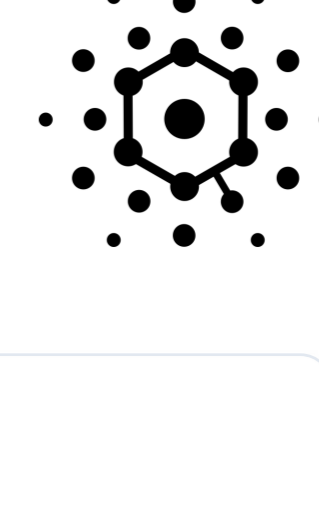


Quanta G-Type Market Maker Trading Performance

Performance report - window: 2025-09-15 00:02:10 to 2025-10-03 23:52:22



Executive Summary

The market maker algorithm executed 4,353 trades, turning over \$77,805 in notional while deploying up to ~\$3,644 of capital at risk. Cumulative profit was \$77.61, equivalent to a dataset return on capital of 2.13%. A simple linear annualisation implies 777.49%, 11 of 19 periods finished profitable, indicating performance was not concentrated in a single session.

Execution remained highly passive with maker fills at 95.5%, indicating efficient spread capture and limited taker leakage. While cumulative profit remained positive at \$77.61, the window captured a drawdown with a max trough of -175.71 USDC. This points to sequencing risk rather than structural unprofitability. Monte Carlo outcomes were uniformly non-negative (100% positive; mean \$77), supporting strong durability under sequence variation. Price - Drawdown correlation was positive (r=0.80), suggesting structural sensitivity to price regimes.

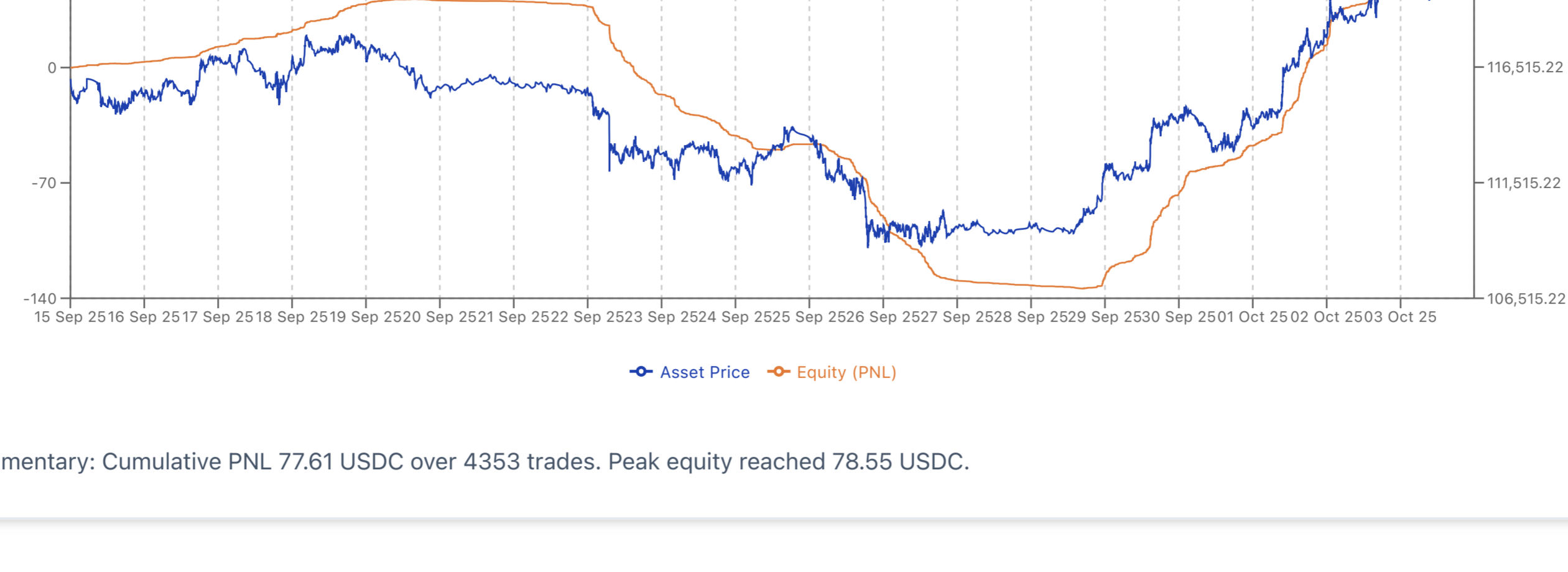
Turnover efficiency (Volume-to-Capital) was 8.86x, below crypto market-maker norms (~10-50x, Kaiko 2022) and within traditional dealer ranges (~3-10x, Greenwich 2020). Below crypto norms but comparable to TradFi; could reflect conservative quoting, lower venue velocity, or inventory caps.

