

Quarterly Report

Q2 2021

FULL REPORT



Founders' Note



The total crypto market capitalization has cooled down after hitting a peak of \$2.5 trillion in May 2021. There were a few sharp drawdowns in Q2, with the market cap dropping as much as 20-30% within a day, causing cascading liquidations. As crypto continues marching into the mainstream, the world is scrutinizing it more than ever.

Q2 ends with China banning crypto mining (for real this time) while being globally scrutinized for its environmental impact. Crypto has gone through many cycles of FUD and we believe this is but another bump towards the inevitable worldwide adoption. After all, we already have El Salvador, the first country in the world to adopt Bitcoin as legal tender!

Meme tokens have been the highlight of this quarter as Dogecoin and its brethren rose to new heights. Led by the troll Elon Musk, 'Doggo' coins proliferated and created a new culture where coins without any explicit utility were regarded as 'reliable investments'. We cannot emphasize enough that users should always do your own research!

Beneath the tsunami of memes, Decentralized Finance (DeFi) expanded out of Ethereum on other blockchains. Polygon rose very quickly and dominated the Total Value Locked (TVL) chart, buttressed by the expansion of Aave and Curve. DeFi has also been particularly innovative this quarter. Uniswap v3 launched with concentrated liquidity while protocols have started tokenizing future yield. We can also expect more institutions entering the scene through the Compound Treasury and Aave Pro.

The hype of Non-Fungible Tokens (NFT) have slowed down considerably with falling volume and floor prices. The exception, however, is Axie Infinity who is paving the way forward with its play-to-earn model. A whole new economy is being created in front of our very eyes and players of all ages are taking advantage of this new paradigm. Axie Infinity showcases the immense potential of what NFTs can bring to the world.

And finally, we are happy to announce that we have just released two new books under our How to DeFi series - How to DeFi: Beginner and How to DeFi: Advance. The beginner version is an update of our previous DeFi book while the advance version is a more in-depth dive of DeFi. Do check them out in our CoinGecko Store!

"In Q2, DeFi has expanded beyond Ethereum and is actively being built on multiple blockchains."



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Uniswap V3 Vault Fund Manager



MARKET LANDSCAPE

Q2 2021 Spot Market Overview



Cryptocurrency market capitalization dropped 20% to \$1.3 trillion



-20%

Top-30 Cryptocurrencies Market Cap Growth in Q2 2021

Meme coins took over the crypto scene at the beginning of Q2, driving the market cap to a peak of \$2.2 trillion in May.

Compared to Q1, the crypto market experienced a 20% drop in market cap and 33% drop in trading volume.

By the end of Q2, the market cap has **dropped** by 41% from its peak to \$1.3 trillion.

The drop coincided with Tesla's announcement to stop accepting Bitcoin payments because of environmental concerns. Bitcoin's supposed high energy consumption was featured prominently in many media headlines during that period.

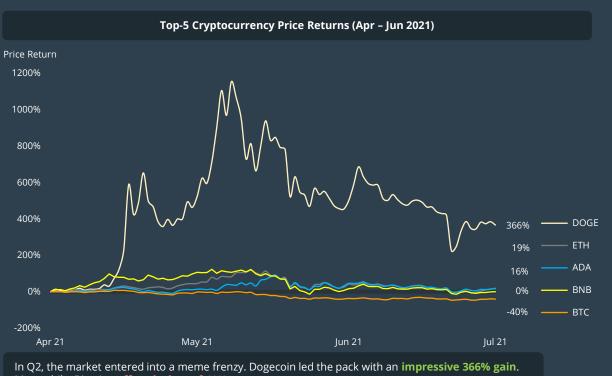
To cap it off, Q2 ended with a nationwide crypto mining ban in China.

^{*} Top-30 Cryptocurrencies as of 1 July 2021

Q2 2021 Top-5 Crypto Returns



Dogecoin flew to the moon following the hype of Meme Coins



Meanwhile, Bitcoin suffered a loss of 40%.

* Top-5 Cryptocurrencies excluding Tether (USDT) stablecoin as of 1 July 2021

Top-5 Cryptocurrencies Average Price Returns in Q2 2021

Price returns Q2 2021 (vs. Q1 2021)



-40% (+103%)



+19% (+159%)



+0.33% (+710%)



+16% (+555%)



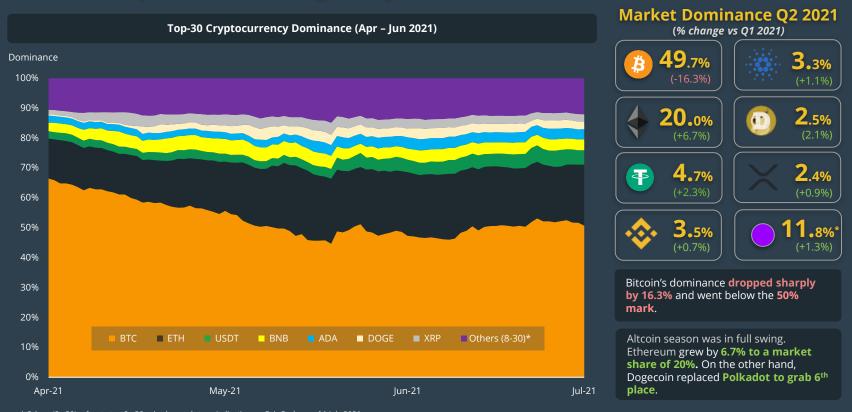
+366%

(1,055%)

Q2 2021 Top-30 Coin Dominance



Ethereum trumped Bitcoin during this quarter

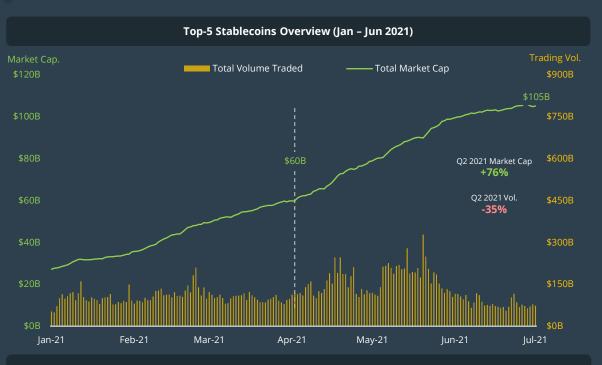


 $[\]star$ Others (8 - 30) refers to top 8 - 30 coins by market capitalization on CoinGecko as of 1 July 2021

Q2 2021 Top-5 Stablecoins



Top-5 stablecoins recorded a 76% increase to \$105 billion in circulation



Stablecoins rallied to new highs and reached a \$105 billion (+76%) market cap, however, volume dropped by 35% to \$73.6 billion. This is likely because traders opted for safety during the 20% market downturn.

Top-5 Stablecoins Market Cap in Q2 2021

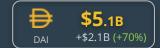
Q2 2021 Stablecoins Circulation

(Q2 2021 Growth)











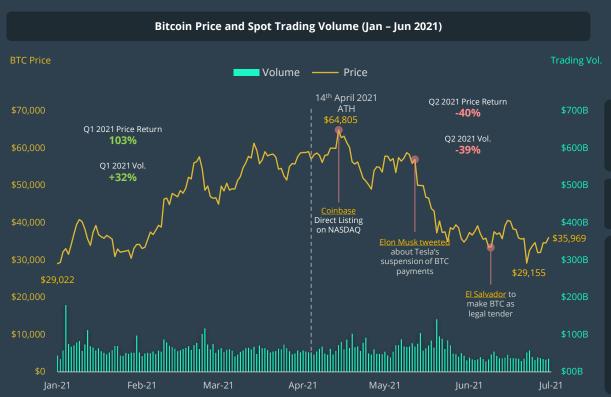


BITCOIN ANALYSIS

Bitcoin Price vs. Trading Volume

CoinGecko (**)

Bitcoin grinds to a halt ... for now



BTC Price return in Q2 2021

After hitting its all-time high in April, Bitcoin has since tapered off. In Q2, Bitcoin hit its lowest price in 2021, briefly touching \$29,154 on 22nd June (representing a 55% drawdown).

Bitcoin ended Q2 2021 at \$35,969, a 40% decline in price and has been consolidating between the \$30,000 to \$36,000 range.

