

Risk Assessment - yCRV Collateral Asset on FiRM

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Useful Links

- Coingecko: <https://www.coingecko.com/en/coins/yearn-crv>
- Website: <https://yearn.finance/ycrv/>
- Holdings: <https://yearn.finance/ycrv/holdings>
- Twitter: <https://twitter.com/yearnfi>
- Bug Bounty: <https://immunefi.com/bounty/yearnfinance/>
- Docs: <https://docs.yearn.finance/getting-started/products/ycrv/overview>
- Forum: <https://gov.yearn.finance/>
- DefiLlama: <https://defillama.com/protocol/yearn-finance>

Background

yCRV poses another unique opportunity for FiRM to lead the Defi space in CRV wrapper collaterals. As with cvxCRV, the newly deployed curve pools with EMA price feed enables a reliable oracle solution for these LP's which was previously not available.

yCRV is Yearn's new and improved veCRV wrapper system designed to tokenize the different benefits of Yearn's veCRV position. This system is composed of a base-token called yCRV as well as 3 derivative tokens called activated tokens. Activated tokens are derivative tokens of yCRV that are designed to tokenize the different benefits of Yearn's veCRV position. These tokens are used to provide holders with access to various rewards and incentives, Activated tokens consist of st-yCRV, lp-yCRV, vl-yCRV.

Users can choose to move between activated-tokens at any time depending on which benefits they want, except for vl-yCRV which has time lock restrictions varying from 14 to 28 days.

[st-yCRV \(vault\)](#)

Staked yCRV is designed to be a 'set and forget' yield-optimized position for yCRV users. The source of yield comes from two primary places:

- **Admin Fees:** Every week, veCRV holders earn weekly "admin fees" from the Curve protocol. Staked yCRV is where 100% of admin fees earned by Yearn's veCRV position are sent and auto compounded into more yCRV.
- **Bribes:** For all the yCRV within st-yCRV, 1 veCRV worth of vote power will be used to vote in favor of the curve gauge which optimizes bribe revenue for st-yCRV users. Bribes (or misc. revenue) collected from from these votes will be allocated as supplemental yield to st-yCRV users.

Under the hood, st-yCRV is a yearn v2 vault, allowing users to sit back, relax and have their underlying token compounded by a strategy that sells 3CRV and some claimed bribes into yCRV

[lp-yCRV \(vault\)](#)

Liquidity Pool'd yCRV provides liquidity to the new CRV/yCRV pool on Curve, and lp-yCRV holders receive this LP fees and emissions. When you zap to this token, under the hood, you are entering an LP position in the yCRV/CRV pool and depositing the LP tokens into the lp-yCRV yVault.

This is also a Yearn v2 vault with a strategy that deposits all CRV emissions generated back into the pool to grow the position. Like st-yCRV this is designed to be set and forget tokens that auto harvests and auto compound rewards.

Yearn will mark 1 veCRV worth of voting power for every 1 yCRV in this position to vote in favor of yCRV Curve gauge - increasing CRV emissions to users.

vl-yCRV (in audit)

vl-yCRV is the position that users can enter which allows them to cast votes for Curve gauge weights. It is currently in the final stages of development, not yet ready for production.

In this position, users can vote for gauge weights (not DAO votes). Users in this position will not earn weekly admin fees or bribes, and will be subject to a minimum 14-day lock (28-day maximum). Once the lock period is over, the user is free to withdraw to yCRV if they choose and move freely within/without the yCRV ecosystem.

Protocol Analysis

Org. Structure

☐ **Is the Protocol a DAO? How is it governed eg. delegates , snapshot (10)**

Yearn is governed by a decentralized autonomous organization (DAO) that is composed of token holders (YFI). The DAO is responsible for making decisions about the development and direction of Yearn, and token holders can participate in the decision-making process by voting on proposals, participating in polls, and more. The governance process is conducted on-chain, meaning that all decisions are made and recorded on the blockchain. Alternatively Snapshot is used for temperature checks and polling.

☐ **Does Protocol publish analytics / transparency via Dune or similar (10)**

Yearn offers a robust analytics suite [Yearn.Watch](#). Here users are able to track vaults Statistics and health.

