 23% Team and Advisors: 2 years with quarterly release
- 22% Private and Public Sales: 1.5 years with quarterly release

Tokens in Ecosystem Growth are used for liquidity provisioning, marketing, community building, operations and partnership engagements.



Credit Scoring

:

The NAOS Credit Score (“**NCS**”) system aims to provide lenders with a simple visual snapshot of an asset pool’s risk profile. A high credit score indicates a lower default risk, and a low credit score signals a higher risk of default.

NCS is a multi-dimensional representation of a borrower that takes its financial, operations, macroeconomics, industrial and other factors into consideration. A borrower with robust financial performance may receive a low NCS if the macroeconomics or industrial outlook is substandard.

NCS ranges from 400 to 800. We’re only considering borrowers with NCS above **601** at this time.

Credit Quality	Scores
Excellent	751 - 800
Very Good	651 - 750
Good	601 - 650
Fair	501 - 600
Poor	400 - 500

How NCS is Calculated

:

Four main categories are evaluated when calculating NCS for a borrower:

Operations: business model, operating history, production efficiency, inventory turnover, cash conversion cycle, branding... etc

Industry: macroeconomics, market size/growth, competitive landscape, product differentiation, regulatory outlook... etc

Other Factors: management, shareholders, corporate structure, geographic risks, legal disputes, political stability... etc

Financials: revenue, profitability, cash position, liability, cashflow...etc

Ecosystem

:

NAOS Finance's approach to growing the DeFi playing field is to scale real world assets ("**RWA**") on-chain, and to build an all-encompassing ecosystem of innovative solutions. In this ecosystem, NAOS and its partners will co-evolve capabilities around RWA, and push the boundaries for the next generation of DeFi innovations.

In practice, the bridge between CeFi and DeFi requires redesigning product services, user behaviors, customer experiences and organizations. An ecosystem mindset is required to capture the inevitable shift in the economy and business landscape. We believe that a conscious partnering model is the best way for NAOS Finance to pursue its mission.

More on NAOS ecosystem roadmap [here](#)

Borrower Onboarding

:

While NAOS is industry agnostic, we're currently focusing on assets with fixed principal value without the need for periodic appraisal.

Examples of the assets are supply chain financing, corporate loans, receivable, debt obligations. We do have plans to finance real estate, inventory, manufacturing, and equipment at a later time.

A Borrower interested in launching a pool on NAOS is required to submit a loan proposal on **NAOS Governance Forum**, presenting the loan terms, borrower/asset description and other relevant information to the NAOS community.

Once the proposal is submitted, the borrower has 14 days to engage the community and answer questions. The community will conduct an initiate vote after 14 days, proposal approved by a majority vote will proceed to auditor assessment.

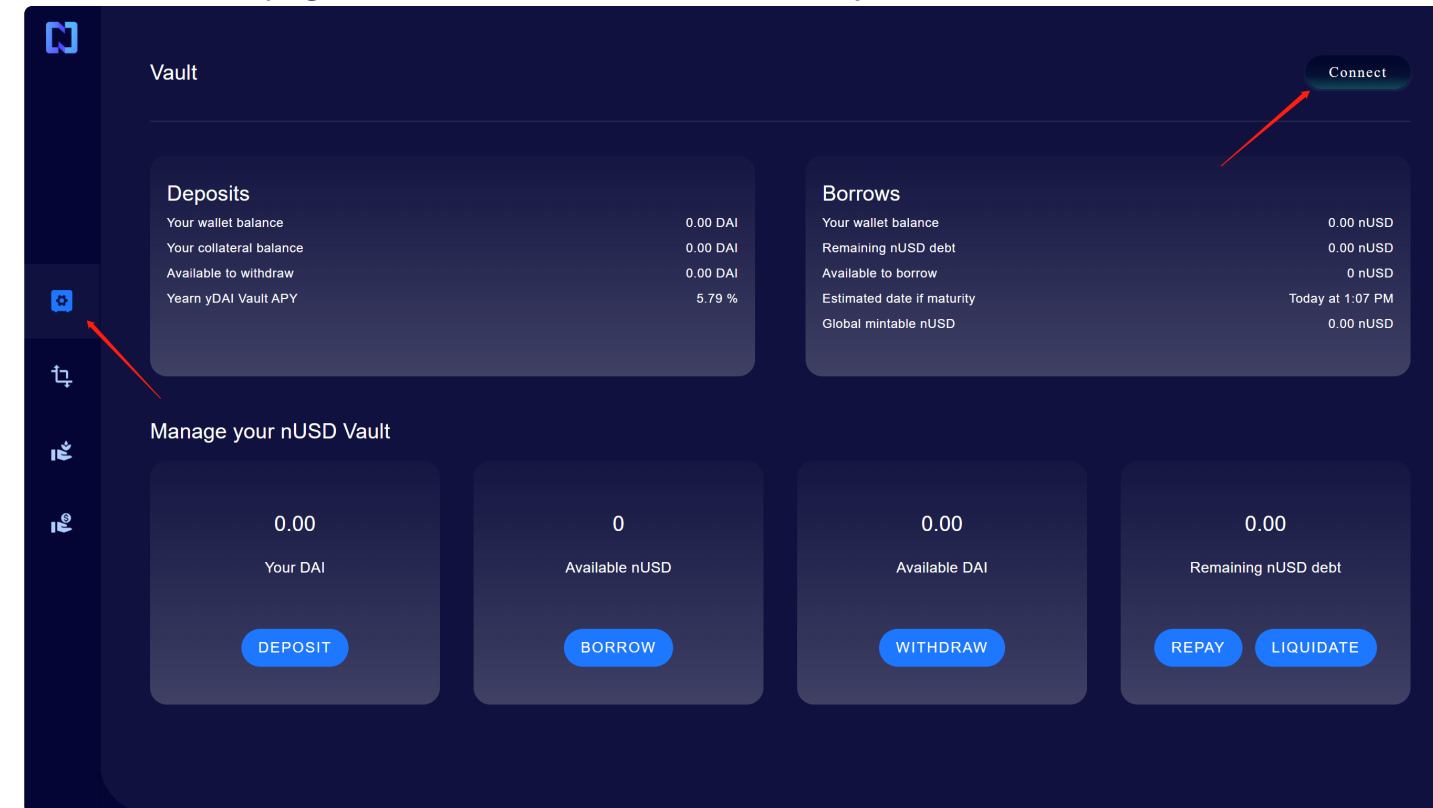
During the auditing process, detailed financial and operating data are assessed. Additional information may be requested, and multiple due diligence calls may be requested. All borrowers will be assigned with credit scores and the findings will be presented to the community for another vote.

Borrowers passed 2nd community vote and approved by independent council will enter legally binding agreements.

