

# Synchrony Whitepaper

## *On-chain Copy-Trading & Composable Indices*

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# 1 Introduction

Over the past 18 months the blockchain industry has experienced exponential growth. The industry's collective market capitalization has increased from USD 100bn to USD 1.75tn (1750%)<sup>1</sup>. As a consequence of such meteoric growth, key issues surrounding the current implementation of blockchain technology have been placed front-and-center, chief among these begin scalability.

The largest smart-contract-enabled blockchain - Ethereum, has pioneered decentralised finance (Defi) and is typically the first stop for burgeoning ecosystem participants on their pilgrimage to Defi. However, rising transaction costs have created barriers to entry reminiscent of traditional finance, a new playground for the already wealthy, not only greatly limiting those who can participate but also alienating those who sought blockchain technology and cryptocurrency as the great equalizers. Furthermore, slow settlement cycles and low throughput have created user experiences vastly inferior to traditional fintech solutions and are further exacerbated by unintuitive and often complicated user interfaces. A combination of the aforementioned factors are pushing projects and users to seek better more scalable solutions.

## 1.1 The Problems

### 1.1.1 Complexity

There is literally more information being created than any one user can sift through, filter, and digest. This sentiment is clearly reflected in Defi communities around the world on various forums such as the subreddit /r/defi, its top post being titled: "My Brain is Melting"<sup>2</sup>. Information overload affects new users and seasoned veterans alike - blockchain and Defi possess a steep learning curve, from learning what a wallet is to implementing yield farming strategies the path to ecosystem fluency and a modicum of success is long and arduous - littered with misinformation, security vulnerabilities and scams. And once a participant has achieved some degree of ecosystem fluency they are still faced with the tremendous amount of research and due-diligence that is required to identify actionable signals or market opportunities. And while mimicking twitter trends can be profitable in the short-term, long-term growth and wealth building are the product of a more nuanced and calculated approach - optimizing portfolio allocations and thoroughly tested investment strategies.

Research shows that there is a considerable cognitive overhead associated with context switching<sup>3</sup>, a user incurs a compounding cognitive cost for every protocol they must interact with. A cost that is further exacerbated by an associated doorway effect<sup>45</sup>: a psychological phenomenon where an individual forgets what they are doing or thinking about upon moving through a doorway. The doorway effect is present when switching between tabs or web-pages - each screen representing a metaphorical doorway a user must pass through. The resulting increase in tab-switching consequently leads to further context switches, and therefore compounds the cost of said context switch. Thus, from a user experience standpoint, interacting with the blockchain ecosystem is mentally exhausting.

### 1.1.2 Centralisation

With the advent of Defi, protocols seeking to emulate traditional investment vehicles are an inevitability. However, while claiming decentralisation, a lot of these protocols converge on a centralised oracle, and typically where it matters most. In the context of asset management protocols, this could be an asset manager, a council of token holders, or the project team.

Decentralised asset management is not a new concept, and has been explored and implemented by several other projects, a non-exhaustive list of these projects are:

1. Balancer;

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<sup>1</sup><https://www.statista.com/statistics/730876/cryptocurrency-market-value/>

<sup>2</sup>[https://old.reddit.com/r/defi/comments/n802v5/my\\_brain\\_is\\_melting/](https://old.reddit.com/r/defi/comments/n802v5/my_brain_is_melting/)

<sup>3</sup>Meyer, D. E., Evans, J. E., Lauber, E. J., Gmeindl, L., Rubinstein, J., Junck, L., & Koeppel, R. A. (1998). The role of dorsolateral prefrontal cortex for executive cognitive processes in task switching. *Journal of Cognitive Neuroscience*, 1998, Vol. 10

<sup>4</sup><https://www.scientificamerican.com/article/why-walking-through-doorway-makes-you-forget/>

<sup>5</sup><https://www.tandfonline.com/doi/abs/10.1080/17470218.2011.571267>

2. Set Protocol;
3. Enzyme;
4. dHedge;
5. pieDAO; and
6. Solrise Finance.

However, all of these protocols share several glaring weaknesses, chief among these being a single point of failure - they are not decentralised.

All of the aforementioned protocols have a similar approach to on-chain asset management: pools of assets managed by an individual or an entity and as such, the protocol must take steps to ensure that the power afforded by this position cannot be abused. There are two general implementations of how a protocol can achieve this: the first is through trust-minimization, not trustlessness - performing rudimentary KYC on the pool's manager. Without regulation however, this is little more than an empty gesture; there is no means to enforce any legal penalty for the misuse of a manager's power. The second is to limit how the manager can interact with the pool or rather, the strategies they can implement. For example, Bonfida created a program on the Solana blockchain named Bonfida Bots<sup>6</sup>. Bonfida Bots enables a user to create a pool that will execute trades based upon some user-defined/provided signal. Bonfida have identified that if the markets that a signal provider can provide signals for are not immutable, then the signal provider can create a mock market on the Serum DEX and siphon of tokens from the pool at a greatly reduced cost. Balancer have also identified similar weaknesses and have sought to "cover all their bases" by providing private pools, where the manager has full control over the parameters of the pool, and public pools where, similar to Bonfida, the parameters are immutable and set upon initialisation of the pool.

