



GMX Research Report

By Riley

February 2022

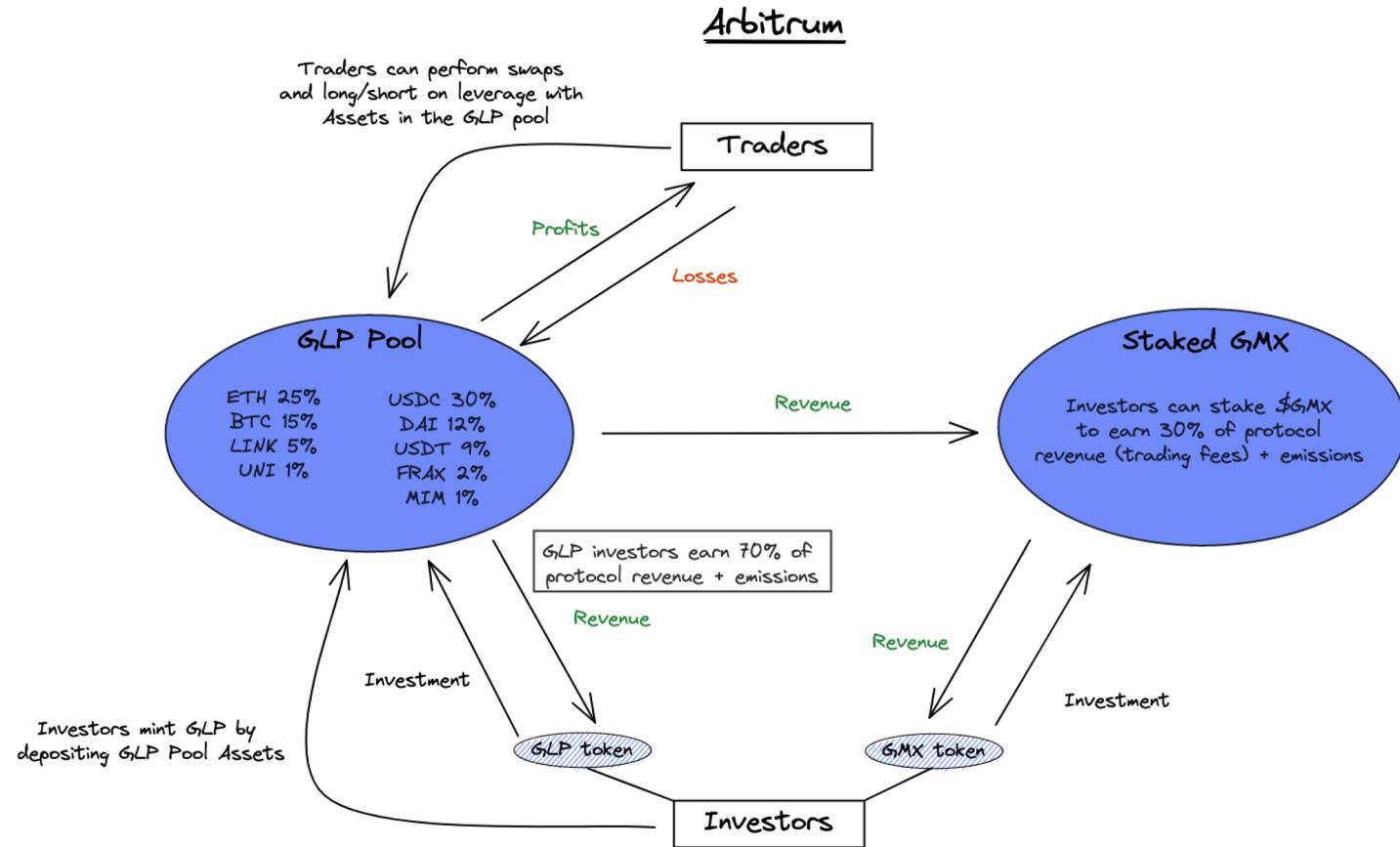
Project Overview | GMX

GMX is a **decentralised perpetual and spot exchange** that allows you to **trade assets on-chain**, without an account, KYC, geographic restrictions or high centralised exchange fees.

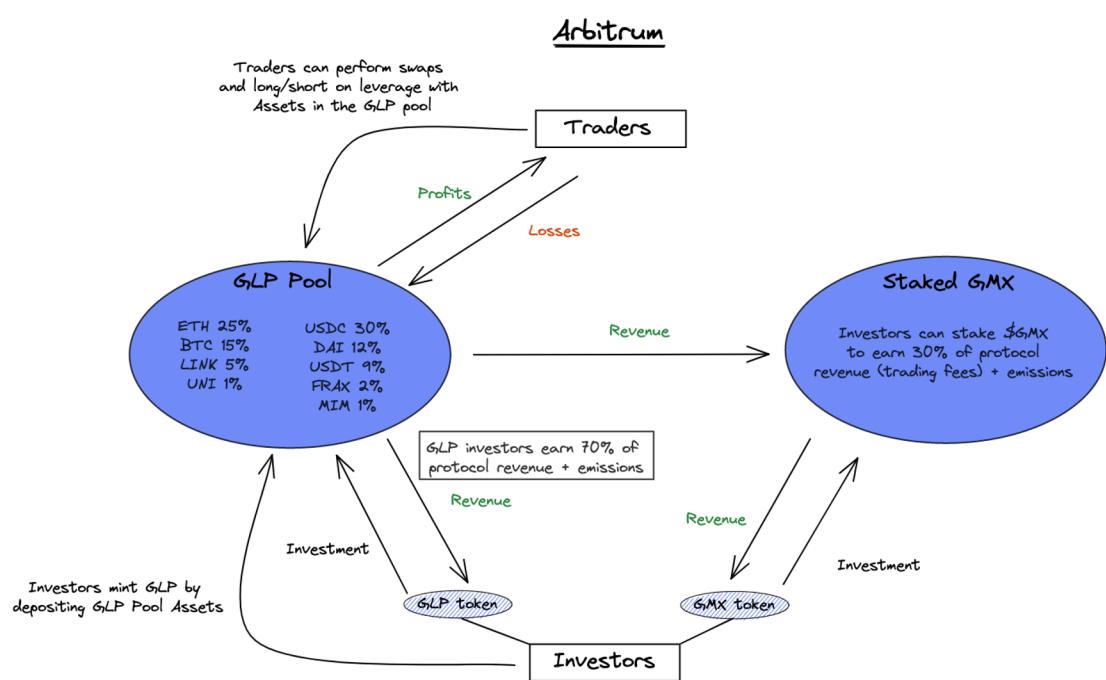
The exchange initially launched as **Gambit Financial** on the Binance smart chain (BSC) but later rebranded to GMX when it launched on Arbitrum. The exchange now operates on both the Avalanche network and on Arbitrum, a layer 2 scaling solution built on Ethereum, and has plans to expand to new chains in the future.

Users can long or short assets in the GLP pool, on **up to 30x leverage and complete swaps**. The pool is composed of high quality crypto-assets, which vary depending on network.

Since its launch on Arbitrum (31.08.21), GMX has processed a total volume of \$16,870,364,343. On the 6th of January 2022, GMX launched on the Avalanche exchange and has since processed a total volume of \$5,090,570,247, bringing the cumulative total volume to over \$21.5 Billion.



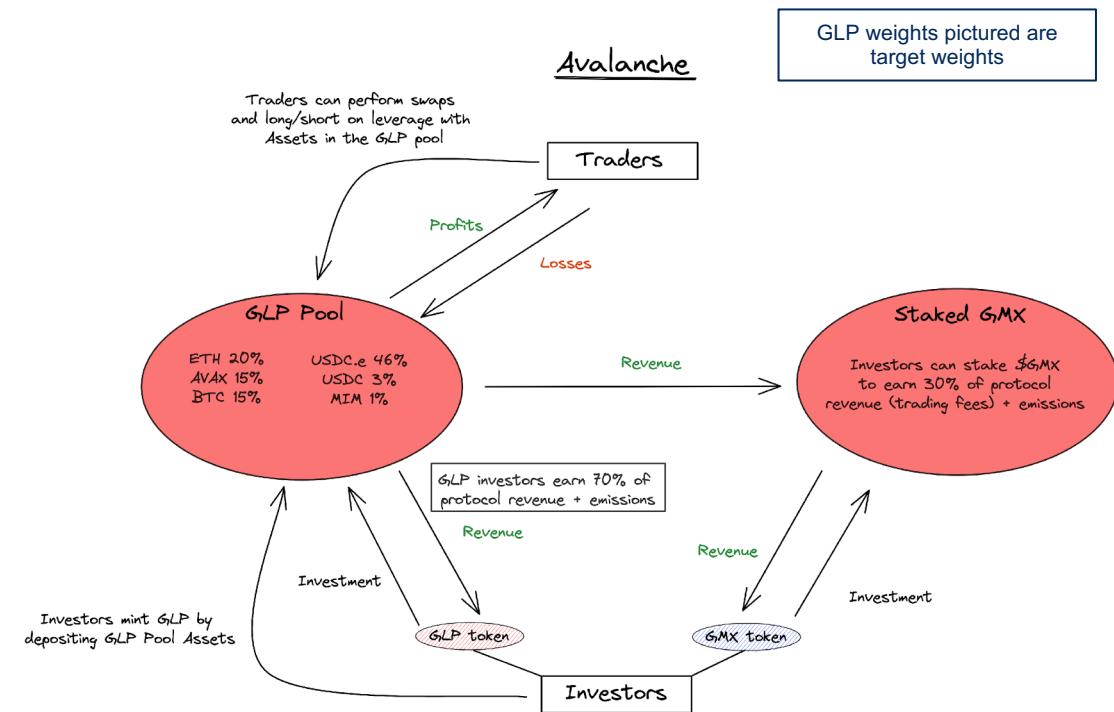
Project Description | Overview of Protocol Mechanics



Traders on the GMX platform on the **Arbitrum network** can perform asset swaps on **ETH, BTC, LINK and UNI** and a variety of **stable coins**. They can also leverage trade these assets in both directions by utilising the assets in the pool.

When entering a long on Bitcoin for example, a trader is '**renting out**' the upside in Bitcoin, from the Arbitrum GLP pool.

When entering a short on Bitcoin, a trader is '**renting out**' the upside of the Stablecoins versus Bitcoin, from the Arbitrum GLP pool.



Traders on the GMX platform on the **Avalanche network** can perform asset swaps on **ETH, BTC and AVAX** and a variety of **stable coins**. They can also leverage trade these assets in both directions by utilising the assets in the pool.

When entering a long on Bitcoin for example, a trader is '**renting out**' the upside in Bitcoin, from the Avalanche GLP pool.

When entering a short on Bitcoin, a trader is '**renting out**' the upside of the Stablecoins versus Bitcoin, from the Avalanche GLP pool.

GLP weights pictured are target weights

Project Description | GLP Pool

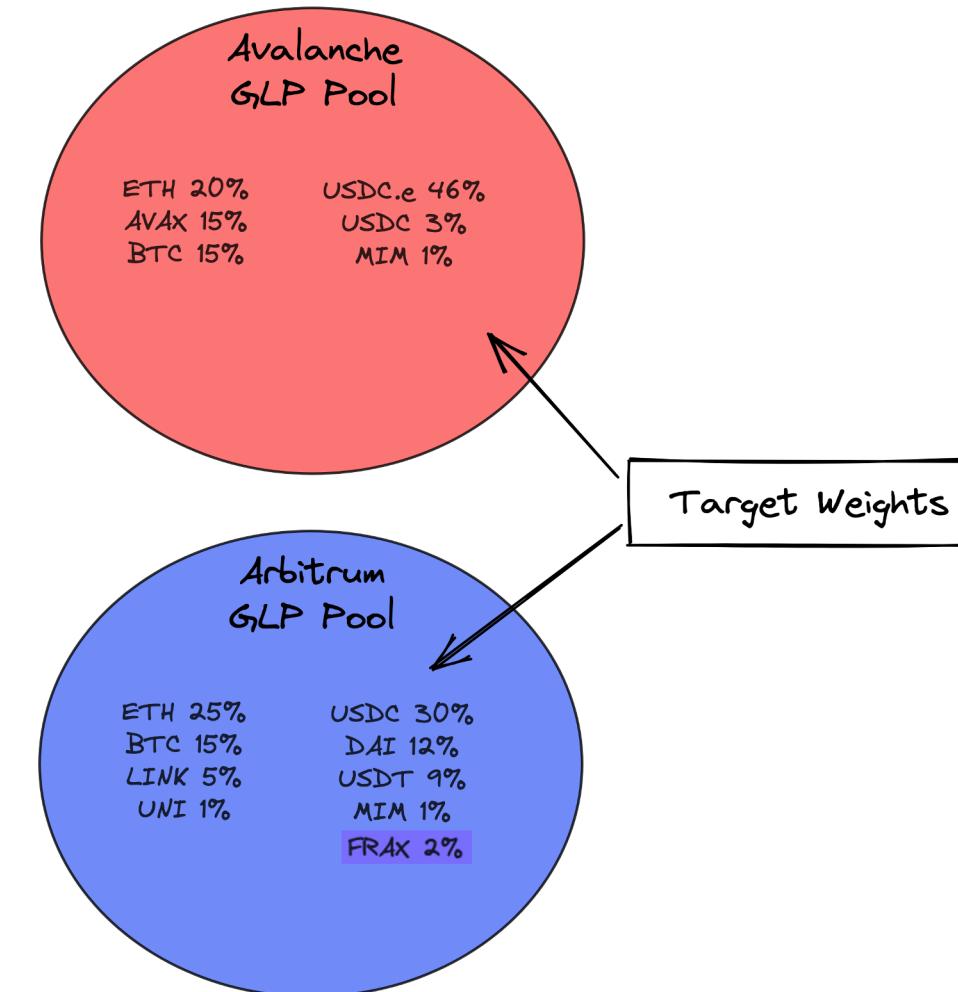
The GLP pool is a **multi-asset pool** that supports trading and allows users to long/short and perform swaps. This **pool earns liquidity provider (LP) fees** from market making, swap fees and leverage trading and these fees are distributed back to both **GMX and GLP holders**.

LP's can 'mint' **GLP tokens**, which represent shares in the GLP pool, by deploying any of the index assets to the pool. They can redeem any index asset by burning their GLP holdings. The fees associated with buying GLP vary depending on which of the index assets are currently underweight/overweight. If any index is underweight the fees for minting GLP by depositing this asset is lower and hence incentivised.

