Greetings,

As a member of this decentralized community, I want to open a dialogue on the following race condition that unfortunately combined with SGX costs threatens small validators from being able to sustainably

partake in the Secret Ecosystem.

Large validators exist within the ecosystem and have incentive to capture as many delegators as possible. This is not

a nefarious incentive. All validators are chasing the same goal.

The problem arises when a large validator due to economies of scale (having more delegators) are able to sustainably exist with a lower commission rate than smaller validators. Note that this is particularly unique to SGX.

In a non-SGX validator world (all other blockchains) smaller validators can still sustainably compete with larger validators because hardware costs are significantly cheaper than SGX. With the current conditions, large validators are dropping commission rates anywhere from 5% and lower to try to capture as many delegators as possible. While there is a list of validators that are sticking with 10%, these are validators that already are name-brand established, many of whom have contracts on the side with large delegators and aren't concerned about race-to-the bottom conditions, especially when they are on multiple blockchain networks.

For delegators, lower commission rates means a higher return. Which as a delegator is great. Unfortunately, smaller validators are at risk, putting decentralization as a component also at risk. The weight of this dynamic does not entirely rest on the delegators, but (in my opinion) largely on the validators to make sure that there is a sustainable rate established such that smaller validators can exist sustainably even with lower delegator counts.

Validator Return Equation (VRE)

Total Delegators = T

Annual ROI = R

Commission Rate = C

Price = P

VRE = T * R * C * P

This leaves 4 options to help smaller validators.

(1) Increase the price

(2) Increase the Annual ROI

(3) Increase the number of delegators to their node

(4) Increase the commission rate.

Price is in the markets' hands. This is despite the fact that most people here in this community believe in the network long term. Unfortunately, depending on a price increase is not a dependable solution to the problem. We cannot directly control price.

Increasing the Annual ROI (which is currently around 30%) would put into danger tokenomics and inflation.

Increasing the number of delegator to smaller validators is a great concept - but we cannot rely on delegators to choose a small validator with a worse commission rate if we assume running a validator node is a commodity. The "holistic" validator model attempts to offer more than just staking as a service as justification for a higher commission rate.

The problem with this model is the greater the spread between a holistic validator commission rate and the largest players' rates (as large validators race to set lower commission rates to capture influx of delegators) exacerbates the movement of delegators from small validators with higher commission rates to instead choose to stake to large validators with a lower commission rate.

This leaves the final option: create a fixed commission rate floor that is a sustainable rate for all validators.

Who benefits from this? First, the large validators who are participating in a race condition - their return will actually increase. Second, the smaller validators also benefit because operations are then sustainable, and a holistic model becomes more sustainable because the spread between the sustainable rate and the commission rate of choice by the validator is pegged to a fixed floor.

Thus, I would propose a commission rate floor as a possible solution.

While delegators get less return short term, in the long run the ecosystem will:

(a) Be more decentralized

(b) Have a greater contribution from a larger number of actors

(c) Incentivise holistic validator models

All of these benefits will translate to a higher price as the offset (for a delegator) for the cost of a higher commission rate.

All of this assumes this change positively benefits the network greater than the current setup (Marginal Benefit > Marginal Cost).

Ultimately, I would like to start a dialogue on this. Is a commission floor a good idea? What are the alternatives?

Thanks for participating,

Carter Woetzel (Co-Founder of Secure Secrets)

p.s. After some good discussion below, I now think there are potentially better alternatives than a commission rate floor