# Fair on Paper:
# What a Prop-Firm Challenge Is Worth, and Who Pays for It

Timothy Oluwatobi Ojebiyi*

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**Abstract**

Retail "prop firms" sell evaluation contracts: a fee buys a simulated account, and a buyer who reaches a profit target without breaching loss limits is paid a share of later simulated profits. I price the full published contract of a named UK firm on twenty years of intraday index prices at measured broker costs, with every hypothesis fixed and time-stamped before its run. Three results stand out. First, the written rules are close to a fair bet for a disciplined buyer with no skill: expected payouts are about 1.03% of the account on the base contract, between 0.58% and 1.31% across four instruments, against list fees of 0.3% to 1.5%. Second, the price list does not follow contract value. Across the firm's nine plans the same buyer gets back between $0.49 and $1.60 per dollar of fee, and one plan sells the same targets and limits as another at half the price. Third, the contract pays steeply for skill, but for a kind of skill a pre-registered search did not find: an idealised Sharpe ratio of 0.3 is worth $285 per $10,000 account, while the one strategy ensemble that survived to untouched data is worth $17. The rules are therefore not where the seller's margin comes from. It comes from how buyers size and trade, from an edge they lack and cannot verify, and from the firm's published discretion over the conduct that extracts value without skill. All values assume the firm pays every valid request.

## 1 Introduction

A retail proprietary trading firm sells an unusual contract. The buyer pays a fee, usually between $50 and $1,000, to trade a simulated account of $5,000 to $200,000. If the account reaches a profit target before it breaches a loss limit, the buyer receives a "funded" account, also simulated, and is paid a share of its profits, typically 80%. Lim (2026) documents consumer warnings by several European regulators and an unsettled legal classification. What the contract is worth to the person who buys it has only begun to be studied.

Two recent working papers price it. Lim (2026) treats a stylised two-step challenge as a contingent claim on a Brownian account and finds that its value sits on a narrow ridge of risk sizing, that the classic time limit and daily rule lower a no-skill buyer's step-one pass probability from 0.50 to 0.30, and that the product is sold with no disclosure of any of this. Villahermosa (2026) bounds the pass probability of a no-skill buyer at a futures firm by the ratio of the loss limit to the sum

*Independent researcher, United Kingdom. Email: tobiojebiyi@gmail.com. ORCID: 0009-0009-7786-8549. Code, the dated analysis plans, rule sources and result tables: `https://github.com/coderback/prop-challenge-pricing`, archived at doi:10.5281/zenodo.23374897. Disclosure: I hold a free demonstration account on the firm's trading server, which I used to measure its spreads. I have never bought one of its evaluations or received a payment from it, and I have no commercial relationship with any firm in this industry. Nothing in this paper is investment advice or a recommendation to buy any product. I used Anthropic's Claude to assist with code and drafting; I verified all design choices, results and conclusions and take full responsibility for them. All errors are mine.

of loss limit and target, prices the full life cycle on one-minute data, and finds that the sign of the buyer's expected value turns on the fee. Both papers set skill aside or treat it as a parameter, both price one contract at one account size, and neither names the firm or releases code and data that reproduce every number. A third paper, Darmanin (2026), tests popular chart signals and finds no net edge, without a held-out sample.

This paper prices a named firm's complete published contract and asks three questions the earlier work leaves open. What is the contract worth across the firm's whole menu of plans and account sizes? How much of that value comes from skill, and how much from sizing, from the horizon and from each rule? And is the skill the contract rewards actually available to a careful retail researcher? The third question draws on a programme of 24 pre-registered tests of published trading effects at the same broker's costs, run before this study.

The answers are as follows.

*The written rules are roughly fair to a disciplined buyer with no skill.* On the base contract, a buyer who takes one random-direction index trade a day, sized for the contract and stopped out at a fixed distance, has expected payouts of \$103 per \$10,000 account (95% interval \$100 to \$106) over 36 months in the firm's restricted regime. That is 1.03% of the account at any account size, because every limit scales with the account. The list fee falls from 1.47% of the account at \$10,000 to 0.55% at \$200,000. The value is not a constant: it runs from 0.58% to 1.31% across four instruments, in line with the cost of a random trade, and falls to 0.75% if stops slip by a tenth of their distance.

*The price list does not follow contract value.* Priced the same way, the firm's nine plans return between \$0.49 and \$1.60 per dollar of list fee to the same no-skill buyer. Every two-step plan in its standard line is worth more than its list fee at every account size, and one of them has the same targets and loss limits as the base contract at half its fee. The one-step plans with trailing loss limits are worth about half as much as the two-step plans and cost more.

*Skill is worth more than sizing once the buyer stays long enough, and the contract pays for a kind of skill that was not found.* I had registered the opposite hypothesis, that sizing would be worth more than a research-grade edge, and it was refuted: an idealised Sharpe ratio of 0.3 is worth \$285, and moving from conventional to contract-optimal sizing is worth \$70. A second registered run shows why Lim (2026) found otherwise. Over one year the two are level; from two years on skill leads, with or without the classic time limit. But the 24 tests confirmed no edge, most cannot exclude a Sharpe ratio of 0.3, and when the programme's surviving strategies are run through the contract as they actually trade, the one ensemble tested on untouched data is worth \$17 against \$292 for an idealised buyer with the same Sharpe ratio.

*The seller's protection is therefore not in the rules.* A buyer's best state-dependent policy is worth 16% more than the best fixed size without skill, and it is exactly the conduct the firm's published policies name as grounds for restricting an account or removing profits. The published restriction regime itself removes 30% of the no-skill value. What remains to the seller is the behaviour of buyers, who by one trade-press account realise a fraction of the no-skill benchmark, and its own discretion.

The paper makes four contributions. It is, to my knowledge, the first reproducible pricing of a named firm's full rule set, including the consistency rule, intraday monitoring, lot and position caps and the restriction regime that Lim (2026) lists as omitted, with the firm's fee at every size and on every plan. It solves for the buyer's best state-dependent policy, the open limitation both earlier papers name, and checks the solution on real price paths. It reproduces Lim (2026)'s tables from an independent implementation, which locates one definitional difference in his headline figure. And it joins contract value to a measured supply of skill. Of 21 registered hypotheses, 13 were supported, 5 refuted and 3 inconclusive; each is reported as found (Table 12).

Section 2 describes the contract. Section 3 sets out the design. Section 4 reports the valuation.

Section 5 asks whether the skill is there. Section 6 turns to the seller's side, Section 7 states limitations and Section 8 concludes.

## 2 The contract

The firm is Alpha Capital Group, a UK company whose accounts trade on the server of ACG Markets. I use its published help-centre articles and terms and conditions as they stood on 13 October 2026. Appendix A lists each rule with its wording and source. Every quoted phrase was checked word for word against the page fetched directly, all 64 articles in the rule-bearing sections were read, and the pages' hashes are recorded.

**The base contract.** The "Swing" plan is a two-step evaluation. Step 1 requires a profit of 10% and step 2 a further 5% on a fresh balance, each with at least three trading days. The account is closed if equity falls to 90% of the initial balance (a static limit) or to 95% of the day's opening balance. There is no time limit: the terms state that "there are no time limits applicable to the Evaluations". There is no lot cap in the evaluation, and index leverage is 1:10. The fee is not refunded.

A buyer who passes receives a "Qualified" account with the same loss limits. Profits are paid on demand: a payout may be requested at any close at which profit is at least 2% of the balance and no single day accounts for more than 40% of it (the Best Day Rule). The buyer receives 80%, the balance returns to its initial level and the account is locked for two business days. On a Qualified account a lot cap applies (2.5 lots on $10,000, which for a US500 position is 1.74 times the account), and the Max Risk Rule closes the account if the open loss on one asset reaches 3% of the initial balance (2% from $50,000).

**The restricted regime.** The firm publishes a "Focused Trader Group" into which a Qualified account may be moved. Its triggers include "using a swing trading account primarily for scalping or frequent intraday strategies, without any swing trading activity", "excessive max lot / max margin usage" and "account rolling", described as taking full risk on evaluation or qualified accounts to pass or fail. In the group the lot caps are halved, index leverage is 1:5, and "the maximum allowable risk for any single position is 1% of your initial balance". The book priced here meets these triggers by construction, so the restricted regime is my base case and the standard regime the upper case.

**Discretion.** Three published clauses are not mechanical and are not modelled. A policy against "gambling" names "a significant change in lot size compared to the overall average on the account" and "all or nothing" strategies, with "the removal of profits" as the consequence. The terms require a Qualified buyer to "maintain the same level of risk". And every passed evaluation is reviewed before a Qualified account is issued. All values in this paper are what the written rules pay if the firm pays every valid request.

**The menu.** The firm sells eight plans. Table 5 gives their structure. The "Pro" plans are two-step with static limits of 6%, 8% or 10%; Pro 10% has the same targets and limits as Swing, twice its lot cap, a five-minute restriction around news releases and no weekend holding once funded. The "One" plans are one-step with a trailing loss limit: the floor follows the highest end-of-day balance until it reaches the initial balance, and a payout does not lower it. "Direct" has no evaluation: the account is funded from purchase with a 5% trailing limit, a 3% profit buffer that must stay in the

account, a 15% best-day rule and a 90% split. List fees were read from the firm's checkout on the same day and match the plan table embedded in its home page.

