

Full Validation Report — Methodology

Data used:

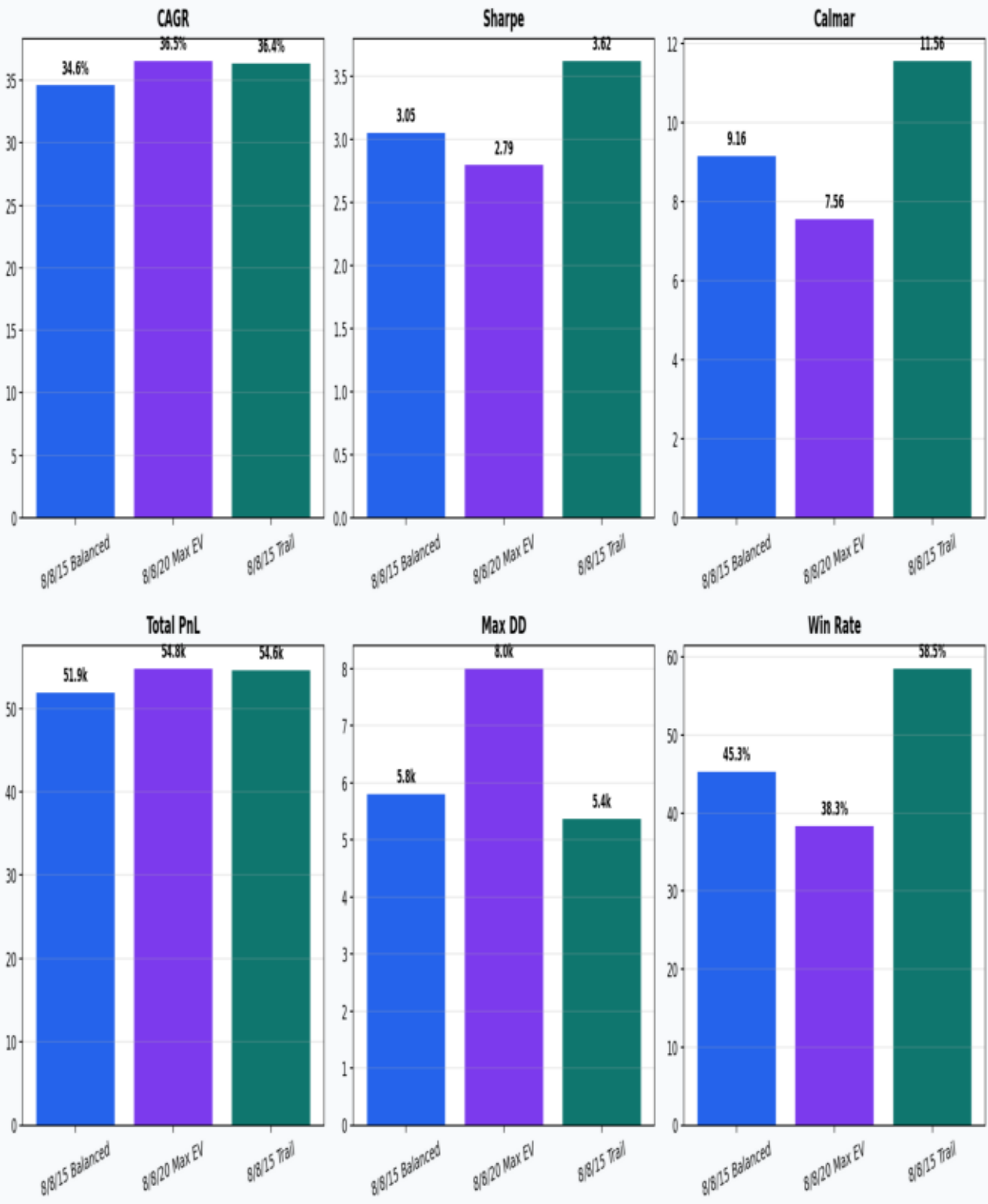
- Databento MBP-1 top-of-book data.
- 40-second open window only: 09:29:50 to 09:30:30 ET.
- 366 total sessions across 2025 and cached 2026 YTD.
- Live-relevant execution: long exits use bid, short exits use ask.

Tests included:

