



QUARTERLY REPORT

Q4 2022

S U M M A R Y

Q4 has been a challenging quarter for all of crypto with the recent collapse of FTX and the bankruptcy of multiple centralized lenders.

Amidst this pessimistic backdrop, Notional continued to move forward by launching leveraged vaults in Q4. Leveraged vaults allow users to borrow at a fixed rate from Notional and deposit the borrowed assets in whitelisted yield strategies. The release of only one leveraged vault strategy pushed ETH rates from 1-1.5% to 4-5.5% in only a few weeks. This marks a turning point in making yields more attractive for lenders while also increasing LP returns organically. Leveraged vaults put Notional on a path of being able to offer sustainable unsubsidized yields to LPs in the coming quarters.

During the quarter, Notional saw its TVL decrease from \$85M to \$55M nevertheless the protocol still managed to process \$60M in transaction volume and generated \$104K in revenue. While these figures are down from Q3, Notional is still reinforcing its lead in the fixed rates market with our two biggest competitors having \$8M and \$4M of TVL.

Despite the obvious obstacles, this year reinforced the need for what Notional is building - secure, transparent, on-chain lending markets. We are more excited than ever to execute on Notional's mission and we're optimistic that we will take the lessons of 2022 and apply them in 2023 to great success.

OVERVIEW

In Q4, Notional facilitated \$60M in trading volume and generated \$104K in protocol revenue. As of December 31st, Notional also managed to attract and retain more than \$55M in capital from its LPs.

Multiple key developments were accomplished in Q4:

- Audit and deployment of leveraged vaults
- Launch of the Balancer-Aura wstETH/WETH leveraged vault strategy
- Development of the Balancer-Aura boosted stablecoin leveraged vault strategy



KEY METRICS

\$54.7M

Total Value Locked (TVL)

\$60.2M

Total Loan Volume in Q4

+230

New users in Q4

\$13.2M

Open borrow as of Dec 31st

\$104K

Protocol revenue in Q4

\$14M

Fully Diluted Valuation (FDV)

\$0.14

NOTE price as of Dec 31st

\$0.14-0.39

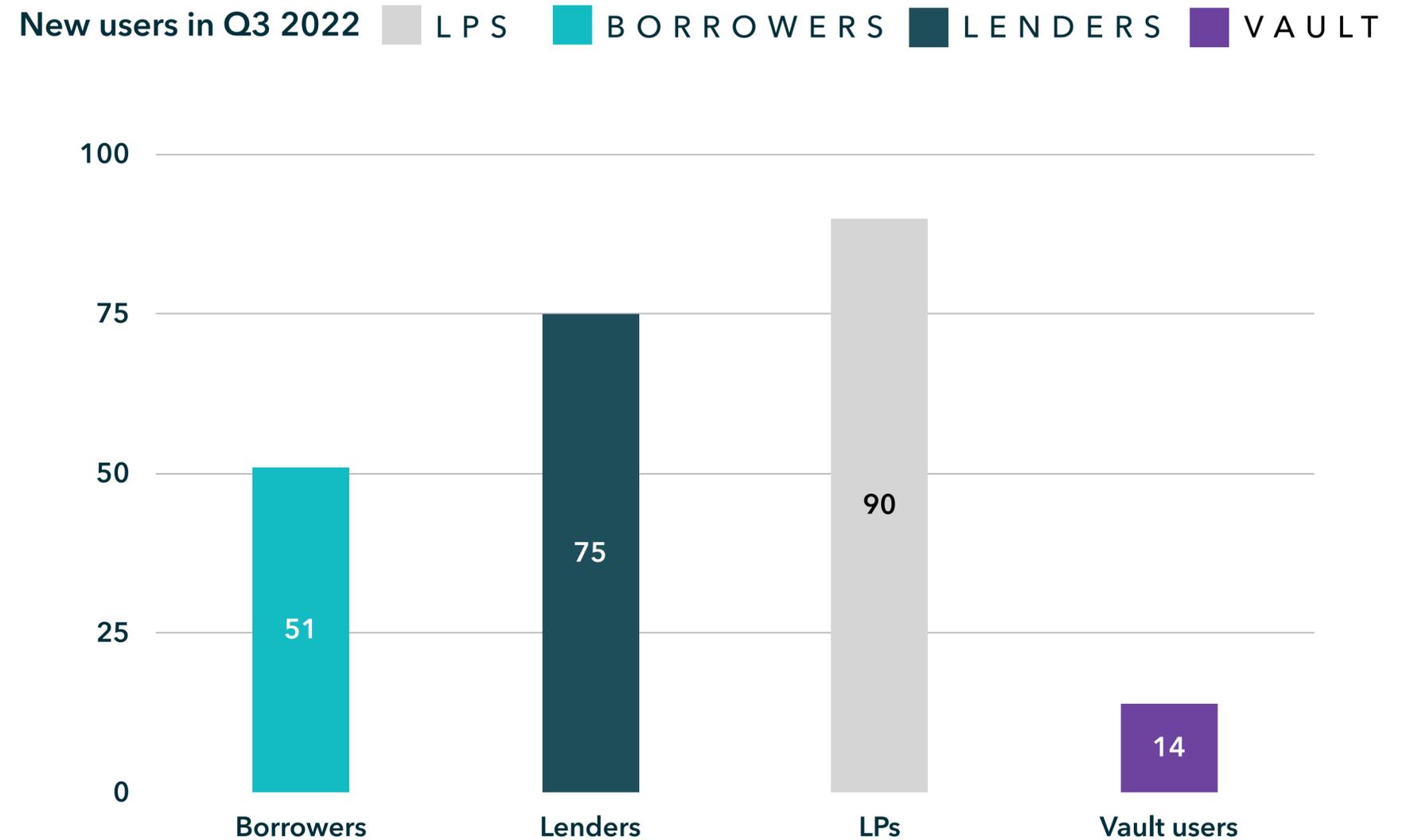
NOTE price range in Q4

USERS

In Q4, 51 new borrowers and 75 new lenders interacted with Notional.

Additionally following the launch of the Balancer-Aura wstETH/WETH leveraged vault in late November we saw 14 new leveraged vault users. The users borrowed ETH at fixed rates to enter the strategy pushing ETH interest rates upwards of 7%.

Additionally, 90 new LPs minted nTokens over the quarter.