## 3 Design

**The book.** The buyer takes one trade every London weekday in the US500 index contract: entry at 14:30, exit at 20:30, with a stop at one average true range of the previous day. Both directions are simulated on 30-minute bars from January 2005 to September 2024 (4,879 trade days), with the worst intraday mark of each. The cost of a trade is the broker's median spread for that hour, measured from its tick data, times 1.5. Indices carry no commission and an intraday trade pays no swap. A trade in a random direction loses 0.0069 of its risk on average, a net Sharpe ratio of $-0.21$.

**Skill.** A buyer of skill $p$ takes the better of the day's two directions with probability $p$, independently each day. The *coin-flip buyer* has $p = 0.5$ and no skill. For a target net Sharpe ratio $S$, $p(S)$ solves $\mathrm{SR}(p) = S$ on the full sample; a Sharpe ratio of 0.3 is a hit rate of 52.1% and 1.0 is 55.0%. This vehicle is generous to skill: the edge is applied at full size every day at almost no cost. The reference level 0.3 is the best validated net Sharpe ratio in the programme of Section 5.

**Policies and value.** A fixed policy is a risk per trade in the evaluation, $r$, and an intended risk when funded, $r_f$, each a fraction of the initial balance; the published caps apply to whatever is intended. The outcome is $V$, the expected payouts per purchase within 36 months, in dollars per \$10,000 account, and $\mathrm{EV} = V - \text{fee}$. Each path draws a purchase day uniformly from the days on which a full window fits and follows the historical order of days from there. One set of 50,000 paths selects the best $(r, r_f)$ for each skill level; every reported number comes from a second, independent set. Intervals are 95% across paths and are paired by path for differences.

**The best policy.** Section 4.4 drops the restriction to fixed sizes. The buyer chooses each day's risk as a function of the stage, the day, the balance and, when funded, the best day since the last payout, and chooses when to request a payout. Treating days as independent draws from the book's own history, I solve for the policy that maximises expected payouts by backward induction on a \$5 grid. The policy is exact for that model. On the real history it is one admissible policy, so its realised value is a lower bound on the optimum there.

**Pre-registration and gates.** The analysis plan and five dated amendments, with 21 hypotheses, were committed and pushed to a version-controlled repository before the runs they describe; analyses outside them are labelled exploratory. Before any result was read, the simulator had to reproduce an earlier study's table exactly and agree with an older, independently written simulator path by path on 2,178 cases, which it did with no mismatch. The solver's value had to match a simulation of its own policy on independent days (\$127.18 against \$127.24) and move by less than 2% on a half-step grid ($-0.09$%). The gates were re-run after each extension of the simulator.

**Validation of sources.** Because a working paper I examined in earlier work failed to replicate, I validated what this paper relies on before drafting. An independent implementation of Lim (2026)'s model, written from his text alone, reproduces all 96 cells of his Tables 2 to 4 within tolerances set beforehand (largest difference 0.002 in a probability and 2.2% in a fair fee), his no-time-limit variant (\$369.89 against \$369) and his Student-$t$ check. Two of nine cells in his sensitivity table

differ by 10%, which traces to a definition: his "average value" of the refundable contract is the population mean of the fair fee, whereas the expected receipts at the posted $500 fee are $212 rather than $221. His conclusions are unaffected. Villahermosa (2026)'s arithmetic is internally consistent, but his data and code are not released, so I cite his findings as reported and rely on none of his numbers.

# 4 Results

## 4.1 A no-skill buyer on the base contract

Table 1 gives the selected policy and value at each skill level, and Figure 1 the whole sizing grid. The coin-flip buyer does best risking 3.5% a trade in the evaluation and the 1% cap when funded. 24.7% of purchases pass both steps, 15.5% are ever paid, and a paid buyer receives a median of $537. The expected payout is $103, or $148 (1.48% of the account) in the standard regime.

Three features of the sizing grid matter. Value is flat from 3% to 4.5% a trade, which is 1.5% to 2.3% of daily volatility and matches the ridge Lim (2026) reports near 2%. At 5% it falls off a cliff, because a single stop-out then breaches the daily limit; below 5% the daily limit never binds on a trade with a stop. And small sizes are costly: at the 1% a trade of conventional risk advice the value is $33, and at 0.5% almost nothing.

The last point needs a qualification that Section 4.2 supplies. On a contract with no time limit, small size mostly costs time. At 1% a trade, 20% of no-skill buyers are still in the evaluation after three years, and the share of value forgone falls from 96% over a 12-month window to 42% over 60 months.

## 4.2 Sizing, skill and the horizon

Value rises steeply with skill, by about $40 per 0.1 of Sharpe ratio at the low end (Figure 2a). A Sharpe ratio of 0.3 is worth $285, 2.8 times the coin flip, and the break-even Sharpe ratio at the $10,000 list fee is −0.05, about zero. With skill the best evaluation risk falls to 2% to 2.5%.

I had registered three hypotheses on this contract. H1, that the no-skill value lies between the $40 promotional fee and the $147 list fee, was supported in the restricted regime and is not robust to the standard one. H2, that the gain from contract-optimal sizing exceeds the gain from a Sharpe ratio of 0.3, was refuted: the sizing gain is $70 and the skill gain $182, a difference $D$ of −$112 (−$117 to −$107). H3, that a Sharpe ratio of 0.3 leaves the value below the list fee, was refuted. Both refutations hold in every robustness row of Table 9. The skill gain here runs from the coin flip, whose net Sharpe ratio is −0.21, to 0.3; measured from a net Sharpe ratio of zero it is $126, still above sizing.

This is the opposite of Lim (2026)'s reading that "risk sizing matters at least as much" as skill. A second registered run locates the difference (Table 2, Figure 2b). It crosses the contract's clock, none or the classic 30 and 60 days, with the value window, 12 to 60 months, and re-selects the policy in every cell. With the classic clock and a 12-month window, sizing is worth slightly more than skill ($D$ = $3.5 (1.9 to 5.2); H4 supported). Without a clock and over 60 months skill is worth far more ($D$ = −$245; H5 supported), and $D$ falls with the window under both clocks (H6 supported). So the length of the window does most of the work, not the evaluation's time limit: from 24 months on skill leads even with the classic limits. H7, that $D$ is larger with the clock at every window, was inconclusive at 12 months and supported beyond.

What the clock does is make caution fatal. With the classic limits, a buyer risking 1% a trade is worth nothing at any skill level. Without them, a cautious buyer with a Sharpe ratio of 1.0 is

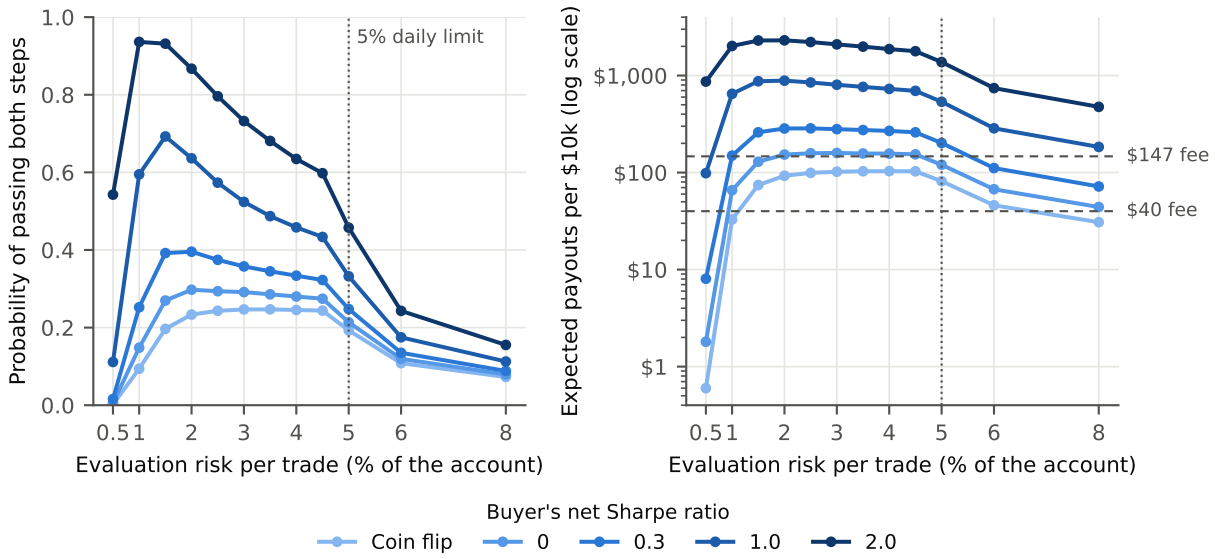



**Figure 1:** Probability of passing both steps and expected payouts per $10,000 purchase, by evaluation risk per trade and the buyer's net Sharpe ratio. Base contract, restricted regime, funded risk 1%, 36 months.

worth $689 over 36 months, 6.5 times the best-sized coin flip. Once the buyer re-sizes for it, the clock costs the coin flip 28% of its 36-month value, and 43% at a Sharpe ratio of 1.0. Measured from a net Sharpe ratio of zero rather than from the coin flip, sizing is worth more than a step of 0.3 at every window under the classic clock, which is Lim's case; it stops holding once the clock is gone and the buyer stays three years.