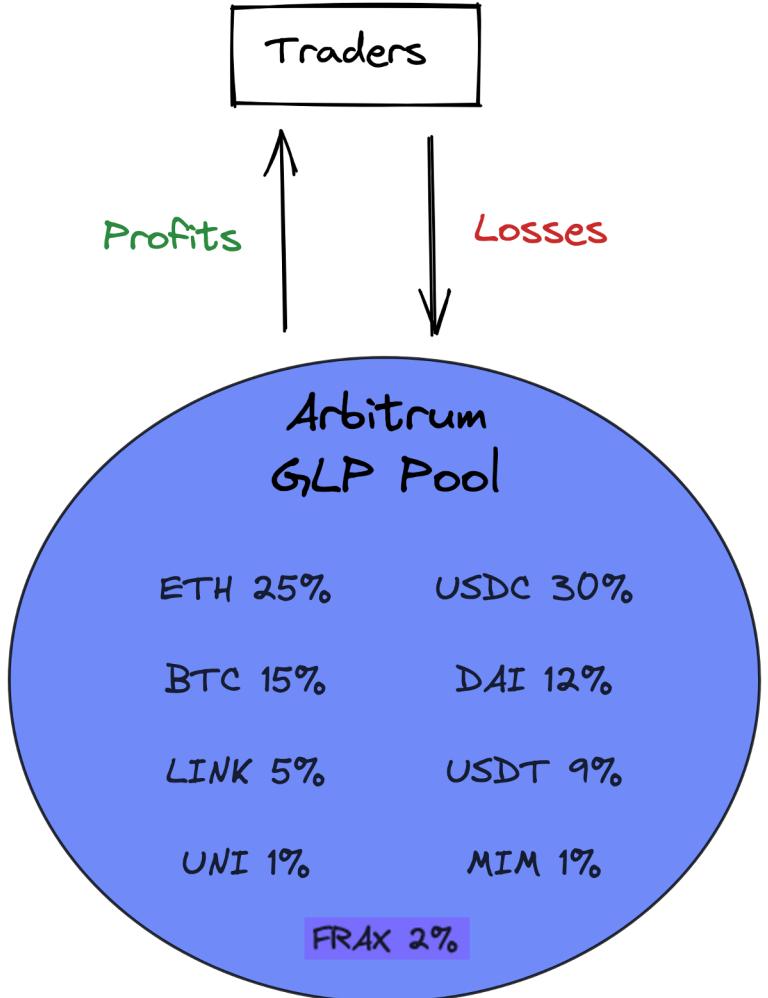
The token weights in the pool are adjusted to help hedge the holders of GLP against the open positions traders have. So, if a large number of traders are long Bitcoin on the Arbitrum exchange, the GLP pool would have a higher Bitcoin weight and vice versa with stable coins if a large proportion are short.

Instead of the standard Automated Market Maker model (AMM) ($x^*y=k$), GMX uses the **GLP pool in combination with dynamic aggregated oracle price feeds** provided by Chainlink (sourced from Binance & FTX) to determine the 'true price' of an asset. This allows GMX to achieve the **true price** of an asset with **far less liquidity** and means trades can be executed with **zero slippage**. Furthermore, **LP's are protected against impermanent loss** as the traditional AMM model isn't utilised.

The value of the GLP token is determined by the changing value of the index tokens inside of it, making it in a way, a diversified index of high quality crypto assets. In fact, **GMX's vision for GLP** is to be "a diversified index of top and upcoming cryptocurrencies all being used in a highly capital-efficient way while generating yield for holders".



Project Description | GLP Pool



The GLP pool is essentially a liquidity pool that acts as the counterparty to traders on the GMX exchange. This means that if **traders on GMX make a profit, GLP holders make a loss** and vice versa.

Analysis of the cumulative Profit and Loss statement of traders on the GMX Arbitrum exchange shows that traders have lost money and thus GLP holders have benefitted.



Project Description | Fees & Revenue Generation

The GMX protocol generates revenue by **charging fees on the opening and closing of trades** and also a “borrow fee” that is deducted every hour a leveraged position is open.

There is a trading fee of **0.1% of your position size** when incurred when **opening a position and closing a position**. The borrow fee is the fee that is paid to the counter-party (GLP pool) of your trade at the start of every hour. This fee varies based on utilisation of assets in the GLP pool and is calculated as follows:

$$\text{Borrow Fee} = \frac{\text{Assets Borrowed}}{\text{Total Assets in Pool}} * 0.01\%$$

The Fees generated by the exchange are **distributed entirely back to GMX and GLP holders**. 70% of these platform fees will be distributed to GLP holders and **30% of them will be distributed to staked GMX holders**. Staked GMX holders receive 30% of the fees generated from both Arbitrum and Avalanche exchange.

However, since the GLP token is unique on each of these networks, holders of the Arbitrum GLP token will receive 70% of the GMX (Arbitrum) platform fees in ETH and holders of the Avalanche GLP token will receive 70% of the GMX (Avalanche) platform fees in AVAX.

Token Utility

The GMX token is the platform's **utility and governance token** and staking the token unlocks a few benefits. The GMX token will be used to vote on governance and determine future rules and goals of the protocol, such as esGMX emissions.

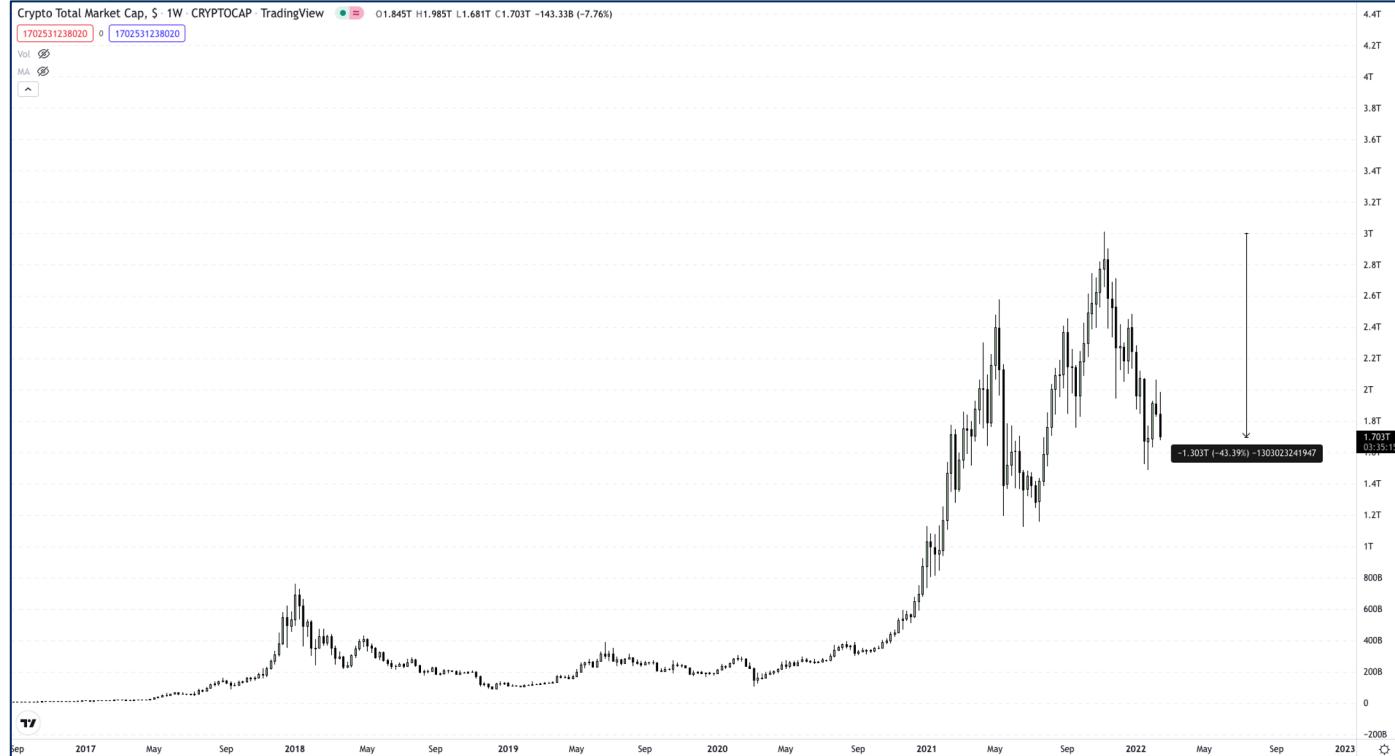
Staked GMX receives three rewards:

1. Escrowed GMX
 2. Multiplier Points
 3. ETH rewards – 30% of platform fees generated are distributed to staked GMX holders in ETH
- More on this in the Tokenomics section (page 34)*

These rewards provide **long-term incentives for GMX holders** to stake their coins and compound rewards.

GMX have also talked about the possibility of GMX holders receiving fees discounts on trading, depending on how much GMX they hold. See [here](#).

Industry Overview | Digital Asset Ecosystem



Bitcoin and the digital asset ecosystem at large has become increasingly correlated with equity markets and has been performing like a risk-on asset amid the current macroeconomic conditions. A lot of attention has been on the Ukraine-Russia conflict and the Federal Reserve, and their talk of raising interest rates may have spooked the digital asset ecosystem.

The industry has been in a downtrend since the total crypto market cap peaked at **\$3.08 trillion on Nov 8th 2021**. The total market cap is currently sitting at \$1.07 trillion, down 43% from the highs.

It is important to note that a continued macro downtrend would most likely negatively impact the performance of GMX and thus it should be considered in the analysis of this project.

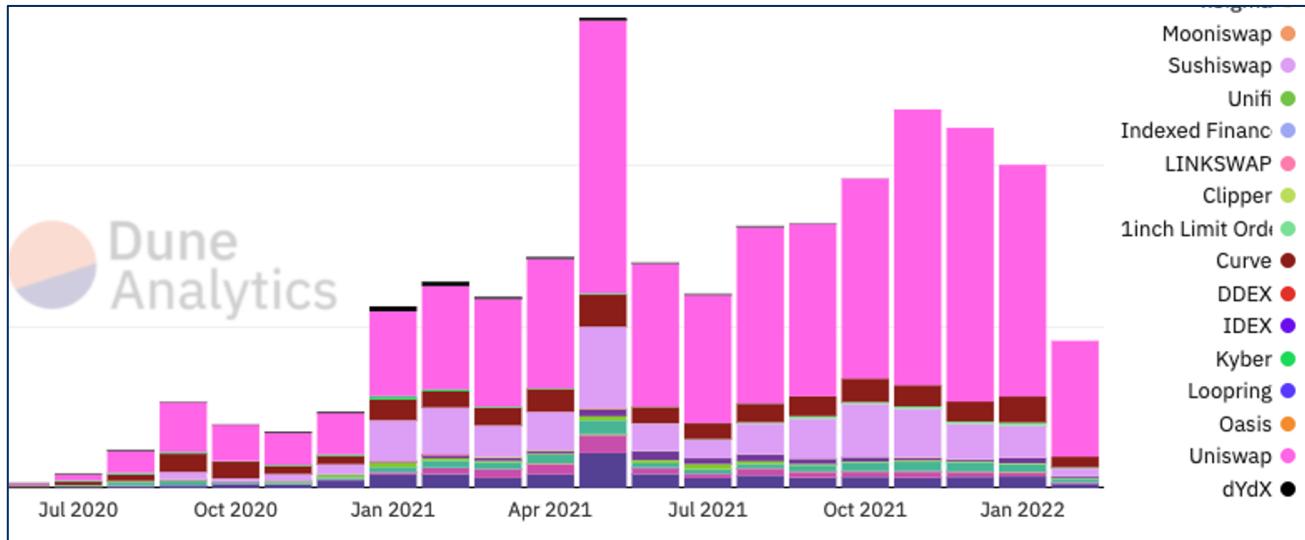
Industry Overview | DeFi

The DeFi Sector has been in a larger downtrend for quite some time now. If we use **FTX's DeFi index perpetual future product** as a proxy for the DeFi sector's performance we can see that it has not performed well in terms of USD and ETH. In USD terms, the **DeFi sector peaked in May of 2021 and is now down 65%** from all time highs. However, if we denominate in ETH, the DeFi sector has consistently underperformed since July of 2020 (DeFi summer). **In ETH terms, this basket of 25 top DeFi projects is down 75%.**

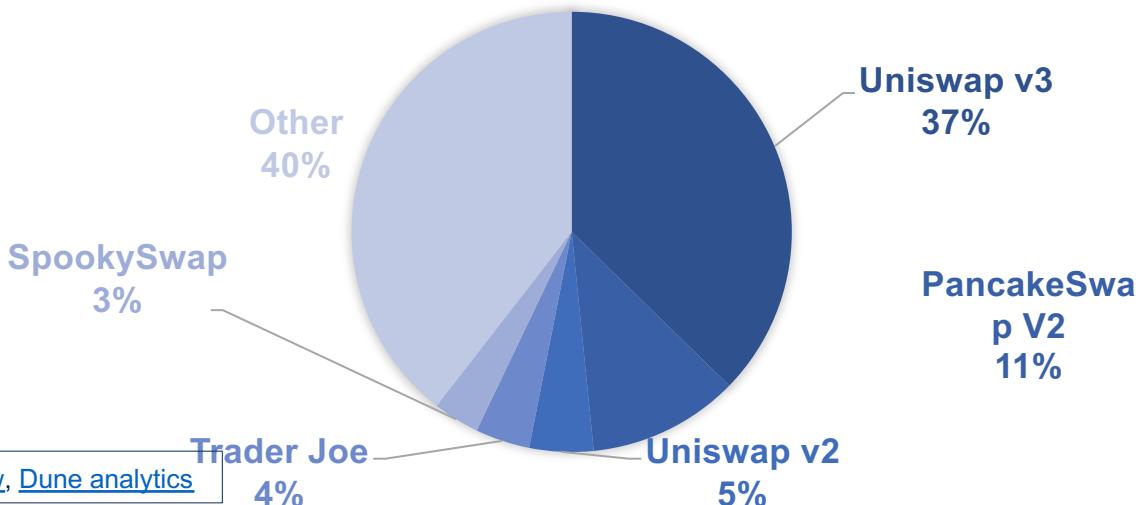
This suggests that this vertical is in a decline, with no real signs of changing as of yet. However, if the prices of cash-flowing DeFi projects continue to fall, there may be a **narrative around ‘value’ buys**. Buying DeFi projects that accrue cash flow back to token holders could be a strong narrative in a bear market and we are already starting to see some attractive Price to Earnings ratios.



Industry Overview | Decentralised Exchange (DEX) Growth



DEX VOLUME SHARE



Looking at the Ethereum monthly DEX volume we can see that volume has been steadily increasing since early 2020. This trend suggests **DeFi has found a real product-market fit** and as such DEX volume has been booming.

GMX, aiming to be both a spot and perpetual exchange fits into both the DEX sub-sector and the derivative platform sub-sector of DeFi.

This continued, high DEX volume is a positive sign, if GMX can continue to attract users they could be a major beneficiary from this trend.

Industry Overview | Spot and Perp Exchange Analysis

Spot and Perpetual trades accounted for almost **95% of total trading volume in 2021**. Both types of trading saw large increases in volume as well, with volume growing by **130%** and **498%**, respectively. This puts the total spot volume for 2021 at \$49 trillion, whilst the **total perpetual volume came in at \$57 trillion**.

We also saw a significant transition from Centralised exchange (CEX) trading to DEX trading, with the top 10 spot DEX's increasing their quarterly volume by **441.92% from Q1 2021 to 2021 Q4**. The top 10 DEX's now make up 9.05% of all trading volume, up from just 1.67% in Q1 2021.

The total DEX perpetual volume market share also increased from almost **0% to just less than 3%** (dYdX made up 2.22% of the entire perpetual exchange volume in Q4 of 2021).

The main trends for 2021 were the increase in both **DEX spot and perp market share** and I believe there are a few reasons for this. Firstly, the user experience has improved greatly, with improvements in gas fees due to the **rise of alt L1's and L2 scaling solutions**. Another large reason traders may be favouring DEX's is due to **regulatory pressures on CEX's** leading to reductions in the leverage offered and the products offered.

2022 looks set for the continued growth of DEX trading and specifically DEX Perp trading. GMX could be a major beneficiary of this trend and as such GMX and GLP holders could greatly benefit from the rewards that will be distributed to holders.

Team | Overview

In true Web 3.0 fashion, the **GMX team is anonymous**. I got in touch with the lead developer (known as X) and the structure of the team is as follows (names are telegram names):

4 Developers - *xdev_10, gdev8317, xhiroz, vipineth*

1 Designer - *anonymous* - *xhiroz manages him*

3 Marketing, Business development & partnerships – *Coinflipcanada, puroscohiba, bagggDad*

3 community managers – *y4cards, supersonicsines*

Given the anonymous nature of the team, it is not possible to assess the credibility of team members by traditional methods, such as recognised qualifications and experience. The next best thing is to assess the team's ability to ship products and features.

