MarketVector™ Figment Ethereum Staking Reward Reference Rate Index FAQ

The MarketVector™ Figment Ethereum Staking Reward Reference Rate Index (STKR) measures the annualized rate resulting from staking ETH on Ethereum. The Rewards Rate encompasses rewards from all activities on the Consensus Layer, including block proposals, attestations, sync committee, slashing reporting and the Execution Layer, including priority transaction fees and MEV. Penalties incurred from slashing are automatically deducted.

The following are Frequently Asked Questions (FAQ) to provide deeper insights into STKR, the uniqueness of MarketVector's approach, and the benefits our methodology.

For further details, please refer to the Index Guide or contact index-support@marketvector.com

What is Staking?

Staking as a source of rewards

Stakers, or holders of ETH, stake ETH to validators, who propose and attest to new blocks on the Ethereum blockchain on behalf of the staker. The action of staking validates new transactions and codifies the historical provenance of the blockchain. In return, stakers receive newly minted ETH as well as the transaction fees contained within the block. Staking is the exclusive method to earn newly issued ETH.

All attesting validators are rewarded with newly issued ETH every epoch, which is roughly 6.4 minutes. Validators are also rewarded with the priority transaction fees included in the blocks they propose. Though the rewards are technically earned by the work of the validator, they are distributed by the Ethereum protocol and received by the staker's Ethereum wallet.

ETH stakers not only earn rewards but also contribute to making the network more secure. ETH staking participation increases the security of Ethereum because the cost to attack the network also grows as more validators join the network. An attacker would need to control more than one-third of the active validators to attempt to prevent transactions from finalizing on the Ethereum blockchain.

The **MarketVector™ Figment Ethereum Staking Reward Reference Rate** calculates the net rewards obtained after deducting slashing penalties, annualized on a daily basis.

Why consider a Reference Rate Index?

Inclusive Reward Capture: Our off-the-shelf rewards rate captures all on-chain activity, including the rewards earned on both the consensus and execution layer and slashing penalties.

Available Daily: Published at 17:00 GMT daily, including weekends and holidays, to match the continuous nature of digital asset markets.

Standardized Approach: We calculate and publish the Ethereum Rewards Rate to five decimals, aligning with other traditional financial benchmarks such as LIBOR.

> "Off-the-shelf rewards rate captures all on-chain activity."

Customizable: We can build a custom rewards rate based on your needs, whether it be consensus-layer-only rewards, deducting third-party validator fees (off-chain), or focusing on the rewards rate of a subset of validators, such as Figment-only.

How does our partnership with Figment enhance our STKR index?

Our partnership with Figment brings additional expertise and resources but does not restrict our data to their validator set. Together, we ensure that our index covers the entire Ethereum chain, not just a segment of the top providers or an average of the rewards.

What are the key considerations in evaluating difference Index approaches to a reference rate?

Assessing Coverage:

- How broad and diverse is the indexers approach to indexing the Ethereum chain?
- What is the selection criteria?
- What is the quality of the data source?

A true benchmark requires an index that encompasses the entire native staking rate, covering all validators.

Assessing Costs and Customization:

- How transparent is the indexers approach to fee structure?
- How are validators selected?
- How do they deduct fees from the staking rate – is it consistent, considers investor type, and clear?

For both derivatives and general benchmarking, a genuine native rate that includes all validators and excludes costs is essential. Using average costs, which can differ by client type, can create challenges the benchmark is not aligned with investor type. A true benchmark must accurately assess whether one is outperforming or underperforming the relevant "staking market".

> "Fees should be customizable based on client preference, not a default assumption. This flexibility is key in catering to diverse client needs."

MarketVector's STKR is built on top of with Figment's best-in-class Ethereum rewards capture. We recognize that institutions serving different markets have diverse needs, and our index is adaptable to meet those requirements. We can customize many elements of the index, including the capability to rebate invoiced post-facto, maintain the integrity of the reference rate to meet all investor types.

What makes our MarketVector™ Figment Ethereum Staking Reward Reference Rate Index (STKR) comprehensive?

Our STKR index is comprehensive because it includes the entire range of stakers on the Ethereum network. This range encompasses hobbyist stakers, liquid staking protocols, and institutional-grade staking-as-a-service providers. By indexing 100% of the Ethereum chain, we ensure no part of the staking landscape is overlooked, providing a complete and balanced view.

How does the inclusiveness of our STKR index benefit investors?