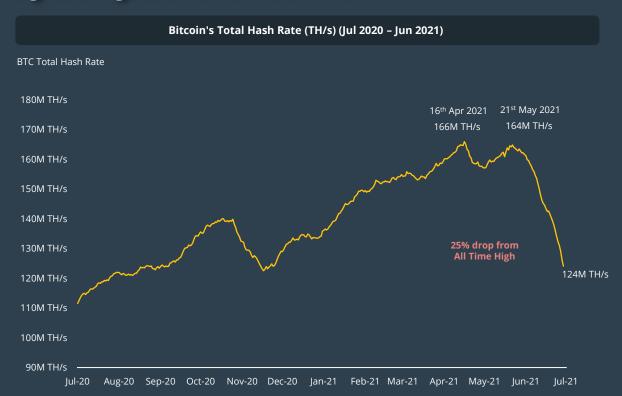
The large sell-off can mainly be attributed to:

- Tesla no longer accepts BTC as a medium of exchange due to its environmental impact.
- The Federal Reserve may raise interest rates sooner than expected to curb higher than expected inflation.
- **Regulations** from China which clamped down on Bitcoin mining.
- Overleveraged traders resulted in cascading liquidations.

Bitcoin Hash Rate



The great migration of China's miners



to end of lune

Bitcoin's hash rate dramatically declined by 25%, falling from April's peak of 166M TH/s to a low of 124M TH/s by the end of June.

This decline can be linked to the nation-wide banning of Bitcoin mining in China on 21st May 2021

Miners have already begun moving out of China. However, once their operations resume, we can expect the total hash rate to recover.

Bitcoin Treasuries in Publicly Traded Companies as of Q2 2021



Public companies are now controlling 1.03% of the total Bitcoin supply

Rank	Company	Total Bitcoin	% of Total BTC Supply	
#1	MicroStrategy Inc.	105,085 BTC		0.500%
#2	Tesla	48,000 BTC*		0.229%
#3	Galaxy Digital Holdings	16,402 BTC		0.078%
#4	Square Inc.	8,027 BTC		0.038%
#5	Marathon Patent Group	4,813 BTC		0.023%
#6	Hut 8 Mining Group	2,851 BTC		0.014%
#7	NEXON Co Ltd.	1,717 BTC		0.008%
#8	Voyager Digital Ltd.	1,239 BTC	This list only includes public companies. Bitcoin held by private companies are not accounted for.	0.006%
#9	Riot Blockchain, Inc.	1,175 BTC	not accounted joi.	0.006%
#10	Aker ASA	1,170 BTC		0.006%

Market Capitalization: Bitcoin vs. Gold & Top-5 S&P 500 Stocks



Bitcoin's market capitalization is now 20x away from flippening Gold

	Assets Market Cap)	Bitcoin's ratio to respective assets	Ratio change Q2 vs. Q1
B	Bitcoin Market Cap: \$0.674 T		
	Gold Market Cap: \$11.355 T	5.90%	(-4.2%)
É	Apple (AAPL) Market Cap: \$2.340 T	28.8%	(-25.0%)
Microsoft	Microsoft Corp. (MSFT) Market Cap: \$2.091 T	32.2%	(-28.6%)
a	Amazon (AMZN) Market Cap: \$1.771 T	38.1%	(-31.7%)
G	Alphabet A (GOOGL) Market Cap: \$1.701 T	39.6%	(-37.7%)
facebook	Facebook (FB) Market Cap: \$1.006 T	67.0%	(-63.8%)

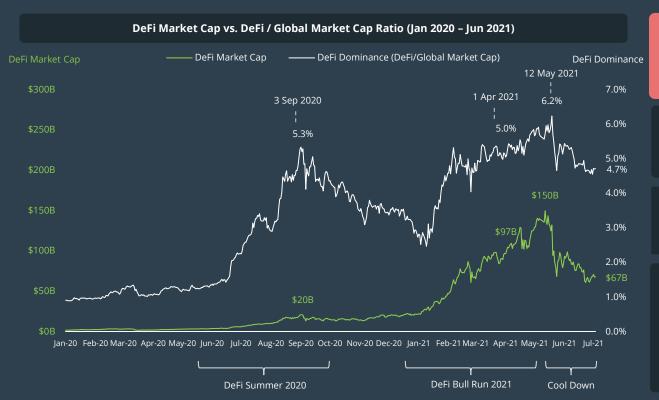


DEFI ANALYSIS

Q2 2021 DeFi Overview



DeFi cools down in the second half of Q2



DeFi market cap reached a \$150B peak in May before suffering a 55% drawdown (\$67B). Quarter-on-quarter, DeFi market fell 43%. However, DeFi retained its 5% crypto market dominance.

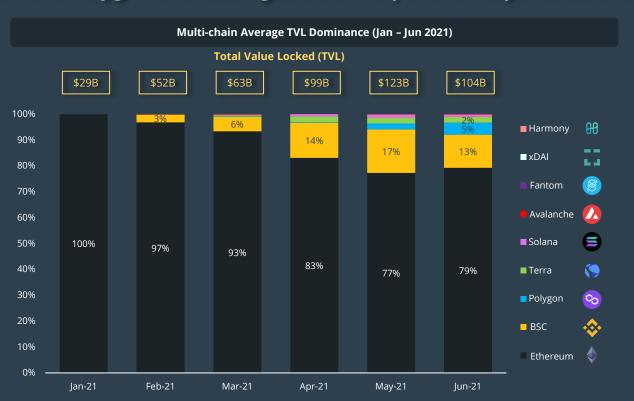
There is a concern that the in-flow of funds has stagnated. DeFi might be at the peak of inflated expectations, mirroring the hype cycle.

This could explain DeFi's focus to onboard more users and institutions from TradFi. For example, MakerDAO has started including real estate loans inside its vault after integrating with Centrifuge on April 2021. Compound Treasury also has started offering institutional access to DeFi yields. Aave Pro will follow suit next quarter.

Q2 2021 DeFi Overview



BSC and Polygon are leading the DeFi expansion beyond Ethereum



+65%

Total Value Locked (TVL) Growth in O2 2021

Despite the 65% TVL quarterly growth to \$104 billion, Ethereum saw its TVL drop by 14% to 79% TVL share by June. Cheaper alternatives such as Binance Smart Chain (BSC) and Polygon have gained market share.

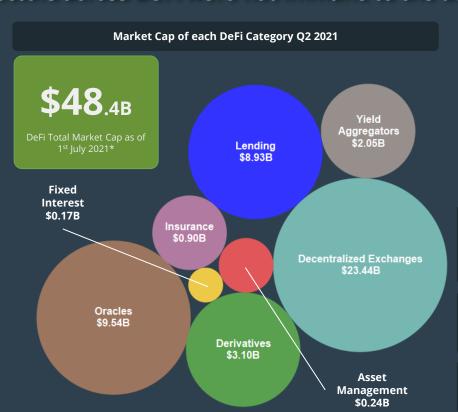
BSC remains undeterred by numerous highprofile hacks (e.g., PancakeBunny and Venus) as it managed to capture 13% of June's TVL market share, an almost 2x increase from March.

Polygon's dominance grew by 5% likely because of the delayed launch of other Ethereum scaling solutions such as Optimism and Arbitrum. DeFi heavyweights have also deployed on Polygon such as 1inch, Aave, and Curve. TVL for these Polygon increased significantly as a result.

DeFi Ecosystem



Sectors across DeFi were not immune to the downturn



Weightage (By 2021 Q2 Market Cap Share)	Sector	QoQ % Change
	Total DeFi Market Cap	-32%
48%	Decentralized Exchanges	-35%
20%	Oracles	-30%
18%	Lending	-16%
6%	Derivatives	-47%
4%	Yield Aggregators	-45%
2%	Insurance	-18%
0%	Asset Management	-49%
0%	Fixed Interest	-31%

DEXs are still the backbone of the DeFi ecosystem as they make up 48% of the total DeFi market cap. The main contributors are mostly the top DEXs on Ethereum such as **Uniswap** and **Sushiswap**. Notably, cross-chain DEXs are also starting to gain traction - THORChain is ranked 3rd based on market cap.

Both lending platforms and oracles have proven to become integral segments of DeFi. Despite their 16% and 30% quarterly drop respectively, the market weight for both remains close to the 20% mark.

The number of fixed interest and asset management projects have grown, however, their market cap has reduced by 30-50%. This is in line with the massive downturn of the entire DeFi ecosystem.

