Trading Boosters · Jan 5, 2026 · 6 min read

Do Breakouts of Strong Swings Work? I Tested 40 Futures Markets and the Data Is Clear

Many traders spend hours hunting for strong support and resistance levels with the goal of entering counter-trend trades. They bet on price hitting a wall and reversing. However, when I tested over 15 years of history across 40 futures markets, I found something different.

Peter
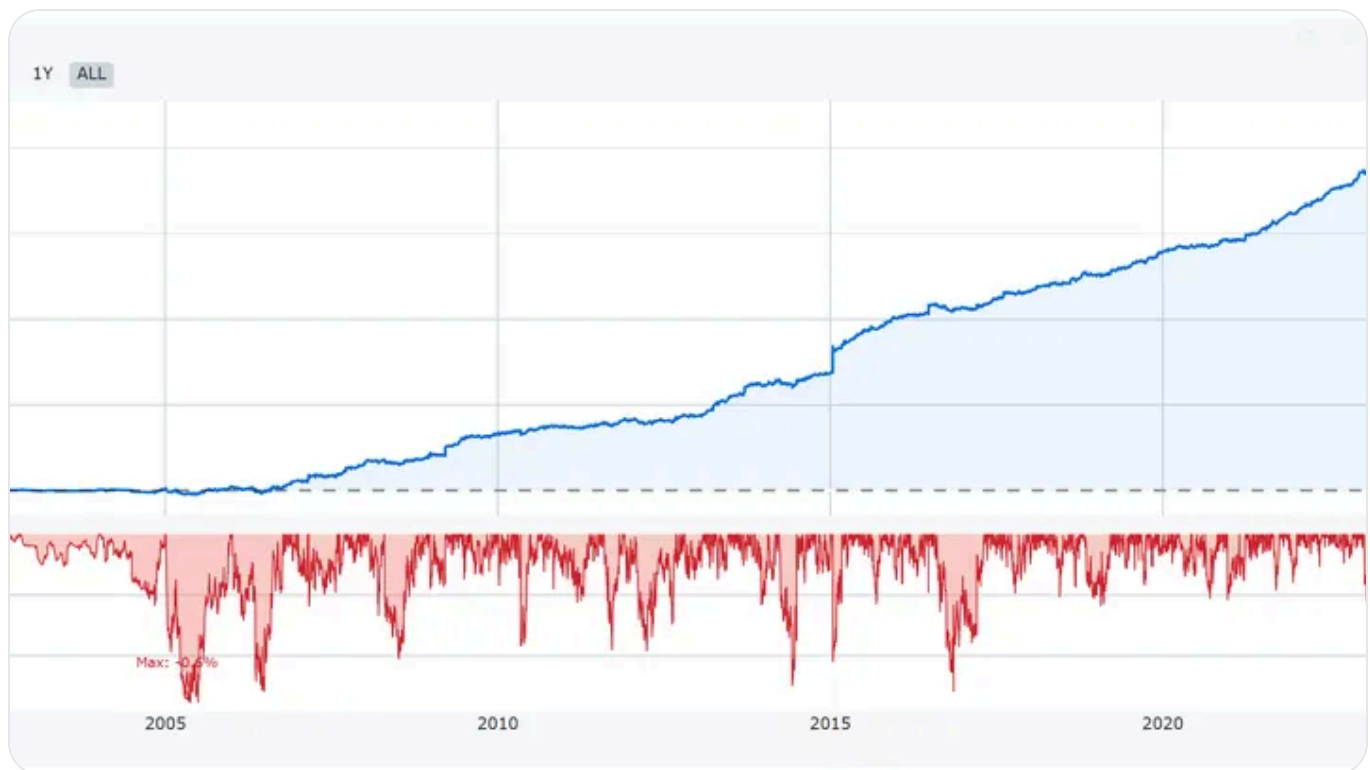
Holding a position mechanically in the direction of the breakout—even for just a few hours after a swing is breached—proves to be a statistically much more interesting **edge** for building a robust trading system.

Trend trading is one of the safest methods in trading. But where do you moving train? One of the potentially strongest areas is the breakout of

high/low—places where a significant shift in supply and demand has historically occurred.

1. What Is a Swing and Why Does It Matter?

On the chart below, you can see a 120-minute timeframe of the Gold futures contract (GC) with swings marked. Blue points indicate a *swing high* (local peaks), and red points indicate a *swing low* (local bottoms).

Visual representation of Swing Highs (blue dots) and Swing Lows (red dots) on a 120-minute Gold (GC) chart. These levels serve as the critical entry triggers for the breakout tests.

