Background context

In developing GMX V2, the existing liquidation mechanics of GLP were largely mirrored and continued forward. However, GMX V2 has unlocked considerable improvements in possible market characteristics and parameters. These include lowering fees, price impact, minimum maintenance margin (max leverage before liquidation), more robust low-latency price oracles (Chainlink DataStreams), and now the recent introduction of Risk Oracles by Chaos Labs that will continue to allow for better optimisation of pools.

Due to all these updates, it is now possible to realize markets with potentially lower fees and higher leverage, as well as markets for a broader range of asset types.

Enabling all this also means ensuring a robust risk management system. How liquidations are handled on GMX is a crucial element of this system, which must ensure that liquidations can't be gamed to circumvent mechanisms designed to guarantee the solvency of markets.

Current liquidation process

The current liquidation process (which is the same for all markets) involves, once a position reaches its liquidation price:

- 1. applying price impact to determine the residual collateral
- 2. applying a standard close fee (either 5 or 7 bps)
- 3. and then returning this residual collateral to the trader

Proposed liquidation process

The updated mechanism will make it possible for liquidations on different markets to have a more appropriate, fine-tuned combination of (i) price impact, (ii) close fee and (iii) liquidation fees.

Such a more tailor-made solution to the liquidation process is what this proposal aims to achieve. Comittee handling risk and updating of markets will continue to update such new parameters as will be done for other market specific paramaters such as price impact, OI caps etc.

Competitive analysis

While we endeavour to be as transparent as possible about how liquidations and fees function on GMX, unfortunately, the same does not apply to many others in the space. Perhaps this is because liquidations are a direct profit driver for their protocol, as opposed to simply a mechanism for the proper functioning of the markets.

To the best of our knowledge (there were multiple cases of inconsistencies in the documentation), the assessment below covers how other perpetual exchanges handle liquidation:

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Next Steps

Based on the community dialogue determine what delegation and if a vote is required with regards to the committees ability to determine handling of new parameters