Twinstake

APR Forecast April 2025

Research Report

April 10th, 2025

by Matan Hamburger and Maksimjeet Chowdhary

In this article, we provide an analysis of the current staking rewards rate for Twinstake-supported crypto assets, offering insights into their performance over the past quarter as well as projections for the next three months. By examining key factors such as staking capitalization, inflation rates, and network utilization, we aim to provide a comprehensive overview of Twinstake's expectations over the coming quarter.

Q1 2025 was a quarter of contrasts. January brought a surge in optimism and on-chain activity amid hopes for a crypto-friendly Trump administration, with Solana's MEV APR hitting a record 3.82%. From mid-February, sentiment cooled as new Trump tariffs emerged, prompting a more cautious market. The rest of the quarter saw key protocol upgrades, validator shifts, and active governance, with modest impacts on staking APRs - MEV on Solana notably declining.

Below is a concise summary of the major staking related developments across the top PoS ecosystems:

Ethereum (ETH)

- Validator count declined from 1.08M to 1.05M before rebounding to 1.07M causing the consensus layer APR to rise slightly from 2.78% to 2.81%.
- MEV APR declined 2 basis points over Q1 due to reduced gas fee pressure following the February gas limit increase (30M → 36M); the APR is currently 0.50%, and we believe it could reach 0.55% by July 2025.

Solana (SOL)

- The inflation APR rose from 7.12% to 7.58%and is expected to reach 7.49% by July 2025, owing primarily to staking flows.
- Jito MEV APR dropped from 3.82% (Jan) to 0.98% (Mar); forecast to recover to 1.30%.

- Key governance updates: SIMD 96 implemented; SIMD 228 (dynamic inflation) failed; SIMD 123 passed and moved to development.

Injective (INJ)

- The staking APR increased by 85 bps owing to the decline in the staking ratio from 61.8% to 52.4% during Q1 and is forecast to recover to 55.0% in Q2.
- The staking APR is expected to rise slightly from 11.89% to 11.95% by Q3 2025 due to reducing staking ratios, offset by the implementation of INJ Tokenomics 3.0.

Toncoin (TON)

- Total stake increased from 630M to 720M TON and we forecast it to reach 740M by July 2025.
- The staking APR trended slightly downward from 5.23% to 4.64% in Q1 and is projected to remain at similar levels in Q2.

Mantra (OM)

- The validator count rose from 23 in January to the current 29 validators, while the staking ratio rose from 27.5% to 31.4%.Concurrently, the APR declined from 6.18% to 5.42%; forecast 5.24% by Q2 end.
- Continued validator onboarding could exert further downward pressure on staking yield, whilst improving the decentralization and adoption of Mantra.

Q1 highlighted growing network maturity, with steady progress in inflation reviews and validator decentralization. Despite late-March ETF outflows triggered by Trump's tariffs, staking market caps held steady, with slight declines in ETH and SOL. We expect Q2 will be shaped by the upcoming Pectra and shifting global sentiment.

ETH

The Ethereum ecosystem has come under scrutiny in recent months due to its poor price performance over the past year, lagging behind Bitcoin and Solana's performance. However, the development of Ethereum has continued, with the latest hardfork, Pectra, poised to become active on mainnet on the 7th May 2025. This upgrade will bring significant changes to the staking mechanics, including the ability to compound staking rewards and increase the maximum balance on a single Ethereum validator. For full details of the impacts of this upgrade, have a look at our comprehensive report, 'Ethereum Pectra Upgrade: The Impact on Institutional Staking.'