TOTAL VALUE LOCKED (TVL)

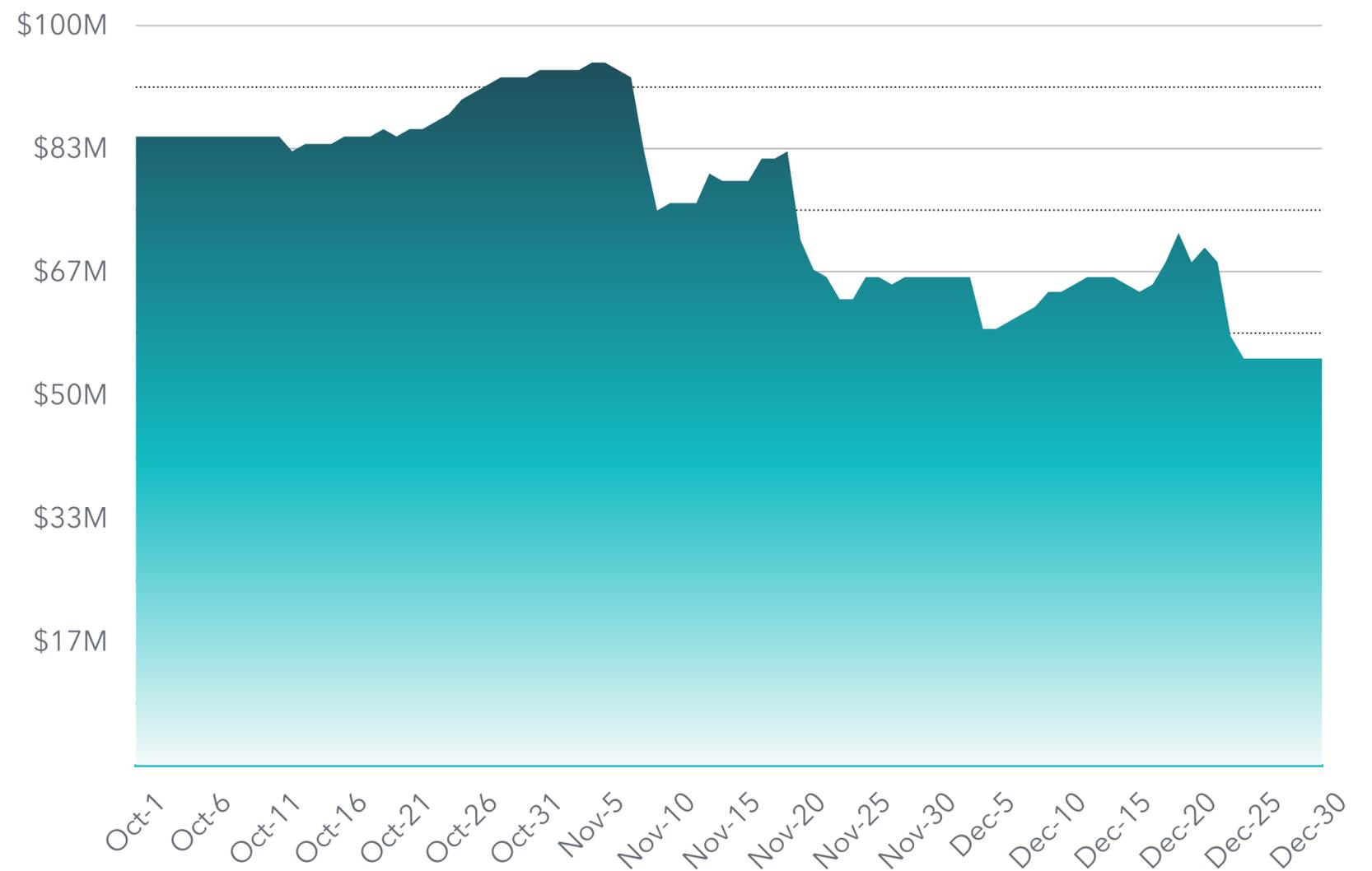
Amidst the market downturn, Notional's TVL was down in Q4 starting the quarter at \$85M and ending it at \$55M.

Notional's TVL remained sticky after a -10% reduction in NOTE incentives in early October. TVL was mainly affected due to market events in November.

We anticipate that the launch of additional leveraged vaults will, over time, increase trading fees for LPs, in turn increasing nToken returns. Sustainable nToken returns will contribute to maintaining sufficient liquidity in trading pools, stabilizing the protocol's TVL.

Additionally listing new markets in 2023 should also have a positive impact on TVL.

Notional Total Value Locked (TVL) - Q4 2022



TRADING VOLUME

In Q4, Notional facilitated \$60M in total trading volume.

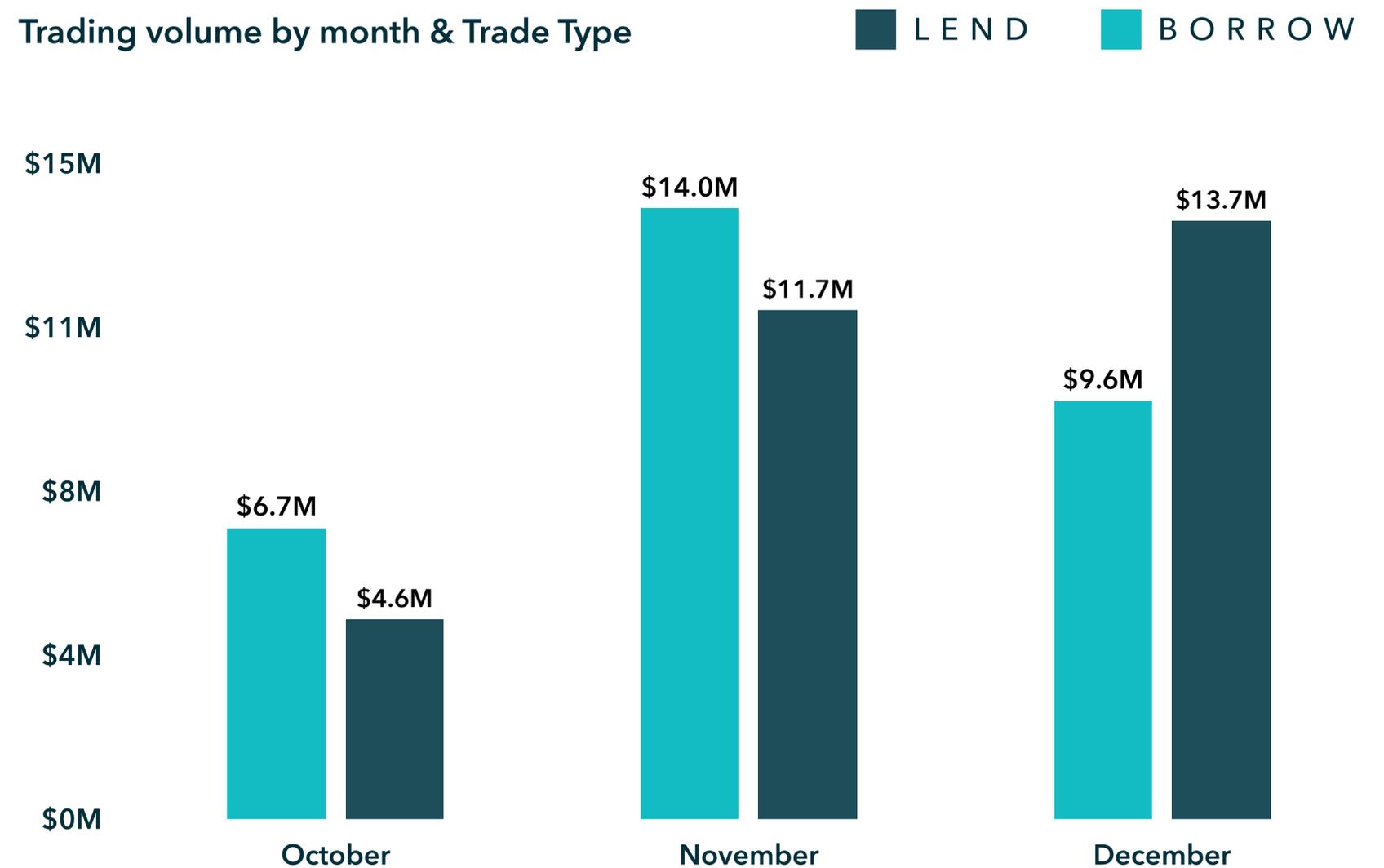
Trading volume was particularly strong in November due to the launch of the Balancer-Aura wstETH/WETH leveraged vault strategy.

