

The Three Opens

The 8:30 data print, the 9:30 cash open, the 10:00 first-half-hour close — how the three prices interact, and what their ordering is worth for the rest of the session. NQ front month, tick-derived 1-minute bars, 1,401 RTH sessions, 2020-12-07 → 2026-07-27. All moves in percent of price (points are not comparable across an index that doubled in the window). Each level is the minute-bar open at its timestamp. Front month = daily volume winner across 24 contracts. Half-sessions dropped.

55%

base rate: 10:00→close drift is green (median +0.08%). Every claim below is measured against THIS, not a coin flip.

78–83%

anchor revisited after 10:00 when the 10:00 price sits MIXED between the anchors (n=124 / n=109) — vs 61–65% when aligned.

61%

green close, median +0.159% (n=356), when 10:00 stacks clean above both anchors. The study's only directional tilt. $t=+1.4$ — a tilt, not a law.

±0.50%

median favorable AND adverse travel after 10:00, in every state. The tape rotates roughly 6× more than it drifts.

One-sentence finding: the three opens are a rotation map, not a direction signal. Where price sits at 10:00 relative to the 8:30 and 9:30 levels says far more about *which prices get revisited* than about where the close lands — and the one configuration everyone wants to trade (the bear stack) pays nothing at all.

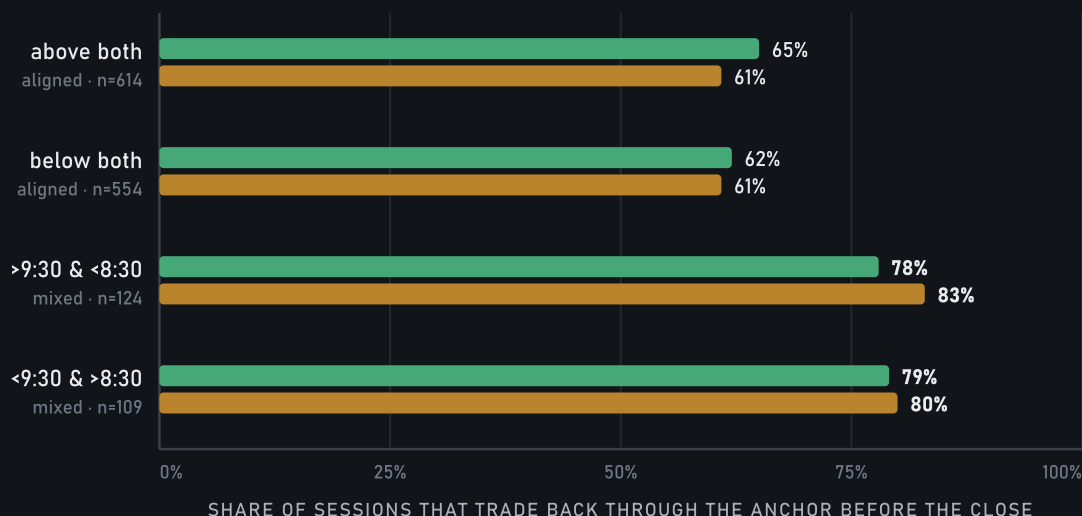
01 · MIXED STATES ARE MAGNET DAYS

Classify every session by the 10:00 price against both anchors. Aligned (above both / below both): the anchors get revisited about 6 times in 10 — barely above base. Mixed — price straddling the anchors, the morning's directional attempt half-undone — and the revisit rate jumps to 78–83%.

