Dear Uniswap community,

I'd like to share with you our recent research around the Uniswap Fee Switch, i.e. the question whether a fraction of trading fees should go to the protocol and UNI token holders.

## arXiv.org

## The Economics of Automated Market Makers

This paper studies the question whether automated market maker protocols such as Uniswap can sustainably retain a portion of their trading fees for the protocol. We approach the problem by modelling how to optimally choose a pool's take rate, i.e...

## Some takeaways:

- In a perfectly efficient market, the protocol with the lowest take rate (fraction of fees that goes to the protocol) attracts all liquidity. This is an argument against flipping the fee switch.
- In a market where a protocol like Uniswap has a "moat" (due to its high profile and brand), the result is different:
  Assume Uniswap has a fraction of loyal ("sticky") trade volume, i.e. some users will always trade on Uniswap
  regardless of price, e.g. because they don't use or check other DEXs. According to our model, this competitive
  advantage makes it possible for Uniswap to sustainably introduce a non-zero take rate even when competing with zero
  take rate competitors. The model also gives some direction on how high to optimally set the take rate.

(Note that, as with every model, simplifying assumptions are made in the paper.)

To be clear, this is not a recommendation for or against flipping the fee switch.

Instead, we see this as a first step to providing a basis for making an informed decision whether and how to direct trading fees to the protocol.

We hope our research can be helpful to the Uniswap community. If you have any feedback or suggestions for future research, feel free to reach out, also on Twitter <a href="https://twitter.com/robin\_ethz">https://twitter.com/robin\_ethz</a>.