Position Sizing With Leverage on a Perps DEX

Leverage changes how much capital a trade consumes, not how much it can cost you — unless you size by the leverage dial, which is how most perps accounts are lost.

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Every perpetuals venue puts a leverage slider in front of you before it puts a position size, and that ordering has probably cost traders more money than any other interface decision in crypto. It invites you to choose a multiplier and let the platform work out your exposure, when sound sizing runs the other way entirely: you decide what a mistake may cost, derive the position from that, and leverage is simply whatever number falls out at the end. This report is about doing that correctly on a decentralised perpetuals exchange, where the mechanics of margin, liquidation, funding, and on-chain execution add constraints that spot trading never imposes. The underlying question of how large the risk budget should be is handled separately in how much to risk per trade.

AT A GLANCE

WHAT LEVERAGE CHANGES **Capital used, not risk taken**	SIZE FROM **Stop distance — not the slider**	LEVERAGE IS **An output of the trade**
NON-NEGOTIABLE **Liquidation beyond your stop**	CARRY COST **Funding, charged on notional**	DEX TWIST **Oracle marks, ADL, OI caps**

01

Three numbers people collapse into one

Clear sizing on a perps venue starts with separating three quantities that beginners treat as interchangeable. *Notional* is the full value of the exposure you control — the number that determines your profit and loss per unit of price movement, and the number funding is charged on. *Margin* is the collateral you post to hold that exposure; it is what the leverage multiple describes, and it is the amount at stake if the position is liquidated. *Risk* is the amount you actually lose if your stop is hit — typically far smaller than either.

Leverage is nothing more than the ratio of the first to the second. It tells you how efficiently your collateral is being used, and by itself says nothing whatever about how much you can lose. Two traders can run identical notional exposure with identical stops and identical losses while displaying wildly different leverage figures, purely because one posted more collateral than the other. Anyone quoting their leverage as a measure of aggression is describing capital efficiency and calling it risk.

02

Leverage is an output, not an input

The correct sequence is unchanged from spot trading, and this is the heart of the matter. Decide the amount you are prepared to lose. Identify the price at which the trade is wrong. The distance between entry and that price, divided into your risk budget, gives the position size. Only then look at what margin that position requires, and the leverage figure resolves itself — a number you read off at the end rather than one you chose at the start.

Run the process the other way and the meaning of every input dissolves. Selecting a multiplier first fixes your notional to whatever your collateral happens to be, which means your loss at the stop is determined by your account balance rather than by any decision about risk. Worse, the platform's maximum available leverage is a statement about its own risk tolerance — the point at which it is still comfortable liquidating you — not a recommendation about yours. Treat the slider as a constraint you may bump into, never as a setting to optimise.

03

Liquidation is not a stop loss

The most consequential difference between spot and leveraged sizing is that a second exit exists which you do not control. When your margin falls below the venue's maintenance requirement, the protocol closes the position for you — not at the price you chose, but at the

price at which its own solvency is threatened, and typically with a penalty attached. Liquidation does not cost you your intended risk. It costs you the margin behind the position.

This creates a hard constraint on sizing, and it is the one most often violated. Your stop must sit *inside* your liquidation price, with room to spare — if the liquidation level is reached first, your carefully budgeted loss is irrelevant, because the venue exits you before your own order can. The gap between the two is a function of how much collateral supports the position: more margin pushes liquidation further away, less pulls it closer. So on a leveraged venue, sizing has two outputs to check rather than one — the loss at your stop, and the distance to liquidation — and a position that passes the first test while failing the second is not correctly sized. The buffer should also account for the fact that liquidation is triggered by the venue's mark price rather than by the last trade, which can differ during exactly the volatility that puts you near the line.

04

Isolated and cross margin

Every perps venue offers two collateral modes, and the choice changes what a sizing decision even means. Under *isolated* margin, a fixed amount of collateral is assigned to a single position; if it is liquidated, you lose that allocation and nothing more. The position is ring-fenced, its liquidation price is calculable from the collateral you assigned, and each trade can be sized independently.

Under *cross* margin, your entire account balance backs every open position. Liquidation is deferred — the whole account absorbs the drawdown, so any single trade is far less likely to be closed out — but the consequence is that positions stop being independent. Unrealised losses anywhere reduce the collateral supporting everything, so a losing trade in one market can drag an unrelated position toward liquidation, and a single bad correlated move can take the account rather than a position. Cross margin also makes your equity, and therefore any percentage-based risk budget, move continuously with open profit and loss. Isolated margin is the more legible choice while you are learning to size; cross is a portfolio-level decision that demands a portfolio-level view of total exposure, not a per-trade one.

> *The slider does not measure how much you can lose. It measures how little collateral you have posted against the exposure you already chose — which is a statement about your liquidation distance, and nothing else.*

05

Funding: the cost that scales with notional

Perpetual futures have no expiry, so they hold their price near spot through a periodic payment between longs and shorts. When the perp trades above the underlying, longs pay shorts; when below, shorts pay longs. The direction and size vary continuously with market positioning, and on most venues it is settled at regular intervals for as long as you hold.

