

# Risk Management (UPDATED)

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# Outline

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# Disclaimer

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I am not a financial advisor and hold no formal qualifications in this area.

Trade entirely at your own risk.

This is for entertainment purposes only.

It's satire. Comedy. A joke. A hallucination.



# General Remarks

- Survival is the priority
- This video will offer a basic framework, the rest is on you
- Focus is on being practical and accessible to noobs, if you want the full quantitative approach, go elsewhere
  - You're here to gamble on coins, not to read about the Kelly Criterion and calculate the expectancy of your backtested strategies
  - Best-suited for discretionary traders
- Colloquially: as long as you don't blow up, you have time to:
  - Figure out cool shit that has an edge
  - Swing for the fences on really asymmetric setups
- Never risk your ability to take risk
- This isn't pretty or scripted, if it's not for you, there are plenty of short and sweet 'tutorials' absent of any nuance that teach you fuck all but make you feel like you've learnt something



# Invalidation

- Basic premise: you take a trade and risk money because you have an idea
  - Your idea may reach point at which it is most likely no longer correct
  - Or, at the very least, evidence suggests that the probability of the idea coming to fruition is reduced such that the risk is no longer justified
  - This is known as an invalidation
- If your idea doesn't have an invalidation, reconsider it
  - If your idea doesn't have a basis in the first place/there is no idea, back to the drawing board
- The invalidation is usually a product of the idea itself (built-in)
- Price-based
  - The idea is that X level is support, invalidation = X fails to act as support
- Time-based
  - The idea is that price should (consecutively) close above X to suggest a breakout, invalidation = closing below X
    - Candle close invalidation
  - The idea is that price usually moves X% within Y hours after Z takes place, invalidation = price not moving X% within Y time frame following Z
    - 'This shit isn't moving quickly enough for the type of setup it is' invalidation
  - The idea that the market usually does X within Y [time period/trading session], invalidation = price not doing X within Y [time period/trading session]
    - 'New York Open gonna moon it, wait, where on earth is the bid?' invalidation
- Volatility-based
  - The idea is that price usually moves X% within Y hours after Z takes place, invalidation = price moving less than X% within Y time frame following Z
    - 'I was expecting dildos but I'm getting shit all' invalidation




# Stop Losses I

- Not all trades have an obvious/outright stop loss e.g. sometimes less clear with time-based/volatility-based examples
  - At the same time, some setups present a very clear place for a stop e.g. price-based failed breakout/breakdown setups
- Basic premise: stop loss is an order (often, but not always, a market order) to fully close a position at a certain price or loss threshold
  - Market order: guaranteed execution, fill price may be unfavourable
  - Limit order: if it 'skips' your price and the market teleports, you're fucked
- TLDR version: stop placement should be where
  - 1) The setup obviously calls for it i.e. clear invalidation in line with the trade idea
  - 2) The idea is obviously wrong if price trades to the stop order
- 99% of complaints about 'stop hunting' or 'price wicked and reversed on me' = shit stop placement, not deliberate 'hunting'



# Stop Losses II

- As before, stop placement inextricably linked with the trade idea itself
  - Shit idea = shit stop placement (most likely)
- If you don't know where to put a stop, that often means the idea itself is not defined very clearly or that the setup isn't particularly good
- Simple eye test: would I want to buy where my long gets stopped out / would I want to sell where my short gets stopped out?
  - If the answer is 'yes', consider revising!
    - Especially if you trade technicals



# Stop Losses III

- Strictness with stop usage and placement inversely correlated with the size of the move you're trying to trade (hot take)
  - If you're punting low time frame, tight rotations with nearby invalidation and a lot of size, stop placement needs to be strict because the idea must be precise to be correct
  - If you're swing trading a higher time frame value area, especially if there are liquidations/an outsized move coming into the level, stop placement can be looser because trade idea is valid over a wider area
- Hard stop
  - Market order to close the full position at a certain price or loss threshold
  - Appropriate for clearly-defined setups and/or setups where entry is close to invalidation (usually means more size, as we'll discuss)
- Soft stop
  - 'Mental' stop to start closing out the position (mix of limit and market orders) if invalidation criteria begin to be satisfied
  - Appropriate for swing trades/ideas less reliant on (short-term) precision
- Use hard stops if you're a beginner, because your ideas probably suck
  - They'll also teach you more about stop placement by studying what the market does (if anything) after taking you out
- Read TradingRiot risk management blog post for some cool ideas on how you can incorporate both where appropriate