However, restriction stifles innovation - because the strategies that can be implemented are limited, the number of strategies will inevitably converge upon a small set, thus causing stagnation, and while stagnation is not the opposite of growth, it certainly affords the opposite of growth.

The trust-minimized nature of these protocols is a symptom of the more serious weakness that all of these protocols bar Balancer share: a single point of failure. This single point of failure most commonly takes the form of the manager or entity managing the pool. These entities are under no obligation to perform their duties and certainly no contracts or regulation exist that can ensure or enforce performance. As such, a manager may even act to the detriment to the investors of a pool, or may be plainly negligent thus necessitating the need for the aforementioned approaches. More importantly however - a single point of failure is centralisation, meaning a lot of asset management protocols are incorrectly classified as Defi protocols.

## 1.2 The Solutions

### 1.2.1 Aggregation

To solve the issue of a cumbersome and cognitively expensive user experience, a user should be able to use one application to perform the majority of their on-chain activities for a specific sector: i.e. an application for Defi, and an application for NFTs. With respect to Defi, a user should be able to monitor and manage their portfolio from such an application as well as be able to research available instruments or opportunities and subsequently transact upon them.

### 1.2.2 Customized Data

Performing exhaustive due diligence on every new company entering a market is not a viable strategy for a retail investor in traditional finance, and the same holds true for Defi. Investors often choose to specialize in certain types of opportunities and to achieve this effectively, the need to be able to tailor the information they receive to be relevant to those types of opportunities. Thus, users are interested in specific data and should therefore be able to customize the information they receive to be relevant to them.

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<sup>6</sup><https://bonfida.github.io/bonfida-bot-docs/>

### 1.2.3 Front-end Optimization

The goal for any front-end should be to eliminate any cost of context switching and to mitigate the doorway effect as much as possible. To do so, a front-end must have an intuitive user interface that captures a user's most logical and optimal workflows. Generally, a user should be able to do as much as possible from a dashboard, utilizing no more than four (4) "button-presses" without the interface feeling cluttered and overwhelming. Thus, each interface must have a clear and well-defined purpose. Effective user interface design requires a great deal of detail and care as well as an intimate knowledge of potential users and their respective behaviours, thought processes and goals.

### 1.2.4 Indices & Passive Investment

As of 2021 ETFs are a USD 8tn industry and growing at an annual rate of 26%<sup>7</sup>. Over the past ten (10) years, 82% of fund managers fell short of their S&P500 benchmark, with 94% failing over twenty (20) years. Similarly, 73% did not match up to the S&P Midcap 400, while 76% also underperformed the S&P Small Cap 600<sup>8</sup>. Active managers are consistently outperformed by indices however, there is not enough historical data to definitively say whether or not this holds true for cryptocurrencies and Defi. What is definitive is that indices are analogues for smart contracts - similar to how a smart contract's code can be scrutinized, so can an index's calculation methodology. Thus, indices are essential for trustless asset management and furthermore enabling a simpler, tangible, and quantitatively effective avenue for passive capital growth.

*Indices do for asset management what blockchain and smart contracts do for transactions.*

### 1.2.5 Trustlessness - True Decentralisation

Finally, any solution must be truly trustless, truly decentralised, without imposing restrictive limitations upon strategy authors or asset managers while simultaneously ensuring the safety of its user's assets.

## 1.3 Enter Synchrony

Synchrony is an on-chain automated portfolio and asset management protocol featuring copy-trading and indices as well as wallet and protocol analytics. Synchrony achieves true trustlessness through the use of highly configurable indices that enable user to compose and index dynamic sets of tokens, liquidity pools, strategies and other on-chain instruments to create algorithmically optimized and automatically rebalancing pools or portfolios. Copy-trading leverages these indices enabling users to define the parameters for which a copy-trade is considered a candidate for execution. Synchrony's analytics and aggregation services enable users to make informed decisions not only with respect to index and copy-trade parameters but also their entire on-chain behaviour. To facilitate a smooth user experience, Synchrony's front-end features a marketplace that, along with the aforementioned suite of tools, enables users to interact with the entire Solana ecosystem from one location.

## 2 Core Principles

### 2.1 Design Philosophy

Synchrony is built upon a modular, composable and extensible design philosophy. Each of Synchrony's key features are built to enhance the capabilities of the others while maintaining the ability to operate independently from the ecosystem. This philosophy extends into the resulting products - each being able to exist independently or as a component of another. e.g. a copy-trade index.

In the case of indices, each index is standalone, and an instance of any particular configuration of an index exists as a pool. This allows pools to be composed of multiple indices. The one restriction Synchrony imposes upon pools is that they must be composed of and managed by an index. This is to ensure safety

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<sup>7</sup><https://www.bbh.com/us/en/insights/investor-services-insights/2021-global-etf-survey.html>

<sup>8</sup><https://www.spglobal.com/spdji/en/documents/spiva/spiva-us-year-end-2020.pdf>

of the underlying assets without the need for KYC or restrictions on the strategies a pool initializer can implement. The modular nature of Synchrony's indices allow other asset management protocols to utilize them.