Additionally there is no official list of members for each role. However through Medium articles, discord channels, GitHub repositories and communication with the team, we can see the work that the team has done.

Team | Developers



X, Lead Developer (@xdev_10 on Twitter)

X has demonstrated ability to ship consistently since Nov 2020. He continues to guide the project to hit milestones, new integrations, new team members etc. 2 Years is a short time frame and all work has been done during the bull market. So X and the team are yet to prove how they will work in a sustained Bear Market.

Accomplishments:

- Started XVIX in November 2020, Upgraded to Gambit on BSC in March 2021, Launched GMX in September 2021 on Arbitrum, GMX Update 1 (1 week after launch), Pricing improvements so traders can trade with smaller spreads, LINK, UNI and USDT added to GLP Pool to steer GLP further towards the S&P 500 for crypto vision, Integrations with aggregators, GMX Update 2 (3 months after launch), Launch on Avalanche as well as Arbitrum and BSC, Interface improvements, Launch of incentives program to encourage organic growth, Implementing fee discounts after community suggestions, Integration with Olympus Pro, Oversees GMX Blueberry Club delivery

@x_dev10 GitHub contributions in past year can be found [here](#).



Xhroz, Developer (@xhroz on Twitter , @gkrasulya on GitHub):

Xhroz Manages a team of front end developers (interface contributors) and a designer. One of these developers is Interface contributor, *Midas* [[@midasdev711 on GitHub](#)].



Vipineth, Developer (@vipineth on Twitter)

Vipin is a GMX interface contributor and GMX stats contributor and he was responsible for building the GMX terminal. His work is now focused on improving the main GMX interface



Gdev, Developer

Gdev joined the team in May 2021 and implemented the limit/stop orders and helped with stats.gmx. Most of his time since then has been making changes in UI, servers or contracts. He also spends time researching and analysing data to understand things like if GMX can decrease min profit period, migrate to chainlink prices, etc.

Team | Marketing, BD, Partnerships & Community Management



[Coinflipcanada](#),

Marketing, business development and partnerships



[Puroscohiba](#)

Marketing, business development and partnerships



[BagggDad](#),

Marketing, business development and partnerships



[y4cards](#),

Community manager



[Supersonicsines](#),

Community manager

Team | Community Developers List and Conclusion

Developers who have built new features, functions or apps for the GMX Community ([info here](#)).

- **Zhongfu (@zhongfu)** - *Built the GMX Positions Bot*
- **Itburnz (@itburns)** - *Built the GMX leaderboard*
- **XM92 (@xm92boi)** - *Built GMX Blueberry Club (Sister NFT Project)*
- **Cryptomessiah (@cryptomessiah)** - Built GMX analytics
- **Atomist (@atomist)** - *Built GMX Charts*
- **Marcus Crypto (@marcus.crypto)** - Built GMX Returns calculator
- **Chasenk.eth (@chasenk.eth)** - *Built optimal compound interval calculator*
- **Sevpants (@sevpants)** - *Built GMX feedback and feature requests*

Conclusion

Whilst we can't know for sure who is working on the project, it is clear X has a fantastic ability to ship. He has a couple of core developers who assist him on projects, notably becoming more active recently to assist with the Arbitrum and Avalanche launches.

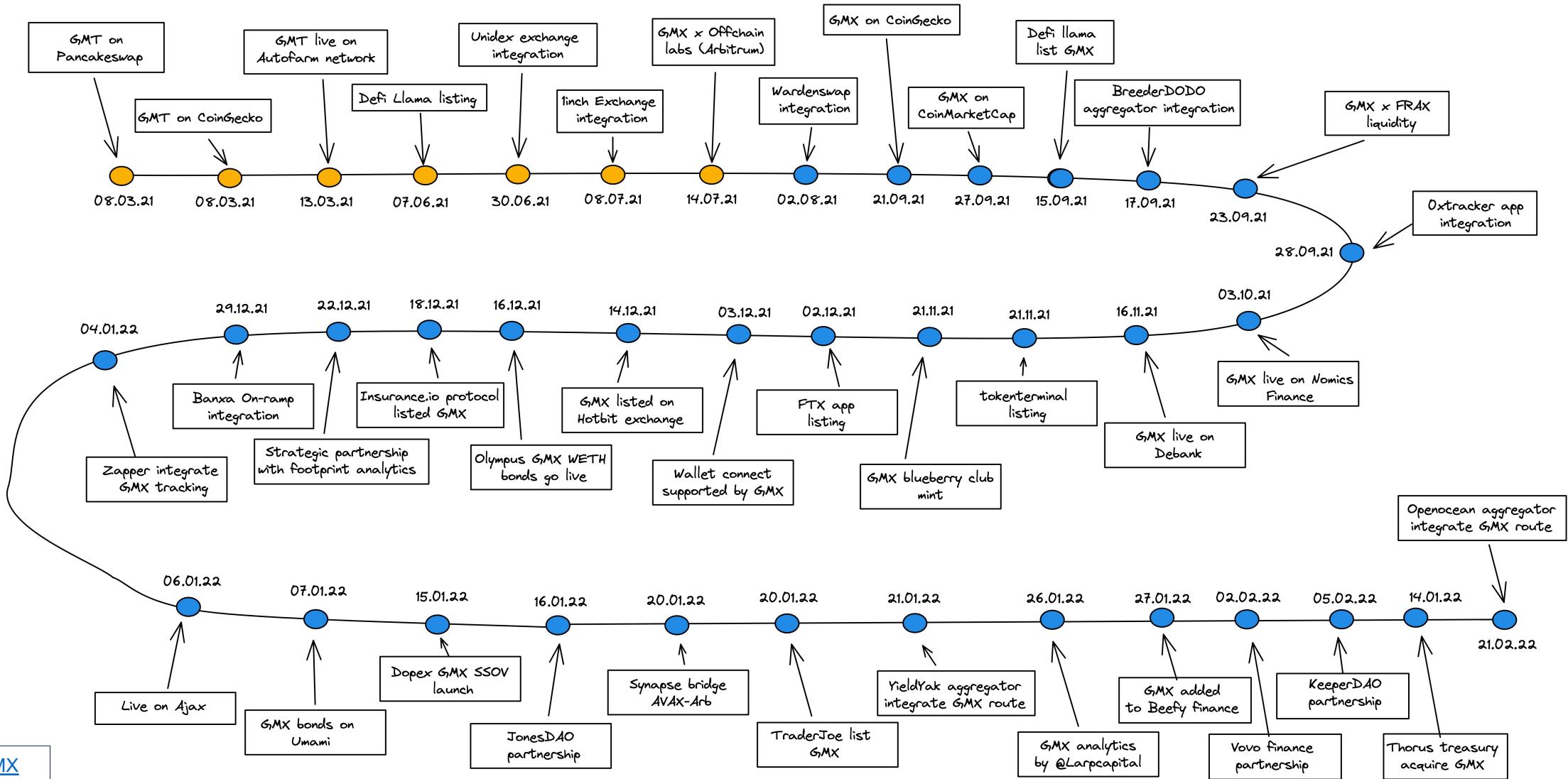
Additionally there is a thriving ecosystem of community developers building applications in the GMX ecosystem.

Investors

GMX had zero VC fundraising. The fundraise for Gambit and XVIX were public community raises and both of these projects had their tokens and liquidity migrated to GMX. VC's and notable investors have therefore had to buy from the open market. Performing both **on-chain analysis** and from analysis of the GMX telegram chat we can discover a few things:

1. **Blocktower** has built a substantial position in GMX, buying over 2400 ETH worth of GMX in the open market. They currently own **336,478 GMX (\$ 8,314,371)**, which is staked. Their wallet can be found [here](#).
2. **Ben Simon** from **Spark capital** (*previously Mechanism Capital*) is in the GMX telegram chat and has contributed to getting GMX listed on certain platforms. He is also speaking about GMX at an upcoming conference. It is unclear whether Ben personally, or Spark/Mechanism are invested.
3. **Flood Capital** (Duncan [Reucassel](#) and co) are advisors for GMX and are rumoured to have built a sizeable position in GMX. Although we don't know for sure, it is rumoured they are a top 10 holder of GMX. Duncan works in research for Delphi digital.
4. **0xMessi** – Social media influencer with 185,000 followers. He also built the [gmxstats.com](#) site.

Partnerships



Partnerships | Notable Partnerships

Olympus

GMX has partnered with Olympus to sell GMX WETH bonds. 50% of the funds raised from the Olympus bonds, will be used to buyback and burn GMX as per the price floor fund. The other 50% raised will fund GMX marketing.

Dopex

GMX has partnered with Dopex, which is a decentralised options exchange. On Dopex, users can now purchase decentralised call and put options for GMX.

Aggregator Partnerships

Wardenswap, BreederDAO and YieldYak have integrated GMX as a route in their aggregator. GMX has since since routed >35% of the total volume traded in USD on YieldYak, beating out Platypus finance, Curve, Sushiswap and Traderjoe.

On-ramp and interoperability

Banxa is a fiat on-ramp platform that has partnered with GMX so users can directly convert fiat into ETH on Arbitrum, in order to buy GMX. **Synapse** is a multi-chain bridge that allows users to bridge their assets to both Arbitrum and Avalanche. They have integrated GMX so users can transfer their GMX from Avalanche to Arbitrum easily.

Exchanges

GMX is currently listed on **Uniswap, TraderJoe, Hotbit, BKEX and AJAX**.

Tracking applications

FTX app, 0xtracker, Coingecko, Defi Llama, Coinmarketcap, Debank, Nomics Finance, GMX analytics, Zapper, Tokenterminal. All of these applications aim to track the price or statistics of the GMX token and platform.

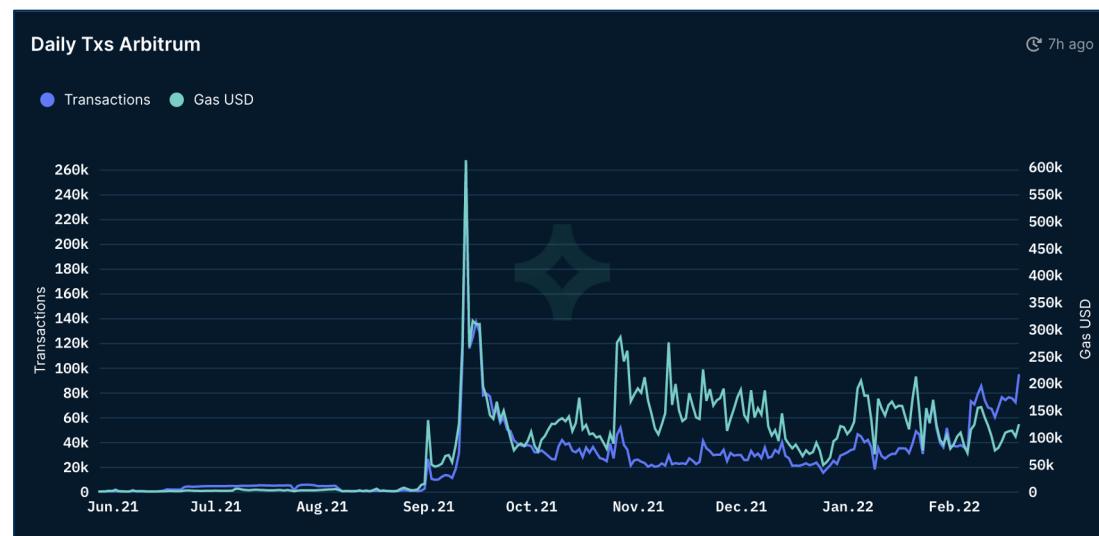
Fundamentals | Arbitrum

GMX is chain agnostic and the aim is to expand to all chains that gain network adoption and a consistent user base.

GMX launched on Arbitrum on July 14th 2021. Arbitrum is a **layer 2 scaling solution built on top of Ethereum**, thus benefiting from the low transaction fees of an L2 but also the security of Ethereum's main chain. Arbitrum is an Optimistic Rollup and processes transactions off-chain before bundling them up and sending back to the Ethereum main chain. The validity of those transactions are then checked using fraud proof's. This enables GMX transactions to be cheap and fast, creating a great user experience.

Currently, **Arbitrum is the largest L2 scaling solution by Total Value Locked** (TVL) with \$3.09 Bn, and boasts a **52.62% market share** according to L2beat. This network has seen an uptick in usage and TVL as Ethereum users have migrated to avoid the high transactions fees of the main chain. Data from Nansen estimates that there are **87.3 K unique active addresses** on the Arbitrum network in the last 30 days, with the number of daily transactions growing from 0 in May 2021 to **94,752 yesterday** (20th Feb 2022).

The overall trend therefore suggests that the Arbitrum network is the dominant L2 scaling solution and it currently being adopted as Ethereum users wish to migrate to cheaper chains (or L2's), whilst preserving the security of their transactions. As Ethereum moves to Proof-of-Stake and with their plans to make Rollups a large part of their scaling solution, I expect Arbitrum's network to continue to grow.

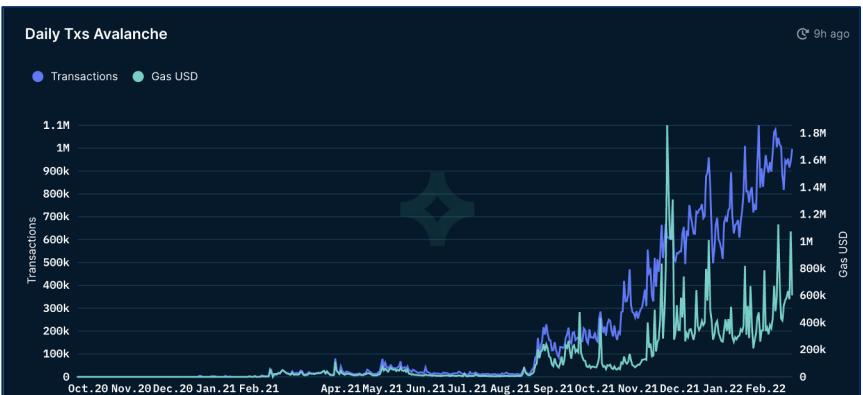


Fundamentals | Avalanche

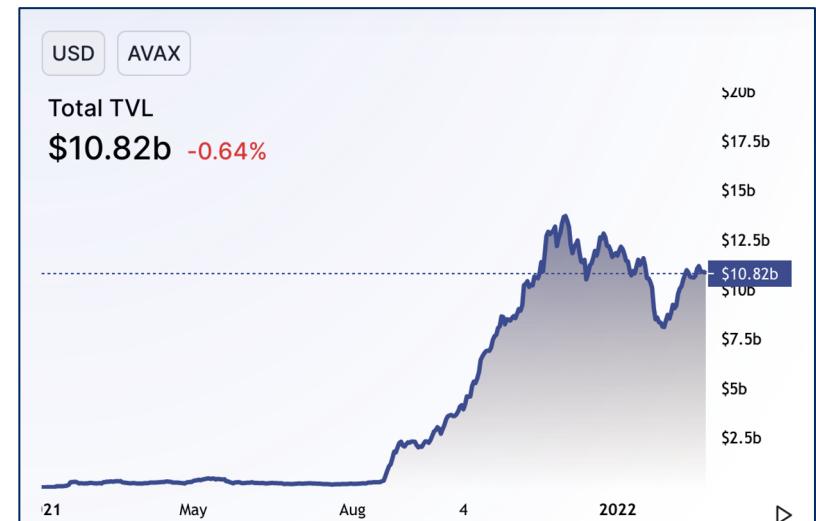
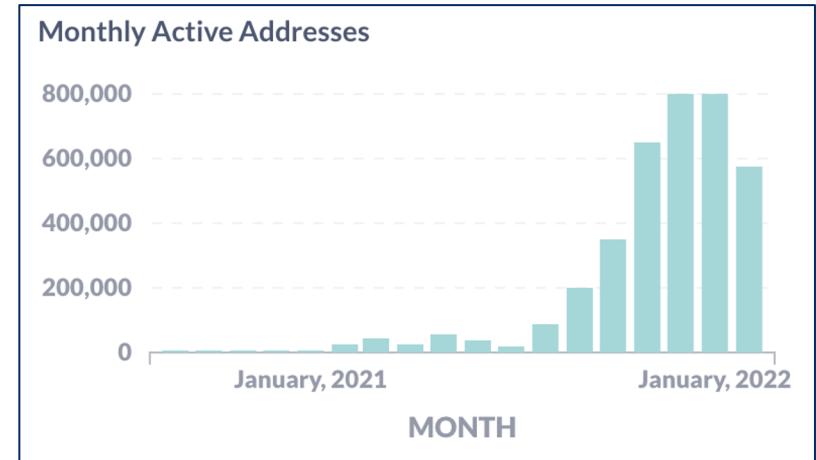
The Avalanche network is an alternative Layer 1 solution which is EVM compatible. Having launched in 2020 by Ava labs, the platform has gained a significant amount of monthly active users and has locked up **\$10.82 billion in TVL**. Again, the high fees of the Ethereum main chain and their inability to scale has led users to cheaper, faster chains and Avalanche was well positioned to onboard users.