By including all types of stakers, our index offers a true market average. This allows investors to accurately assess whether they are performing above or below the market standard. It's essential for a benchmark to reflect the whole ecosystem to offer a meaningful comparison.

Why is on-chain data crucial for our STKR index?

On-chain data ensures transparency and accuracy. Since staking rewards on Ethereum are all on-chain, there are no subjective variations in quality or value. This means our STKR index accurately reflects the real rewards being distributed across the entire network.

Does ETH staking rewards decrease as more people stake?

It depends.

On a network-wide basis, CL rewards, which are awarded for actively validating and proposing blocks, increase as the number of active validators increases. However, on a per-validator basis, CL rewards decrease as more active validators participate.

EL rewards are the fees, usually referred to as priority fees or “tips”, paid in Ethereum by users transacting on the network. EL rewards depend on users’ demand for blockspace, or to have their transaction included in a more recent block. In times of high transaction volume, users will pay a premium for the speed at which their transactions settle. Thus, EL rewards are more difficult to predict and dependent on how users are transacting on Ethereum. It is almost a certainty that EL rewards will not remain constant.

How does Ethereum determine the amount of rewards paid out to stakers?

CL rewards are determined by the network and constitute the majority of rewards earned on a consistent basis. CL rewards can be viewed as compensation by Ethereum to validators for running the network. The Ethereum specs can be reviewed to get an understanding of how these rewards are determined.

EL rewards are paid by Ethereum’s users to the validators proposing blocks; these users are paying to increase the chances that their transactions will be included in a block (or more specific outcomes in the case of MEV). Generally, EL rewards are related to demand for blockspace which can vary considerably over time.

What are the biggest risks to consider when staking ETH?

Slashing is the most important risk to consider when staking ETH. Unlike other blockchain networks, slashing has a very specific meaning on Ethereum; it refers to equivocation or double signing. This occurs when a validator is proposing or attesting twice, effectively voting for two versions of the state of Ethereum. Regardless of the validator’s intent, an honest error or malicious, in all instances of double-signing, the validator pays a penalty: A portion of the staker’s ETH is burned, and the validator is removed from actively proposing and attesting to new blocks.

There are specific things that can be done to limit slashing risk, especially when outsourcing to an institutional third-party validator like Figment. The service provider can use remote signing software like Web3Signer to ensure their validators are only attesting once, and have robust insurance coverage to compensate stakers should a slashing event occur.

Figment operates under a "safety over liveness" principle, meaning that they prioritize the reduction of the likelihood and magnitude of double-sign slashing events. Besides operating robust infrastructure, Figment provides its customers with off-the-shelf coverage to further mitigate these staking risks. Figment's Ethereum customers can also opt to purchase additional double-sign slashing coverage through its on-chain coverage partner, Nexus Mutual.

About MarketVector

MarketVector Indexes™ ("MarketVector") is a regulated Benchmark Administrator in Europe, incorporated in Germany and registered with the Federal Financial Supervisory Authority (BaFin). MarketVector maintains indexes under the MarketVector™, MVIS®, and BlueStar® names. With a mission to accelerate index innovation globally, MarketVector is best known for its broad suite of Thematic indexes, long-running expertise in Hard Asset-linked Equity indexes, and its pioneering Digital Asset index family. MarketVector is proud to be in partnership with more than 25 Exchange Traded Product (ETP) issuers and index fund managers in markets throughout the world, with approximately USD 29 billion in assets under management.

As pioneers in 2017, we introduced groundbreaking products, such as our flagship Bitcoin & Ethereum Indexes. Since then, our product offering has only continued to expand and innovate across multi-token, thematic 'category' indexes, fundamental indexes, and staking rewards. Our indexes serve as the underlying foundation for various financial products such as ETFs/ETPs, UCITs, SMAs, as well as derivatives and futures. We can tailor comprehensive index solutions to help you accurately measure, benchmark, and capture performance, giving your ideas an edge in the digital asset market.

To learn more about MarketVector's Digital Assets, please visit our website at marketvector.com

About Figment

Figment is the leading provider of staking infrastructure with billions of dollars of assets staked. Figment provides a comprehensive staking solution for asset managers, exchanges, wallets, foundations, custodians, and large token holders to earn rewards on their digital assets. Figment's institutional staking service offers a point-and-click staking dashboard, portfolio reward tracking, API integrations, audited infrastructure, and slashing protection. Additionally, Figment empowers clients with standardized, accurate data for use cases such as index construction. Figment aims to support the adoption, growth, and long-term success of the digital asset ecosystem.

To learn more about Figment, please visit our website at figment.io

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