### 4.3 What each rule costs

Table 3 removes one rule at a time with the policy held fixed. The largest items are the second step, trading costs, the firm's 20% share and the absence of a fee refund. A spread of 0.0069 of the risk a trade takes 28% of the coin flip's value. The rules Lim (2026) lists as omitted from his model are small here: the Best Day Rule, intraday monitoring, the funded caps and the Max Risk Rule together cost the coin flip about $28, taken one at a time, and the daily limit costs nothing. So his caveat that the omissions bias his values upward is, on this contract, a modest one. The restricted regime is the large one: it lowers the no-skill value from $148 to $103. Appendix C gives the same table for the standard regime, in which a skilled buyer is better off without the earliest possible payouts, a point the next subsection measures.

### 4.4 The buyer's best policy

Table 4 compares four classes of policy on the same real paths: (A) the selected fixed sizes; (B) those sizes with payout timing free; (C) sizing free with the earliest payout; (D) both free. For the coin flip the best policy is worth $120 against $103, a gain of 16% (H10, a gain above 10%, supported), with 28.5% passing and 18.2% paid. All of the gain comes from sizing.

Figure 3 shows the policy. Without skill the buyer starts near 4.75% a trade, shrinks the trade to just reach the target as it nears, and close to the floor stakes whatever is left. This is the bold play that Dubins and Savage (1965) show to be optimal in an unfavourable game, and that Villahermosa (2026) invokes. With skill the policy is cautious: it starts near 2% to 2.5%, cuts size

**Table 1:** Selected policy and value by skill, base contract

| | | | Restricted regime ($r_f = 1\%$) | | | | Standard regime | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Skill | Sharpe | Hit % | $r$ % | P(pass) | P(paid) | $V$ | $r$ % | $r_f$ % | P(pass) | P(paid) | $V$ |
| Coin flip | −0.21 | 50.0 | 3.5 | 0.247 | 0.155 | 103 | 4 | 2.5 | 0.245 | 0.129 | 148 |
| 0 | 0.00 | 50.9 | 3 | 0.291 | 0.207 | 159 | 2.5 | 2.5 | 0.294 | 0.173 | 225 |
| 0.15 | 0.15 | 51.5 | 2.5 | 0.334 | 0.254 | 215 | 2 | 2.5 | 0.346 | 0.216 | 304 |
| 0.3 | 0.30 | 52.1 | 2.5 | 0.375 | 0.303 | 285 | 2 | 2.5 | 0.396 | 0.263 | 405 |
| 0.5 | 0.50 | 53.0 | 2 | 0.466 | 0.398 | 413 | 2 | 2.5 | 0.466 | 0.332 | 580 |
| 0.75 | 0.75 | 54.0 | 2 | 0.554 | 0.503 | 623 | 1.5 | 2.5 | 0.590 | 0.453 | 896 |
| 1.0 | 1.00 | 55.0 | 2 | 0.636 | 0.602 | 886 | 1.5 | 2.5 | 0.693 | 0.565 | 1,318 |
| 1.5 | 1.50 | 57.1 | 2 | 0.772 | 0.760 | 1,544 | 1.5 | 2.5 | 0.845 | 0.752 | 2,415 |
| 2.0 | 2.00 | 59.1 | 2 | 0.867 | 0.864 | 2,307 | 1.5 | 2.5 | 0.932 | 0.870 | 3,838 |

$V$ is expected payouts in dollars per $10,000 purchase within 36 months. Policies are selected on one set of 50,000 paths and reported on another. "Hit %" is the probability of taking the better side of the day.

**Table 2:** Value by contract clock and value window

| | | Coin flip | | | | $S = 1.0$ | | |
|---|---|---|---|---|---|---|---|---|
| Clock | Months | Best size | 1%/1% | In eval. | $S = 0.3$ | Best | 1%/1% | $D$ (95% interval) |
| None | 12 | 58 (4.5%) | 3 | 70% | 111 | 239 | 39 | 2 (0 to 4) |
| | 24 | 87 (4%) | 19 | 39% | 204 | 544 | 300 | −48 (−51 to −44) |
| | 36 | 105 (3.5%) | 40 | 20% | 288 | 876 | 689 | −117 (−122 to −112) |
| | 60 | 123 (3.5%) | 71 | 5% | 419 | 1,555 | 1,509 | −245 (−252 to −238) |
| 30 and 60 days | 12 | 43 (4.5%) | 0 | 0% | 82 | 174 | 0 | 4 (2 to 5) |
| | 24 | 64 (4.5%) | 0 | 0% | 141 | 345 | 0 | −13 (−15 to −11) |
| | 36 | 76 (4.5%) | 0 | 0% | 187 | 499 | 0 | −34 (−37 to −31) |
| | 60 | 87 (4.5%) | 0 | 0% | 247 | 771 | 1 | −73 (−77 to −69) |

Dollars per $10,000 purchase, restricted regime, with no cut-off on the evaluation. "In eval." is the share of coin-flip buyers at 1%/1% still in the evaluation at the end of the window. $D$ is the sizing gain minus the gain from a Sharpe ratio of 0.3.

as the floor nears and never stakes the remainder. Average risk in the evaluation falls from 4.2% without skill to 1.6% at a Sharpe ratio of 0.3, then edges up to 1.7% at 1.0, because a stronger edge is worth reaching the funded stage sooner. H11, a monotone fall, is therefore refuted.

Payout timing matters only with skill (H13 supported). For the coin flip the earliest payout is exactly optimal. At a Sharpe ratio of 1.0 in the standard regime free timing alone adds 22% and the full policy 43%: the buyer lets profit build a buffer above the floor before withdrawing. The model of independent days is adequate: the solver's value exceeds what its policy earns on the real history by a factor of 1.06 (H12, within 10%, supported).

The no-skill policy is the conduct the firm's gambling policy names. On a typical path its largest size is about 10 times its smallest. The published discretion is therefore aimed at a prize of about a sixth of the no-skill value; the rest is available at a constant size.

### 4.5 The price list

Table 5 and Figure 4 price every plan for the same coin-flip buyer. The dispersion is wide: expected payouts per dollar of list fee run from $0.49 on One 6% to $1.60 on Pro 8%.

Four patterns stand out. Every two-step Pro plan is worth more than its list fee at every account

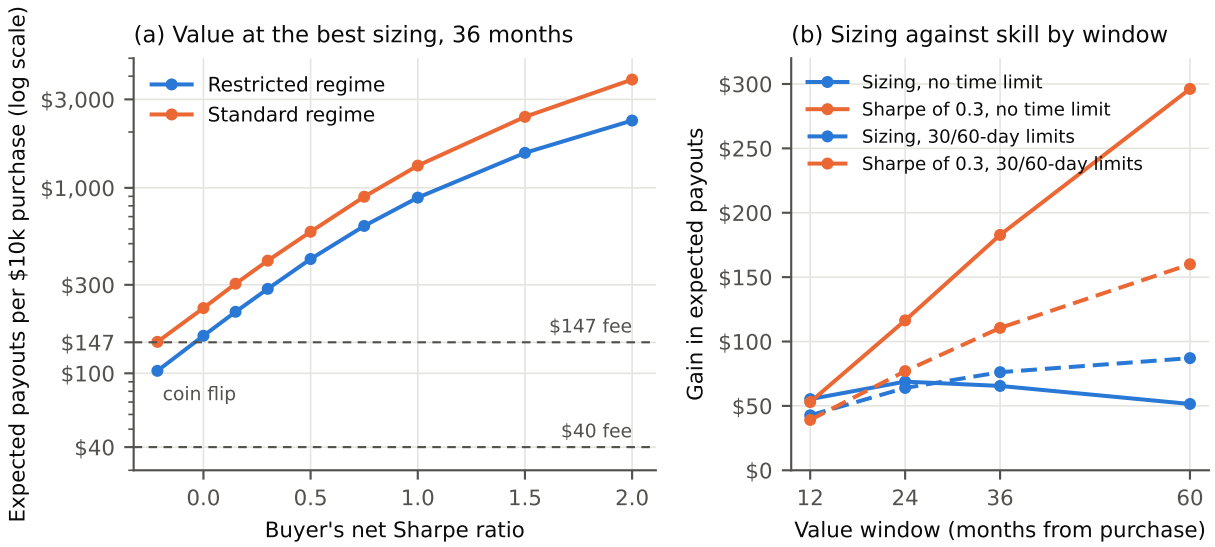



**Figure 2:** (a) Expected payouts at each skill level's selected policy, base contract, 36 months. (b) The gain from sizing (the coin flip moved from 1% to its best size) and the gain from skill (the coin flip against a Sharpe ratio of 0.3, each at its best size), by value window, without a time limit and with the classic limits of 30 and 60 trading days. Policies are re-selected in every cell.

size (Table 6); on Pro 10% the buyer gets back $1.42 per dollar at $10,000 and $2.44 at $100,000. Swing is Pro 10% at nearly twice the price: the targets and limits are identical, Pro 10% is worth $6 more for this book because its lot cap is looser (H14 supported), and its value exceeds its $77 fee by $32 (H15 supported). The one-step plans are the poor contracts: One 10% is worth $63 less than Pro 10% (H17 supported), because each payout ratchets the trailing floor up and the cushion never rebuilds. I had expected Swing to return the least per fee dollar; the One plans do, and H16 is refuted. Direct is close to fair, $91 of value against $97 (H18 supported), with 13% of buyers ever paid.

Within each plan the fee per dollar of account falls with size while the value per dollar does not (Figure 5). On the base contract the list fee is above the no-skill value at $5,000 and $10,000 and below it from $25,000. A buyer with a Sharpe ratio of 0.3 is above the fee on every plan, by very different margins: the purchase is worth $303 on Pro 10% (fee $77) and $71 on One 6% (fee $67).