☐ **working group structure (10)**

Yearn Finance is governed by YFI holders, and the working group structure is designed to ensure that the protocol is maintained by independent developers. The working groups are divided into four main categories: Core Development, Research & Development, Community & Education, and Governance & Risk. Each working group is responsible for different aspects of the protocol, such as developing new features, researching new technologies, educating the community, and managing the governance process.

☐ **are core contributors compensated / Doxed (9)**

Yes, core contributors are compensated for their work and Yearn utilized LlamaPay to facilitate on-chain payrolls. The Yearn Finance Multisig is responsible for allocating funds to core contributors, and YFI holders can vote on proposals to approve the allocation of funds. Core contributors are typically compensated in YFI tokens, but they may also receive other forms of

compensation, such as grants or equity.

Not all contributors are doxed.

☐ **Any known controversies in crypto space (e.g. Sifu) (7)**

Yearn Finance, like many projects in the cryptocurrency space, has had its share of controversies and challenges. Here are a few notable ones:

1. **Exploits and Losses:** In February 2021, Yearn Finance reported that one of its DAI lending pools had been exploited due to a complex attack, resulting in a loss of \$11MM. The exploit was due to a vulnerability in the version 1 yDAI vault. Yearn suffered from another flashloan misconfiguration exploit in April 2023, resulting in the loss of an additional ~\$11.5MM.
2. **EMN Incident:** In late 2020, Yearn founder Andre Cronje was involved in a controversy around a project called Eminence Finance (EMN). Cronje had been testing this project, which was not yet fully developed. However, some users discovered the contract address and began to interact with it, investing a significant amount of money. Unfortunately, the project was exploited, leading to a loss of \$15 million, which created a lot of negative sentiment towards Cronje and Yearn Finance. Cronje faced criticism for not sufficiently communicating that the project was in a test phase and not ready for public interaction.
3. **Merger Strategy:** In early 2021, Yearn Finance announced a series of mergers with other DeFi protocols like SushiSwap, Cream Finance, Akropolis, and others. This strategy was met with mixed reactions. While some praised the initiative as a way to foster collaboration within the DeFi space, others criticized it for a lack of transparency and for potentially concentrating too much power within Yearn.

Despite these controversies, it's worth noting that Yearn has remained a highly influential project in the DeFi space, with a strong community and innovative approaches to yield farming, partaking in the Curve Wars, and other aspects of decentralized finance.

☐ **do they have a security or risk management team (10)**

Yes, Inverse Finance has worked with the security team at Yearn previously. The RWG's impression is that Yearn Finance takes the security of its protocol very seriously. They have a dedicated in-house security team that continuously monitors for potential vulnerabilities and risks. Some standard security measures implemented by Yearn Finance include:

1. **Smart Contract Audits:** Yearn's smart contracts are audited by reputable external firms to identify potential vulnerabilities. These audits are crucial in ensuring the integrity of the code that underpins the protocol.
2. **Bug Bounty Programs:** Yearn Finance operates a bug bounty program on ImmuneFi, incentivizing the wider community of developers and security researchers to find and report vulnerabilities in the protocol.

3. **In-house Security:** As mentioned, Yearn has an internal security team that monitors for potential threats and works on mitigating them. Similar to Inverse Finance, Yearn's system makes full use of alerts to better assist with monitoring potentially sensitive contracts/environments.
4. **Insurance:** Yearn also introduced yInsure, a kind of decentralized insurance for deposits made into the protocol, aiming to provide users with additional protection against potential losses.

Multisig Structure

☐ **Is protocol transparent of multisigs and signers, List/links of multisigs, purpose, and setup x of x (10)**

Yearn Finance has one main Multisig, which is composed of a group of YFI holders. The Multisig is responsible for making decisions about the protocol, such as allocating funds to core contributors and approving new features. The Multisig is also responsible for managing the Yearn Finance treasury, which is used to fund development and other initiatives.

