Overview of Protocol Owned Liquidity 1/10/2022

Motivation: The 2017 ICO boom provided effective ways for projects to raise funds and distribute tokens, but was not an effective way to keep market/token holders locked into the project other than the success/purpose of the project. L2 projects were given network security from L1 network, which rose the problem for price stability and problem above. The solution was liquidity mining which rewards protocol users with governance tokens. This is a form of yield farming. Users deposit tokens into the protocol's liquidity pool in return for newly emitted token rewards (UNI and SUSHI). Liquidity providers (LPs) deposit two tokens in return for a proportional portion of the fees paid by users who use that liquidity pool. Worked well in the short term, especially for bootstrapping projects. Problems with yield farming:

- Because of low switching costs, it allows for competition between projects and have to make rewards high to get LP
- High rewards generate inflationary price to rise, but then produces sell pressure on the farmed tokens, especially because APY% decreases over time
- Creates a cycle of moving project to project

These are the reasons for protocol owned liquidity projects. This is also known as DeFi 2.0 or liquidity as a service (LaaS). Liquidity is purchased by the protocol from the market, removing the need to rent it. The liquidity is owned by the protocol creating a revenue-generating asset. The protocol accrues more revenue from LP rewards bolstering our treasury. Protocol can better absorb large trades and market drawdowns. This reduces liquidity fragmentation that occurred in liquidity mining by being able to unstake their tokens. Olympus DAO was the first protocol to implement this structure on February 1, 2021. They implemented a bonding structure to allow users to purchase OHM (token for Olympus DAO) at a discount. The bond vesting term is 33110 Ethereum blocks, which is approximately 5 days or 15 epochs.

Token Comparison:

Protocol	Token	Price*	Market Cap	FDV	Circulating	Total	% Circulating	Max
Olympus	OHM	$306.25	$3,010	-	7.4	8.3	89.16%	-
Abracadabra	SPELL	$0.02	$1,600	$4,000	79,870	103,200	77.39%	196,000
Curve	CRV	$5.39	$2,600	$19,000	446.5	1,700	26.26%	3,300
Convex	CVX	$42.22	$1,900	$4,300	44.9	80.6	55.71%	100
Tokemak	TOKE	$64.41	$511	$5,900	8.6	100	8.60%	100

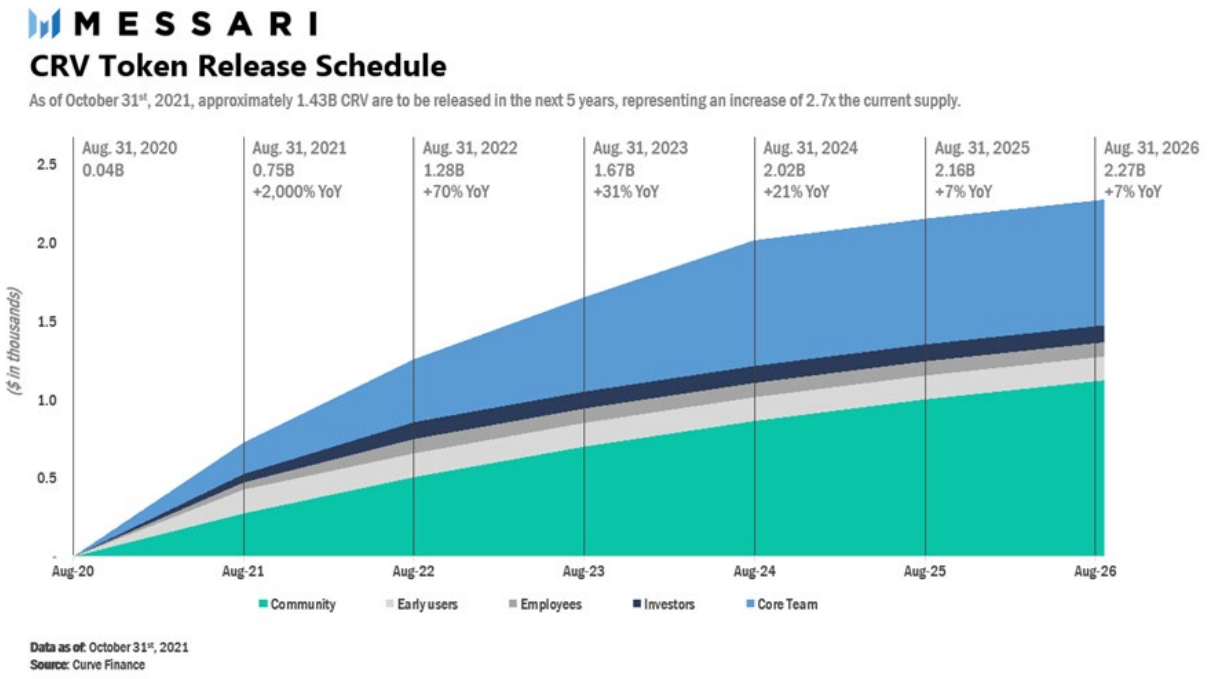
*Prices from messari.io on 1/6/22 3:19 PM and values in millions