### 4.6 Other instruments, stop slippage and robustness

The figure of about 1% of the account is specific to the index. I had registered that the no-skill value would lie between $75 and $130 on three other instruments, and it does not (H8 refuted; Table 7): it is $131 on NAS100, $95 on EUR/USD and $58 on USD/JPY. The differences are trading cost. The value lines up with the net Sharpe ratio of a random trade, at the same slope as skill in Table 1, so cost behaves as negative skill; with costs set to zero the four books sit between $135 and $165. Skill is worth more than sizing on every one of them (H9 supported).

The simulation's stops never slip: the worst loss in 9,758 simulated trades is exactly the stop distance. An exploratory stress in which every stop-out loses $1 + s$ times that distance lowers the no-skill value on the base contract to $88 at $s = 5\%$, $75 at 10% and $49 at 25% (Table 8). The size from which the list fee is below the no-skill value moves accordingly. I have no measurement of slippage on this server; one index point is about 1.2% of the stop distance.

**Table 3:** Change in value when one rule is removed, restricted regime

| Rule removed | Coin flip | $S = 0.3$ | $S = 1.0$ |
|---|---|---|---|
| Baseline value | 103 | 285 | 886 |
| Step 2 (one step only) | +78 | +150 | +258 |
| *Added:* step maturities of 30 and 60 days | −52 | −225 | −795 |
| Trading costs | +40 | +100 | +205 |
| The firm's 20% share | +26 | +71 | +221 |
| No fee refund (refund of $147 with the first payout) | +23 | +45 | +88 |
| Best Day Rule | +12 | +18 | +23 |
| Intraday monitoring of the floors | +10 | +19 | +31 |
| *Instead of on demand:* payout checks every 21 days | −9 | −15 | −24 |
| Funded lot and position caps | +6 | +18 | +69 |
| Two-day payout lock | 0 | +2 | +17 |
| 2% minimum profit | 0 | 0 | 0 |
| Three-day minimum | 0 | 0 | 0 |
| Daily floor | 0 | 0 | 0 |
| Max Risk Rule | 0 | 0 | 0 |
| Evaluation leverage cap | 0 | 0 | 0 |
| All frictions together (two steps kept) | +81 | +179 | +391 |

Dollars per $10,000 purchase at each skill level's selected policy, which is held fixed. A buyer who re-sized would lose less to an added rule and gain more from a removed one; Table 2 re-sizes for the step maturities.

Table 9 gives the registered robustness rows for the base contract: a block bootstrap of days, two purchase periods, monthly instead of on-demand payouts, a 60-month window and costs at 1.0 and 2.0 times the measured spread. In those rows the no-skill value ranges from $92 to $123, and the refutations of H2 and H3 hold in every row. A discretionary bonus of 0.25% of the account on the fourth payout, which the firm publishes and I do not include in $V$, would add $0.85 for the coin flip and $10.74 at a Sharpe ratio of 1.0.

### 4.7 Real paths against the Brownian model

Passing Lim (2026)'s classic contract with the real book in place of his normal increments gives nearly the same funding probabilities at 2% daily volatility (0.180 against his 0.184 without skill, and 0.298 against 0.298 at a Sharpe ratio of 1.0; Appendix C). At 3% the real book funds less often, because a stop-out then exceeds the daily limit. Running normal increments through this paper's contract overstates the restricted-regime value by about 30% and shows a rounded peak where the real book shows a plateau and a cliff. The differences between his contract values and mine therefore come mostly from the rules, in particular the absent time limit, on-demand payouts and three years of funded trading, and not from the paths.

**Table 4:** Value by class of policy on real paths

| Regime | Skill | A: fixed | B: A, timing free | C: sizing free | D: both free | D over A |
|---|---|---|---|---|---|---|
| Restricted | Coin flip | 103 | 103 | 120 | 120 | +16% |
| | 0.3 | 285 | 285 | 306 | 306 | +7% |
| | 1.0 | 886 | 896 | 976 | 982 | +11% |
| Standard | Coin flip | 148 | 148 | 171 | 171 | +16% |
| | 0.3 | 405 | 441 | 460 | 483 | +19% |
| | 1.0 | 1,318 | 1,607 | 1,618 | 1,881 | +43% |

Dollars per $10,000 purchase on the evaluation paths of Table 1. Classes B to D are solved by backward induction on independent days and then simulated on the real history. In the standard regime 7.5% of funded accounts at $S = 1.0$ reach the solver's profit cap of $3,000, so those values are lower bounds.

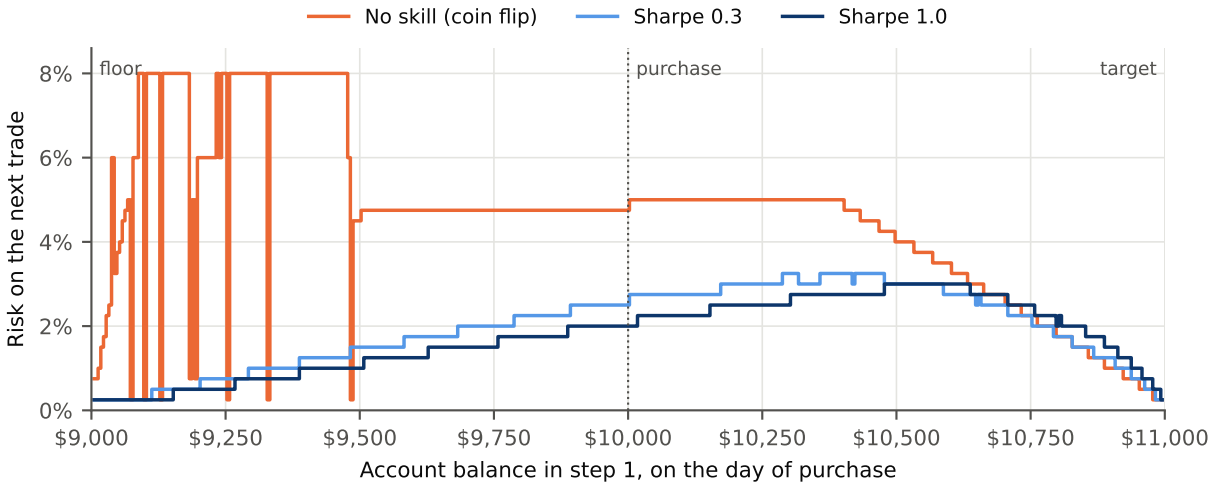



**Figure 3:** The best policy's risk on the next trade as a function of the account balance, in step 1 on the day of purchase, base contract. The irregular sizes close to the floor are near-ties between staking the remainder and a token trade.

**Table 5:** The plan menu at $10,000 for a no-skill buyer

| Plan | Targets; loss limit | Fee | P(pass) | P(paid) | $V$ | $V$, std. | EV | $V$/fee | $V$, $S = 0.3$ |
|---|---|---|---|---|---|---|---|---|---|
| Pro 8% | 8%, then 5%; 8% static | 57 | 0.226 | 0.134 | 91 | 115 | 34 | 1.60 | 259 |
| Pro 10% | 10%, then 5%; 10% static | 77 | 0.245 | 0.153 | 109 | 154 | 32 | 1.42 | 303 |
| Pro 10% bi-weekly | as Pro 10%, paid every two weeks | 87 | 0.247 | 0.192 | 122 | 164 | 35 | 1.40 | 323 |
| Pro 6% | 6%, then 6%; 6% static | 47 | 0.181 | 0.100 | 62 | 71 | 15 | 1.31 | 182 |
| Direct | no evaluation; 5% trailing | 97 | – | 0.128 | 91 | – | −6 | 0.93 | 247 |
| Swing | 10%, then 5%; 10% static | 147 | 0.247 | 0.155 | 103 | 148 | −44 | 0.70 | 285 |
| One 12% | 12%; 8% trailing | 107 | 0.234 | 0.131 | 70 | 71 | −37 | 0.66 | 159 |
| One 10% | 10%; 6% trailing | 87 | 0.212 | 0.106 | 46 | 46 | −41 | 0.53 | 106 |
| One 6% | 6%; 4% trailing | 67 | 0.237 | 0.115 | 33 | 33 | −34 | 0.49 | 71 |

Dollars per $10,000 purchase, 36 months, restricted regime unless marked "std.". List fees from the firm's checkout on 13 October 2026. $V$ at $S = 0.3$ is at that buyer's own selected policy.