☐ **Can multisigs interfere with collateral options? EOA minting (10)**

No

Influence, Reputation, and Partnerships

☐ **How long has the protocol been around , have they endured long bear markets (9)**

Yearn Finance was launched in February 2020, reaching mainstream notoriety during "DeFi Summer". Since then, it has become one of the most popular DeFi protocols, with a wide range of products and services. Yearn Finance is well positioned to sustain this current bear market, with a treasury worth \$43.7MM (per DefiLlama), and annual operating expenses of \$3.8MM.

☐ **Have they been exploited and how was it handled , was value restored to users (4)**

[On February 2021. Value restored to users](#)
[On April 2023](#)

There have been some reported incidents of users exploiting the protocol, such as taking advantage of flash loan arbitrage opportunities or manipulating the price of YFI tokens. The Yearn Finance team has implemented a number of measures to prevent these types of exploits, such as introducing a flash loan limit and introducing a YFI token vesting period. Additionally, the Yearn Finance Multisig is responsible for monitoring the protocol and responding to any potential exploits.

☐ **Current and notable past partnerships , are they a net positive on the DEFI space (10)**

Yes, Yearn Finance has a number of partnerships with other DeFi protocols and projects. These partnerships are designed to help Yearn Finance expand its reach and provide more services to its users. Some of Yearn Finance's partners include Aave, Compound, Curve, and Synthetix. Yearn Finance also has a number of strategic partnerships with venture capital firms and other investors.

Audits & Bug Bounties

Previous and Ongoing

☐ **Previous and Ongoing audits & bounties with links (7)**

Yearn has a \$200,000 ongoing bug bounty through [immunfi](#) and a separate bug bounty managed by the Yearn finance team with rewards paid out in YFI tokens. This internal bug bounty has rewards that range from \$100 to \$10,000.

☐ **Are Rewards paid ? Were vulnerabilities found with severity level? (10)**

Unclear. None that have been made publicly available. The details of such payouts are often kept confidential to protect the privacy of the individuals involved and to maintain the integrity and security of the protocol. Their process is very well [documented](#), which warrants a high score.

Contracts in Scope

☐ **Is the scope a comprehensive list of contracts including collateral and wrappers**

All contracts including yCRV.

Collateral Analysis

Oracles

☐ **EMA vs TWAP**

The EMA oracle (Exponential Moving Average oracle) is a type of oracle called "exponential" because it uses a weighting factor that exponentially decreases the influence of older data points on the moving average. The EMA oracle works by taking a series of recent prices for a

particular asset and calculating an average price, giving more weight to the more recent prices. The result is a moving average price that is updated over time.

Whereas EMA calculates the average price based on a weighting factor that exponentially decreases the influence of older data points on the moving average; TWAP, on the other hand, calculates the average price based on the time-weighted average of prices over a specific period of time. This means that each price is given equal weight in the calculation, regardless of when it was recorded. The main difference between EMA and TWAP is in their responsiveness to changes in market conditions. EMA is more responsive to changes in market conditions (depending on half-life setting), while TWAP provides a more stable and predictable reference price over a longer period of time.

☐ **Does the asset have a backup oracle**

There is a MA Price built into the LP as well.

☐ **Any advanced oracle implementation required**

In our oracle implementation for yCRV, we'd rely on the same mechanism of our cvxCRV oracle implementation (recently audited by Nomoi). That is, we cap the max price using the CRV chainlink price feed, and use the EMA reading from the new yCRV/CRV LP when it reads prices below 1 CRV.

Using the chainlink price feed for CRV as a "price ceiling" for yCRV makes sense since there are no scenarios aside from malicious ones where the price of yCRV would ever be greater than CRV. Together with FiRM's PPO safety feature, we believe these measures are enough to protect against upward price manipulation of the sdCRV asset.

As for downward price manipulation, something to consider is the EMA half-life. The new Curve stablepools are deployed by default (using the UI) with an EMA Half-Life of 10 minutes. For our intents and purposes, a half-life of 30 minutes would result in a more resilient EMA price reading in the context of a malicious actor trying to manipulate the price downwards (in order to profit from liquidations). EMA Half-Line can be adjusted by Curve gov after deployment, or it can be set on deployment using [this proxy admin contract](#).