Two consequences matter for sizing. First, funding is charged on notional, not on margin — so a highly leveraged position pays the same funding as an unleveraged one of identical size, but that cost represents a far larger share of the collateral behind it. Second, funding turns holding period into a sizing input: a position intended to run for days or weeks carries a recurring cost that a same-day trade does not, and in a strongly one-sided market that carry can quietly consume a meaningful part of the margin supporting the trade. Neither effect is captured by a stop-based sizing calculation, so treat funding as a separate line item — estimated before entry, monitored while open, and counted as a cost of the position rather than a rounding error.

06

What a decentralised venue changes

Trading perps on-chain preserves the mechanics above and adds several of its own. Pricing and liquidation are driven by an oracle rather than by a single internal book, which is what allows a decentralised venue to mark positions fairly — but it also means your liquidation is triggered by an external feed with its own update cadence and failure modes, and a brief dislocation between the oracle price and the venue's traded price can trigger closures that the chart alone would not explain.

Three further constraints deserve planning for. Venues cap total open interest per market, and individual positions may face size limits, so the position your sizing model produces may exceed what the venue will accept — a real ceiling on thinner markets. Liquidations are executed by a public mechanism backed by an insurance fund, and where that fund is insufficient, some venues resort to auto-deleveraging: profitable positions on the opposite side are closed to absorb the shortfall. That is a genuine risk with no spot equivalent — you can be closed out of a winning trade because someone else was liquidated badly. Finally, conditional orders such as stops are instructions that must be executed on-chain when triggered, which introduces dependencies on network conditions and keeper infrastructure

that a resting order on a centralised book does not have. The general market-structure background sits in our note on decentralised exchanges.

07

A sizing routine that survives leverage

The discipline reduces to a short sequence, run in order and never reversed. Fix the risk budget in currency before looking at any market. Mark the invalidation level, and set the stop there rather than where a convenient size would put it. Derive the position from budget divided by stop distance. Check the resulting margin requirement, and confirm the liquidation price sits comfortably beyond the stop — if it does not, post more collateral or cut the size, never widen the stop. Estimate funding over your intended holding period and treat it as part of the cost. Only then read the leverage figure, as a diagnostic rather than a decision.

Two habits protect the routine. Size at the *fully built* position, not the first tranche: on a leveraged venue every addition drags the liquidation price toward the market, so a plan that was safe at entry can be unsafe once complete — the reason staged entries need checking at their final size, as covered in how to scale into a position. And keep unencumbered collateral in reserve. Running an account at full margin utilisation means no capacity to absorb an adverse move, no room to defend a position, and no ability to act on anything else — the leveraged equivalent of being fully invested with no cash.

08

How it actually goes wrong

The failure modes are consistent. The most common is sizing to available buying power — taking the largest position the venue permits, which guarantees the tightest possible liquidation distance at the exact moment you can least afford one. Next is treating a leverage multiple as a strategy: “I trade at ten times” describes collateral efficiency, not a risk rule, and traders who think in multiples rather than in loss-at-stop have no consistent risk per trade at all. Third is cross-margin contagion, where correlated positions that each looked prudent in isolation drain shared collateral together during a market-wide move.

Two more are specific to on-chain venues. Conditional orders can fail to execute as intended during congestion or infrastructure problems, so a stop is a request that depends on the chain being available — which argues for margin buffers rather than reliance on precise

exits. And volatility can move price through a stop faster than any order can fill, arriving at liquidation instead. None of this makes leveraged trading unworkable; it makes the buffer between your stop and your liquidation the single most important number in the position, and it makes an explicit written exit plan — the subject of how to build an exit strategy — more necessary here than anywhere else in crypto.

> *"Be not thou one of them that strike hands, or of them that are sureties for debts. If thou hast nothing to pay, why should he take away thy bed from under thee?"*
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> PROVERBS 22:26–27

Methodology & Sources

This report explains sizing mechanics on leveraged perpetuals venues; it contains no leverage multiples, maintenance-margin percentages, funding rates, liquidation-penalty figures, open-interest caps, or fee schedules, all of which are venue- and asset-specific and change continuously — consult the platform's own documentation and current parameters. The core identity, that position size follows from risk budget divided by stop distance and that leverage is the resulting ratio of notional to margin, is arithmetic rather than a strategy claim. Maintenance margin, mark-price and oracle-driven liquidation, isolated versus cross collateral, insurance funds, and auto-deleveraging are standard perpetuals mechanisms whose specific implementations differ materially between venues. Funding is described directionally — paid between longs and shorts according to whether the perpetual trades above or below the underlying — with no rate or interval asserted. Leveraged trading carries risk of total loss of posted collateral; nothing here is a recommendation to use leverage. For the prior question of how large a risk budget should be, see how much to risk per trade, and for sizing conventions generally, fixed versus percentage position sizing.

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