

Portfolio oversight

Decision memo | independent validation and implementation economics

Research evidence run: oversight-20261013T034644 · 2026-10-13

Recommendation

Release the research evidence for review: baseline PASS; 5 of 5 deliberate faults blocked; corrected inputs PASS. Do not interpret technical release as approval to trade a real account.

The investment decision

For the No gold account, lower-turnover allocation cut annual one-way turnover from 18.23% to 7.25%, but raised realized gross tracking error from 1.37% to 1.64%. At the assumed 5bp per dollar bought or sold, the annual cost-rate saving is 1.10bp of NAV: about \$110 per constant \$1m. That is a modest cost benefit for about 27bp more tracking risk. Prefer the minimum-risk implementation if tracking fidelity is the client's primary objective; accept lower turnover only when the mandate places a defensible value on avoiding trades. Taxes are not modeled.

What was independently challenged

A separate contract and challenger reconstruct total-return sleeve holdings, return contributions, self-financing costs and benchmark wealth from source returns and recorded trades. SQL checks data grain and trade/cost identities. The checker does not call the production optimizer's validation or accounting functions. Shared economic assumptions and shared source inputs remain a limitation of independence.

Decision clock

Estimate risk and propose weights at the previous close. Old holdings earn the execution day's return. Rebalance at that day's close and deduct costs from the account. Enforce weight bounds after execution; monitor, rather than prohibit, drift between rebalances. Realized TE is an outcome, not the same object as the ex-ante risk budget.

Data and evidence

Actual WRDS/CRSP CIZ data: eight ETFs and 32,192 source observations across 2010–2025; 2014–2025 evaluation, 30 account/method paths and 4,320 decisions. Current-vintage and retrospectively selected universe; the history has already been examined. All displayed accounts and trading-cost assumptions are hypothetical.

Failure investigation and release conditions

INC-001 | Distribution-return definition mismatch — BLOCK

Replaced total returns with ex-distribution returns in an in-memory copy of the full source panel. Restore CRSP CIZ DlyRet and reconcile distributions without adding DLRET again. Corrected-input retest: PASS.

INC-002 | Duplicate trade record — BLOCK

Duplicated exactly one trade-key row in an in-memory copy. Reject duplicate natural keys before aggregation; identify upstream duplication and reload a unique snapshot. Corrected-input retest: PASS.

INC-003 | Same-day decision timestamp — BLOCK

Changed one signal date to equal its execution date. Require the decision to reference the previous close and a strictly earlier complete risk window. Corrected-input retest: PASS.

INC-004 | Prohibited asset allocation — BLOCK

Moved one percentage point from SPY to prohibited GLD in one No gold proposal; weights still sum to one. Reject the proposal and re-solve under the separately declared client bounds. Corrected-input retest: PASS.

INC-005 | Trade-fee reconciliation error — BLOCK

Added \$100 to one recorded trade fee without changing holdings or actual trade notional. Recompute each fee from absolute notional and rate; reconcile fees and funded NAV. Corrected-input retest: PASS.

What the evidence does not establish

Faults are deliberately injected copies, not historical production incidents. The wrong-return case holds recorded trades fixed; its replay is diagnostic inconsistency, not a self-consistent alternative strategy. The experiment does not establish live execution readiness, tax-lot handling, stock-level factor attribution, market-impact calibration, multi-currency accounting or future alpha. Contribution reconciliation explains the accounting of this model, not a causal factor model. Passing these checks does not certify all possible errors.

Next release conditions

For production use: reconcile to an independent custodian/order source; implement corporate-action and tax-lot policies, market-impact and execution controls, operational ownership, monitoring and deployment review. For research discussion: retain run hashes, tolerance definitions, exception acceptance criteria and the corrected retest receipt. Detailed licensed security-day data remain private.

Evidence: validation_summary.json, incident_summary.json, run_receipt.json, historical_stress.json and Portfolio_Oversight.xlsx. Created with AI coding and drafting assistance; interpretation and technical explanations require the presenter's own understanding.