

To improve the performance of GLP and to guard the pool against edge cases as well as black swan events we propose the following changes:

1. If a price update is more than 0.4%, there will be a spread of (price update size - 0.4%), for example, if the price is 100.0, then updates to 101.6, the prices used for settlement would be 100.4 and 101.6, in this case opening a long would be at a price of 101.6 and closing it would be at 100.4. This helps guard the pool against edge cases of large price updates beyond the 1.5% threshold where a position could be opened and closed in profit immediately. The 0.4% helps reduce the impact of these cases while maintaining a minimal spread for the majority of the time. Based on analysis of past data, there should be no spread in 90% of cases and less than 0.2% spread in 99% of cases even with this change.
2. For stablecoins, currently only the Chainlink price is used, in cases where a stablecoin's price trades below peg and there are profitable shorts, there may not be a sufficient amount of stablecoins to pay all traders, to prevent this from occurring, there should be a spread between 1.00 and the Chainlink price, for example if the Chainlink price is 0.98, then the spread would be from 0.98 to 1.00, when closing a profitable short, the 1.00 price would be used and ensures that all traders can be paid proportionately even if a stablecoin trades below peg.
3. To guard against black swan events, e.g. a large short position is opened and prices drop by a large amount, the size of shorts should be capped, we propose to cap the maximum shorts to 30% of the total pool size. This can be done by creating a reserve contract that will strictly allow transfers only between itself and the GLP pool. Having this structure allows the GLP pool to have a reduced amount of funds exposed to trading and any other risks, while being able to scale as demand increases.
4. Based on analysis of the current price updates, changing the min profit duration to 6 hours instead of the current 12 hours should not adversely affect the performance of the GLP pool and could benefit it by increasing volumes