



Powering The Evolution Of Cultural Assets

Xsauce Whitepaper v1 Draft (Feb 2022)

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1. Introduction

Xsauce is an ecosystem of three tools that merge fashion, collectibles, and various other cultural assets with blockchain technology.

Cultural assets, which we define as assets deriving their value from cultural significance rather than a pure measure of utility, represent a valuable, yet small portion of the investable assets which can be traded on centralized exchanges. As the market currently stands, the typical means of investing in these types of assets is via a managed collection wherein investors can buy shares of a fractionalized asset. This solution significantly reduces the cost of entry and reduces investor risk, but it overlooks fundamental limitations such as narrow trading windows and liquidity challenges.

The current paradigm also presents significant opportunity costs associated with acquiring, holding and liquidating cultural assets. The pace of cultural shifts, the proliferation of NFTs (non-fungible tokens) and digital assets all play a role in exacerbating this issue. Unfortunately, there isn't an efficient or cost-effective means of moving across asset classes in the event of volatility or changes to market conditions.

We believe that the future of cultural assets will be dynamic. That the value created will grow in tandem with the meaning and creativity which defines culture. We see a future where a select number of assets are released for physical wear/use and the remaining are synthetic counterparts.

2. The Xchange Overview

The Xchange is an integral part of the Xsauce ecosystem. The Xchange allows staked token holders to swap their staked SAUX token for synthetic tokens pegged to the value of real-world items. The Xchange operates by offering fractionalized shares referred to as xAssets. Our immediate focus is on hyped or rare sneakers and this will evolve with time and member input. You can think of Xsauce as a market for tokenized alternative assets. We like to call ourselves Stockx 3.0.

The engine room of the Xchange is the Xvault. The Xvault is a staking mechanism that doubles as the collateral pool necessary to use the Xchange.

The following subsections break down the challenges and solutions provided by the Xchange:

a. Market Access

Centralized exchanges in their very nature are exclusionary. They require brokers and multiple parties to approve or execute a trade. This centralization also creates a knowledge barrier, shrouding the process in red tape and jargon. The P2P buying process used by many sneaker resale platforms is a step in the right direction, however, these platforms are riddled with bots and opaque raffle systems, causing an unfair advantage to those without sophisticated tools or technical know-how. The “drops model” can also be problematic as the true supply of these “limited releases” is not public knowledge, allowing retailers and select individuals to get sneakers before the general release.

Inclusive market access is also about reducing both the entry and holding costs. By removing the necessity of buying and selling the physical item to realize gains, Xsauce offers a new investment paradigm. We achieve this by converting cultural assets into synthetic derivatives. What this means is that members are able to gain exposure to price fluctuations without the burden of ownership. Synthetic derivatives enable members who are in overlooked markets to invest in cultural assets or pragmatic investors who do not wish to worry about shipping, storage or any additional liability that comes with holding the physical asset. This opens up the ability to leverage cultural assets as a more dynamic investment vehicle.

b. Asset Valuation

Due to the volatility of culturally-derived value, assigning a representative value can be difficult. The Xchange uses oracle price feeds to inform the price of the synthetic derivative. The oracle feeds aggregated price data from the world's largest sneaker and streetwear resale platforms. This data represents a reliable and robust view of real-world pricing across multiple markets, brands and sizes. This oracle price feed determines the underlying value of the synthetic asset. The derivative is then tokenized and broken into shares, denoted as an xAsset.

xAssets are then offered in bundles of ten (10) expressed by a total implied value (TIV).

Here's an example. A "Jordan 1 Bordeaux" xAsset is bundled in a set of 10 to create the xJ1h-Bordeaux bundle. This synthetic sneaker bundle has a TIV of \$3,190. Members can acquire tokenized shares of the bundle at half or full

increments. Each share represents 1% of the TIV, pricing most shares less than \$25 USD. In the previous example, a full share would be ~\$32 USD and half shares of the xJ1h-Bordeaux would be ~\$16 USD.

c. Market Liquidity

The Debt Pool

The debt pool structure is a novel P2P liquidity provision that's superior to the traditional order book approach. The Synthetix (\$SNX) protocol outlines a considered and efficient approach to managing the debt pool. We have built from their tried and tested formulas to track and update stakers' debts, both individually and collectively. We're standing on the shoulders of giants and have immense appreciation for their ingenuity.

If you'd prefer to skip the formulas and technicalities below, here's a high level explanation of how the debt pool works:

The total value of xAssets in the system creates the debt pool. Once a member creates an xAsset, the value of *their asset* relative to the debt pool creates their percentage of debt they owe the debt pool to close their position.

