**CONTRARY
RESEARCH**

MEMO

Uniswap Labs

CRYPTO

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Thesis

Uniswap is an on-chain decentralized exchange (DEX) protocol built on top of Ethereum that enables users to exchange [ERC-20 tokens](#). Users provide trading liquidity between ERC-20 asset pairs on Uniswap through liquidity pools. Liquidity pools earn fees from trades and distribute them to the liquidity providers and the Uniswap team.

Uniswap is also one of the first automated market makers (AMMs) capable of determining the trading price of assets and offering price oracles. Before Uniswap, the bids of buyers and sellers on centralized cryptocurrency exchanges (CEXs) set prices.

Uniswap is one of the largest AMM DEXs in decentralized finance (DeFi). The total value locked (TVL) in the Uniswap protocol at its peak in November 2021 was over $10 billion. As of early September 2022, the TVL of the Uniswap protocol is ~$5.5 billion.

In traditional finance, regulatory requirements and competitive barriers prevent individuals and small organizations from becoming market makers. DEXs provide direct market access to all participants. Individual traders have full access to the technology stack of DEXs, enabling them to provide quotes and trade using the same technology available to all users—including professional firms.

Uniswap offers trading features only found on traditional stock exchanges, such as Robinhood and Schwab, and traditional financial institutions like big banks. Uniswap aims to democratize trading access and shift power from large financial institutions to individuals trading ERC-20 tokens. If successful, Uniswap could play an important role in creating a decentralized future where anyone can access financial services—like DEXs and other DeFi products—without fear of discrimination or counter-party risk from institutions.

Company Overview

Uniswap Labs made a peer-to-peer system for exchanging ERC-20 tokens. Their trading platform is available on the Ethereum, Polygon, Optimism, Arbitrum, and Celo blockchains. Uniswap is a decentralized application (DApp) made up of a set of smart contracts which together create a DEX.

Unlike traditional exchanges like Robinhood and WeBull, Uniswap functions without intermediaries. Trusted intermediaries cannot restrict access to Uniswap, because it is a decentralized protocol. For example, during the GameStop (GME) price surge in January 2021, Robinhood and WeBull halted GME trading, angering many users. If something similar were to happen on Uniswap, no party could prevent the trading of assets since no single entity controls the exchange. Even with centralized exchanges (CEXs) there are examples like Celsius halting funds which further highlight some of the benefits of a DEX.

Uniswap is one of the first automated market makers (AMMs). In AMMs, instead of trading directly between the individual bids of buyers and sellers, users trade against a pool of tokens known as a liquidity pool. The constant product formula determines the price of assets in a trade based on the amount of tokens in the relevant liquidity pool needed to route the trade. When tokens are purchased, a proportional amount of tokens on the other side of the liquidity pool are sold for the purchased asset and deposited back into the liquidity pool to maintain a constant price. The ratio of tokens within liquidity pools combined with the constant product formula determines the price trades execute at.

Founding Story

On July 6, 2017, Hayden Adams, a former mechanical engineer at Siemens, was laid off from his first job out of college. A friend of Adams, Karl Floersch, encouraged him to learn smart contract development. Adams tells the story of the conversation between him and Floersch after getting laid off at Siemens in a blog post published on Uniswap's website. Floersch said to him:

> **Congratulations, this is the best thing that could have happened to you!!! Mechanical Engineering is a dying field. Ethereum is the future and you're still early. Your new destiny is to write smart contracts!**

Adams started learning the basics of Ethereum and smart contract development, as advised by Floersch. He began working on an AMM protocol (that would later become Uniswap) inspired by the Ethereum co-founder Vitalik Buterin's idea in 2016 calling for on-chain money markets.

At the time, Floersch was working in Casper FFG at the Ethereum Foundation and introduced Adams to Vitalik Buterin. Vitalik told Adams to apply for a grant from the Ethereum Foundation after rewriting his Uniswap contracts in the Vyper programming language.

To support his work on Uniswap, Adams received a $100,000 grant from the Ethereum Foundation and grants from other organizations, including a grant from Pascal Van Hecke. Adams claims to have had weekly calls with Pascal, bringing structure and accountability to his work.

After Adams had worked on the project for over a year, Uniswap v1 was publicly announced and deployed to the Ethereum mainnet on November 2, 2018 as a proof of concept. The second version of Uniswap, Uniswap v2, would officially deploy to the Ethereum mainnet in May 2020, and Uniswap v3 was deployed in May 2021. According to Uniswap's GitHub page, there are 13 core contributors, to the Uniswap project, as well as ~40 engineers employed by the company.

Product

Uniswap Protocol

The Uniswap Protocol is a suite of smart contracts that together create an AMM. Uniswap also built a web interface connecting to the Uniswap Protocol and has a governance system based around the UNI token. UNI token holders have voting power for Uniswap distributed in proportion to a user's UNI balances.

In contrast to centralized exchanges using order books to trade between buyers and sellers, Uniswap uses liquidity pools. Liquidity providers (LPs) deposit tokens into a liquidity pool and are rewarded with the fees generated when other users make trades. Traders pay a fee to liquidity pool providers when executing trades. Uniswap does not charge fees for listing tokens and does not require user registration.

Uniswap's code is open source and can be forked to create new exchanges. A notable project based on Uniswap but with a different token and governance system is Sushiswap. Sushiswap launched in August 2020.