Key Performance Indicators (KPI's)

KPI	Value	KPI	Value
Total Trades	4,353	Average Win (USDC)	0.2
Total Volume (USDC)	77,604.67	Average Loss (USDC)	-0.06
Total Profit (USDC)	77.61	Sharpe Ratio	6.73
Average Trade Volume	17.83	Sorntino Ratio	10.38
Max Trade Volume	3718	Return on Capital (dataset)	2.13%
Min Trade Volume	1.12	Annualised APR (simple)	777.49%
Max Capital Used (USDC)	3,643.6	Price-Drawdown Pearson r	0.8
Volume-to-Capital Ratio	8.86x	Avg Trades per Period	229.11
Win Rate	30.76%	Max Drawdown (% of Peak Equity)	223.70%
Gross Profit (USDC)	266.93	Price Range over Window (%)	14.08%
Gross Loss (USDC)	189.32	Peak to Trough (hrs)	217.38
Profit Factor	1.41	Trough to Recovery (hrs)	93.61

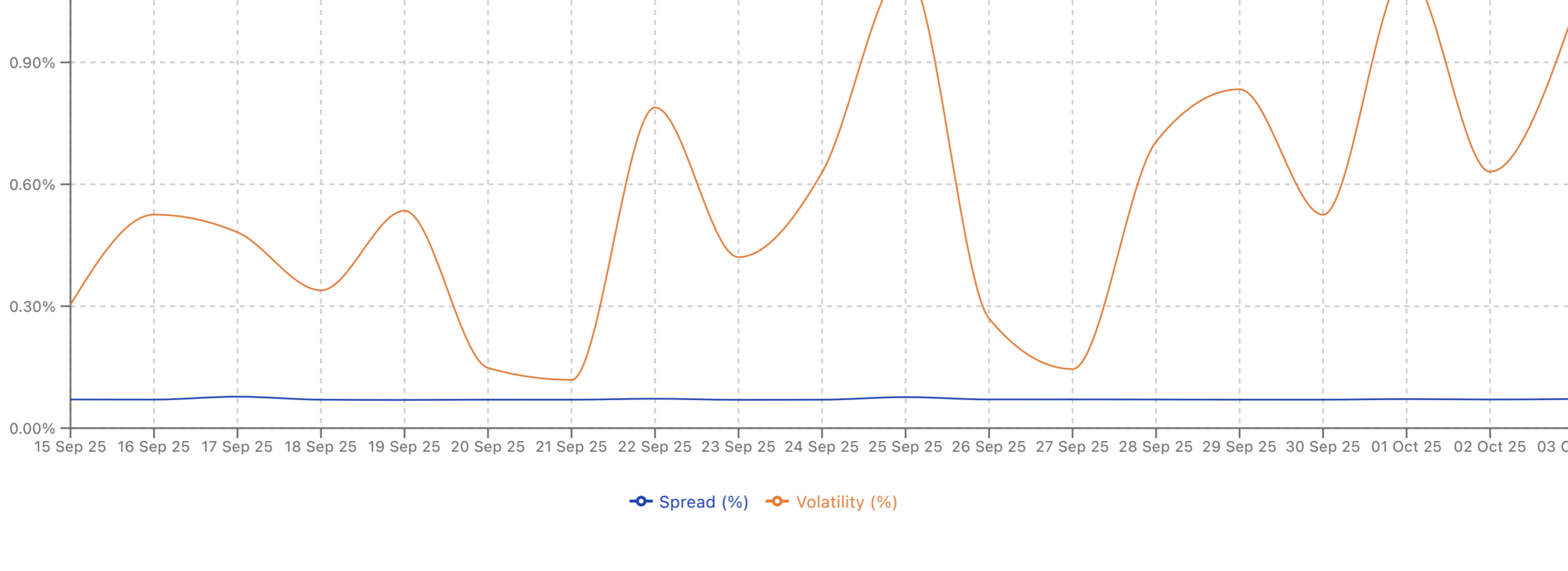
Commentary: Volume-to-capital 8.86x; Profit Factor 1.41; Win Rate 30.76%; Sharpe 6.73; Sorntino 10.38; ROC 2.13%; APR 777.49%