Here's the technical overview of the process, much of it extracted from Synthetix's Litepaper published in 2020:

The system tracks the debt pool (as well as each individual staker's debt) each time an sSAUX holder mints or burns an xAsset. It does this by updating the

Cumulative Debt Delta Ratio. This measures the SAUX staker's proportion of the debt pool at the time they last bought or sold an xAsset, as well as the debt change caused by other stakers entering or leaving the system. The system uses this information to determine the individual debt of each staker at any time in the future, without having to actually record the changing debt of each individual staker.

Updating the Cumulative Debt Delta Ratio on the Debt Register allows the system to track every user's % of the debt. It calculates the % change the new debt introduces against the debt pool using the formula below and appends it to the Debt Register:

New Debt Minted (Total Existing Debt + New Debt)

The staker's last action is then recorded in the Debt Register within their issuance data and the relative index number at which this action happened. The detail recorded is the percentage of the debt pool they represent, which is calculated by this formula:

User debt percentage = (New Debt + Existing Debt) (Previous Debt Pool + New Debt)

The Debt Register holds the Cumulative Debt Delta Ratio, which is the product of the calculation above, and the relative time (index) the debt was added, so that it can be used to calculate any user's % of the debt pool at any index in the future based on the % shift in the debt pool their last action has caused.

We recalculate the debt pool by summing the number of tokens in each xAsset contract each time new debt is issued or claimed:

totalDebtIssued = totalIssuedSynths

This enables the calculation of the current debt pool, and is included in the updated Cumulative Debt Delta Ratio so that we know at each Debt Register entry the size of the debt (in xAssets).

When a staker pays back their debt (i.e. by burning the xAssets they minted) to unlock their sSAUX collateral, the system updates the Cumulative Debt Delta based on the % shift in the amount of debt to be burned against the total value of the system's debt after the reduction in debt.

Governance

Xsauce DAO

Our DAO performs several integral functions such as proposing new assets and protocol upgrades. The connection between the Xchange and our DAO creates a symbiotic relationship making the exchange more sustainable and truly reflective of the dynamic communities driving culture forward.

The Xchange seeks to alleviate the barriers outlined above as well as directly address the most pertinent issues facing anyone trying to invest in cultural assets. The Xchange is creating a future where cultural assets like sneakers, streetwear and collectibles are tokenized and offer true financial utility. This was built from culture and designed to evolve with it.

Xsauce has a progressive decentralization roadmap. At completion, stakers in the Xvault will be able to use staked SAUX to vote on platform changes and features, most notably the composition of indices or specific cultural assets not listed on the platform.

Timelock + Quadratic Voting Structure

To be eligible to vote on proposals, members must have a minimum amount of (TBD) SAUX staked. Each member meeting the SAUX threshold will be allocated one vote.

As we do more user testing, we will release a table that shows thresholds for how many votes 1 SAUX token is worth based on how many an individual wallet holds. (*Quadratic Voting*)

Members may also lock their tokens to receive a vote multiplier. The minimum locked period is 4 weeks, the maximum lock period is 52 weeks (1 year). For every week of SAUX locked in the protocol, the voting multiplier increases by (+0.125). This amounts to +1 in voting power roughly every 8 weeks up to a maximum of +6.5 voting power if locked for 52 weeks. Voting multipliers are available as soon as they are accrued.

In addition to the lock up period, the vote multiplier will allow members to preferentially allocate their total amount of votes. So if a member has 6 votes, they can distribute them across the proposals that mean the most to them. It is necessary to choose wisely because there will often be multiple proposals happening at the same time. After each lock-up period ends, the voting multiplier reverts back to 0.

Here's an example, Tre locks his 1 SAUX for 6 months (24 weeks) and will see an +4 increase in voting power. Tre will be able to apply his multiplier and will have ($4 + 1 = 5$ votes) to allocate towards any proposals during the lock up period. Meanwhile, Tre will also receive his staking APY and airdrop rewards (if applicable).

At first, votes are done via snapshot and the nominal voting tokens issued will hold no monetary value unlike your staked SAUX tokens you hold in your wallet. On a regular basis there will be proposals for new assets to be listed. Members can opt to 'put skin in

the game' behind these proposals. This means allocating your SAUX along with your vote. In due time, we will implement this feature to where any member that pledged SAUX tokens along with their vote will receive the appropriate percentage of the synthetic asset as it is minted. This rewards committed members that are invested in the future of Xsauce. Think Kusama on the Polkadot Blockchain when it comes to skin in the game behind proposals.

Keep in mind that the longer you lock your tokens, the lower your APY for staking will be. The proposed voting mechanisms, incentives and network effects provide a viable approach to tackling these challenges around group consensus while still mitigating the impact of potential bad actors. As the community grows, we will cocreate the most viable governance frameworks. We are in the process of outlining an ongoing protocol maintenance incentive structure for tiered levels of improvements. We will likely allocate treasury funds to compensate these individuals for critical upkeep of the protocols.

