Perfect competition model: The perfect competition model requires a large number of buyers and sellers, homogenous goods, no barriers to entry or exit, perfect information (consumers and producers know the utility and quality of the product and the prices) and beside other restrictions no economies of scale/ network effects.

In theory we know that under perfect competition the price of a product equals the marginal cost and the average total cost of a product. As a result a company makes zero profits.

In Ethereum that would mean people would join the market until the staking reward would decline to the minimum cost of running a node. That would probably be good for the network.

My question is how viable is this approach to model staking rewards ? I my opinion it could be compared to the real world markets be very close to perfect competition.

- We have a large number of people that are using the network and paying for that service in form of gas (buyers) and a large number of people running nodes that provide service (sellers)
- We have homogenous goods as every node is running software that does exactly the same (every node provides the same service)
- We have no barriers to entry (this is what ethereum is all about) as there are no restrictions in running a node. Neither there are strong economies of scale (we have linear not exponential staking rewards but there will still be fixed costs in some way).
- We have perfect information in the sense that every information possible is public.

I know that there are other approchaes like people from finance would look at risk and return and would compare it to projects with similiar risk structure (A very hard task though). Nevertheless what might be some strenghts and flaws using this model ?