## **2.2 Intention-First**

The user's intention is our top priority. A significant portion of users do not care if they are yield farming, staking, or liquidity mining; they care about having their assets work harder for them. There is however, an obvious preference for instruments that are meaningful and understandable.

## **2.3 Inclusive**

Synchrony is a platform for users of all levels of experience. Synchrony grants passive users passive strategies via copy-trading and indices, active users can submit their wallet to be copied and featured on the Synchrony leaderboard or build index-pegged pools that other users can subscribe to - capitalising on the analytics service to drive their decisions.

## **2.4 Trustless**

Synchrony is completely trustless, not trust-minimized. Trustless is synonymous with decentralised - there are no single points of failure, there are no vectors through which an entity can abuse its position i.e. trust is not required.

Synchrony achieves this through the use of highly configurable indices; only the index may manage a pool or a copy-trade wallet and transact on its underlying assets. Each instance of an index-pegged pool is immutable; after a pool has been initialised its parameters cannot be changed. Indices used for copy-trade parameters are only mutable by the copy-trade wallet's owner.

Synchrony utilizes decentralised synchronisation; anyone can execute protocol-critical functions as long as the conditions for execution have been met. For indices - rebalancing when a deviation threshold has been exceeded or a rebalancing interval has elapsed. For copy-trade wallets - when leader wallets have made valid transactions and the following wallets have pending transactions or settlements.

Users are rewarded SCY for successfully executing these functions.

## **2.5 Non-Custodial & Collateralized**

Synchrony does not own any assets in any of the pools or wallets that the protocol manages. The user always owns their assets. Furthermore, no one controls the pool and no one can transact on the pool's underlying assets, only the program has the authority to do so, and it may only do so within the parameters of its index(es).

## **2.6 Fungible**

Each index instantiated as an index-pegged pool is represented by a fungible token fully collateralized by its underlying tokens.

## **2.7 Dynamic**

The Defi landscape is ever-changing, investors and ecosystem participants must be adaptable and be able to react swiftly to market changes. Synchrony's approach to copy-trading and indexing adheres to these principles. Synchrony enables users to define ranges or sets of instruments for both the copy-trade and indexing protocols to execute upon, granting dynamic allocations and compositions and affording granular control over strategy implementation.

## 2.8 Streamlined

Synchrony is built to empower all levels of users without incurring any unnecessary cognitive overhead. Synchrony achieves this by providing a seamless and intuitive interface with clearly defined and logical workflows while distilling information down to profile-specific signals and features by aggregating data and functionalities from various Defi protocols. Users only see the data they are interested in organized based on their preferences and needs.

## 3 Aggregation & Analytics

The Synchrony analytics and aggregation services provide users detailed insights into the on-chain activity of wallets, tokens, products and protocols.

### 3.1 Aggregation

Synchrony's platform provides users a holistic view into Solana's protocols, enabling a user to manage their portfolio, compare assets, backtest strategies and transact all from a single application. Users can explore the Solana ecosystem filtering protocols and instruments via a range of options such as but not limited to:

- performance metrics with user-defined ranges (e.g. MTD, YTD, etc.):
  - performance;
  - volatility;
  - volume;
  - liquidity; and etc.
- strategy authors;
- asset classes;
- protocols; and etc.

The aggregation service is a synergistic value-add to the entire Solana ecosystem - by providing a platform for consolidation, Synchrony enables user cross-pollination and generates awareness for both established and burgeoning protocols. Synchrony also simplifies user ecosystem experience thus spurring user adoption.

### 3.2 Wallet Analytics

Synchrony's analytics service affords users access to a granular level of detail regarding an ecosystem participant's on-chain behaviour. Users may simply enter a wallet address to retrieve data such as trade history and performance which is presented in a clear and easily digestible format allowing for comparisons against other wallets, tokens and indices.

Wallet analytics enable users to make informed decisions with respect to their own investment strategies and are also integral in driving leaderboard and gamification features.

A future goal of the analytics service is to provide analytics on an ecosystem-wide scope granting macro-level insight into an ecosystem's participants' behaviours and sentiments.

### 3.3 Customization

Analytics can be user-configured providing a curated and tailored experience ensuring a user only receives data relevant to the types of opportunities they are interested in.



### 3.4 Subscription-Based Service

The analytics service is subscription-based and charged at a monthly fee of USD 60, payable with USDC, SOL/SCY equivalent or with a strategically partnered protocol's tokens at a discounted rate. All net fees are used for SCY repurchases. Subscriptions will eventually be tier-based - fee/trial, standard, pro, and enterprise - catering to users of different needs and budgets.