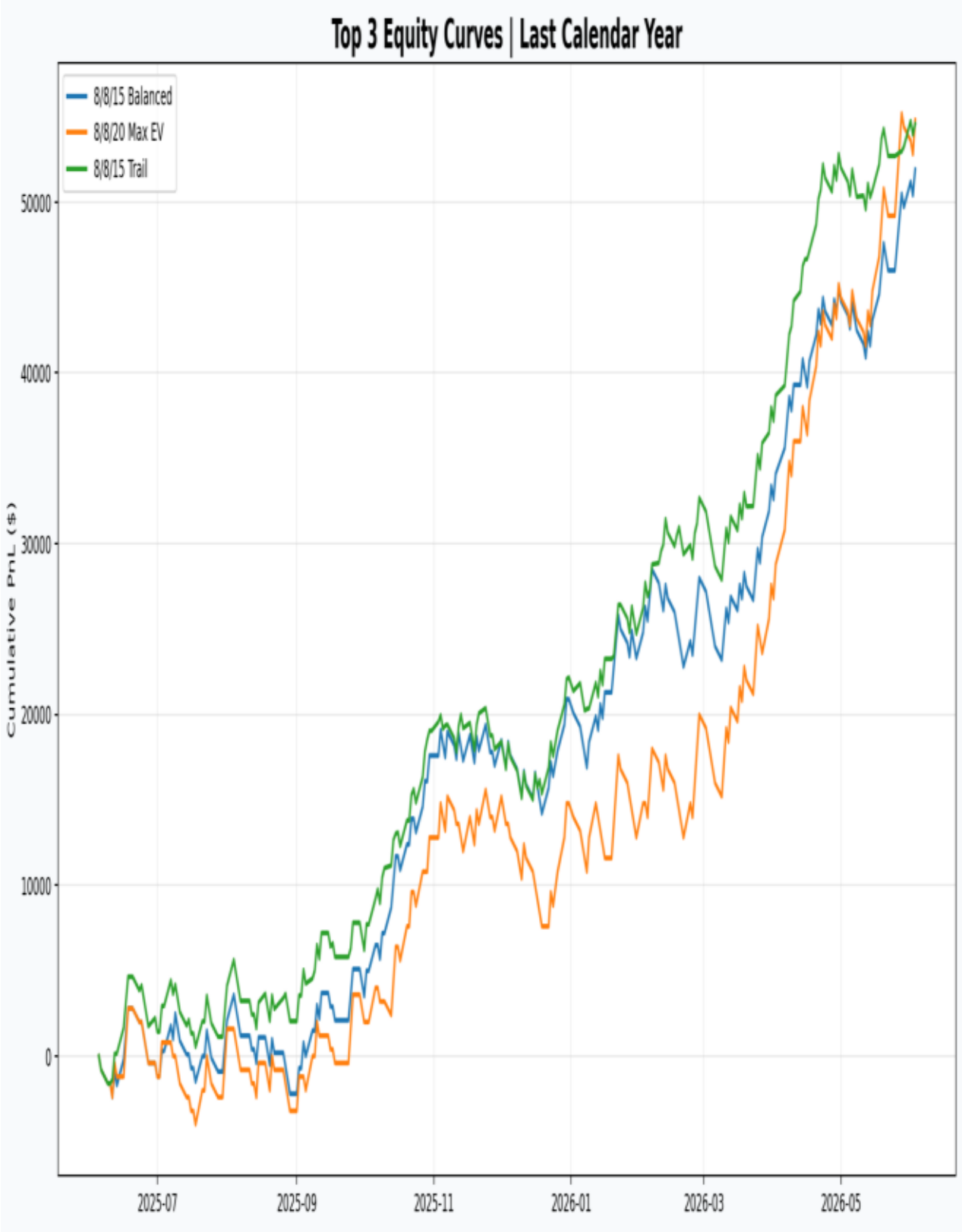
1. Monte Carlo bootstrap: resamples daily outcomes to estimate distribution of PnL and drawdown.
2. Walk-forward: selects best model on trailing six months, then trades next month out-of-sample.
3. Train/OOS: compares 2025 behavior versus 2026 YTD.
4. Regime tests: month, weekday, and quote-activity buckets.
5. EV significance: bootstrapped confidence interval around mean daily PnL.