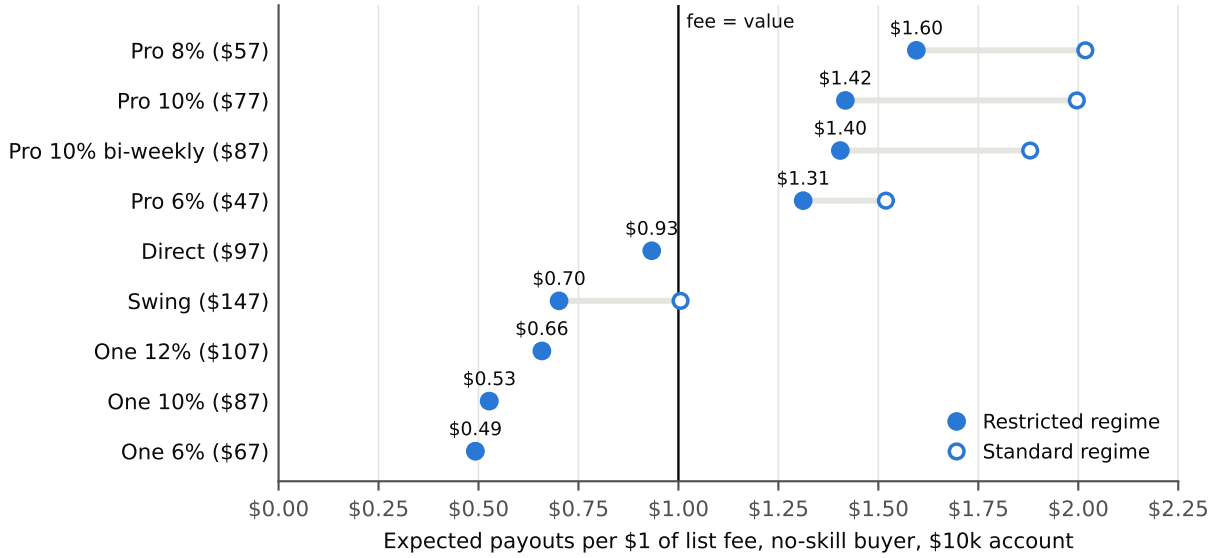



**Figure 4:** Expected payouts per dollar of list fee for a no-skill buyer on a $10,000 account, by plan. List fee in brackets. Direct has one regime.

**Table 6:** No-skill expected value at list fees by account size

| Plan | $V$, % of account | $5k | $10k | $25k | $50k | $100k | $200k |
|---|---|---|---|---|---|---|---|
| Pro 8% | 0.91 | 8 | 34 | 50 | 158 | 382 | 821 |
| Pro 10% | 1.09 | 22 | 32 | 96 | 279 | 644 | 1,286 |
| Pro 6% | 0.62 | 4 | 15 | 37 | 91 | 220 | 436 |
| Direct | 0.91 | −22 | −6 | 29 | 196 | 448 | 913 |
| Swing | 1.03 | −18 | −44 | 11 | 159 | 454 | 965 |
| One 12% | 0.70 | −22 | −37 | −41 | 5 | 117 | – |
| One 10% | 0.46 | −24 | −41 | −72 | −48 | −18 | −30 |
| One 6% | 0.33 | −21 | −34 | −75 | −72 | −67 | 12 |

Dollars per purchase, restricted regime. The rules scale with the account, so $V$ is a constant share of it; the fee is not.

**Table 7:** The base contract on four instruments

| Book | Cost ($R$) | Sharpe | $r$ % | P(pass) | $V$, coin flip (95%) | 1%/1% | $S = 0.3$ | No costs |
|---|---|---|---|---|---|---|---|---|
| NAS100 | −0.0050 | −0.15 | 3 | 0.263 | 131 (128 to 134) | 51 | 317 | 165 |
| US500 (the base case) | −0.0069 | −0.21 | 3.5 | 0.247 | 103 (100 to 106) | 33 | 285 | 143 |
| EUR/USD | −0.0049 | −0.21 | 4.5 | 0.257 | 95 (93 to 98) | 10 | 253 | 149 |
| USD/JPY | −0.0075 | −0.35 | 4.5 | 0.225 | 58 (56 to 60) | 3 | 221 | 135 |

The same trade design on each instrument at its own measured spread. “Cost” is the mean result of a random trade in units of risk and “Sharpe” its annualised net Sharpe ratio.

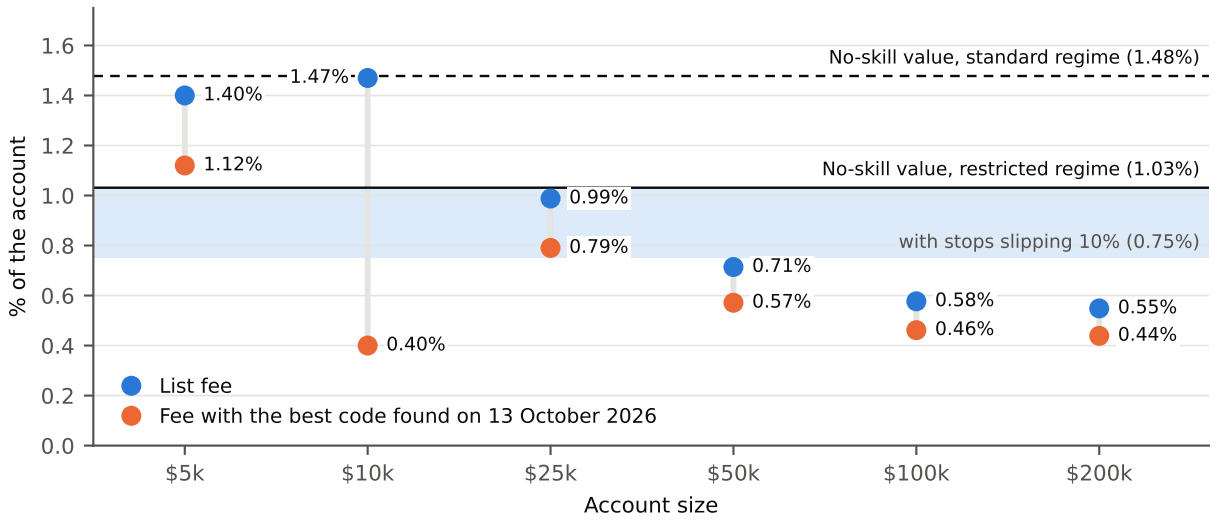



**Figure 5:** The base contract's fee as a share of the account, against the no-skill value. The band shows the value when every stop-out loses 10% more than the stop distance.

**Table 8:** Stop slippage (exploratory)

| Slippage $s$ | P(pass) | $V$ | % of account | List fee below value from |
|---|---|---|---|---|
| 0% | 0.247 | 103 | 1.03% | $25k |
| 5% | 0.234 | 88 | 0.88% | $50k |
| 10% | 0.222 | 75 | 0.75% | $50k |
| 25% | 0.188 | 49 | 0.49% | no size |

Coin flip, base contract, restricted regime, evaluation risk 3.5%, funded risk 1%. Not pre-registered.

**Table 9:** Robustness of H1 to H3 on the base contract

| Row | $V$, coin flip | $V$, coin at 1%/1% | $V$, $S = 0.3$ | $D$ |
|---|---|---|---|---|
| Primary (restricted regime) | $103 | $33 | $285 | −$112 |
| 1. Standard regime, its own selected policy | $148 | $35 | $405 | −$144 |
| 2. Block bootstrap of trading days | $110 | $34 | $296 | −$110 |
| 3. Purchases February 2005 to February 2014 | $115 | $39 | $310 | −$120 |
| 3. Purchases January 2017 to November 2021 | $96 | $31 | $280 | −$118 |
| 4. Payout checks every 21 days | $94 | $29 | $270 | −$112 |
| 5. 60-month window | $123 | $44 | $395 | −$194 |
| 6. Costs at 1.0 times the measured spread | $115 | $39 | $284 | −$94 |
| 6. Costs at 2.0 times the measured spread | $92 | $27 | $285 | −$129 |

Dollars per $10,000 purchase. Policies are fixed at the primary selection except in row 1.

## 5 Is the skill there?

The contract pays for skill. Whether a buyer has any is a separate question, and the one this paper can speak to only for one kind of buyer: a researcher who tests published effects carefully at retail costs.

**Twenty-four tests.** Before this study I ran a programme of 24 pre-registered tests of published trading effects on currency, index, bond and commodity contracts at the same broker's measured spreads and swaps, with a discovery sample, a validation sample, one-time hold-outs, random-timing twins and a Benjamini–Hochberg correction across the family (Benjamini and Hochberg, 1995). The ideas came from work on currency fixings (Krohn et al., 2024), month-end hedging flows (Melvin and Prins, 2015), monetary policy announcements (Mueller et al., 2017; Lee and Wang, 2025), futures positioning (Tornell and Yuan, 2012), value, momentum and trend (Asness et al., 2013; Moskowitz et al., 2012), cryptocurrency momentum (Liu and Tsyvinski, 2021), macroeconomic announcements (Andersen et al., 2003), earnings drift (Bernard and Thomas, 1989), statistical arbitrage (Avellaneda and Lee, 2010; Gatev et al., 2006), news tone (Tetlock, 2007), Treasury auctions (Lou et al., 2013) and the turn of the month (Lakonishok and Smidt, 1988), together with machine-learning and positioning signals. None was confirmed. Several effects were present before costs and absent after them: slow strategies lost to swaps and fast ones to spreads.

**What the tests can and cannot exclude.** Figure 6 reports each test under a rule fixed in the plan, following the reporting convention of Darmanin (2026): a test refutes a Sharpe ratio of $S^*$ if the upper end of its one-sided 95% interval lies below $S^*$. At $S^* = 0.5$, 12 of the 24 are refuted. At 0.3, only 5 are. The median test could have detected a Sharpe ratio of 0.77 with 80% power. "No edge was found" is supported; "no edge exists" is not.

This is not a weakness peculiar to the programme. The contract's break-even Sharpe ratio is about zero, and a ratio of 0.3 doubles its value, so the purchase turns on a difference of a few tenths. Telling a Sharpe ratio of 0.3 from zero with 80% power at the 5% level takes about 69 years of daily data. No retail track record and few backtests resolve the range that decides the purchase. The evaluation does not resolve it either: 24.7% of no-skill buyers pass, against 37.5% at a Sharpe ratio of 0.3, so a pass multiplies the odds of that much skill by about 1.5.