The Uniswap ecosystem has three types of users: liquidity providers, traders, and developers.
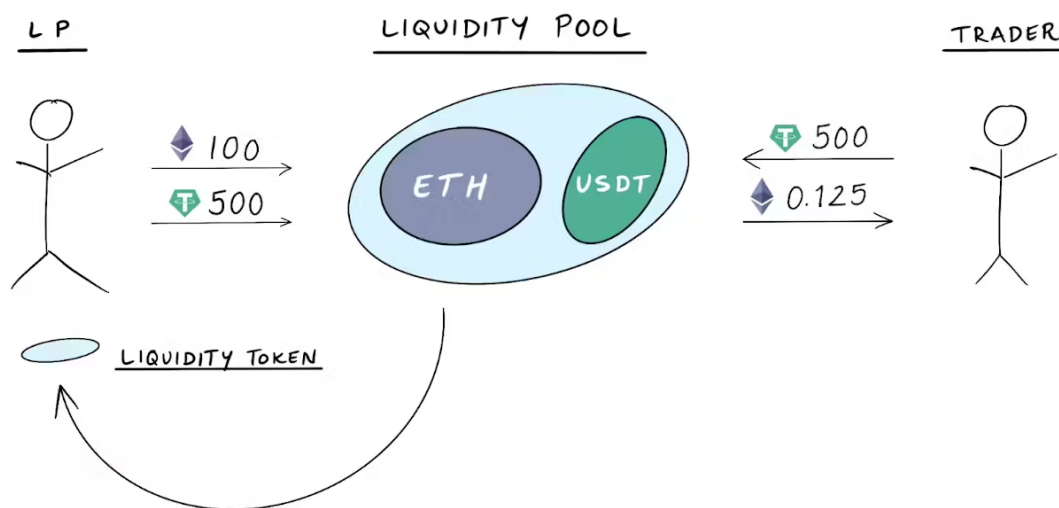
Source: The Generalist

Liquidity providers (LPs) are incentivized to contribute ERC-20 tokens to common liquidity pools with the potential to earn fees and other liquidity incentives. They provide liquidity by staking or locking up tokens in Uniswap smart contracts, and are rewarded with liquidity tokens representing their contribution to the liquidity pool.

Developers can use decentralized exchanges (DEX), such as Uniswap, to launch new tokens or automatically trade tokens while being decentralized. Hundreds of decentralized finance

(DeFi) apps, tools, and wallets utilize Uniswap, including popular projects like Aave, 1inch, and Compound Finance.

Uniswap may offer more products in the future, including lending platforms, coin launchers, and NFT platforms. Competitors such as Sushiswap and Coinbase offer lending platforms, coin launchers, and NFT platforms, which Uniswap may integrate in the future. In June 2022, Uniswap acquired Genie, a NFT marketplace aggregator. As stated on the Uniswap blog:

> **NFTs will be integrated into our products, starting with the Uniswap web app, where soon you'll be able to buy and sell NFTs across all major marketplaces. We'll also integrate NFTs into our developer APIs and widgets, making Uniswap a comprehensive platform for users and builders in web3.**
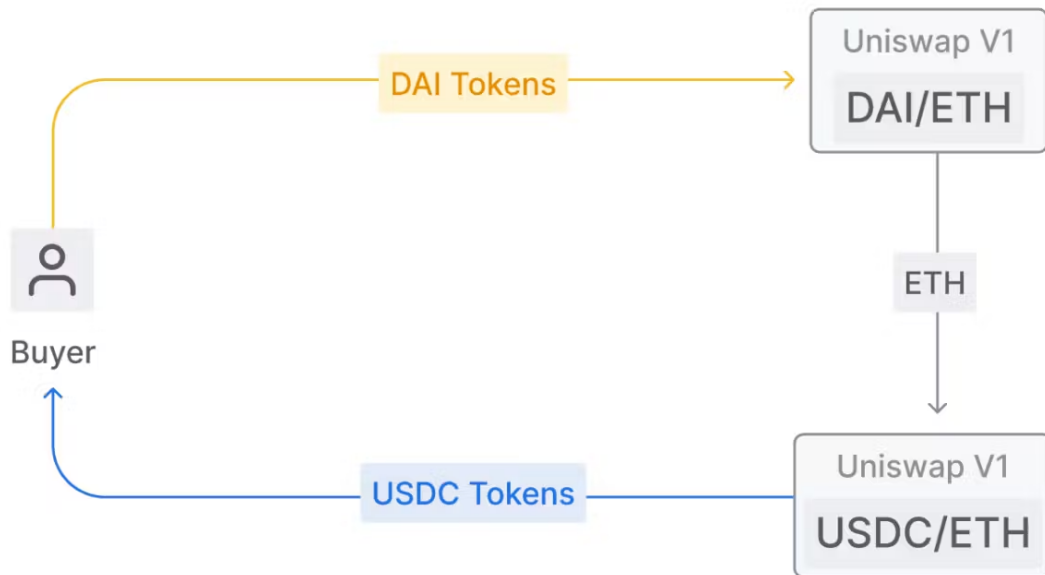
Uniswap v1

Uniswap v1 was first launched on the Ethereum mainnet on November 2018. Uniswap v1 supported only ETH-ERC20 trading pairs, so users could only swap ETH for a single ERC-20 token. For example, if someone wanted to swap USDC for DAI, they had to swap USDC for ETH and then go to the ETH-DAI pool to swap ETH for DAI. To place trades between two assets in Uniswap v1 usually two swaps would need to take place, leading to more fees and slippage for users compared to a single swap. Uniswap v2 allowed trades to be routed using one swap, eliminating the excessive slippage and gas fees paid by users in Uniswap v1.

Uniswap v1 also introduced the concept of liquidity provider tokens. Every liquidity provider would get an amount of LP tokens proportional to the percentage of liquidity they are adding to a liquidity pool. All LP tokens represent an asset that is generating fees on Uniswap by facilitating trades on the protocol by providing liquidity. All LP tokens represent an LP's contribution to the pool and could be sold, traded, or burned to redeem the deposited tokens. Additionally, every trade on Uniswap incurred a 0.3% trading fee and was automatically sent as a reward to LPs providing liquidity.