Notional facilitated \$11M of volume in October, \$26M in November, and \$23M in December.

Overall trading activity was evenly split 50/50 between lenders and borrowers.

We anticipate that the launch of additional leveraged vault strategies and the addition of new markets will have a positive impact on trading volumes over the coming quarters.

Trading volume by month & Trade Type



TRADING VOLUME

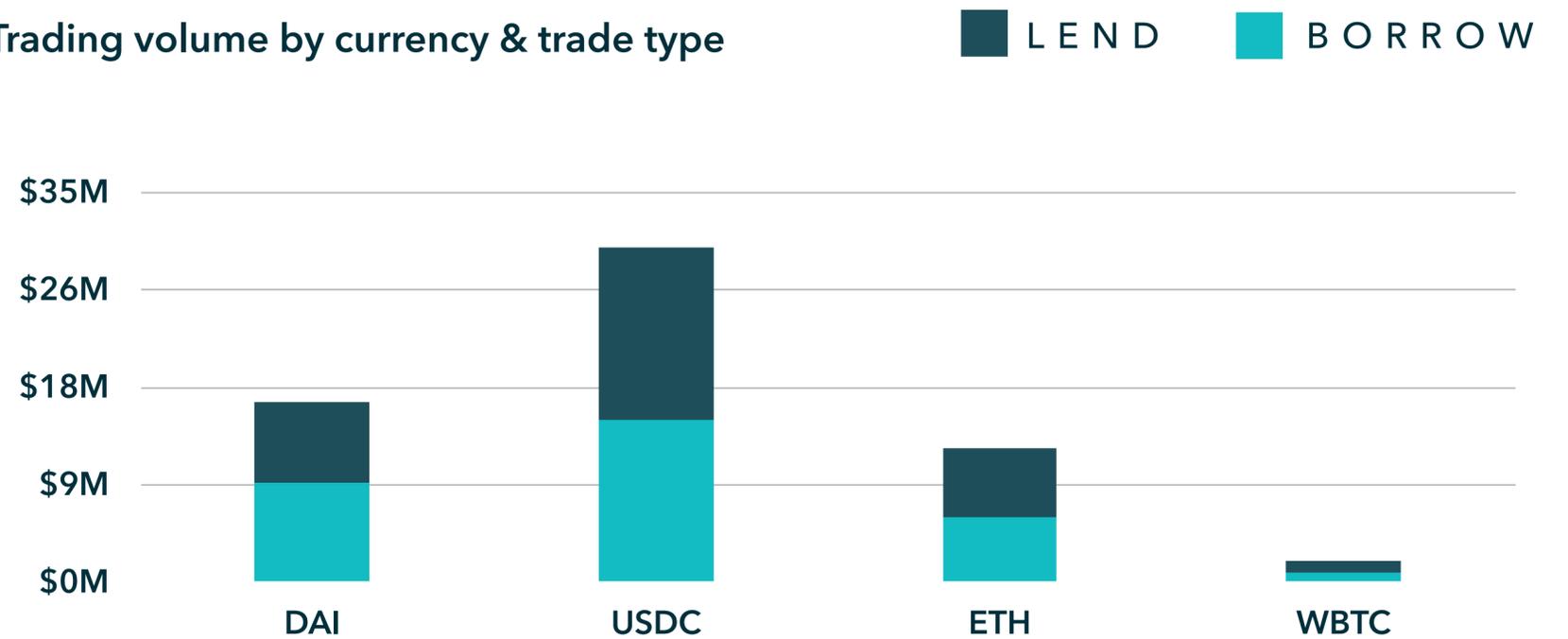
Of the \$60M in trading volume, 50% came from fUSDC trading, 27% from fDAI, 3% from fWBTC, and 20% from fETH.

The proportion of ETH trading volume was up in Q4 due to the borrowing activity of leveraged vault users. In Q4 we also saw Yearn starting to lend in the fETH 3 Month market. We expect fETH markets to continue to represent a higher proportion of Notional's trading volume in 2023.