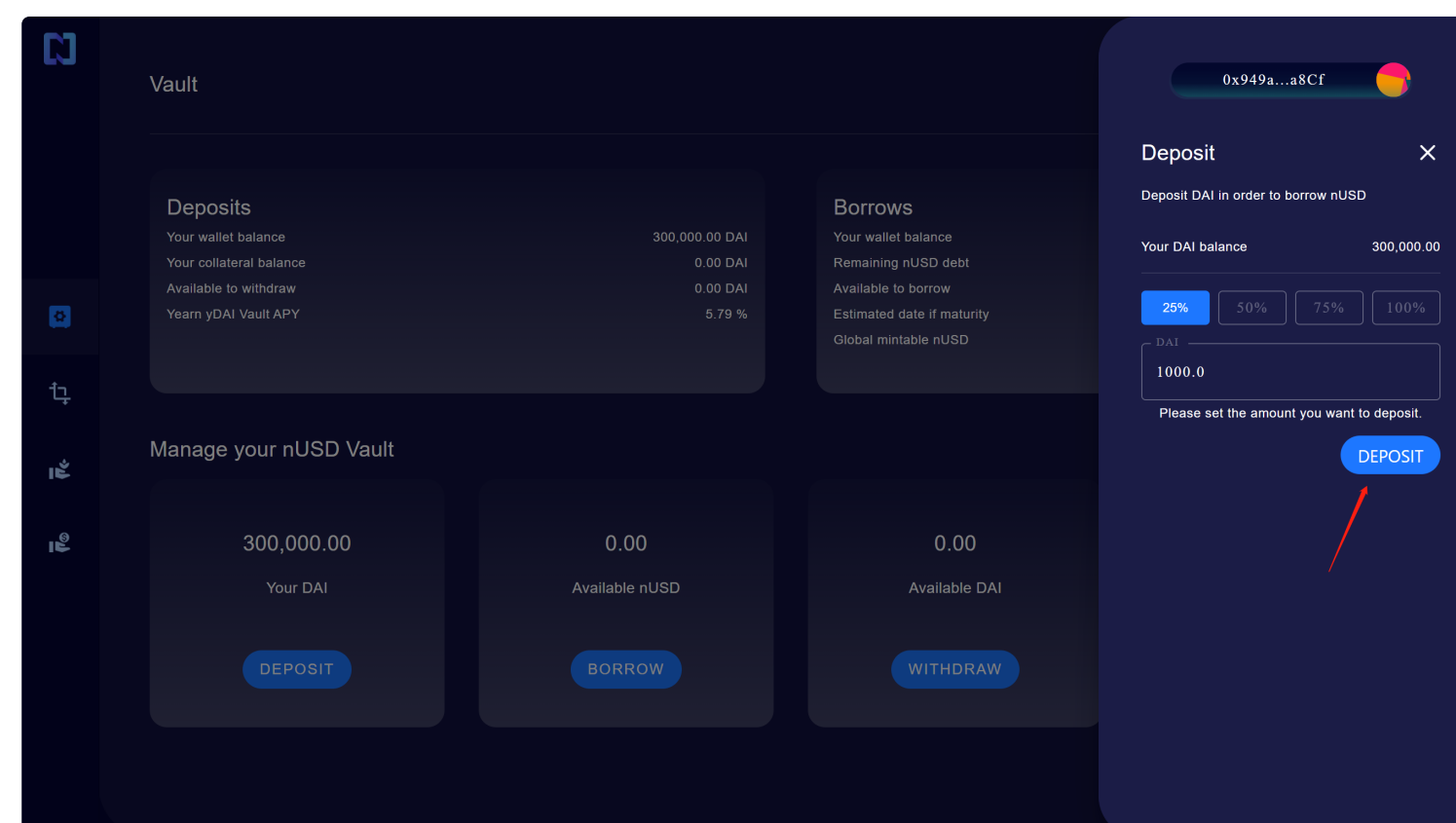
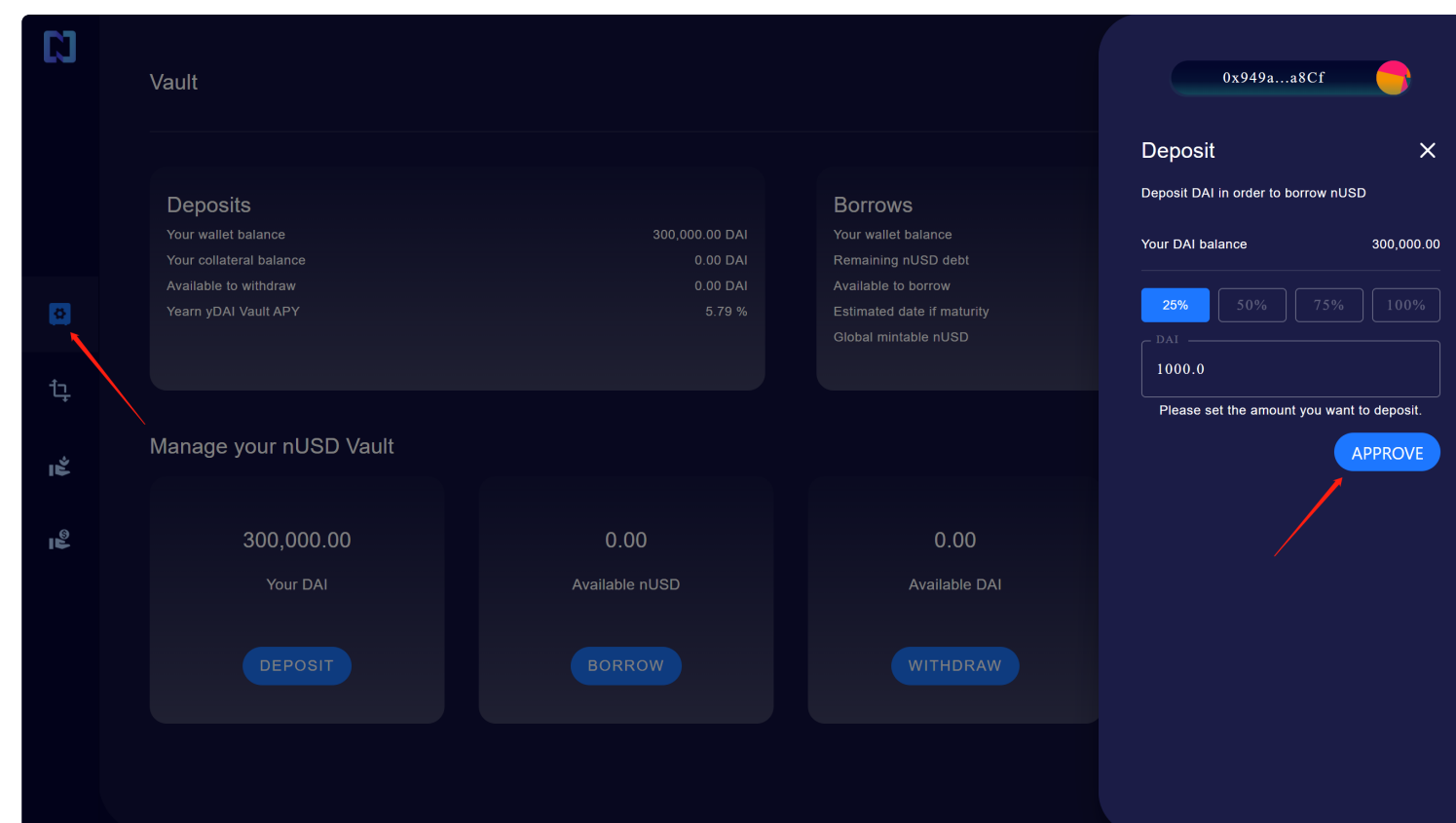
Once completed, the borrowing pools will be scheduled to launch.

How to deposit stable coins and borrow nUSD

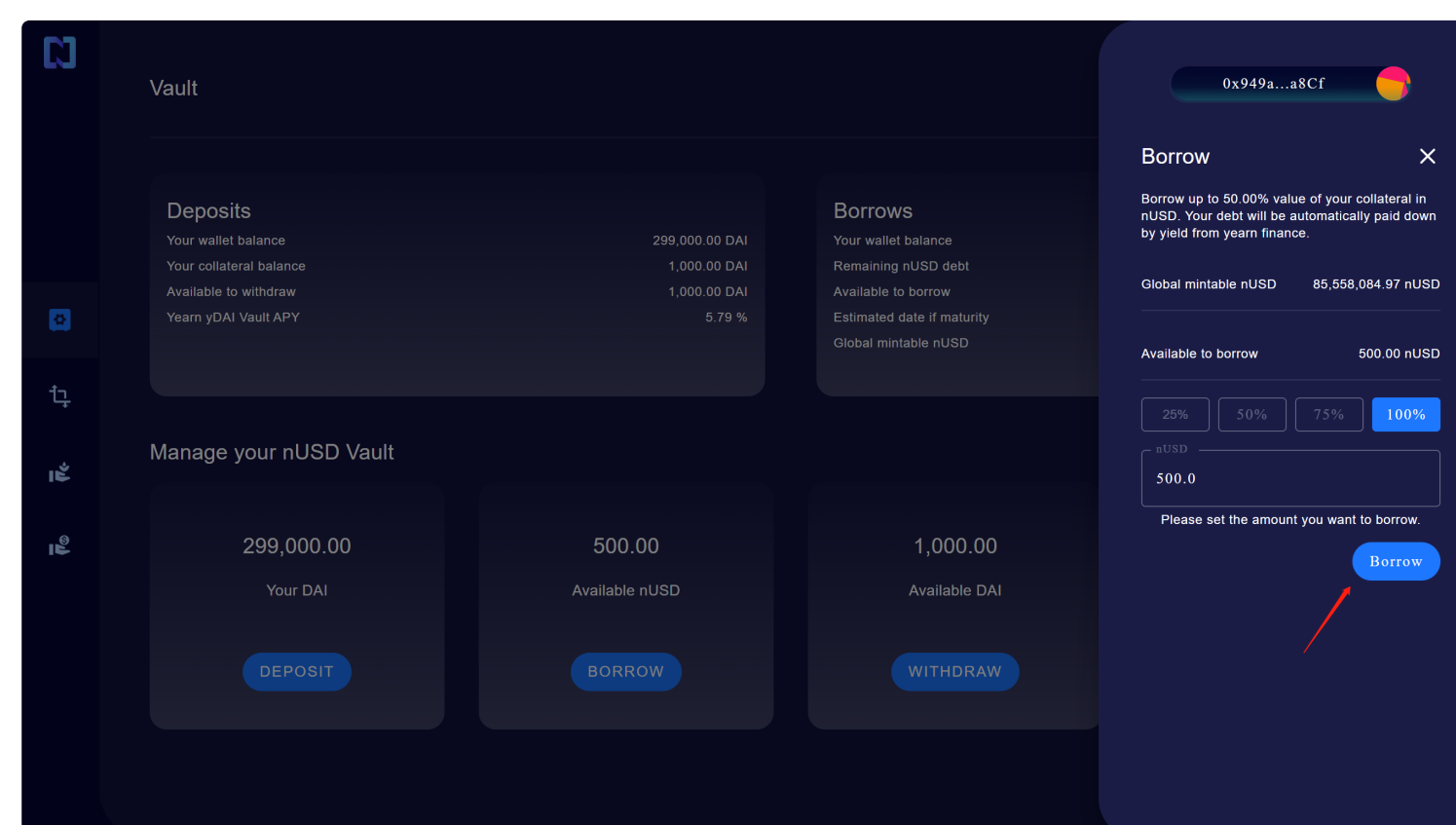
1. Go to the **Vault** page and click on **Connect** to connect your wallet



2. Depositing for the first time requires two transactions: **APPROVE** and **DEPOSIT**. Among them, **APPROVE** transaction is only needed in the first time you deposit. After the **APPROVE** transaction is confirmed, you can **DEPOSIT** your stable coins (DAI).

