BD

PUBLICATION REPORT / CLOSED RESEARCH EVIDENCE

Research 005: why a positive return still failed

A prospectively frozen 365-day evaluation returned +5.26% net under the research cost model, yet failed the acceptance rule that had been fixed before the holdout was opened.

FALSIFIED

NET CUMULATIVE RETURN	NET SHARPE	HAC LOWER BOUND
+5.26%	**0.368**	**-0.1002%**
Actual compounded holdout result	Required at least 0.50	Mean daily return, one-sided 95%

Publication report. Generated from preserved closed research evidence. No strategy replay, retuning, new market-data capture, or re-evaluation was performed for this document.

Published 5 September 2026.

01 / LINEAGE AND FROZEN EXPERIMENT

The strategy was inherited, not redesigned

Research 005 was a one-shot prospective extension of the executable channel-breakout strategy independently reproduced in Benchmark 004. It did not reopen parameter search after seeing the new holdout.

Original external source: frozen Momentum / Channel Breakout notebook
Lineage: external notebook -> Benchmark 004 reproduction -> Research 005 prospective holdout.

PROTECTED PERIOD	FROZEN UNIVERSE
1 Sep 2025	**66**
through 31 Aug 2026	Binance Spot symbols

Frozen executable semantics

- Long entries used the highest prior 46 daily highs; short entries used the lowest prior 35 daily lows.
- Entries also required current volume above the prior 50-day 0.68 quantile.
- Long and short price exits used different prior-channel lengths.
- The reproduced 33-day post-hoc position-age mask was preserved, including its non-recursive quirk.
- Portfolio weights used the reproduced square-root-of-rolling-volatility scaling and daily normalization.
- Turnover cost was fixed at 20 bps per unit of turnover.
- The evaluator could not alter universe, dates, costs, direction, parameters, or acceptance criteria after the holdout was opened.

Some choices were unconventional. That was deliberate: the experiment tested the already-reproduced object rather than repairing it.

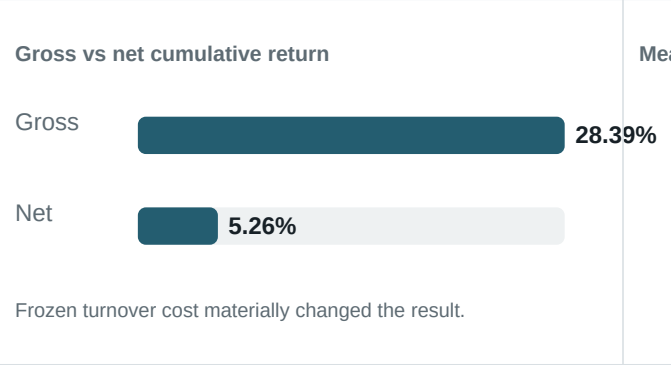
02 / DATA CONTRACT AND RECORDED RESULT

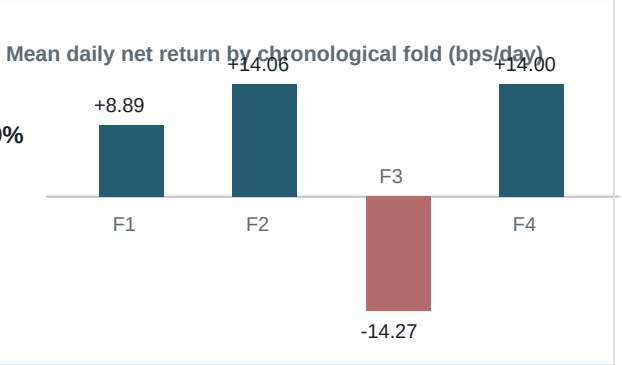
The data capture was frozen too

The provider contract authorized exactly one official Binance daily-kline request for each of the 66 frozen symbols, with zero automatic retries and no alternate-provider fallback. All 66 requests executed successfully.