Data from Nansen and Avalanche show that the monthly active addresses on the network has grown from almost 0 in Jan 2021 to between **590,000– 667,000 currently**. This trend in combination with the increase in TVL and number of transactions on the network show real signs of **network adoption and network effects**. Another interesting and potential catalyst for GMX could be the introduction of **Avalanche subnets** that drastically improve scalability of the protocol, leading to low transaction fees and sub-second finality.

GMX will be able to benefit from the large user base on Avalanche, whilst also enjoying the low fees and high throughput (higher than Ethereum) offered.



Source:
[Nansen](#), [DeFi Llama](#)



Fundamentals | Need for GMX

I believe the Digital Asset space needs an **on-chain spot and perpetual exchange** in order to help facilitate a thriving ecosystem through **enhanced liquidity, price discovery and consumer choice**. The Perpetual futures market is currently the largest source of liquidity and trading activity in the digital asset space and since the overall liquidity of a market greatly affects the growth of that market, it is vital that the digital asset space has an efficient perpetual future market.

However, there have been significant regulatory concerns regarding CEX perp trading in 2021 and we have seen exchanges such as **Huobi forced to shut down** operations in China because of this. Furthermore, we have seen exchanges such as Binance and FTX forced to **clamp down on KYC**, whilst also **reducing the leverage** they are able to offer customers. It therefore makes sense that the digital asset ecosystem has a viable alternative in case of regulatory crackdowns.

GMX, a decentralised spot and perpetual futures exchange, fulfils this need well with their fully pseudonymous team. Users of the exchange can trade spot and perp markets directly on-chain, with **no KYC or account**, from any location in the world.

Fundamentals | Value Proposition

Decentralised Spot and Perp Exchange

The need for a fully decentralised DEX for both Spot swap and Perpetual futures is becoming evident with the regulatory concerns surrounding CEX trading. A non-KYC exchange that is completely on-chain will allow the thriving Perp market to continue being the main source of liquidity to the digital asset ecosystem in case of CEX regulations.

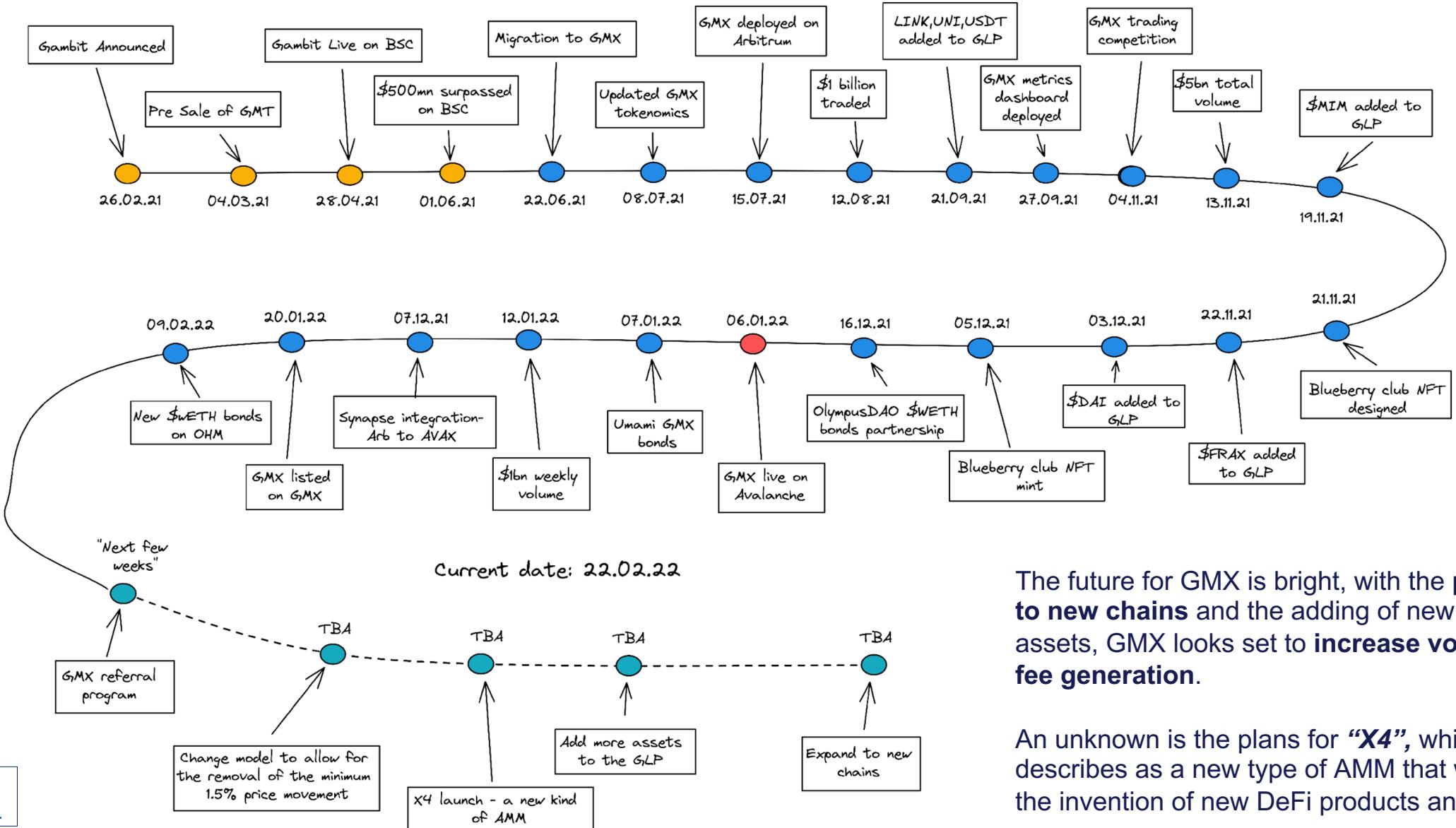
Multi-Chain Future

The future is that of a multi-chain one. Different blockchains have positioned themselves at different positions along the blockchain trilemma scale and in doing so each chain will excel at certain use cases and underperform at others. GMX is chain agnostic and plans to expand to new chains and become the leading spot and perp DEX there.

Great User Experience

GMX has a sleek UI without the need to KYC or even create an account. Moreover, the use of the GLP pool and price feeds provided from Oracles, enables trades to be executed with no price impact. The resultant effect is a great user experience when trading both Spot and Perpetual markets.

Fundamentals | Roadmap



Fundamentals | Scalability

GMX, being chain agnostic, has plans to **scale horizontally** by deploying their contracts onto more chains and becoming a **multi-chain Spot and Perp exchange**. With the rise of alt-L1's in 2021, there are plenty of chains to expand to with a large user base and GMX can instantly tap into this base on deployment. The focus will be on low transaction fee chains, that have high throughput.

GMX plans to **scale vertically** by continuing to increase market share on both Arbitrum and Avalanche. I reached out to a team member and they said the main priority right now is "**to consolidate current work on Avax and Arbitrum**". One initiative the GMX team has voted on is the introduction of a referral program, similar to FTX and Binance's referral programs. 10,000 esGMX per month of the marketing and floor price fund allocation is going to be dedicated to rewarding the referrers.

I believe GMX will also scale with the base chains they are already on. As mentioned, we are seeing **high network adoption rates** of both the Arbitrum and Avalanche chains and if these chains continue to grow, GMX will benefit.

Furthermore, the trend is firmly in the favour of DEX trades vs CEX trades, as DEX's increased their market share of total trading by 441% in 2021. I expect this trend to continue for the foreseeable future and as such GMX will scale nicely.

Fundamentals | Decentralisation

GMX is a dApp built on top of multiple blockchains and therefore it will **inherit the decentralisation of the blockchain it is running on**. Currently, GMX is operating on the Arbitrum and Avalanche network.

Arbitrum

As discussed, the Arbitrum network is an optimistic Rollup layer 2 scaling solution for Ethereum. This means GMX inherits the decentralisation of the Ethereum main chain and is therefore secured by a widely distributed network of miners (or Validators when Proof-of-Stake). Ethereum is widely considered to be one of the most, if not the most decentralised smart contract platform.

Avalanche

The Avalanche network is a Proof-of-Stake blockchain that is secured by 1,284 Validators. Interestingly, the number of messages each node has to handle per decision remains constant as the validator set grows. Therefore, there is a clear path for greater decentralisation, as validators scale. On the scale of decentralisation, Avalanche is less decentralised than Ethereum (and by extension the Arbitrum network), but it remains sufficiently decentralised in my opinion.

Binance Smart Chain (BSC)

Although GMX is not technically on the BSC, Gambit is. Before rebranding to GMX, Gambit was the first iteration of GMX, hosted on the BSC. The Binance smart chain is arguably the most centralised of the large chains. Utilising Proof-of-Stake Authority, the BSC has only 21 validators.

Fundamentals | Innovation

GMX's dual use of the GLP pool as the counterparty to traders and the oracle pricing system represents a huge innovation in the execution of trades. Firstly, trades are executed with zero slippage/ market impact as the traditional Automated market maker (AMM)/ Order book model is not used. This also represents an innovation for LPs as they are not subjected to Impermanent loss due to the oracle pricing system (not subjecting the LPs to the cost of price discovery via arbitrage).

Furthermore, the aggregated oracle pricing system GMX uses pulls price feeds directly from Binance and FTX. By aggregating these feeds, there is a reduction in the risk of liquidation from temporary wicks. Looking at the intraday wicks on the December 4th Bitcoin sell-off, we can see the GMX wick bottomed out 3.94% higher than FTX and 3.45% higher than Binance.

The dual use of capital and the oracle pricing system also enables the GLP to be one of the **most efficient pools in the entire digital asset space**. More on this later.

FTX low - \$41,803



Binance low - \$42,000



GMX low - \$43,319



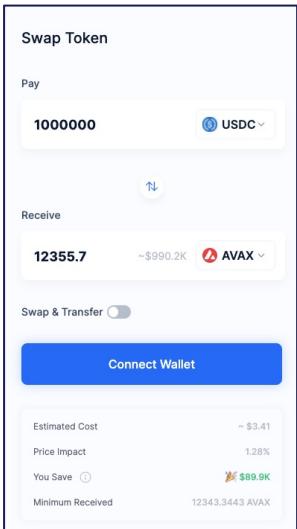
Fundamental Analysis & Catalysts | DEX Aggregator Integration

GMX is both a decentralised derivative platform and spot platform. The elegant design of the GLP pool, a multi-asset liquidity pool, in combination with the oracle pricing method allows for digital asset swaps to be completed with no market impact, akin to an OTC trade. This trade execution design was so efficient on the BSC chain (with Gambit), that **at its peak Gambit was handling roughly 20% of all 1inch exchange's (aggregator) traffic with just under \$2.5 million in liquidity and only a few assets swappable**. Furthermore, GMX was added as a new route on YieldYak (21.01.22) and has since **routed >35% of the total volume in USD**, beating Platypus finance, Curve, Sushiswap and Traderjoe.

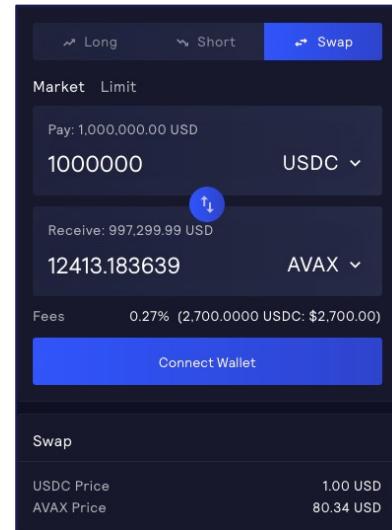
A huge catalyst for GMX would be its integration into aggregators such as Matcha, Paraswap and 1inch (on Arbitrum and Avalanche). Since GMX is one of the most liquid places to trade assets in the GLP pool, an aggregator integration would result in a **large share of the volume from trading these assets to be routed through GMX**. This in turn would increase the number of users of GMX and the fees generated and distributed to GMX stakers.

Certain trade sizes would almost always be routed through GMX instead of through the typical AMM models of Uniswap, Sushiswap and Curve and this represents a large vertical that GMX can exploit to gain market share. Taking a look at trade execution on the Avalanche network, we can see that GMX already offers the best execution of USDC to AVAX, with only \$75,146,457 in the GLP pool.