# Position Sizing & Risk per Trade I

- Position size and risk per trade are two different things
  - Position size = the number of units of an instrument bought/sold
  - Risk per trade = % of portfolio/amount a trader stands to lose upon invalidation
- If you have an invalidation point, calculating position size is straightforward
- $\text{Position Size} = (\text{Portfolio} \times \text{Risk \%}) \div \text{Distance to Invalidation}$ 
  - Position size = number of contracts
  - Portfolio = total trading capital/equity
  - Risk % = percentage of your portfolio at risk (expressed as a decimal)
  - Distance to invalidation = distance between entry and invalidation (expressed as a decimal)
- For example, 100,000 USD equity, 2% risk, with invalidation 5% away
  - $\text{Position Size} = (\text{Portfolio} \times \text{Risk \%}) \div \text{Distance to Invalidation}$
  - $\text{Position Size} = (100,000 \text{ USD} \times 0.02) \div 0.05$
  - Position Size = 40,000 USD
  - Checking the maths: if 40,000 USD moves 5% and hits my stop loss =  $40,000 \text{ USD} \times 0.05 = 2000 \text{ USD}$  lost, which is 2% of 100,000 USD
  - N.B. this doesn't account for slippage, fees etc. (cost of trading and actual execution)



# Position Sizing & Risk per Trade II

- Fixed risk per trade is mostly bullshit, because it assumes that all setups carry the same expected value
  - Gun to my head: 1-3% per trade to be safe, but that range is useless without context
- Two things to consider:
  - What is the expected value i.e. average outcome of this (specific) setup?
  - What are my chances of ruin if I eat shit on this setup repeatedly?
- My framework:
  - Frequent setups with marginal odds = marginal bets
    - Risk less on shit that happens a lot and has a marginal edge
  - Frequent setups with good odds = bigger bets
    - Risk more on shit that happens a lot and has a clear edge
  - Less frequent setups with great odds = biggest bets
    - Risk most on shit which rarely happens but offers a massive edge/no-brainer
- Sorry for not giving a lazy % answer, but this is the reality of discretionary trading
  - Consider individual EV/odds of specific setups
  - Consider frequency with which that setup occurs
  - Place it on the spectrum between high frequency low EV (shit, risk less/nothing) and low frequency high EV (great, risk more)
    - High frequency high EV is the golden goose and often doesn't stick around forever, pedal to the metal if you ever spot something like that
- **THE BEST EDGES DON'T LAST LONG ENOUGH TO BE BACKTESTED THOROUGHLY**



# Dynamic Risk to Reward/Evolving R

- Basic premise: the risk to reward ratio of a trade evolves as price moves away from your entry point
- Idea is to make sure you're not being complacent in trade management
- Example:
  - Buy at 50, target at 100, stop at 25
  - You're risking 25 (50-25) for a gain of 50 (100-50)
  - $\text{Reward} \div \text{Risk} = 50 \div 25 = 2R$
  - Suppose the market pushes from 50 to 85 and starts to struggle. Evolving R posits that, where appropriate, you should reassess the risk to reward calculation to assess if staying in position is justified in the absence of any management.
  - With the market at 85 and your stop and target unchanged, the risk to reward of the trade has become  $0.25R \rightarrow$  you're risking 60 points to gain another 15 (at an area where the market appears to be shifting)
- The point of evolving R isn't to ensure that your trade always satisfies some arbitrary ratio
  - Instead, it's there as a wake-up call or trade management signal once the market approaches your take profit (or stop)
  - Common remedies to address poor evolved R: close position and/or move stop closer
- Works to the downside as well i.e. don't always have to wait for the market to take your stop if there's compelling evidence that probabilities have shifted against you
- Best guide here will be your trade journal i.e. looking at whether, on average, your trade management decisions improve your results or if you're better off relying on set-and-forget
  - FWIW, beginners are usually better-served learning via conservative targets and set-and-forget
  - Early on, overmanaging much more likely than undermanaging
  - The emphasis should be on making sure trades that are near completion don't round trip and come back to stop you out.

Avalanche Perpetual Futures, 1D, FTX 088.056 H89.994 L82.541 C83.503 -4.553 (-5.17%)

AVAXPERP	83.503	10:55:13
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200.000
180.000
165.000
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134.000
122.000
110.000
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85.000
83.500
76.55-73
72.500
66.500
60.500
54.500
48.500
44.500
40.500
36.500
33.500
30.500
27.500
25.000
25.000
22.000
20.000
18.000
16.500
15.000
13.500
12.300
11.100
10.100
9.200
8.400
7.700



# Streaks

- Streaks: consecutive wins/losses
- Streaks can offer information about changes in the market regime and/or the EV of a specific setup
- Dumb shit to avoid
  - Risking more when losing to make it all back
  - Risking more on losing setups while other setups are doing well
  - Risking less when winning to accumulate karma points from the market for not being greedy
  - Risking less on winning setups following a losing streak on a different setup
  - Ditching a profitable setup after a small string of losses
- Smart shit to consider
  - Which setups are working well/no longer working? E.g. trending setups start losing while ranging setups start printing = change in conditions/regime
  - If something is working well, trade it more frequently and/or with bigger size
  - If something is not working well, trade it less and/or with smaller size and/or be more selective with it
  - If a novel, short-term edge stops printing, bin it → they usually don't come back
  - Short-term streaks don't necessarily mean a setup is trash/fantastic
    - Variance
    - Incorrectly identifying setups
    - Shift in conditions
    - Shit happens
- Be nimble, some variance is expected; try to think about what the streak is telling you
  - Sometimes it's nothing, but other times you'll get clues as to a shift in conditions when staple setups stop printing
  - Impossible to do any of this without a journal