Treasury

The staking incentives are structured to keep as much SAUX within the treasury and mitigate large price fluctuations due to loss of liquidity. The treasury is responsible for locking up funds for predetermined functions with the Xsauce ecosystem. The treasury will selectively use funds to over-collateralized synthetic asset bundles that are deemed inaccessible or too expensive. There will only be a fixed amount of shares available to be minted for these specific xAssets, referred to as treasury-backed assets (TBAs).

Those who are looking to utilize the protocol long term will find solace knowing that they can buy SAUX tokens directly from our treasury for a discount price based on the asset they bond to make the swap. We plan to maintain control of our liquidity, but will also give everyone the ability to buy via a DEX.

The treasury will also seek passive income investments to generate revenue for the protocol using the assets in the treasury. Ways to allocate these assets will be proposed through the Xsauce DAO and will be voted on accordingly. The treasury asset usage is not exclusive to crypto native investments. A proposal could include a purchase of both a real-world asset, or a digital asset.

As a result of staking, bonding, exchange fees and other passive income streams, the treasury will seek to grow in value and sustain APY rewards far into the future.

How the Xchange Works

Buying shares (opening a position)

Members must stake SAUX to receive sSAUX in order to acquire shares of xAssets. The sSAUX is locked as collateral via the Xsauce smart contract.

For every SAUX token staked, members will receive a 3:1 ratio of sSAUX. This means for \$30 of SAUX staked, members will receive \$10 of sSAUX to buy xAssets. In exchange for locking funds at or above the 300% ratio, members also receive APY rewards.

The steps involved to acquire an xAsset:

- Acquire SAUX at a discount directly from the Treasury by bonding, or buy on DEX
- Stake your SAUX and receive sSAUX (e.g. There is a 3:1 ratio ; 30 SAUX gets you 10 sSAUX)
- Open a position with an xAsset by spending sSAUX

- Monitor your collateralization ratio based on changes to the debt pool and add more funds where necessary
- *Keeping your collateralization ratio above 250% avoids unexpected liquidation of your xAsset(s)

Selling shares (closing a position)

The steps involved to sell an xAsset:

- To take a profit, the shareholder must have enough sSAUX to meet their debt pool obligations
- If the value of the xAsset meets the above criteria, then it is burned to release sSAUX
- sSAUX can be used to invest in other xAssets or unstake to return your portion of the total pool. Whatever your percentage of the total debt pool is at the time you unstake is what you will receive in SAUX tokens.

Staking Rewards

“Staking” is synonymous with lending tokens to a contract. You could also think of this as a refundable deposit in which you earn a yield for contributing to the overall health of the ecosystem.

Rewards are claimable as they accrue, however unstaking SAUX before your locked period ends will negate your voting multiplier.

The final APY calculations will be determined on the market capitalization.

Collateralization Requirements

The Xsauce exchange has two types of collateralization options, each with differing tradeoffs for the xAsset holder. Each xAsset will either be treasury-backed or overcollateralized by the user. At launch, all xAssets will require overcollateralization.

Option 1: Overcollateralized by the User

The user is required to provide sSAUX as collateral before minting the xAsset. The collateralization ratio should be at least 300% of the underlying asset. If the ratio falls too low then there is a risk of liquidation if more funds aren't added.

Option 2: Treasury-backed xAsset (TBA - future release)

A treasury-backed xAsset is when the xDAO has voted for the Treasury to lock SAUX as collateral for a fixed number of shares. T.B.As can reduce or eliminate the risk of the shareholder being liquidated. The advantage is for very expensive items where it's difficult to meet the collateralization requirements, the tradeoff is that the exchange fee is 10% for T.B.As.

Exchange Fees

All user collateralized trades on the Xchange will have a 3% premium paid in SAUX. 1% of these fees will go back to SAUX stakers who are not using their staked SAUX as collateral, 1% is burned, and the remaining 1% goes to the Sauce Foundation.

Treasury-backed xAssets have a 10% premium paid in SAUX and the process is the same.

Tokenomics Overview - SAUX

The Xsauce token (SAUX) is the native currency of the Xsauce ecosystem. It is deflationary by design and can only be earned through actions that drive the community forward. This includes bonding assets to the treasury, unstaking profits after trading xAssets, and staking SAUX in the Xvault. SAUX is also a reputational store of value and used to unlock specific platform privileges.

SAUX Reserve Basket

SAUX will be “backed” by a reserve basket of 4 cryptocurrencies to start. The following list is tentative and will more than likely change prior to launch and continue to change based on governance decisions and other feedback:

\$MIM token to provide stable yield-bearing liquidity to holders of **SAUX**.

\$UST token to provide stable cross-chain liquidity for **SAUX**.

\$MATIC - SAUX LP token to support the exchange of the **\$MATIC** token and **SAUX**.