🦄 Uniswap V1

DAI to USDC Swap

Source: Uniswap

Uniswap v2

Uniswap v2 launched in May 2020. It improved on Uniswap v1 by introducing ERC20-ERC20 liquidity pools. After Uniswap v2 was launched someone wanting to swap USDC for DAI could swap USDC directly for DAI if a USDC-DAI pool exists, rather than executing two swaps from USDC-ETH then from ETH-DAI using Uniswap v1.

Additionally, Uniswap v2 introduced a price oracle, or a tool used to view price information about a given asset. It calculates the average price of an asset over a period of blocks (Time Weighted Average Price, or TWAP) by dividing the cumulative price by the timestamp duration. These price oracles are a critical component for many decentralized financial applications, including those related to derivatives, lending, margin trading, and prediction markets.
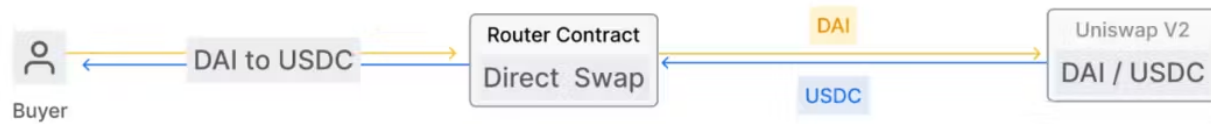
Uniswap v2 also introduced flash swaps that allow users to withdraw any amount of ERC20 tokens without having to pay upfront, provided that by the end of the transaction execution the user either pays for all ERC20 tokens withdrawn, or pays for a percentage of ERC20 tokens and return the rest, or returns all ERC20 tokens withdrawn. An example of using flash swaps is being able to arbitrage with no upfront capital.

Similar to Uniswap v1, Uniswap v2 also charges a 0.3% trading fee. However, Uniswap v2 also introduced a protocol fee switch. If the fee switch is flipped on, instead of 0.3% of all fees going to the LPs, 0.25% of the trading fees would go to LPs and the remaining .05% would be used to support contributions to Uniswap and its ecosystem.
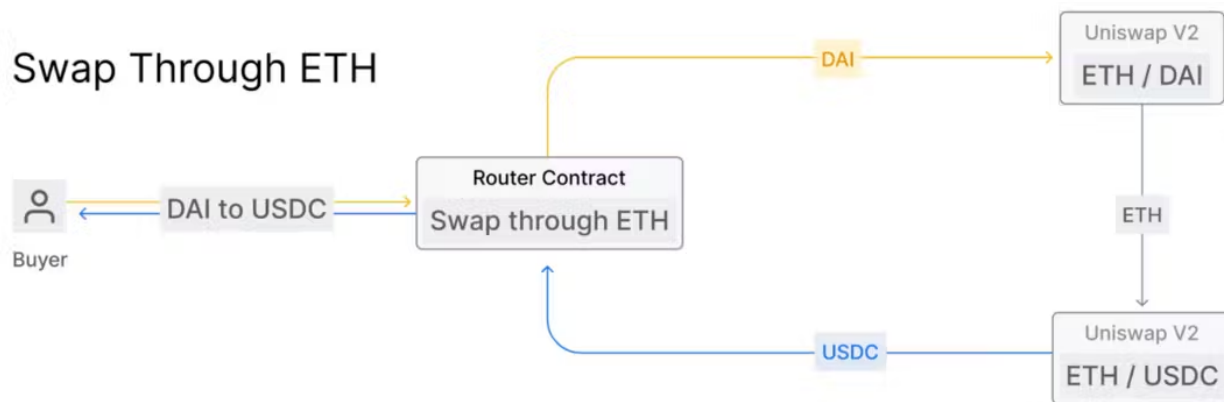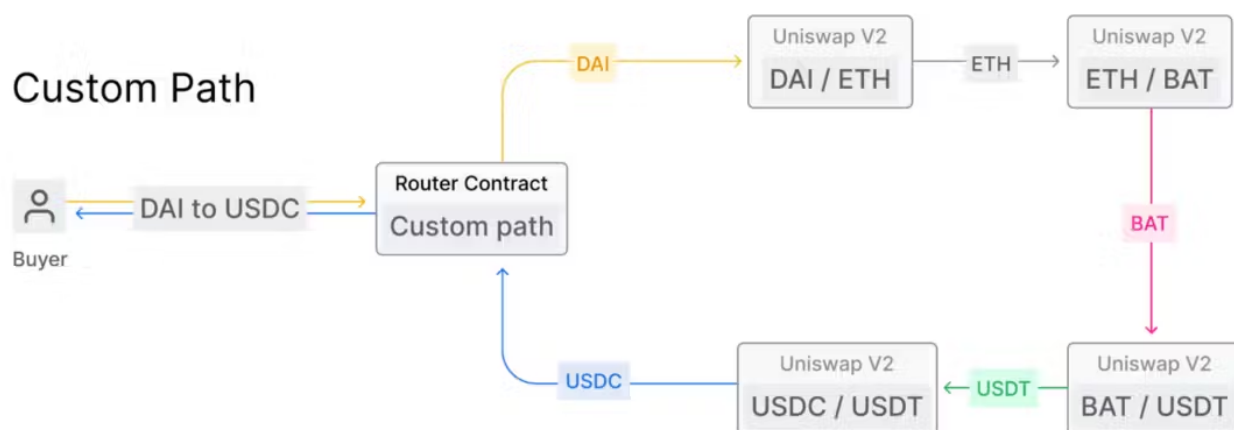
Uniswap V2