**Real strategies through the contract.** The skilled buyer of Section 4 is idealised. Table 10 runs the programme's surviving strategies through the base contract as they actually trade: three forward-test candidates and two ensembles of them, each converted to a daily series at one unit of risk per trade. None is a confirmed edge, and two were chosen after their parent tests were seen, which flatters them on early purchases. Sizes are selected on purchases from 2005 to 2014 and held for purchases from 2017 to 2021.

Every book is worth less than an idealised buyer with the same Sharpe ratio (H19 supported). The ensemble that was tested on untouched data has a Sharpe ratio of 0.32 on late purchases and is worth \$17, against \$292. Two mechanisms do this. An event-driven edge trades too rarely to reach the targets: the month-end book trades on about twelve days a year and passes 1% of the time at any size. And once funded, the restricted regime caps the risk of all open positions together at 1%, so a book with twelve trades open risks 0.08% on each. The one book that trades daily is worth \$468 on the years it was chosen on and \$155 afterwards, with an interval from \$10 to \$320. Whether it beats the no-skill buyer's \$96 on the same purchase days is not settled (H20 inconclusive), and nor is whether every book has decayed (H21 inconclusive): five overlapping years hold few independent three-year windows.

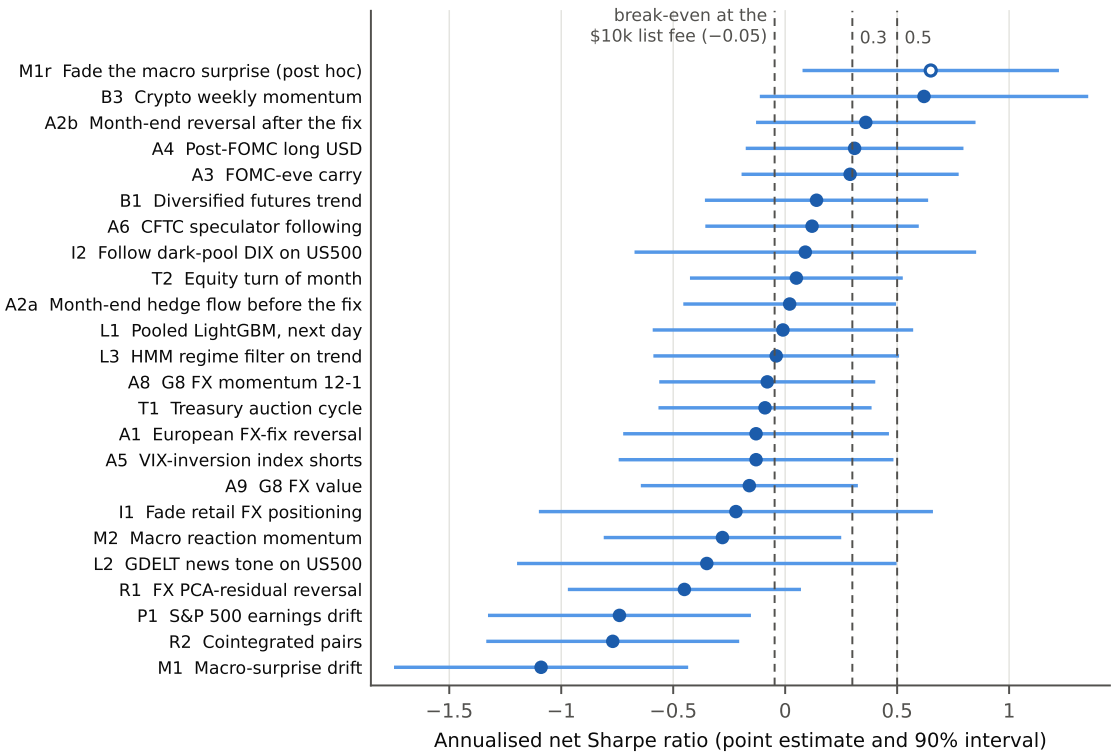



**Figure 6:** Annualised net Sharpe ratio of each of the 24 tests on the sample that decided it, with a 90% interval (Lo, 2002). The hollow marker is a strategy whose sign was chosen after its parent test.

The $285 that the contract pays for a Sharpe ratio of 0.3 is thus the price of an edge that trades one position every day. The programme produced nothing of that kind.

**Table 10:** The programme's surviving strategies through the base contract

| Book | Purchases | Sharpe | P(pass) | Months | P(paid) | $V$ (95% interval) | Idealised |
|---|---|---|---|---|---|---|---|
| A1b: pre-fix long-USD leg | Early | 0.80 | 0.587 | 11.7 | 0.566 | 468 (163 to 779) | 729 |
| | Late | 0.49 | 0.429 | 12.1 | 0.283 | 155 (10 to 320) | 397 |
| A2b: month-end reversal | Early | 0.34 | 0.010 | 2.7 | 0.000 | 0 (0 to 0) | 338 |
| | Late | 0.49 | 0.001 | 3.0 | 0.001 | 0 (0 to 0) | 395 |
| M1r: fade the macro surprise | Early | 0.58 | 0.155 | 7.1 | 0.026 | 6 (0 to 18) | 524 |
| | Late | 0.10 | 0.039 | 11.2 | 0.000 | 0 (0 to 0) | 187 |
| R3: A2b and M1r | Early | 0.67 | 0.376 | 14.7 | 0.169 | 40 (6 to 87) | 606 |
| | Late | 0.32 | 0.308 | 13.6 | 0.089 | 17 (0 to 43) | 292 |
| W3: all three | Early | 1.03 | 0.721 | 9.4 | 0.707 | 648 (311 to 985) | 994 |
| | Late | 0.58 | 0.322 | 7.6 | 0.258 | 80 (19 to 148) | 471 |

Dollars per $10,000 purchase, restricted regime. "Idealised" is the value of the Section 3 buyer at the same net Sharpe ratio on the same purchase days. Intervals are from a stationary bootstrap of the purchase days (Politis and Romano, 1994), because neighbouring purchases share most of their path. "Months" is the median time to pass.

## 6 The seller's side

I observe nothing of the firm's books, so this section draws implications and no more.

**Who pays.** The same contract returns very different amounts to different buyers. On the base contract at its $147 list fee, expected payouts per dollar of fee are $0.22 for a no-skill buyer at conventional 1% sizing, $0.70 at contract-optimal sizing and $1.94 at a Sharpe ratio of 0.3; on Pro 10% the middle figure is $1.42. A seller whose buyers were all disciplined would lose money on most of its menu at list prices. It does not need to exclude them if they are few. Lim (2026) reaches the same conclusion from an assumed population, attributing the margin to cost drag and to buyers sizing away from the ridge, and Villahermosa (2026) from the pass rate at which his seller breaks even. The only public figure I could read at its source is a trade-press report of a technology vendor's data, in which 7% of 300,000 accounts across ten firms achieved a payout and payouts averaged 4% of the account (Finance Magnates, 2025). Taken at face value that is about 0.3% of the account per purchase, against 1.03% for the disciplined no-skill buyer here and 0.33% at 1% sizing. The firms, rules and dates differ, the figure is not audited, and I do not rest anything on it. It is consistent with a customer base that does about as well as a no-skill buyer following conventional risk advice.

**What the price list suggests.** The menu's pricing is hard to explain by the cost of the claims. Fees fall with account size while the value of the claim per dollar does not. Two plans with identical targets and limits differ in price by a factor of two. And the plans that are simplest to describe, one step or none, carry the least value per fee dollar. These patterns fit prices set by what buyers will pay for salient features, such as a single step, weekend holding or a large notional balance, more than by the claims' actuarial value. That is a conjecture; the data that would test it are the firm's.

**Discretion.** If the rules do not protect the seller against a disciplined buyer, something else must. The published restriction regime removes 30% of the no-skill value on the base contract. The gambling policy is aimed at the state-dependent sizing worth a further sixth. Beyond those, the terms reserve review of every pass and every payout. At the $40 promotional fee available on

the base contract's $10,000 account, the no-skill buyer's expected value is zero if 61% of payouts are refused. I cannot observe how often any of this is used. The point for disclosure policy is that an average pass rate or payout ratio, as Lim (2026) proposes firms should publish, would describe the firm's customers and its discretion as much as its contract. Both are worth knowing; they are not the same thing as the odds the rules imply.

# 7 Limitations

*One firm, one date.* The rules and fees are one firm's on 13 October 2026. They change; the rule sources are dated and hashed so that the contract priced here can be identified.

*The firm pays.* Every value assumes each valid request is paid. Discretionary refusal, the gambling policy, the review on passing and the "same level of risk" clause are not modelled.

*One trade design.* The no-skill book is one intraday trade a day with a stop. Other books would differ; the four instruments of Table 7 show by how much cost alone moves the value.

*Execution.* Costs are one broker's spreads measured in 2026 and applied to 2005 to 2024 in proportion to price. Stops fill at the stop price in the base case. The five-minute news restriction on the Pro, One and Direct plans is not modelled; the trade avoids scheduled releases by design, but a stop triggered inside a window would be a close inside it.

*Skill is idealised.* Section 5 shows how far real strategies fall short of it.

*A machine with three years.* The buyer never deviates, trades every day for up to 36 months and takes each payout mechanically. About 75% of no-skill purchases fail and 85% are never paid, so the expected value is the mean of a skewed distribution and a single buyer should expect to lose the fee.