Top Strategy Financial Metrics

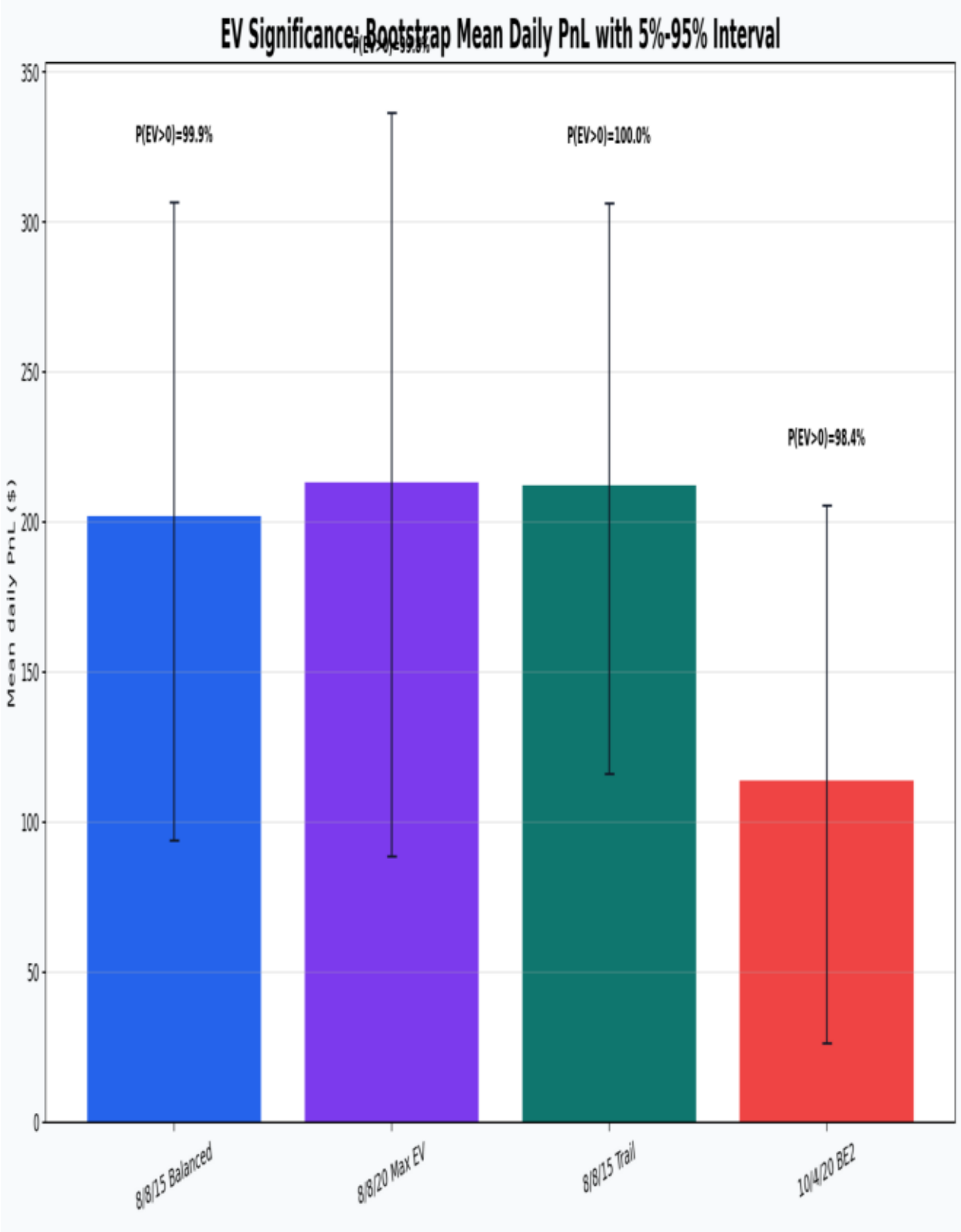
Top Strategy Financial Metrics | Last Calendar Year