Marking these swings gives us an immediate navigational map. Price didn't turn at these points by accident. Behind every such point was a temporary shift in the balance of power between buyers and sellers. The market "remembers" these levels.

💡 **Market Psychology Behind the Swing**
Why are swings so important? Imagine a swing high as a place where the last group of buyers suffered pain when the market turned against them. At the same time, it is the place where bears (short sellers) place their stop-losses to protect profits.
When price returns to this level and breaks through it, two things happen simultaneously:

How to Define a Swing for Algorithmic Testing

Before we start testing, we must define swings precisely. A subjective "eyeball" view isn't enough for backtesting. There are many methods:

- **Fractals (Bill Williams):** A swing high is a bar with the highest High, surrounded by N bars with lower Highs.
- **Percentage Retracement:** A swing is formed if the market retraces by $X\%$.
- **ATR Movement:** A swing must be of a minimum size measured in multiples of the Average True Range (ATR).

For this research, I focused on more **significant swings**—those that appear roughly once a day or less. I used a volatility-based definition (1× daily ATR) with a small additional filter. If you apply simple ATR logic, your swing structure—and thus your test results—should be very similar to mine. I won't reveal the exact script definition, as I plan to build a proprietary system on this concept.

2. Test Methodology: Seeking Pure Probability

The goal of this research is not to show a finished strategy, but to determine the **fundamental market tendency.** Does the market tend to bounce (Mean Reversion) or break through (Breakout) after touching a significant swing? To get "pure data," the tests are performed **without commissions and without slippage.**

Test Parameters

- **Data:** Continuous, back-adjusted 1-minute data from TradeStation.
- **Scope:** 40 futures markets (US indices, commodities, bonds + DAX).
- **History:** From 2003 (most markets from 2006) to the present.
- **Entry:** Stop order exactly at the swing price. Each swing is traded only once.
- **Money Management: Volatility Normalization.** I open a number of contracts corresponding to a $25,000 movement based on average daily volatility.

- *Note:* This is not a recommended risk for a real account! It is a mathematical method to ensure that cheap corn has the same weight in the test as an expensive stock index.
- **Exit:** Time-based. We test what happens after *X* hourly bars. No other Stop-Loss or Profit-Target.

3. Test Results: The Myth of Reversals Crumbles

Let's look at the hard data. I tested various position holding times.

A) Holding 1 Hour After Breakout (Immediate Reaction)

In this scenario, we enter upon touching the swing and exit at the Close of the following 60-minute bar. Here is a visual example of a trade on Crude Oil (CL), which happened to end in a loss (false breakout):
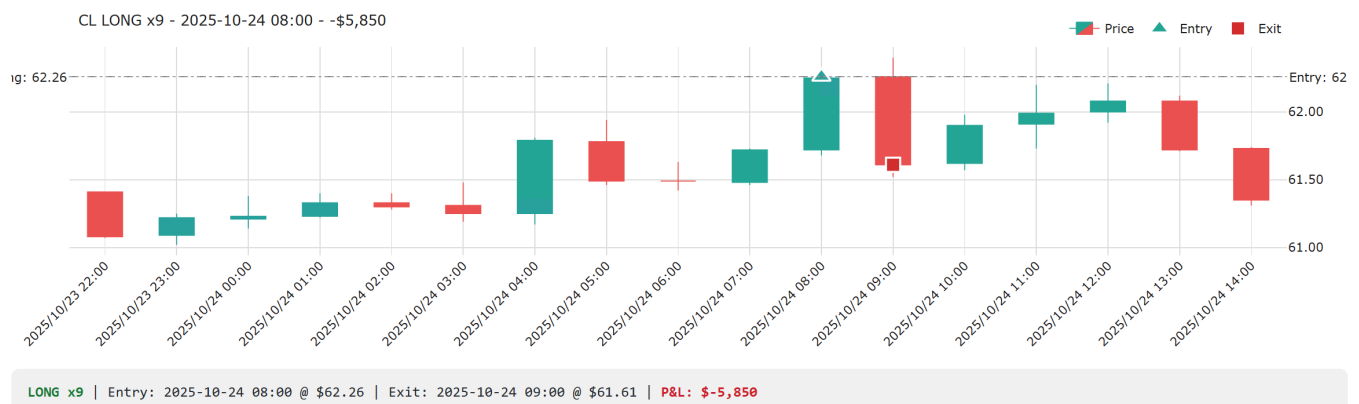
An example of the execution logic on Crude Oil (CL). The system enters a Long position on the breakout of the swing high and exits exactly one hour later. Note that not every breakout is successful, as seen in this false breakout example which resulted in a loss.