DAI to USDC Swap with Router

Direct Swap

Buyer → DAI to USDC → Router Contract (Direct Swap) → DAI → Uniswap V2 (DAI / USDC) → USDC → (back to Router)

Swap Through ETH

Buyer → DAI to USDC → Router Contract (Swap through ETH) → DAI → Uniswap V2 (ETH / DAI) → ETH → Uniswap V2 (ETH / USDC) → USDC → (back to Router)

Custom Path

Buyer → DAI to USDC → Router Contract (Custom path) → DAI → Uniswap V2 (DAI / ETH) → ETH → Uniswap V2 (ETH / BAT) → BAT → Uniswap V2 (BAT / USDT) → USDT → Uniswap V2 (USDC / USDT) → USDC → (back to Router)

Source: Uniswap

Uniswap v3

Uniswap v3 was launched in May 2021, and improves upon Uniswap v2. Uniswap v3 introduces:

- **Concentrated liquidity**, giving individual LPs granular control over what price ranges their capital is allocated to, and
- **Multiple fee tiers**, allowing LPs to be appropriately compensated for taking on varying degrees of risk.

Uniswap v3 also launched on layer 2 blockchains including Polygon, Arbitrum, and Optimism in addition to Ethereum. Uniswap V3 improved its price oracle, making it easier and cheaper to integrate it into apps and services.

Uniswap v3 offers LPs three separate fee tiers—0.05%, 0.30%, and 1.00%. LPs using Uniswap v3 have more flexibility in their risk margins. Lower fee tiers are expected for less risky positions, such as stablecoins, and higher fee tiers are expected for more risky positions, like non-correlated token pairs.

Uniswap v3 also has protocol fees similar to Uniswap v2. Fees will be off by default, but can be turned on by governance on a per-pool basis and are set between 10% and 25% of LP fees.

Furthermore, Uniswap v3's license was updated such that the code may not be forked for commercial use for two years in response to the Sushiswap fork. The Uniswap team made the following public statement about the decision to update their commercial license:

> **We strongly believe decentralized financial infrastructure should ultimately be free, open-source software. At the same time, we think the Uniswap community should be the first to build an ecosystem around the Uniswap v3 Core codebase.**

Aa Name	≡ Uniswap V1	≡ Uniswap V2	≡ Uniswap V3
Liquidity	ETH-ERC20 pairs ERC20-ERC20 pairs through 2 swaps Does not work with "missing return" ERC20 tokens (USDT)	ERC20-ERC20 pairs (including WETH) in the core contract ETH-ERC20 pairs through helper contracts Custom multi-step paths through a Router contract	ERC20-ERC20 pairs (including WETH) in the core contract ETH-ERC20 pairs through helper contracts Custom multi-step paths through a Router contract
Order types	Trades	Trade Flash swaps	Trades Flash swaps Range orders
Liquidity Tokens	ERC20 (fungible)	ERC20 (fungible)	ERC271 (non-fungible)
Market Maker Function	$x * y = k$	$x * y = k$	$x * y = k$ locally in a tick depending on tick liquidity $sqrt(k)$
Fees	0.3% Reinvested	0.3% (with a switch of sending 0.05% as a protocol fee, leaving LPs with 0.25%) Reinvested	Three tiers: 0.05% 0.30% 1.00% (flexible protocol fee can be turned on at levels 1/4, 1/5, 1/6, 1/7, 1/8, 1/9, 1/10) Fees not reinvested
Price oracles	-	TWAP Oracle	Improved Oracle
Other features	Custom pools	Improved Initial Shares	-
Liquidity Migration	-	Uniswap V1	Uniswap V2 SushiSwap
Technical features	-	Core/Helper Architecture Deterministic Pair Addresses	-
Language	Vyper	Solidity	Solidity

Source: Medium

Uniswap Labs Ventures

In April 2022, Uniswap Labs announced the launch of Uniswap Labs Ventures, an organization investing in teams building web3 products. Uniswap Lab Ventures invests in all technologies associated with web3, like infrastructure, developer tools, and consumer-facing applications.

Notable investments made by Uniswap Ventures (as of September 2022) include Tenderly (an Ethereum development platform), LayerZero (an omnichain interoperability protocol), Aave (a decentralized money market), Compound Protocol (a decentralized money market), and

PartyDAO (a decentralized software organization making a platform for collectively purchasing NFTs).

Market

Customer

Uniswap customers include developers, traders, and liquidity providers. Developers develop DeFi apps and integrations built on the Uniswap Protocol, traders swap various cryptocurrencies using Uniswap, and liquidity providers earn fees generated trades on Uniswap. Beyond developers, traders, and liquidity providers, Uniswap also fosters a community of users, developers, designers, and educators through social media. They use Discord, Twitter, Reddit, and the Uniswap Governance Forum to drive the success of the Uniswap protocol.