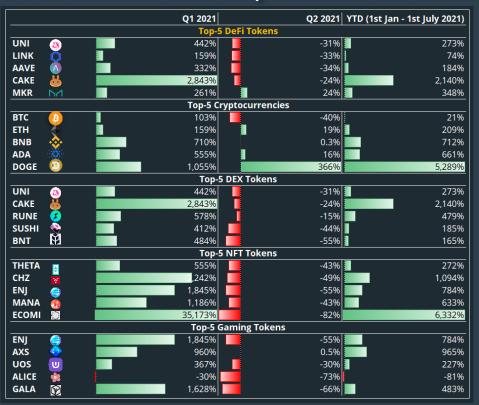
Data is sourced from https://www.coingecko.com/en/categories as of 1 July 2021

^{*} Categorical market cap includes only governance and utility tokens (excluding stablecoins and wrapped tokens).

Performance of Top-5 Tokens from Various Categories



DOGE HODLers have outperformed the market



In Q2 2021, DOGE outperformed other cryptocurrencies, posting a 3month return of 366%. This is followed by ETH and ADA with a 3-month return of 19% and 16% respectively.

The crypto sector that suffered the most is NFT tokens which ranged from 43% to 82%.

MKR and AXS are the only tokens outside of the top-5 cryptocurrencies which have shown positive quarterly gains of 24% and 0.5% respectively.

The crypto sector that suffered the most in Q2 is NFT tokens which ranged from 43% to 82%.

If we zoom out, only ALICE HODLers have suffered YTD losses of -81%. The YTD gains for every other token is positive, with the floor set by BTC at 21%.

Only two tokens saw a positive return of more than 5,000% which is DOGE and the NFT platform, ECOMI.

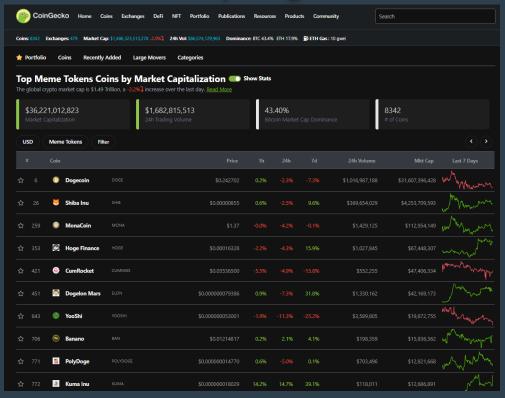


MEME COINS

Meme Coins



Memecoins are the new paradigm?



What started off as a meme has fully evolved into a new movement. Led by DOGE and its cousin, SHIBA, memecoins have gained traction ever since Elon Musk started promoting DOGE on his personal Twitter account in early 2021.

As of July 1, there are a total of 55 memecoins, with a combined market cap of \$36 billion, which is 1.43 times larger than the 2020 GDP of Cambodia.

Dogecoin accounted for more than 87% (\$31.6 billion) of the memecoin market cap, followed by SHIBA (\$4.3 billion) and MonaCoin (\$113 million).

The thing about meme is that it might be based on a shaky foundation. Investing in memecoins is extremely risky and is generally not advisable. Investors are advised to do their own research before purchasing any meme coin.

Meme Coins



Dogecoin moves in tandem with Elon Musk, the king of trolls



Meme Coins



With a \$1 dollar investment on SHIB, you would have gained \$456,693 at the peak



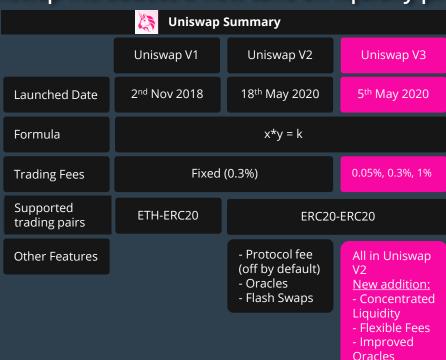


Uniswap V3

A Brief Introduction to Uniswap V3



Uniswap introduces a new take on liquidity provision



Uniswap is an Automated Market Maker (AMM) based exchange and launched its third iteration, Uniswap V3, on 5th May 2021. Each version is non-upgradeable by design.

In the latest V3 iteration, Uniswap introduced two new main features:

Concentrated Liquidity

In Uniswap V3, Liquidity Providers (LPs) can choose the price ranges they would like to provide liquidity. For example, Liquidity Providers for the USDC/ETH liquidity pool may choose to allocate 30% of their capital in the \$2,000 - \$3,000 price range and the remaining 70% in the \$1.500 - \$1.700 price range.

Flexible Fees

Uniswap V3 offers a three-tier pool fee that LPs can choose accordingly:

- a) 0.05%
- b) 0.30%
- c) 1.00%

For example, the USDC/DAI trading pair has low price volatility and may warrant a lower 0.05% pool fee. The ETH/DAI trading pair has higher price volatility and would warrant a 0.30% pool fee. Meanwhile, the 1.00% pool fee may be more appropriate for more long-tail or exotic trading pairs.

Concentrated liquidity



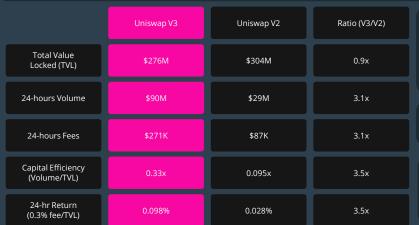
Uniswap V3 is more capital efficient but comes with higher impermanent loss risk

In V2, liquidity is distributed evenly along the price curve and this enables the users to trade against the pool no matter the price range. However, it only utilizes a fraction of the liquidity provided when the asset price is trading at certain price ranges, thereby making the remaining unused liquidity inefficient.

In V3, the Liquidity Providers (LPs) can choose the price range they wish to provide liquidity. As a result, higher capital efficiency is achieved when the assets is traded at that specific liquidity range. A by-product of this is that LPs will receive Non-Fungible Tokens (NFTs) instead of fungible ERC-20 tokens which represent their LP positions.



Case Study: USDC/ETH Uniswap V3 vs. Uniswap V2 Pool



As of 8th July 2021, the TVL in Uniswap V3 for USDC/ETH is \$276 million, which is 0.9x of Uniswap V2, yet Uniswap V3 is trading 3.1x higher than V2 (\$90M vs \$29M). This means Uniswap V3 is much less capital intensive than V2 and giving it a capital efficiency of 0.33x (vs. only 0.095x in V2!).

With higher volume in V3, the LPs would receive 3.5x higher fee returns than in V2. Nevertheless, this does not account for impermanent loss (IL).

For Uniswap V3, a narrow price range set by LPs, equates to a higher **impermanent loss**, should the price trade out of the price range. Moreover, it is not very user-friendly because users would need to set an optimal price range, while considering the volatile nature of the underlying assets.

The Pros, Cons, and Risks of Uniswap V3 as a Liquidity Provider



Uniswap v3 requires proactive management to leverage its capital efficiency ...

The Pros. Cons. and Risks of Uniswap V3 as a Liquidity Provider





PROS

- Higher capital efficiency because lower capital is needed to handle higher trading volume.
- **Higher fees earned** if you set a narrow price range as liquidity is concentrated to cater to a higher volume within that price range.
- Flexible fees with three fee tiers: 0.05%. 0.3%, and 1%.



CONS

- Fees earned are not compounded because fees are not reinvested in the LP pool due to your liquidity share being represented as non-fungible tokens instead of ERC20.
- Difficult to determine the optimal price range to gain optimal return.



RISKS

Although you can earn higher trading fees, you are likely to suffer high Impermanent Loss (IL) in a narrowly defined price range. The narrower you set your price range, the higher is your Impermanent Loss. This is because when the current price goes out of your defined price range, you will suffer 100% Impermanent Loss.

Uniswap V3 Vault Fund Manager



... however, Vault Fund Managers are performing worse than expected

In Uniswap V3, Liquidity Providers (LPs) have to determine the optimal price range for maximizing LP returns while minimizing Impermanent Loss (IL) risks, which is a major pain point. To address this issue, a new breed of protocols have risen, otherwise known as Vault Fund Managers. The three most well-known are Charm, Visor, and Popsicle Finance. Each of them utilize a different strategy and if you want to read more on this, you can read more on Vividot's essay here.

Uniswap V3 ETH/USDT Pool Vault Performance Alpha Vault (Charm.fi) vs. Hypervisor (Visor) vs. Sorbetto Fragola (Popsicle Finance)



Chart legend

- **Red line** = ETH performance if you HODL
- **Green line** = Uniswap V2 50/50 LP performance includes IL without fees earned
- Blue line = Uniswap V3 vault management performance include IL and fees earned

Conclusion

Despite the different strategies, Vividot's findings (based on Dune Analytics' dashboard) suggest that Uniswap V2 LPs are performing better than the Uniswap V3 Vault Managers (represented by the green line hovering above the blue line). On top of that, this does not account for fees earned from V2 which means that the performance of V2 LPs are actually higher than what is shown here. Nevertheless, it has only been less than 2 months since these vaults launched and it is still too early to conclude with any certainty.