## 4 Copy-Trading

Copy-trading enables users to input a wallet address and replicate all valid transactions in that wallet in their own copy-trade wallet. A valid transaction is defined as any transaction made through another protocol, the list of which is governed and may be amended by the Synchrony DAO. Users can choose between three different methodologies for assessing whether a transaction made by a leader wallet is a candidate for a copy-trade:

1. Naked copy-trading - simple proportional replication of all the valid transactions a leader wallet executes. Naked copy-trading carries a significant risk associated with it - if a leader wallet is privy to the fact it is being followed and is owned by a malicious user, the leader wallet could potentially execute transactions to the disbenefit of the following wallets, an example would be a scenario similar to the Bonfida example described above. The specific use-case for naked copy-trading one where the user completely trusts the leader wallet - there is a pre-existing relationship. The protocol however does not restrict access to this feature - the user may use this feature at their own discretion and accepts the associated risks.
2. Parameterised copy-trading - user-defined criteria for which a valid transaction made by a leader wallet is considered a candidate for a copy-trade. Parameterised copy-trading grants a user a relatively basic yet granular level of control over their copy-trade wallet's behaviour - examples of configurable parameters include but are not limited to:
  - frequency of replicated transactions;
  - stop-losses;
  - take-profits; and
  - whitelisted tokens/protocols.
3. Index-driven copy-trading - dynamic whitelisting of candidate tokens, protocols or instruments. Index-driven copy-trading builds upon parameterised copy-trading by utilizing indices to define when a valid transaction made by a leader wallet is considered a candidate for a copy-trade. For example, copy-trade wallets utilizing the Solana Ecosystem Index will only replicate transactions on tokens that are present in that index. The default setting for index-driven copy-trading utilizes a combination of Synchrony composed indices however, users may choose to utilize any index or combination of indices on the Synchrony platform as well as construct their own.

### 4.1 Leveraging the Ledger

Blockchains are transparent and immutable ledgers, anyone can peruse the record of transactions made by any participant on the network. This is a powerful tool for not only analytics but also for copy-trading. In off-chain implementations of copy-trading only traders who are approved by the platform and opt-in to having their trades copied can be copy-traded, and thus, any data and analytics available to a user regarding copy-trading is limited to that scope. On-chain however, there are no such limitations - a wallet does not need to be listed on the Synchrony marketplace in order for a user to be able to see the transactions it is executing, and therefore, a wallet does not need to be listed on the Synchrony marketplace for a user to be able to copy-trade it. Synchrony still remunerates unlisted wallets however, there are advantages for a wallet to be listed on the Synchrony marketplace, some of which are described below.

## 4.2 Subscription-Based Service

Copy-trading is a subscription-based service and charged at a monthly fee of USD 30, payable with USDC, SOL/SCY equivalent or with a strategically partnered protocol's tokens at a discounted rate. Leader wallets that are listed on the Synchrony marketplace are remunerated  $\frac{2}{5}$  or USD 12 of the subscription fee for each wallet that is following it, Synchrony receives  $\frac{2}{5}$  or USD 12 as a platform fee and  $\frac{1}{5}$  or USD 6 is granted proportionally to users who stake SCY on that wallet. Wallets that are not listed on the marketplace will be remunerated at USD 6 per month, with the rest of the fee granted to Synchrony. The subscription fee is antecedently charged monthly to followers and distributed at the end of the month to stakeholders.

## 4.3 Leaderboard

Wallets listed on the Synchrony marketplace are eligible to be featured on the copy-trade leaderboard. Consistently profitable wallets can garner community accolades and privileges including but not limited to cosmetics that showcase their standing. The leaderboard will be the focal point of competitions and time-based events that will drive community engagement and contribution. Furthermore, maintaining a position on the leaderboard grants users a SCY reward proportional to their average 7d performance and enters them into a community-driven lottery.

# 5 Indexing

Synchrony's indices have three general implementations and an unlimited number of configurations. The three (3) general implementations are:

1. Synchrony composed indices - indices composed by the team in conjunction with our strategic partners. The aim of Synchrony composed indices is to provide consumers an entypoint and/or passive investment strategy with a focus on the assets and instruments present on the Solana ecosystem. These indices may be created and governed by the Synchrony DAO.
2. Community composed indices - these indices are composed by the community, there are not restrictions on these indices besides the static fee set by the Synchrony DAO which is uniform across all indices, and that there may only be one particular instance of a specific configuration of an index.
3. Portfolio-level indices - these indices are implemented at a portfolio level and are typically utilized for automated portfolio management, these indices are not visible to the community unless permitted by the author. Portfolio-level indices have no associated token.

## 5.1 Configurable

Each of Synchrony's indices are completely configurable, affording investment strategies with a high degree of specificity. A user can define the parameters for which an asset or strategy would be considered a candidate for inclusion into a pool - essentially delineating a dataset. The index can then be configured with:

- chosen weighting metric;
- minimum and maximum weights;
- rebalancing period;
- deviation threshold;
- the minimum and maximum number of assets to be returned by the index; and etc.

### 5.1.1 Whitelisting

Whitelisting enables users to specify tokens or instruments for a dataset they want an index to evaluate. For example, a user may wish to evaluate only specific tokens on the Solana Ecosystem Index instead of the entire index and weigh them accordingly. Whitelisting is the feature that enables a high degree of specificity - enabling strategy authors a large degree of freedom with respect to strategy implementation without imposing overly restrictive limitations.

