# Hybrid protocol

Index funds have been a common financial instrument since the 70th. Index funds guarantee investors a constant and controlled exposure to a portfolio. If one of its assets out- or under-performs, it is respectively sold or bought to keep its value share of the total portfolio constant.

# Description

In the simplest of terms, Hybrid can be thought of as an index fund that enables participants to invest in an index portfolio of digital assets and have governance upon management strategies. The in its core system is decentralised, and minimises the requirement for trust.

Hybrid protocol is a universal solution that will allow everyone to place any amount of funds for any period of time and receive profitability from the best algorithmic teams on the planet.

## Components

There are several important components that make up the Hybrid system:

- **The Protocol:** The agreed logic behind the index fund, consisting of a mandatory "vault" or cold wallet, that securely holds digital assets, and hot wallet that allows Hybrid funds to meet the differing needs and requirements of platform fund managers. Cold and hot wallets together form a Hybrid fund.
- **The UI:** A graphical user interface in your browser (Chrome, Firefox etc) that allows participants to access and interact with the protocol.
- The Hybrid Token (HBT): Gives protocol design rights to participants in the Hybrid ecosystem and acts as an incentive mechanism for those participants to continue engagement over time.
- The Index Token (xHBT): Shows its owner's share in the Hybrid's index portfolio.
- **The Ecosystem:** Made up of all the differing participants and DApps that interact with and are affected by the Hybrid system.

## **Definitions**

There are useful and important definitions:

#### Protocol

A protocol can be thought of as an agreement between participants in a platform on a standard way to interact with each other. A good example in a blockchain context is Bitcoin, the protocol that allows users to send bitcoins to and from each other.

#### Blockchain

A blockchain is a special kind of distributed database. Some blockchains also are an execution environment that anyone can upload programs to and leave the programs to self-execute. The current and all previous states (history) of every program are always publicly visible, and carry a very strong cryptoeconomically secured guarantee that programs running on the chain will continue to execute in exactly the way that the blockchain protocol specifies.

#### **Smart Contract**

Smart contracts are contracts with the terms directly written into lines of code. The code and the agreements contained therein exist across a distributed, decentralised blockchain network. Smart contracts permit trusted transactions and agreements to be carried out among disparate, anonymous parties without the need for a central authority, legal system, or external enforcement mechanism. They render transactions traceable, transparent, and irreversible where appropriate.

### **DApp**

DApp is an abbreviated form for decentralised application. A DApp has its backend smart contracts running on a decentralised peer-to-peer network. Contrast this with an app where the backend code is running on centralised servers. A DApp can have frontend code and user interfaces written in any language (just like an app) that can make calls to its backend. Furthermore, its frontend can be hosted on decentralised storage such as Swarm or IPFS.

#### **Protocol Tokens**

Digital tokens that are governed by a coded protocol. The rules of the protocol are enforced by the underlying blockchain technology. They are generally not linked to any "centralised" entity or any "traditional" real-world assets.

#### **Traditional Asset Token**

Digital tokens that represent a "traditional" asset, such as collateralised fiat currency (e.g USDT or USDC), or precious metals (e.g Paxos), or company equity. These assets are still dependent on traditional financial and legal systems.

## The Protocol

The Hybrid protocol is a collection of smart contracts that form a blockchain-based protocol for digital asset management. It is initially built on the Ethereum platform. It enables participants to invest any amount of funds for any period of time and receive profitability from the best algorithmic teams on the planet. Hybrid team can manage an index portfolio that consists of both the Ethereum based tokens and other coins via Binance exchange.

#### In more detail:

- 1. The Hybrid protocol allows a fund manager to set up an asset management fund with predefined parameters at a much reduced cost compared to traditional fund structures. These parameters are voted by users with HBT tokens.
- 2. It ensures that the manager operates the fund within those specified parameters, protecting investors from many potential issues that are prevalent in traditional fund structures. In a way, you can think of the protocol as being technology where, when specified, regulation is adhered to by default
- It lowers barriers to entry making it inexpensive and much simpler to set up a fully audited, transparent index fund using digital assets and blockchain technology.
   Standardised fund calculations make it easy to build and share the fund's track record and track tax requirements.
- 4. Allows users to for all important management decisions. Participants do not necessarily have to know or trust a fund manager in order to manage their money managers are totally bound by the specified parameters of the Hybrid fund.

## Cold wallet "Vault"

Index fund structure consists of a so-called cold wallet "vault" and a hot wallet.

The standardisation of the "vault" in every Hybrid fund is what allows for the real time fund calculations and audits to occur. The vault is designed to be extremely secure, and keeps the potential attack surface for Hybrid funds as small as possible.

### Hot wallet

Hot wallet together with the vault is what gives Hybrid fund managers the abilities to meet the individual needs and requirements of each user.

