Uniswap — Research Document (06.03.24)

Market

- Uniswap solves one the most basic use case in DeFi: swap tokens permissionlessly.
- Dex in DeFi represents $14.658Bn or 12.68% of the total value locked. (DeFillama)
- Currently, DeFi's dominance in crypto market is 4.5%. From October 2023, there has been a rise from 3.2% to 4.5% ($20Bn)
- Regarding volumes, TVL and fees, Uniswap is respectively standing far ahead in 1st place in DEX market (Tokenterminal)
- Uniswap is clearly the biggest DEX in Ethereum ecosystem: 2.5x TVL than Curve (2nd biggest TVL) and 4x Volumes than 1inch (2nd biggest in Trading Volume).

Product & Competition

- There are some competitors that innovates to offer a better capital efficiency. TraderJoe liquidity book should be more capital efficient for Liquidity providers. Instead of spreading liquidity horizontally like Uniswap, LP can choose to provide liquidity on special prices, in a vertical manner. This implies also no slippage (if trade stay in liquidity bin)

  https://coinmarketcap.com/academy/article/what-is-trader-joe-liquidity-book-dex

  https://joecontent.substack.com/p/liquidity-book-making-liquidity-composable
- Very easy UX to start with. Trade and Liquidity pools are directly on website.

  https://app.uniswap.org/swap
- Uniswap Extension will enable to swap, sign transactions, and send or receive crypto anywhere on the web.

  https://twitter.com/Uniswap/status/1762494099637088285
- Their main competitors are 1inch, Curve and Pancakeswap. However, Uniswap still the first regarding Token Value Locked and trading volume with barely the triple of the 2nd in TVL and trading Volumes.

  https://tokenterminal.com/terminal/markets/exchange

Value Creation / Traction

Current Uniswap datas

- Date: 04/03/2024
- Price: 12.93$
- Current Token Value Locked: 5,403,566,809.7$
- Current Cumulative Volume (365d): 445,467,955,773.59$
- Current circulating marketcap: 7,741,658,290.2$
- Current fully diluted marketcap: 12,916,433,587$

- Cumulative fees generated by Uniswap v3 over the last 365d: 515,000,000$

- Cumulative volume by Uniswap v3 over the last 355d: 390,504,000,000$

- Current ratio between fees and volumes: ratio = fees / volumes = 515,000,000 / 390,504,000,000 = 0,001388 ~ 0.1388 %

Protocol fee: 10% of Uniswap v3 fees

- **Impact:**
  - TVL = [4.25%-14.79%]
  - Volume = [0.22%-1.44%]

- **Annualized Revenue:**
  - 10%*Volumes*(100%-lower_impact)*0.1388% =10%*390,504,000,000*(100%-0.22%)*0.1388% = 54,082,710.899$
  - 10%*Volumes*(100%-upper_impact)*0.1388% =10%*390,504,000,000*(100%-1.44%)*0.1388% = 53,421,447.045$

- **P/F (marketcap/annualized fees):**
  - Circulating:
    - lower_impact = 7,741,658,290.2$/540,827,108.986$ = 14.31
    - upper_impact = 7,741,658,290.2$/534,214,470.451$ = 14.49
    - mean = 14.4
  - Fully diluted:
    - lower_impact = 12,916,433,587$/540,827,108.986$ = 23.887
    - upper_impact = 12,916,433,587$/534,214,470.451$ = 24.178
    - mean = 24.03

- **P/S (marketcap/revenue):**
  - Circulating:
    - lower_impact = 7,741,658,290.2$/54,082,710.899$ = 143.145
    - upper_impact = 7,741,658,290.2$/53,421,447.045$ = 144.916
    - mean = 144.03
  - Fully diluted:
    - lower_impact = 12,916,433,587$/54,082,710.899$ = 238.827
    - upper_impact = 12,916,433,587$/53,421,447.045$ = 241,783
    - mean = 240.30

Protocol fee: 20% of Uniswap v3 fees

- **Impact:**
  - TVL = [28.46%-28.83%]
  - Volume = [0.41%-4.12%]