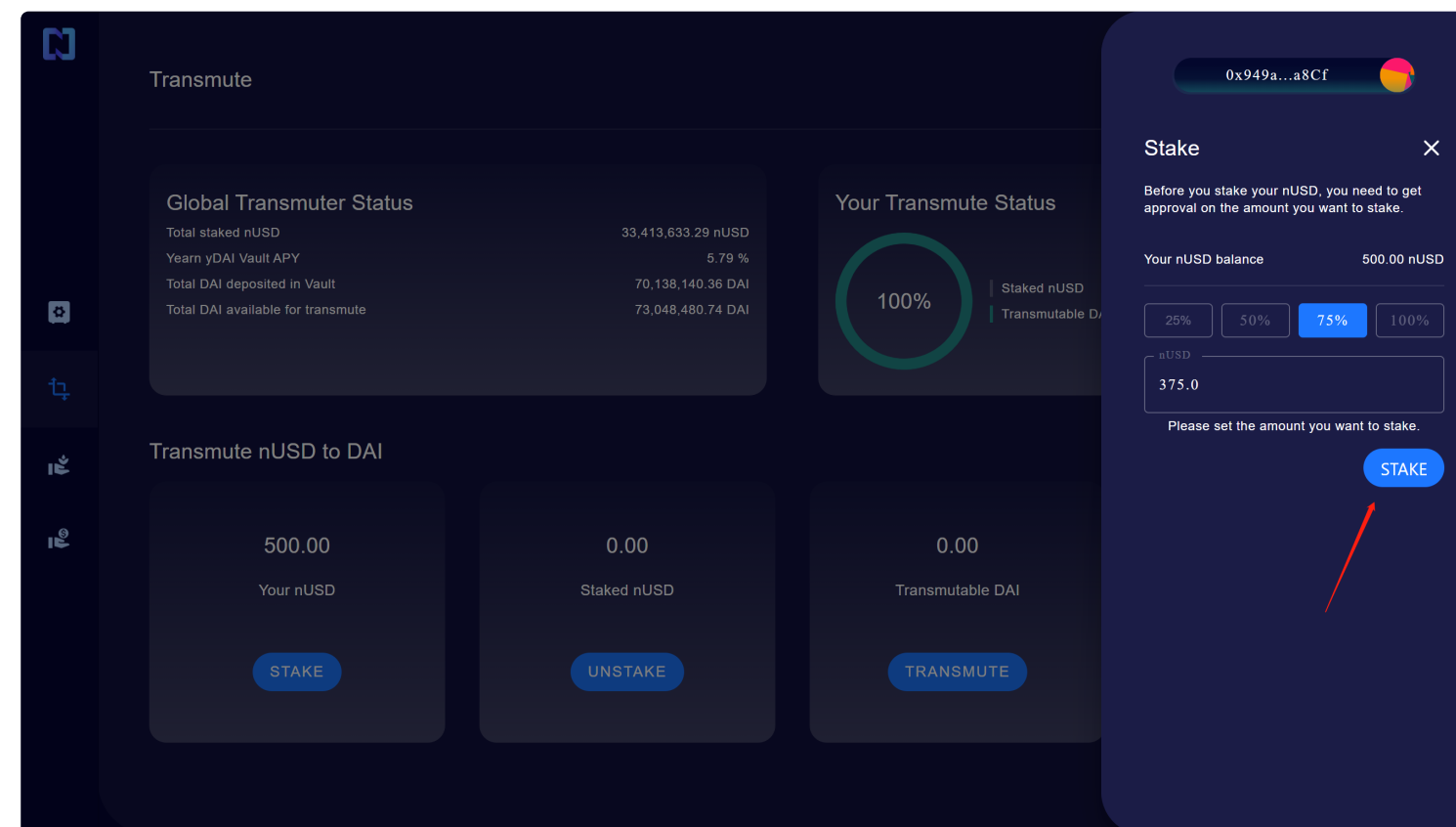
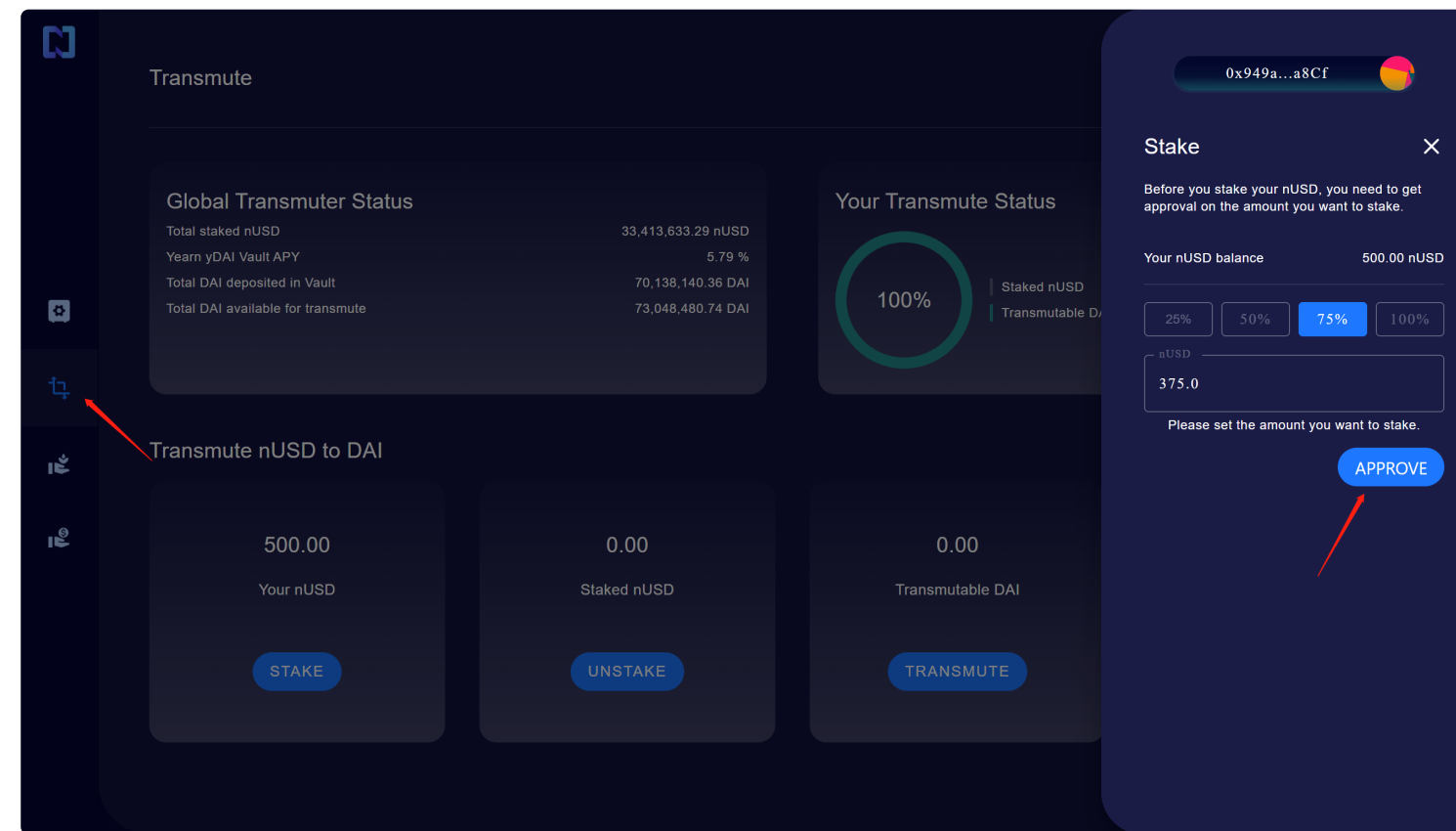