Olympus DAO: Their goal is to be a stable free floating currency that is backed by reserve assets and used as the base currency of the crypto economy. Native to the Etheruem chain, but now multichain with easy staking mechanism. Works like a private bank in that it mints its own banknotes (OHM) which are fully backed by the assets in the treasury. Can function as a currency that holds its purchasing power regardless of market volatility. Each OHM is backed by

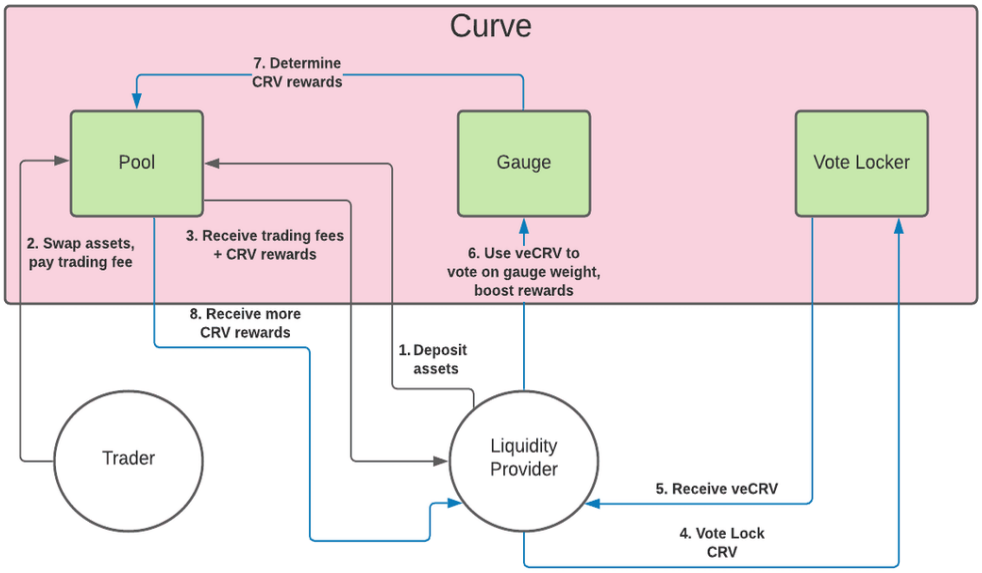
$95.34* in the treasury but trades higher based on a premium. OHM is an algorithmic stable coin that if the price of OHM falls below 1 DAI, the protocol buys OHM and burns it, decreasing the circulating supply. When OHM is greater than 1 DAI the protocol sells OHM at a discount (Bonds) increasing circulating supply. Bond sales generate profit for the protocol because protocol always sells at a higher price than it buys. 90% of profits are shared with OHM stakers and 10% goes back into the treasury. 90.9% of all circulating OHM is staked earning rewards and the protocol owns 99.9% of liquidity. Once you stake you currently earn about 4550% APY and your OHM is converted to sOHM, which you earn more of every 8 hour period rebase. gOHM is the governance token, which can be converted back to sOHM easily. The TVL for Olympus is $2.7 billion. Olympus has a feature called OlyZaps that is defined as an easy staking mechanism to exchange "any assets" into sOHM or a bond in a single operation. There are two large OHM "forks" that are worth noting: Wonderland/Time (Avalanche) and Invictus/IN (Solana). They both have the goal of becoming the decentralized reserve currency on their respective chains. Wonderland has a TVL of $1.6 billion with a staking APY of 79,000% and Invictus has a TVL of $88 million with a staking APY of 39,000%. Olympus also has a DAO2DAO (B2B) feature called Olympus Pro which is a playbook for other protocols to use their bonding model to help them acquire their own liquidity. Olympus charges a 3.3% fee on all bond payouts. Large users of Olympus Pro are Abracadabra, Alchemix, Float Protocol, Pendle, and StakeDAO. The landscape of Olympus is evolving rapidly with the creation of Odyssey and Ohmiesea which creates a secondary market for NFTs on OHM.