TOKENIZING FUTURE YIELDS



Improve your capital efficiency by splitting principal and yield



What is Tokenized Future Yield?

Users deposit their assets to mint future yield tokens, which can be sold upfront to lock in yield.

Represent claims on deposit **How Does It Work? 5.** Wait until expiry to Principal withdraw your funds. Token 1. Deposit into protocol for a fixed period. 2. Mint principal Element and yield tokens **Pendle Tokenized Yield Interest-bearing** 3. Sell your yield **Protocols** tokens upfront assets 4. Receive fixed returns Yield Deposits are used on your deposit. Token to generate yield. Can be used to claim accrued yield

Tokenized Future Yield



A comparison of some of the latest tokenized yield protocols

	G APWine	Element	Pendle
Collateral Deposited	Interest-bearing assets	Regular assets	Interest-bearing assets
Minted Assets	Interest-bearing tokens (IBT) Future Yield Tokens (FYT)	Principal tokens (PT)Yield Tokens (YT)	Ownership tokens (OT)Yield Tokens (YT)
How is the Fixed Yield Determined?	Based on the returns from selling FYT upfront. Depositors will receive new FYT at the start of each new period.	Based on the returns from selling YT upfront. After that, depositors must wait until expiry before they can redeem their principal.	Based on the returns from selling YT upfront. YT tokens can be used to claim accrued interest anytime, without having to wait until the end of a period.
Early withdrawal?	Yes , requires burning of FYT	No	Yes, requires burning of YT

These protocols largely operate in the same manner, based off a dual-token model.

Through this method, they are effectively turning yield into a separate, tradeable asset.

The yield tokens represent a claim on the accrued interest generated from the protocol's deposits.

Users have the **flexibility to sell them to** lock in a fixed interest rate, or hold them to receive a variable rate.

Since yield tokens are relatively cheaper, it offers better capital efficiency because users can gain exposure to fluctuating yield rates without committing large amounts of capital.



POLKADOT & KUSAMA

Basic Infrastructure of Polkadot and Kusama



Polkadot and Kusama are chains that share the same infrastructure

What are Polkadot and Kusama?

Polkadot is another blockchain built by the ex-CTO of Ethereum. Gavin Wood and has since received \$300 million worth of funding. Kusama was created later as a canary network to offer an experimental space for developers to test out their ideas.

2 Key Roles on Polkadot/Kusama Network

Validators

Produce blocks on the Relay Chain.

Collators

Collect Parachain's transactions and provide state transition proofs to the validators.

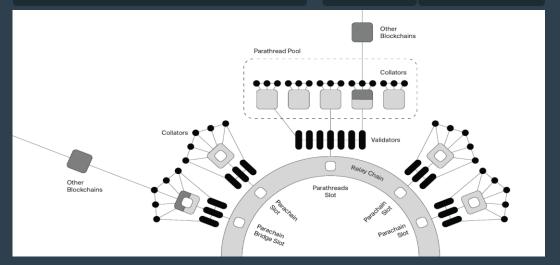


Relay Chain - this is the main chain where it is secured by the validators. The Relay Chain does not support smart contracts as its role is simply to connect all the Parachains and Parathreads.

Parachains – this is where these projects can build on and leverage on the security offered by the Relay Chain. This is where the projects can build on and leverage on the security offered by the Relay Chain.

Parathreads – this is where new and smaller projects that cannot afford to build on Parachains utilize a pay-as-you-go model. It can be viewed as a split version of Parachains because securing Parachains is a capitalintensive investment and require longer time commitment.

A Parachain Bridge Slot refers to Parachains that have been reserved to act as a bridge to other blockchains (e.g. Ethereum).



The Differences between Polkadot and Kusama



While Polkadot emphasizes on security, Kusama focuses on speed

	Kusama (KSM)	Polkadot (DOT)
Network Role	Canary Network (acts as a sandbox for developers)	The main network
Security	Focused on experimentation and speed instead of stability and security	Focused on stability and security
Governance	Takes 7 days to vote on referendum, 8 days to implement changes	Takes 1 month to vote on referendum, and 1 month to implement changes
Staking	Staked KSM can be unbonded in 7 days	Staked DOT can be unbonded in 28 days
Length of Parachain's Slot	Up to 48 weeks	Up to 2 years
Token Supply	Capped supply at 10 mil	Uncapped supply, inflationary

Crowdloans

Similar to other blockchains, Polkadot and Kusama have limited resources to allocate for Parachains. As such, they decided to use Candle Auction to choose which projects can take the spot of Parachains. Projects will bid by having to stake KSM/ DOT during the period of lease. The highest bidder will win the slot. Unlike Initial Coin Offerings (ICOs), the contributed KSM/DOT will be returned back to the users when the lease period ends. Kusama and Polkadot aim to support up to 100 Parachains.

There are two ways to raise the required amount of KSM/ DOT for the Parachains Auction:

- The project team can pay the contributions themselves (usually when the team has access to large funds).
- The project team can acquire a Parachain slot through crowdloans by offering their native tokens up as incentives.

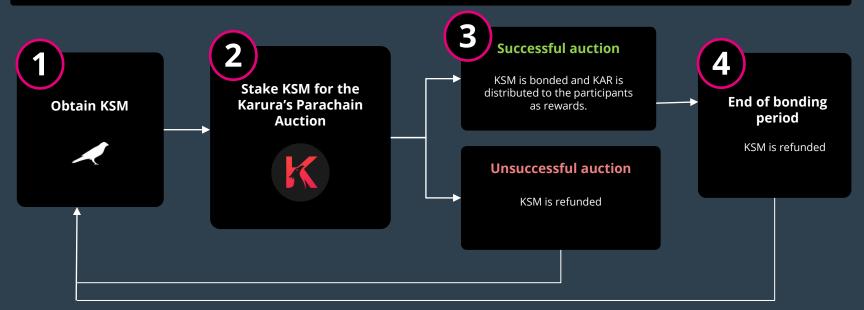


Participating in a crowdloan is similar to staking on a Proof of Stake blockchain

Below shows an example of a user's journey of participating in a Kusama Crowd loan by betting on Karura. The mechanism is very similar to the process of staking Proof-of-Stake (PoS) tokens. Users can bet on the success of the projects' securing a Parachain slot by agreeing to stake a certain amount of KSM during the period of leasing.

Users will receive the project's native tokens as a reward if it succeed (in this case KAR) and the KSM contributed will be returned at the end of the bonding period. Alternatively, if the project fails, the contributed KSM will be refunded.

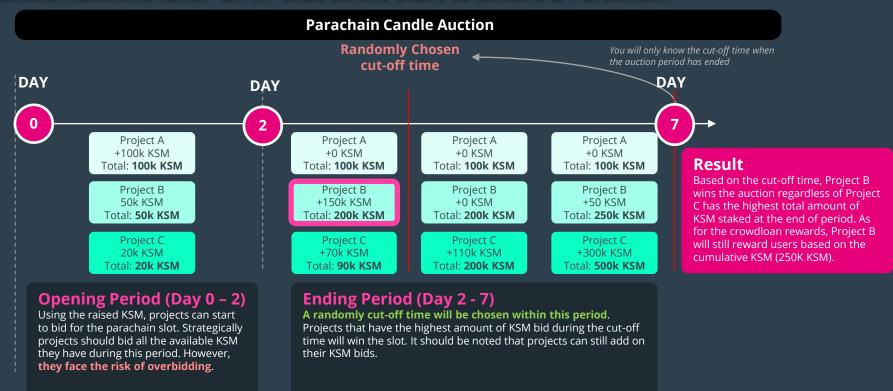
User's journey of participating in a Kusama Crowdloan by betting on Karura.



Crowdloans



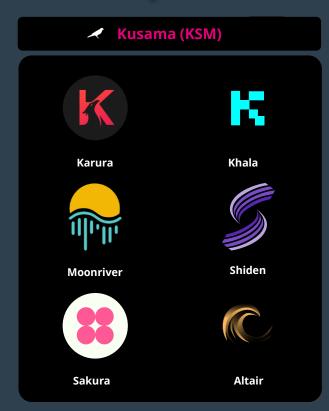
Candle Auctions favor 'all-in' bids at the start to secure a Parachain

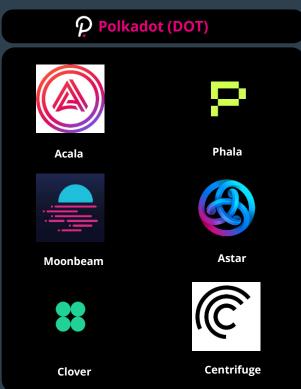


Crowdloans



Crowdloans may mark the start of a Kusama/Polkadot season





There are quite a few projects that have decided to build on Kusama and Polkadot in anticipation of the Parachain auction.