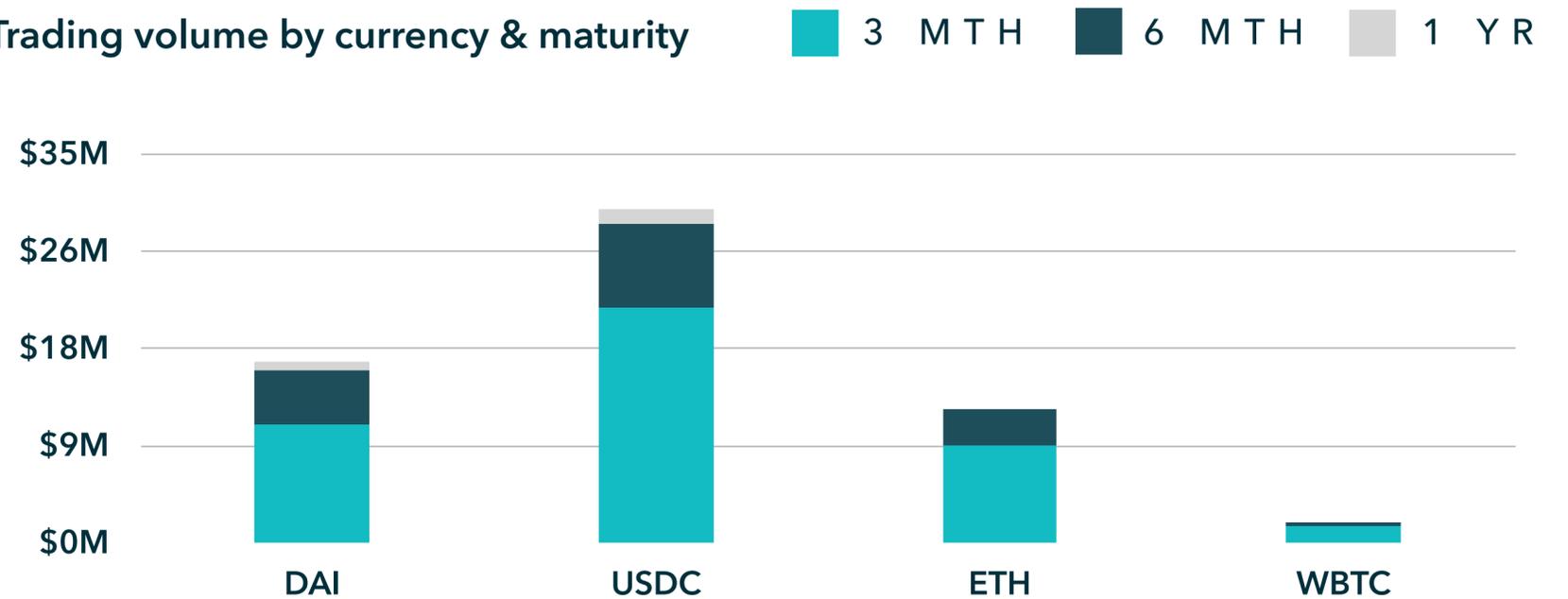
70% of trading activity was executed in 3 Month pools, 27% in 6 Month pools, and 3% in 1 Year pools. This clearly denotes that users have a preference for shorter term maturities when markets become more volatile.



Trading volume by currency & trade type



Trading volume by currency & maturity

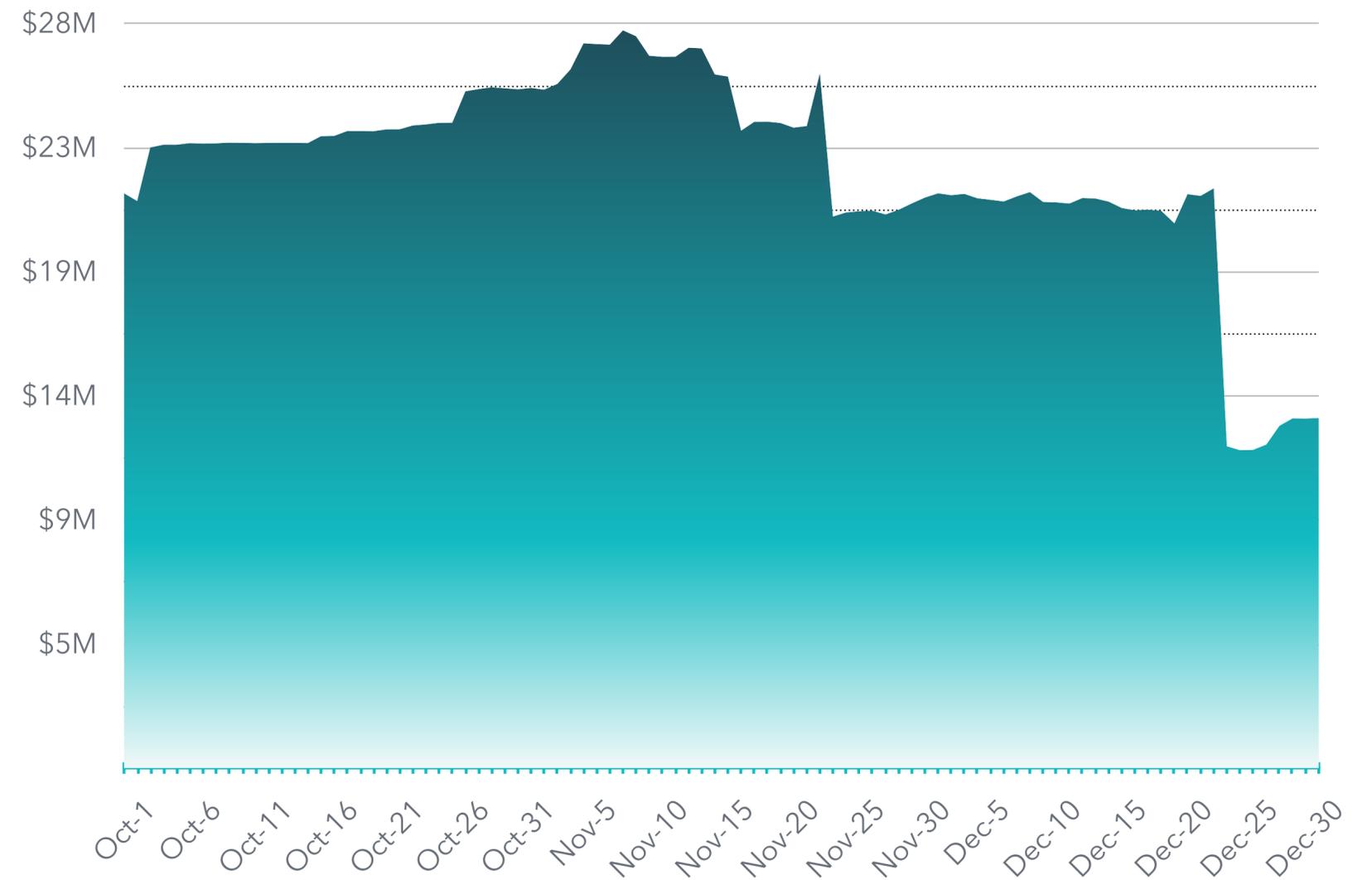


OPEN BORROW

In Q4, the protocol's outstanding open debt positions decreased from \$21M to \$13M. Some loans were closed before the December 23rd quarterly roll explaining the decrease in open borrow.

We expect open borrow positions to increase over the upcoming quarters due to the launch of additional leveraged vault strategies.