*Pre-registration.* The plans were committed to a private research repository before the runs they describe. The history of the plan and of every commit touching the analysis is in the reproduction package's `provenance/` folder, and the full repository is available to editors and referees on request. Git dates can be set by the author, so this is a record rather than proof; later plans will be registered with a third party before they are run. The 24 tests were run in adaptive batches and their family was fixed as it grew.

*Unrefereed neighbours.* The three papers closest to this one are working papers. I reproduced the one whose numbers I use and cite the others as reported.

# 8 Conclusion

On its written rules, the contract examined here is close to a fair bet for a disciplined buyer with no skill and a cheap claim for one with a little. Its base plan returns about 1% of the account in expected payouts against a fee of 0.55% to 1.47%; the firm's standard two-step plans return more than their list fee at every size; its one-step plans return about half of theirs. The value depends on the instrument's trading cost, on stops filling, and on the firm paying.

The rules are not what defeats buyers. The time limit is gone, the daily limit does not bind a stopped trade and the consistency rule costs a tenth. What stands between a buyer and the contract's value is sizing that suits ordinary risk advice and not this contract, the absence of an edge that 24 registered tests did not find and no track record could verify, and the seller's discretion over the conduct that extracts value without skill.

For buyers, the practical reading is narrow: passing an evaluation is weak evidence of skill, and the expected value of a single purchase is the mean of a distribution in which most purchases return nothing. For regulators, disclosure of realised pass and payout rates would be informative about

a firm's customers and conduct, and should be read alongside the odds its rules imply, which this paper shows can be computed from public documents. For research, the method extends to any firm that publishes its rules, and the solved contract offers a test bed with a known optimum.

## A Rule sources

All pages were fetched directly on 13 October 2026 from https://help.alphacapitalgroup.uk and https://alphacapitalgroup.uk/terms-and-conditions. The repository records each page's address, date and SHA-256 hash and the script that checks every quoted phrase against the raw page.

| Rule | As published | Source article (page date) |
|---|---|---|
| Targets | "Phase 1 profit target: 10%", "Phase 2 profit target: 5%" | Alpha Swing (24 Jul 2026) |
| Overall loss | "Max Drawdown (static): 10%"; "If the balance or equity drops below $90,000, the account is breached" | Alpha Swing; Maximum total loss (24 Jul 2026) |
| Daily loss | "Max Daily Drawdown (balance-based): 5%"; "breaches are always applied based on open trades (unrealised losses)" | Daily risk limits (24 Jul 2026) |
| Minimum days | "Minimum trading days (for each phase): 3"; a trading day is "a day on which you open and close a trade on the same day" | Alpha Swing; Minimum trading days (6 Jul 2026) |
| Time limit | "There are no time limits applicable to the Evaluations" | Terms, clause 8.2.1 |
| Evaluation size | "There is no maximum virtual position size exposure during the evaluation stage" | Terms, Schedule 2, 3.4(a) |
| Inactivity | "All accounts, at all stages" are subject to a 30-day inactivity limit | Inactivity (6 Jul 2026) |
| Refund | "All our evaluation plans are non-refundable" | Refund of evaluation fees (6 Jul 2026) |
| Commission | "Indices are commission-free across both account types" | Commission fees (6 Jul 2026) |
| Lot cap | Swing: $10k = max 2.5 lots; "the total combined lots/position size allowed at any one time" | Lot size limit (21 Jul 2026) |
| Max Risk Rule | "applies to Qualified Accounts only"; 3% up to $25,000 and 2% from $50,000, on "floating/unrealised losses" | Max Risk Rule (25 Aug 2026) |
| Payout | "a minimum of 2% of gross profits on the account balance"; "no single trading day should contribute more than a set percentage of the total generated profits" (40%) | On-demand performance fee (22 Jul 2026) |
| Processing | "processed and paid within 2 business days"; "You can resume trading once your account balance has been reset" | How do I get paid (7 Jul 2026) |

| Rule | As published | Source article (page date) |
|---|---|---|
| Split | "an 80% share of the profits" | What Qualified Analysts earn (21 Jul 2026) |
| Bonus | "on the fourth performance fee request, a discretionary bonus of 0.25% of the initial account size is applied" | Performance fee bonus (7 Jul 2026) |
| Restricted group | "a temporary group into which Qualified Analyst accounts may be moved"; "the maximum allowable risk for any single position is 1% of your initial balance"; Swing lots halved, index leverage 1:5 | Focused Trader Group (7 Sep 2026) |
| Gambling policy | "A significant change in lot size compared to the overall average on the account"; "all or nothing"; "the removal of profits" | Policy against gambling (6 Jul 2026) |
| Same risk | "A Qualified Analyst is required to maintain the same level of risk on a Qualified Analyst Account" | Terms, Schedule 2, 3.2 |
| Review | "All passed evaluations are subject to review, and traders found guilty of policy ignorance or abuse will not advance to the Qualified phase" | Prohibited trading strategies |
| Allocation | "a maximum allocation of $400,000 per household"; "a $300,000 limit per strategy" | How many accounts (6 Jul 2026) |
| Scaling | At a 10% gain the trader "can request scaling"; not available in the restricted group | Scaling plan (24 Jul 2026) |

Not modelled: the fourth-payout bonus (priced separately in Section 4), the scaling plan (which cannot help a buyer who takes each payout at 2% and is closed to the restricted group), the allocation caps, the news rule and the discretionary clauses.

# B Hypotheses and verdicts

**Table 12:** All registered hypotheses

| | Hypothesis | Estimate (95% interval) | Verdict |
|---|---|---|---|
| H1 | The no-skill value lies between the \$40 promotional and \$147 list fee | \$103.1 (100.5 to 105.8); \$148 in the standard regime | Supported, not robust |
| H2 | Sizing is worth more than a Sharpe of 0.3 ($D > 0$) | $D = -\$112.0$ ($-116.6$ to $-107.4$) | Refuted |
| H3 | A Sharpe of 0.3 leaves the value below \$147 | \$285.4 (280.6 to 290.2) | Refuted |
| H4 | Classic clock, 12-month window: $D > 0$ | \$3.5 (1.9 to 5.2) | Supported |
| H5 | No clock, 60-month window: $D < 0$ | $-\$244.7$ ($-251.7$ to $-237.7$) | Supported |
| H6 | Under each clock, $D$ falls as the window lengthens | all six steps fall | Supported |
| H7 | At every window, $D$ is larger with the clock | \$1.3 ($-0.3$ to 2.8) at 12 months; larger at 24, 36, 60 | Inconclusive |
| H8 | The no-skill value is \$75 to \$130 on three other instruments | \$131, \$95, \$58 | Refuted |
| H9 | $D < 0$ on all three | $-107$, $-73$, $-108$ | Supported |
| H10 | The best policy beats the fixed one by more than 10% (no skill) | $V_D - 1.10\,V_A = \$6.4$ (4.1 to 8.7) | Supported |
| H11 | Average evaluation risk under the best policy falls with skill | 4.18%; 1.56%; 1.67% | Refuted |
| H12 | The solver's value is within 10% of the realised value | ratio 1.061 (1.037 to 1.086) | Supported |
| H13 | Free payout timing adds under 2% without skill and over 5% at a Sharpe of 1.0 (standard regime) | 0.0% and 22.0% | Supported |
| H14 | Pro 10% is worth at least as much as Swing | \$6.0 (4.4 to 7.7) | Supported |
| H15 | Pro 10% is worth more than its \$77 fee | EV \$32.1 (29.3 to 35.0) | Supported |
| H16 | Swing has the lowest value per fee dollar of the plans with an evaluation | Swing 0.70; One plans 0.49 to 0.66 | Refuted |
| H17 | One 10% is worth less than Pro 10% | $-\$63.3$ ($-65.8$ to $-60.8$) | Supported |
| H18 | Direct is worth less than its \$97 fee | EV $-\$6.5$ ($-8.9$ to $-4.0$) | Supported |
| H19 | Every real book is worth less than an idealised buyer at the same Sharpe | all five intervals below | Supported |
| H20 | The best real book is worth less than the no-skill buyer | \$155 (\$10 to \$320) against \$96 | Inconclusive |
| H21 | Every real book is worth less on late purchases than on early ones | clear for one book of five | Inconclusive |

$D$ is the gain from contract-optimal sizing minus the gain from a Sharpe ratio of 0.3. A hypothesis is supported if the interval excludes its boundary in the stated direction, refuted if it excludes it in the other, and inconclusive otherwise. H1 to H3 were fixed in the original plan; H4 to H9, H10 to H13, H14 to H18 and H19 to H21 in four dated amendments, each committed before its run.