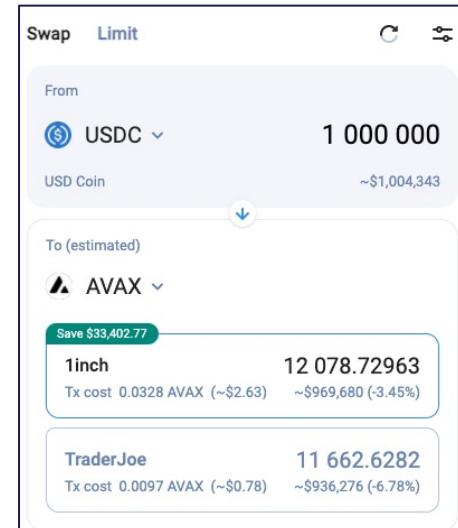
Paraswap



GMX



1inch

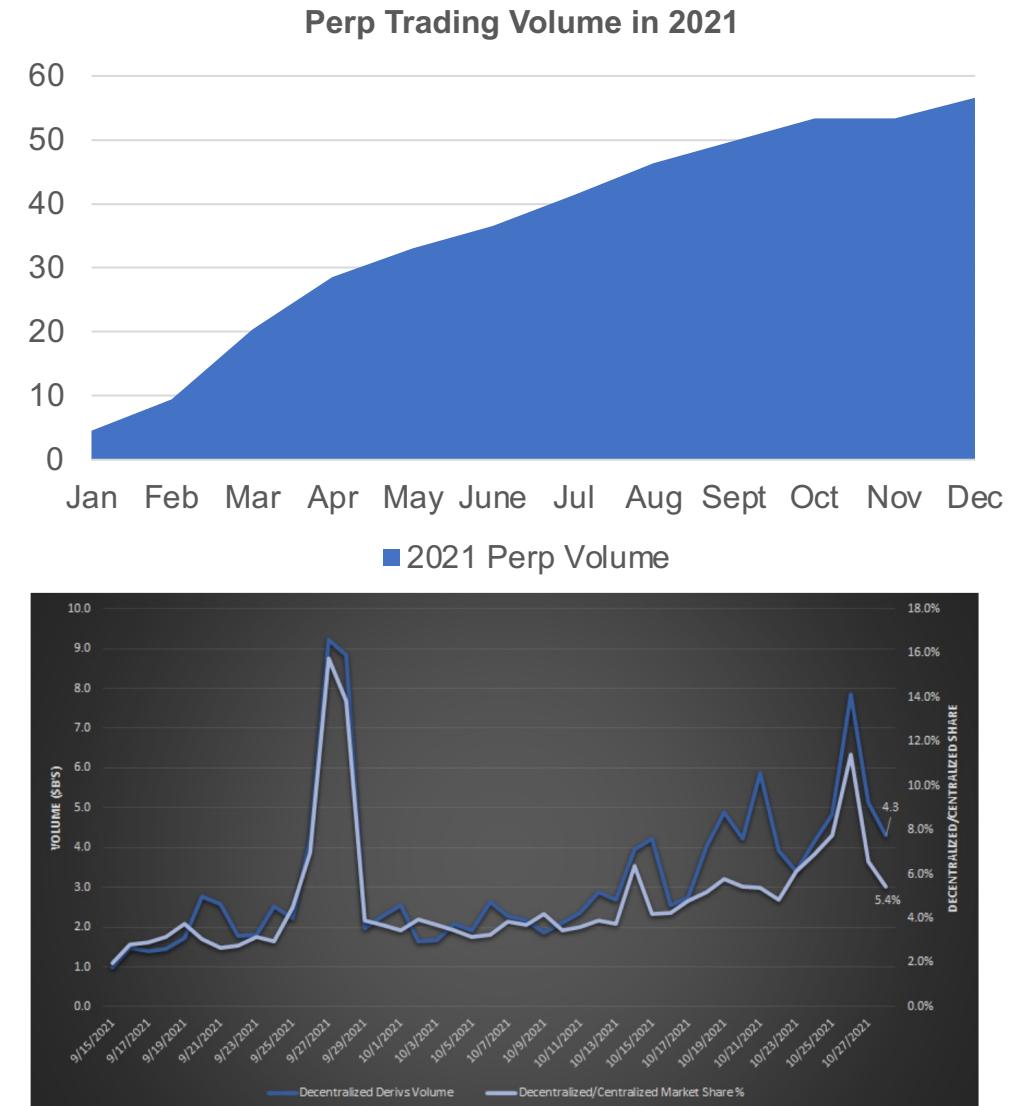


Investment Thesis | The Market Opportunity and DEX Adoption

The perpetual futures (Perps) market is the main source of liquidity and trading volume in the digital asset space and GMX is positioned well to serve a proportion of this demand for perps. In 2021, perp volume in the digital asset space was around **\$57 trillion**, accounting for **52.8% of all trading volume**. The perp market was also witnessed the largest growth of all the derivatives, **growing by an estimated 358%** in comparison to derivative trading volumes.

Analysis of the decentralised perp exchange volume vs the centralised perp volume shows there is a clear trend toward DeFi perps, having grown from just **2% of market share in Sept 2021 to around 5.4% at the start of November 2021**. This trend looks set to continue in 2022 as advances in layer 2 solutions and faster chains have made perp trades viable. Moreover, another key catalyst for further growth of DeFi perps is regulator concerns surrounding CEX's.

Therefore, the total addressable market for **GMX perp's is staggering** and if they could capture just a small percentage of total perp volume, the GMX token will **accrue massive value to holders**, through revenue share (*more on this in the valuation section – starting on page 45*). With the expansion of GMX to multiple chains, the addition of new assets to the GLP pool (to become tradeable) and the continued growth of the protocol on Arbitrum and Avalanche, it is likely that volume processed by the platform will continue to increase.



Investment Thesis | Fee Generation and Chain Expansion

GMX is a **DeFi cash cow**, generating an annualised \$117.2 million in protocol revenue*, which is completely distributed back to token holders. Since the 6th of January 2022, GMX has generated \$10.2 million in fees on Arbitrum and \$6.5 million on Avalanche (having only just launched on the 6th).

If we look at the relative market sizes of the Arbitrum network and the Avalanche network, we can see that GMX looks set to grow massively through its recent expansion to the Avalanche chain. Avalanche is currently processing **23x the daily transactions of Arbitrum and has 3.5x the TVL**. However, The Arbitrum GLP currently has more liquidity, sitting at \$163.5 million. It is therefore not unreasonable to think that the Avalanche GLP could grow to around \$360 million (*it has already gained \$75 million in 52 days*). If we keep the **GLP average annualised fees per dollar of AUM constant (\$2.33 for Arbitrum)**, we can model the expected fee generation from Avalanche:

* Daily average vol annualised since Jan 6th

Avalanche Fees to GMX stakers (As of: 27.02.2022)										
		Avalanche GLP AUM (millions USD)								
		200	250	300	350	400				
Annualised Fees per Dollar of AUM	\$ 1.00	\$ 60.00	\$ 75.00	\$ 90.00	\$ 105.00	\$ 120.00				
	\$ 1.50	\$ 90.00	\$ 112.50	\$ 135.00	\$ 157.50	\$ 180.00				
	\$ 2.00	\$ 120.00	\$ 150.00	\$ 180.00	\$ 210.00	\$ 240.00				
	\$ 2.50	\$ 150.00	\$ 187.50	\$ 225.00	\$ 262.50	\$ 300.00				
	\$ 3.00	\$ 180.00	\$ 225.00	\$ 270.00	\$ 315.00	\$ 360.00				

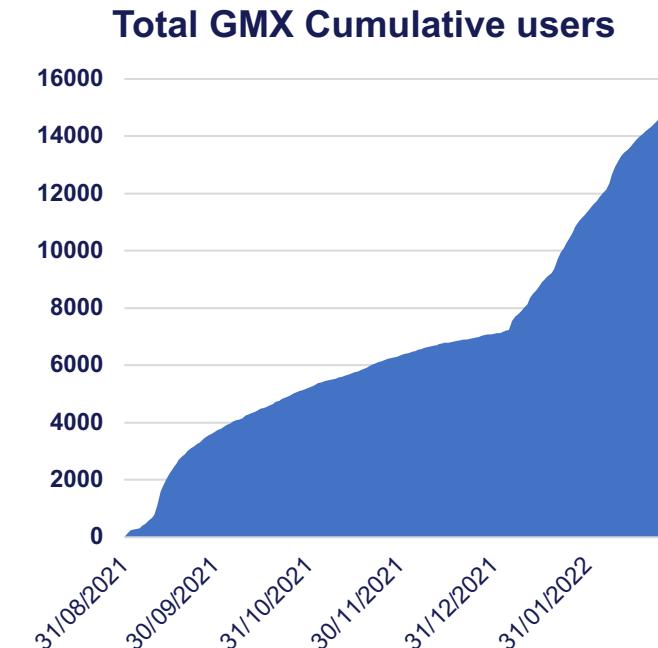
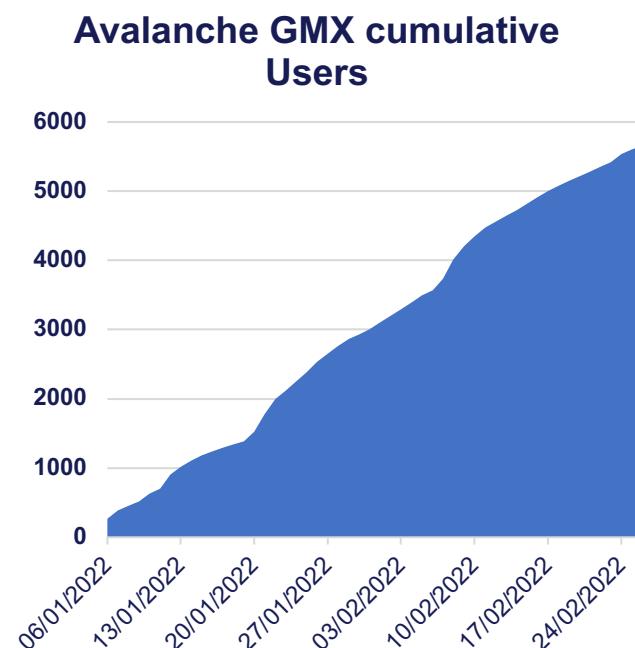
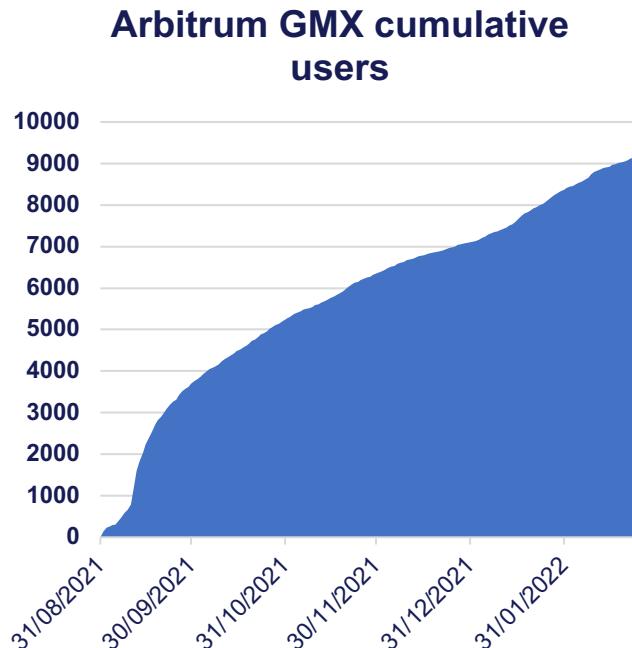
We can therefore see that this chain expansion to the Avalanche network has the potential to generate massive value for GMX token holders. For example, if Avalanche could achieve a GLP AUM of \$300 million and we hold the Annualised fees per dollar of AUM constant at \$2.33, **GMX holders would be entitled to \$209.7 million**. As I have modelled in the valuation section starting on page 45, this will have profound effects on the market cap of GMX.

Furthermore, this model can be extrapolated to show the effect a chain expansion can have on the market cap of GMX. I therefore believe the continued expansion of GMX to new layer 1 chains is a bullish catalyst for GMX and will result in higher fee generation and thus a higher GMX market price.

Investment Thesis | Product Market-Fit and Network Effects

Since its launch on the Arbitrum network at the end of August, GMX has gathered a cumulative **9,234 users** and this trend shows no sign of slowing down. Even more impressive is the launch of GMX on Avalanche, with a higher user base on the underlying network, GMX has managed to reach **5,691 total users in just 52 days**.

It is clear to see that in the short time GMX has been operating, it has **found product-market fit as users desire an on-chain perpetual futures exchange**. The plans for a GMX referral program will be a great way to increase network effects and expand vertically. Furthermore, the expansion to new chains and the integration of GMX into aggregators will ultimately lead to an increase in total users of the platform and hence, increased network effects.



Investment Thesis | Bullish Tokenomics

A large part of my investment thesis is based on the bullish token utility and tokenomics of GMX. We have already spoken about the utility through revenue generation, so I will now focus on the supply and demand aspect of the token. Firstly, GMX had what is referred to as a “**fair launch**” – **no Venture Capital or private sales to kickstart the project**. This means all holders have acquired their GMX from the open market (*such as Blocktower*). Thus, there are no VC’s selling tokens after purchasing in private rounds, for a fraction of the market price. Moreover, the team allocation of GMX was small, with just 250,000 GMX (**1.88% of total supply**), unlocked linearly over 2 years.

Supply

The total supply of GMX is **13.25 million coins**, however, it is **very unlikely that all of these coins will ever be circulating** on the market. Firstly, the price floor fund (2 million GMX) tokens have no plan to hit the market as the team don’t want to dilute holders. Secondly, the 2 million GMX that are allocated to esGMX emissions are **only liquid if token holders lock the average number of GMX or GLP tokens that earned them their esGMX for a whole year**. It is therefore very likely that a large proportion of these 2 million GMX will never circulate on the open market, as people forget to vest/don’t want to. The total realistic supply for GMX is therefore much smaller than 13.25 million and makes **GMX extremely scarce**.

Demand

The token utility creates a large demand for GMX as **30% of protocol revenues accrue to GMX stakers**. As such, **82.5% of the circulating supply is currently staked**. This **staked GMX is currently yielding a 27.41% APR** and hence there is a high demand for the token. Token holders are further incentivised to hold through the multiplier points system and due to the clever vesting procedure of esGMX, GMX tokens cannot be farmed and instantly sold (*like a number of high APR farming projects*). Furthermore, the introduction of a GMX fee reduction for GMX holders will further incentivise holding a position if you are an active trader or a protocol that utilises the exchange. In a way this is similar to the Curve ve tokenomics, as protocols integrating GMX will be incentivised to accumulate GMX. There are already a couple of examples of protocols acquiring GMX for their treasuries - [KeeperDAO](#) and [Thorus](#).

Investment Thesis | Community

In the digital asset space, with open source protocols, the community of a protocol plays a large role in the adoption and proliferation of that protocol. Users and investors attach "great importance to property rights, management and project performance", as they have a financial incentive to do so. The more users and investors they can attract to that protocol, the greater the outcome of their own investment. **Therefore a strong community in crypto can act as a great marketing campaign for projects**, whilst also propelling the project forward through community projects and governance proposals. In the vein, we find that the GMX community is very strong.

The community has built multiple projects to propel the GMX exchange forward, such as exchange statistics interfaces, trading competition leader boards and dashboards.

Furthermore, a community developer by the name of *@xm92boi* (Twitter), built a community NFT project called the GMX Blueberry Club (GBC). GBC is a generative 10,000 NFT collection on Arbitrum dedicated to the GMX decentralised exchange and its community. Since launch on the 5th of December 2021, the project has processed 535.29 ETH (\$1,477,935) in volume, showing the strength of the GMX community.