Market Size

There are two primary factors determining the market size for Uniswap. The first is the TVL in DeFi and the ability for DeFi to pull market share away from traditional financial products. The second is the number of transactions happening within DeFi related to Uniswap. The diagram below shows the value locked inside of popular DEXs from July 2020 to August 2022.
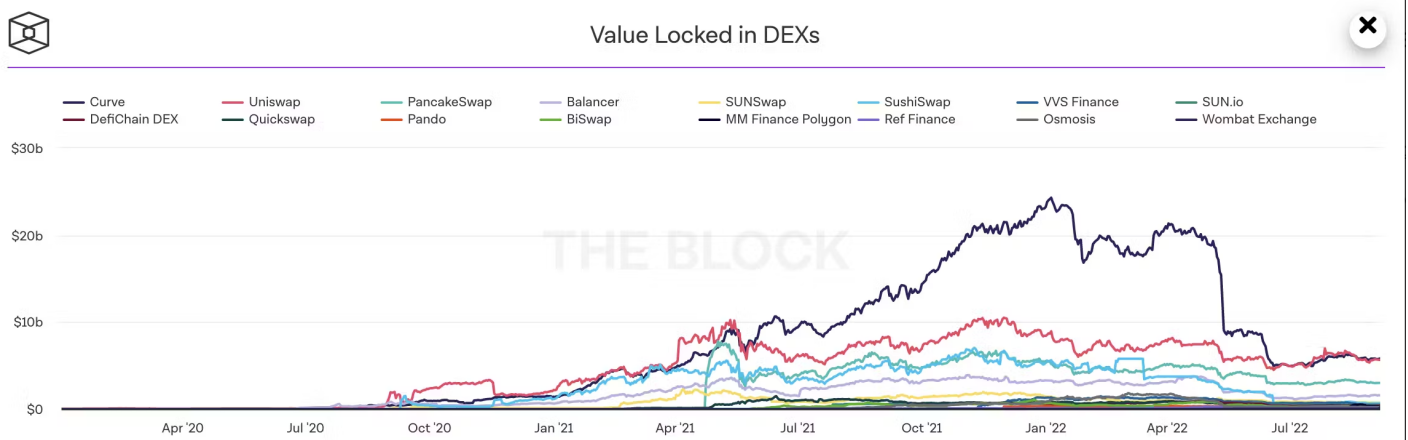
Source: The Block

DeFi TVL

As of September 2022, the Ethereum DeFi market has about $16 billion in TVL. Artem Tolkachev, the founder and CEO of BondAppetit and an investor in DeFiHelperthe, believes

the DeFi market could grow over 100 times its size from its November 2021 market cap of $240 billion by 2026.

DeFi could potentially take market share from traditional finance as people begin to trust the safety of smart contracts. In 2021, the consumer banking industry was estimated to be $2.3 trillion globally, and the capital markets were estimated to be $121 trillion. As of June 2022, the total market cap of public companies worldwide is estimated to be $105 trillion. If the TVL of DeFi protocols continues to grow by taking market share away from traditional financial products, then Uniswap is likely to see a significant rise is its addressable market.

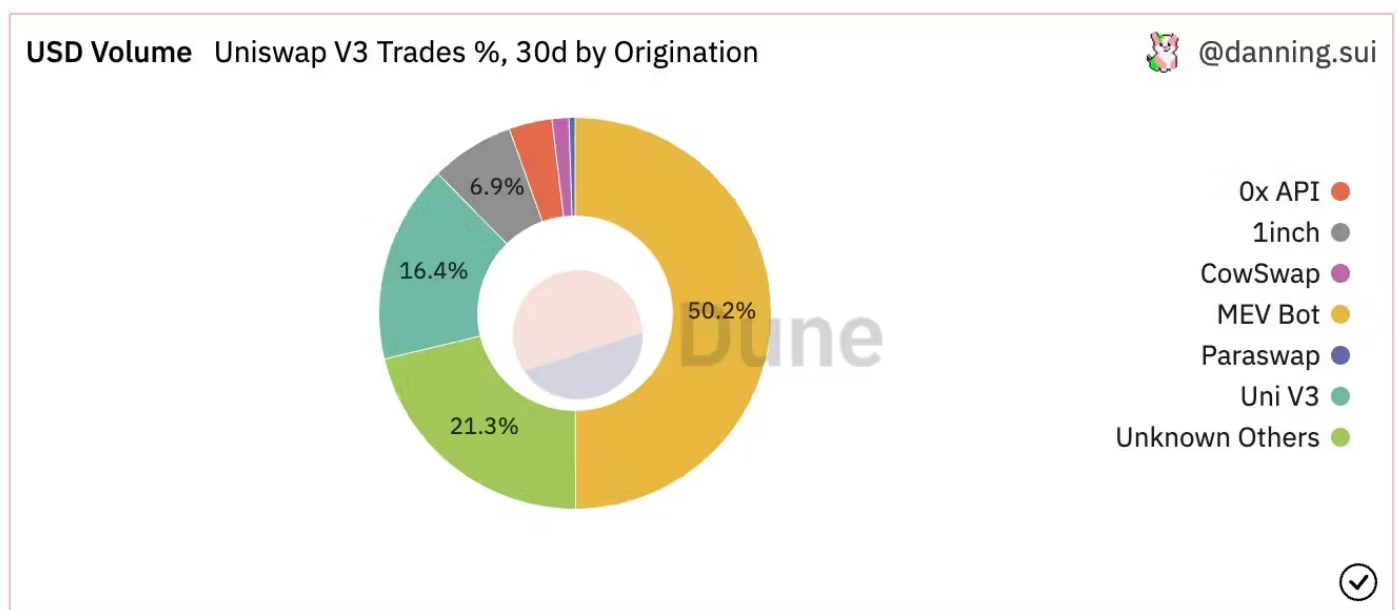## Total value locked in DeFi

Source: Coin Telegraph, DeFi Llama

DeFi Transactions

The other factor influencing the market size for Uniswap besides the growing TVL of DeFi and DeFi taking market share away from traditional financial products is the growing number of transactions happening on Uniswap. The more transactions happening in DeFi, and through Uniswap, the larger the potential market size of Uniswap because more transactions lead to Uniswap accruing value through the fees it charges.

The two factors that influence the growing number of transactions and value accrual happening on Uniswap are bot activity and other DeFi products built on top of Uniswap.

Bot Activity

The more people actually participating in DeFi leads developers to create more bots capable of performing services on behalf of users like arbitrage trading, auto-compounding liquidity positions, and many other actions. In June 2022, 50.2% of all trades on Uniswap were done by maximal extractable value (MEV) bots and another 21.3% of trades were done by 'unknown others' suspected to be bots as well.

