

OVERVIEW

VOID is a pioneering project on Base, designed to create a symbiotic relationship with a diverse basket of promising blue-chip tokens, functioning like an index fund and an investment company inside Base. VOID employs a unique burn mechanism and liquidity management strategy that benefits both VOID holders and the broader Base ecosystem.

VOID: The S&P 500 of Base

Just as the S&P 500 represents the performance of the top 500 companies in the US stock market, VOID aims to represent the performance of the top tokens on Base. By creating liquidity pools with carefully selected tokens, VOID provides investors with exposure to the overall growth and performance of Base through a single token.

This approach offers several advantages:

1. **Diversification:** Holding VOID provides exposure to multiple top-performing tokens on Base.
2. **Reduced Risk:** The multi-token approach mitigates the impact of poor performance from any single token.
3. **Ecosystem Growth:** As Base grows and evolves, VOID automatically grows and evolves too, it also adapts by including new promising tokens and potentially removing bad performers.
4. **Liquidity Boost:** VOID's liquidity pools enhance the overall liquidity of all the other Base tokens inside the VOID ecosystem.

VOID's BURN MECHANISM

Unlike traditional deflationary tokens that rely on transaction taxes or reflections, VOID employs a unique burn mechanism that creates true deflation without passing inflation to counterparties. VOID burns without any taxes and doesn't require any volume, there is also no hidden inflation passed on to counterparties.

The core of VOID's mechanism is the `claimVoid()` function in the [Entropy.sol](https://entropy.sol) smart contract. This function burns a portion of the VOID tokens from the main liquidity pool at regular intervals, creating a systematic reduction in supply.

Burn Interval: Initially, the burn occurs every 12 hours. However, the interval increases at specific burn milestones:

- At 5%, 10%, 15%, and 30% of total supply burned: +6 hours each
- At 50% of total supply burned: +12 hours

This gradual increase in the burn interval ensures long-term sustainability of the mechanism.

Burn Process:

1. The claimBurn() function of the lock contract removes 1% of the total liquidity from the VOID/ETH pool.
2. The VOID tokens are sent to the 0x000 burn address, permanently removing them from circulation.
3. The ETH from the burned liquidity is used to create or enhance liquidity pools with other tokens on Base.

```
function claimVoid() external {
    uint256 VOID_INTERVAL = 12 hours;
    uint256 voidedSupply = void.balanceOf(address(0));
    uint256 totalEntropy = voidedSupply / benchmarkSupply;
    if (totalEntropy >= 5) {
        VOID_INTERVAL += 6 hours;
    }
    if (totalEntropy >= 10) {
        VOID_INTERVAL += 6 hours;
    }
    if (totalEntropy >= 15) {
        VOID_INTERVAL += 6 hours;
    }
    if (totalEntropy >= 30) {
        VOID_INTERVAL += 6 hours;
    }
    if (totalEntropy >= 50) {
        VOID_INTERVAL += 12 hours;
    }
    require(block.timestamp >= nextVoidTime, "Void interval has not passed yet");

    uint256 wethBalance = WETH(payable(weth)).balanceOf(address(this));
    lock.claimBurn();
    lock.claimFees();
    nextVoidTime = block.timestamp + VOID_INTERVAL;
    timeLeft = nextVoidTime - block.timestamp;
    uint256 voidBalance = void.balanceOf(address(this));
    uint256 wethBalanceAfter = WETH(payable(weth)).balanceOf(address(this));
    uint256 wethGain = (wethBalanceAfter - wethBalance);
    if (wethGain > 0 || voidBalance > 0) {
        WETH(payable(weth)).transfer(owner, wethGain);
        void.transfer(address(0), voidBalance);
    }
}
```

This function is permissionless and decentralized, so anyone can call it when its time is up. However, it is typically automated by a script.

LIQUIDITY POOL STRUCTURE

VOID/ETH POOL (Main Pool)

This is the initial and main liquidity pool for VOID for VOID

A novel aspect of The Void's burn mechanism is that since the VOID tokens are constantly removed from this liquidity pool on a fixed schedule, but the counterpart Ethereum for those burned tokens are kept (and converted), the buy-side liquidity is usually heavier than the sell-side liquidity.

90% of the counterpart ETH of VOID tokens removed inside this pool at each burn event are used to buyback VOID and other Base tokens in a 50-50 split. (So, half of it instantly goes back into this pool)

All VOID fees earned by this pool fees are instantly burned at the burn event while the other 10% of ETH from the burn event + ETH fees earned by this pool are kept to be used in necessary costs to continue the operation (like API's, hosting, development, marketing, infrastructure and commissions.)



VOID/XXX POOL (Side Pools)

VOID creates additional liquidity pools with other tokens with the accrued ETH collected as the counterpart for the burned VOID tokens, with this, VOID becomes backed and collateralized by the token it's making a pool with instead of ETH. Similarly, these other tokens are also backed up and collateralized by VOID in this case.

