I’m not really sure where you got the 36% for 5% CORR and 13% for 2% CORR from. By my math, 2% CORR gives a 146% return a year, and 5% gives a 696% return a year. The way I calculated this is to calculate your stake gain at week n, you multiply your CORR by your stake at week n-4, then you calculate your stake at week n as your gain at week n plus your stake at week n-1. Hopefully, those numbers will reassure you for a start.

With regard to what happens if the payout factor only comes in at 1 million NMR staked, I created a spreadsheet a few days ago to forecast when the treasury runs out. I’ve updated it a bit for this question, but this is how it goes with the payout factor coming in at 300k.

[

image

979×927 27.8 KB

](https://forum.numer.ai/uploads/default/original/1X/24c3c84c6dc12f3ffb7aade4b23f1a717650a2ed.png)

So the treasury runs dry in about 6 years assuming we make 69% a quarter.

Here’s what happens when I set the payout factor coming in at 1M.

[

image

973×917 27.3 KB

](https://forum.numer.ai/uploads/default/original/1X/9258d7d0a75308f24ae7780715775798dde3d29e.png)

So the treasury runs dry in 2 years.

It’d be crazy if we did return 69% a quarter, so I’d not worry about how many years it will be until it runs out. But importantly if the payout factor comes in at 1M the treasury runs dry 3 times quicker. So setting it to 1M seems like it might not be healthy for the competition.

Capping staking seems to go against the principles of the competition. The high performer’s bubble to the top with no capping. As demonstrated by the 2% vs 5% example for stake after a year. An average 5% CORR has a stake 5 times larger at the end of the year than someone with a 2% CORR (assuming they had the same stake at the beginning of the year). This is desirable as it means high performers have more weight in the meta-model. If you cap it then in the long term the meta-model will approach equal weighting, which Numerai have already said underperforms the stake weighted model.