# C Further tables

**Table 13:** The coin flip along the sizing grid, base contract, restricted regime

| $r$ % | Daily vol. % | P(step 1) | P(pass) | Months | Static | Daily | In eval. | P(paid) | $V$ |
|---|---|---|---|---|---|---|---|---|---|
| 0.5 | 0.25 | 0.035 | 0.002 | 20.1 | 0.116 | 0.000 | 0.882 | 0.001 | 1 |
| 1 | 0.51 | 0.246 | 0.094 | 15.5 | 0.520 | 0.000 | 0.386 | 0.056 | 33 |
| 1.5 | 0.76 | 0.368 | 0.197 | 10.4 | 0.722 | 0.000 | 0.082 | 0.121 | 74 |
| 2 | 1.02 | 0.405 | 0.234 | 6.6 | 0.758 | 0.000 | 0.009 | 0.145 | 93 |
| 2.5 | 1.27 | 0.418 | 0.243 | 4.5 | 0.756 | 0.000 | 0.001 | 0.153 | 99 |
| 3 | 1.52 | 0.425 | 0.247 | 3.2 | 0.753 | 0.000 | 0.000 | 0.155 | 102 |
| 3.5 | 1.78 | 0.429 | 0.247 | 2.4 | 0.753 | 0.000 | 0.000 | 0.155 | 103 |
| 4 | 2.03 | 0.431 | 0.245 | 2.0 | 0.755 | 0.000 | 0.000 | 0.155 | 103 |
| 4.5 | 2.29 | 0.431 | 0.244 | 1.6 | 0.756 | 0.000 | 0.000 | 0.155 | 103 |
| 5 | 2.54 | 0.380 | 0.193 | 1.2 | 0.318 | 0.489 | 0.000 | 0.121 | 81 |
| 6 | 3.05 | 0.264 | 0.108 | 0.8 | 0.154 | 0.738 | 0.000 | 0.068 | 46 |
| 8 | 4.06 | 0.220 | 0.073 | 0.5 | 0.098 | 0.830 | 0.000 | 0.045 | 31 |

"Static" and "Daily" are the shares of purchases that breach each limit in the evaluation; "In eval." the share still in it after 504 trading days. Funded risk 1%.

**Table 14:** Change in value when one rule is removed, standard regime

| Rule removed | Coin flip | $S = 0.3$ | $S = 1.0$ |
|---|---|---|---|
| Baseline value | 148 | 405 | 1,318 |
| Step 2 (one step only) | +111 | +185 | +309 |
| *Added:* step maturities of 30 and 60 days | −58 | −373 | −1,291 |
| Trading costs | +49 | +148 | +328 |
| The firm's 20% share | +37 | +101 | +329 |
| No fee refund (refund of $147 with the first payout) | +19 | +39 | +83 |
| Best Day Rule | +14 | −13 | −153 |
| Intraday monitoring of the floors | +23 | +43 | +98 |
| *Instead of on demand:* payout checks every 21 days | −7 | +1 | +59 |
| Funded lot and position caps | +6 | −2 | −12 |
| Two-day payout lock | −1 | 0 | +10 |
| 2% minimum profit | 0 | 0 | 0 |
| Three-day minimum | +1 | 0 | 0 |
| Daily floor | 0 | 0 | 0 |
| Max Risk Rule | 0 | 0 | 0 |
| Evaluation leverage cap | 0 | 0 | 0 |
| All frictions together (two steps kept) | +93 | +202 | +453 |

**Table 17:** The 24 tests: claim exclusion

| Test | Idea | Years | Sharpe | 90% interval | MDE | At $S^*$ | At 0.3 | At 0.5 |
|---|---|---|---|---|---|---|---|---|
| A1 | European FX-fix reversal | 7.8 | −0.13 | −0.72 to 0.46 | 0.89 | Inconclusive | Inconclusive | Refuted |
| A2a | Month-end hedge flow before the fix | 12.0 | 0.02 | −0.45 to 0.49 | 0.72 | Inconclusive | Inconclusive | Refuted |
| A2b | Month-end reversal after the fix | 12.0 | 0.36 | −0.13 to 0.85 | 0.72 | Inconclusive | Inconclusive | Inconclusive |
| A3 | FOMC-eve carry | 12.0 | 0.29 | −0.19 to 0.77 | 0.72 | Inconclusive | Inconclusive | Inconclusive |
| A4 | Post-FOMC long USD | 12.0 | 0.31 | −0.18 to 0.80 | 0.72 | Inconclusive | Inconclusive | Inconclusive |

**Table 17:** The 24 tests: claim exclusion

| Test | Idea | Years | Sharpe | 90% interval | MDE | At $S^*$ | At 0.3 | At 0.5 |
|---|---|---|---|---|---|---|---|---|
| A5 | VIX-inversion index shorts | 7.2 | −0.13 | −0.74 to 0.48 | 0.92 | Inconclusive | Inconclusive | Refuted |
| A6 | CFTC speculator following | 12.0 | 0.12 | −0.36 to 0.60 | 0.72 | Inconclusive | Inconclusive | Inconclusive |
| A8 | G8 FX momentum 12-1 | 11.7 | −0.08 | −0.56 to 0.40 | 0.73 | Inconclusive | Inconclusive | Refuted |
| A9 | G8 FX value | 11.7 | −0.16 | −0.64 to 0.32 | 0.73 | Inconclusive | Inconclusive | Refuted |
| B1 | Diversified futures trend | 11.0 | 0.14 | −0.36 to 0.64 | 0.75 | Inconclusive | Inconclusive | Inconclusive |
| B3 | Crypto weekly momentum | 6.0 | 0.62 | −0.11 to 1.35 | 1.02 | Inconclusive | Inconclusive | Inconclusive |
| M1 | Macro-surprise drift | 10.0 | −1.09 | −1.75 to −0.43 | 0.79 | Refuted | Refuted | Refuted |
| M2 | Macro reaction momentum | 10.0 | −0.28 | −0.81 to 0.25 | 0.79 | Inconclusive | Refuted | Refuted |
| M1r | Fade the macro surprise (post hoc) | 10.0 | 0.65 | 0.08 to 1.22 | 0.79 | Above | Inconclusive | Inconclusive |
| P1 | S&P 500 earnings drift | 10.0 | −0.74 | −1.33 to −0.15 | 0.79 | Refuted | Refuted | Refuted |
| R1 | FX PCA-residual reversal | 11.0 | −0.45 | −0.97 to 0.07 | 0.75 | Inconclusive | Refuted | Refuted |
| R2 | Cointegrated pairs | 11.0 | −0.77 | −1.33 to −0.21 | 0.75 | Refuted | Refuted | Refuted |
| L1 | Pooled LightGBM, next day | 8.0 | −0.01 | −0.59 to 0.57 | 0.88 | Inconclusive | Inconclusive | Inconclusive |
| L2 | GDELT news tone on US500 | 4.0 | −0.35 | −1.20 to 0.50 | 1.25 | Inconclusive | Inconclusive | Refuted |
| L3 | HMM regime filter on trend | 9.0 | −0.04 | −0.59 to 0.51 | 0.83 | Inconclusive | Inconclusive | Inconclusive |
| I1 | Fade retail FX positioning | 3.6 | −0.22 | −1.10 to 0.66 | 1.32 | Inconclusive | Inconclusive | Inconclusive |
| I2 | Follow dark-pool DIX on US500 | 4.7 | 0.09 | −0.67 to 0.85 | 1.15 | Inconclusive | Inconclusive | Inconclusive |
| T1 | Treasury auction cycle | 12.0 | −0.09 | −0.57 to 0.39 | 0.72 | Inconclusive | Inconclusive | Refuted |
| T2 | Equity turn of month | 12.0 | 0.05 | −0.43 to 0.53 | 0.72 | Inconclusive | Inconclusive | Inconclusive |

$S^*$ is the break-even Sharpe ratio at the base contract's \$10,000 list fee (−0.05). MDE is the Sharpe ratio detectable with 80% power at the one-sided 5% level. Intervals follow Lo (2002).

**Table 15:** Funding probabilities on Lim (2026)'s classic contract

| | | Normal increments | | Real book | | |
|---|---|---|---|---|---|---|
| Sharpe | Vol. % | Lim | This paper | $r$ % | At the close | Intraday |
| 0 | 1 | 0.026 | 0.026 | 1.97 | 0.024 | 0.024 |
| 0 | 2 | 0.184 | 0.183 | 3.94 | 0.180 | 0.173 |
| 0 | 3 | 0.195 | 0.196 | 5.90 | 0.162 | 0.122 |
| 1 | 1 | 0.066 | 0.063 | 1.97 | 0.058 | 0.058 |
| 1 | 2 | 0.298 | 0.298 | 3.94 | 0.298 | 0.286 |
| 1 | 3 | 0.278 | 0.278 | 5.91 | 0.232 | 0.177 |
| 2 | 1 | 0.135 | 0.136 | 1.98 | 0.121 | 0.121 |
| 2 | 2 | 0.434 | 0.434 | 3.96 | 0.439 | 0.424 |
| 2 | 3 | 0.375 | 0.372 | 5.94 | 0.311 | 0.241 |

Probability of passing both steps of his Table 1 contract. "This paper" is my simulator with his contract and normal increments. The real book is sized to the same daily volatility.

**Table 16:** The base contract's fee and the no-skill value by account size

| Account | List fee | % | EV at list | Coded fee | % | EV with code | Refusal rate |
|---|---|---|---|---|---|---|---|
| $5,000 | 70 | 1.40 | −$18 | 56.00 | 1.12 | −$4 | – |
| $10,000 | 147 | 1.47 | −$44 | 40.00 | 0.40 | $63 | 61 |
| $25,000 | 247 | 0.99 | $11 | 197.60 | 0.79 | $60 | 23 |
| $50,000 | 357 | 0.71 | $159 | 285.60 | 0.57 | $230 | 45 |
| $100,000 | 577 | 0.58 | $454 | 461.60 | 0.46 | $570 | 55 |
| $200,000 | 1,097 | 0.55 | $965 | 877.60 | 0.44 | $1,185 | 57 |

Coin flip, restricted regime. "Coded fee" is the lowest fee obtained with a discount code at checkout on 13 October 2026. "Refusal rate" is the share of payouts that would have to be refused for the coded expected value to be zero.

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