Open Borrow - Q4 2022



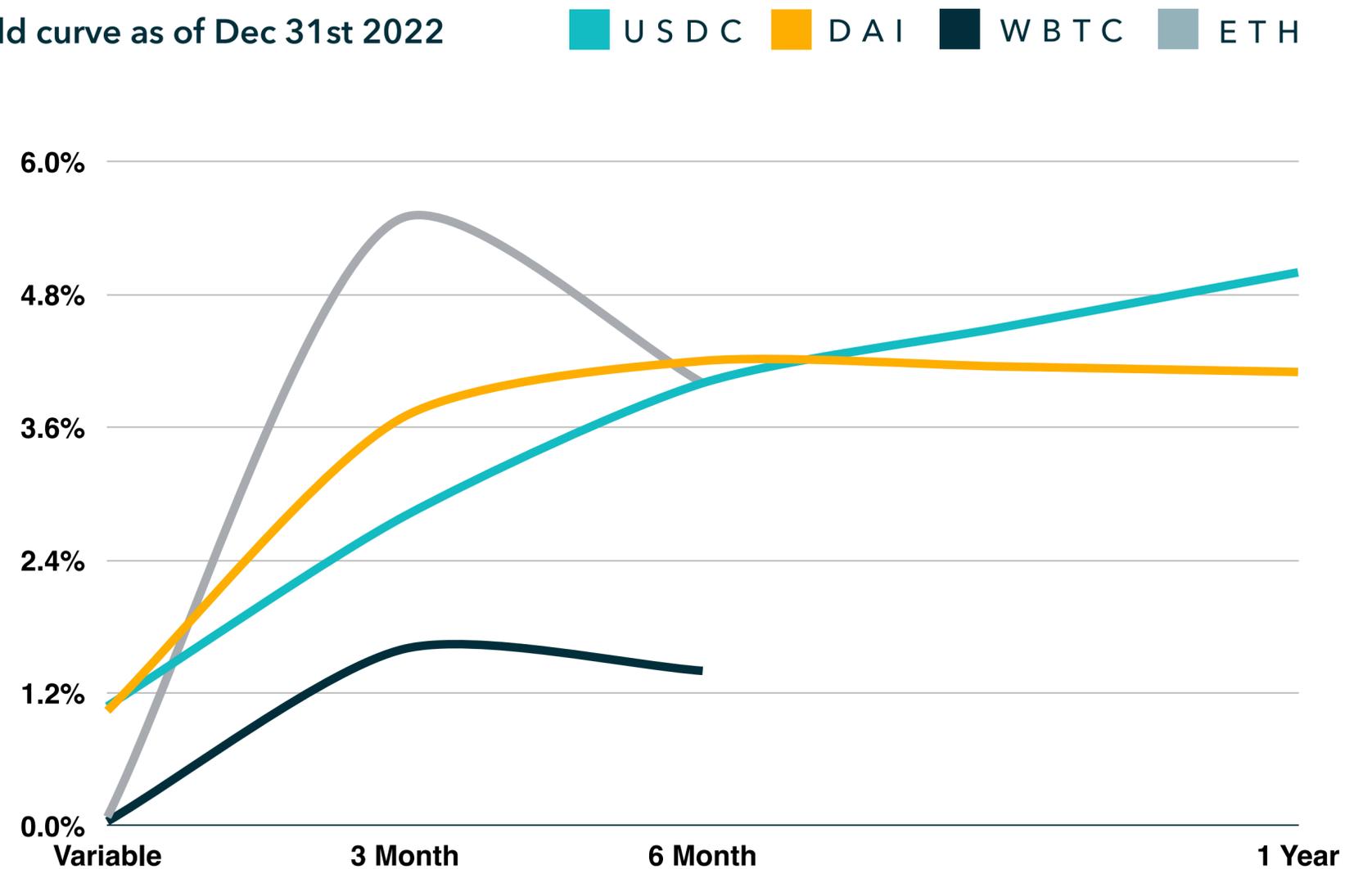
INTEREST RATES

As of December 31st the USDC and DAI interest rate curves were upward sloping allowing users to lend at up to 5.0% on the 1Y. These curves are 100BPS higher than the end of Q3 showing that lenders demand higher rates to lend.

The launch of the Balancer-Aura wstETH/WETH leveraged vault had a significant impact on ETH rates. The 3 month ETH rate increased from 1.6% to 5.5% and the 6 month rate increased from 1% to 4%. The impact leveraged vaults had on rates clearly shows that borrowers are willing to borrow at higher rates if they can enter a yield strategy with the assets they borrow.

Notional rates have remained consistently higher than Compound lending rates in Q4.