## 5.2 Dynamic

Most on-chain implementations of an index exist as static weights and static compositions where rebalancing returns a pool to its initial state. No on-chain implementations of an index-pegged pool implement dynamic compositions. For example, when DPI by Index Coop makes a change to the pool's composition it undergoes a complete reconstitution, a limitation imposed upon the pool by Set Protocol's design. Synchrony is different, not only are the weights dynamically adjusted to track a proper implementation of an index, the pool's composition is also dynamic as the protocol has the authority to add and remove assets from the pool.

## 5.3 Composable & Modular

Each index is instantiated as an index-pegged pool with an accompanying fungible token representing proportional ownership of its underlying assets. Indices can therefore compose, or be composed of another index's tokens.

## 5.4 Powerful

Synchrony's indices are suitable for a wide range of use-cases, from portfolio management to copy-trading. One of the more powerful features of Synchrony's indices, alongside their configurability, is the ability to index any on-chain instrument. From tokens, to liquidity pools, to strategies and even indices themselves, there is very little that Synchrony's suite of indices cannot evaluate. Where Synchrony does not have coverage, Synchrony will rely on the strength of its community and DAO.

## 5.5 Mechanics

Indices generate revenue via an immutable transaction fee of 0.25%. Transaction fees are charged upon the creation and redemption of index-pegged pool tokens. To construct a pool token, the user must provide the underlying assets in their relevant weights however, the protocol is capable of performing transitive swaps on the Serum DEX enabling a single-asset entry/exit.

### 5.5.1 Synchrony-Composed Index Mechanics

Synchrony composed indices possess the same immutable fees as any other index however, only authorized participants - users who stake an amount of SCY as determined by the Synchrony DAO, are able to construct and deconstruct pool tokens. Synchrony will maintain liquidity pools for each Synchrony-composed index's pool token - e.g. ETF/SOL. Synchrony incentivizes authorized participants to capitalise on the arbitrage opportunity created by these swap pools and not any other third-party liquidity pools by waiving the transaction fee for the creation and redemption of pool tokens if the token is immediately swapped into one of the corresponding liquidity pools. This is achieved via executing the instruction:

```
PoolInstruction::TokenEvent(EventType::Arbitrage(NonZeroU64))
```

itself executing:

```
PoolInstruction::TokenEvent(EventType::Create(NonZeroU64))
```

and subsequently:

```
SwapInstruction::Swap(NonZeroU64)
```

in one transaction.

## 6 Synchrony Indices

### 6.1 The Solana Ecosystem Index (SEI)

The Solana Ecosystem Index tracks the top tokens on the Solana Ecosystem with a market capitalization of over USD 10mm. This index is weighted by market cap and is capped at thirty-two (32) tokens. Each token has a maximum weight of 30%, there is no minimum token weighting upon initialisation. This index has a rebalancing interval of twenty-four (24) hours which elapses at 0000 UTC daily and has a deviation threshold of 20% where a token's market cap must deviate 20% from its previous market cap before a pre-interval rebalance may be triggered. A manual rebalance may be performed by authorized participants by providing the underlying assets in weights that may resolve the delta. Manual rebalances are subject to a grace period - after such period has elapsed, any user may permissionlessly trigger an automatic rebalance with the necessary transactions being executed on Serum DEX at spot prices.

This index utilizes an adjustment methodology based on the Paasche formula:

$$I_t^{pass} = I_{t-1}^{pass} \frac{\sum_{i=1}^n P_{i,t} Q_{i,t}}{\sum_{i=1}^n P_{i,t-1} Q_{i,t}}$$

The following parameters may be altered by a vote of simple majority made by the Synchrony DAO:

- number of tokens permitted in the index;
- minimum market cap;
- minimum token weight;
- maximum token weight;
- rebalancing period; and
- deviation threshold.

### 6.2 The Raydium Liquidity Pool Index (RAI)

The Raydium Liquidity Pool index tracks the highest yielding liquidity pools on the Raydium protocol with a minimum liquidity requirement of USD 1mm. Tokens in candidate liquidity pools must be composed of one stable coin OR possess correlative volatility. This index is weighted by volume and is capped at eight (8) tokens. Each token has a maximum weight of 30%, there is no minimum token weighting upon initialisation. This index has a rebalancing interval of twenty-four (24) hours which elapses at 0000 UTC daily and has a deviation threshold of 20% where a liquidity pool's liquidity must deviate 20% from its previous liquidity before a pre-interval rebalance may be triggered. The following parameters may be alter by a vote of simple majority made by the Synchrony DAO:

- weighting parameter;
- number of tokens permitted in the index;
- minimum pool liquidity;
- minimum token weight;
- maximum token weight;
- rebalancing threshold; and
- deviation threshold.

### 6.3 The Stable Coin Index (STX)

The Stable Coin Index tracks all stable coins on the Solana ecosystem (at the time of writing USDC & USDT) and weights them equally. This index is rebalanced daily at 0000 UTC.