Abracadabra.money: Abracadabra is a cross-chain stablecoin lending protocol that allows users to make use of capital that they own, but unable to put into use. Natively launch on Ethereum, but actively launching on Terra, Cosmos, and Solana. Bootstrapped liquidity by using Olympus Pro but no longer has a bonding mechanism. Able to use interest-bearing tokens that you get from staking in vaults can be used as collateral to MIM, a USD pegged stablecoin. Similar protocol to MakerDAO, over use of collateral assets to generate a stablecoin. Using assets like UST, AGLD, etc. you can deposit them as collateral to mint more MIM and then use MIM somewhere else. This reduces the likelihood of liquidation because the collateral assets increase in value. The initial allocation was as follows: 30% to the team vested over four years, 7% IDO, 18% ETH-SPELL farming incentives, and 45% MIM-3LP3CRV farming incentives. The TVL of the protocol is $6.15 billion, 500% increase last 3 months. To keep MIM pegged at a dollar, it is burnt every time the loan is payed back. They have a yield farming component which allows users to keep deep liquidity on particular pairs and burn tokens to decrease emissions. The ETH-SPELL farm has a 32.21% ROI with $69.2 million TVL. From the stablecoin lending protocol, Abracadabra has generated $45.2 million in fees. They currently have 22k open loans, with an average size of $135,198 that has a blended interest rate of 1.76%. Abracadabra's staking feature has an APR of 26.4% and converts SPELL to sSPELL which is a governance token, however governance is still being developed.

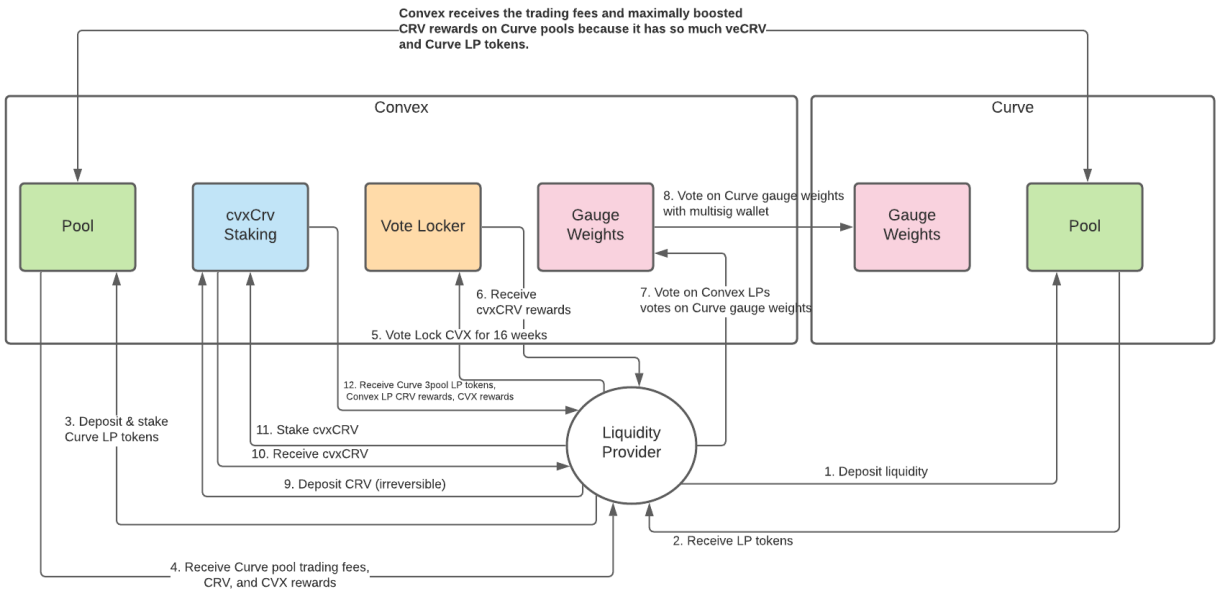
Curve: Decentralized exchange for stablecoins that uses an automated market maker (AMM) to manage liquidity. The motivation was to optimize low slippage swaps on stablecoins or similar