Although the example above didn't work out, statistics from **over 40,000 trades** speak clearly in favor of breakouts. If you had mechanically bought swing highs and sold swing lows on all 40 markets with a 1-hour exit, your theoretical equity curve would look like this:
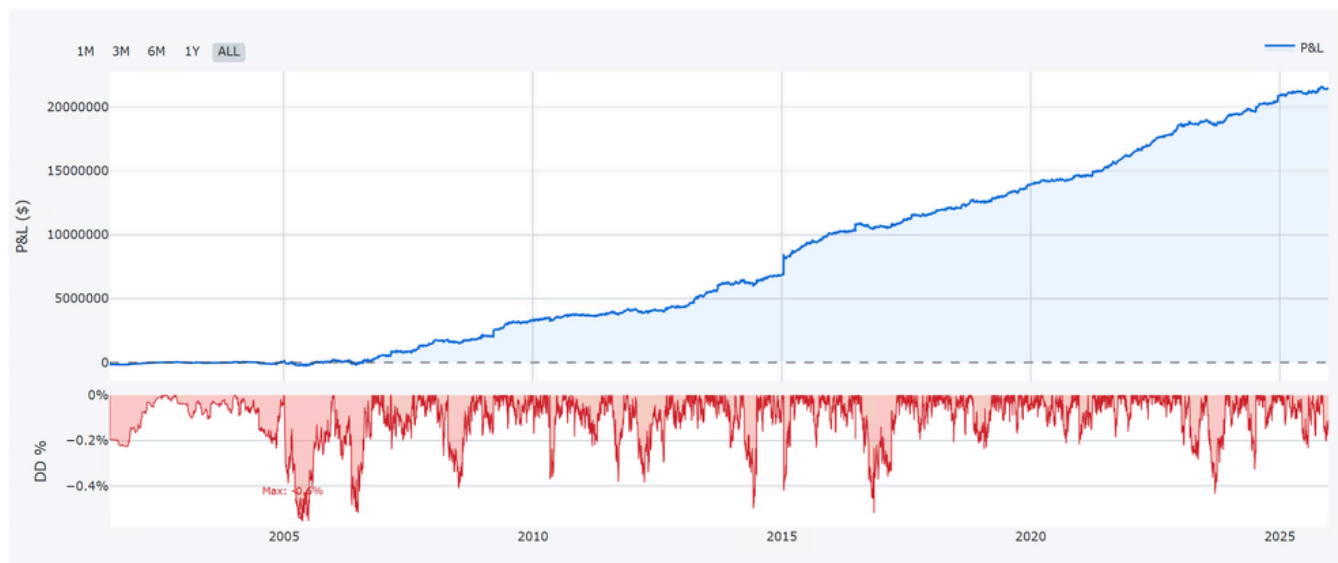
The chart displays the theoretical potential (gross profit) of the breakout principle itself without applying costs and risk management.

Key Findings:

- **Sharpe Ratio 1.59:** This is a very solid number for a "raw" system without filters and SL. Though let's not forget commissions and slippage are excluded.
- **Consistency:** The system has worked stably for over 25 years.
- **Symmetry:** Both sides make money—Long and Short:

Direction Breakdown	
Long Trades	22082
Long Winners	11248 (50.9%)
Long Net P&L	$10,723,903
Short Trades	21743
Short Winners	10896 (50.1%)
Short Net P&L	$10,730,206
Best Hour	04:00 ($1,151/trade)
Worst Hour	16:00 ($-468/trade)

Performance breakdown by direction for the 1-hour holding period. The results show remarkable symmetry, with both Long and Short trades contributing almost equally to the total profit, confirming the edge exists in both directions regardless of market bias.

Some markets have truly exemplary results.