The hot wallet is a gate for users and fund managers to interact with each other. It also connects the fund to different public exchanges (initially, Binance exchange) for trading purposes.

[A diagram showing how the "Vault" and "hot wallet"]

So, the hot wallet together with a vault assembles to a fully functioning, smart-contract bound asset management fund. Investors can review the fund's smart-contract hot wallet and decide whether they are satisfied with the rules to which the fund manager is bound by, before investing.

## The UI

The UI is a web-based graphical user interface that can be used by Hybrid participants to easily access and engage with the smart contracts that make up the Hybrid protocol. It can be thought of as a decentralised application, or DApp. The UI allows participants to set up their fund, select the hot wallet of choice, then deploy fund structure to the Ethereum blockchain. Once deployed, the UI can then be used to manage their fund as is required, such as buying and selling assets for the fund to manage, or investing and redeeming value held by the fund.

It works by connecting directly to the Ethereum blockchain, which is why users still require access to blockchain clients.

Participants plug their blockchain clients into the UI (Such as Parity, Geth, MetaMask etc) which then allows them to interact with it as is required. What's interesting about this is that the UI is really just a visualisation of the data that exists on the blockchain combined with a bit of wizardry that helps execute the Hybrid protocol smart contracts based on the fund managers desires. It is the blockchain clients (and therefore the user) who is always in full control of the management activity — there is no requirement of trust from us!

# The Index Token (xHBT)

The xHBT token is an ERC-20 token on the Ethereum blockchain. xHBT token allows holders to participate in an index portfolio and represents owners' shares of it. Also it allows holders to engage in staking for the Hybrid protocol. Platform shall reward all users who stake xHBT index tokens with HBT hybrid tokens.

Complete index investing involves purchasing all of an index's components (different tokens and coins) at their given portfolio weights from the market. Obtaining xHBT token one can implicitly hold a basket of tokens without buying them and taking additional risks.

The stacking reward works as follows. Once a user has stacked his or her xHBT tokens, Hybrid protocol starts to accumulate HBT tokens for that user. Thus token stacking works in the way farming does. The accumulation process is expected to be continuous but there could be gaps due to price variations. If the price of HBT drops below the threshold price then accumulation stops until the price would grow above the threshold. Threshold price is given by formula:

$$P_{th} = 0.3 + 0.1T$$

# The Hybrid Token (HBT)

The HBT token is an ERC-20 token on the Ethereum blockchain. The Hybrid token HBT along with index token xHBT is one of the core components of the Hybrid protocol, and is designed to provide a "usage and political right" to the Hybrid platform. The token itself is a smart contract that dwells on the Ethereum blockchain.

# Hybrid token functionality

HBT token has two major purposes: governance and utility. Governance is performed via voting. Votes are proportional to the amount of HBT tokens that were staked by their owners.

### Governance

- Voting on index design: Whilst team portfolio managers will determine the initial index design, token holders should have a say in changing index composition by adjusting its weights.
- **Voting on technical design**: Anyone can propose a new technical design to modify, add or remove parts from new versions of the protocol. Token holders and investors will have a say in whether new versions are added or not.

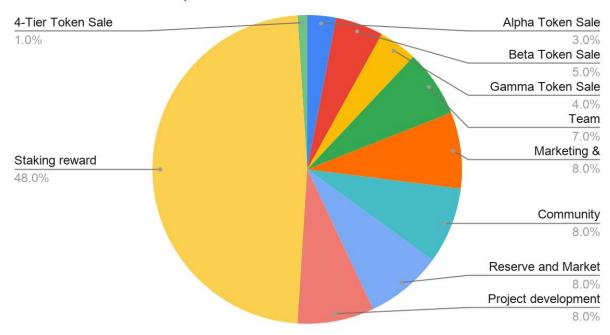
## Utility

- In terms of usage functionality, transaction (licensing) fees will initially be set at zero with the possibility for token holders and investors to later to vote on introducing fees.
- Any performance or management fees earned by the managers will require a conversion into Hybrid token before they can be paid out to the managers. This would mean that managers could use the Hybrid protocol for free, but would need to use the Hybrid token to withdraw any earnings.

## Issuance and Distribution

A total supply of 100,000,000 HBT tokens shall be created after the protocol is fully deployed to the Ethereum network. 48% of its total supply shall be locked up and used as a staking reward. 13% will be distributed during token sales. 49% shall be reserved for team, community and development purposes.

## Token distribution plan



## Token Sale

The whole token sale shall be divided into four stages: alpha, beta, gamma and delta. Stages alpha, beta and gamma shall be carried out before final deployment of the system. Early adopters will receive sHBT tokens instead of HBT. They could exchange sHBT tokens for HBT (one to one proportion) after the starting of the Hybrid platform. sHBT shall not have any governance power or utility usage with the exception of being exchanged on HBT tokens.