- **Annualized Revenue:**
  - 20%*Volumes*(100%-lower_impact)*0.1388% =10%*390,504,000,000*(100%-0.41%)*0.1388% = 107,959,454.367$
  - 20%*Volumes*(100%-upper_impact)*0.1388% =10%*390,504,000,000*(100%-4.12%)*0.1388% = 103,937,669.292$

- **P/F (marketcap/annualized fees):**

- - Circulating:
    - lower_impact = 7,741,658,290.2$/539,979,271.837$ = 14.337
    - upper_impact = 7,741,658,290.2$/519,688,346.458$ = 14.897
    - mean = 14.612
  - Fully diluted:
    - lower_impact = 12,916,433,587$/539,979,271.837$ = 23.920
    - upper_impact = 12,916,433,587$/519,688,346.458$ = 24.854
    - mean = 24.387
- **P/S (marketcap/revenue):**
  - Circulating:
    - lower_impact = 7,741,658,290.2$/107,959,454.367$ = 71.709
    - upper_impact = 7,741,658,290.2$/103,937,669.292$ = 74.484
    - mean = 73.097
  - Fully diluted:
    - lower_impact = 12,916,433,587$/107,959,454.367$ = 119.642
    - upper_impact = 12,916,433,587$/103,937,669.292$ = 124.271
    - mean = 121.956

Protocol fee: 60% of Uniswap v3 fees

- **Impact:**
  - TVL = [24.98%-72.25%]
  - Volume = [1.8%-17.19%]
- **Annualized Revenue:**
  - 60%*Volumes*(100%-lower_impact)*0.1388% =10%*390,504,000,000*(100%-1.8%)*0.1388% = 319,357,920.038$
  - 60%*Volumes*(100%-upper_impact)*0.1388% =10%*390,504,000,000*(100%-17.19%)*0.1388% = 269,307,834.60$
- **P/F (marketcap/annualized fees):**
  - Circulating:
    - lower_impact = 7,741,658,290.2$/532,263,200.064$ = 14.545
    - upper_impact = 7,741,658,290.2$/448,846,391.011$ = 17.248
    - mean = 15.896
  - Fully diluted:
    - lower_impact = 12,916,433,587$/532,263,200.064$ = 24.267
    - upper_impact = 12,916,433,587$/448,846,391.011$ = 28.777
    - mean = 26.522
- **P/S (marketcap/revenue):**
  - Circulating:
    - lower_impact = 7,741,658,290.2$/319,357,920.038$ = 24.241
    - upper_impact = 7,741,658,290.2$/269,307,834.60$ = 28.8

- mean = 26.492
  - <u>Fully diluted:</u>
    - lower_impact = 12,916,433,587$/319,357,920.038$ = 40.445
    - upper_impact = 12,916,433,587$/269,307,834.60$ = 47.962
    - mean = 44.203

Comparison with other DEXs

Protocol	Uniswap v3 (10% fee)	Uniswap v3 (20% fee)	Uniswap v3 (60% fee)	Curve	TraderJoe	1inch	GMX
P/F (circulating)	14.4	14.612	15.896	39.1	3.7	1,112.17	4.0
P/F (fully diluted)	24.03	24.387	26.522	113.2	5.1	1,475.6	4.2
P/S (circulating)	144.03	73.097	26.492	78.5	28.5	1,112.7	13.8
P/S (fully diluted)	240.30	121.956	44.203	227.2	38.7	1,475.6	14.5

<u>Observation</u>: Uniswap v3 with a protocol fee of 60% would be the most interesting as P/F and P/S ratios are showing. Indeed, in comparison with Curve, Trader Joe and 1inch, Uniswap would take less years from the revenue to "repay" the circulating valuation. However, GMX and its specific tokenomics has the best ratios out there.