Top Strategy Equity Curves



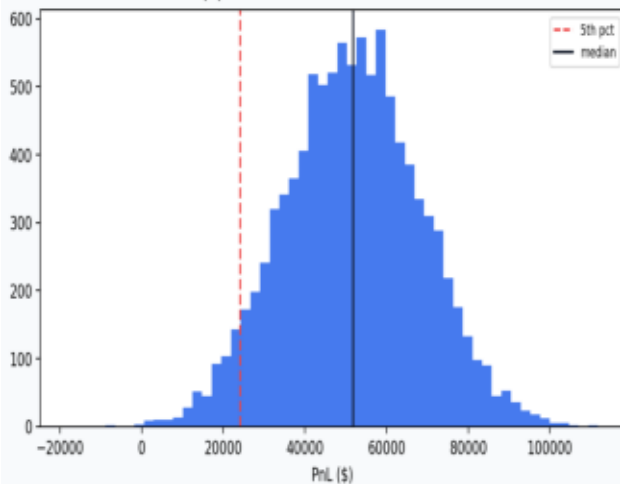
EV Significance



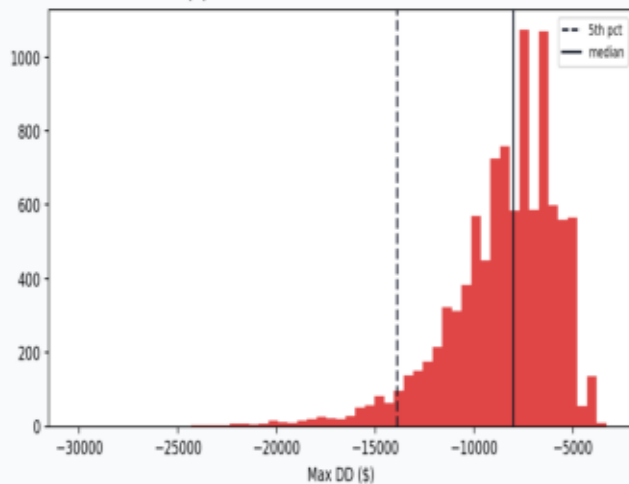
Monte Carlo Bootstrap

Monte Carlo Bootstrap | Resampled Daily MBP-1 Results

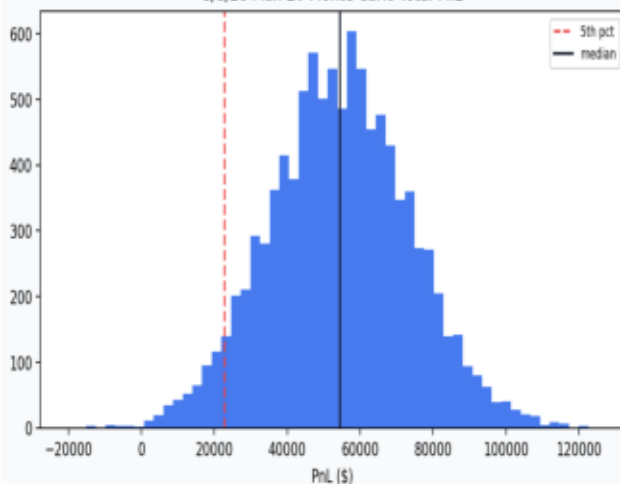
8/8/15 Balanced Monte Carlo Total PnL



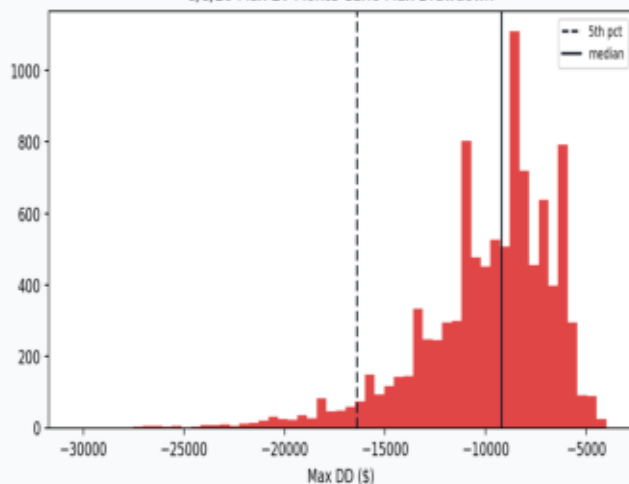
8/8/15 Balanced Monte Carlo Max Drawdown