The parameters of this index may not be altered by DAO vote.

## 6.4 The Synchrony Composite Index

The Synchrony Composite Index is a value-weighted index composed of the Solana Ecosystem Index and the Raydium Liquidity Pool Index weighted 70/30 respectively with the aim of emulating a traditional portfolio allocation. This index has a rebalancing interval of seven (7) days which elapses at 0000 UTC every Sunday and a deviation threshold of 15% where one of the underlying components' value must deviate 15% from its previous rebalance value before a pre-interval rebalance can be triggered. The following parameters may be altered by a vote of simple majority made by the Synchrony DAO:

- weighting parameter;
- number of tokens permitted in the index;
- minimum market liquidity;
- minimum token weight;
- maximum token weight;
- rebalancing period; and
- deviation threshold.

While the underlying composition may be subject to alteration via DAO vote, the Solana Ecosystem Index will always compose a minimum of 30% of the index.

## 7 The Synchrony Token

SCY is the native token of the Synchrony platform, providing an asset the holder can use for staking rewards, unlocking premium features, yield farming, and discounts. It will grow in value based on the revenue generated by the Synchrony platform.

- All net platform fees go towards the Synchrony token;
- users staking SCY receive a discount for platform services;
- SCY may be used to pay fees across the platform;
- SCY holders may use SCY to purchase premium features such as “banner space”<sup>8</sup> and profile customisation options;
- SCY will be rewarded for staking and synchronisation<sup>9</sup>;
- SCY holders may stake SCY on wallets or indices as a form of “insurance”/“validation”, this grants the staker a share of the fees generated by the wallet/index<sup>10</sup>;
- SCY holders may participate in limited governance of the Synchrony platform; and
- data for indices is provided by ecosystem participants voted on by the Synchrony DAO. Data providers must meet a minimum capital requirement, decided on by the DAO, of staked SCY tokens. These tokens go towards a platform insurance pool. Providers are granted an equal share of all fees generated by Synchrony composed indices.
- index token creation and redemption may only be performed by authorized participants. Any platform participant may become an authorized participant by staking a certain amount of SCY the exact amount being decided by the Synchrony DAO.

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<sup>8</sup>“Banner space” is “real-estate” on the marketplace where a wallet or index-pegged pool may be featured.

<sup>9</sup>Synchronisation is defined as interacting with the protocol in order to execute protocol-critical functions, this includes but is not limited to rebalancing.

<sup>10</sup>If the staked-on instrument consistently performs poorly, a portion of the staked tokens are forfeited to the users subscribed to the instrument

## 8 Governance

SCY holders can submit proposals for changes and improvements to Synchrony. Some examples of proposals are:

- implementation priority of integrations with other protocols;
- utility features for the SCY token; and
- parameter adjustment for certain Synchrony composed indices.

Initially proposals will need to be approved by the project team & advisors. They will help guide the proposal and evaluation process for up to thirty-six (36) months to allow for the community and platform to be built out and ensure significant participation from SCY holders.

In order to propose a topic for voting, users will need to pay a deposit of SCY. If the proposal receives a simple majority (51%) of the votes the proposer will receive their entire SCY deposit back.

A minimum threshold for the required number of votes must be met for each stage a proposal goes through in order for a proposal to pass.

The process for voting is as follows:

1. one (1) week for proposals; and
2. one (1) week for voting on proposals

## 9 Roadmap

### 9.1 Phase 0 - Protocol Demo

The Synchrony protocol demo will be streamed live on September 14th 2021, the demo will feature basic copy-trading functionality and the release of the Solana Ecosystem Index onto the Solana Devnet for testing. The front-end will feature integrations with Serum, Raydium and Orca enabling users to perform swaps utilising all three (3) protocols as well as provide liquidity to Raydium & Orca directly from the Synchrony dashboard. The aforementioned features will be made available to users in a selective closed-beta.

### 9.2 Phase I - Solana Devnet Launch

Phase I will feature Mainnet launch of all Synchrony composed indices:

1. the Solana Ecosystem Index;
2. the Raydium Liquidity Pool Index;
3. the Stable Coin Index; and
4. the Synchrony Composite Index.

Copy-trading and automated portfolio management via static indices will be available for open-beta testing on Devnet. Backtesting and limited analytics will be available on Mainnet with additional features on a rolling release schedule.

### 9.3 Phase II - Solana Mainnet Launch & TGE

Mainnet launch of Copy-trading featuring integrations with Mango Markets, Serum & Raydium will coincide with Synchrony's token generation event. The target date for Mainnet launch is early January 2022.

### 9.4 Phase III - Mainnet Launch of Composable Indices & Feature Expansion

Mainnet launch of composable indices marks the full release of version 1.0 of the Synchrony platform. Phase III will also explore the development of social analytics features such as platform trends, social searching and news aggregation.