Other safety measures (that carry obvious cons) the PWG might consider here are:

- Using an EMA that gives more weight to older price readings.
- Using a consensus mechanism though this would require multiple trusted oracles.
- Implementing a circuit breaker though inefficient as it would require governance to intervene and 5+ days to reactivate the market (especially a problem if triggered incorrectly)
- Exploring the use of comparing last used price with EMA price, and causing reverts if the difference is too large.

☐ **Liquidation Routing, Do liquidations require a wrapper?, accessibility**

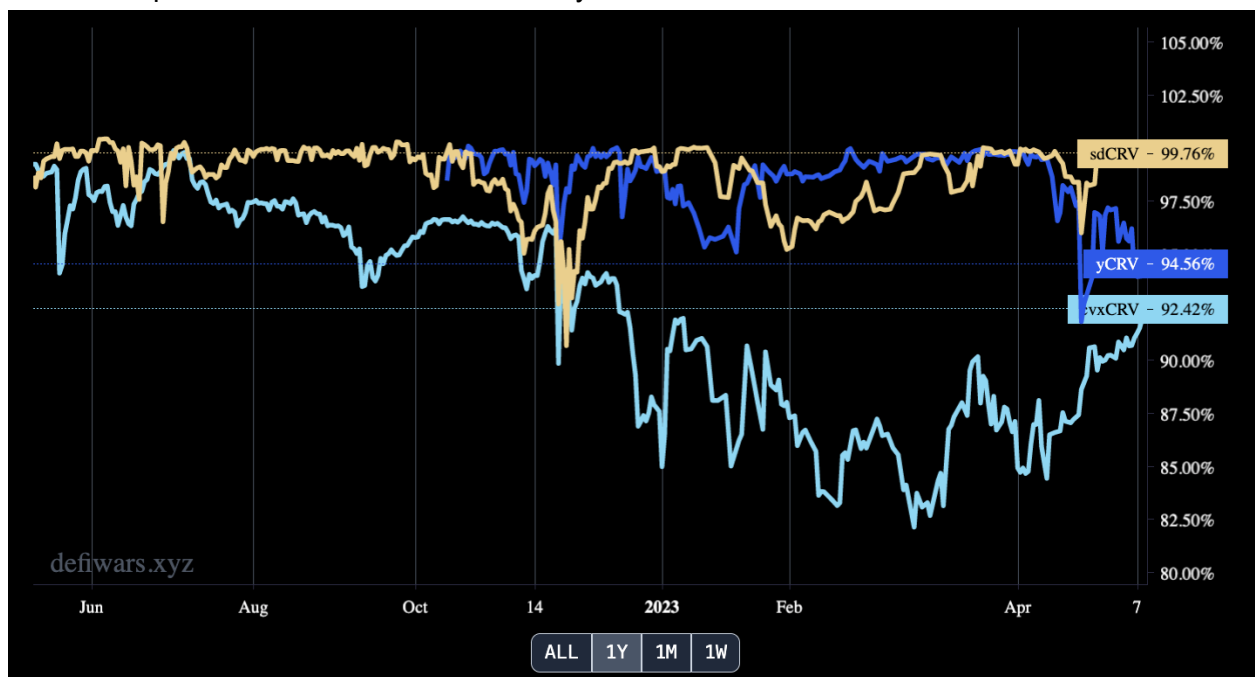
yCRV>CRV>USDC>DOLA

yCRV>USDC>DOLA

☐ **Peg Risk if any**

As there is shallow liquidity in yCRV's sole LP (see liquidity section below), yCRV's peg is volatile and seldom 1:1 with CRV. One can assume healthy use of the yCRV market on FIRM will positively affect the peg.

Design leads to intrinsic peg support, as the lower the peg falls, the higher the APR from the veCRV it represents which leads to more buyers.