Yield curve as of Dec 31st 2022

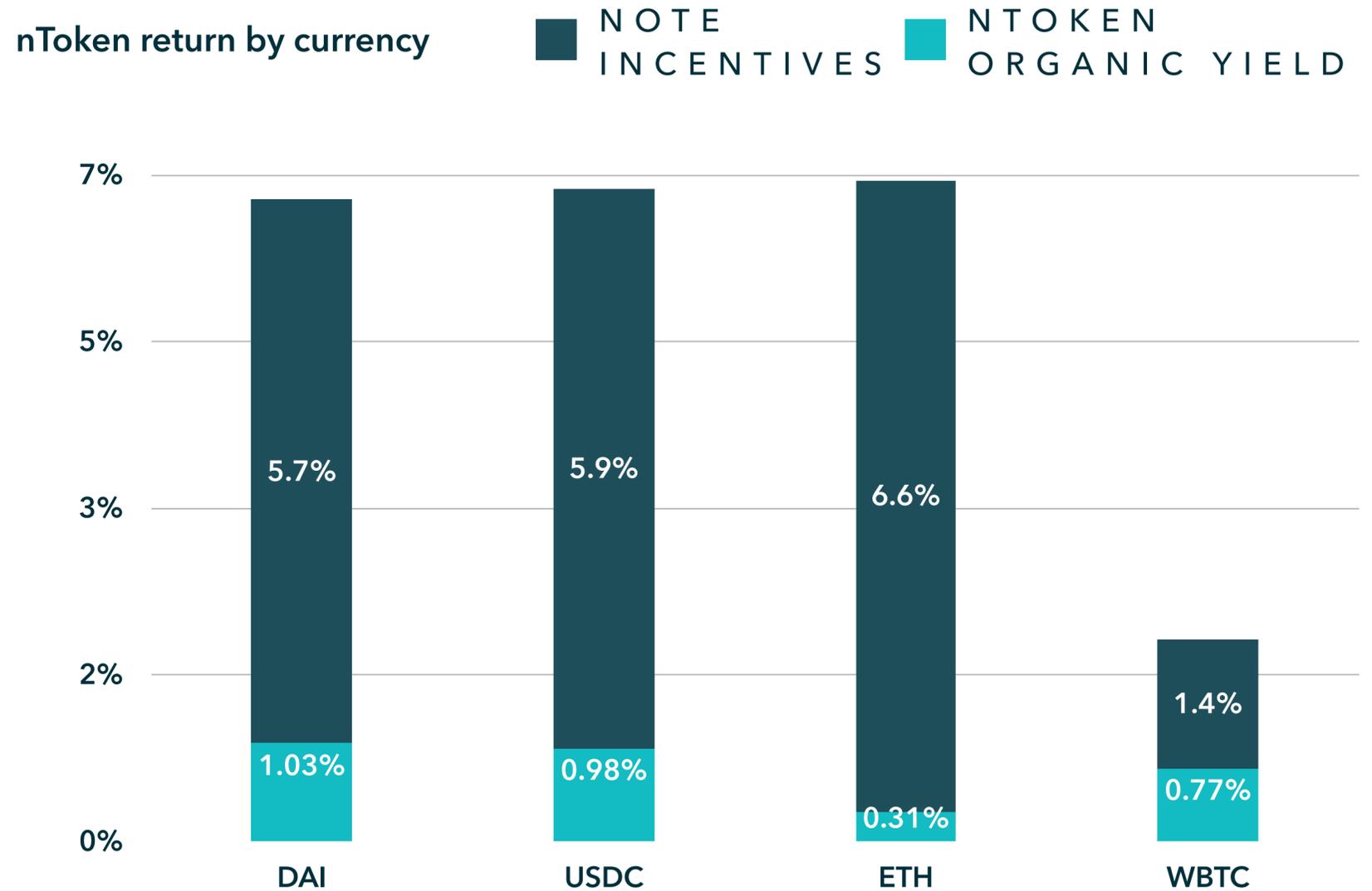


N T O K E N R E T U R N S

nTokens enable LPs to passively earn returns from providing liquidity to Notional across all active pools in a given currency. nUSDC and nDAI annualized returns were 5.9% and 5.7% respectively in Q4.

Organic nTokens yields were up for the quarter with returns of about 1% for stablecoins due to higher Compound supply rates. The nETH organic yield increased due to higher ETH trading fees and a net impact from borrowers.

Going forward we anticipate organic nTokens returns to continue to increase due to higher trading fees from more leveraged vaults. We also have plans to increase the variable yields earned by nTokens in the upcoming Notional v3 release. More details regarding the scope of Notional v3 will be released over the upcoming months.



PROTOCOL REVENUE

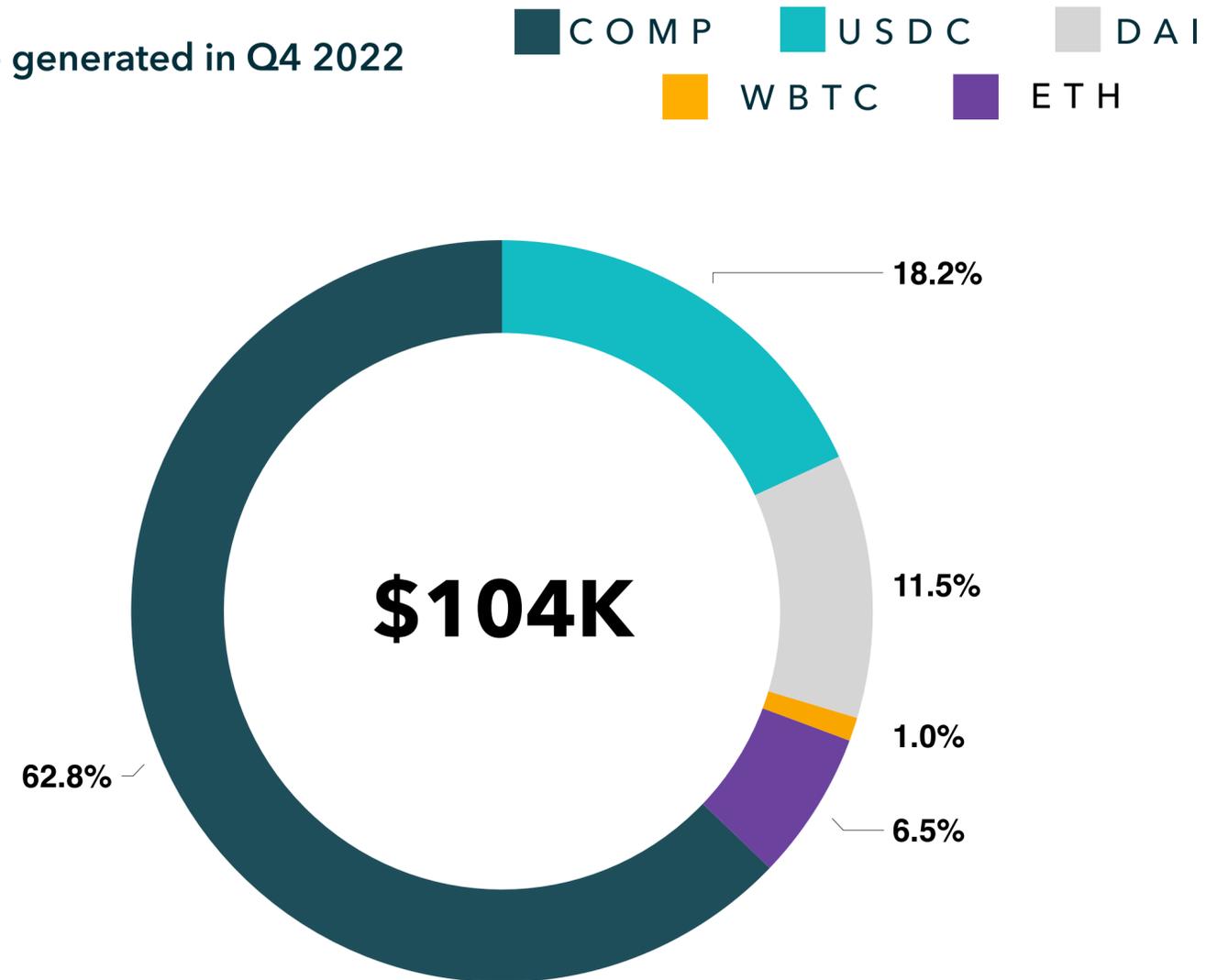
In Q4, the protocol generated \$19K in cUSDC, \$12K in cDAI, \$1K in cWBTC, and \$7K in cETH from transaction fees.

It also accrued ~2,050 COMP tokens or \$65K as of September 30th 2022, for a grand total of \$104K in protocol revenue during the quarter.

Due to the NOTE staking module reinvestment plan, part of the accrued COMP reserves were sold for ETH to the benefit of sNOTE holders.