## 9.5 Phase IV & Beyond - Cross-Chain Integration

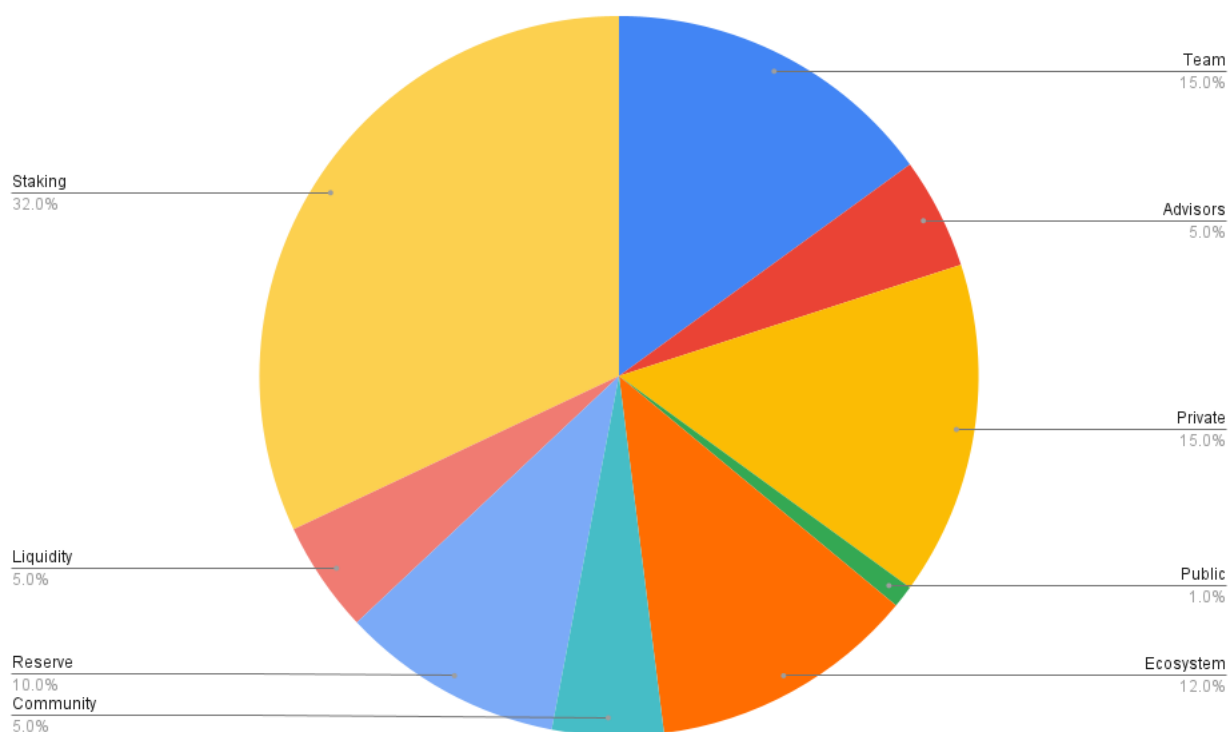
Phase IV will ramp up tooling for cross-chain integration with an expected rolling release model of six (6) weeks development followed by six (6) weeks of testing, culminating in a Mainnet launch by the end of each quarter.

## 10 Tokenomics

Token Symbol: SCY

Total Token Supply: 1,000,000,000.00

Token Allocation by Percentage:



### 10.1 Team

The Synchrony team will be vested on a thirty-six (36) month timeline, 1/24 of team tokens will be emitted on the one (1) year anniversary of the Token Generation Event and every month thereafter. 15% of the total token supply is allocated to the Synchrony team.

### 10.2 Advisors

Synchrony advisors will be vested on the same schedule as the team. 5% of the total supply is allocated for advisors.

## **10.3 Private**

### **10.3.1 Round 1**

Round 1 tokens are vested on a fifteen (15) month timeline, 5% of which are emitted on the date of the Token Generation Event. 1/15 of the remaining vested tokens are emitted each month thereafter on the same day of the month as the Token Generation Event. 3% of the total token supply is allocated to Round 1 investors, token price is set at USD 0.02.

### **10.3.2 Round 2**

Round 2 tokens are vested on a twelve (12) month timeline, 10% of which are emitted on the date of the Token Generation Event. 1/12 of the remaining vested tokens are emitted each month thereafter on the same day of the month as the Token Generation Event. 12% of the total token supply is allocated to Round 2 investors, token price is set at USD 0.03.

## **10.4 Public**

Public sale tokens will follow no vesting period and participants of the public sale will therefore receive 100% of their tokens. 1% of total token supply is allocated for the public sale, token price is set at USD 0.06.

## **10.5 Ecosystem**

Ecosystem token allocation is to ensure and encourage a vibrant community. Ecosystem token allocation is specifically used to support partnerships, grants and development programs. A longer time horizon was chosen to ensure that growth remains constant allowing Synchrony and its community to mature and foster innovative and meaningful partnerships. 12% of the total token supply is allocated for ecosystem growth vested over a twenty-four (24) month period with monthly emissions.

## **10.6 Liquidity**

Liquidity token allocation primarily serves the function of maintaining liquidity on exchange listings. 5% of the total token supply is allocated for liquidity without any vesting period.