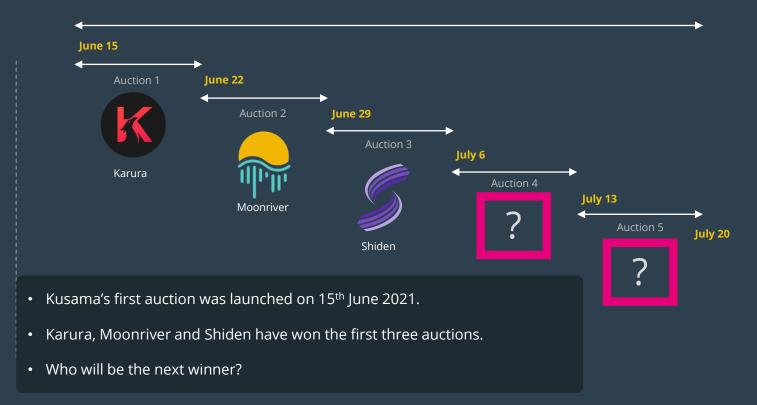
The first Parachain auction of Kusama has already started on 15th June 2021.

Projects that choose to build on Polkadot most likely will also launch on Kusama. As such, the same project team will release two different tokens. The table shown on the left are arranged to showcase that. For example, Karura and Acala are built by the same team. Khala with Phala, Moonriver with Moonbeam.

Polkadot and Kusama



Several winners have already been announced for the Parachain Auctions

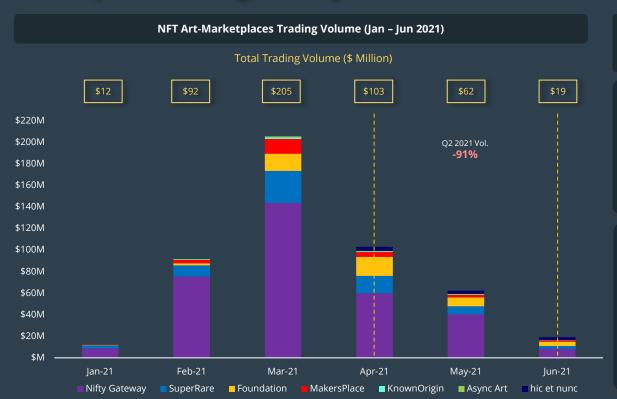




Non-Fungible Tokens (NFTs)



Art marketplaces have significantly slowed down...



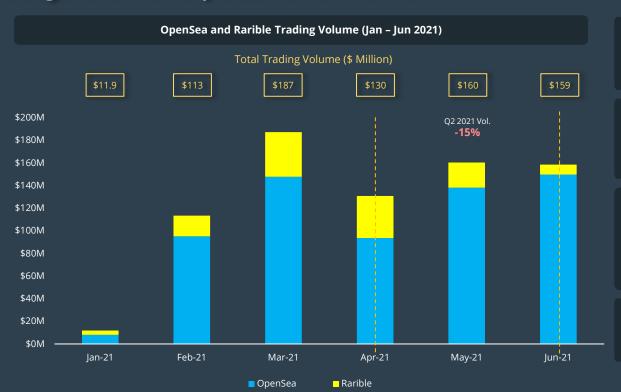
The appetite for Art-based NFTs has greatly dropped. By the end of June, trading volume saw a 91% decrease from April.

In Q1, art marketplaces saw a total trading volume of \$312 million. However, in Q2, that figure dropped to \$184 million. Notably. the total trading volume for Q2 is less than the month of March alone. This includes the new art marketplace, Hic et nunc, which launched in March on the Tezos blockchain.

Although hic et nunc is a newer platform, it has a monthly average of \$3.17M trading volume and has surpassed smaller incumbents like MakersPlace (\$2.54 million), KnownOrigin (\$0.47 million), and Async Art (\$0.35 million). Part of its quick success has been attributed to its strong environmental narrative (Tezos uses a Proof-of-Stake Model) and lack of competitors on Tezos.



... but general marketplaces remain active



Market demand for general NFTs appears to have plateaued as both OpenSea and Rarible combined saw a slight decrease in trading volume (-15%) from April to June.

While trading volume appears to have stabilized, it still cannot compare to its alltime-high in March (\$187 million) where the NFT narrative and media hype was at its peak.

One interesting observation is the growing dominance of OpenSea. In April. OpenSea's trading volume was 3x bigger than Rarible, however, by the end of June, it was 17x bigger. OpenSea even surpassed its all-time-high in March (\$147 million) by \$2 million.

A reason for this could be new NFT collectibles sweeping across Ethereum which are often listed on OpenSea as their preferred choice.



New NFT Collectibles are all the rage, driving up marketplace activity

Over the quarter, we have seen many new NFTs that borrow elements from CryptoPunk's iconic **2D style**. While some have gravitated towards pixelated art, the more popular ones (some of which are listed below) are banking on **crypto culture** and **memes**. There are however, two outliers which we have pinpointed. One is, in fact, created by the creators of CryptoPunks themselves while the other line of NFTs are curated and randomized blocks of art.



Art Blocks November 2020 Art Blocks consists of a variety of art pieces involving geometric shapes, lines, and patterns. Buyers may choose a preferred artist/style where users may pay to mint a randomly generated version of the selected content. The resulting piece might be a **static image**, **3D model**, or an **interactive experience**. Art Blocks saw renewed interest in June 2021 when new curated art collections were introduced.

4,266No. of Unique

\$1.3k

Average Sale Price since inception



Bored Ape Yacht Club April 2021 The Bored Ape Yacht Club (BAYC) is a collection of 10,000 Bored Ape NFTs with over 170 unique traits. Owners of the NFT will have access to a collaborative graffiti board known as THE BATHROOM. Over time, owners will also get other privileges including exclusive rights to purchase BAYC merchandise and opportunity to participate in a future BAYC Treasure Hunt.

5,744

\$3.3k

No. of Unique Buyers Average Sale Price since inception



The Meebits May 2021 The Meebits are 20,000 unique 3D voxel characters, created by Larva Labs, the creators of CryptoPunks. Similar to CryptoPunks, Meebits have randomized traits and rarities. Owners of a Meebit are also given access to a full 3D model asset pack which can be used to render/animate the Meebit, or even use it as an avatar in the metaverse.

2,031 No. of Unique Buvers \$10.6k

Average Sale Price since inception



Wicked Craniums June 2021 The Wicked Craniums are residents of the fictional island of Osseous. There are 10,762 Craniums with over 180 differentiable features. Owners of the NFT will have access to The Cradle, a member's only social platform. Similar to BAYC, there will be future events like real-life sculpture airdrops and release of trading cards.

3,075 No. of Unique Buyers \$868.2

Average Sale Price since inception



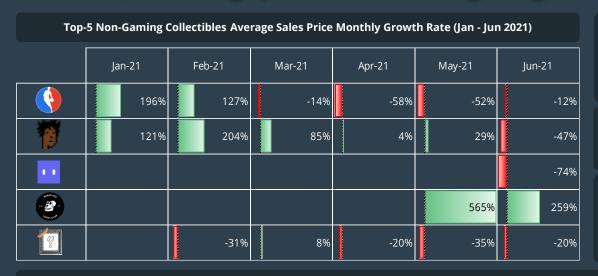
Bored Ape Kennel Club June 2021 The Bored Ape Kennel Club (BAKC) was a **surprise "airdrop" to all owners of BAYC**. Each BAYC NFT entitled the owner to **"adopt" (mint) a new BAKC NFT for free**; they only need to pay for gas. Like BAYCs, there are only 10,000 of them with 170 unique traits. Notably, there is a **2.5% royalty fee** for all transactions on OpenSea for the first 6 weeks where **proceeds would be donated to animal charities**.

1,278 No. of Unique Buyers

Average Sale Price since inception



Nevertheless, the average prices of 'older' non-gaming collectibles are dropping



Floor prices across the board have **dropped considerably** except for the Board Ape Yacht Club (BAYC). NBA Top Shot peaked in February at \$182 while CryptoPunks peaked in May at \$91k. Hashmasks have not recovered since its peak at \$6,245 during its launch month.