Equity Curve



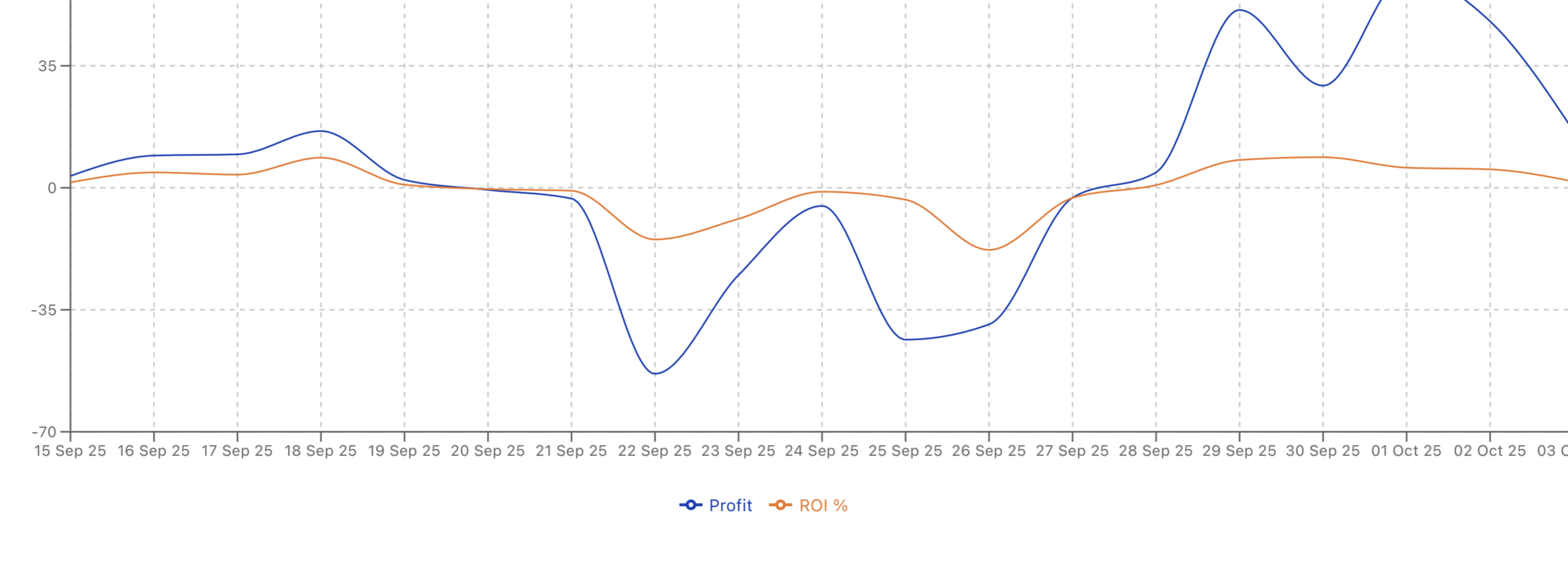
Commentary: Cumulative PNL 77.61 USDC over 4353 trades. Peak equity reached 78.55 USDC.

Price Dispersion & Spread



Commentary: Price Dispersion is the daily coefficient of variation of trade prices; Volatility is the mean % gap between consecutive Buy/Sell prints within the day. Rising dispersion typically coincides with wider spreads; persistent decoupling can indicate either quote skew or regime shifts.