200 COMP token per week are sold as part of the sNOTE buyback program.

Protocol revenue generated in Q4 2022



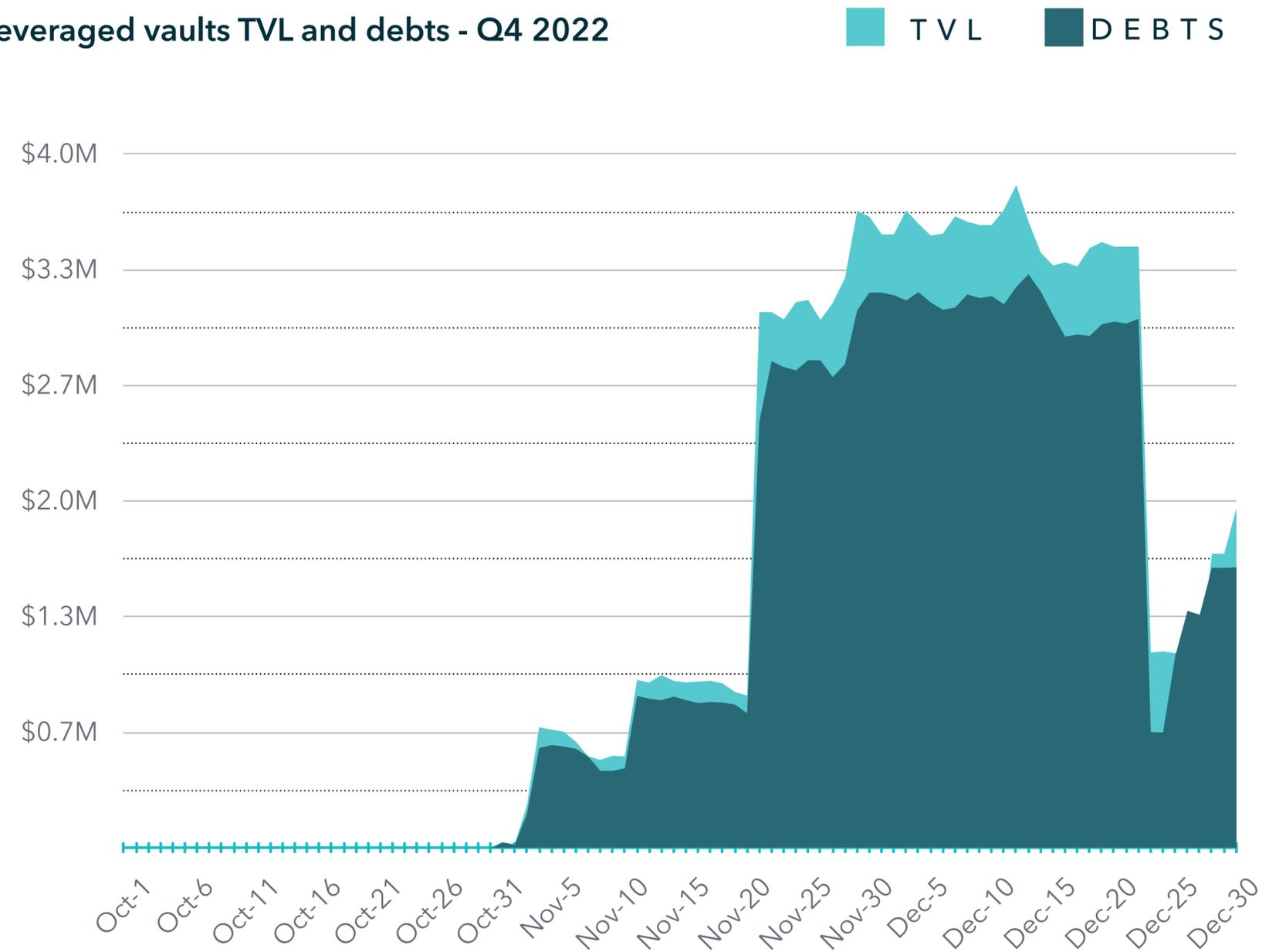
LEVERAGED VAULTS

Notional's first leveraged vault strategy - the Balancer-Aura wstETH/WETH leveraged vault launched in early November in Beta.

At its peak in mid November, 14 leveraged vault users borrowed 2,500 fETH from Notional to deposit in the strategy.

We plan to deploy additional leveraged vault strategies in Q1 2023 as well as decreasing the minimum borrow requirements for the Balancer-Aura wstETH/WETH vault.

Leveraged vaults TVL and debts - Q4 2022



NOTE TOKEN

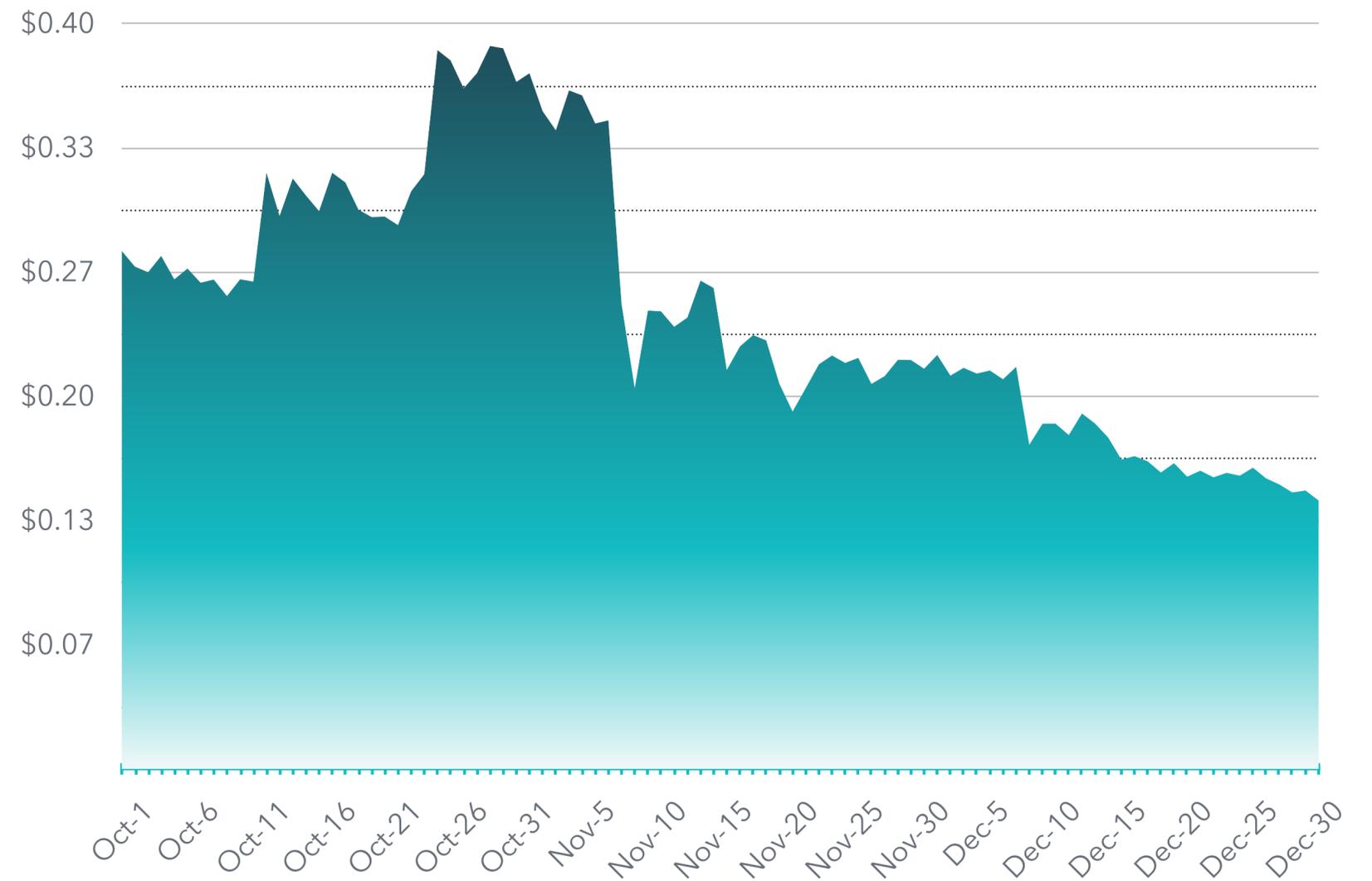
In Q4, the NOTE token price decreased from \$0.28 to \$0.14.