Tokens that are bought during the first three token sale stages are initially locked up. The exact unlock schedule is given in the table below.

Name	HBT/sHBT
Туре	ERC-20
Distribution Method(s)	Token sale and minting through staking xHBT tokens
Total Supply	100,000,000 (100 mln.)
Hard Cap	50 mln. USD
Soft Cap	100 mln. USD

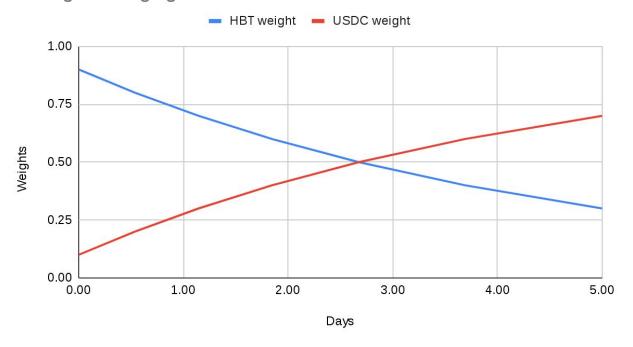
Alpha (Seed) Token Sale (1-st Tier)		
Token	sHBT	
Token Sale Price	0.15 USD	
Market	sHBT airdrop	
Participants	Up to 30 participants, and 100 000 tokens per wallet	
Token Sale Duration	5 days (23-30 Sept.)	
Total Tokens for Sale	3 000 000 sHBT (3% of total supply HBT)	
Lockup	10% without lockup 30% shall be unlocked at the end of the each month during three month period	
Beta (Private) Token Sale (2-nd Tier)		
Token	sHBT	
Token Sale Price	0.2 USD	
Market	sHBT airdrop	
Participants	Up to 50 participants, and 20 000 tokens per wallet	
Token Sale Duration	5 days ()	
Total Tokens for Sale	5 000 000 sHBT (5% of total supply HBT)	
Lockup	10% without lockup 15% shall be unlocked at the end of the each month during six month period	
Gamma (Public) Token Sale (3-rd Tier)		
Token	sHBT	
Token Sale Price	0.25 USD	
Market	sHBT airdrop	
Participants	Up to 100 participants, and 40 000 tokens per wallet	
Token Sale Duration	5 days	

Total Tokens for Sale	4 000 000 sHBT (4% of total supply HBT)
Lockup	10% shall be unlocked after unlock of all token sold during alpha token sale 15% shall be unlocked at the end of the each month during six month period after the unlock of first 10%
Public Token Sale (4-th Tier)	
Token	НВТ
Token Sale Price	0.3 - 0.25 USD
Market	Balancer's smart pool
Token Sale Duration	5 days ()
Total Tokens for Sale	1 000 000 HBT (1% of total supply HBT)

The Balancer's Smart Pool will be live for 5 days and is designed to prevent front-running. It will start at a high price then go down quickly as the weights of the pool change. This prevents people from front-running other people.

The Balancer LBP will be live for 5 days only and is designed to prevent front-running and speculation. It will start at a high price then go down quickly as the weights of the pool change. This prevents people from front-running other participants and speculating on PERP tokens rather than using them for governance and staking. After the 5 day period, the Balancer LBP will be stopped and part of the proceeds will be used to seed a BSP open to everyone and integrated with Perpetual Protocol's backstop system.

## Wheight changing schedule



#### Rules of 4-tier token sale:

- Create a HBT/USDC Balancer LBP with 1,000,000 HBT tokens and 111,111 USDC.
- 2. The Balancer LBP shall work until 32 500 blocks are mined from the start of the trading (approximately 5 days).
- 3. The weights will change gradually from the start (**HBT:USDC = 90:10**) to the end (**HBT:USDC = 30:70**) during that period.

# The Ecosystem

The Ecosystem encompasses... Everyone, even you, the reader! We see anyone and anything that interacts with Hybrid protocol in some way as being part of the ecosystem. Of course, some entities are much more prevalent than others, but our goal here is to keep it as open and as accessible as possible for any value creators who may wish to get involved as a participant.

In this final section of the Hybrid explainer, we'll talk about the participants in the ecosystem now, and how that might look in the future.

## **Fund Managers**

These are the people that put together Hybrid index funds and manage various assets within them. They pick and choose the right assets that need to be managed, track hot wallets, and compete against each other (if they wish to) for a position on the Hybrid fund leaderboard. They

will be Hybrid token owners so that they can use Hybrid for their requirements, and may also wish to use the tokens to vote on the future of Hybrid itself.

# Related Companies/Entities

These are groups that provide additional support or services to the Hybrid ecosystem, but not necessarily as fund managers. As for now such company is a Binance exchange that provides tools for platform's fund managers to buy and sell non-Ethereum digital assets.