Trading Period ROI



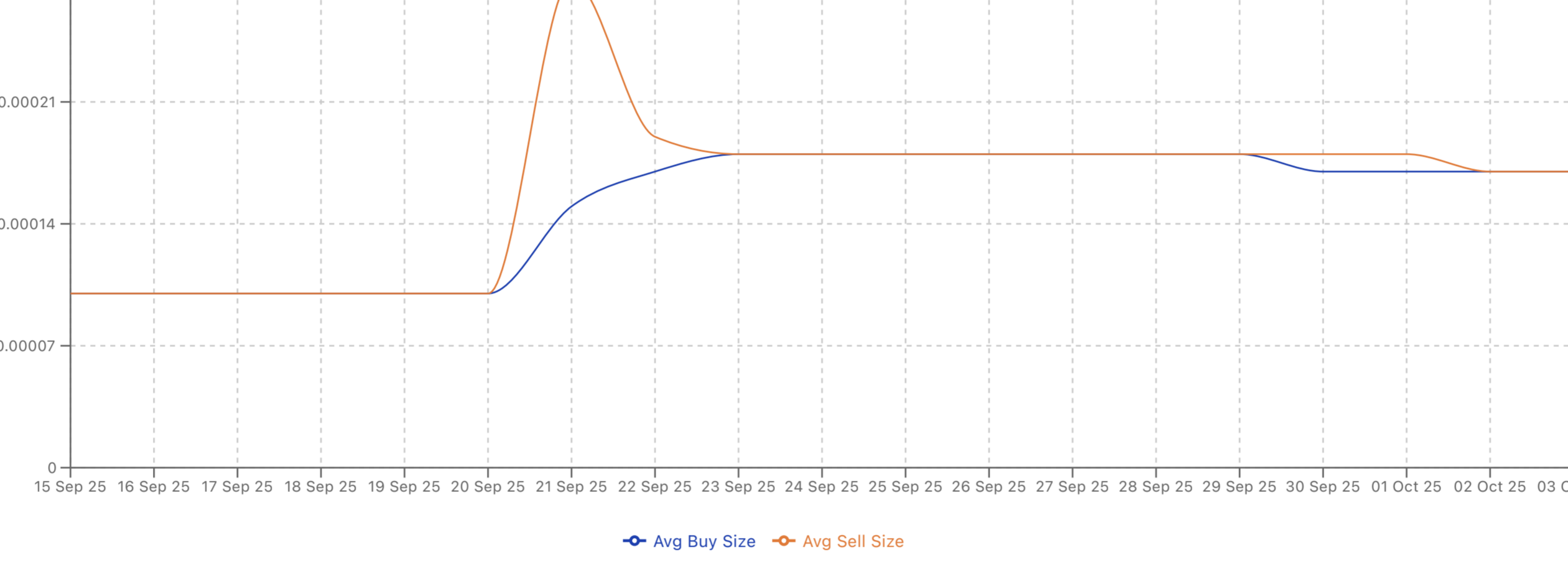
Commentary: Peak ROI 8.77% in Period 16; total periods 19.

Drawdown



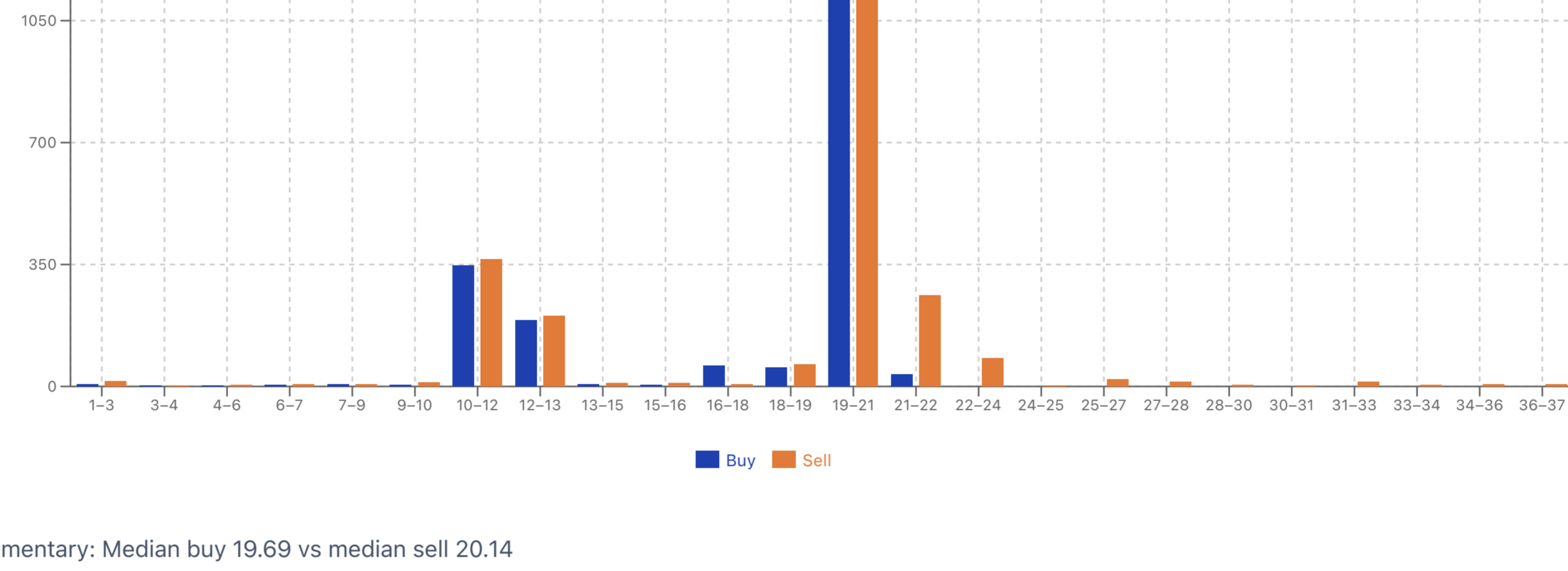
Commentary: Max drawdown -175.71 USDC (223.70% of peak equity). Recovery span 175.71 USDC (100.0% of trough depth). Price range over window: 14.08% (min 103.689; max 123.992). Peak to Trough 217.38h; Trough to Recovery 93.61h. This chart visualises drawdown points against contemporaneous trade prices. Pearson correlation = 0.804 (strong, positive, statistically significant, n=4353). Higher prices tend to coincide with shallower drawdowns, indicating stress is not concentrated during sell-offs.

