Problem Statement:

1. GLP TVL is rising quite fast, will continue to do so and this will dilute APR if it outpaces trading volume growth.
2. In the event that lending platforms allow you to use GLP as collateral or even leverage your GLP position (e.g similar to UST degenbox on abracadabra), we may see even faster growth in the GLP TVL.
3. This increase in GLP, while beneficial in allowing larger trade volume, will not directly lead to increased trade volume. Instead, large amounts of GLP collected will be sitting idle – even now, pool utilization is not ideal.

Proposed Solution:

1. Overview

1.1. This solution aims to be capital efficient with the TVL in GLP by more directly scaling revenue with GLP TVL, and be a useful product that anyone in DeFi would be interested in using.

1.2. The conclusion is to allow users to change the % weighting of the constituent tokens of their GLP by trading amongst one another, while continuing to accumulate the GLP yield.

1.3. This enables different strategies with GLP, all of which would require transacting in the prediction market – accruing fees to GMX. Strategies include, changing one's USDC weightage to 100% to get high yield on stablecoins, or the converse which would be to get higher exposure to BTC/AVAX/ETH. Since market participants are aware that yield is being accrued to their positions, they are willing to buy stability or buy long-exposure at a premium based on their expectation of future price. In effect, the long-termist nature of accruing yield on GLP results in a prediction market being created for the assets within it that are traded at different prices according to the expectations of users.

1.4. This proposal will outline this in more detail to show how this can be implemented, from a high-level view, without changing the GLP smart contract and how assets are currently weighted within it.

1. Implementation:

2.1. Create mechanism to lock GLP from being withdrawn while the user is participating in the prediction market. This locking is needed because users should only be able to mint/sell GLP using the current GLP smart contracts, at the prevailing asset-weightage.

2.2. To be clear, the user does not have any ownership over the locked GLP. The GLP is simply locked into a pool, and users can, depending on their trading within the prediction market, withdraw a corresponding sum of GLP when they choose to. Let me illustrate.

2.3. Upon locking their GLP, users receive xGLP that can only be used in the prediction market. While the user is accessing prediction markets, the weightage of their xGLP's various cryptoassets may differ from the asset-weightage of GLP depending on what trades the user has made. Hence, it is only when the user wants to exit their xGLP position that they will change their weightages back to the prevailing GLP weightage of cryptoassets (by buying or selling weightages at market prices), and then be allowed to redeem a corresponding sum of GLP from the locked-GLP smart contract.

2.4. How does the prediction market operate? Create an orderbook based market where users can place buy and sell orders, buying and selling percentage-weights in their GLP position. E.g, GLP currently weights USDC at 50%, and Alex wants to change that to 25% while increasing his BTC weightage by 25% as he is bullish on BTC. He then puts up 25% of his USDC weightage for sale for 25% BTC. He sets the price he is willing to sell his USDC for, which may be at a discount or premium to the value of USDC – this delta arises from the market's present willingness to buy or sell exposure to different assets, within GLP.

2.5. To be clear, the reason why participants are only able to buy and sell % weightage, rather than a specific amount of an asset (e.g 1000 USDC), is because the actual number of any asset within 1 unit of GLP is constantly changing. As such, this approach allows individuals to place an order that can stay on an orderbook for an indefinite period of time. E.g if Alex sells 100% of their USDC weightage on the market at a price they set, and the weightage of USDC within GLP were to change from 50% to 1%, their market order and limit price remain valid and executable.

2.4. At the point where an order is executed, the buyer and seller have their xGLP crypto-asset weighting percentages change.

2.5. Note that throughout this process, the amount of BTC, ETH, AVAX, USDC, etc within the locked GLP stays constant – the only thing being traded is the weightages of those tokens that each GLP holder has.

1. What's the benefit?

3.1. On each transaction in the xGLP prediction market, the protocol can earn a fee. This fee can go to GMX holders.

3.2. A prediction market that has an underlying yield from the GLP yield would be incentivised and would draw volume from those who want to trade without liquidation risk. Since there is no liquidation risk, and since the number of participants could include even those who have lower-risk tolerance, the fees charged on the platform could be relatively higher. This is

especially so when there is no comparable product on CEXs, so no fee-competition needs to occur.

1. I am a non-technical commentator

– please point out if there are easier/better ways to implement the above in the comments!