USD Volume Uniswap V3 Trades %, 30d by Origination 🐱 @danning.sui

- 0x API
- 1inch
- CowSwap
- MEV Bot
- Paraswap
- Uni V3
- Unknown Others

6.9% / 16.4% / 50.2% / 21.3%

Source: Twitter @danning.eth

Protocols Using Uniswap

DeFi consists of many separate smart contracts that build on top of the functionalities of other smart contracts to create new products and more complex DeFi products. A popular analogy to describe DeFi is the protocols/smart contracts of DeFi are like lego blocks that developers can assemble any way they want to create increasingly more complex financial products.

For example, popular protocols like Curve Finance (a DEX) and Compound Finance (a lending platform) have smart contracts built on top of them by other protocols. Convex is built on top of Curve Finance to boost rewards for CRV stakers and liquidity providers, and Yearn Finance builds on top of Compound Finance for yield aggregation and auto-compounding.

Three examples of projects building on top of Uniswap to optimize yields for liquidity providers and save time for users are Popsicle Finance, Gelato Network, and Mellow Protocol. Projects also build on top of Uniswap to optimize trades for their users by offering DEX aggregators capable of routing trades on behalf of users to get the best prices. Four notable projects using Uniswap to optimize trading for their users include 0x, Cowswap, Paraswap, and 1inch. In June 2022, Uniswap activity from DEX aggregators accounted for ~12% of all trading activity on Uniswap.

Competition

Centralized Exchanges

Uniswap's main competitors include CEXs such as Coinbase, Kraken, BlockFi, and Binance. CEXs provide more due diligence in regulating tokens available to trade on their platforms and better support for converting cryptocurrencies to and from fiat. In contrast, tokens may be added by anyone on Uniswap, but trades cannot be converted to fiat using Uniswap. CEXs also take the responsibility of key management away from their users, which might attract a broader customer base than is possible for Uniswap. By using a centralized exchange, users eliminate the risk of losing assets due to DeFi exploits or loss of private keys.

Decentralized Exchanges (DEXs)

Smart contract automation can make trading assets more efficient. Uniswap uses smart contracts to avoid liquidity issues that traditionally affect centralized exchanges. The elimination of any rent-seeking third party, such as a centralized exchange or financial institution, can also reduce transaction processing fees because transaction fees do not need to fund the daily operations of an entire company.

DEX competitors such as 1inch, Sushiswap, Curve Finance, and PancakeSwap run on multiple chains that Uniswap does not, such as Binance Smart Chain, Aurora, Harmony, Avalanche, Fantom, Gnosis Chain, and Moonbeam. Competitor DEXs also lower fees to traders. For example, Sushiswap offers a 0.25% fee to LPs, creating a better incentive for trading activity at the expense of generating less fees for LPs.

Business Model

Uniswap's primary source of revenue is fees for processing trade orders. Uniswap v2 takes 0.30% on all trades, and Uniswap v3 has three fee tiers: 0.05%, 0.3%, and 1.0%.

In August 2021, Uniswap officially distributed over $1 billion in fees since its creation in 2018 to users providing liquidity through Uniswap v2 and v3. Uniswap was the first DeFi protocol to surpass $1 billion in generated fees distributed to its users.

Although most of the fees are distributed to LPs, Uniswap keeps a portion of the fees in some trading pools. In 2021, Uniswap generated over $1 billion in fees for the year, and it's estimated about $40 million of the $1 billion when directly to Uniswap.

The costs of Uniswap are low since it has less than 50 employees. Since Uniswap uses smart contracts to execute trades, it does not need to spend large amounts of capital to host servers or hire operational personnel like traditional exchanges. Once the smart contract code is launched, it cannot be changed or modified and is hosted directly on the blockchain instead of on centralized servers.

Coinbase, which does approximately 3x more transactions than Uniswap, has more than 30x the number of employees as Uniswap. Uniswap's unit economics are therefore much better than Coinbase's, as it can perform a similar function with fewer resources.

	coinbase	🦄 UNISWAP
Trading Volume[1]	$193B	$58B
Revenue	$1.3B	$174M[2]
YoY Revenue Growth	139%	15,000%
Net Income	$322M	$29M[3]
Market Cap / Valuation	$86B	$5.2B[4]
P/S Ratio	66	30
P/E Ratio	197	179
Employees	1,249	34
Venture Funding	$547M	$14M
Years since founding	9	3

1) FY 2020. Source: Coinbase S-1 , https://uniswap.org/blog/year-in-review
2) Based on 0.3% of transaction volumes paid out to liquidity providers
3) Assuming 0.05% fee to UNI token
4) As of 12/31/2020. Source: CoinGecko

Source: Twitter @dberenzon

Between June 7 to June 18, 2022, Uniswap generated more fees for its users than all of the fees generated and distributed to miners on the entire Ethereum blockchain. Over those 7

days, Uniswap generated $4.1 million in fees, while Ethereum only generated $3.9 million in fees. The high amount of fees generated by Uniswap was due to high market volatility and a drastic increase in trading activity caused by the liquidity issues of the venture capital firm Three Arrows Capital and the Celsius Network lending platform. The director of research at Arca, Katie Talati, made the following statements regarding Uniswap temporarily generating more fees than Ethereum over the 7-day period:

> **When combined with heightened volatility over the last few weeks, Uniswap volumes and therefore fees have increased heavily as trading has picked up everywhere**

Uniswap Leapfrogs Ethereum in Fees

7-day average fees, in millions

Uniswap	$4.88
Ethereum	$4.58
Aave	$0.98
Synthetix	$0.60
BSC	$0.59

Source: Bloomberg

However, the fees generated by Uniswap are usually not higher than the fees generated by Ethereum. As of September 7, 2022, the 7-day average fees generated by Uniswap is $1.45 million compared to the $2.58 million generated by Ethereum over the same period.

