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Disclosure: Reverie is an investor in Stride.

Summary

- As of today, the total value locked (TVL) or total deposits on the dYdX Chain are roughly \$140 million, with the chain having slightly more than 114 million DYDX tokens staked, which are valued at approximately \$456 million (at a market price of \$4).
- The rate of DYDX being staked to validators has <u>plateaued</u> and deposits to the exchange are growing at a tremendous <u>pace</u>. Over \$140M USDC is held in dYdX v4, of which roughly \$100M arrived in the past week. Given the growing adoption of dYdX v4 and recent market volatility driving trading activity, we assume that this rate of deposit will continue to increase in the coming weeks and months.
- As deposits grow, the incentive for malicious activity increases with it. Ideally, this would be matched with increasing economic security to outweigh malicious incentives.
- The <u>community treasury and community treasury vester</u> collectively have over 230M DYDX, valued at around \$920M (\$4 market price). Of this, 80M (\$320M) has vested and is available for distribution by the community.
- We propose that the community participate in securing the protocol by staking 20M DYDX from the community pool through <u>Stride</u>'s liquid staking protocol.
- The benefits of this proposal include: (1) the dYdX community can take ownership in protecting users and supporting the growth of dYdX by increasing economic security, (2) the dYdX community can address concerns with stake weight concentration among top validators by proactively delegating to active validators with less voting power, and (3) diversifying a portion of the community treasury into USDC.

Background

The dYdX Chain launched as a proof-of-stake <u>protocol</u> with an active set of 60<u>validators</u> leveraging <u>CometBFT</u> for consensus. DYDX, the L1 token of the DYDX Chain, may now be used for staking, contributing to the security of the network, and governance of the dYdX Chain. The total amount of DYDX staked to dYdX Chain validators determines the protocol's economic security - securing user deposits and securing other community assets, like DYDX in the community pool. A malicious actor only needs to control ½ of the network voting power to halt the chain and ½ of the network voting power to potentially exploit user or community funds on the dYdX Chain.

As of today, the <u>total value locked (TVL) or total deposits</u> on the dYdX Chain are roughly \$150 million, with the chain having slightly more than 114 million DYDX tokens <u>staked</u>, which are valued at approximately \$456 million (with the market price of DYDX being \$4 per token). Typically, the value of the staked DYDX tokens should surpass the total deposits to make sure that executing an attack on the network is excessively costly.

Using the parameters above means roughly \$304M $(\frac{2}{3})$ of voting power is needed to reach consensus.

If we assume the current stake is honest, the cost to attack the protocol by reaching two-thirds of total voting power can be denoted as follows:

3/3 = Malicious Voting Power / (Malicious Voting Power + Current Voting Power)

Since the voting power today is \$456M, a malicious actor must contribute at least \$912M in staked DYDX to take control of the protocol, which would allow them to exploit user deposits and community assets. This sounds like a lot today, but isn't such a high barrier when we factor in that only 11.5% of the total supply of DYDX are staked as well as the value of user deposits and community assets.

The amount of staked DYDX, initially growing rapidly, has effectively <u>plateaued</u> in recent weeks. This leads us to assume, particularly given the attractive yield offered to stakers (+20% APR), that a natural limit for liquid DYDX available to be staked has been reached. Existing holders not already staked are presumably either unable or unwilling to stake for various reasons (e.g. trading inventory, stake concentration, regulatory, or other).

Meanwhile, deposits to the exchange are growing at a tremendouspace. Over \$150M USDC is held in dYdX v4, of which roughly \$100M arrived in the past week. Given the growing adoption of dYdX v4 and recent market volatility driving trading activity, we assume that this rate of deposit will continue to increase in the coming weeks and months.

As deposits grow, the incentive for malicious activity increases with it. Ideally, this would be matched with increasing economic security to outweigh malicious incentives. To protect users and the protocol, we must also continue increasing its security via the amount of staked DYDX.

Additionally, the top ten validators in the active set currently hold two-thirds of the voting power, the top three hold one-third, and the top validator holds roughly 24%. In other words, ten of the sixty active validators have control over the dYdX protocol given the CometBFT consensus mechanism. A concentration of voting power among few validators can hurt the

resilience of the protocol and liveness guarantees. If a top three validator goes offline, it suddenly becomes much harder for the protocol to reach consensus. Voting power should be distributed more evenly across the active set to improve resiliency and liveness.

Description

We propose that the community participate in securing the protocol by staking a portion of the community pool. In this model, the community can take ownership in protecting users and supporting the growth of dYdX by increasing economic security. Additionally, the community can address concerns with stake weight concentration among top validators by proactively delegating to active validators with less voting power.

Staking the community pool offers an opportunity to increase the protocol's growth potential, by allowing for more deposits into dYdX, while also improving its resiliency. As a neutral, protocol-aligned staker, the community guarantees a certain amount of honest and sticky voting power to the protocol. The community effectively serves as a fallback for liquid capital constraints, leveraging its sizable community pool to proactively address scaling issues.