Token Statistics

☐ **Contracts**

[yCRV](#)

[st-yCRV](#)

[lp-yCRV](#)

☐ **Price / Market Cap / Circulating Supply / Locked Supply / True Circulating / Total / Max**

*As of May 9th

[Coingecko](#)/[Yearn Holdings](#)

Price	Market Cap	Circulating Supply
\$0.79	\$38,578,228	48,833,201

Liquidity

☐ Mainnet Dex Liquidity

LP	Protocol	Liquidity	24 Hour Volume
yCRV/CRV	Curve	8.1M	\$48k

Currency reserves

 [CRV](#)  

2,009,535.49915 (19.64%)

 [yCRV_0xfc...f65b](#)  

8,217,295.00892 (80.35%)

☐ On-Chain Slippage / price impact

Initial ->	yCRV ->	CRV ->	USDC ->	DOLA	Slippage (%)	Price Impact (%)*
\$5,000	6442	6151	4966	4977	0.46	~0
\$10,000	12884	12301	9932	9955	0.45	~0
\$20,000	25769	24597	19861	19908	0.46	0.01
\$50,000	64383	61406	49561	49676	0.65	0.16
\$100,000	128767	122640	98813	99038	0.96	0.43
\$200,000	257535	244534	196810	197293	1.35	1.04
\$500,000	643839	610927	491211	492346	1.53	3.54
\$1,000,000	1287679	1170444	937949	939999	6.00	11.86
\$2,000,000	2575404	1935654	1514719	1517738	24.11	62.16

\$5,000,000	6438511	2211395	1723015	1726333	65.47	98.51
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*yCRV to CRV trade.

☐ **Token Holders**

[Holders](#)

Volatility

☐ Price Log Return Volatility

Emissions

☐ **Token Emissions schedule**

For CRV - Please refer to Emissions section in [Risk Assessment CRV Collateral on FiRM](#)

For yCRV - N/A

For YFI -

When YFI, the governance token of Yearn Finance, was initially launched in July 2020, the total supply was capped at 30,000 tokens. These tokens were not pre-mined or sold in an ICO; instead, they were distributed to users who provided liquidity to specific pools in the Yearn ecosystem, effectively 'earning' the YFI tokens. This process happened over a short period of about a week, after which all 30,000 YFI tokens had been distributed.

In February 2021, the Yearn community voted to mint an additional 6,666 YFI tokens to fund the Yearn treasury. This decision was made through a governance vote, with the majority of YFI holders agreeing to the proposal. The 6,666 additional YFI tokens were not distributed according to a specific emission schedule. Instead, they were minted all at once and then allocated to the Yearn treasury for use according to the needs of the Yearn ecosystem.

There is no further token emission schedule for YFI. The total supply is capped at 36,666 tokens, and there are no plans to mint more. However, the Yearn community could vote to change this in the future.

☐ **Emissions Policy (10)**

For CRV - Please refer to Emissions section in [Risk Assessment CRV Collateral on FiRM](#)

For yCRV - N/A

For YFI -

Yearn Finance's governance token, YFI, has a unique emission policy that significantly differs from many other projects in the DeFi space.

Yearn Finance follows a unique approach called Buyback and Build, which was introduced through YIP-56. Instead of distributing profits to YFI token holders through staking rewards, Yearn uses protocol earnings to buy back YFI on the open market. The bought-back tokens are then added to the Yearn treasury.

This mechanism is intended to ensure that the value generated by the protocol is used to support the growth and sustainability of the project. The treasury can use the bought-back YFI for various purposes such as funding development, rewarding contributors, or providing liquidity, all of which could potentially increase the value of the YFI token.

The Buyback and Build model is a departure from the traditional dividends or staking rewards model. It is based on the premise that reinvesting protocol earnings back into the project can create more long-term value for token holders than simply distributing earnings.

☐ **What are emissions used for**

For *CRV* - Please refer to Emissions section in [Risk Assessment CRV Collateral on FiRM](#)
For *yCRV* - N/A

For *YFI* -

The YFI tokens acquired through the Buyback and Build program (introduced in YIP-56) are added to the Yearn treasury. The treasury is essentially a communal fund that's used to finance the ongoing operations and development of the Yearn Finance protocol.

Some potential uses for the YFI tokens in the treasury include: Development Funding, Rewarding Contributors, Liquidity Provision, Governance Initiatives, Protecting the Protocol, or Strategic Investments:

The exact use of the bought-back YFI tokens is determined by the Yearn community through governance votes.