Community projects:

1. [GMX Positions Bot](#)
2. [GMX Leader Board](#)
3. [GMX Stats Website](#)
4. [GMX Stats Charts](#)
5. [GMX Returns Calculator](#)
6. [GMX Optimal Compound Interval Calculator](#)
7. [GMX feedback and Features request](#)
8. [GMX Blueberry Club](#)
9. [GBC Marketplace](#)

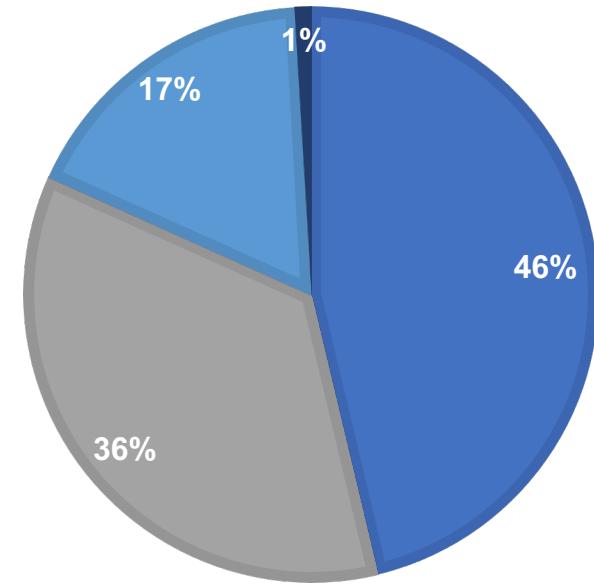


Tokenomics | Overview

Tokenomics Overview (as of 21 st Feb 2022)	
Price	\$28.86
Circulating supply	7,373,371
Circulating market cap	\$211,099,611
Fully diluted supply	13,250,000 * (PTO)
Fully diluted market cap	\$382,966,067
Average trading volume per day (30 day average)	\$7,165,810.72
All time high	\$62.49 (16.01.22)
All time high	\$19.14 (13.12.21)

TRADING VOLUME %

■ Uniswap ■ Trader Joe ■ BKEX ■ Sushiswap



Exchange	Pair	+2% Depth	-2% Depth	Volume %
Uniswap (Arbitrum one)	WETH/GMX	\$523,083	\$521,512	41.04%
Trader Joe	GMX/WAVAX	\$139,168	\$138,750	35.34%
Uniswap (Arbitrum one)	WETH/GMX	\$5,320	\$5,304	5.24%
BKEX	GMX/USDT	\$233	\$100	17.41%

Tokenomics | Supply

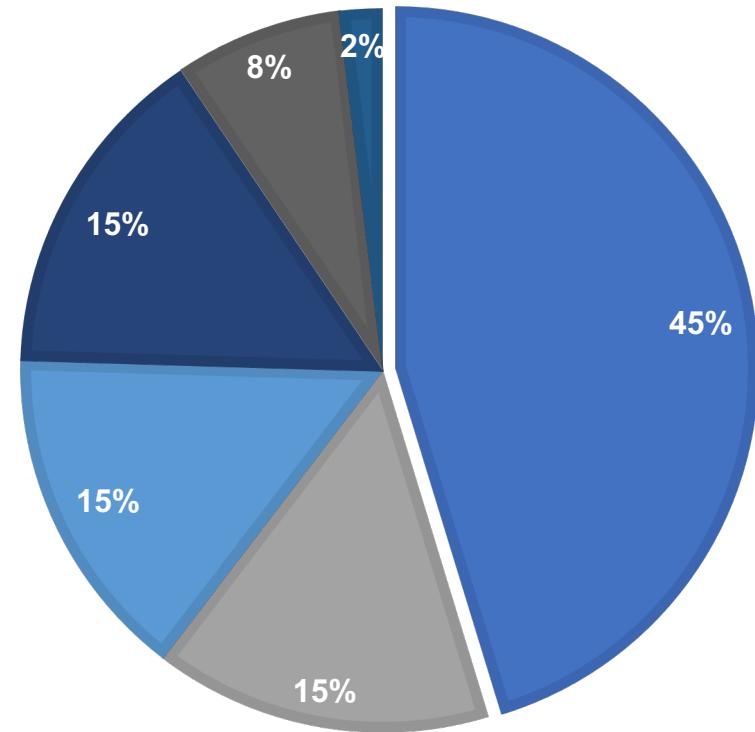
The Tokenomics of a project are all the factors that describe the mechanics of how an asset works, including the incentives, psychological or behavioural forces that affect the value of an asset. Ultimately, the Tokenomics of a project can be separated into the supply and demand. Let's first look at supply:

*GMX has a total supply of 13.25 million of which 7.37 million are circulating (55.6%). This maximum supply can be increased via a DAO vote from GMX holders. This option will only be used "if more products are launched and liquidity mining is required". **The supply distribution will look like this:**

- **6 million GMX** from the XVIX and Gambit migration.
- **2 million GMX** paired with ETH for liquidity on Uniswap.
- **2 million GMX** reserved for vesting from Escrowed GMX rewards (may never happen)
- **2 million GMX** tokens to be managed by the floor price fund. Yet to be minted
- **1 million GMX** tokens reserved for marketing, partnerships and community developers.
- **250,000 GMX** tokens distributed to the team linearly over 2 years

SUPPLY DISTRIBUTION

■ XVIX & Gambit
■ Price floor fund
■ Liquidity on Uniswap
■ Marketing
■ Vesting from esGMX
■ Team



* The 13.5 million GMX max supply may never be reached as some users may never vest their esGMX.

Tokenomics | Escrowed GMX

Staked GMX holders are entitled to receive Escrowed GMX (esGMX) as a reward and this esGMX can be used in two ways:

1. **Staked** for rewards similar to normal GMX
2. **Vested** to become normal GMX tokens over a period of 1 year

Staked

esGMX can be staked immediately, earning the holder exactly the same rewards as normal staked GMX – more esGMX, multiplier points and ETH/AVAX rewards from platform fees.

Vested

esGMX can be vested to become normal GMX. To vest your esGMX, you are required to lock the average GMX/GLP that earned you that esGMX in a vault. Whilst in this vault the GMX/GLP cannot be sold but does still accrue rewards. Vesting esGMX then unlocks linearly and takes one year to unlock fully, with GMX or fractions of GMX being distributed to you every second.

The locked GMX/GLP in the vault can always be withdrawn but this will stop any further vesting of esGMX

Current Distribution rate of esGMX *

- 100,000 esGMX tokens per month to GMX stakers
- 100,000 esGMX tokens per month to GLP holders on Arbitrum
- 50,000 esGMX tokens per month to GLP holders on Avalanche from **Jan 2022 - Mar 2022**
- 25,000 esGMX tokens per month to GLP holders on Avalanche from **Apr 2022 - Dec 2022**

* Reward rates are subject to change after evaluation each month. Changes must be announced 7 days in advance

Tokenomics | Multiplier Points

The second reward GMX holders are entitled to is Multiplier points. Multiplier points are a way to reward long term holders without inflation. Staked GMX receives multiplier points every second at a fixed rate of 100% APR.

These multiplier points can then be staked, allowing the holder to accrue protocol fee rewards. Each multiplier point is entitled to the same amount of ETH/AVAX as a normal GMX token.

Unstaking GMX or esGMX will mean a proportional amount of multiplier points are burnt. "For example, if 1000 GMX is staked and 500 Multiplier Points have been earned so far, then unstaking 300 GMX would burn 150 ($0.3 * 500$) Multiplier Points".

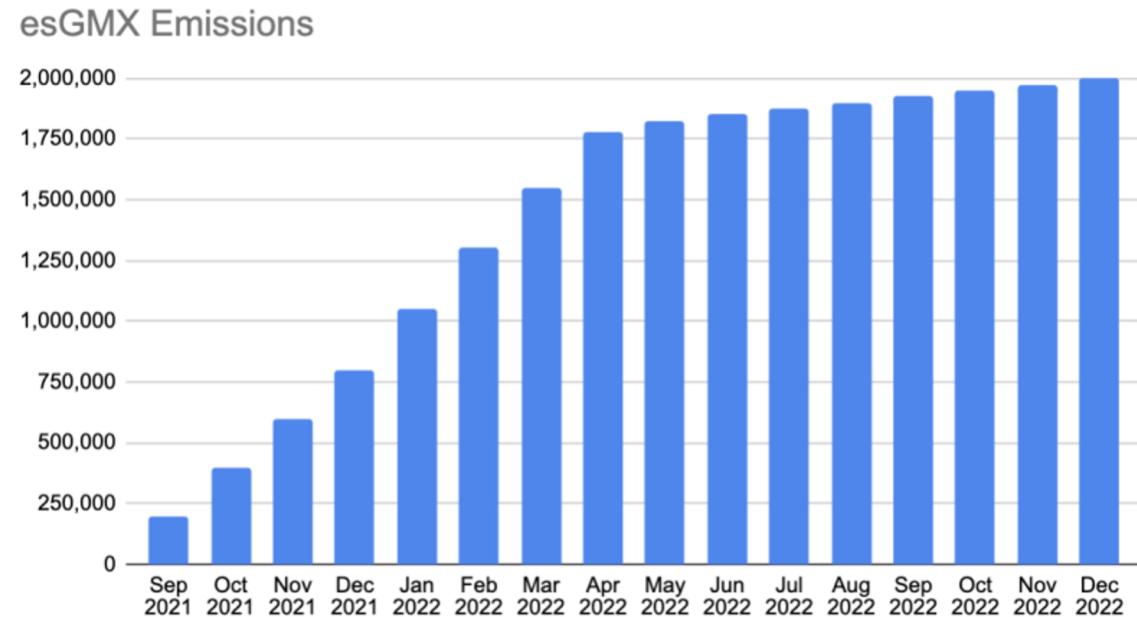
This mechanism incentivises holders to stake their GMX for long periods of time as the only way to acquire multiplier point is through time. Furthermore, the GMX team has hinted ("*the specifics of these benefits will be released at a later time*") at future rewards being distributed based on these points as they are a good proxy for a power/long-term user of the protocol.

Tokenomics | Supply emissions

The current scheduled emissions are from the esGMX allotment, distributed to GMX stakes and GLP holders on both Arbitrum and Avalanche. However, this GMX is not liquid as it must be locked for a year with the average amount of GMX/GLP that earned the holder that esGMX. With the current esGMX emissions, we will reach the 2,000,000 cap in December of 2022. However, this esGMX may never turn into GMX as people leave the project/ don't vest their rewards.

The rest of the GMX emissions are introduced on an ad-hoc basis to fill the budgets introduced on slide 34. The GMX team will, for example, use the GMX liquidity budget to add liquidity when needed and not on a set schedule.

Due to the ad hoc nature of these emissions we are unable to get an exact supply emissions schedule, however, by using the information on esGMX vesting, the linear team unlock and the allocated budgets of GMX, the inflation of GMX looks to be low.



Tokenomics | Demand

Next we will look at demand for the GMX token. We will analyse the return on investment and the project mechanics to better understand why this token will be in high demand.

The staking of the GMX token entitles users to earn a 30% share of the protocol revenue, distributed in ETH. This currently represents a 27.41% APR (9.42 WETH APR, 17.99 esGMX APR), however, this esGMX APR should be discounted as it is not immediately liquid. This return on investment represents a large opportunity for long term holders to generate additional returns and as such **82.25% of the total supply is staked**.

Price Floor Fund

The next source of demand for the GMX comes from the price floor fund. 2 million GMX have been allocated to be managed by the price floor fund and are yet to be minted. The idea is that the price floor fund will help ensure liquidity in the GLP pools and provide reliable rewards for staked GMX, this is because it is protocol owned liquidity.

As the price floor fund grows, due to accumulation of fees from the liquidity provided in the GLP and from 50% of the funds from the Olympus bonds, it can be used to buyback and burn GMX if:



This will lead to a minimum price for GMX in terms of ETH and GLP. Since the price floor fund currently has \$3,938,827 and the GMX supply is 7,373,371. The price floor for GMX is \$0.53.

Comparable Analysis | Competition Analysis Overview

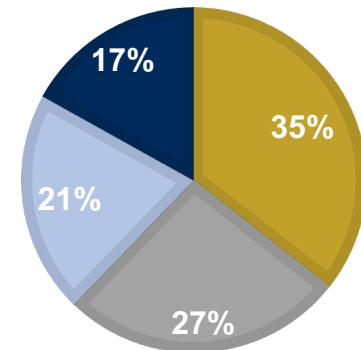
The main vertical GMX is competing in is the decentralised perpetual futures market, however, it also competes in the spot markets with decentralised exchanges such as Uniswap and TraderJoe.

I believe the main vertical GMX is focused on expanding market share in the Perp market. This is because most of the trading in the digital asset space is Perp trading, with spot markets in Bitcoin and Ethereum being 7x smaller than perp markets ($\approx \$2T$ vs $\approx \$300B$ per month).

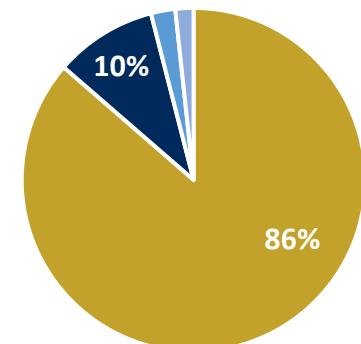
GMX is already a major competitor in this vertical, with the 4th largest circulating market cap and the 2nd largest average daily volume (since the 1st of January 2022). The major competitor for GMX is dYdX, which currently processes an average of \$2.18 B per day in volume (since 01.01.22), representing 86% of the trading volume between these competitors. Interestingly, GMX processes 5.6 x and 4.22 x more volume per day than Injective Protocol and Perpetual protocol respectively, but has the smallest market cap out of the 3.

MARKET CAP %

■ dYdX ■ Perpetual Protocol ■ Injective Protocol ■ GMX



Trading Volume Share



■ dYdX ■ GMX ■ Perp ■ Injective

Comparable Analysis | Competition Analysis Overview

	GMX	PERP	INJ	dYdX
Blockchain	Ethereum (Arbitrum), Avalanche	xDAI, Ethereum (Arbitrum)	Injective chain	Ethereum L2 (Starkware ZK-rollup)
Pricing Method	GLP pool & Oracles	Virtual AMM	Order book relayers	Central limit order book (CLOB)
Liquidity Source	Shared liquidity (GLP pool)	Trader collateral	Market Makers	Market Makers
Liquidations	Keeper bots	Keeper bots	Injective liquidation engine	dYdX Liquidation engine

Comparable Analysis | Competition Analysis - dYdX

dYdX is currently the market-leading Perp exchange having processed a cumulative \$437 B in volume since its launch just under 1 year ago. The protocol is powered by Starkware, a layer-2 scaling solution utilising Zero-Knowledge rollups to execute transactions off-chain before sending back to the Ethereum main-chain. Instead of using a typical AMM to execute trades, dYdX makes use of a Central limit order book (CLOB). This is a similar pricing method to CEX's and allows for more complex order types, however, it is also more centralised. dYdX has a huge market share of the decentralised perp exchanges, processing 86% of the daily volume from the top 4 competitors in the space. However, since the total addressable market (perp market) is so large, there is plenty of space for competing exchanges.

Where I believe GMX beats dYdX is in the distribution of revenue to token holders. As we know, GMX distributes 100% of the protocol revenues to GLP holder (70%) and GMX holders(30%). dYdX token holders on the other hand are not entitled to a share of the revenue generated from platform fees due to “regulatory concerns”. The GMX token utility is far greater than that of dYdX's for this reason.

Furthermore, dYdX was a highly converted project and raised multiple VC rounds, attracting capital from some of the most prominent angels and firms in the space. The token distribution was 50% to the community and 50% to the team/investors, with unlocking periods starting after 28 days. Almost exactly when this unlocking period started, dYdX peaked at \$27.40. Since then, dYdX is down 81.4%. GMX on the other hand had no private sales or VC funding and if VC's wanted to buy GMX, they had to do so from the open market.



Comparable Analysis | Competition Analysis – Perpetual Protocol (PERP)

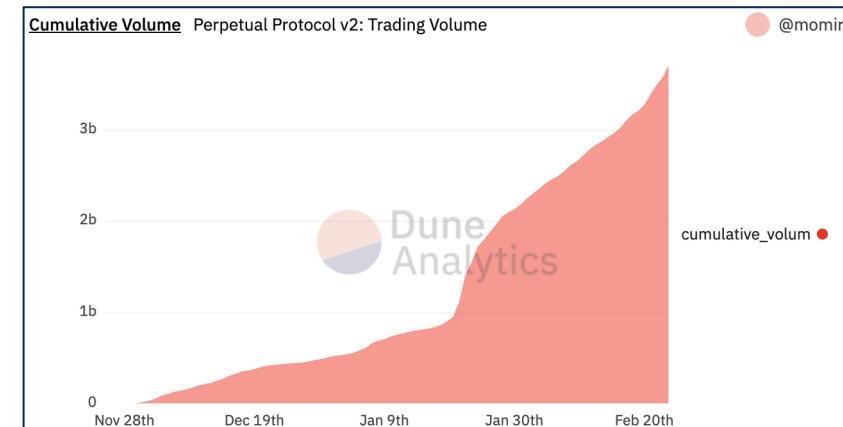
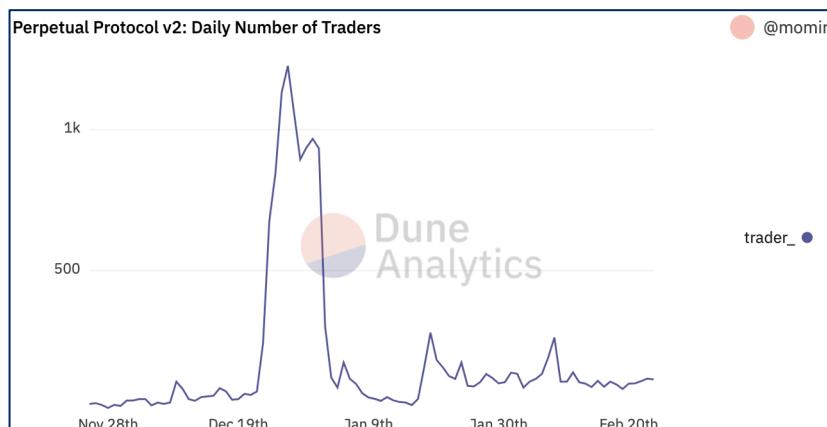
Perpetual Protocol is the 2nd largest decentralised Perp exchange with a cumulative \$3.73 B in cumulative volume processed since its launch on the optimism mainnet on the 28th of November 2021. Perpetual Protocol is an on-chain perpetual futures DEX operating on Ethereum's layer 2 optimistic rollup scaling solution.