The community <u>pool</u> has over 230M of DYDX, valued at around \$920M (\$4 market price). Today, 80M (\$320M) has vested and is available for distribution by the community. The remaining 150M (\$600M) will continue to <u>vest</u> over the next two years. Some of that amount has been allocated to incentives, but most of it remains unallocated for future use. Proactively staking some of this idle capital allows the protocol to grow, without actually removing funds from the community. With staking, the community retains control of all the capital committed, which can be reclaimed at a future time should more liquid DYDX be committed and security organically increased. In other words, no funds are lost or spent through this initiative, only temporarily allocated for a more productive use.

How should we stake the treasury?

The community as a whole may not be able to agree on and efficiently maintain a staking delegation of the treasury. Since the community is represented by tokenholders, contributors, and active validators, agreeing on the amounts and eligible validators may be difficult given conflicts and coordination constraints. Similarly, the need to actively manage a staked position with things like reward accrual and redelegations (in the event of a validator going offline, for example) presents additional challenges for a community-run delegation program.

We propose leveraging <u>Stride</u>'s liquid staking protocol, already active on the dYdX Chain, to more efficiently stake the treasury. Through Stride, the community would only need to agree on a total amount to stake. All other responsibilities, including validator selection, amounts to stake, compounding rewards, and redelegating as needed would be managed through Stride. Ultimately, control of the funds remains with the community, Stride is just being delegated the responsibility of productively deploying the capital on its behalf.

Staking rewards on dYdX accrue in USDC, since they originate from the fees users pay to trade on the protocol. Stride's current mechanism implements auto-compounding of rewards back into staked DYDX, continuously increasing the amount staked through rewards accumulated.

Stride's mechanism for auto-compounding the rewards back into staked DYDX presents an added benefit for this initiative. By auto-compounding rewards, the number of DYDX staked by the treasury increases automatically with time, continuously bolstering the protocol's economic security.

Additionally, Stride has agreed to reduce its protocol fee to 7.5% on the staked position to the community treasury, which will result in substantial USDC inflows to the treasury (more on this below). An added benefit of this proposal is that the treasury is diversifying its asset exposure into stablecoin assets while continuing to benefit from protocol-owned security that increases over time.

Most importantly, Stride presents the easiest path to execution using a community-owned interchain account controlled through governance. Instead of depending on special governance messages, or a future <u>authz</u> implementation, this solution lets the community execute a straightforward, one-time treasury spend proposal. We believe this is the best solution for a timely proposal to pass, addressing the immediate concerns for protocol security and growth.

Specification

Below, we explore technical details for how the community should delegate the treasury with Stride.

How will it work?

Stride has deployed a dYdX Community Pool ICA (Interchain Account) address on dYdX Chain. This account is controlled by the Stride validator set. Any DYDX deposits to this address are detected using ICQs (Interchain Queries), liquid staked with Stride, then returned to the dYdX Community Pool as stDYDX.

To liquid stake the DYDX in the dYdX community pool, the dYdX community can pass a community spend proposal of DYDX tokens with the dYdX Community Pool ICA address as the recipient address. Any DYDX sent to this address will be liquid staked with Stride and returned to the community pool as stDYDX.

Once the community pool receives its stDYDX, it is in full control of its liquid staked tokens. Stride delegates the underlying DYDX across the active set to increase economic security and promote a decentralized validator set. Stride will follow its current guidelines for selecting validators in the active set, and manage those delegations to ensure productive and fair staking participation.

Should the dYdX community choose to unstake these funds, it can do so following the same process in reverse: pass a community spend proposal of stDYDX tokens with the dYdX Community Pool ICA address as the recipient. Any stDYDX deposits to this address are detected using ICQs (Interchain Queries) and redeemed via Stride. After the unbonding period, the unbonded DYDX is returned to the dYdX Community Pool, along with all earned and auto-compounded staking rewards.

Amount

20,000,000 DYDX

The community pool has over 230M of DYDX, of which 80M is vested and sitting idle. Given the sizable amount available, and lack of any other immediate large-scale funding initiatives, we propose delegating 20,000,000 DYDX from the community pool. This 20M will guarantee a significant amount of additional economic security, allowing the protocol to continue growing at a rapid pace without concern for security.

Term

The community will have the ability to unstake the DYDX at any moment and return the principal amount of DYDX plus any rewards back to the community treasury through a governance vote. For the sake of this proposal, we propose staking these funds for at least 12 months, barring any funding needs that supersede the need for economic security.

Stride Fee Reduction

Given the amount of stake contributed to the Stride protocol with this proposal, Stride is offering to reduce its protocol fee on the community pool stake by 2.5%. As a result, based on current staking APRs (21%) approximately \$420,000 of USDC will accrue in the dYdX community treasury per year.

Rather than being auto-compounded, this portion of the rewards is simply sent directly to the community treasury.

With the fee reduction, the staking reward breakdown allocations for the staked position are as follows:

- 90% of rewards used to auto-compound DYDX into the treasury's staked position, growing it over time.
- 2.5% of rewards flow directly to the dYdX community treasury as USDC.
- 7.5% of the rewards flow to the Stride protocol

Using this model, the treasury gets the benefit of both auto-compounding to increase security and USDC inflows to help diversify the treasury's holdings.