Trade Size by Side (Daily Median)



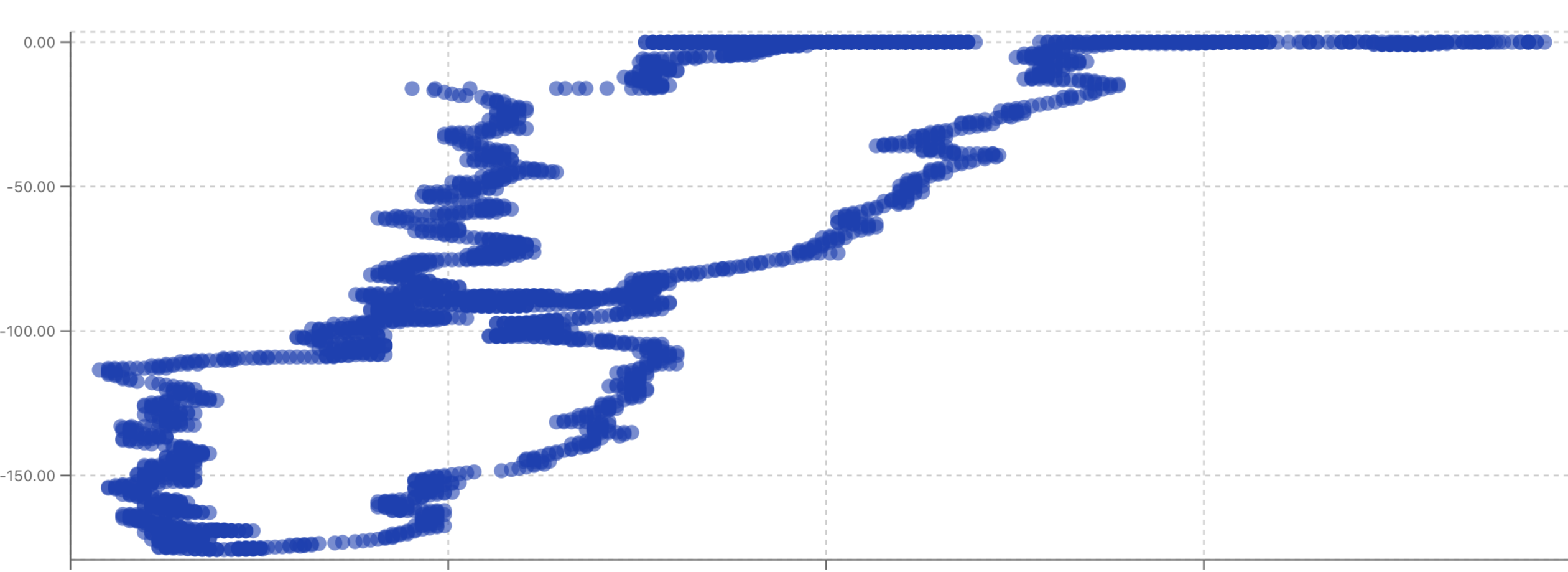
Commentary: Daily median trade sizes by side (notional). Persistent divergence can indicate skewed inventory management or asymmetric liquidity provision; convergence suggests balanced flow.