The PERP token grants users 50% of the trading fees the platform generates and the other 50% goes to an insurance fund that backs the protocol. This fee distribution is similar to GMX, however, GMX distributes 100% of the fees back to holders of GLP or GMX.

Finally, if we analyse the number of users of the Perpetual protocol, we will see there have been an estimated 10,082 since launch. However, by looking at the daily number of traders we can see there was a huge spike between Dec 16th and the 2nd of January. Further analysis of this 17 day period shows that perpetual protocol was running a liquidity mining program, distributing 10,000 PERP per week to traders and during this time 58.9% of the total number of daily traders used this platform during this period. This suggests they were utilising the platform as there was a financial incentive to do so and doesn't show real adoption of the exchange. We can now see that the average number of daily traders is around 100 and growing slowly.

Similar to dYdX, PERP is down 81.11% from it's all time high of \$25.12 which it reached on the 30th of August 2021.

PERP Overview (as of 24th Feb 2022)	
Price	\$5.20
Circulating supply	64,262,725
Circulating market cap	\$335,182,041
Fully diluted supply	150,000,000
Fully diluted market cap	\$782,371,203
24 Hr trading volume	\$18,796,677
All time high	\$25.12 (30.08.21)
All time low	\$4.89 (24.02.22) on open market

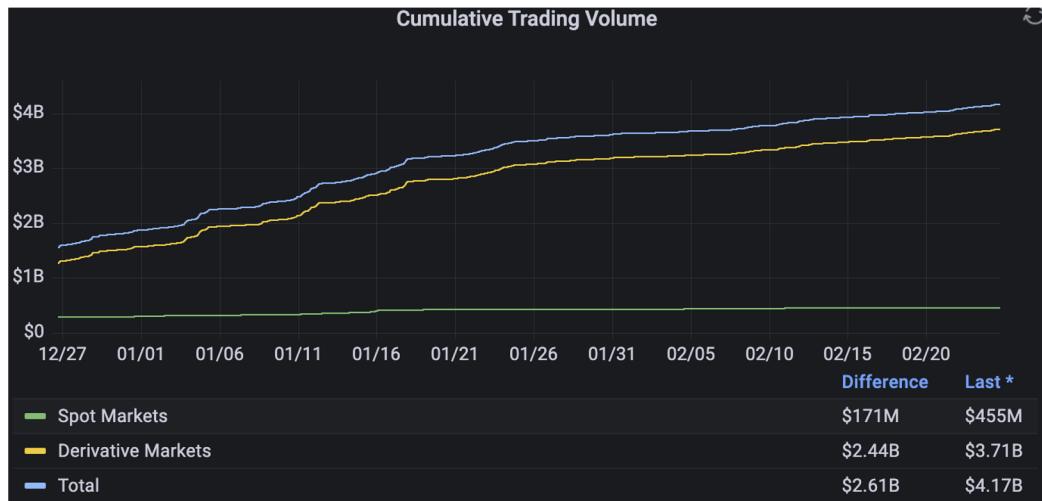


Comparable Analysis | Competition Analysis – *Injective Protocol (INJ)*

Injective protocol is a decentralised spot, perps, futures and margin exchange. The protocol has processed \$4.17B of trades since the 26th of December 2021, with an average daily volume of \$43,076,923 since the 1st of January. Since the protocol is built using the Cosmos SDK and utilises the EVM, users can execute fast, cross-chain and zero gas fee transactions. Similar to dYdX, Injective doesn't use an AMM and instead relies on order book relayers to manage liquidity and match orders (CLOB). This order book pricing method allows the protocol to execute complex trades such as futures, synthetic assets and exotic assets.

The native token, INJ, is used for governance, exchange value capture, liquidity mining and staking. 60% of the trading fees the protocol generates are used to buy back and burn INJ every two weeks.

INJ Overview (as of 24th Feb 2022)	
Price	\$5.18
Circulating supply	48,655,554
Circulating market cap	\$250,657,382
Fully diluted supply	100,000,000
Fully diluted market cap	\$515,167,047
24 Hr trading volume	\$42,118,500
All time high	\$25.26 (12.05.21)
All time low	\$0.15 (21.10.20) on open market



Source: [CoinGecko derivatives](#), [Token insights report](#), [Perp stats](#), [Injective stats](#)

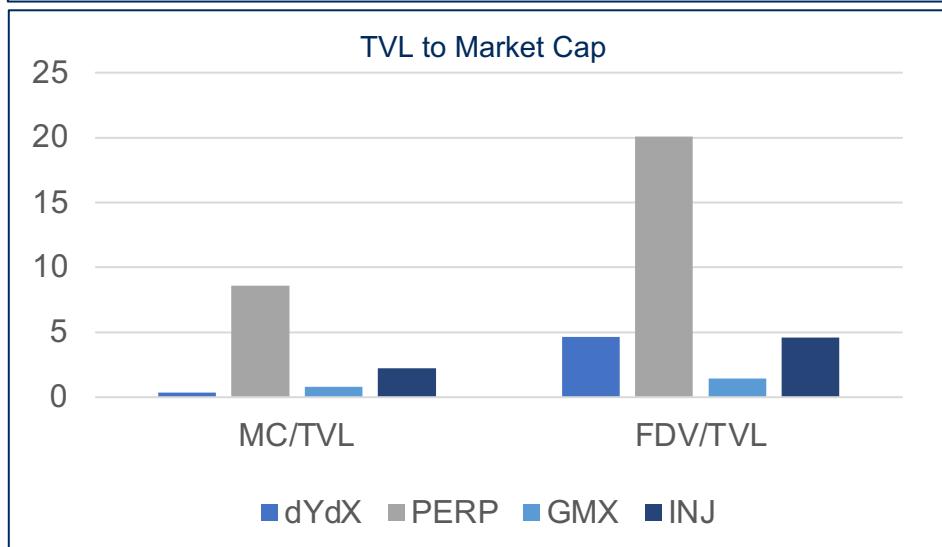
Comparable Analysis | Social Media comparison

As of 25.02.2022	dYdX	Injective Protocol	GMX	Perpetual Protocol
Discord Followers	30,156	9997	3733	7097
Twitter Followers	114.8k	104.2k	21.3k	38.4k
Reddit Users	2.8k	4.6k	n/a	n/a
Telegram Users	n/a	15,903	4287	6766

GMX currently has the smallest combined social media following on its main competitors. However, anecdotally, the telegram chat for GMX is one of the most high quality crypto communities I have been apart of.

Valuation | TVL to Market Cap

As of:	24.02.2022	DEX			
		dYdX	Pepetual	GMX	Injective
Last T7d Average Daily Volume	(in millions)	2193.00	69.10	207.70	24.04
Last T30d Average Daily Volume	(in millions)	2487.00	63.40	242.70	42.90
Volume Past 5m CAGR		59%	-2%	106%	n/a
Total Value locked (TVL)	(in millions)	\$ 1,039.00	\$ 37.40	\$ 228.60	\$ 111.80
Price		\$ 4.83	\$ 5.00	\$ 24.71	\$ 5.12
Circulating Supply	(in millions)	82.95	64.26	7.38	48.65
Max Supply	(in millions)	1000.00	150.00	13.25	100.00
Market Cap. (MC)	(in millions)	\$ 400.00	\$ 321.61	\$ 181.44	\$ 249.13
Fully-Diluted Value (FDV)	(in millions)	\$ 4,821.20	\$ 750.69	\$ 325.90	\$ 512.03
MC/FDV	(in millions)	8.3%	42.8%	55.7%	48.7%
MC/TVL		0.38	8.60	0.79	2.23
FDV/TVL		4.64	20.07	1.43	4.58



The digital asset space doesn't always trade on fundamentals and rationale and it is hard to come up with intrinsic valuations for projects. However, we can look at some relative valuation metrics to help understand the market and identify areas of relative overvaluation/undervaluation.

When analysing decentralised exchanges I believe the most important metric to look at are the volume of the protocol and its Total value locked (TVL). Comparing these metrics to the previously listed competitors, allows us to get a better sense of how GMX is valued.

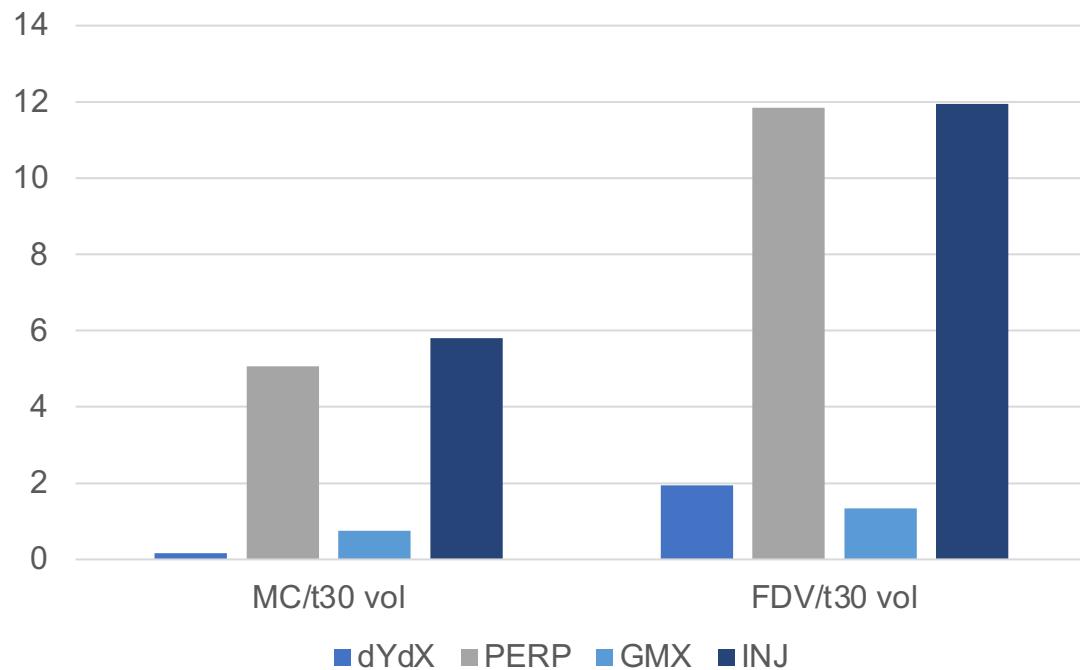
Comparing the TVL to MC and FDV allows us to get a better understanding of how the market is valuing each protocol on a relative basis. If we look at MC/TVL metric we can see that dYdX and GMX are undervalued relative to the group. However, if we take FDV/TVL we see that **GMX is the most undervalued**, due to the high total supply of dYdX tokens.

Notes/assumptions: GMX AVAX stats added into total, injective figures are 27 day average, comparison of TVL is not perfect as each protocol uses liquidity in a different way.

Valuation | Volume to Market Cap

As of:	24.02.2022	DEX			
		dYdX	Pepetual	GMX	Injective
<u>Market Cap/Volume Multiples:</u>					
MC/T7d Ave. Daily volume		0.18	4.65	0.87	10.36
FDV/T7d Ave. Daily Volume		2.20	10.86	1.57	21.30
MC/T30d Ave. Daily volume		0.16	5.07	0.75	5.81
FDV/T30d Ave. Daily volume		1.94	11.84	1.34	11.94

Market Cap to Vol Multiple



Another relative valuation metric that is relevant to perp exchanges is the market cap to volume multiples.

Looking at the market capitalisation-to-average daily volume we can see that both dYdX and GMX trade at relative discount to their competitors.

Looking at the MC/Vol multiples for the 7 day trailing daily average we see that dYdX is trading at 0.18x, making it the most undervalued relatively. However, once again when we take into account dYdX's large token supply we see that GMX is trading at the largest discount when factoring in FDV.

In fact, GMX's FDV trades at a multiple of 1.34x to its 30 day average daily volume, showing relative undervaluation without even factoring in the growth of the protocol. Furthermore, GMX trades more volume per day (average) than Perpetual protocol and Injective protocol, but has a lower market cap. This shows how relatively overvalued INJ and PERP are.