Utility & Use Case

☐ **Does the Token have utility (10)**

The main purposes of CRV is to incentivise liquidity providers on the Curve Finance platform as well as getting as many users involved as possible in the governance of the protocol. CRV has 3 main utilities - voting, staking and boosting. Those three things will require you to vote lock your CRV and acquire veCRV. Fees are charged for swaps and shared between LPs and the protocol. The fees accrued by the protocol are shared among the veCRV token holders. All

together, this is a solid value capture model which ensures participation in governance and long term alignment of token holders with the protocol.

Staked yCRV offers the highest yield among all wrappers. However, the yield will go down, as there are remaining rewards coming from the legacy yvBOOST donator contract. Also, 1/4 of all yCrv is owned by the treasury boosting yield for all yCRV stakers. st-yCRV offers "set & forget" UX where the source of yield comes from two places:

- Admin Fees: 100% of admin fees earned are auto-compounded into more yCRV
- Bribes: 1 st-yCRV = 1 veCRV worth of vote power which will be sold on the bribes market to further increase yield.

Unlike sdCRV, st-yCRV holders are giving up their voting power, so protocols can't use it to cast votes for Curve gauges. However, vl-yCRV is in the final stages of development, which will give the voting power but remove fees and bribes in favor of st-yCRV.

☐ **Liquid or locking feature (10)**

yCRV is tokenized veCRV. If a user deposits CRV into Yearn, that CRV is locked forever on the platform as veCRV. A tokenized version of veCRV, yCRV, is returned to the user at a 1:1 rate. yCRV conversion is 1-way. One liquidity pool exists that allows users to swap yCRV for CRV tokens. Yearn has 62,108,843 veCRV.

☐ **Goal of the token, where is value derived from (10)**

One of Yearn's purposes is to scoop up as much CRV as possible. Consequently, yCRV value is derived by how much CRV Yearn hold and the future prospects of them increasing their bag. Outside of the Curve ecosystem, there is no other protocol making use of yCRV. This makes it an appealing proposal for Inverse Finance. allowing yCRV to be used as collateral against other borrowing loans and yields will draw much attention from the Yearn Finance community.

What are the tradeoffs with yCRV?

1. Protocol fees are charged by the protocol for the service they provide (they are deducted from the displayed APR). yCRV's fee is 10%.
2. Voting power: yCRV doesn't offer voting power, but shares the bribe revenue
3. For the peg maintenance all the protocols are directing CRV emissions to their respective LPs.

Conclusion

Asset Score

As we build out a registry of TAS for a variety of collateral options and match them with findings from other risk profiling frameworks and methodologies, the RWG will be able to rely more and more on the Asset Scoring Model. As of now, our data indicates the following:

- Any asset with $TAS > 7.5$ can be deemed an asset carrying a low risk profile.
- $5 > TAS > 7.5$ warrants caution, and, if approved, a “guarded” launch on FiRM.
- $TAS < 5$ should seldom be considered worthy of a FiRM market.

Token Contract Address: 0xfcc5c47be19d06bf83eb04298b026f81069ff65b

Assessment date: May 11th, 2023

Component	Link/Rationale	Score
Market Capitalization (MCS)	yCRV supply:48834973, yCRV price: 0.7782 wETH supply:3545208, wETH price: 1830.26 $MCS = \min(10, (yCRV \text{ Supply} * yCRV \text{ Price} * 200) / (wETH \text{ Supply} * wETH \text{ price}))$	1.27
DEX Trading Volume (TVS)	$TVS = \min(10, (30 \text{ Day Avg Token Trading Volume} * 200 / 30 \text{ Day Avg wETH Trading Volume}))$	0.12
Price Volatility (PVS)	$PVS = \min(10, 10 - (Token \text{ Log Price Volatility} / wETH \text{ Log Price Volatility}) * 9)$	3.05
Token Distribution (TDS)	Token Distribution Score = $\min((1 - \text{Token Gini Index}) * 10 / (1 - wETH \text{ Gini Index}); 10)$	1.54
Project Fundamentals (PFS)	Risk Assessment yCRV Collateral on FiRM - See Protocol Analysis, and Audits & Bug Bounties Sections	8.92
Token Utility (TUS)	Risk Assessment yCRV Collateral on FiRM - See Collateral Analysis Section	10

