

# Your Strategy Doesn't Work — and Why That's OK

You aren't paid for predicting; you're paid for **structuring risk**.

## TL;DR

Most retail strategies fail because they have **negative or razor-thin expectancy** once you include costs, slippage, and rule-break risk. That's fine. If you route your trading through **prop firm structures**, you can exploit **non-linear convexity**: your **downside is capped** (reset/fee), while your **upside scales with external capital** and payout schedules. This lets you pull **larger absolute profits on your personal cash** than buy-and-hold — **without “technically” outperforming** buy-and-hold on the notional account size.

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## Part I — Why your strategy probably doesn't work

- 1) **Backtest lies (a little)**. - Data-snooping, overfitting, survivorship bias, and regime shifts create **illusory edges**.
- 2) **Costs kill slim edges**. - Commissions, spreads, slippage, funding/borrowing, and borrow availability quietly push an edge from +0.05R to **negative**.
- 3) **Bad risk transforms a good idea into a bad business**. - Inconsistent sizing, martingales, or doubling after losses explodes **risk of ruin (RoR)**.
- 4) **Expectancy is ignored**. - Per trade:  $E = p * W - (1 - p) * L$  where  $p$  is win rate,  $W$  avg win,  $L$  avg loss. - If  $E \leq 0$  **after costs**, the strategy is **uninvestable** no matter how pretty the chart looks.
- 5) **Time & variance are underestimated**. - Long plateaus draw down attention, discipline, and capital. You quit right **before** the mean reasserts.

**Sanity check**: if your live results aren't within spitting distance of your backtest **distribution**, your edge is probably an artifact.

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## Part II — Why it doesn't matter: convexity via prop firms

### What is “non-linear convexity” here?

A **convex payoff** means **limited downside** with **open-ended upside**. Prop accounts approximate this because: - **Downside is capped** to a **reset/evaluation fee** (plus time) and/or a firm-defined **max drawdown**. - **Upside taps external capital** (e.g., \$25k–\$300k funded) and **payout splits** (70–90%+). - You can **stop when ahead** (withdraw) and **reset when behind** — an **embedded “option to reset.”**

This creates an **asymmetric payoff** even if the underlying strategy's raw alpha is small.

### Why this beats buy-and-hold *on your personal cash*

- **Buy-and-hold:** ROI is measured on **your capital**. To make \$2,400 at 1% monthly, you'd need **\$240,000** invested.
- **Prop convexity:** You might spend **\$150-\$400** in fees to access **\$50k-\$200k** of notional. If you extract **\$3,000** and keep **80%**, you net **\$2,400** on a few hundred dollars at risk.
- You didn't "beat the market" on the **\$50k notional**; you simply **monetized optionality** on **external capital**, so your **return on personal cash** dwarfs buy-and-hold.

You win by **changing the denominator** (your own capital at risk), not by proving you're smarter than the S&P.

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## Part III — A simple numbers picture

- Assume a \$50k funded account, **trailing drawdown** \$2k, **payout 80%**, and **monthly fee/fee-equivalent** \$250.
- You target **\$3,000** gross in a month, then **withdraw**.
- **Payout to you** =  $\$3,000 \times 0.80 = \$2,400$ .
- **Cash at risk**  $\approx$   $\$250$  (fees) + small buffer time. Your **ROI on personal cash** is **~10×** that month.
- On the **\$50k notional**, the month is **+6% gross** — not "alpha vs. market" in any statistical sense, but the **absolute dollars to you** are compelling **relative to your own cash deployed**.

**Cycle expectancy framing** (oversimplified): - Let  $pT$  = probability you **hit target** before violating rules;  $T$  = gross target;  $s$  = payout split;  $F$  = reset/fees. -  $E_{\text{cycle}} = pT * (T * s - F) - (1 - pT) * F$ . - The wrapper is positive when  $pT * (T * s) > F$ . Even a **small edge** can work if your **target/payout** dwarfs **fees** and you **quit while ahead**.

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## Part IV — How to apply the convex wrapper (playbook)

- 1) **Trade to a fixed profit target, then stop.** - Withdraw early/often; don't "give it back" to chase scale.
- 2) **Hard daily loss and weekly loss.** - Keep the account alive; treat the **drawdown as air, not fuel**.
- 3) **Risk light, trade clean.** - Risk per trade small enough that the **trailing drawdown** is rarely touched intraday.
- 4) **Reset fast when cold.** - The **option to reset** is part of your edge. Don't waste time digging.
- 5) **Exploit session bias.** - Focus windows with known microstructure (e.g., **London, NY AM/PM**) to boost  $pT$  modestly.
- 6) **No compounding until firm scales you.** - Size via rule-based **scale-ups**, not emotional leverage.

7) **Process > prediction.** - Your job is to **harvest convexity**; the market decides direction.

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## Risks & realities (read this)

- **Rule risk:** daily loss, news locks, trailing drawdown mechanics.
- **Execution risk:** slippage on fast products; commissions matter.
- **Behavioral risk:** tilt, revenge, fatigue — convexity fails if you **overtrade**.
- **Regime risk:** strategies die; the wrapper doesn't save **negative-EV** behavior.
- **Operational risk:** firm policy changes, payout delays, scaling criteria.

**Disclaimer:** Educational only, not financial advice. Know the rules of your firm, model your expectancy, and size so a sequence of losses costs you **fees and time — not your identity**.

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## Appendix — Quick definitions

- **Expectancy (E):** average profit per trade/cycle.  $E > 0$  required.
- **Convexity:** payoff curvature where losses are limited but gains can run.
- **Reset option:** ability to stop when behind and restart; economically similar to owning a cheap option on your skill.
- **Return on Personal Cash (RoPC):** payouts ÷ (fees + small buffer). This is the **meaningful denominator** for a prop approach.