3. After you deposit your stable coins (DAI), you can **BORROW** nUSD up to 50% of your deposited collateral.

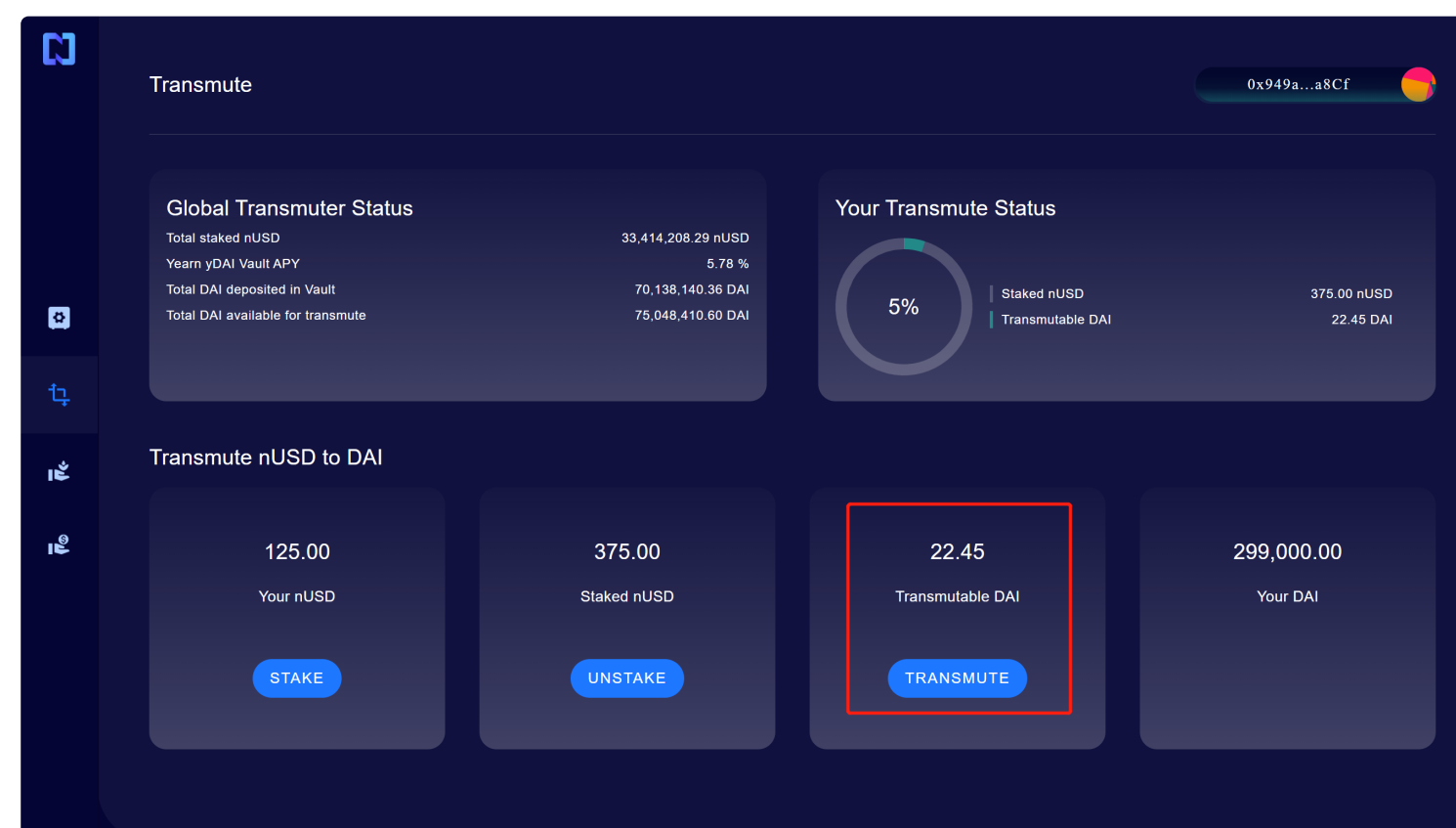


How to transmute nUSD to DAI

1. Transmuting for the first time requires two transactions: **APPROVE** and **STAKE**. Among them, **APPROVE** transaction is only needed the first time. After the **APPROVE** transaction is confirmed, you can **STAKE** your nUSD.

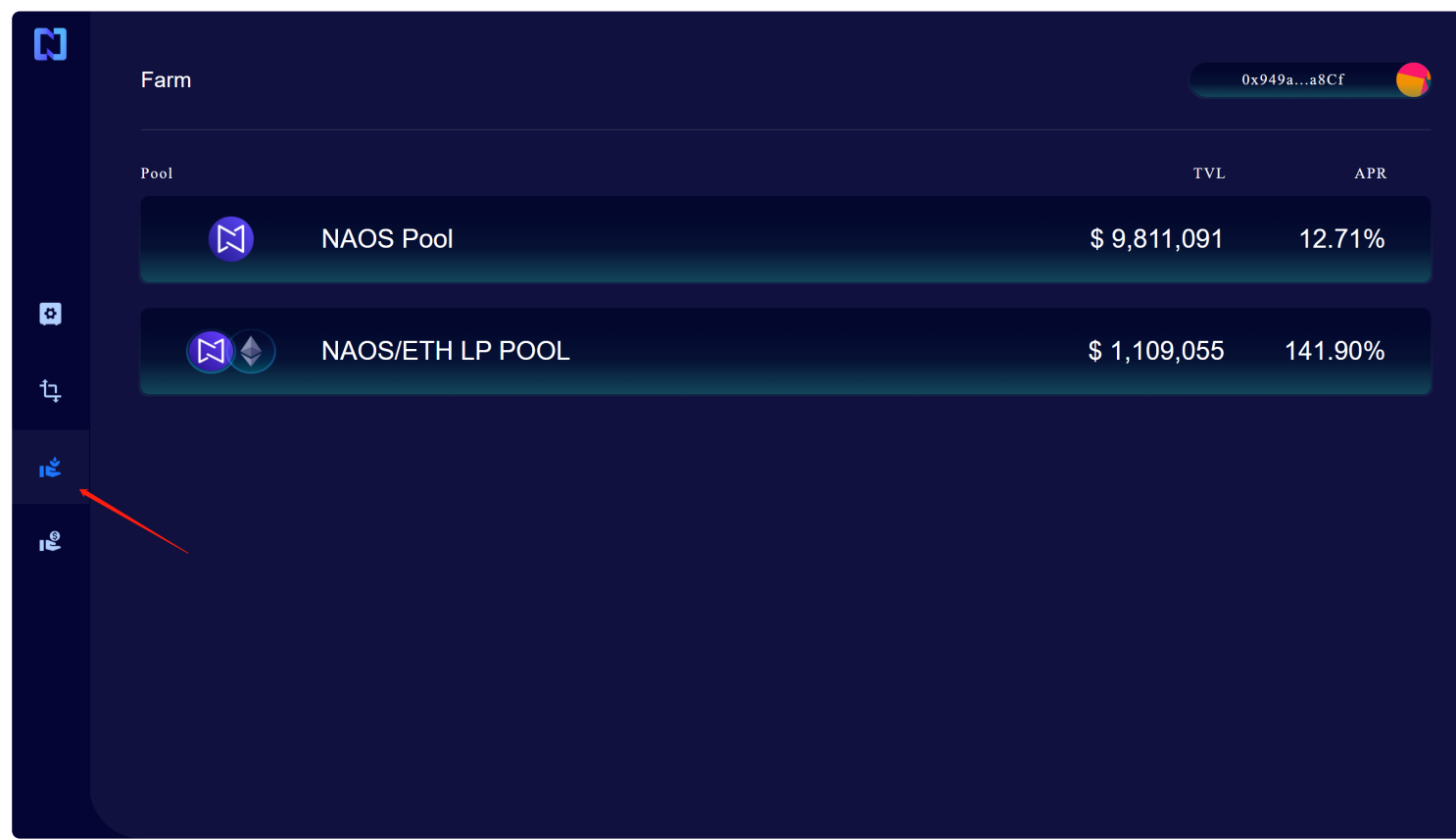


2. If there is a **Transmutable DAI** quota, you can click on **TRANSMUTE & CLAIM** to transmute your staked nUSD into DAI. Or you can click on **TRANSMUTE & EXIT** to transmute your staked nUSD into DAI and withdraw remaining staked nUSD.