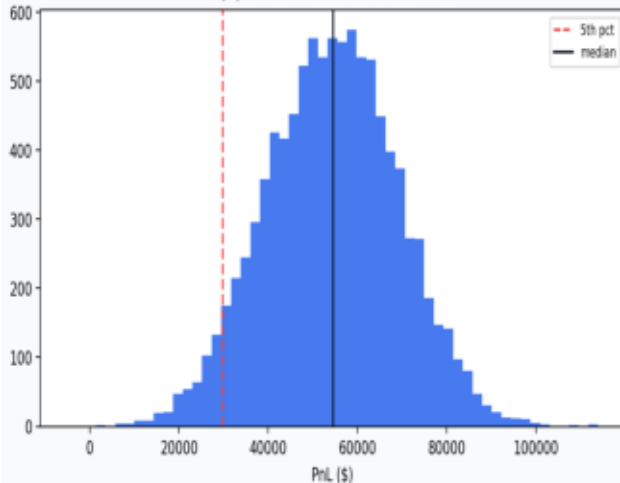
8/8/20 Max EV Monte Carlo Total PnL



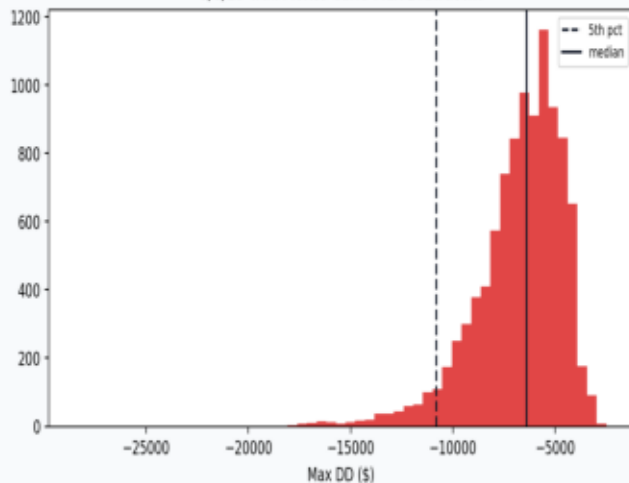
8/8/20 Max EV Monte Carlo Max Drawdown



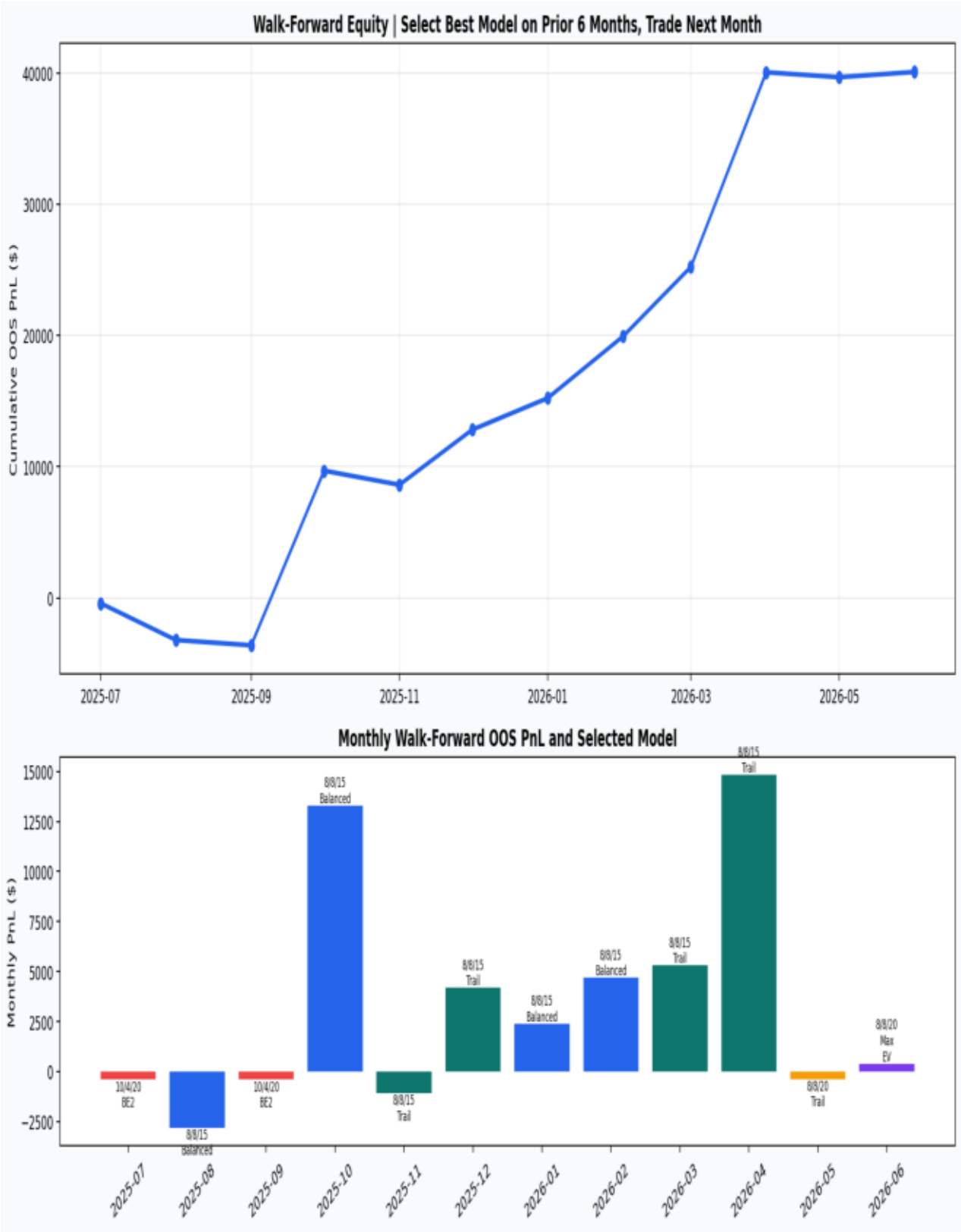
8/8/15 Trail Monte Carlo Total PnL



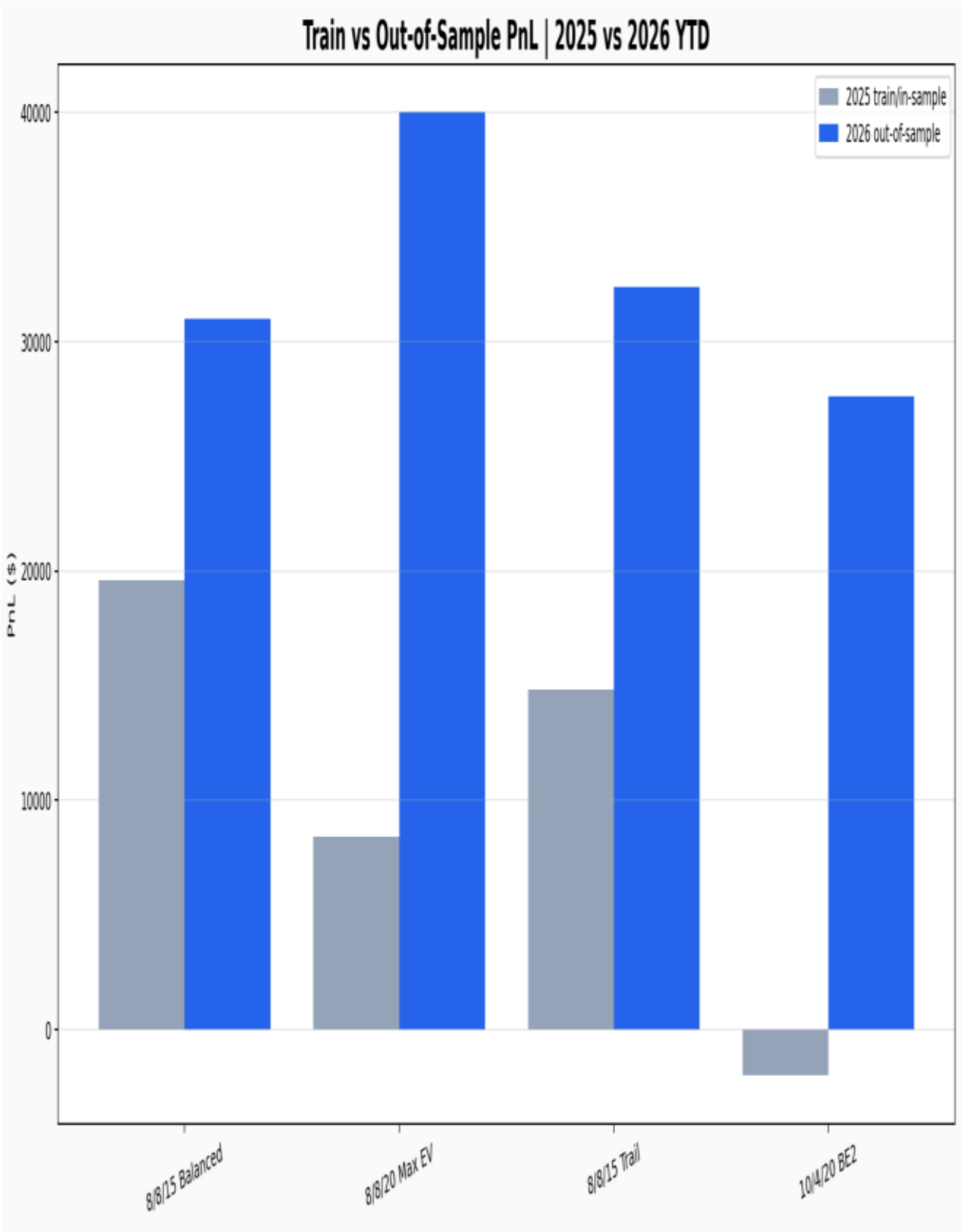
8/8/15 Trail Monte Carlo Max Drawdown



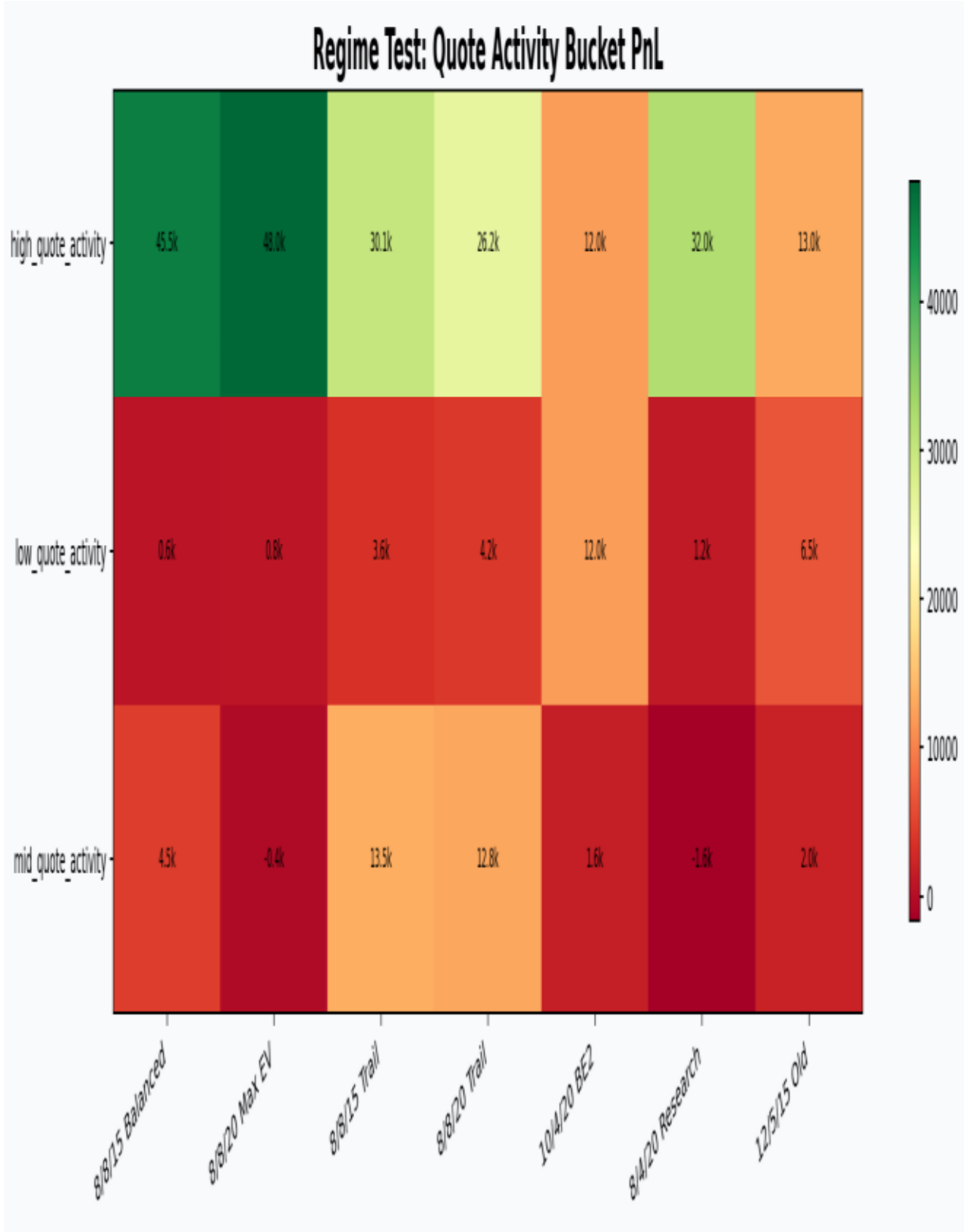