# Break Even Stops and Partial Profits I

- “Stop to break even, free trade now.” → Bullshit
- “Took some off here, can never go broke taking profit!” → Bullshit
- Most break even stop and partial profit decisions are made to achieve psychological comfort, not because those decisions improve trade outcomes in the long run
  - It's not the market's job to make you feel cozy, seek therapy instead
- The market doesn't care about your entry/target/stop loss and unrealised PnL, making decisions to preserve the sanctity of those arbitrary figures is a futile attempt to impose your will on the market
- Break even stops
  - Trade management decisions should never be arbitrary and should almost always be derived (to some extent) from the trade idea itself
  - There's probably nothing special about your exact entry and the specific unrealised PnL derived therefrom → not a good basis for making trade management decisions
  - It's not a 'free trade' → the cost is sacrificing the potential gain from your trade idea by not letting it play out properly!
  - For technical traders:
    - Break even stop on a long = I am bearish in the same place that I bought previously
    - Break even stop on a short = I am bullish in the same place that I sold previously
    - Sometimes that will be true and reasonable, but more often than not, it's just a coping mechanism and an attempt to avoid uncertainty in the market
      - E.g. can be justifiable where revisiting entry invalidates the idea/makes the setup very likely to fail



# Break Even Stops and Partial Profits II

- Similar reasoning regarding partial profits: can be justified in certain situations e.g. evolving R examples, but arbitrarily closing trades early based on non-market factors like PnL alone will likely harm you in the long run
  - Good trading is process-oriented, not being a slave to the short-term red or green on your screen
- Cost to break even stops: in the long run, you probably perform better by letting your setup logic play out
- Cost to taking profit early: in the long run, you probably perform better by letting your setup logic play out
- Even if this^ is **not** true, if you manage trades according to a system or somewhat objective criteria, you can at least review that data and optimise your trade management
  - Randomly closing trades does not give you any useful or actionable information
- Best case: closing early isn't harming you in the long run but you can't optimise it because the decision itself is arbitrary in most cases
- Worst/base case: closing early is harming you in the long run, and the decision-making process is too arbitrary and opaque to be helpful
- Unlikely that 'I close winning trades when I feel my dick tingle' is an edge



# Leverage Trading

- Not evil, not a shortcut, either
  - A tool, like any other: misuse it, get hurt
- Basic premise: can put on positions with a fraction of the notional amount as collateral
  - E.g. In spot markets, if you want to buy 10,000 USD worth of Coin A, you need 10,000 USD.
  - If you're trading leveraged products and trying to put on the same position, you can have a fraction of 10,000 USD, post it as collateral (margin), and 'borrow' the remainder from the exchange.
    - E.g. With 5,000 USD in my account, I can put on a 10,000 USD position by leveraging my 5,000 USD 2x.
- One of the primary risks of leverage trading is getting liquidated
  - Liquidation = your position is forcibly closed by the exchange when you run out of maintenance margin (collateral required to maintain the position)
  - Liquidation can apply to your specific position (isolated margin) or your trading account as a whole (cross/portfolio margin)
- Cranking up the leverage slider does not increase/decrease your PnL, your PnL is dictated by your position size. Leverage affects how collateralised you are for that position size.
  - E.g. Long 10,000 contracts of linear ALT/USD futures at 2x leverage + market gains 5% = 5% gain.
  - E.g. Long 10,000 contracts of linear ALT/USD futures at 10x leverage + market gains 5% = 5% gain.
  - Leverage = collateralisation
    - Low leverage = more margin (collateral) = liquidation further away from price
    - High leverage = less margin (collateral) = liquidation closer to price
- In theory, leverage is cool for: pair trades, keeping less money on exchange, trading coins that you don't own in spot
- This topic needs its own video, but unless you know exactly what you're doing with leverage trading, don't ape in
  - Go read contract specs on exchanges





# Crypto-Specific Considerations

- **Correlations**
  - When Bitcoin and Ethereum nuke, the rest of the market tends to nuke with them → strong positive correlation to the downside
  - You might think you're diversified with 5-6 different positions in different 'sectors', but if your big picture read is wrong, you'll likely eat shit on all those positions
  - So be careful when 'stacking' risk; I personally prefer fewer, high conviction trades (often just 1-2) rather than trying to bet on direction with a basket of coins that will, on average, behave quite similarly anyway
- **Counterparty risk and exchange downtime**
  - Sometimes exchanges go down and/or crash during volatility
  - Consider keeping coins spread across different credible venues to diversify risk and to ensure you can trade/hedge somewhere else if one venue goes down
- **Security**
  - Unique emails and non-SMS 2FA for all sign-ups
  - Do not reuse passwords
  - Keep coins on well-secured, credible centralised exchange (hot take) or on a hardware wallet without the backup being somewhere easily accessible (like your desktop)
  - Favourite/bookmark all the main websites you use to avoid phishing
  - Never share your seed phrases with anyone or input them anywhere (even if you're a BAYC member)
  - Be aware that impersonators are rampant in the space especially across messaging apps and social media



# Conclusion

No referral links, courses, ads, or upsells

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