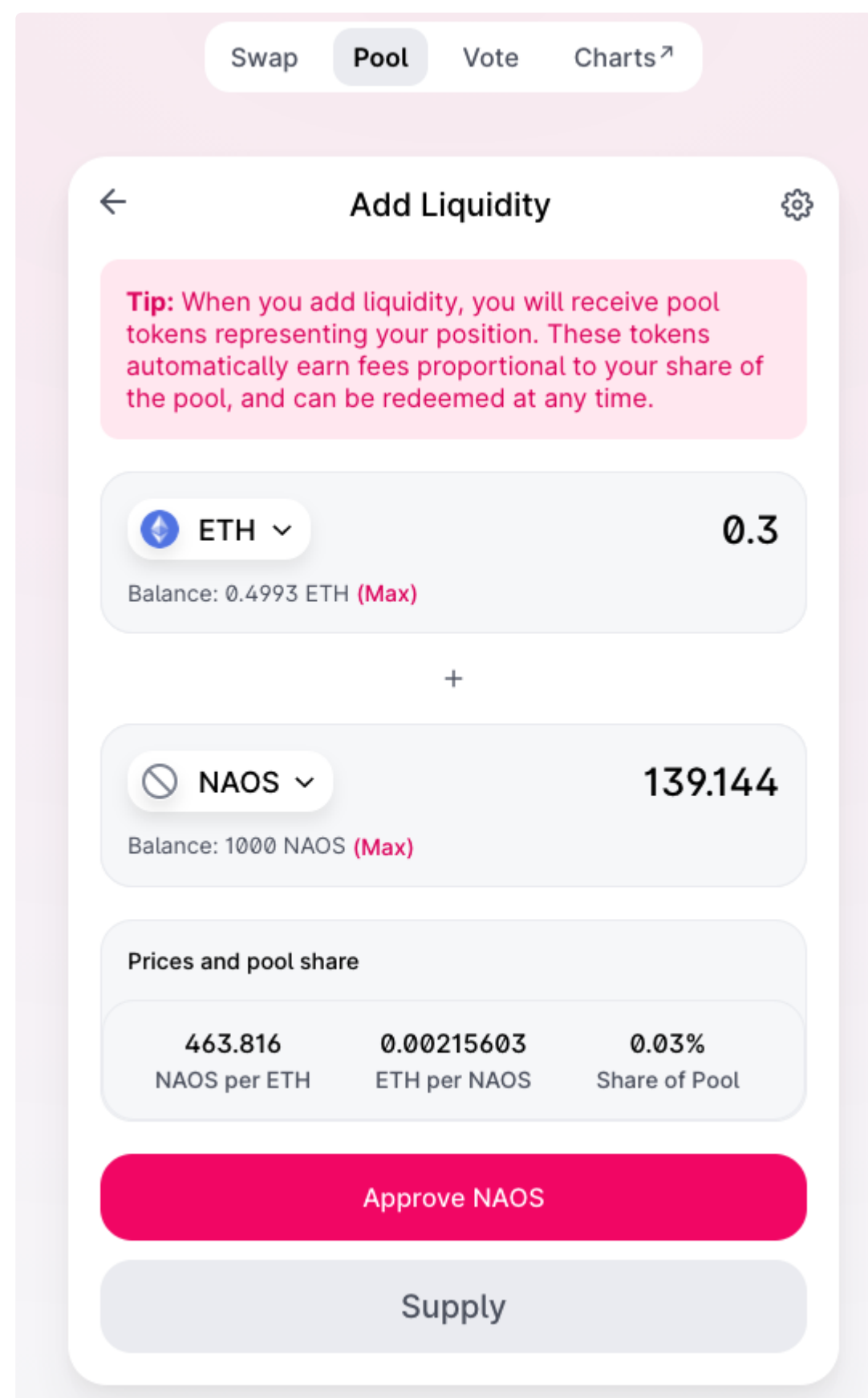
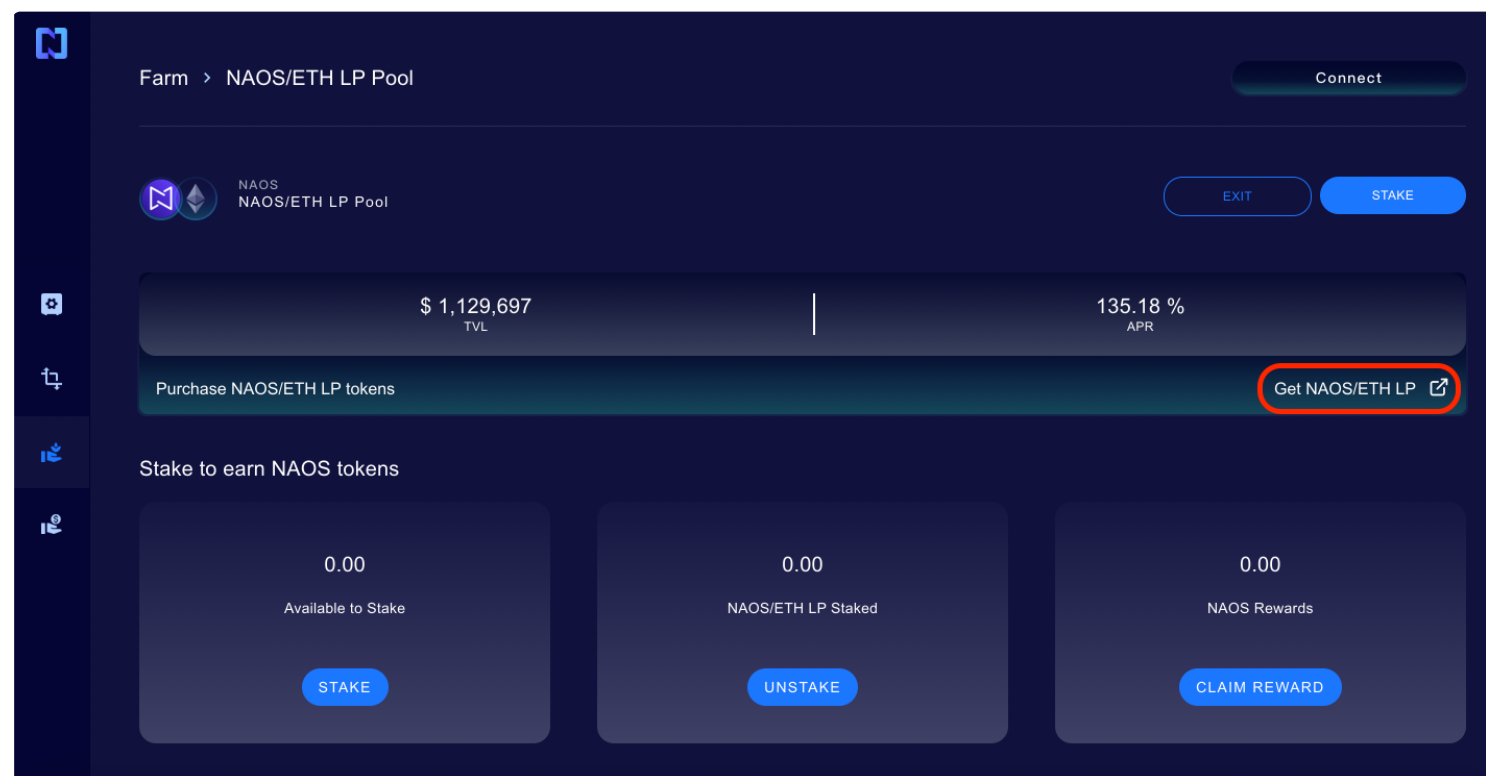


How to stake tokens to earn NAOS rewards

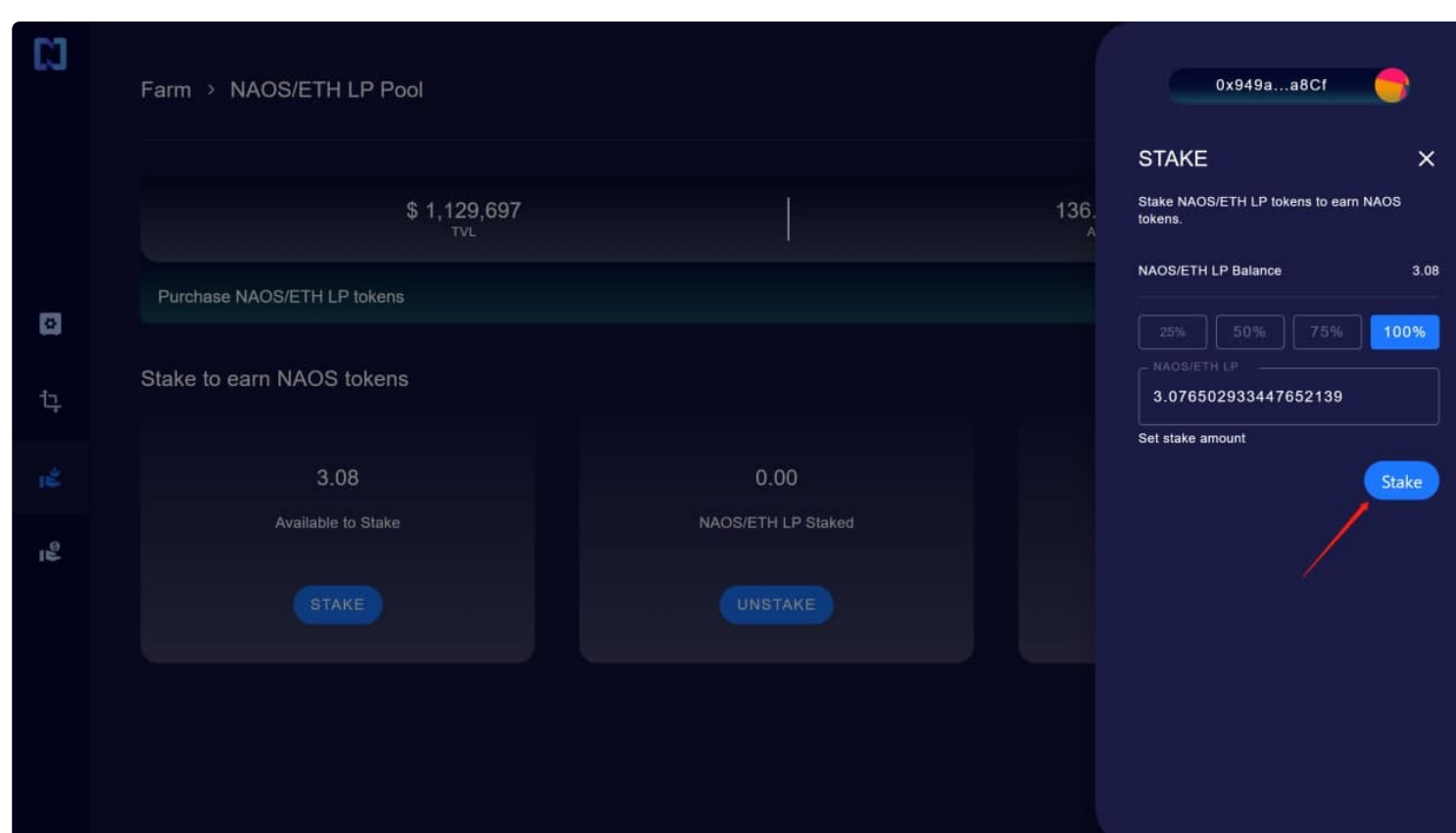
1. Go to the **Farms** page and choose the pool in which you want to stake