Sixty-five symbol responses contained 365 daily klines; OMUSDT contained 183. The frozen rules already defined legitimate venue absences as missing data, so the shorter series was not repaired, substituted, or used to change the universe after inspection.

ANNUALIZED NET RETURN	MAXIMUM DRAWDOWN	POSITIVE FOLDS
+20.50%	**-29.59%**	**3 / 4**
Arithmetic: mean daily net x 365	Longest drawdown: 207 days	This criterion passed





The gross cumulative return was +28.39%; after the frozen turnover charge, net cumulative return was +5.26%. Average turnover was about 0.272 per day, equivalent to roughly 5.4 bps of average daily research cost before compounding effects.

03 / FROZEN DECISION RULE

Seven criteria. Five passed. Two failed.

SURVIVED_RESEARCH required every frozen criterion to pass. A positive return could not override the failed risk-adjusted and dependence-aware confidence conditions.

Criterion	Recorded result	Verdict
Exactly 365 evaluation rows	365	**PASS**
Annualized net return > 0	+20.50%	**PASS**
Net Sharpe >= 0.50	0.368	**FAIL**
One-sided 95% HAC lower bound > 0	-0.1002% mean daily	**FAIL**
At least 3 of 4 positive folds	3 / 4	**PASS**
Maximum drawdown > -50%	-29.59%	**PASS**
All required deterministic metrics finite	Finite	**PASS**

Why the HAC condition mattered: the one-sided 95% Bartlett-HAC lower bound remained below zero after accounting for changing volatility and serial dependence, so the predeclared requirement for a positive lower confidence bound was not established.

The frozen decision specification explicitly prohibited post-result rescue: no changed costs, parameters, dates, universe, provider, fold removal, alternate signal, or direction reversal after the terminal result was known.

Why +20.50% is not the same as +20.50% profit

The reported +20.50% annualized net return is an arithmetic annualization: mean daily net return multiplied by 365. The actual compounded net cumulative change over the protected 365-day holdout was +5.26%.

What the result establishes

- This frozen executable strategy produced a positive net cumulative result under the frozen research cost model.
- It failed two criteria that had been fixed before evaluation.
- The terminal classification is therefore FALSIFIED.

What it does not establish

- That channel breakouts can never work.
- That the strategy is live-tradable across all 66 symbols.
- That 20 bps fully captures borrow, funding, margin, liquidation, basis, or taxes.
- That a positive annualized arithmetic mean equals realized wealth growth.

Execution boundary

The strategy can hold negative weights while the evidence source is Binance Spot OHLCV. Borrow availability and cost, funding, margin, liquidation, and derivatives basis were outside the experiment. The frozen 20 bps turnover charge is a research assumption, not proof of executable short-side economics.

Why the negative verdict is useful

After seeing a positive headline return, it would have been easy to argue that a 0.368 Sharpe was close enough or that the confidence bound was too conservative. Preserving the original rule kept the experiment capable of saying no.

05 / EVIDENCE INDEX

Selected preserved evidence

The public site exposes five byte-for-byte text artifacts selected from the preserved Research 005 terminal bundle. Raw market payloads, binaries, private machine paths, and unrelated runner material are intentionally omitted.

Terminal result	`c3d88fd9a9dee10b9fe4c08c9f826c7e2269f4ea54e396b1c5776e36204b0dfa`
Deterministic evaluation	`83dab48e7cf7684feaf43c8245d5f6381e4ea89d7f005f1b6b085534e09b33e6`
Frozen strategy specification	`562908e8ba433d66f136299ef45594ab3b3b9d113b49f559ea91422656692121`
Frozen decision specification	`c3c51fb05eba1872e4d8c02adacc65758a262e06d9a3dbf75b36734f3af3f3f2`
Frozen experiment definition	`799ffd35820836fd6877bddfe962c5a07b87aa397ecd58cf4443d949d87e4e11`

Evidence state: closed. This document is a publication report over preserved evidence, not a fresh evaluation. The charts on page 3 are editorial renderings of values already present in the deterministic evaluation.

Detailed case study: /research/research-005/