**Derivatives**

A derivative is a contract, the value of which is determined by the performance of an underlying asset. Similarly, Derivative markets in DeFi trade nearly any asset on the blockchain using synthetic pricing. For example, synthetic price feeds create derivative tokens for stocks, futures, and even Bitcoin using smart contracts. In a similar way, prediction markets are another popular type of derivative market in DeFi. Prediction markets essentially let users bet on the outcome of any event.

1. What types of derivatives are available?
2. **Synthetix**

Synthetix is a decentralized platform on Ethereum for the creation of Synths: on-chain synthetic assets that track the value of real-world assets. Synthetix has a native token called SNX. Holders can lock in collateral such as SNX and ETH to mint Synths, which are freely tradeable ERC20 tokens. Transaction fees from Synths exchanged on Synthetix’s non-custodial DEX (Synthetix.Exchange) go to SNX holders/Synth minters, incentivizing Synth creation and giving value to the underlying collateral (i.e., the SNX token).

1. **Nexus Mutual**

Nexus Mutual is an open platform on Ethereum that let members pool and share risk through a discretionary mutual (a community-owned insurance alternative). Only members can participate in the network, buy cover, and hold NXM (the platform's native token). But anyone can become a member by paying a nominal fee in ETH. The mutual is fully member-owned, and members are entitled to a share of any capital held in excess of what's necessary to pay potential claims.

1. **MCDEX**

MCDEX is on a mission to make investing in perpetual contracts easier by building a secure and easy-to-use decentralized financial platform. The first product is a fully decentralized perpetual contract ETH-PERP with up to 10x leverage. MCDEX has a -0.025% maker fee and 0.075% taker fees. MCDEX has been audited by OpenZeppelin and Consensys Diligence.

1. **Erasure**

Numerai developed the Erasure protocol, a decentralized data marketplace for predictions which allows users to upload predictions and build reputation over time by staking cryptocurrencies like Numeraire (NMR) or DAI to show their confidence in their data or prediction.

1. **Opyn**

Opyn is an open decentralized insurance platform built on Ethereum that allows users to protect themselves from the unique risks they face in DeFi. Opyn is built using Convexity Protocol, a generalizable options protocol that allows DeFi users to create put and call options.

1. **Augur**

Augur is a decentralized oracle and peer-to-peer protocol for prediction markets on Ethereum that lets anyone create a market around the outcome of any real-world event. Augur has a native ERC20 token (REP). Users don’t need REP to trade (ETH is used for that).

1. **Veil**

Veil has been shut down as of July 24, 2019. Veil Market leveraged the Augur, 0x, and Ethereum protocols to provide a peer-to-peer trading platform for prediction markets and derivatives.

1. **Data Table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Derivatives** | **Synthetix** | **Nexus Mutual** | **MCDEX** | **Erasure** | **opyn** | **augur** | **Veil** |
| Shared across sites | Yes | - | - | - | - | - | - |
| Lending | No | - | No | - | - | - | - |
| Exchange | Yes | - | Yes | - | - | - | - |
| Asset | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| API | Yes | Yes | Not Available | Yes | Yes | Yes | Yes |
| Data Accessible | Yes | - | - | - | - | - | - |

1. **API Table**

|  |  |
| --- | --- |
| **Derivatives** | API |
| NexusMutual | <https://github.com/somish/NexusMutual> |
| Synthetix | [https://synthetix.com/apis#](https://synthetix.com/apis) |
| <https://synthetix.exchange/#/> |
| <https://docs.synthetix.io/integrations/guide/> |
| Erasure | <https://github.com/erasureprotocol> |
| Opyn | <https://github.com/opynfinance> |
| Augur | <https://docs.augur.net/#using-npm> |
| Veil | <https://github.com/veilco/veil-api-docs> |

1. **Asset Table**

|  |  |  |
| --- | --- | --- |
| **S/No.** | **Derivatives** | Asset |
| 1 | Synthetix | **sBTC, sUSD, iETH, sETH, sADA, iBTC, sDEFI, iDEFI, sEOS, sLINK, sXAG, iLINK, sXAU, sBNB, sXPR, sLTC, iADA, sJPY, sCHF, iCEX, sCEX, sGBP, sAUD, sEUR, sNIKKEI, sFTSE, iETC, iDASH, iTRX, iXMR, iXTZ, iBNB, iEOS, iLTC, iBCH, iXRP, sETCsDASH, sTRX, sXMR, sXTZ, sBCH** |
| 2 | Nexus Mutual | **NXM, ETH** |
| 3 | MCDEX | **ETH, PERP** |
| 4 | Erasure | **NMR, ETH** |
| 5 | opyn | **-** |
| 6 | augur | **-** |
| 7 | Veil | **-** |

| Field | Type |
| --- | --- |
| src | byte |
| amount | uint |
| dest | byte |
| reclaim | uint |
| rebate | uint |
| srcRoundIdAtPeriodEnd | uint |
| destRoundIdAtPeriodEnd | uint |
| timestamp | uint |

1. **Synthetix API (Exchanger.maxSecsLeftInWaitingPeriod())**