The NOTE token price hit an all time low of \$0.14 at the end of December.

As of December 31st, the NOTE token price implies an FDV of \$14M.

1,474 Ethereum addresses held NOTE tokens at the end of Q4.

NOTE token price - Q4 2022



NOTE STAKING

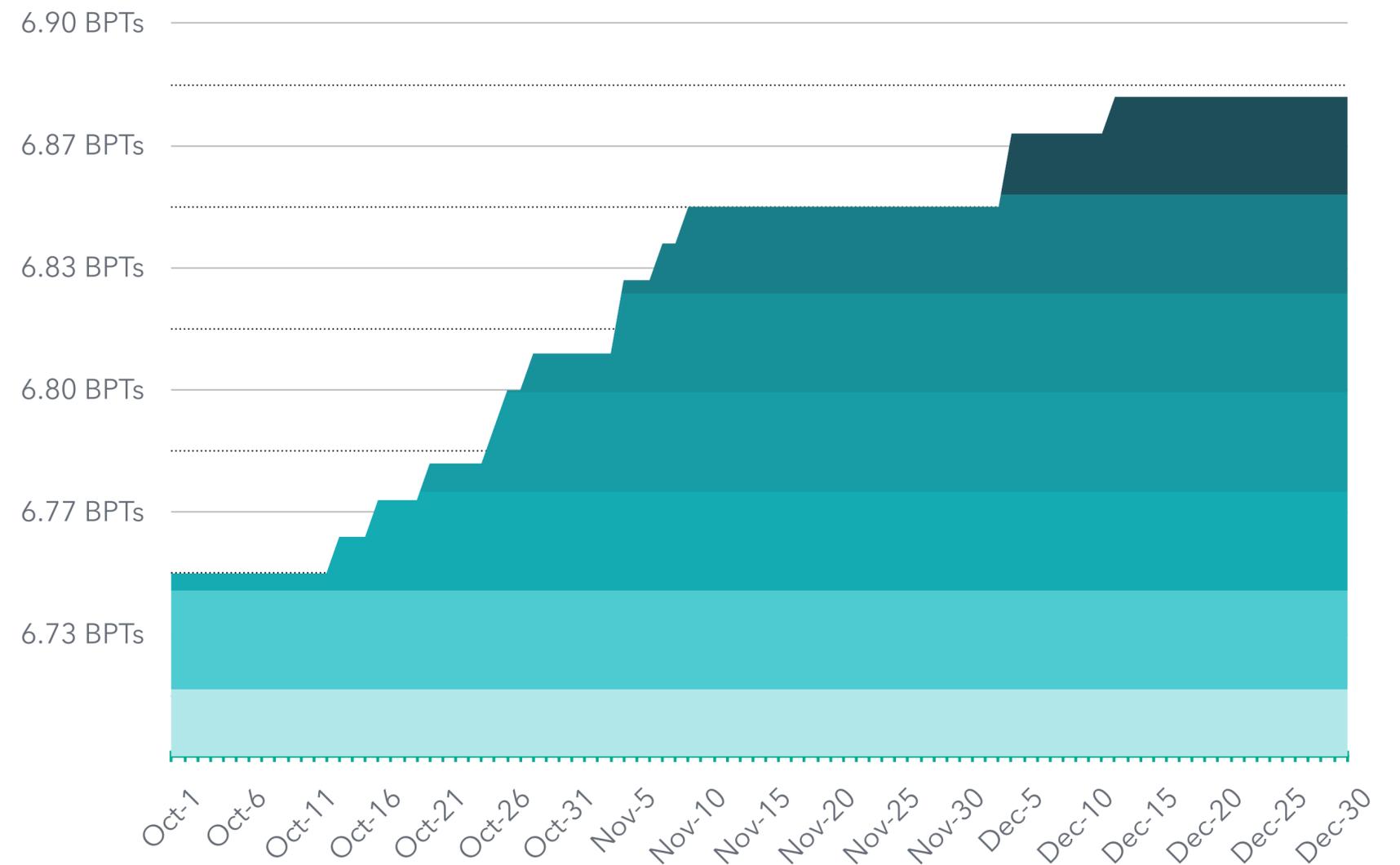
As of December 31st, 11.2M NOTE tokens and 353 ETH were deposited in the NOTE staking module.

Since launch, the treasury manager bought back BPT for sNOTE holders, for a total amount of 350 ETH and 180K NOTE. These ETH buybacks were financed by the treasury manager selling a total of 8,944 COMP tokens.

These buybacks increased the amount of BPTs held per sNOTE from 6.75 BPT per sNOTE in early October to 6.88 BPT per sNOTE as of December 31st. Going forward buybacks will be executed at a pace of 200 COMP tokens per week.

232 Ethereum addresses held sNOTE tokens at the end of Q4, an increase of 6.

Number of BPTs per sNOTE - Q4 2022



UPCOMING DEVELOPMENTS

The Notional core team is currently working on new developments and integrations:

- Launch of new leveraged vault strategies such as the Balancer-Aura Boosted Stablecoin pool strategy
- Addition of new collateral assets and new tradable currencies (ex: wstETH)
- Development and audit of Notional v3
- Contango finance integration