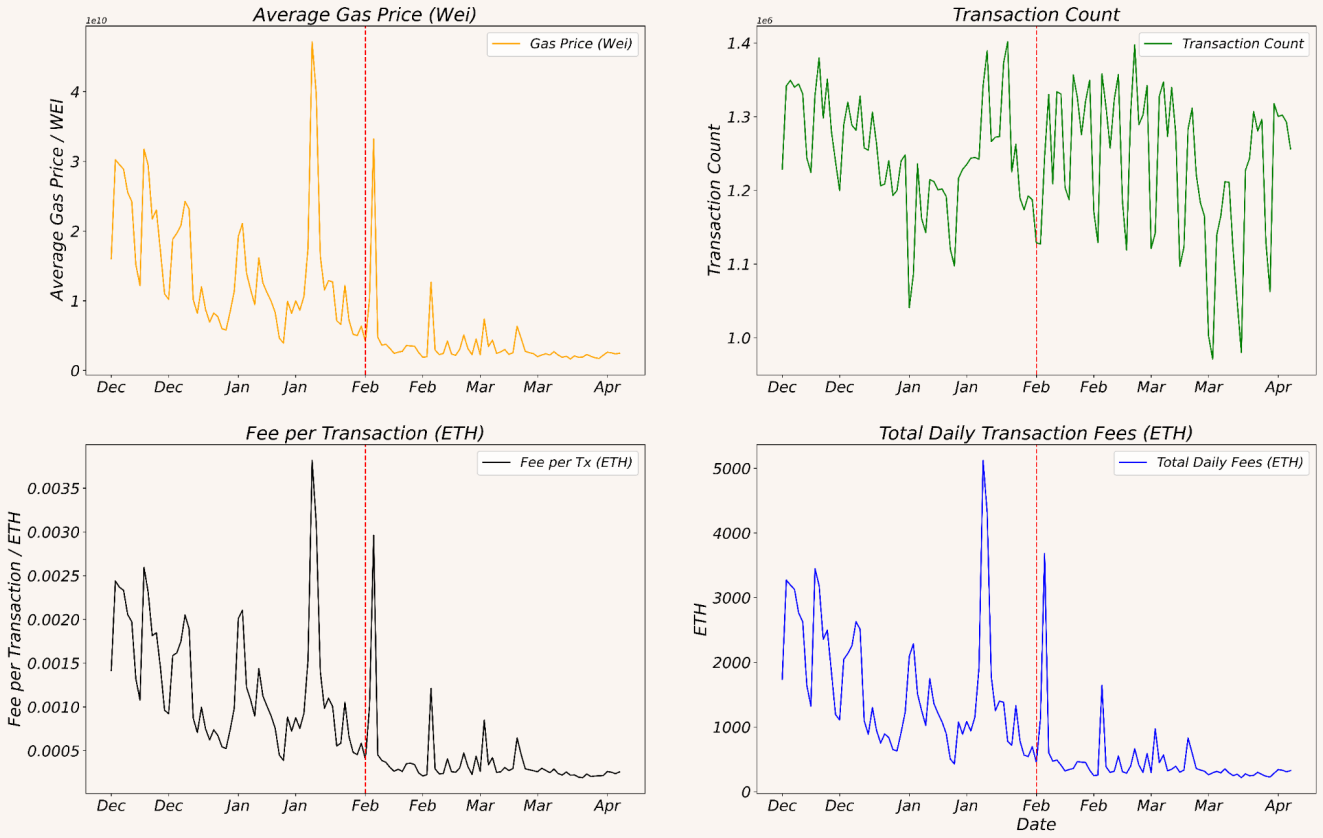
Additionally, an important upgrade occurred on February 3rd, when the gas limit per block increased from 30M to 36M. Importantly, this impacts the calculation of gas fees spent by users and the yield extracted by MEV strategies.

Ethereum calculates gas fees for a transaction using the following formula:

$$\text{Fee} = \text{Units of Gas Used} * (\text{Base Fee} + \text{Priority Fee})$$

The priority fee is set by the user when sending the required transaction, however the base fee is a dynamic protocol parameter which is adjusted based on network congestion. Network congestion is assessed by observing the amount of gas used in the previous block. If the previous block's gas usage is higher than the target gas usage for the block, the base fee will increase. The target gas usage is defined as half of the max gas limit. Therefore, the increase in max gas limit actually increases the target gas usage per block, and will result in lower transaction fees.

The average gas price on Ethereum dropped following the increase in max gas limit per block. The result is a drop in total daily transaction fees, and a reduced yield for Ethereum validators.



The consequence of this is that the gas fees' contribution to the MEV APR reduced, despite network activity (transaction count) staying at similar levels.

Taking a more holistic view of Ethereum's MEV APR, its contribution to the total staking APR remains notoriously difficult to forecast due to its dependence on network conditions. This includes relationships with gas prices, mempool transaction complexity, and unpredictable MEV opportunities like arbitrage, liquidations, and sandwich attacks. In early 2024, MEV APR peaked at around 0.91%, before dipping as low as 0.41% in late 2024. It currently sits at approximately 0.50%.

The consensus layer APR on Ethereum is primarily driven by the number of active validators. After peaking at 1.08 million on November 3rd, 2024, validator

participation declined through the end of February 2025, reaching a local minimum of 1.05 million. Since then, the count has recovered to approximately 1.07 million validators. As a result, the consensus layer APR has experienced a marginal increase from 2.78% to 2.81%.