Valuation | Relative Valuation

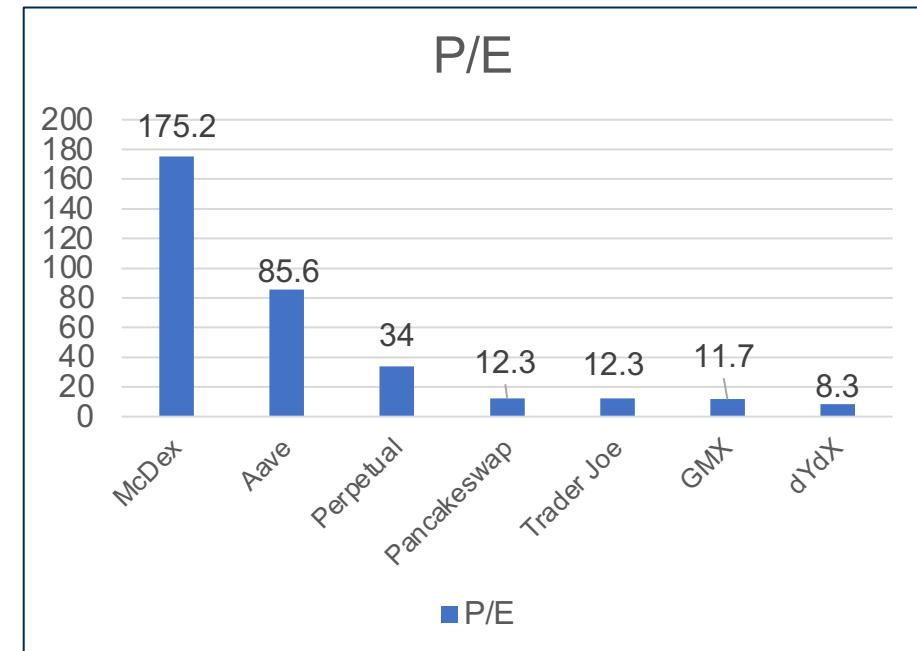
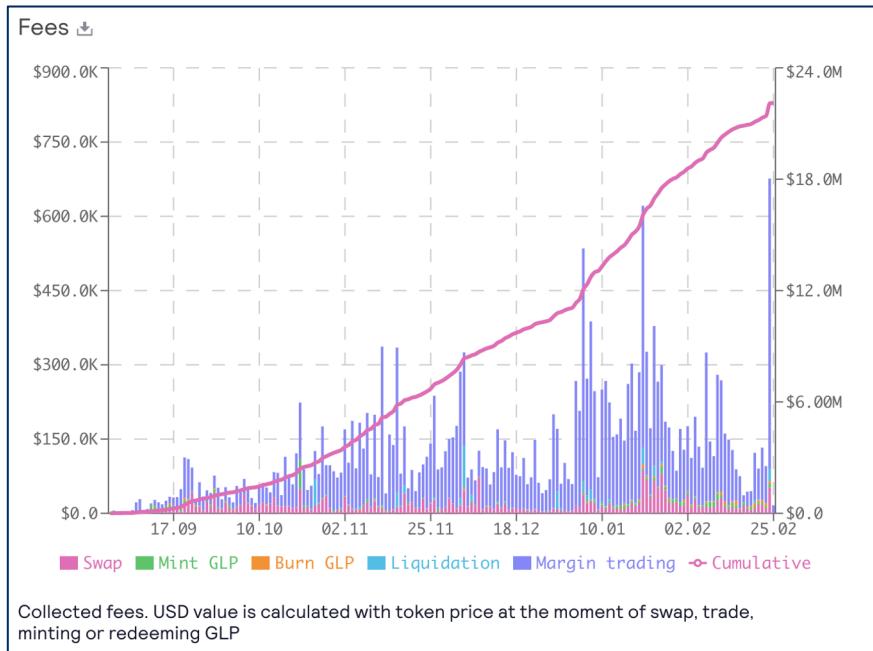
As of:	24.02.2022	GMX market Cap if we apply relative multiplier		
		Perpetual	Injective	dYdX
Market Cap to TVL:				
MC/TVL	(in millions)	\$ 1,965.96	\$ 509.78	\$ 86.87
FDV/TVL	(in millions)	\$ 4,588.44	\$ 1,046.96	\$ 1,060.76
GMX Total Supply	(in millions)	13.25	13.25	13.25
implied GMX price for MC/TVL		\$ 148.37	\$ 38.47	\$ 6.56
implied GMX price for FDV/TVL		\$ 346.30	\$ 79.02	\$ 80.06
Market Cap/Volume Multiples:				
MC/T7d Ave. Daily volume	(in millions)	\$ 966.69	\$ 2,152.43	\$ 37.88
FDV/T7d Ave. Daily Volume	(in millions)	\$ 2,256.42	\$ 4,423.82	\$ 456.62
GMX Total Supply	(in millions)	13.25	13.25	13.25
implied GMX price for MC/Vol		\$ 72.96	\$ 162.45	\$ 2.86
implied GMX price for FDV/Vol		\$ 170.30	\$ 333.87	\$ 34.46

If we apply the relative multipliers from competitor protocols we can see what market cap GMX would be trading at.

Taking a look at MC/TVL, we can see that if GMX was trading at the same multiple to TVL as Perpetual protocol, its market cap would be \$1.965 billion (980% higher). Furthermore, if it traded at the same multiple to TVL as Injective it would have a MC of \$509 million (180% higher than today).

Moving onto relative volume valuations, we see that GMX is vastly undervalued compared to Perpetual and injective. GMX would be trading at a market cap of \$966 million and \$2.15 billion if it traded at the same multiple to volume as Perpetual and injective, respectively.

Valuation | Price to Earnings (P/E)



GMX's has generated a cumulative \$22.1 million in fees since 31/08/21 on Arbitrum. The Annualised revenue generated from the platform fees is \$56.8 million and it is all distributed to GLP and GMX holders. Dividing the fully diluted market cap by the earnings of the exchange, we can see how a protocol is valued relative to its earnings and its peers. Doing this, we can see GMX has one of the lowest P/E's in the DeFi industry and is undervalued.

GMX has a higher P/E than dYdX, however, the actual revenue that is accrued to the token holders of dYdX is 0 and so if you were to calculate the actual P/E of the token holder for each of these projects they would be much higher, making GMX even more attractive by this metric. If we factor in how much revenue of a protocol is distributed to the holders of the token, GMX has the lowest P/E in the entire DeFi industry.

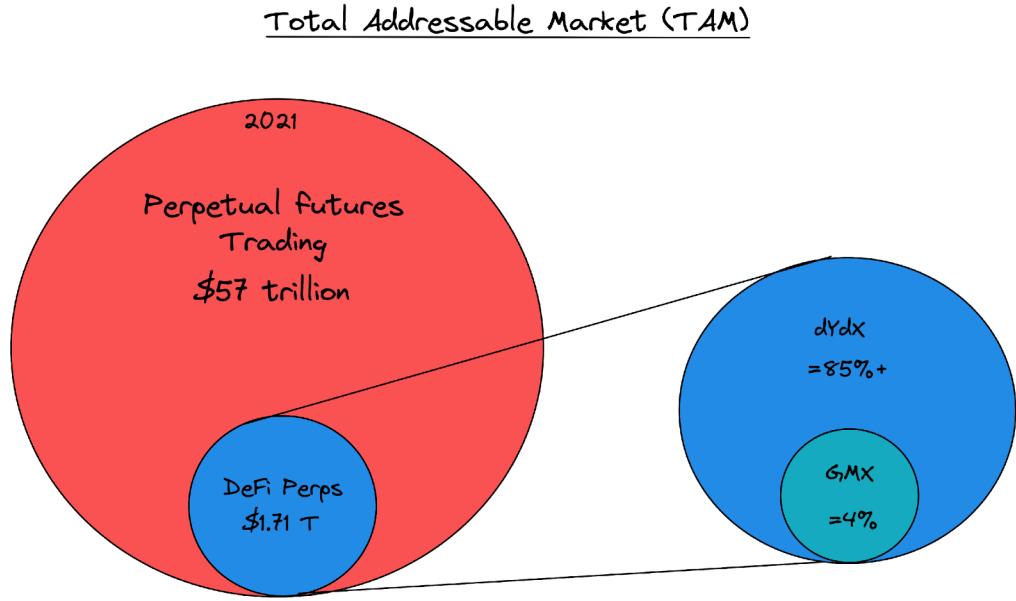
Valuation | Fee generation and P/E

GMX Market Capitalisation based on annualised Revenue Generation (<i>millions USD</i>)													
(As of: 27.02.2022)		GMX annualised Fees (<i>millions USD</i>)											
		50	75	100	150	200	250	300	350	400	400	500	
Price to Earnings ratio (P/E)	5.00	\$ 250.00	\$ 375.00	\$ 500.00	\$ 750.00	\$ 1,000.00	\$ 1,250.00	\$ 1,500.00	\$ 1,750.00	\$ 2,000.00	\$ 2,500.00		
	7.50	\$ 375.00	\$ 562.50	\$ 750.00	\$ 1,125.00	\$ 1,500.00	\$ 1,875.00	\$ 2,250.00	\$ 2,625.00	\$ 3,000.00	\$ 3,750.00		
	10.00	\$ 500.00	\$ 750.00	\$ 1,000.00	\$ 1,500.00	\$ 2,000.00	\$ 2,500.00	\$ 3,000.00	\$ 3,500.00	\$ 4,000.00	\$ 5,000.00		
	15.00	\$ 750.00	\$ 1,125.00	\$ 1,500.00	\$ 2,250.00	\$ 3,000.00	\$ 3,750.00	\$ 4,500.00	\$ 5,250.00	\$ 6,000.00	\$ 7,500.00		
	20.00	\$ 1,000.00	\$ 1,500.00	\$ 2,000.00	\$ 3,000.00	\$ 4,000.00	\$ 5,000.00	\$ 6,000.00	\$ 7,000.00	\$ 8,000.00	\$ 10,000.00		
	25.00	\$ 1,250.00	\$ 1,875.00	\$ 2,500.00	\$ 3,750.00	\$ 5,000.00	\$ 6,250.00	\$ 7,500.00	\$ 8,750.00	\$ 10,000.00	\$ 12,500.00		
	40.00	\$ 2,000.00	\$ 3,000.00	\$ 4,000.00	\$ 6,000.00	\$ 8,000.00	\$ 10,000.00	\$ 12,000.00	\$ 14,000.00	\$ 16,000.00	\$ 20,000.00		

If we take the annualised revenue generation from the GMX protocol and multiple it by a P/E ratio, **we can estimate the GMX market cap**. I have taken a wide range of P/E values and GMX annualised fees, but I ultimately think **the fees and P/E ratio will fall somewhere in the coloured area for 2022**. If we look at the total fee generation since the 6th of Jan (when GMX launched on Avalanche), we find that the protocol has generated \$16.69M in fees, or an annualised \$117.2M. In fact on the 24th of Feb, GMX generated \$786M in fees in just one day (\$286.9M annualised).

If we assume the annualised fee generation is between \$50M and \$250m and the P/E ratio of the protocol is between 7.5 and 25, we get a lower bound for the **GMX market cap of \$375 million and an upper bound of \$6.25 billion**. Through the growth of GMX on Avalanche, GMX integration into aggregators and further expansion to new chains, it is likely GMX will be able to command \$100-\$200 million in fees.

Valuation | Market Cap potential



The TAM for GMX is huge, with 2021 perpetual futures volume coming in at \$57 trillion and growing by 498% in a single year. GMX is positioned well to capitalise on the growth of Perp volumes and from the transition from CEX perp trading toward DEX perp trading. It is therefore not unreasonable for GMX to reach a market cap of \$2.4 billion in 2022 and \$6.9 billion in 2023.

If GMX was able to achieve this market cap in 2022 it would represent a 13.25x.

This market cap analysis doesn't even touch on GMX's ability to facilitate spot swaps and compete with the largest DeFi protocols due to their oracle pricing system and GLP creating some of the cheapest trade routes.

As of:	24.02.2022	GMX Potential Market Cap	
		2022E	2023E
Total Perpetual Futures Volume % to DeFi	(in trillions)	68.4 10.00%	82.1 15.00%
Total DeFi Perp Volume % GMX Market share	(in trillions)	6.8 5%	12.3 8%
GMX volume Market Cap at Current MC/t30Vol	(in billions)	342.0 \$ 255.68	985.0 \$ 736.35
GMX Perp trading fee %		0.20%	0.20%
GMX Perpetual Trading Fees GMX Revenue to Stakers %	(in millions)	684 30%	1969.9 30%
GMX Perpetual Futures Revenue Current GMX P/E	(in millions)	205.2 11.7	591.0 11.7
GMX Market Cap	(in millions)	\$ 2,400.84	\$ 6,914.42
Max Supply GMX Token Price	(in millions)	13.25 \$ 181.20	13.25 \$ 521.84

Assumptions:

1. Total Perp volume grows by 20% per year (very conservative as they grew by 498% in 2021)
2. DeFi perp volume grows from around 3% to 10% of market share. (*Blocktower estimate it will grow to 15% in 2022 and 20% in 2023. I have been more conservative.*)
3. GMX market share grows to 5% of all DeFi Perp vol in 2022 and 8% in 2023
4. The borrow fee is not included in platform fees (this would increase protocol revenue and increase market cap estimate)
5. I have used total supply instead of circulating (conservative)

Risks | 1

1. **Long-tail asset risks** – due to the oracle pricing nature of assets in the GLP pool traders can avoid market impact. This works fine for assets which are liquid such as Bitcoin or Ethereum, but for illiquid assets (long-tail assets) there are risks. Traders could potentially execute trades with no slippage on smaller cap coins.
2. **GLP as the counterparty to traders** – Since GLP is the counterparty to traders, if traders are very profitable the GLP pool is depleted. The data shows that traders are at a loss so far and GMX expect the traders to cumulatively have 0 PnL in the long-term.
3. **Bear Market short skew** – In a bear market it is likely there will be a significant short skew on open interest. Whilst the GLP pool works well in a bull market as traders are long skewed and the GLP pool will just pay out this upside to traders (whilst the assets in the GLP pool rise). However, in a bear market with traders short skewed and making money, GLP will be paying out Stablecoins to these traders as profits whilst the index assets in the GLP decrease. This would make the GLP an unattractive place to LP and we may see a decrease in the AUM. An interesting idea, akin to funding rates could solve this risk and it can be found [here](#).
4. **GMX team pseudonymous** – The entire GMX team is pseudonymous and this makes walking away from the project/stopping shipping that much easier for the team. We are yet to see how the team works in a bear market.

Risks | 2

- 1. Adoption risks** – currently the GMX platform doesn't allow traders to exit their position unless price has moved at least 1.5% away from their entry and this minimum price movement duration is 3 hours. This is to limit arbitrage bots taking advantage of lagged oracle price feeds, however, these features dampen the user experience. Furthermore, large players like HFT firms will not be able to use this protocol and hence adoption could be limited.
- 2. Smart contract risks** – Since GMX operates on Arbitrum, an L2, it carries significant smart contract risks. Tokens within a rollup are locked into a smart contract, meaning a smart contract bug / hack could result in those funds getting stolen or frozen. However, GMX has had an audit from ABDK consulting and currently has a bug bounty listed on ImmuneFi which is a good sign.
- 3. Competition** – GMX has competition from both CEXs and DEXs. Binance currently dominates the perp market and Decentralised perp exchanges only make up less than 3% of total pep volume. In the decentralised perp exchange space, dYdX currently dominates and has a significant head start on GMX.

Conclusion | Evaluation

GMX is a decentralised perpetual futures and spot exchange looking to fulfil the market demand for on-chain trading. Its innovative design allows it to execute trades with zero market impact, making it a very desirable place to trade. The central investment thesis is that GMX is a grassroots DeFi cash cow that distributes all trading revenue back to holders of GMX and GLP, and as such the GMX token accrues value from an increase in volume (and thus fees) on the platform.

Therefore, the question is, how will volume increase? - GMX has plans to scale both horizontally and vertically. Firstly, GMX will consolidate market share on Arbitrum and Avalanche and scale horizontally with the introduction of the trading referral program and the addition of new assets to the GLP pool. Then, GMX will increase volume by scaling horizontally; expanding to new chains, integrating as a new route in aggregators and with the launch of X4.

GMX is also positioned well to benefit from the growth in demand for perpetual futures contracts, DeFi applications and from the transition from CEX's to DEX's, in light of regulatory concerns.

Conclusion | Exit Strategy

The investment strategy for GMX would be defined by a **long-term investment horizon**, making up one of the key holdings in the DeFi investment theme. I would suggest staking this position to benefit from the esGMX rewards and multiplier points. If the investment is successful we would look to **trim the position in 10% tranches for every 100% of returns**. After a 300% return from current prices, selling 10% of the initial position at each 100% would **result in a total return of 145%, with 60% of the initial position still invested**. Each take profit level is labelled on the chart.

The remainder of the position will be exited based on **exit catalysts and on the maturation of the project**. Possible exit catalysts would include: expansion to new chains, introduction of X4 (as discussed in the roadmap section on page 22), a DeFi sub-sector bull market or a market wide bull market.

A key metric to track whilst **determining the adoption and maturation of GMX would be the volume processed by the platform**. Since we expect both the Perp market volume and the share that DeFi serves to grow, we will look to exit based on examining trends in this sector. By using the revenue generation model on slide 50 what the expected market cap of GMX will be dependent on the volume the platform processes (keeping P/E constant). We would therefore look to exit positions when GMX has fulfilled its potential in terms of perp market volume share.



Miscellaneous Information

Socials

[Discord](#)

[Twitter](#)

[Telegram](#)

[Medium](#)

GMX Information

[Website & Exchange App](#)

[GMX documents](#)

[GMX stats](#)

[GMX dashboard](#)

[GMX Governance page](#)

[GMX Analytics by CryptoMessiah](#)

GMX Blueberry club

[Website](#)

[New Discord](#)

[Discord](#)

[Twitter](#)

[Buy a GBC](#)