Even The Meebits, which launched recently in May, suffered a 74% monthly decrease in floor price from \$16.9k to \$4.3k.

BAYC, despite its launch in April, has performed extremely well, and is ranked 4th out of all non-gaming collectibles by sales volume (5th place over all NFT collectibles). In June, it had an average floor price of \$2,081.

Top-5 Non-Gaming Collectibles Aggregate Sales Volume Since Inception (As of 1 July 2021)





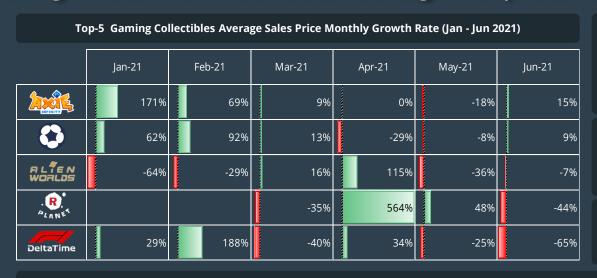








Gaming NFTs saw renewed interest although floor prices have also dropped



Newer games like Alien Worlds and R Planet saw large spikes in interest in O2 but has since **slowed down**. Alien Worlds token (TLM) was listed on Binance on 13 April and peaked in April at \$9.05. R Planet released their R-Planet Land on 14 April 2021 and peaked in May at \$342.47

Floor prices for incumbents (established before 2020) have been relatively stable throughout Q2, except for F1 Delta Time which has dropped significantly from \$3,534 in February, to \$751 in lune.

One thing to note, however, is the massive growth Axie Infinity has seen in terms of sales volume - it is now 1st for gaming NFTs and ranked 3rd over all NFT collectibles.

Top-5 Gaming Collectibles Aggregate Sales Volume Since Inception (as of 1 July 2021)



Axie Infinity

121.880 **Unique Buyers**



43.430 Sorare **Unique Buyers**

\$50.6M



306.784 Alien Worlds Unique Buyers

\$23.7M



\$15.4M

R Planet

13.171 **Unique Buvers**



\$5.3M

1.187

F1 Delta **Unique Buyers** Time

The King of Gaming NFTs - Axie Infinity



Axie Infinity is a Pokémon-inspired battle strategy game by Sky Mavis

Adventure Mode (PVE)



Axie Infinity was first developed by gaming studio, Sky Mavis back in 2018. The game borrows many elements from Pokémon including a breeding system for skill cards and stats (analogous to Pokémon's moves and IV stats). Gameplay can roughly be divided into two core features - Player-versus-**Environment (PVE) and Player-versus-**Player (PVP).

Arena Mode (PVP)



During a battle, players must bring three Axies. Each Axie has four skills, represented by cards which are randomly drawn every round. There are currently over a 100 different skills and 9 species. Axie Infinity also has positioning and energy consumption mechanics similar to Hearthstone.

Mobile App



Unlike most blockchain-based games, Axie Infinity works on both Android and iOS. This is on top of their desktop app. Users are thus free to play under one account on all devices. However, users must have a Ronin Wallet (Axie Infinity's sidechain) in order to acquire and breed Axies.



Each Adventure/Arena battle requires one Energy to play. The maximum amount and refill rate depends on how many Axies there are in the account.

The King of Gaming NFTs - Axie Infinity



Over the past few months, Axie Infinity has exploded in popularity ...



Although Axie Infinity has been around for more than three years, its popularity did not take off until 2021.

Monthly sales volume for Axie Infinity trended upwards in February 2021 after its Phase 1 launch of its sidechain. Ronin. However, Phase 1 only allowed land-based assets to be migrated.

The real catalyst came in May 2021 when Axies were migratable and could be traded freely on Axie Infinity's Roninbased marketplace. The surge in media hype, especially around Axie Infinity's Play-to-Earn elements, led to a 131x increase in a span of 6 months.

The King of Gaming NFTs - Axie Infinity



... leading to more revenue than ever



Revenue for Axie Infinity is generated from breeding fees and trading fees. Each time an Axie breeds, it requires 4 AXS, all of which is sent to the protocol's treasury. As for trading fees, each time an asset gets sold on the marketplace, Axie Infinity receives 4.25% worth of trading fees in ETH.

With the Ronin Side Chain Phase 2 implementation, revenue ballooned along with trading volume. Within 6 months, Axie Infinity's revenue went up by 118x.

Notably, breeding fees surpassed marketplace fees in May 2021, likely due to the Ronin migration, (thus lowering the costs of breeding operations) and the increased demand for Axies. In June alone, breeding fees accounted for \$6.9 million of total revenue (57%).

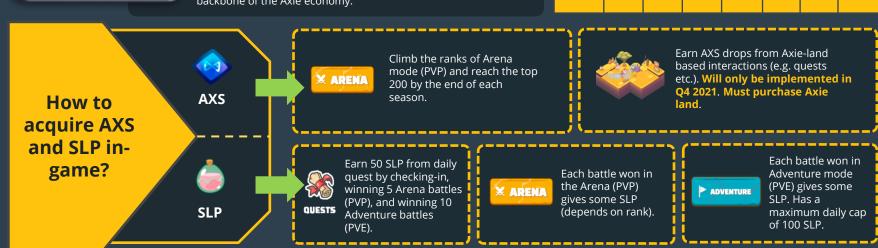


Axie Infinity's success is closely linked to its well-designed P2E mechanics



Axie Infinity has 2 fungible tokens (aside from Axies NFT themselves). One is Axie Infinity (AXS) and the other is Smooth Love Potion (SLP). Both tokens are required to breed an Axie. A single Axie can breed a maximum of seven times. The cost of breeding is 4 AXS + a certain amount of SLP (depending on how many times both parents have bred). For example, if one parent has bred 0 times and the other has bred 2 times, the total SLP cost would be 600. One thing to note is that Axie parents and siblings cannot mate with each other. This breeding system forms the backbone of the Axie economy.

Breed Count	(0/7)	(1/7)	(2/7)	(3/7)	(4/7)	(5/7)	(6/7)
SLP Cost	150	300	450	750	1200	1950	3150





There are four main ways for players to Play-to-Earn on Axie Infinity



Sell SLP/AXS acquired from in-game on exchanges like Uniswap and Binance.

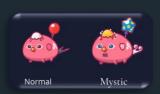
Currently, Axie Infinity operates on its Ronin sidechain where assets would need to be bridged using the Ronin Wallet. However, the team is building a Ronin-based DEX which would remove the need to bridge out SLP/AXS and sell it on the main Fthereum network.



A decent team is needed to progress through higher levels of Adventure Mode and higher ranks in the Arena. Many breeders look for specific skills, traits, and parental genetics to ensure they have the best chances of obtaining offspring that fit the current meta. Breeders will then sell their Axies on the **Axie Marketplace or use** the offspring to breed new Axies.



AXS also doubles up as a governance token and would eventually be able to be staked (sometime in 2021) to earn protocol revenue. Delphi Digital, an Axie infinity Partner who helped design the tokenomics structure, has forecasted an annual percentage yield of 40% for the next 5 years.



Collect and speculate on rare Axies, Axie Land Plots and other land-related assets. Rare Axies are issued by the gaming developers at special events and have different cosmetics. Land also has a limited supply, and different rarities that would influence spawn rates of resources, chimeras etc. However, land gameplay has not yet been implemented although users can still buy land.



Axie Infinity is sparking a financial revolution by creating a whole new economy



Daily SLP Farmers



Assuming a player has 3 Axies, he would be able to use 20 Energy per day.



Technically, a player does not need energy to earn SLP from Adventure mode. However, he would require energy to gain experience to improve his Axies' stats and progress to higher levels. Let's assume he spends 10 energy per day on PVE games and earns the maximum cap of 100 SLP.



The remaining 10 Energy is spent on the Arena. Arena battles are a lot more uncertain as it is driven by decision-making, team composition, and a bit of luck. The amount earned from the Arena is also dependent on your rank - the higher your rank, the more SLP you earn. Assuming he averages a 50%-win rate at 7 SLP per win (average SLP earned in the 1100-1299 MMR bracket), he would earn 35 SLP in total.



Following this routine, he would also be able to complete the daily quest for 50 SLP.



At the time of writing, 1 SLP = \$0.30, putting his total earnings at 185 SLP or \$55.5 USD per day.*

Axie Infinity has become extremely popular in many developing countries. In May 2021, Axie Infinity released a mini-documentary on its growing adoption rate in the Philippines. Players of all ages have suffered throughout the pandemic and are playing Axie Infinity for an alternative source of income.