Total Asset Score

$$TAS = 1.27 * 0.2 + 0.12 * 0.15 + 3.05 * 0.15 + 1.54 * 0.1 + 8.92 * 0.2 + 10 * 0.2$$

$$TAS = 4.67 / 10$$

Parameter Recommendations

Supply Ceiling	\$1,000,000
Initial Fed Supply	\$500,000
Daily Borrow Limit	\$100,000
Liquidation Factor	50%
Firm Global Supply Ceiling	\$22,000,000
Collateral Factor	50%

- ☐ **Supply Ceiling** - Setting the supply ceiling for an asset, though influenced by such factors as market demand, collateral volatility, correlation with other assets, and overall risk appetite, should ultimately be determined by considering the overall liquidity picture and slippage figures for said asset. Put simply, If the collateral has high liquidity, then the supply ceiling can be set higher because it is easier to sell the collateral in case of liquidations. In the case of yCRV, liquidity is slim. Furthermore, Yearn Finance has yet to migrate yCRV liquidity from the old Curve LP to the new more reliable yCRV/CRV pool. After this migration we can expect at least 2M CRV “backing” yCRV. Slippage figures are somewhat encouraging, with a \$100k yCRV trade incurring only 0.96% slippage, and \$500k yCRV incurring 1.53% (see table above). Simulations were also ran on a 1M yCRV sell order, which resulted in a 11.86% price drop. Based on the above, we recommend the initial supply ceiling for yCRV be set to \$1,000,000. The data suggests this amount is on the higher end of what we can consider safe, that is until liquidity for yCRV deepens.
- ☐ **Initial Fed Supply** - the amount the Fed injects to the market up to supply ceiling. The RWG recommends this amount be \$500,000.
- ☐ **Daily Borrow Limit** - Like all factors here, daily borrow limit is set to strike a balance between meeting market demand and managing risk. yCRV scored poorly in our asset scoring model framework, particularly in volume, distribution, and price volatility. Based on this, the RWG recommends the daily borrow limit amount be set to \$100,000 per day. This figure matches the deployment parameter for the cvxCRV market on FiRM. While

one might consider this figure to be somewhat aggressive given the present-day total asset score and liquidity picture, we believe the potential for a yCRV market on FiRM will incentivize Yearn to deepen yCRV liquidity. Assuming this occurs, the daily borrow limit can be readjusted.

- ☐ **Liquidation Factor** - It is important to set the liquidation factor carefully to ensure that the platform can manage its risk exposure effectively. If the collateral has a history of high price volatility, if the collateral has low liquidity, and if the platform has a low risk appetite, these are all true in our case and are grounds to set a higher liquidation factor. At the same time, it's likely our TWG will have to carry out liquidations for this market initially as we can't assume automated liquidations will take place by MEV liquidators (until we can prove yCRV is being searched). As such, we recommend the liquidation factor be set to 50%, so that the liquidation incentive matches with CF.
- ☐ **Firm Global Supply Ceiling** - Global Supply ceiling (currently set at \$21,000,000) will increase to \$22,000,000 to account for the supply ceiling for the yCRV market.
- ☐ **Collateral Factor** - Setting the collateral factor requires balancing the risks associated with the asset being used as collateral with the demand for loans. Assets with lower risks may have higher collateral factors, while assets with higher risks may have lower collateral factors. Ultimately, the collateral factor is closely related to, and influenced by many of the factors pertaining to the parameters presented above. While parameters above act as a backstop, the collateral factor determines whether an attack on the protocol can be profitable for the potential exploiter capable of manipulating our price oracle implementation. Given all the above and taking into account the results of our Asset Scoring Model, the RWG recommends we launch the yCRV market with collateral factor set at 50%. At 50% CF, the protocol starts to take on bad debt if the yCRV oracle price allows for an account's collateral to become less than 10% the value of the loan position. For this to happen, a price drop of 45% or more is needed for the collateral asset before a full liquidation is able to take place (full liquidation meaning the position is brought back to health, not the entire loan being repaid). A 45% price drop would occur if ~\$1.5M yCRV was dumped on the market, which far exceeds the daily borrow limit, as well as the supply ceiling for the market.