Moreover, there is no need to increase the protocol fee because the revenue should significantly drops after 60% (according to Gauntlet's simulations)
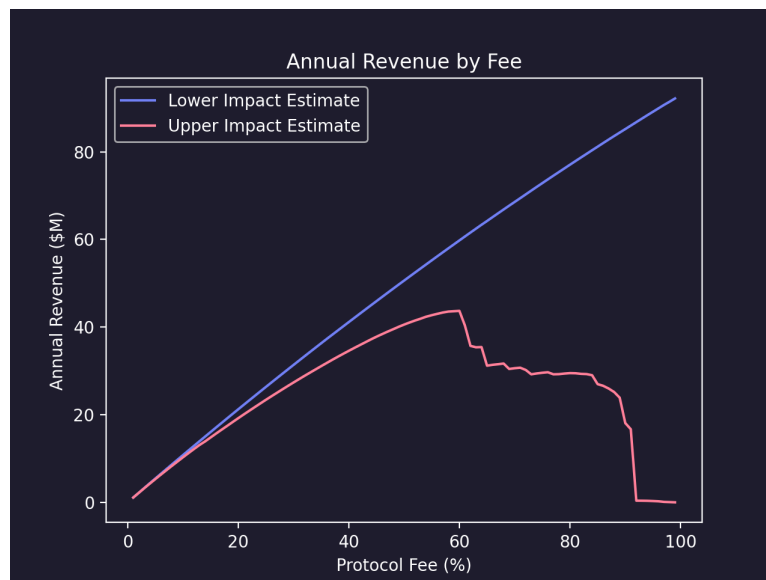
Token: Value Capture & Accrual

- There is currently no token value capture for UNI holders

Team / Community

- There is a strong technical devs team with at its head Hayden Adams which has been part of the most of the success of the platform.

https://coinmarketcap.com/academy/people/hayden-adams

- Uniswap's community is a very active community and also well documented. As can be seen in most of the proposal, of all arguments are followed by sources which helps readers building their own opinion. There are at least more than 4 starts of proposal a week.

https://gov.uniswap.org/

- With the current situation, only 15 individuals can make a proposal (>0.1% of the supply) which represent a very centralized group of entities (without taking into account delegation)

https://vote.uniswapfoundation.org/

- More than 95% of proposals have been approved by the community, even though Erin Koen is complaining that small portion of UNI circulating supply is used for voting

https://twitter.com/eek637/status/1754334070383727071

https://twitter.com/eek637/status/1761029351263318151

- https://gov.uniswap.org/t/temperature-check-activate-uniswap-protocol-governance/22936
  One of the major improvement for UNI token holders is the coming proposal where UNI holders that stake and delegate their token with get a part of revenue made by Uniswap
  - This proposal wants to resolve the small impact of the current DAO where a lot of important members are not participating in voting.
  - There are gonna be two major innovations:
    - The introduction of GovSwap:
      - GovSwap will be an institution leads by Uniswap Foundation in oder to respond to core questions regarding delegators and their roles inside the protocol
      - What should be the focus for the future ?
      - What is good, value-aligned for the delegators ?
    - Making the delegation necessary for UNI staking
  - The Uniswap Foundation hopes that by making delegation mandatory and requiring current delegators to delegate to other addresses, inactive DAO-related addresses will go under revamp in the short to mid-term.
  - There will be the introduction of two main contracts:
    - V3FactoryOwner.sol: This contract allows for the programmatic, permissionless collection of protocol fees from the pools
    - UniStackers.sol: This contract manages delegation and fee distribution
    - The fees will only be taken from v3 at the current stage of the proposal.
  - https://gov.uniswap.org/t/gauntlet-s-uniswap-protocol-fee-report-tldr-version/22607/3
    The protocol fee number has not been discussed yet. However, Uniswap foundation has already asked Gauntlet, an external company, to realize simulation on the impact of the introduction of a such fee. The results are the following:
    - General: Liquidity providing yield will decrease → Which will decrease the liquidity → Which will increase the spread in swaps → etc...
    - 10% Protocol fee will decrease by 10% the liquidity and MEV, decrease by 0.75% trading volumes which combining with MEV represent 5.24% of all trading volumes.
    - Gauntlet advice the community to start with a low protocol fee to see how the liquidity react