Order Size Distribution: Buys vs Sells



Commentary: Median buy 19.69 vs median sell 20.14

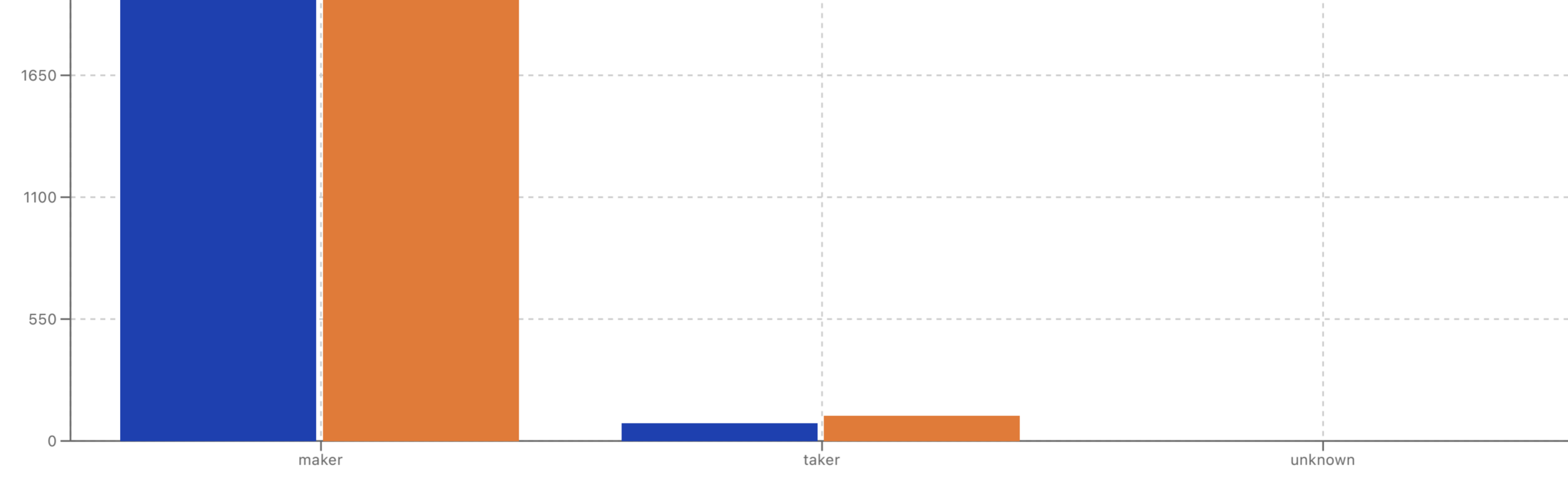
Price vs Drawdown



Commentary: This chart visualises drawdown points against contemporaneous trade prices. Pearson correlation = 0.804 (strong, positive, statistically significant, n=4353). Higher prices tend to coincide with shallower drawdowns, indicating stress is not concentrated during sell-offs.