However, not everyone has the capital to acquire the minimum number of 3 Axies to play the game. Budget teams can cost up to 0.5 ETH while specialized competitive teams can cost up to 1 ETH. Floor prices for Axies have also been increasing over the past few weeks.

This has led to the popularization of Axie Scholarships, a form of loan where Axies are lent to 'Scholars' in return for a portion of SLP earnings. Some scholars even have CVs!



Other games are capitalizing on the P2E element, including investors and platforms

Upcoming NFT Games



Guild of Guardians is a mobile, multiplayer, fantasy, action RPG that is slated for release in early 2022. One of the key elements include beginner-friendly P2E mechanics where players can earn heroes and items without spending any money.



Aavegotchi recently unveiled their latest plans for the "Gotchiverse" which has some similarities with Axie Infinity's land game mechanics and rolled up into an action RPG. There is also a specially designed role known as a "Liquidator" which is meant for P2E players.

Play-to-Earn (P2E) Investors



Yield Guide Games (YGG) is a decentralized P2E gaming guild. YGG has numerous gaming assets in a wide variety of NFT games, including Axie Infinity. In June 2021, the guild raised \$4M in a Series Funding A round and plans to launch their new governance token (YGG) on 27 July 2021 via SushiSwap.



BlackPool

BlackPool is a decentralized autonomous organization (DAO) that purely operates within the NFT industry. Aside from acquiring collectibles and Art NFTs, the fund also invests in gaming assets and loans them out in return for in-game currency. Some examples include Sorare and Axie Infinity. Blackpool currently has about \$6.6M assets under management.



e%eedme

Exeedme is a P2E platform that allows players to earn crypto and NFTs while playing their own games (e.g. CS:GO). Users may also win NFTs and unlock achievements in-game through staking their token, XED.



Matrix allows content creators, individuals, and communities to build better community interactions and raise funds from fans through their gamification platform. Users may leverage the platform to sell merchandise and NFTs, create quests and rewards for fans, while earning income along the way.



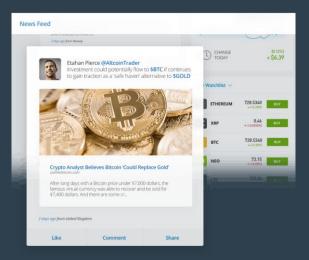
'етого**'**

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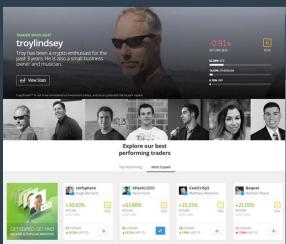
Click here to learn why 13 million users worldwide trust eToro



Social Trading Platform

The array of social features eToro offers is vast and extends well beyond the trading platform itself. While pioneering social features and making the financial market more friendly and accessible to almost anyone around the world, eToro has also extended its reach and is maintaining active social channels.

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EXCHANGES

Q2 2021 Top-10 Cryptocurrency Exchanges



Total spot trading volume grew by 69% to \$7.38 trillion



+69%

Top-10 (CEXs + DEXs) Total Trading Volume Growth in Q2 2021 vs. Q1 2021

Overall, Q2 spot trading volume across the top-10 centralized and decentralized exchanges grew from \$4.4 trillion to \$7.4 trillion (+69%).

The \$3 trillion growth was driven by **CEXs which** contributed to 88% of the quarter's increase.

DEXs recorded a **higher growth** compared to CEXs (growth rate of 131% vs. 65%) and contributed to 12% of Q2 total growth.

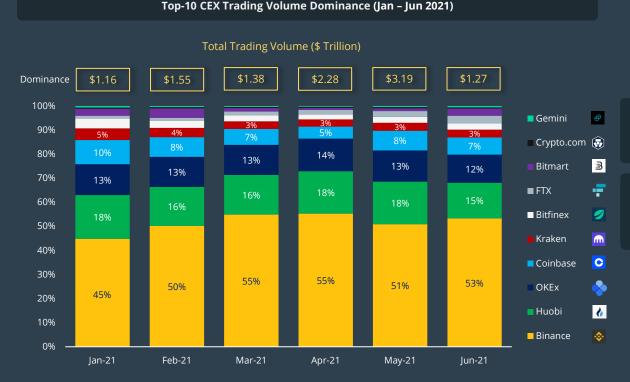
The DEX-CEX ratio has increased from 6.7% in Q1 2021 to 9.4% in Q2 2021.

However, the total trading volume of both exchanges has decreased by nearly 60% in June, ending the quarter with \$1.43 trillion which is \$2.1 trillion lower than May.

Q2 2021 Top-10 Centralized Exchanges (CEX)



CEXs spot trading volume recorded \$6.74 trillion



+65%

Top-10 CEX Total Trading Volume Growth in Q2 2021 vs. Q1 2021

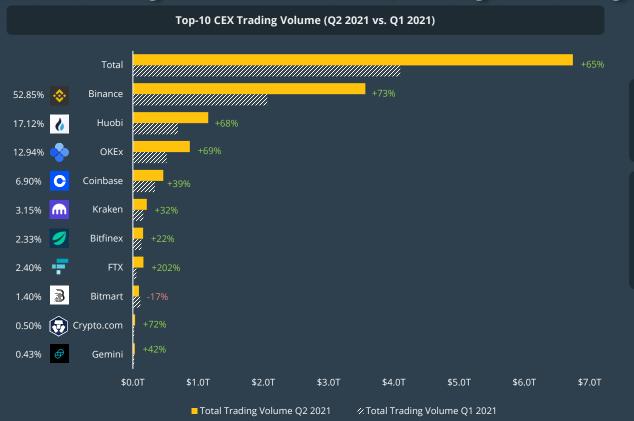
Despite overall \$2.1 trillion volume decline in from May to June, Binance still maintained its dominance by controlling more than 50% of the market share throughout Q2.

Huobi's dominance scaled back from 18% to 15%, while its trading volume decreased by \$376 billion (67%) in June because of the crackdown in China.

Q2 2021 Top-10 Centralized Exchanges (CEX)



Most CEXs trading volume has increased, 53% of growth belongs to Binance



Binance is the major contributor to the increase, accounting for 53% (+\$1.5 trillion) of this quarter's increase. This is followed by Huobi (17%), OKEx (13%), and Coinbase (7%).

Bitmart is the only CEX that performed poorly when compared to Q1, shrinking by 17% in trading volume.

Otherwise, all the other CEXs have grown at least 22%. FTX leads the pack with a +202% growth, albeit from a smaller base.

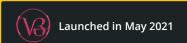
Q2 2021 Top-10 Decentralized Exchanges (DEX)

CoinGecko (**)

The DEX ecosystem remains as cutthroat as ever

	Jan-Mar	Apr	May-Jun
1	Uniswap v2	Pancakeswap v1	Pancakeswap v2
2	Pancakeswap v1	Uniswap v2	Uniswap v3
3	Sushiswap	Pancakeswap v2	Uniswap v2
4	1inch	Sushiswap	Quickswap
5	Curve	1inch	1inch
6	0x	Curve	Sushiswap
7	Bancor	0x	Curve
8	Balancer v1	Bancor	Waultswap
9	Tokenlon	Balancer v1	Dodo
10	Dodo	Dodo	Bancor

V2 Launched in April 2021



In Q1 2021, **DEX dominance was linear** throughout the analysis period where the top-10 DEXs maintained their rank. This time, however, the same approach may not adequately capture the narrative.

In April 2021, Tokenlon fell out of the top-10 and was replaced by Pancakeswap v2. During the migration to v2, users were not allowed to add liquidity to Pancakeswap v1. Even then, the volume of v1 was significant during that period. This however, did not apply to Uniswap v3 when they launched in May 2021 as users were still allowed to add liquidity into Uniswap v2.

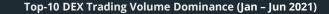
Similar to Tokenlon, Pancakeswap v1, Balancer v1 and 0x fell out of the top-10 in May 2021, and was replaced by Uniswap v3, Quickswap and Waultswap. Quickswap exploded to rank No.4 after riding the hype of users into the Polygon chain during the Ethereum's high gas fee period.

Considering all these events, we decided to **include all** exchanges that have appeared in the top-10 throughout Q2 2021 to paint a better picture of the DEX ecosystem.