\$MATIC token to support the underlying chain that Xsauce will be built on.

The purpose of this basket is to offer price stability and provide additional value to SAUX holders over the long term.

(\$MIM, \$UST, \$MATIC - SAUX LP \$ETH and \$MATIC all are subject to change as we expand cross-chain)

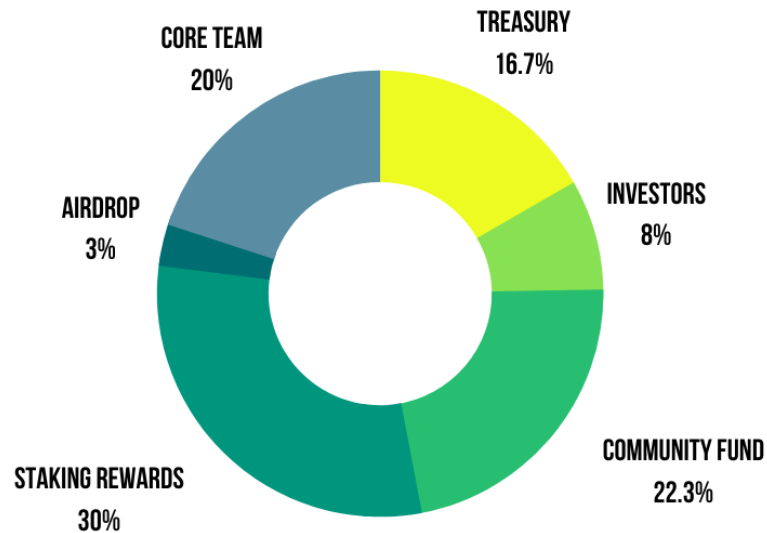
Allocation and Distribution of Tokens:

SAUX (SAUCE):

Total Supply: 52,525,252 Tokens

TGE: 5,525,252 Tokens are released (10%)

The remaining tokens will be allocated as illustrated below:



The categories above should be self explanatory outside of the community fund. The community fund includes bug bounties, marketing, audits, and strategic partnerships as we see fit.

The core team tokens comprise 20% of the total allocation. These tokens are released on a 5% schedule every month to core team members. Our intention is for this to pioneer a new front in the web3 space. We are taking the proper steps to make sure we stay above board on all fronts.

Current Risks and Risk Mitigation Strategies

All investment vehicles carry some degree of risk. Synthetic assets are no different. There are the foreseen risks of prices falling steeply. There also may be unforeseen events that negatively impact the asset's underlying value that is unrelated and beyond the scope of the Xsauce protocol. As mentioned previously, the asset classes listed derive their value from cultural significance, making them subject to news, marketing activity, collaborations or other brand activity.

The primary risks are liquidation or not being able to close a position.

Liquidation happens when a shareholder's collateralization ratio becomes too low (<250%) and a selling event by another member triggers the contract to release the sSAUX. This can be avoided by keeping your collateralization ratio above 250%.

In the case that a member has insufficient funds to pay their proportionate share of the debt pool, they will need to burn their xAsset to fully close their position. This scenario will likely occur if the value of your xAsset drops significantly.

In many cases the MSRP of the cultural asset acts as a price floor and is seldom breached. The MSRP offers a protected downside for the majority of established cultural assets produced by reputable brands.

The general rule to mitigate these risks is to diversify across asset classes and hedge against the debt pool. Both offer complimentary strategies to reduce risk in uncertain or volatile market conditions. With that being said, none of this is financial advice and we are not financial advisors.

NFT Privileges

The “Sauce” NFT unlocks platform specific privileges and benefits to holders. We will release our NFT to crowdfund the rest of the Xsauce ecosystem. Below are 3 NFT holder benefits currently on the roadmap:

- 1) Synthetic Asset Managers : NFT holders will also be allowed to manage a portfolio of xAssets, as long as said member has sufficient collateral and reputational standing they may create a pool for funds. This means other members may lock sSAUX to invest in the portfolios and trading behavior of portfolio managers. In turn, portfolio managers receive SAUX based on the TIV of the xAssets they have under management. The realized and unrealized gains will be reflected on a transparent dashboard where all can see how “Xport” managers stack up. Think of this as creating your own synthetic hedge fund for cultural assets.
- 2) Xvault: Increase in staking APY for a limited time once platform goes live
- 3) Airdrop: Based on the tier of NFT acquired, the proportional amount of SAUX will be airdropped. (TBA)

Conclusion

The Xsauce ecosystem is creating a world where culture is accessible to all. By leveraging synthetic assets in the form of xAssets we can create a global, decentralized marketplace for culture. We believe that the future of cultural assets will be dynamic. That the value created will grow in tandem with the meaning and creativity which defines culture. This whitepaper is a draft. However, we intend to implement what was outlined.