This symbiotic relationship has additional benefits for both coins. In order to create and improve this liquidity pool, 90% of the ETH accrued by burning counterpart VOID tokens are directly swapped for VOID and the other token we are pairing VOID with to be put into these pools (50%-50%).

This buyback takes both VOID and XXXX off the market and into inert supply while also creating constant demand and volume for both tokens. Additionally, all the fees earned from these pools are compounded right back into them to permanently scale and grow them.

VOID TOKENOMICS

VOID released with a maximum supply of 100 million VOID tokens, all of these were immediately put into the VOID/ETH liquidity pool with an initial pricing and a market capitalization of 60 ETH. The LP's NFT was instantly locked permanently with this [LiquidityLock](#) contract, and VOID contract ownership was [renounced](#).

POOL CREATION

To decide which tokens to pair VOID with and which liquidity pools to be created, VOID first takes a look at security and safety conditions such as the contract's source code, liquidity locks (if any), how long has that token been out, has there been any shady movements or events in the past, etc.

After the security scan, it looks at liquidity, volume, and volatility. These 3 variables are key. If the token has high liquidity with low volume, it is harder to compete against the bigger liquidity pools so we are a smaller piece of the pie fighting for lower rewards (fees) because of low volume; therefore, the capital efficiency is higher somewhere else most of the time.

Another thing we look at is the overall expected price performance of the token because if the token we are paired up with pumps or dumps, it also causes an appreciation or depreciation in VOID's price too through the pools and arbitrage transactions (the effect of the downside is less than the positive side due to skewed main liquidity pool structure and higher buy-side liquidity). Very high and very low market cap projects are slightly worse in our eyes to pool with as one is too risky and the other one might have limited gains left.

In the future, this decision will be relayed to the community, and a governance-based vote with VOID tokens will be put through to decide future pools.

POOL MANAGEMENT

Pools are primarily managed through Aperture Finance and team decisions; we rarely move funds around but whenever there is a good opportunity in our eyes that will benefit VOID and our holders, we move funds around either to create new pool with a specific token or move funds between different pools to re-balance our investments to be better positioned for the future.

BENEFITS OF THE VOID

For VOID Holders:

1. Exposure to a basket of top Base tokens
2. Systematic burn mechanism increasing scarcity
3. Over-collateralization due to retained buy-side liquidity
4. Potential for price appreciation as Base grows
5. Constant lower supply and constant potential demand from other tokens.

For Paired Tokens:

1. Increased liquidity and trading volume
2. Exposure to VOID holders and broader visibility
3. Partial collateralization by a systematically scarce asset (VOID)
4. Potential for price stability due to increased liquidity depth
5. They also benefit from VOID's price appreciation.

For Base:

1. Enhanced overall liquidity
2. Increased interconnectedness between top projects
3. An "index fund" product attracting more investors to Base
4. An easy-to-invest, hands-off bet for Base that doesn't require constant management or staking or smart contract risks.

All of Base Through The Void

The burn on VOID is static and certain; it does not rely on volume, taxes, or price. 1% is directly removed from the liquidity, which exists even without any volume.

When it removes tokens from the liquidity pool, it removes 1% of ETH + 1% of VOID. The VOID tokens are instantly sent to the burn wallet. However, the ETH is kept and used to buy back VOID and XXX to increase the liquidity in the VOID-XXX side pools.

In effect, the buy-side liquidity (ETH) is never gone (just converted) and sell-side liquidity (VOID) gets thinner over time. VOID is effectively over-collateralized in this way.

The deflationary mechanism pushes the AMM up the bonding curve with the burn mechanism. When we pair tokens together in a liquidity pool, they work synergistically by collateralizing each other, because of this, VOID will always be worth at least the floor amount of its extra buy-side liquidity and is always backed up to some degree.

The side liquidity pools are constantly creating volume from arbitrage opportunities and partial fills from aggregators. This volume increases VOID's burn because a big chunk of that volume also flows back to the main VOID/ETH liquidity pool and the VOID fees accrued from volume in that pool are all burned.

With all the extra liquidity that we have at each burn interval, we spread all throughout Base and constantly pair VOID with promising blue-chip tokens and use the fees accrued from those liquidity pools to even further expand, improve, or make new pools with other tokens.

As this continues, we see increasing returns to scale because as we have more pools and liquidity, it means more volume and competition power, giving us more fees to be used in improving current pools or making new pools a lot faster and easier on our journey to make all of Base go through The Void.

All of this not only benefits VOID but also the other tokens (XXX) we are paired up with as they also become slightly backed up by a deflationary asset with an increasing baseline. They also constantly receive buybacks and additional volume through us, and they also have additional liquidity for better entry/exit and price impact on all of their transactions.