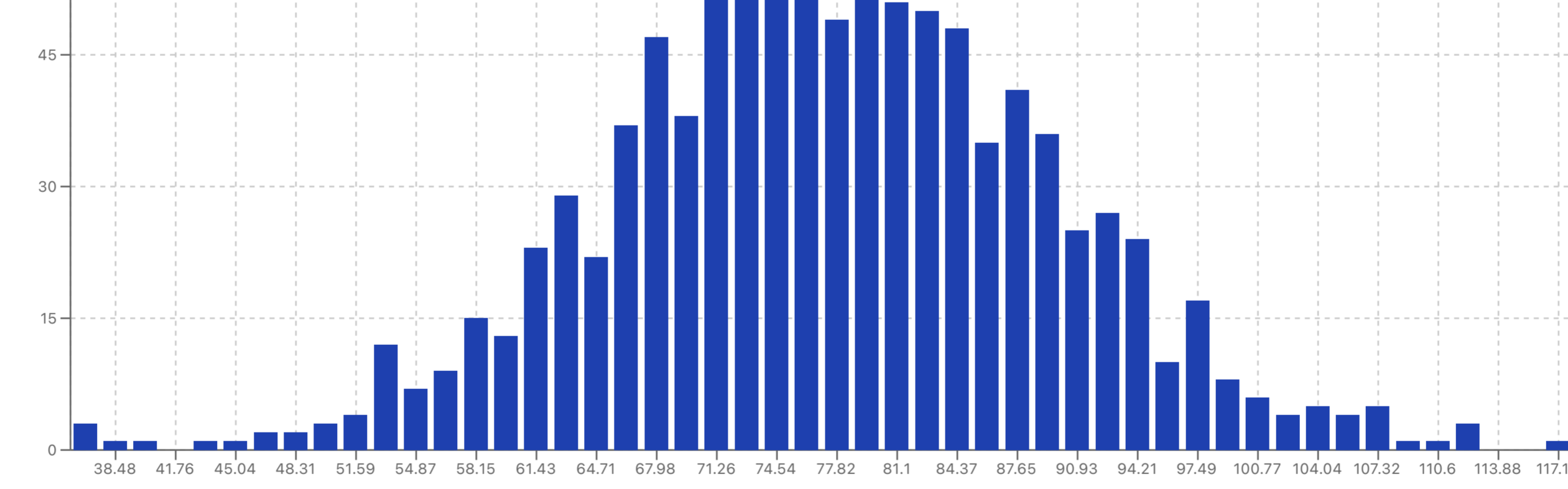
Fee Structure

Fee Type	Buy	Sell	Total	% of Overall
Maker	2,038	2,120	4,158	95.52%
Taker	80	115	195	4.48%
Unknown	0	0	0	0.00%



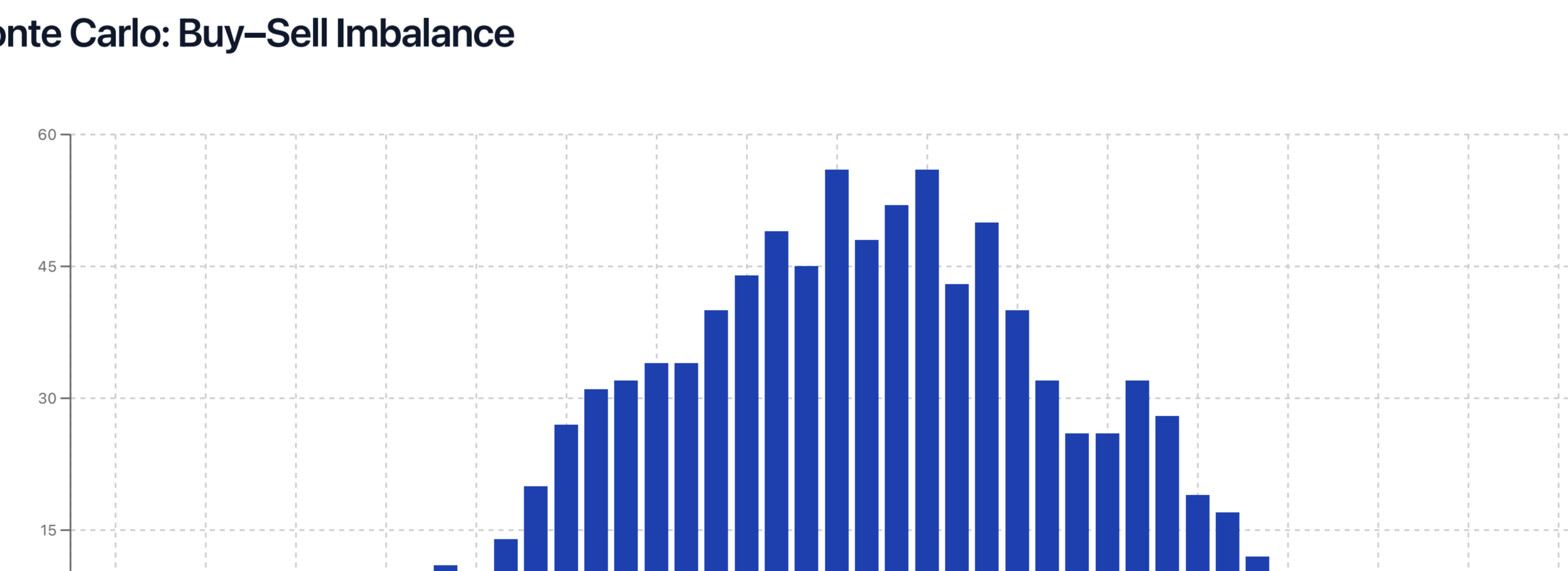
Commentary: Maker 95.5% of fills; taker 4.5% of fills.