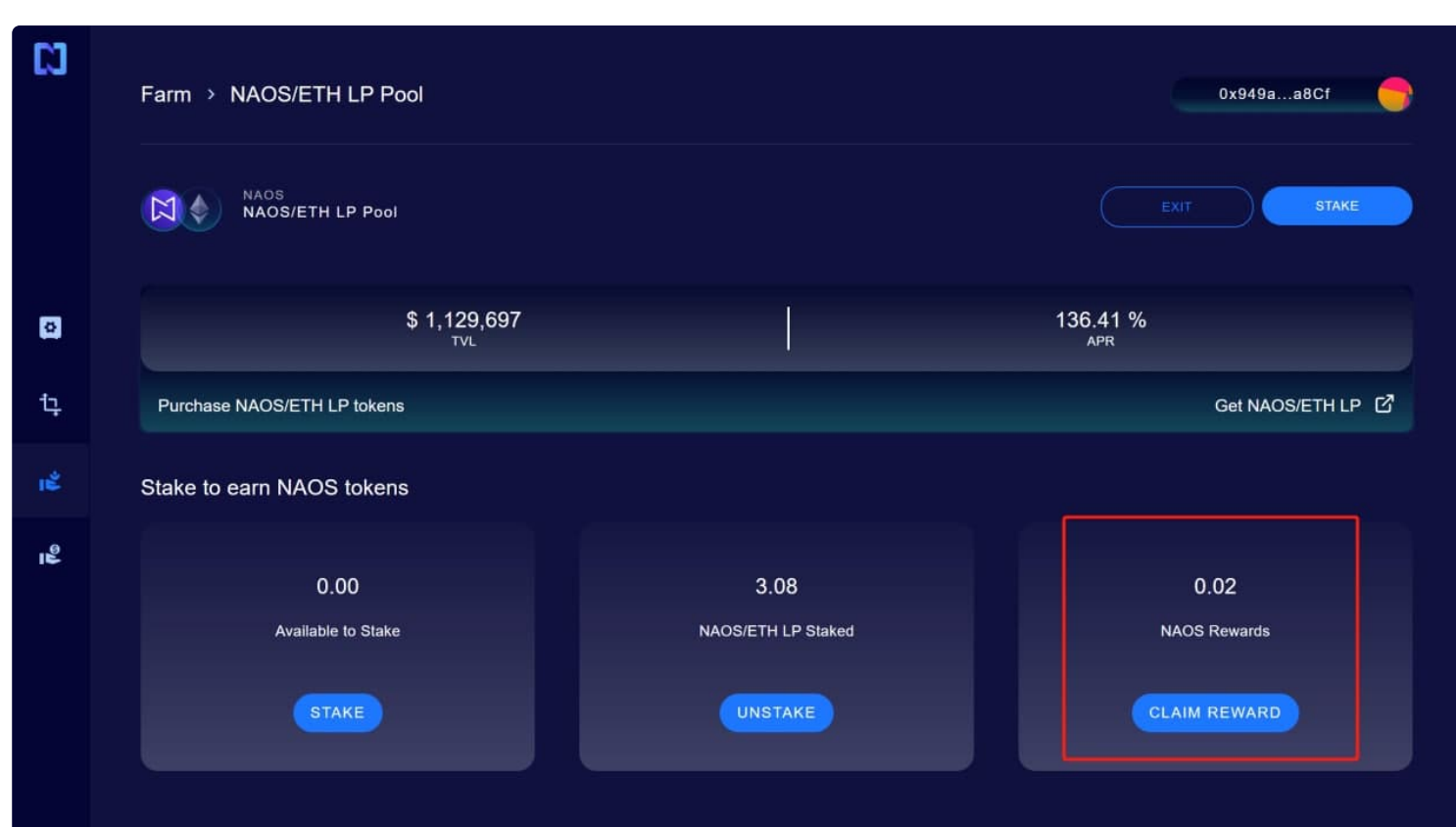
2. Using NAOS/ETH LP pool as an example, you can click on **Get NAOS/ETH LP** to provide NAOS tokens and ETH in the uniswap to get NAOS/ETH LP tokens.



3. Staking for the first time requires two transactions: **APPROVE** and **STAKE**. Among them, **APPROVE** transaction is only needed the first time. After the **APPROVE** transaction is confirmed, you can **STAKE** your tokens.

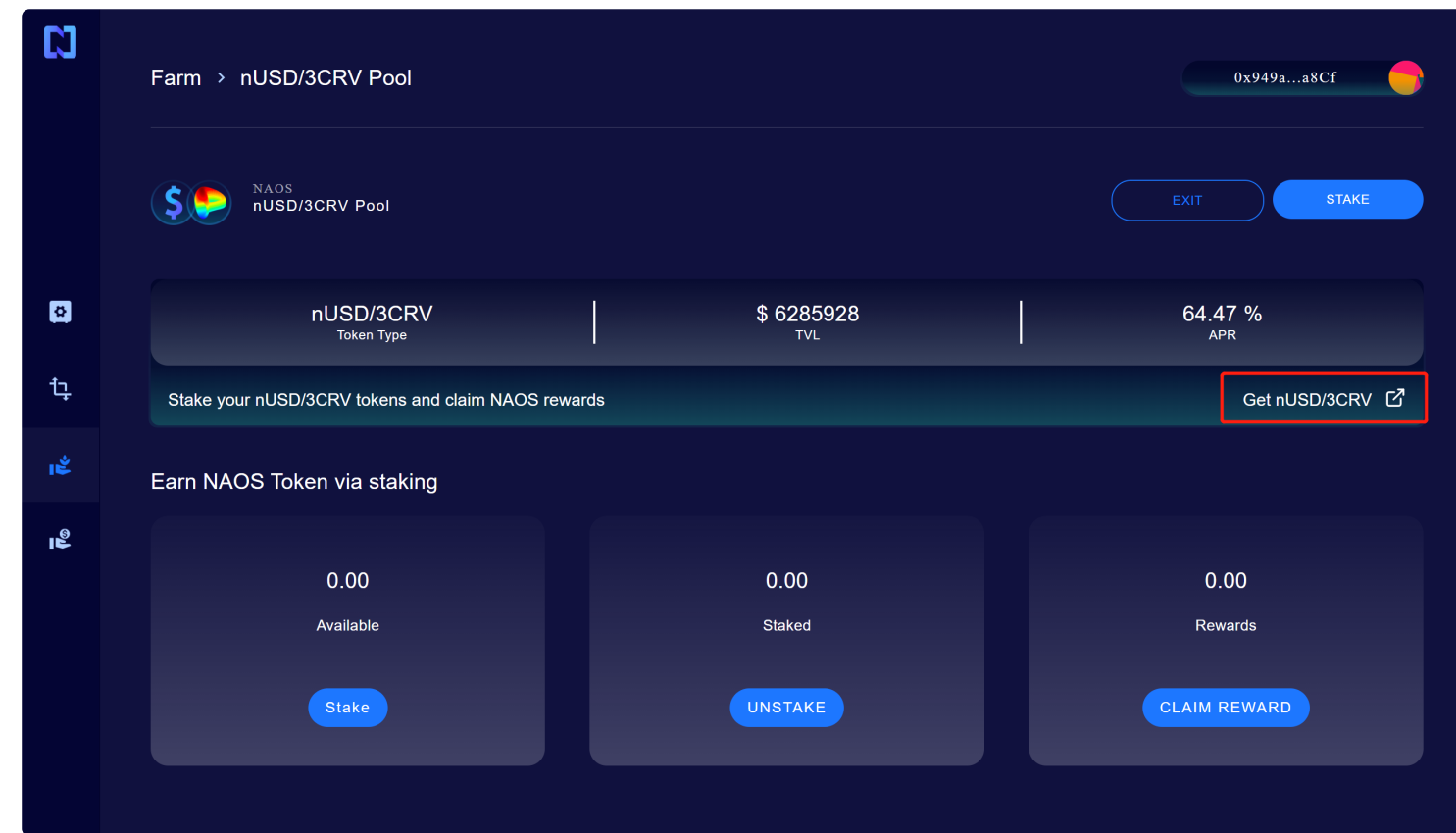


4. After you stake the LP tokens, NAOS rewards will increase with each block. You can click on **CLAIM REWARD** to earn NAOS tokens.