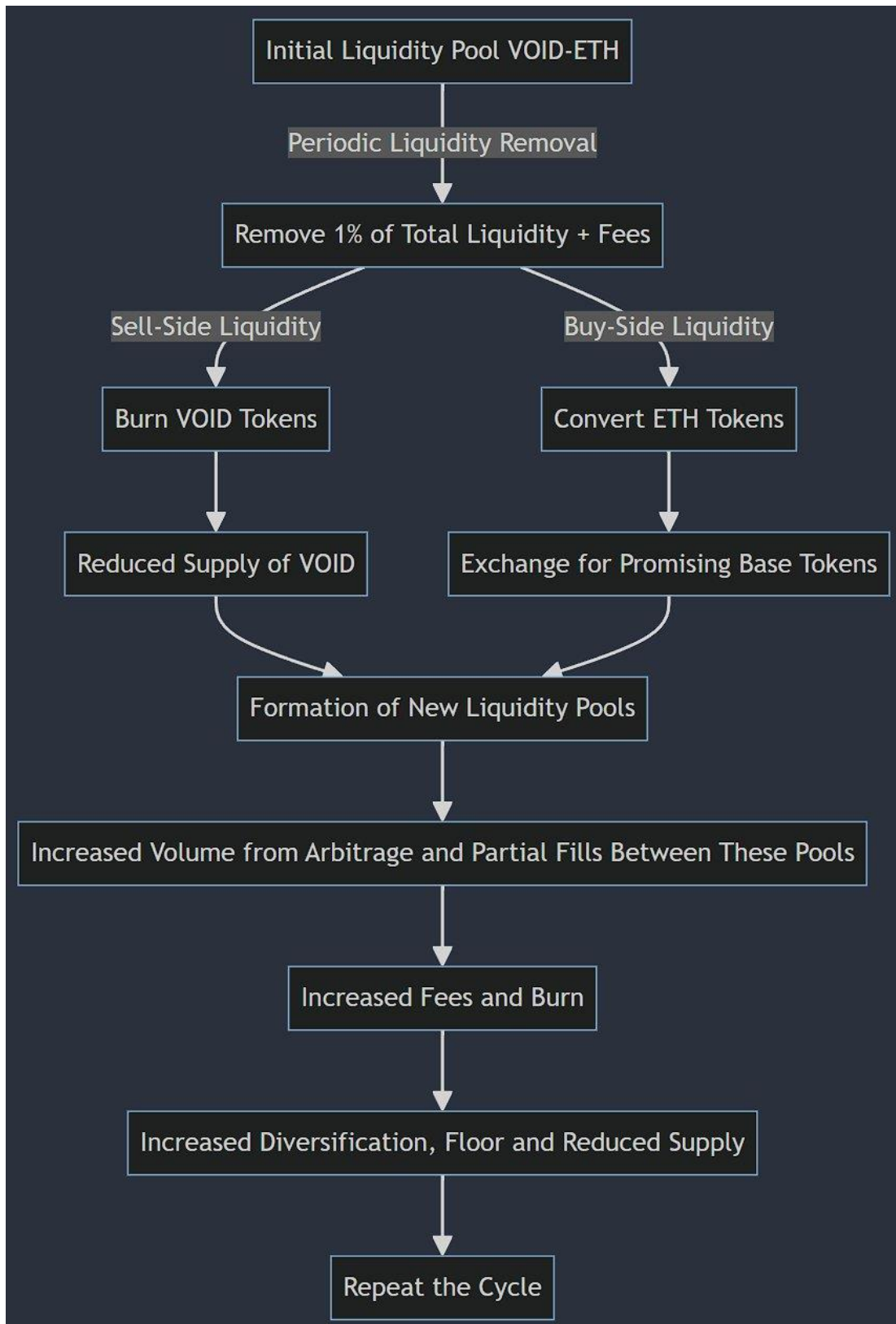
Finally, we encourage the community to also participate in creating new pairs with VOID or adding liquidity to existing VOID pairs. The multiple pools and their volatility generate volume and fees, incentivizing users with high APR%. If you hold both VOID and other Base tokens, combining them in a liquidity pool can earn fees and benefit both projects. This approach is recommended if you're indifferent between holding VOID and the paired token, but remember that liquidity pools always carry impermanent loss risk.

Let's make all of Base go through The Void.

FUTURE DEVELOPMENTS

1. Governance Implementation: Allowing VOID holders to vote on new pool additions and other protocol parameters
2. Cross-chain Expansion: Exploring opportunities to create VOID liquidity pools on other chains, interconnected with the Base version
3. RWA VOID Pools: Exploring opportunities to create VOID liquidity pools paired up with tokenized real-world assets.
4. Uniswap V4: Exploring V4 pools once they are widely available to come up with newer pool management strategies.
5. VOID NFTs: VOID NFTs whose ownership entitles you to a share of fees earned from a specific side liquidity pool.

FLOWCHART



CONCLUSION

VOID represents a novel approach to creating a system that addresses both supply and demand dynamics, uniquely tailored to Base's long-term performance. By employing innovative burn mechanics and liquidity management strategies, VOID aims to provide value to its holders while contributing to the growth and stability of the entire Base network. It functions as both an investment company and an index fund, offering a comprehensive solution for ecosystem participants.

As Base continues to evolve, VOID will adapt and grow, maintaining its position as a key player in the ecosystem. It offers an unparalleled investment vehicle for those seeking broad exposure to Base's success, while simultaneously fostering the network's development and liquidity.

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