## **10.7 Community**

Community token allocation is for user acquisition, engagement and management. 5% of the total token supply is allocated for community growth vested over a twenty-four (24) month period with monthly emissions.

## **10.8 Reserve**

Reserve allocation may be utilised in any of the aforementioned areas for which there may be a shortfall due to unforeseen circumstances or increased demand. Reserve allocation may also be used for any further raise Synchrony requires specific to cross-chain integrations. 5% of the total token supply is allocated for reserve vested over a twelve (12) month period with monthly emissions.

## **10.9 Staking**

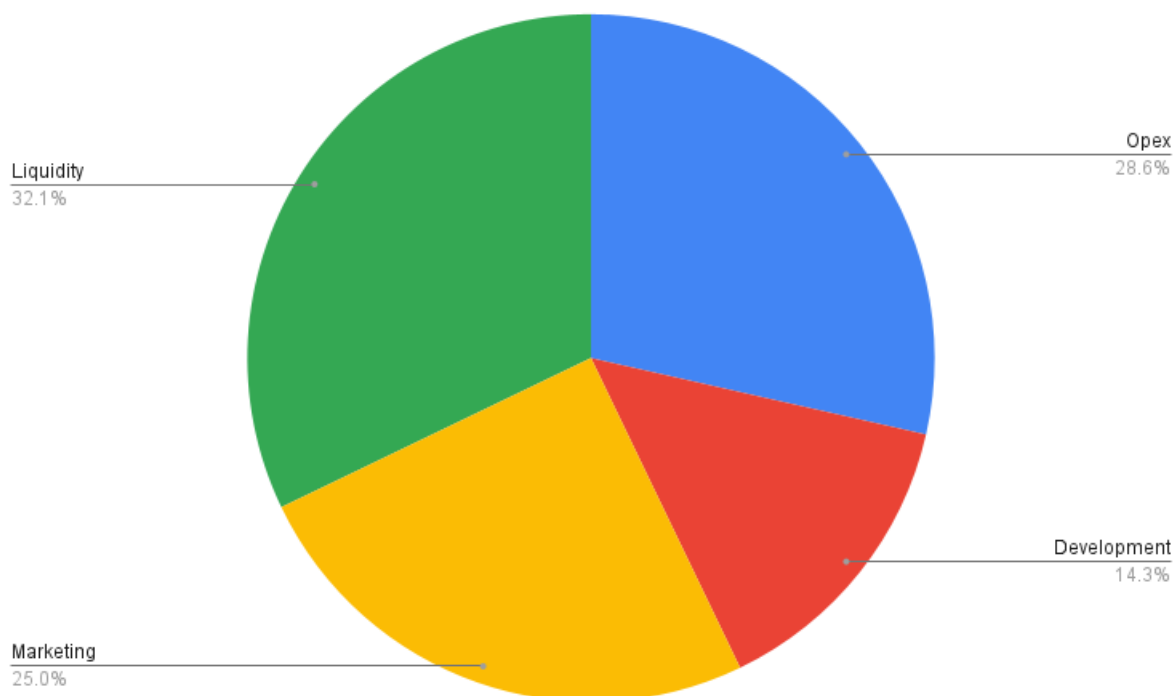
Synchrony's protocol accounts for staking with an initially inflationary model with a decreasing rate until a terminal floor is reached. This is necessary for rapid initial growth of the protocol and to bootstrap liquidity. 32% of the total token supply is allocated for staking vested over a twelve (12) month period with monthly emissions.



## 11 Funding Allocation

Total Raise: USD 4,200,000.00

Funding Allocation by Percentage:



## 12 Solana

We built Synchrony on Solana as we believe Solana is the next generation blockchain. It is the objective winner in terms of scalability, currently able to process over 65,000 transactions per second with a settlement cycle of 400ms. This is forecast to scale with Moore's law of parallelism to a maximum theoretical throughput of 700,000 transactions per second and 150ms.

Frequently rebalancing indices and copy-trades necessitate not only a blockchain with a high throughput and fast settlement cycle, but also one with negligible transaction costs - transaction costs on Ethereum are value destroying.

Furthermore, only Solana possesses all the traits necessary to provide user experiences that are on-par with current fintech solutions.

## 13 The Synchrony Team

The Synchrony team (Synchrony Labs) is an international team of engineering and finance professionals with a single shared goal - to build blockchain technologies that are useful, lasting and high quality.

Each member brings decades of experience in their respective fields: asset management, fintech, software development, blockchain and entrepreneurship.

We built this platform for ourselves as much as anybody else, addressing significant shortcomings across all blockchains and traditional asset management sectors.

The Synchrony team is lead by:

### **13.1 Andrew Fraser**

- a software engineer with a decade of experience designing and developing solutions for tier-1 financial institutions with a speciality in execution platforms, algorithmic trading and algorithmic portfolio optimization. He was a former director of Prive technologies, a Hong Kong based fintech start-up, their execution platform Avenir / Wealth and i-Invest: an in-house execution platform for Ageas Insurance Company Asia (AICA).