Walk-Forward Test



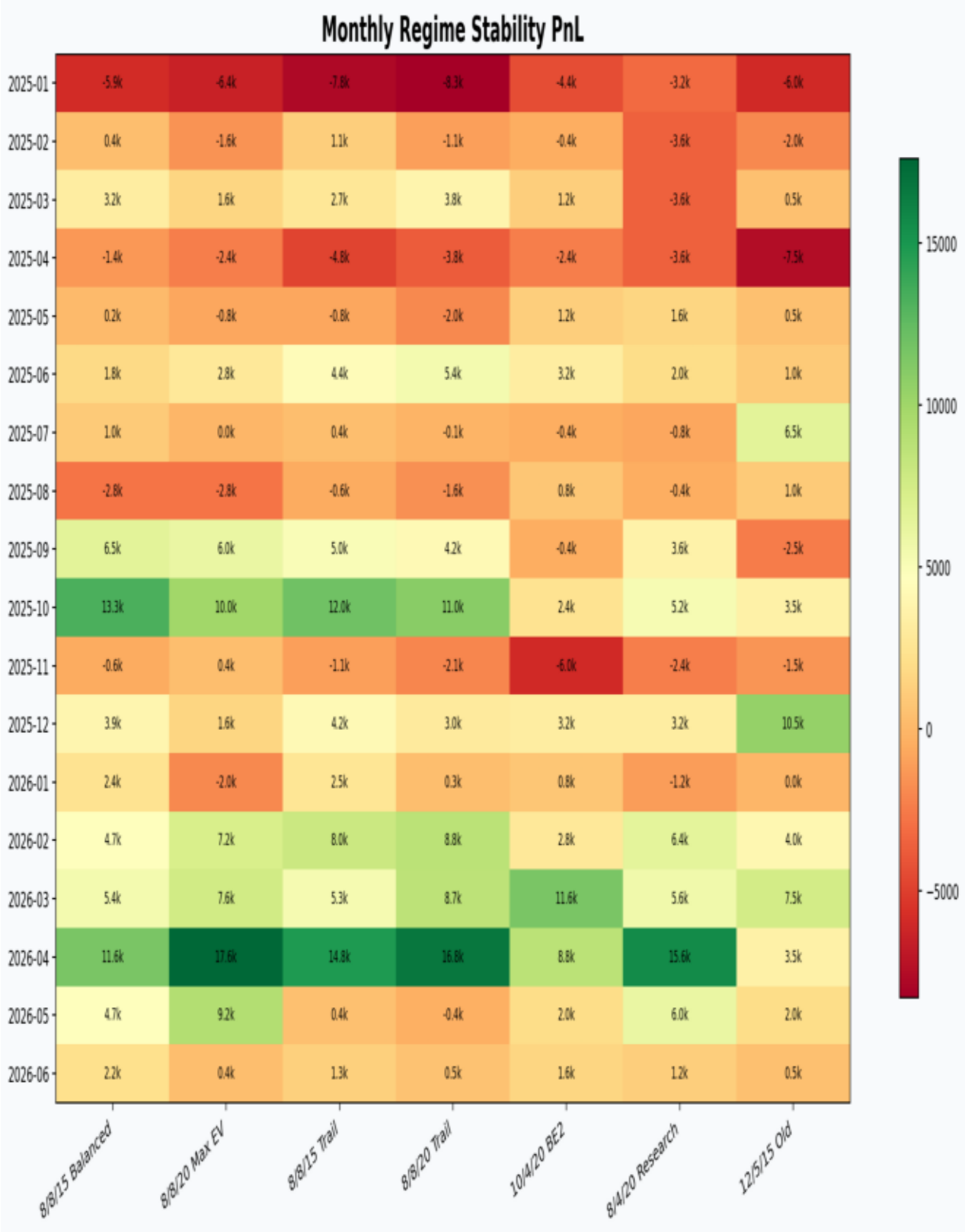
2025 Train vs 2026 Out-of-Sample



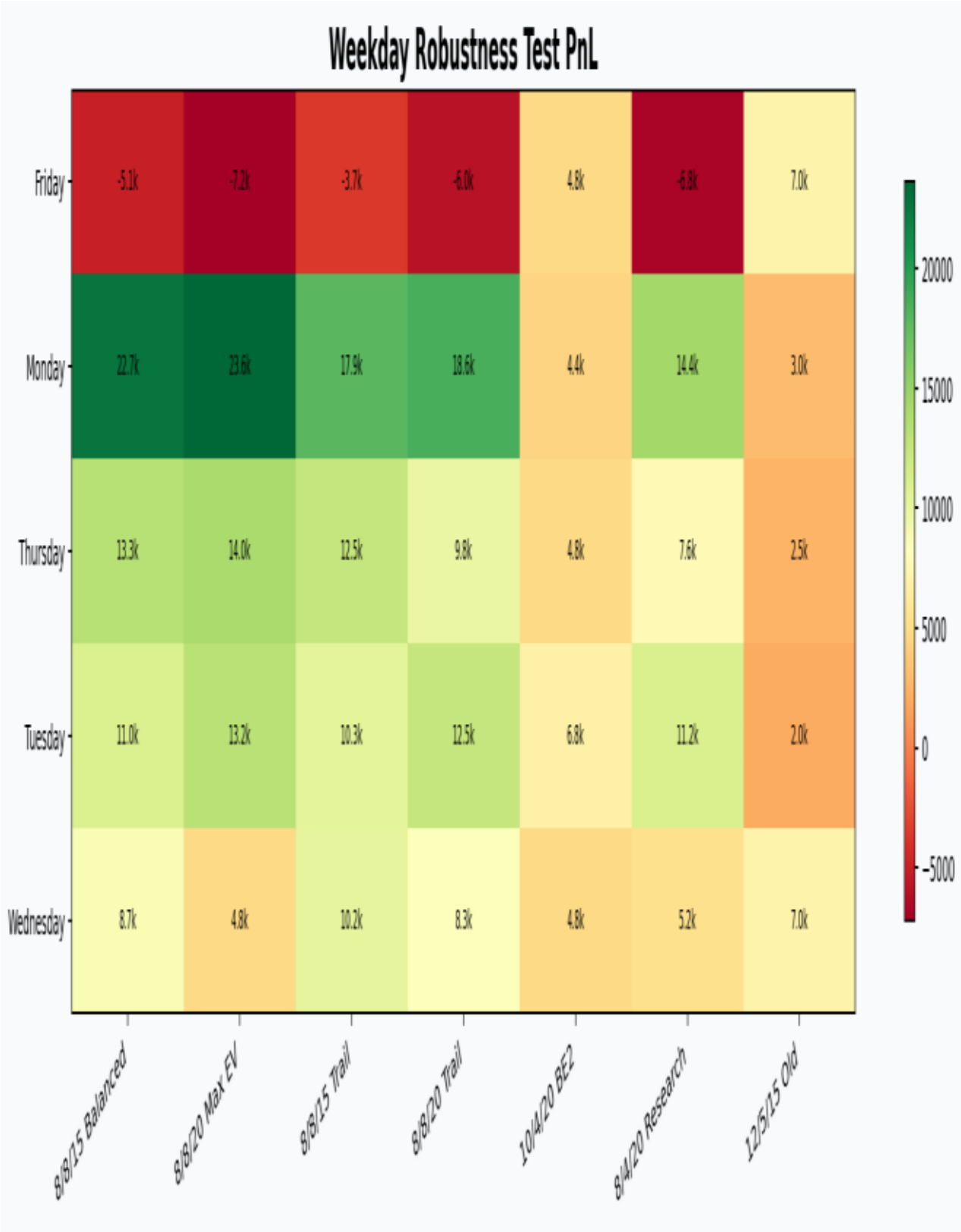
Quote-Activity Regime Test



Monthly Regime Stability



Weekday Robustness



Monte Carlo Summary Table

model	pnl_p05	pnl_p50	pnl_p95	dd_p05	dd_p50	loss_streak_p9	prob_positive
8/8/15 model B	24,100.00	51,800.00	78,805.00	-13,900.00	-8,000.00	12.00	1.00
8/8/20 model A	22,800.00	54,400.00	86,400.00	-16,400.00	-9,200.00	15.00	1.00
8/8/15 trail8/8	29,848.75	54,625.00	78,726.25	-10,813.12	-6,400.00	8.00	1.00

PnL and max drawdown percentiles come from 10,000 bootstrap resamples of daily MBP-1 results.

EV Significance Table

model	mean	ci05	ci50	ci95	p_mean_gt_zero_boot	t_stat
8/8/15 model B	201.95	93.77	201.56	306.63	1.00	3.08
8/8/20 model A	213.23	88.72	211.67	336.19	1.00	2.82
8/8/15 trail8/8	212.31	116.14	212.55	306.33	1.00	3.65
10/4/20 BE2 eval	113.62	26.46	112.06	205.45	0.98	2.08

Bootstrap CI is for average daily PnL. This is not a guarantee, but it helps separate robust EV from random noise.