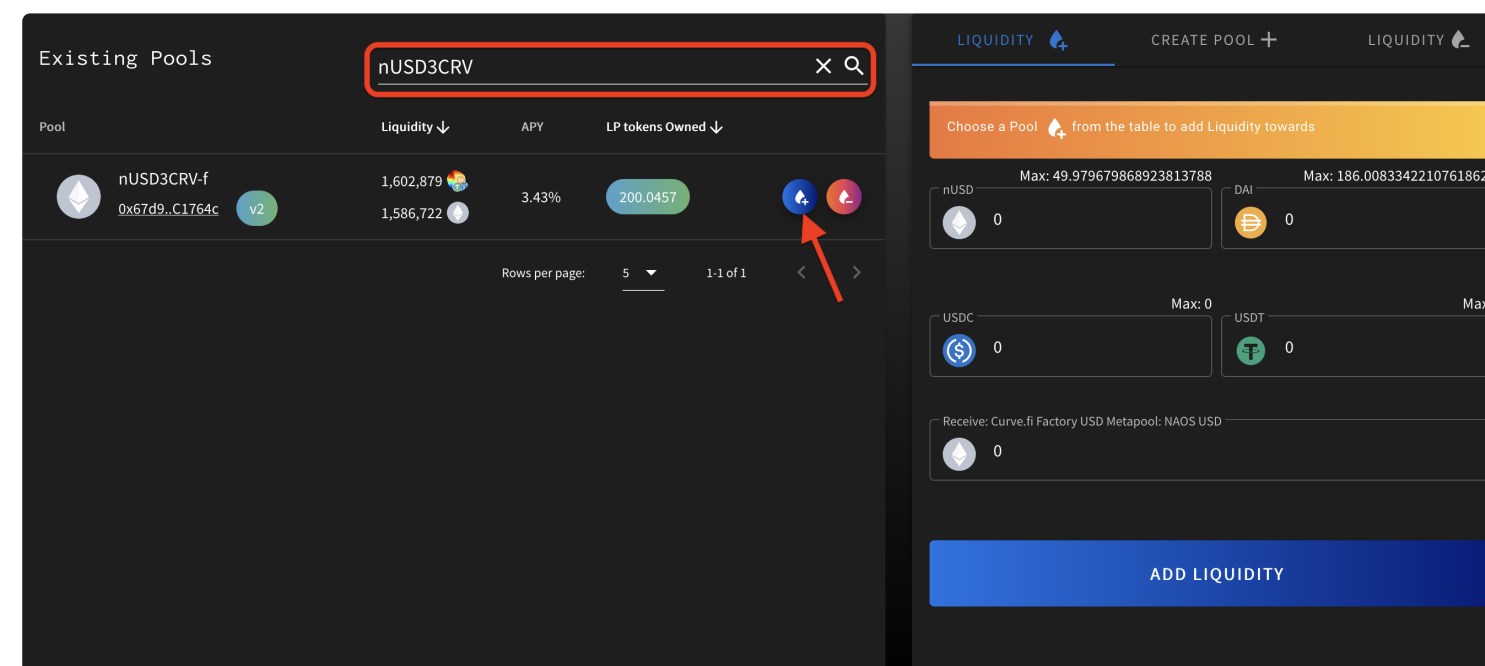


How to get nUSD/3CRV Token

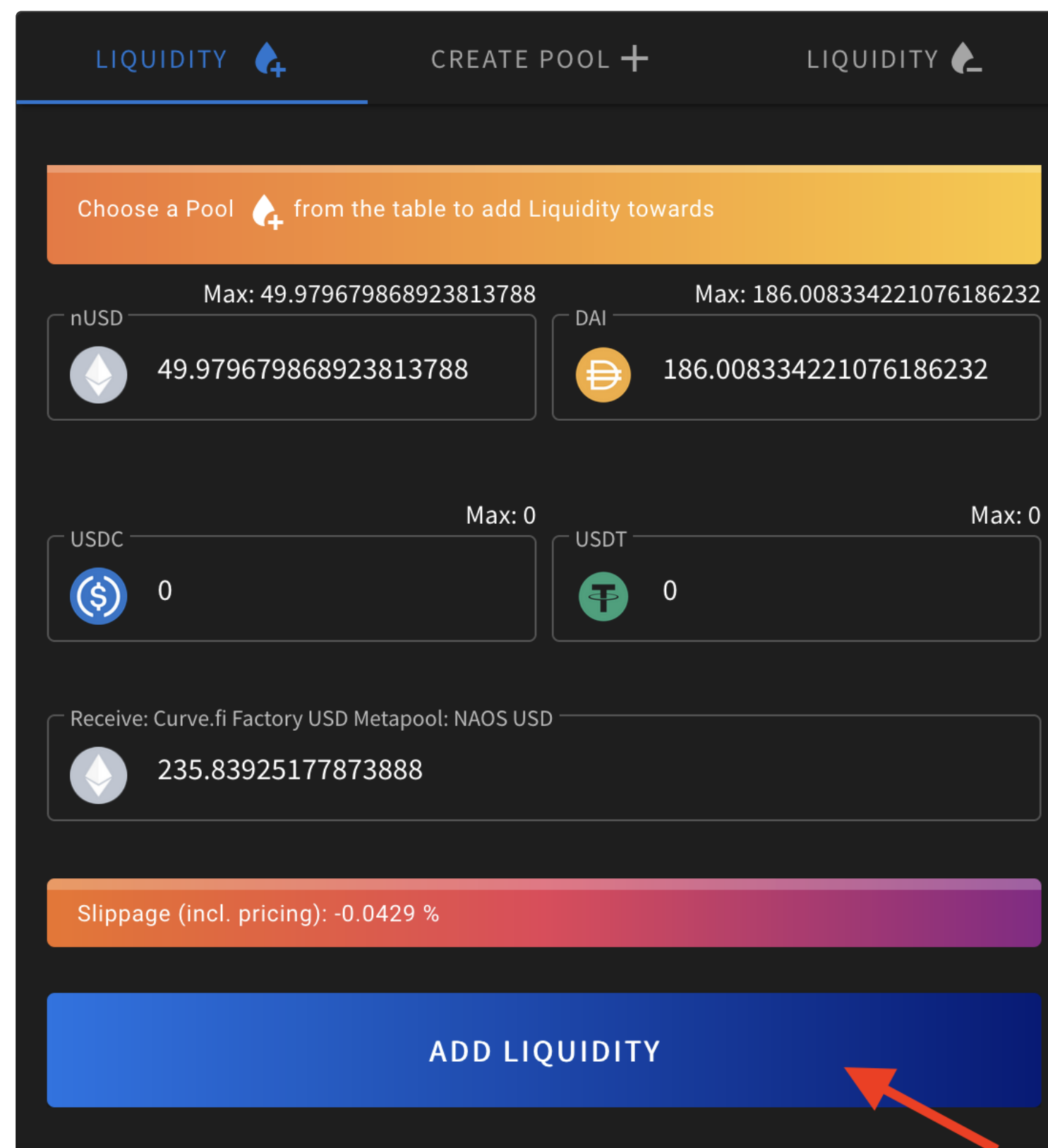
1. In the nUSD:3CRV pool, you will find the link to <https://crv.to/pool>



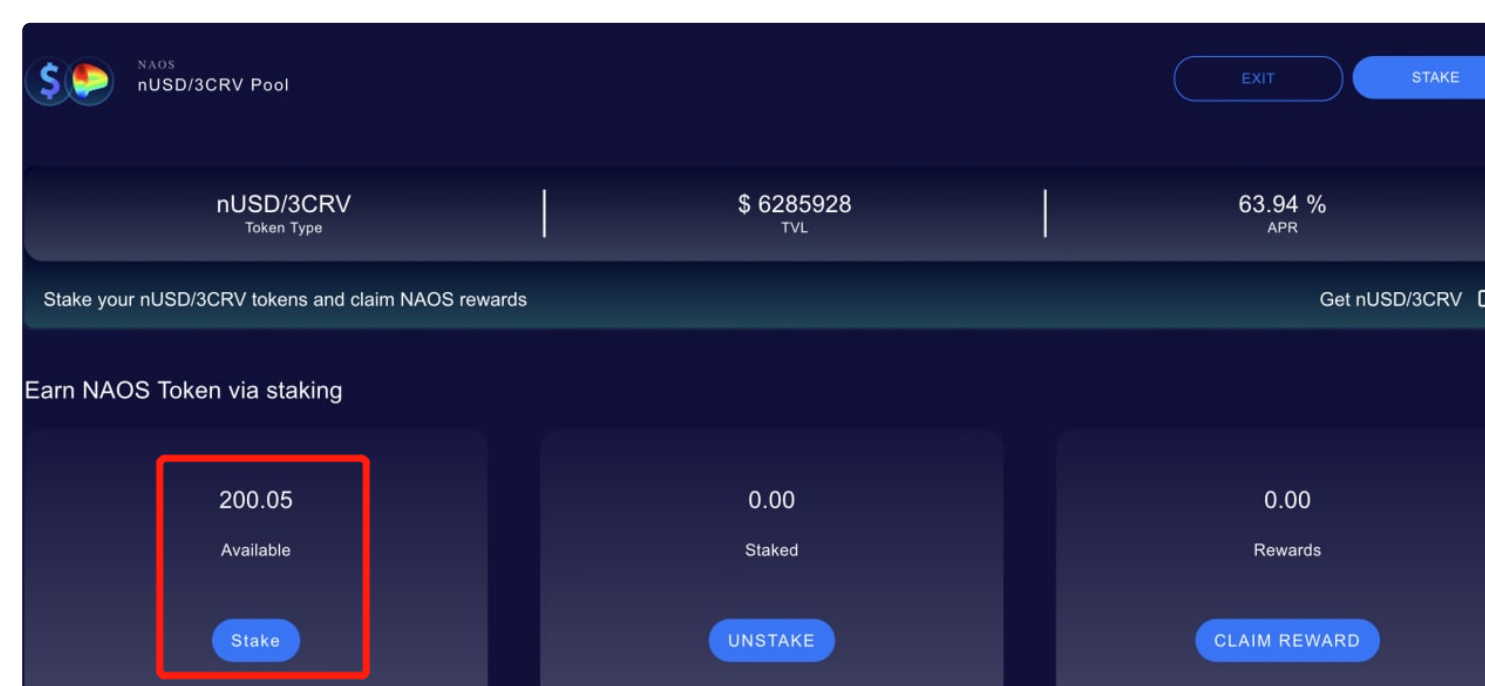
2. Search nUSD3CRV-f pool and click on the blue bottom



3. Enter the staking amount in the pool and click "ADD LIQUIDITY". If you are the first time to do it, you have to approve crv.to to use your tokens. You can stake in any token and amount combination.