Name	▼ 1 Day Fees	7 Day Av. Fees
Ethereum	$2,900,181.59	$2,582,087.04 ⌄
Uniswap	$1,942,841.27	$1,449,307.79 ⌄
GMX	$939,450.41	$337,533.74 ⌄
BSC	$712,965.36	$635,133.90 ⌄
Aave	$695,352.70	$483,976.57 ⌄
Synthetix	$292,006.02	$198,287.90 ⌄
Bitcoin	$289,585.93	$283,841.24 ⌄

Source: Crypto Fees

Traction

User Traction

Uniswap has the third-largest TVL, with $5.41 billion in TVL as of September 7, 2022, which is roughly 33% of the TVL of the entire DeFi market. It is also the biggest DEX, holding over 65% of the total market share of all DEX trading volume as of September 7, 2022. From September 1, 2022, to September 7, 2022, the 7-day trading volume on Uniswap was ~$7.3 billion from ~76,000 traders, which is over 5.5X the volume of the exchange with the second highest 7-day volume (Curve Finance), and more unique traders than the top 20 DEX's and DEX aggregators combined.
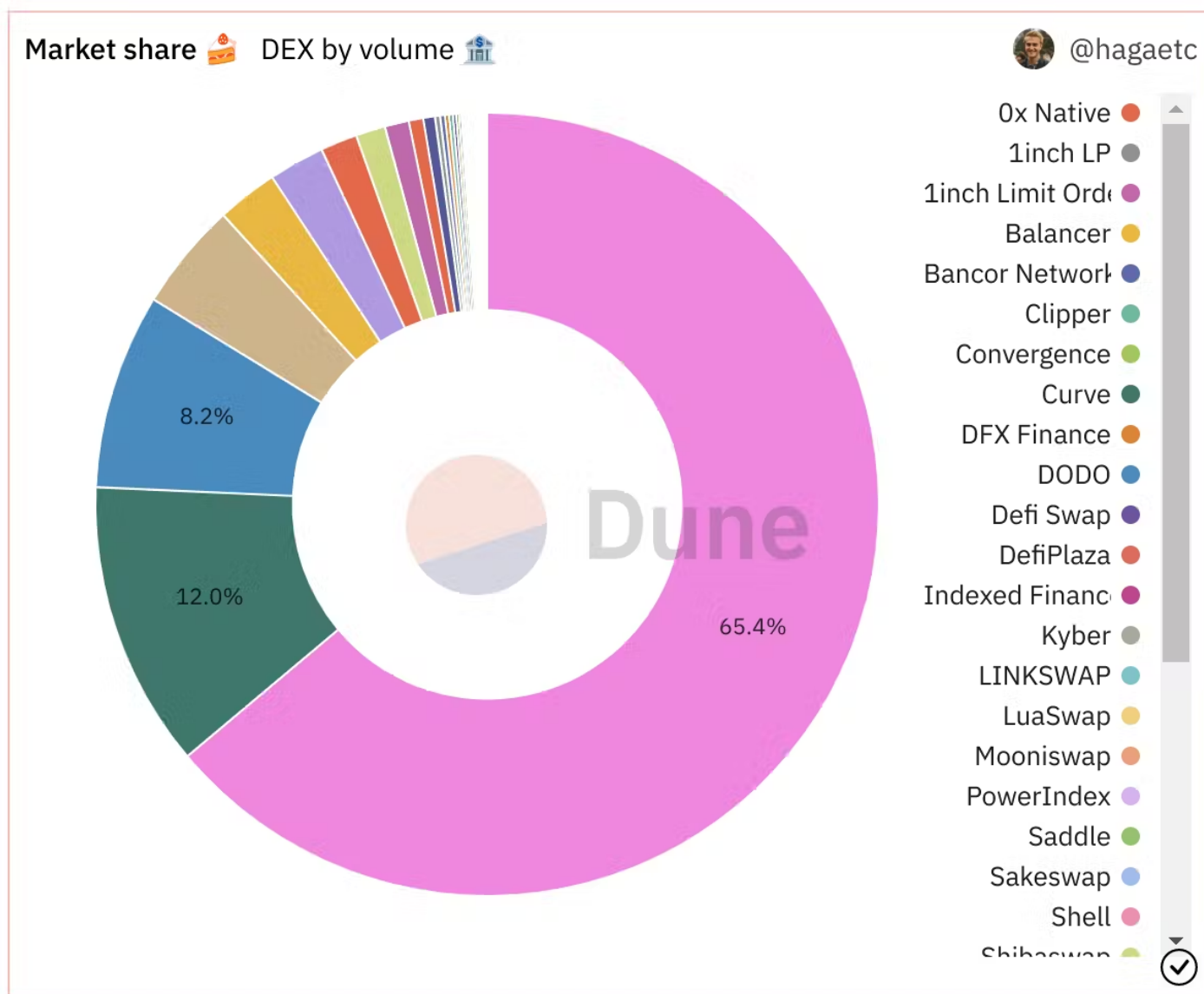
Source: Dune @hagaetc

After launching Uniswap v1 in November 2018, Uniswap has since updated its protocol to Uniswap v2 in March 2020, launched the UNI governance token in September 2020, and launched Uniswap v3 in March 2021.

From July to December 2021, it expanded to additional layer 2 blockchains on Ethereum, including Optimism, Arbitrum, and Polygon. Uniswap also expanded to the Ethereum Virtual Machine (EVM) compatible layer 1 blockchain Celo in April 2022.