P(PRICE TRADES BACK THROUGH THE ANCHOR AFTER 10:00), BY 10:00 STATE · 1,401 SESSIONS

■ revisits the 9:30 open

■ revisits the 8:30 level



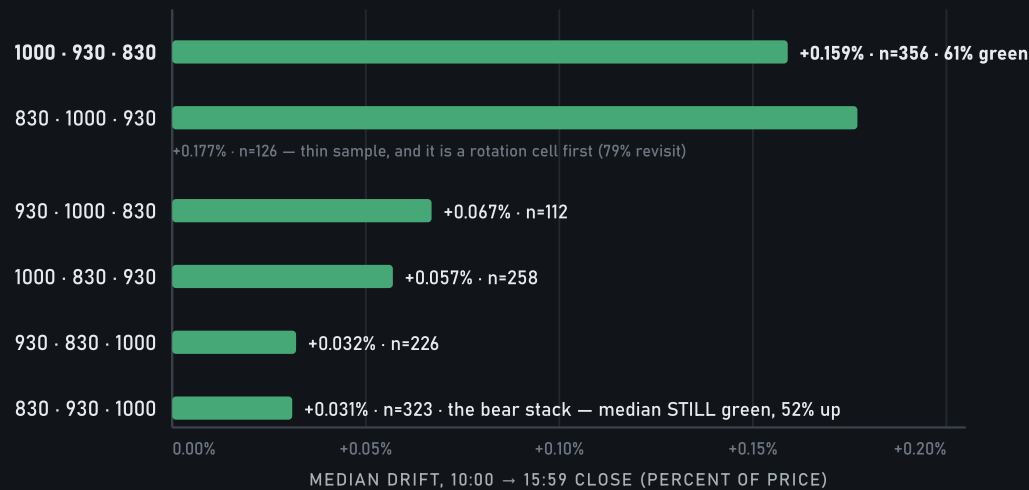
IMPLICATION

A mixed 10:00 state means the auction rejected the morning's directional attempt — and the anchors themselves become the day's most probable destinations. That is a fade-toward-the-levels regime: the market pays whoever expects rotation and punishes whoever needs escape. On quiet mornings the effect is strongest (8:30 level tagged 88% of the time, n=86).

02 · ONLY THE CLEAN BULL STACK TILTS DIRECTION

Six possible orderings of the three prices at 10:00. Every one of them closes green at the median — the index long-bias, quantified — but only one clears the base rate with any margin: 10:00 > 9:30 > 8:30, the clean bullish staircase. Its mirror, the clean bear stack, gives shorts nothing: 52% of those days still close green.

MEDIAN 10:00 → CLOSE DRIFT, BY FULL ORDERING AT 10:00 (HIGH → LOW)



10:00 STATE (ALL DAYS)	N	WIN%	MEAN%	MEDIAN%	T	MED MFE%	MED MAE%	REVISIT 9:30	REVISIT 8:30
>9:30 & >8:30 (aligned up)	614	58	+0.033	+0.116	+0.8	+0.50	−0.50	65%	61%
>9:30 & <8:30 (mixed)	124	57	+0.135	+0.190	+1.4	+0.66	−0.51	78%	83%
<9:30 & >8:30 (mixed)	109	53	−0.038	+0.050	−0.3	+0.54	−0.55	79%	80%
<9:30 & <8:30 (aligned down)	554	52	−0.009	+0.033	−0.2	+0.48	−0.57	62%	61%