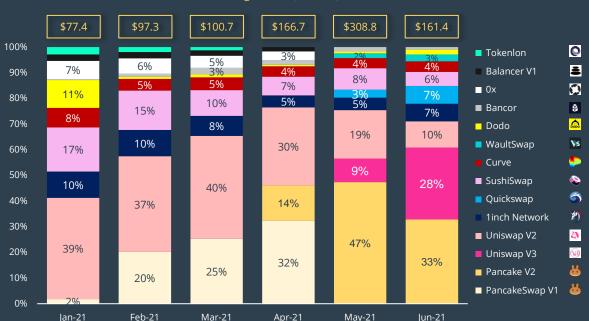
Q2 2021 Top-10 Decentralized Exchanges (DEX)



DEXs spot trading volume recorded \$486.5 billion







+131%

Top-10 DEX Total Trading Volume Growth in Q2 2021 vs. Q1 2021

Decentralized exchanges spot trading volume recorded a total of \$637 billion in Q2. This marks a 131% increase from Q1. However, it suffered \$148 billion loss (-48%) loss from May-June, representing the biggest month-on-month loss

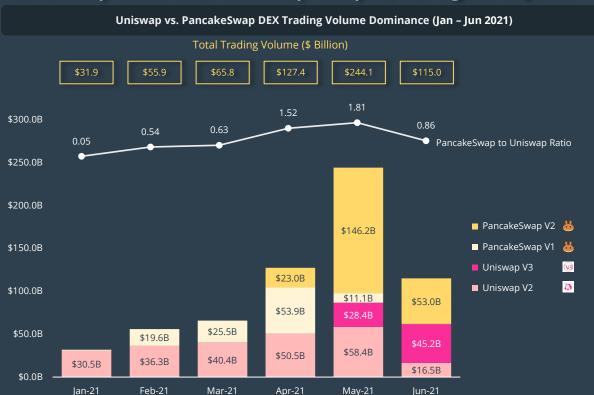
Unlike CEX, the top-10 DEX ranks are not constant throughout the quarter. Tokenlon, Balancer V1. and 0x lost to newer exchanges, especially to DEX from altchains (PancakeSwap & WaultSwap - BSC. and OuickSwap - Polygon)

There's a clear rivalry between Uniswap and Pancake, Overall, Uniswap is still the king of DEX reigning at 38% (V2 & V3). However, Pancake V2 is at 33% (excluding V1 as it is not part of the top-10 DEX by 1st July 2020)

Q2 2021 Top-10 Decentralized Exchanges (DEX)



PancakeSwap took over Uniswap in April, fell again in June



PancakeSwap flipped Uniswap in April and May during the bull run, suggesting that retail investors dominated the market during that period.

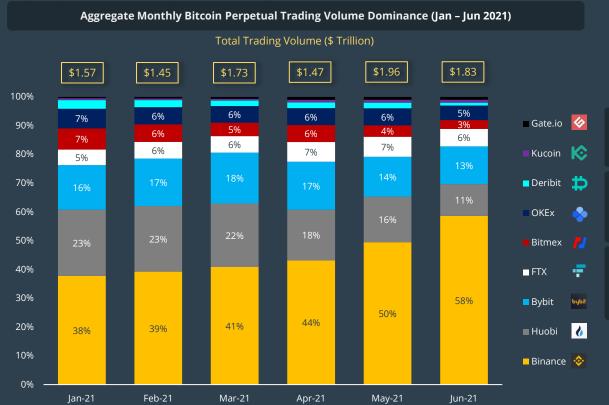
PancakeSwap trading volume has increased sharply by 517%, from \$26 billion in March to \$157.3 billion in May. However, Uniswap rose again to become the top DEX in June with a combined volume of \$62 billion.

^{*}PancakeSwap V2 was launched on 23 April 2021. *Uniswap v3 was launched on 5 May 2021.

Q2 2021 Derivatives Exchanges – Bitcoin Perpetual Swaps Volume



BTC perpetual swaps trading volume recorded \$5.26 trillion



Top-9 Bitcoin Perpetual Swap Trading Volume Growth in Q2 2021

Bitcoin perpetual swaps trading volume across the top-9 derivative exchanges saw a quarterly increase of 6% to \$1.8 trillion.

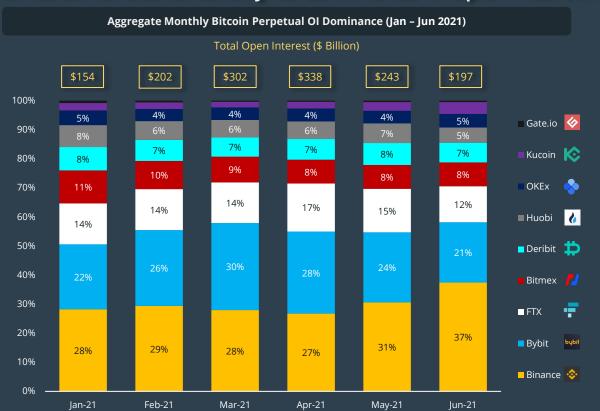
In terms of dominance, Binance continued to lead the pack, increasing its dominance to 58%, while others fell or remained consistent. Huobi had the biggest drop of -7%.

Although their **dominance has shrunk**, Bitmex and FTX have achieved a significant increase in trading volume compared to Q1, recording a 201% and 108% increase respectively.

Q2 2021 Derivatives Exchanges – Bitcoin Perpetual Swaps Open Interest



Binance continues to solidify its dominance of Open Interest (OI)



-35%

Top-9 Bitcoin Perpetual Swap Open Interest Growth in Q2 2021

Bitcoin perpetual swaps open interest (OI) across top-9 derivative exchanges recorded a total of \$778 billion ending June; representing a quarterly decrease of 35% to \$197 billion in Q2.

Bybit (46%), Binance (9%), and FTX (16%) accounted for 71% (-\$75 billion) of the quarterly decrease.

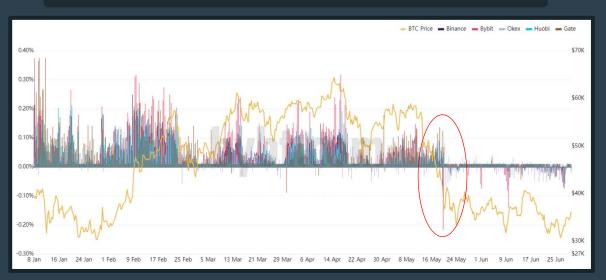
As BTC perpetual swaps open interest continued to dwindle in Q2, Binance increased its dominance from 27% to 37%, while Bybit and FTX suffered a hefty 7% and 5% drop, respectively.



Q2 2021 Derivatives Exchanges - Bitcoin Perpetual Swaps Funding Rate

From April's highs, funding rates plunged to rock-bottom levels in mid-May.





0.008% (-6.4 b.p.)

Weighted-Average 8-hour Bitcoin Funding Rates in Q2 021

Funding rates on Bitcoin perpetual swaps significantly decreased from an average of 0.07% in April to 0.01%.

During Bitcoin's run-up to \$60k, funding rates remained consistently high, even reaching over 0.3%, as traders became overleveraged.

However, the massive crash in Bitcoin price on May 19th sharply reversed funding rates to negative, going as far as -0.2 %. Over \$7 billion dollars worth of liquidations were triggered.

Since then, funding rates have remained relatively stable in May and June as Bitcoin consolidates in the \$30,000 - \$36,000 range.



COINGECKO ANNOUNCEMENT





"This is an excellent resource for anyone who wants a comprehensive introduction to DeFi."

- Kain Warwick, Founder of Synthetix





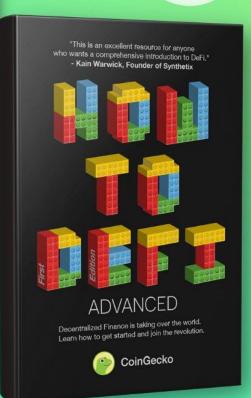


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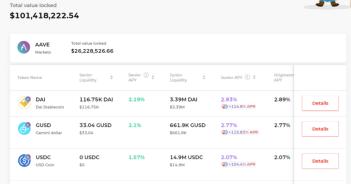
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Howdy! Here's one of our past Farmwatch. We talked about some em' crops on BarnBridge - up to 118% APY!





Farm Location: BarnBridge

You will need: Dai (DAI), Tether (USDT), or USD Coin (USDC)

Tips: Based on your risk appetite, you can opt for a fixed or variable yield by selecting the appropriate tranche.

APY: 1% - 118%

Rewards: Deposited asset, **BOND** and/or **stkAAVE**

For more information:

Beginner's Guide to SMART Yield









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