CRV is the ERC-20 governance token for the DAO, but it is not given any voting power. In order to gain voting power, you need to vote lock your CRV and gain veCRV, the voting escrow CRV. veCRV is non-transferrable and decays linearly over time. You have the option to vote lock up to 4 years and the longer you decide to vote lock the larger voting power you obtain. There are three benefits to vote locking: additional trading fees, voting power, and reward boosts. 50% of all trading fees on Curve are split proportionally based on veCRV balances. With voting power, the users decide the gauge weights for different liquidity pools which are distributed a percentage of 663k CRV every day. Then your rewards are boosted of up to 2.5x depending on that pool you are liquidity providing for.



Convex: Convex was built on top of curve and whole purpose is to gain voting power on curve. Convex is now the single largest holder of CRV and governs the protocol it's built on top of. Collects curve related assets from individuals or other DAOs (Olympus) and deploys them in various ways to acquire more CRV. Convex currently has a TVL of $21.1 billion. One of the use cases for Convex is to stake the Curve LP tokens given from being a liquidity provider for Curve. This allows you to stake indefinitely and pull out whenever. By staking the user receives base Curve trading fees that would have been received as a Curve liquidity provider, portion of CRV rewards if fully boosted veCRV holder, and CVX rewards. CVX is the native ERC-20 token for Convex Finance. Once you have CVX you can stake or vote lock the tokens. Once staked you receive cvxCRV tokens as reward. The vAPR is 3.53% with $658.8 million TVL. Both CRV and cvxCRV are volatile in price. Vote locking CVX is the same mechanism on Curve to convert CRV to veCRV. Instead of being locked for 4 years, the CVX is only locked for 16 weeks to the nearest Thursday. The benefits to this is a higher vAPR, 4.71% and voting rights for Convex's voting on Curve gauge weights. Another use case of Convex is staking CRV on Convex to convert it to cvxCRV. This is a 1:1 conversion factor. The benefits are equivalent Curve trading fees if you would've converted to veCRV, a portion of the 10% fee charged when staking Curve LP tokens, and additional CVX rewards. The CVX rewards are in the form of 51.08% vAPR of your cvxCRV amount. Convex is currently in the process of designing the same thing with the FRAX network/token.



Tokemak: AMM protocol to generate deep, sustainable liquidity for DeFi and future tokenized applications. Controls where liquidity flows and offers easier, cheaper way to provide and source liquidity to other projects. They are a large player in Convex. Coordinates actions across LPs and Liquidity Directors (LDs). LPs provide assets by staking liquidity and LDs direct that liquidity to AMMs/exchanges by staking and voting with TOKE. The initial allocation of TOKE is as follows: 30% reward emissions, 5% bootstrapping event, 9% DAO reserve, 16.5% contributors, 14% team, 17% investors, 8.5% DAOs and market makers. LPs have various token staking options to earn various APR on deposits. LDs can then stake TOKE and then distribute voting power to earn various APR on TOKE staking to result in a blended voting APR. Through this Tokemak has a TVL of $935.8 million. The long term goal is to eliminate the need for new LP assets in the long term and transition to rely fully on Tokemak's protocol controlled value. Once the treasury is large enough and doesn't need LPs, the DAO will be created and more concrete form of governance will be created.