Looking ahead, we anticipate a modest increase in MEV APR to 0.55% by the end of Q2, driven by a rebound in on-chain activity. The consensus layer APR is likely to remain at similar levels.

SOL

Q1 2025 saw the Solana staking ratio decline from 66.0% to 64.3%, largely due to market rotation and increased liquidity demand. Toward the end of February saw the steepest decline in total staked Solana, reducing by 25M SOL to a low of 372M staked SOL. This occurred around the same time as the highly anticipated unlock of the Solana in the FTX estate. It is likely that many institutions unstaked during this period, to increase liquidity around the event. The staking ratio recovered during the second half of March and we expect the recovery to continue through Q2, with staking rates expected to stabilize at around 65.0%.

On the MEV side of things, the Jito APR dropped significantly from a January 2025 peak of 3.82% to 0.98% by the end of March. This decrease reflects a broader lull in network activity, reducing transaction fees and the frequency of arbitrage and liquidation opportunities. Nevertheless, we foresee a gradual recovery in Jito yields, potentially reaching 1.30% by Q3 2025, assuming market activity picks up and on-chain volumes normalize.

In addition to the staking APR trends, Q1 was a significant period for Solana's governance. Two critical Solana Improvement Proposals (SIMDS) were voted on, and a long awaited proposal was implemented:

SIMD 96

Voted on: 18th-27th May 2024

Outcome: Passed

SIMD 96 was voted on in early 2024, and proposed to direct 100% of priority fees to validators producing blocks. Previously, only 50% of these fees were passed on to validators, with the remaining 50% being burnt. The impact of the improvement is to reduce gas fees on Solana by incentivising validators to include transactions with smaller priority fees, given that they will now receive 100% of these fees.

This SIMD was implemented on 13th February 2025, and is live on Solana.

SIMD 228

Voted on: 8th-14th March 2025

Outcome: Failed

The proposal suggested transitioning Solana's fixed token emission schedule to a dynamic, market-driven mechanism that adjusts based on staking participation rates. When staking participation is high, SOL issuance would decrease, leading to lower staking rewards. This approach aimed to minimize SOL issuance to the minimum necessary amount required to secure the network, thereby reducing inflation and its associated drawbacks, such as increased selling pressure and potential centralization of ownership.

The impact would have caused a significant reduction in inflationary rewards reducing the total staking APR to around 3-4%. Despite the proposal failing, it was highly debated and grabbed the attention of the whole Solana community. 74% of the total staking power voted on the proposal, with 61.4% of the (no+yes) votes voting in favour- missing the 66% support needed for the proposal to pass.

SIMD 123

Voted on: 8th-14th March 2025

Outcome: Passed

This proposal will introduce an opt-in mechanism allowing validators to set commission rates on block rewards, with the remaining rewards automatically distributed to delegators each epoch. The intent is to improve transparency, eliminate off-chain reward distribution, and enhance security by enabling validators to collect rewards using multisig or cold wallets.

This proposal was voted on by 57% of the total voting power, and passed the vote with 75% of the votes in favour. The proposal now goes into development stages, which may take several months to complete.

INJ

INJ's staking ratio dropped significantly from 61.8% in Q4 2024 to 52.4% by the end of Q1 2025 resulting in an increase in the staking APR from 11.04% in January to its current value of 11.89%. We expect a partial recovery to approximately 55.0% by the end of Q2, as the wider crypto markets recover from the global market volatility in the wake of Trump's ongoing tariffs.

The INJ tokenomics 3.0 upgrade continues to be implemented, and will further reduce inflation from 8.875% to 8.5% in the coming weeks. The impact this reduction has on the staking APR is expected to be offset by the increased staking ratio, resulting in the potential for a slight increase in the staking APR from 11.89% to 11.95%.

TON

Staking participation on TON has steadily increased, rising from 630 million TON in Q4 2024 to 720 million by the end of March 2025. We project this could further climb to 740 million TON by July.

At the same time, average daily network fees have decreased by over 40% to 7,000 TON during Q1 2025, which is likely a temporary dip due to lower transaction demand. Assuming usage picks up again, fees may return to prior levels, maintaining the protocol's staking reward attractiveness.

Accordingly, we forecast a rather stable APR, with only a slight drop from 4.64% to 4.62%. For a more detailed assessment of staking reward rates and trends on TON, see Twinstake's recent research piece here[1].