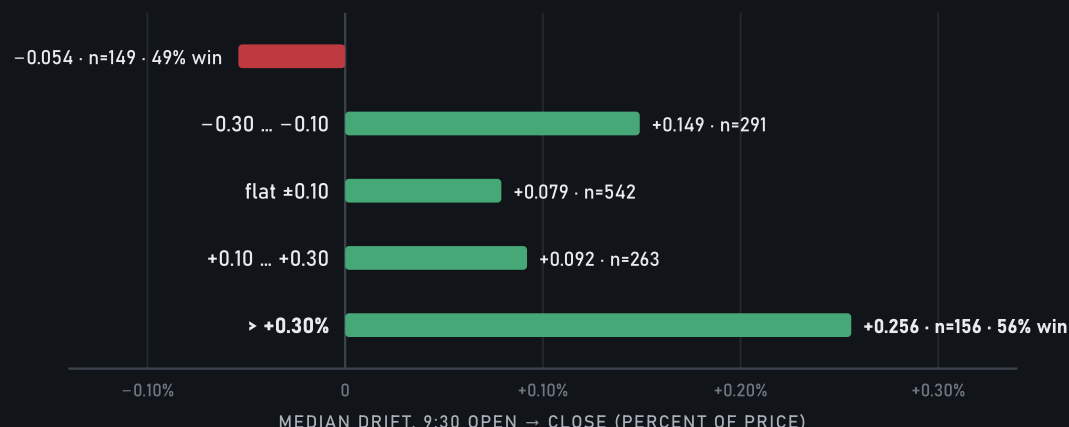
IMPLICATION

At NQ 30,000, the bull-stack median (+0.159%) is ≈48 points held 10:00→close — with median heat of −0.50% (≈150 points) on the way. The tilt is an expectancy, not an escape from drawdown. The bear stack's null is the sharper lesson: data-shock or not, downside continuation in this index dies by lunch. Sample = a bull half-decade; treat the asymmetry as regime until the 2009–2020 replication runs.

03 · 8:30 IMPULSES PERSIST UP, DIE DOWN

Bucket the 8:30→9:30 reaction, then measure the rest of the cash session. A strong up-reaction ($>+0.30\%$) keeps paying: median another $+0.256\%$ by the close. The same-size down-reaction pays shorts nothing — 49% win, median -0.054% .

MEDIAN 9:30 → CLOSE DRIFT, BY SIZE OF THE 8:30 → 9:30 REACTION



IMPLICATION

Chasing data-shock strength has historically been paid; shorting data-shock weakness has not. On high-impulse 8:30 mornings specifically (top-quintile 8:30 range — the CPI/PPI cohort), the weakest cell in the study appears: 10:00 below the open but above the data anchor → 42% win, median -0.107% (n=40, thin). Post-data limbo is where longs bleed.

ACTIONABLE INTEL — AND THE LACK OF IT

WHAT THIS BUYS YOU

A regime classification, decided by 10:00, from three prices you already have: clean bull stack → the session's only measured directional tilt; any mixed state → ~80% odds the anchors get traded back through, so the levels are targets, not launch pads; bear stack → no measured short edge exists. Knowing which hope to delete before it costs anything is the product.

WHAT THIS DOES NOT BUY YOU

An entry. No row here fires a trade: the best directional t-stat is +1.4 (suggestive, unproven), returns are level-to-level with no spread or commission, the revisit stats say nothing about WHEN the touch comes or how much heat precedes it, and the whole window is a bull half-decade. Anyone selling you the bull stack as a system is selling the drift plus survivorship. This drop is context. Context is worth exactly as much as the discipline holding it.

HOW WE'LL TRY TO KILL IT

1. **The noise null (required before this stat graduates).** Any random path revisits old prices. Shuffle each session's own 1-minute returns (Drop 01 method) and measure anchor-revisit rates on structureless paths with identical volatility. The finding survives only if the aligned/mixed 62-vs-80 split does.
2. **Out-of-sample decade.** The desk's archive reaches 2009. Replicate 2009–2020: different vol regimes, two real bear markets, pre-microstructure-modern tape.
3. **Regime splits.** 2022 alone; vol terciles; trend-day vs balance-day conditioning. Does the bear-stack null survive a bear year, or is it pure sample?
4. **A real calendar.** The 8:30-impulse proxy (top-quintile range) approximates data days. Re-run against the actual CPI/PPI/NFP calendar; separate print-type.
5. **Time-to-touch and heat-to-touch.** The 80% revisit is worthless without its cost curve: distribution of when the anchor gets hit and the max excursion against a fade taken at 10:00. This is the EV test — hit rate is not edge until the heat is priced.
6. **Liquidity at the anchors.** 241 sessions of recorded depth: do resting-size shelves actually form at prior 8:30/9:30 prices, or is the revisit pure path behavior?

AXIS DESK · The Weekly Drop 04 · built 2026-08-12 · method: opens_study.py over tick-derived 1-minute bars, front month stitched by daily volume winner; per-session table and full results JSON archived with this PDF. Every number above carries its n and window; nothing here is rounded for effect.

Research/education, not advice. Futures trading involves substantial risk of loss. Most people who trade futures lose money.