Proposal

We propose that the community stake 20M DYDX through Stride to increase protocol security and improve the distribution of voting power for resiliency. This proposal is merely a signaling proposal. It will be put up for voting alongside a comparable governance proposal on Stride. If both proposals pass, a second proposal will be put up for voting to send 20M DYDX to the community owned interchain account, which will sweep to Stride for delegation to the active validator set. Using Stride's auto-compounding methodology, the community will continuously increase its staked position, allowing for more economic security to grow overtime.

Next Steps / Timing

The proposed timeline for execution of the joint proposal and staking process is as follows:

Date

dYdX proposed schedule

Stride proposed schedule

Friday 3/15

dYdX forum post live

Stride forum post live

Tuesday 3/19

dYdX signaling proposal on-chain

Stride signaling proposal on-chain

Thursday 3/21

Stride software upgrade proposal to enable the rebate goes on-chain for voting

Saturday 3/23

dYdX signaling proposal concludes

Stride signaling proposal concludes

Sunday 3/24

dYdX puts executable community spend proposal on-chain

Monday 3/25

Stride upgrade proposal concludes

Wednesday 3/28

Community spend proposal concludes. Tokens are sent to the Stride ICA on dYdX Chain if the proposal passes

Friday 3/29

Tokens are fully staked with Stride and stDYDX is returned to dYdX Chain treasury

FAQs

Why Stride? Why not delegate directly from the Community Pool?

A governance proposal on v4, which includes votes from the active validator set, will lead to significant biases across voting populations. Similarly, it may be susceptible to manipulation and/or a governance attack if malicious attackers vote to stake all tokens to one validator.

Stride can act as a trusted, independent party to promote an even distribution among the active set. Stride is incentivized to continue to deliver on the proposal because the dYdX community may withdraw its stake from the Stride protocol through a new proposal at any time.

Why auto-compound rewards?

We believe that the immediate focus should be to grow the number of staked DYDX. By auto-compounding rewards back to DYDX and staking them, the community introduces a reinforcing loop of continuously expanding economic security, furthering the protocol's growth potential over time. We also think this presents the easiest solution to managing the stake position today.

How does auto-compounding work?

At a high-level, Stride converts the USDC staking rewards into DYDX and compounds that DYDX using the following process:

- Stride's interchain account on the dYdX Chain claims the staking rewards every 6 hours
- From there, the account transfers the USDC staking rewards via IBC to Osmosis, where it is swapped for DYDX in the associated DYDX / USDC liquidity pool.
- After being swapped, the resulting DYDX is returned via IBC to the same interchain account on the dYdX Chain.
- Finally, the interchain account stakes the DYDX with validators on the dYdX Chain.

This process is repeated every 6 hours, and is handled fully non-custodially thanks to the interchain accounts on dYdX and Osmosis.

What will happen to the staking APR on dYdX Chain?

Because this proposal will result in staking rewards accruing to an additional 20M DYDX tokens and increase total staked DYDX by 17%, we anticipate a reduction in the dYdX Chain staking APR from 21.32% to roughly 18%. We believe that this modest reduction is well worth the additional economic security guarantees gained by the protocol.

How will Stride allocate the community's staked DYDX?

From the moment that Stride launched liquid staking for the dYdX chain in January, delegations have been chosen with the

dYdX chain's security in mind. Stride's delegation criteria are heavily inspired by the dYdX Foundation's <u>published take on good practices for validators and delegators</u>. Some non-exhaustive factors that are considered as part of the validator selection process include:

- The validators' respective contributions to dYdX in testnet and mainnet so far, including node and infrastructure operation, testing, maintenance, bug reporting, engineering contributions, dashboard and tooling maintenance, social advocacy / marketing, and more
- Position in the active set. Because 33% of vote power is currently concentrated in the top 2 validators, no stake will be delegated to the top 33% of vote power until such time as stake weight distribution across the set improves
- MEV considerations on a particular validator, leveraging the Skip Validator MEV dashboard
- Validator operations and security, to the extent that this is easily discoverable using publicly available means.
- Node performance and latency.
- Governance participation.

Tokens delegated to Stride are currently split evenly amongst 28% of validators in the dYdX active set. New validators have been added to the validator set on a regular cadence since launch (approximately 3-4 validators every few weeks), and will continue to be added until an optimal distribution in the range of 40 - 50% of validators receive delegations from Stride. The next validator set addition will occur on March 27.

Stride monitors existing delegations on a frequent basis to ensure that host-zone validators continue to adhere to delegation guidelines. In the event that validators become inactive, are frequently jailed, or otherwise operate in a manner that harms the host-zone, Stride acts swiftly to redelegate from the impacted validator. Examples in which this has been done in the past on other host-zones can be found here and here.

Similarly, Stride will continue to monitor its delegations on the dYdX chain and make adjustments as necessary, redelegating from validators that become inactive, participate in MEV, or otherwise negatively impact the chain. Stride will work with stakeholders like the MEV council to ensure that delegations remain allocated in a manner that prioritizes chain security and growth.