MANTRA

During Q1 2025, the Mantra network saw an increase in the number of active validators, rising from 23 to 29. This expansion of the validator set contributed to a notable increase in the staking ratio—from 27.51% at the start of the year to 31.4% by the end of March.

This trend suggests a growing level of validator participation and network security. However, the staking APR declined from 6.18% in January 2025 to its current value of 5.42% as more tokens were staked. Looking ahead, if the validator set and total stake continue to grow, we may see a further slight reduction in APR. Our forecast places the staking yield at approximately 5.24% by the end of Q2 2025.

The dynamics on OM remain challenging to forecast with precision, as validator expansion may not occur linearly and is largely at the discretion of the Mantra foundation. Nevertheless, the network's healthy validator growth indicates continued confidence in the protocol's staking mechanism, and appetite to participate in securing the network.

For Twinstake's comprehensive staking APR projections on some of our key chains are presented on the next page.

[1] https://www.twinstake.com/reports/unlocking-the-trends-insights-into-ton-staking-rewards

Asset	Current staking APR	Forecast APR At end of Q2 2025	Main Drivers
APT	6.80%	6.80%	No significant changes expected
ATOM	19.44%	20.21%	The staking rate increased from 54,0% to 58.2% during Q1, and we anticipate a slight reversal taking the staking rate to 56.0%.
AVAX Staking period 14 days / 1 year	5.83% / 6.94%	5.69% / 6.74%	Increasing circulating supply set to reduce staking rewards, a function of the remaining supply.
DYM	3.43%	3.94%	The staking rate on DYM reduced by a 1/10th in Q1 and is currently at 50.2%. When the staking ratio drops below 50.0%, the inflation rate will start climbing. We expect the staking rate to continue its reduction to 46.5% and the inflation rate to increase slightly.
ETH	2.81% - CL 0.50% - MEV	2.80% - CL 0.55% - MEV	We expect a slight increase in the amount of staked ETH from 34.1M to 34.4M. An uptick on on-chain activity is possible given it is currently rather low, boosting MEV APRs to around 0.55%
INJ	11.89%	11.95%	Since Q4 2024, the staking ratio has dropped from 61.8% to 52.4%. During Q2 2025, we believe this may recover to 55.0%. The inflation rate is also expected to drop from 8.875% to 8.5% in line with INJ Tokenomics 3.0.
POL	4.16%	4.23%	Little changes expected. <2% increase in total stake possible.
NEAR	9.85%	9.85%	Little change expected
OM	5.42%	5.24%	The number of active validators on OM has increased from 23 to 29 over Q1, resulting in an increased staking ratio- 27.51% to 31.4%. A continued increase in validators and stake is expected, although this is difficult to predict.
SOL	7.58% - Inflation 0.98% - Jito	7.49%- Inflation 1.30% - Jito	Drop in staking ratio from 66.0% to 64.3% in Q1 is expected to reverse with staking rates stabilising at around 65% by end of Q2 2025. Jito MEV dropped significantly from its peak of 3.82% in Jan 2025 and now sits at 0.98%. We expect this to climb back to 1.3% by Q3.
TIA	11.51%	11.23%	Staking rate dropped by 8.2% to 59.34%. We expect Q3 to see renewed staking interest bringing the staking ratio to around 61.2%
TON	4.64%	4.62%	The total stake on TON continued to climb from 630M TON in late Q4 2024 to 720M at the end of March 2025, it is possible for this to further rise to 740M by July 2025. Additionally, network transactions fees reduced by over 40% (currently 7,000 TON daily), although we anticipate that this is temporary.
XRD	6.80%	6.56%	Total stake increased by 200M during Q1 2025, reaching 4.6B XRD. Similar increases are expected during Q2.

The projected APR estimates are the result of a combination of mathematical forecasting, expertise regarding upcoming network upgrades, insights into the network's current state, and Twinstake's qualitative opinion. For further information regarding how staking works, or for additional information regarding the networks supported by Twinstake, reach out to us at info@twinstake.io.

About Twinstake Twinstake is the premier non-custodial staking provider for institutional clients, providing premier service and maximum performance to our clients. Twinstake offers extensive asset support, easy integration with custodial partners, a comprehensive approach to compliance and reporting, and the ability to build custom products to support our clients needs. To learn more about how Twinstake can support your crypto asset staking needs, please contact us at info@twinstake.io or speak to your Twinstake Customer Success Manager.