Developer Traction

Uniswap development saw a considerable rise in contributions from January 2022 to March 2022. From mid-February to mid-March there were over 1000 contributions on Github per day according to an analysis by Santiment. With over 1000 contributions per day, Uniswap

developers had more contributions than all of the developers working on Solana, Cardano, Polkadot, and Kusama.

Key Opportunities

Chain Expansion

Uniswap was one of the first DEXs and pioneered the idea of the Automated Market Maker (AMM) and Liquidity Pools. It is also the biggest DEX in terms of market share (as of September 2022), and has consistently updated the protocol and expanded to new chains. Expanding to additional EVM-compatible L1 is a key opportunity for Uniswap, as many traders have moved to different blockchains due to high Ethereum gas fees. There are discussions with support for launching Uniswap v3 on Harmony, Avalanche, and Moonbeam.

New Product Offerings

Additional opportunities include expanding some features into the DeFi space. Uniswap could start offering lending and margin trading similar to competitors like Sushiswap.

Uniswap may also expand to additional fee structures designed to compete with stablecoin trades and additional specialized AMMs such as Curve Finance. For example, in Q4 of 2021, Uniswap governance passed a fourth 0.01% fee tier specifically designed for stablecoin trades.

In June 2022, Uniswap acquired Genie, a NFT marketplace aggregator. Uniswap may add increased NFT services to its platform. Uniswaps has also been experimenting with offering NFTs for Uniswap v3 positions using on-chain generative SVGs.

Source: Twitter @hayden.eth

Partnerships

Uniswap is reportedly exploring partnerships with PayPal and Robinhood, which means it is looking to expand into consumer finance. If confirmed, the partnerships could allow Uniswap to provide a larger variety of assets, instant settlement, and 24/7 accessibility. Uniswap is actively attempting to build partnerships with intermediary cryptocurrency companies between DeFi and consumer finance, such as Fireblocks, Paxos, and Talos. Ashleigh Schap,

the growth lead of Uniswap Labs, made the following statement about the companies trying to partner with Uniswap:

> **We're trying to put Uniswap and the rest of DeFi right there in those applications so that we can bring the dream of open, 100% uptime liquidity to the whole world. PayPal wants to talk to us, E*Trade wants to talk to us, Stripe wants to talk to us.**

Key Risks

Regulation

The changing cryptocurrency regulations is a big risk. Uniswap does not require any identifying information of the trader (KYC) or require any background checks before listing a token on the exchange or facilitating a trade. Since they are decentralized, they're not required to comply with the regulations for traditional companies.

Regulations required for Uniswap to potentially comply with are unclear. However, the SEC has been investigating Uniswap to determine if the tokens listed on it should be considered securities. The SEC's decisions on how to regulate the cryptocurrency market may impact Uniswap's position as a DEX. Uniswap may need to start collecting identifying information from its users. Additionally, Uniswap delisted some fraudulent tokens in 2021 after citing the regulatory landscape.

Forks

Since Uniswap is open-source, making it is very easy for anyone to copy and fork its code. In fact, SushiSwap was a fork of Uniswap and conducted a vampire attack—a method where one protocol offers better incentives than another protocol, stealing their customers and investors. The Sushiswap vampire attack siphoned off almost $1 billion in TLV from Uniswap. In response, Uniswap introduced the governance token UNI, and Uniswap v3's license was updated such that the code may not be forked for commercial use for two years.

Gas Fees

Due to Ethereum's high gas fees, many traders have moved to other L1 chains, such as Solana and Avalanche. The high gas fees may cause fewer people to use Uniswap on Ethereum as

traders move to different chains to pay less fees. However, Uniswap is mitigating the risk associated with high gas fees by expanding its protocol to layer 1 solutions like Celo and layer 2 solutions such as Optimism, Arbitrum, and Polygon.

Valuation

Uniswap founder Hayden Adams initially received a $100k grant from the Ethereum Foundation in August 2018. Since then, Uniswap raised a $1.82 million seed round from Paradigm in April 2019 and $11 million in Series A in August 2020 led by a16z. Additional investors participating in Uniswap's Series A round included USV, Paradigm, Version One, Variant, Parafi Capital, SV Angel, and A.Capital. The Uniswap team publicly stated that they plan on using their Series A funding to focus on building Uniswap v3 to increase the flexibility and capital efficiency of its protocol.

Using the traditional Gordon Growth Model to value Uniswap, Blockchain at Berkeley predicted a UNI price that was an average of 0.001X the token's actual price based on the growth rate of LP fees in September 2022. According to CoinMarketCap, the UNI token is worth $6.10 on September 7, 2022, with a market cap of $4.55 billion, and the Gordon Growth Model also values UNI at around $4.55 billion. However, the Gordon Growth Model method fails to consider factors such as uncertainty around market prices, developing regulations, future governance decisions, and future projected growth.

Alternatively, using Primary Factor Analysis and correlating Uniswap's growth with Coinbase's, Uniswap has around 45% of Coinbase's market cap/GMV ratio and 25% of Coinbase's exchange volume ratio. Coinbase has $15.37 billion in terms of market cap as of September 2022, and extrapolating that to Uniswap, this would mean that Uniswap is valued between $3.84 billion to $6.92 billion.

Summary

Uniswap provides amazing value to traders and LPs. It allows traders to easily swap tokens and LPs to earn high fees in exchange for providing liquidity. It is the biggest DEX in terms of market share, and one of the oldest and most reputable DeFi protocols.

There are some opportunities for Uniswap to expand to additional blockchains, create new products, and establish future partnerships. However, some key risks in the future include regulatory risk, copycat DEXs due to the open-source code, and whether people will continue to trade on Ethereum or move to a different blockchain due to the high gas fees on Ethereum.

Uniswap has gained the trust of the cryptocurrency community and will continue to be an essential protocol for the DeFi industry.