

This question is particularly interesting for Numerai because the answer is so different from basically any other tech company which would want to grow its userbase at all costs. I've often thought that Numerai shouldn't

want to grow its userbase past a certain threshold. Bringing on certain participants is just bad for the meta-model. There are a bunch of colliding factors that might help weight the pros/cons of greater participation:

- Increasing the userbase increases demand for NMR, increased demand (all else equal) will increase the value of NMR
- Increasing the userbase does not necessarily increase meta-model efficacy
- In the long run, increasing the userbase and then churning out negative contributors may increase meta-model efficacy
- In the short run, increasing the userbase and waiting for negative contributors to churn may decrease meta-model efficacy

The ideal amount of NMR staked in the tourney should be X.

What is the value you assign X, and why?

Who knows? X will be determined by market equilibrium and that's what's so cool about it. All of the factors above will come into play for all of the market participants. Those participants will determine whether they will increase their stake or withdraw their stake based on those pieces and how it effects them at the margin. It will also be constantly changing. And so, like an individual stock price at any given time, it's probably impossible to predict what X should be.

Directionally, it seems easier to predict (also like a stock price). I would say that X should be a lot higher than it is right now. Based on circulating supply of NMR, less than 7% ($393,221 / 5,704,183$) of that supply is being staked right now. The utility of NMR is to stake it and a significant minority of the supply is being staked. Maybe 25% staked tokens to circulating supply is a good target? Maybe 50%?