Monte Carlo: Final PNL



Commentary: Mean 77.43 USDC, 100.0% positive paths.

Monte Carlo: Buy-Sell Imbalance



Commentary: Imbalance mean -3380.58 USDC

Trading Period ROI Log

Period	Trades	Volume (USDC)	Profit (USDC)	Capital Used (USDC)	ROI
2025-09-15	235	2,693.38	3.39	218.52	1.55%
2025-09-16	201	2,326.35	9.24	209.92	4.40%
2025-09-17	282	3,272.17	9.59	254.12	3.78%
2025-09-18	198	2,275.61	16.27	188.37	8.63%
2025-09-19	129	1,490.59	2.26	254.91	0.89%
2025-09-20	40	653.55	-0.6	162.5	-0.37%
2025-09-21	57	1,338.78	-3.11	361.1	-0.86%
2025-09-22	323	6,530.56	-53.34	359.8	-14.83%
2025-09-23	245	4,941.52	-25.04	281.01	-8.91%
2025-09-24	182	3,272.17	-5.21	458.05	-1.14%
2025-09-25	459	8,973.09	-43.55	1,274.05	-3.42%
2025-09-26	374	7,247.87	-39.18	219.84	-17.82%
2025-09-27	59	1,143.91	-2.86	98.24	-2.91%
2025-09-28	116	2,263.4	4.44	579.16	0.77%
2025-09-29	250	4,906.75	51	639.5	7.97%
2025-09-30	287	5,703.77	29.3	334.09	8.77%
2025-10-01	293	5,879.41	61.03	1,057.02	5.77%
2025-10-02	327	6,565.84	47.73	903.34	5.28%
2025-10-03	296	5,759.4	16.25	909.41	1.79%

Glossary of Key Terms

Term	Definition
Notional (USDC)	Trade size expressed in base currency (e.g., USDC).
Capital Used	Maximum absolute running inventory exposure (proxy for deployed capital).
Volume-to-Capital Ratio	Total traded notional + Capital Used; measures turnover efficiency.
Profit Factor	Gross profit ÷ Gross loss; >1 implies profits exceed losses.
Win Rate	Proportion of profitable trades.
Sharpe Ratio	Mean PNL per trade ÷ Std. dev. of PNL, scaled by \sqrt{N} ; risk-adjusted return.
Sorntino Ratio	Mean PNL per trade ÷ Downside std. dev., scaled by \sqrt{N} ; penalises downside only.
Return on Capital (ROC)	Total profit ÷ Capital Used over the dataset.
Annualised APR (simple)	ROC × 365; linear annualisation (not compounding).
Drawdown	Equity relative to prior peak (negative values reflect pullbacks).
Max Drawdown (% of Peak Equity)	Largest equity decline from a prior peak, expressed as a % of that peak.
Peak to Trough (hrs)	Elapsed hours from equity peak to subsequent drawdown trough.
Trough to Recovery (hrs)	Elapsed hours from drawdown trough until equity fully recovers to prior peak.
Maker/Taker Fee	Maker adds liquidity (postwed limit); taker removes liquidity (market/IOC).
Fee Attribution	Buyers pay fee in base (converted by price); sellers pay in quote.
Period	Trading day defined as 00:00 local to 00:00 next day.
Avg Trades per Period	Mean number of trades per period.
Monte Carlo (PNL)	Bootstrap of per-trade PNL to stress sequence risk.
Pearson Correlation Coefficient (r)	Measures the strength and direction of a linear relationship between two variables.
Buy-Sell Imbalance	Bootstrapped difference of total buy vs sell notional (inventory symmetry).
Price Dispersion (Coefficient of Variation)	Daily volatility proxy: standard deviation of trade prices divided by their mean, expressed as a percentage. Indicates how turbulent prices were relative to the day's average price.
Spread (Effective, %)	Approximate buy-sell gap: average percentage difference between contemporaneous buy and sell trade prices within a day. Wider spreads often reflect higher volatility or lower liquidity.

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Notes: Citations support fee attribution, turnover benchmarks, Monte Carlo sequencing risk, and limit-order-book microstructure.