4. After receiving nUSD3CRV-f tokens, go back to the nUSD:3CRV pool to stake nUSD3CRV-f tokens to earn NAOS rewards.



Vaults



Formation ([Formation.sol](#))

Formation contract is the starting point of Vault, investors can deposit stable coin and mint synthetic asset (nUSD) through this contract. The operation has the following steps:

```
function deposit(uint256 _amount)
```

Deposit stable coin into the Vault. The deposited stable coin will be put into [yearn.finance](#) (ETH) and Alpaca Finance (BSC) to generate yield.

```
function mint(uint256 _amount)
```

Mint nUSD up to 50% of deposited collateral.

```
function harvest(uint256 _vaultId)
```

Harvest from yearn.finance to reduce the loan in nUSD. If one deposits stable coins and did not take out nUSD, the borrowing limit for nUSD will increase proportionally to the yield generated.

```
function repay(uint256 _parentAmount, uint256 _childAmount)
```

Stable coins and nUSD have 1:1 pegging ratio. You can choose to pay down the nUSD with either currencies.

```
function withdraw(uint256 _amount)
```

Withdraw deposited stable coins in amounts up to 200% collateralization ratio.

```
function liquidate(uint256 _amount)
```

Liquidate the asset at any time. Formation will repay the nUSD debt with deposited stable coins and return any remaining collateral.

Transmuter

:

Transmuter ([TransmuterV2.sol](#))

Transmuter guarantees the value of the synthetic asset (nUSD). Harvested yield will be disbursed to the Transmuter, ensuring the 1:1 pegging ratio of nUSD and the stable coins. Over time, staked nUSD will be transmuted into stable coins, representing the yield from yearn.finance.

```
function stake(uint256 _amount)
```

Stake synthetic asset into the transmuter.

```
function unstake(uint256 _amount)
```

Unstake synthetic asset from the transmuter.

```
function transmute()
```

Transmute staked synthetic asset into stable coins at a 1:1 ratio.

```
function claim()
```

Withdraw converted stable coins.

Farm

⋮

StakingPool ([StakingPools.sol](#))

Farm provide incentives for investors to provide liquidity for the protocol.

```
function deposit(uint256 _poolId, uint256 _depositAmount)
```

Deposit the token corresponding to each poolId into the stakingPool.

```
function withdraw(uint256 _poolId, uint256 _depositAmount)
```

Withdraw the deposited token corresponding to each poolId from the stakingPool.

```
function claim(uint256 _poolId)
```

Claim the rewards from the pool.

Galaxy



Galaxy enables involving investment pools, meaning that investors can redeem and invest ALPHA and BETA tokens on an ongoing basis.

The investment and redemption of tokens is executed in periodic epochs (e.g. 24 hours) on which investors can place orders. The calculation of the token prices for an investment or redemption requires a net asset value (NAV) evaluation of the ongoing loans based on the underlying collaterals.

Alpha Staking Pool

⋮

GalaxyStakingPools (GalaxyStakingPools.sol)

The NAOS galaxy staking pool collects users' funds and deposits them into Galaxy. Investors can stake stable coins, such as DAI or BUSD into the NAOS galaxy staking pool. These funds will be supplied to Galaxy for the real world assets lending. Investors can get interests from real world assets and NAOS tokens in return.

```
function deposit(uint256 _poolId, uint256 _amount)
```

Deposit stable coins into alpha pool, after the asset settlement, stable coin will be converted into alpha tokens according to the epoch alpha token price.

```
function redeem(uint256 _poolId, uint256[] calldata _index)
```

After lock period is expired, users can register to redeem their alpha tokens which is staking in the pools. If there is enough stable coins in the Galaxy, the alpha tokens will be converted into stable coins to the user.

```
function withdraw()
```

Withdraw redeemable stable coins which is redeemed from Galaxy.

```
function claim(uint256 _poolId)
```

Claim the pending NAOS rewards.

```
function activateBoost(uint256 _poolId, address _account)
```

Rebalance the user's NAOS reward weight of the pool according to the poolId. The formula of the boost weight is:

$\min(\text{UserAlphaDeposited}, 0.4 * \text{UserAlphaDeposited} + 0.6 * \text{TotalAlphaDeposited} * \text{UserBoostPoolDeposited} / \text{TotalBoostPoolDeposited})$

```
function activateBoosts(address _account)
```

Rebalance the user's NAOS reward weight of all pools. The formula of the boost weight is:

$\min(\text{UserAlphaDeposited}, 0.4 * \text{UserAlphaDeposited} + 0.6 * \text{TotalAlphaDeposited} * \text{UserBoostPoolDeposited} / \text{TotalBoostPoolDeposited})$

Beta Insurance

:

BetaInsurance (BetaInsurance.sol)

Beta insurance token is the LP token which is the proof that the user provides liquidity for the beta insurance. Users can deposit nBUSD, which is generated from NAOS liquidity protocol Formation, and get the LP tokens.

```
function deposit(uint256 _amount)
```

Deposit synthetic asset and get the beta token according the beta token price

```
function withdraw(uint256 _shares)
```

Burn the beta Token and get back the stable coins according the price per share.

```
function balance()
```

Get the net value of the beta pool.

```
function getPricePerFullShare()
```

Get the beta token price per share.

```
function issue( address _NFTContract, uint256 _NFTID, uint256 _validPeriod,
uint256 _insuranceAmount )
```

Issue an insurance policy with the valid period and insurance amount.

```
function setInsurancePremium( uint256 _insuranceID, uint256 _premiumCurrencyAmount, uint256
_premiumNAOSAmount )
```

Governance can set the premium price of the insurance.

```
function payPremiumByCurrency(uint256 _insuranceID, uint256
_naosAmountOutMin)
```

User can pay the premium by the stable coins. The paid stable coins will be automatically exchanged as NAOS tokens by the AMM protocol. These NAOS tokens can be linearly distributed to the staking pool by the function `distributeNAOSToStakingPool`. And the issued insurance amount will be locked in the pool.

```
function payPremiumByNAOS(uint256 _insuranceID)
```

User can pay the premium by the NAOS tokens. These NAOS tokens can be linearly distributed to the staking pool by the function `distributeNAOSToStakingPool`. And the issued insurance amount will be locked in the pool.

```
function compensate(uint256 _insuranceID, uint256 _amount)
```

If there is default of Alpha pool, governance can use this function to compensate for losses. The compensation amount can not exceed the issued amount.

```
function unlock(uint256 _insuranceID)
```

After the valid period is expired, the user can use this function to unlock the locked insurance amount of this insurance policy.

```
function distributeNAOSToStakingPool(uint256[] calldata _index)
```

The insurance premium can be linearly distributed to the staking pool.

NAOS Boost Pool

:

BoostPool ([BoostPool.sol](#))

NAOS boost pool is a time deposit pool of NAOS tokens. The user who deposits NAOS tokens into the NAOS boost pool can not only get the extra NAOS rewards, but also boost the NAOS reward weighted in the NAOS galaxy staking pool. There are different time periods for users locking their NAOS tokens. The longer duration users lock, the higher weights users can obtain in the pool.

```
function deposit(uint256 _depositAmount, uint256 _index)
```

Deposit NAOS tokens with a lock time period. The longer period users lock, the higher weights users can obtain in the pool.

```
function withdraw(uint256[] calldata _index)
```

Withdraw the unlocked deposited NAOS tokens.

```
function startCoolDown()
```

Start the cooldown period. After the cooldown period is expired, user has one day to claim their fully rewards by the function `claim`.

```
function claim()
```

User has one day to claim their fully rewards after the cooldown period. Once the rewards have been claimed, the status will be reset.

```
function claimImmediately()
```

The users can call this function outside of cooldown period and claim period to take away half of the rewards. The other half of the rewards will be distributed to other depositors in the boost pool.

Glossary



Debt Obligations: an obligation to make a repayment of money to another person, including accounts payable and the obligations arising under promissory notes, bills of exchange and bonds

Principal Values: the original sum of money borrowed in a loan, or put into an investment.

Senior Tranche: senior tranches typically contain assets with higher credit ratings and lower yields than junior tranches. The senior tranches have first lien on the assets—they're in line to be repaid first, in case of default.

Junior Tranche: Junior tranches have a second lien or no lien at all with higher yields.

Coverage Ratio: Coverage ratio is the portion of Junior Tranche (first loss) in a loan facility. A lending pool with 20% coverage ratio means Junior Tranche accounts for and assumes 20% first loss coverage in case of default.

Exchange Traded Fund (“ETF”): A pool of securities that trades on an exchange just like a stock does.

Receivables: The balance of money due to a firm for goods or services delivered or used but not yet paid for by customers.

Supply Chain Financing: A financing solution in which suppliers can receive early payment on their invoices.

Corporate Loans: A debt-based funding arrangement between a business and a financial institution such as a bank.

Tangible Asset: a tangible asset is an asset that has a finite monetary value and usually a physical form. Tangible assets are the opposite of intangible assets which have a theorized value rather than a transactional exchange value.

Cash drag: A portion of a portfolio in cash rather than investing this portion in the market.

(DeFi) Liquidity: Liquidity in crypto refers to the ease with which tokens can be swapped to other tokens or fiat currencies. In NAOS lending pools, liquidity is used interchangeably as capital.

Grace Period: a grace period is a set length of time after the due date during which payment may be made without penalty.

Asset-based Lending: asset-based lending is a loan or line of credit issued to a business that is secured by some form of collateral. The various types of collateral used in asset-based lending includes but are not limited to inventory, equipment, accounts receivable and other balance-sheet assets. On the other hand, for unsecured lending, it is usually called credit-based lending. Credit score is required to review for the credit limit.

Loan Facility: an arrangement where a person or organization can borrow money up to a particular amount if and when they need it.

Nominal interest: nominal interest rate is the interest rate before taking inflation into account, in contrast to real interest rates and effective interest rates.