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================================================================================================
Symbol Name              Trades    Net Profit  Win Rate    Avg Win    Avg Loss   Mean P&L  Sharpe  Max DD
------------------------------------------------------------------------------------------------
AD     Australian Dollar   1459   -154,990 $     48.5%    3,775 $    -3,766 $    -106 $    -0.11   17.7%
BO     Soybean Oil         1237    546,336 $     52.2%    4,932 $    -4,467 $     442 $     0.34    7.8%
BP     British Pound       1406    334,331 $     50.4%    4,046 $    -3,636 $     238 $     0.29    7.0%
C      Corn                1192    459,812 $     44.8%    6,345 $    -4,451 $     386 $     0.28    8.8%
CC     Cocoa                 64     73,040 $     57.8%    5,231 $    -4,463 $   1,141 $     0.27    2.3%
CD     Canadian Dollar     1365    -73,270 $     47.2%    4,451 $    -4,077 $     -54 $    -0.05   13.6%
CL     Crude Oil           1413    905,200 $     54.7%    3,891 $    -3,285 $     641 $     0.91    3.4%
CT     Cotton              1149  1,922,515 $     60.5%    5,750 $    -4,567 $   1,673 $     1.22    6.2%
DX     US Dollar Index     1334    645,966 $     52.3%    4,661 $    -4,100 $     484 $     0.45    9.3%
EC     Euro FX             1390    575,744 $     51.2%    4,779 $    -4,169 $     414 $     0.49   11.0%
ES     E-mini S&P 500      1447    842,812 $     49.7%    4,896 $    -3,678 $     582 $     0.58    9.9%
FC     Feeder Cattle        352    579,325 $     55.7%    7,837 $    -6,133 $   1,646 $     0.65    6.0%
FDAX   DAX Futures         1286    357,675 €     50.0%    4,265 €    -3,709 €     278 €     0.32    8.1%
FV     5-Year T-Note       1348     -6,945 $     43.8%    5,619 $    -4,396 $      -5 $     0.02   18.8%
GC     Gold                1457  2,013,880 $     56.4%    5,279 $    -3,663 $   1,382 $     1.67    2.8%
HG     Copper              1491    927,775 $     50.6%    4,681 $    -3,541 $     622 $     0.65    8.2%
HO     Heating Oil          340     88,171 $     52.9%    3,331 $    -3,196 $     259 $     0.22    4.0%
JY     Japanese Yen        1428    855,006 $     52.0%    5,167 $    -4,342 $     599 $     0.54    6.0%
KC     Coffee               738  1,150,451 $     58.3%    5,809 $    -4,375 $   1,559 $     1.18    2.9%
KW     Hard Red Winter Whea 1071    335,550 $     50.2%    4,762 $    -4,178 $     313 $     0.36    4.8%
LC     Live Cattle          381   -229,210 $     47.2%    7,794 $    -8,120 $    -602 $    -0.17   26.4%
LH     Lean Hogs            348    649,318 $     58.6%    7,516 $    -6,139 $   1,866 $     0.72    3.2%
MBT    Micro Bitcoin        337    282,558 $     53.4%    5,657 $    -4,685 $     838 $     0.80    6.2%
NG     Natural Gas         1448    523,210 $     52.3%    4,031 $    -3,670 $     361 $     0.49    5.4%
NK     Nikkei 225          1216    244,700 $     48.5%    4,334 $    -3,694 $     201 $     0.24    8.9%
NQ     E-mini Nasdaq 100   1433    465,555 $     51.4%    4,230 $    -3,799 $     325 $     0.41    4.6%
OJ     Orange Juice         349  1,526,070 $     64.8%   10,469 $    -6,828 $   4,373 $     1.08    3.0%
PL     Platinum            1382    848,895 $     52.6%    4,700 $    -3,921 $     614 $     0.68    5.9%
RB     RBOB Gasoline        459    -17,161 $     51.0%    3,506 $    -3,723 $     -37 $    -0.03    6.5%
RTY    E-mini Russell 2000 1450    489,375 $     52.1%    4,372 $    -4,057 $     338 $     0.41    8.0%
S      Soybeans            1062    592,412 $     50.8%    5,093 $    -4,134 $     558 $     0.51    5.6%
SB     Sugar                686    747,824 $     55.1%    5,423 $    -4,227 $   1,090 $     0.78    3.2%
SF     Swiss Franc         1310  1,062,144 $     47.9%    6,117 $    -4,060 $     811 $     0.18   19.2%
SI     Silver              1494  1,166,655 $     50.6%    4,983 $    -3,524 $     781 $     0.92    6.4%
SM     Soybean Meal         898    546,790 $     51.4%    5,595 $    -4,675 $     609 $     0.41    6.2%
TU     2-Year T-Note       1112 -1,068,383 $     34.5%    7,024 $    -5,173 $    -961 $    -0.46   64.6%
TY     10-Year T-Note      1341    384,172 $     46.0%    5,145 $    -3,854 $     286 $     0.24   10.2%
US     30-Year T-Bond      1318   -133,781 $     44.5%    4,206 $    -3,550 $    -102 $    -0.11   19.6%
W      Wheat               1354    718,288 $     51.1%    5,154 $    -4,303 $     530 $     0.47   11.9%
YM     E-mini Dow          1480    276,295 $     49.9%    4,211 $    -3,827 $     187 $     0.21   14.8%
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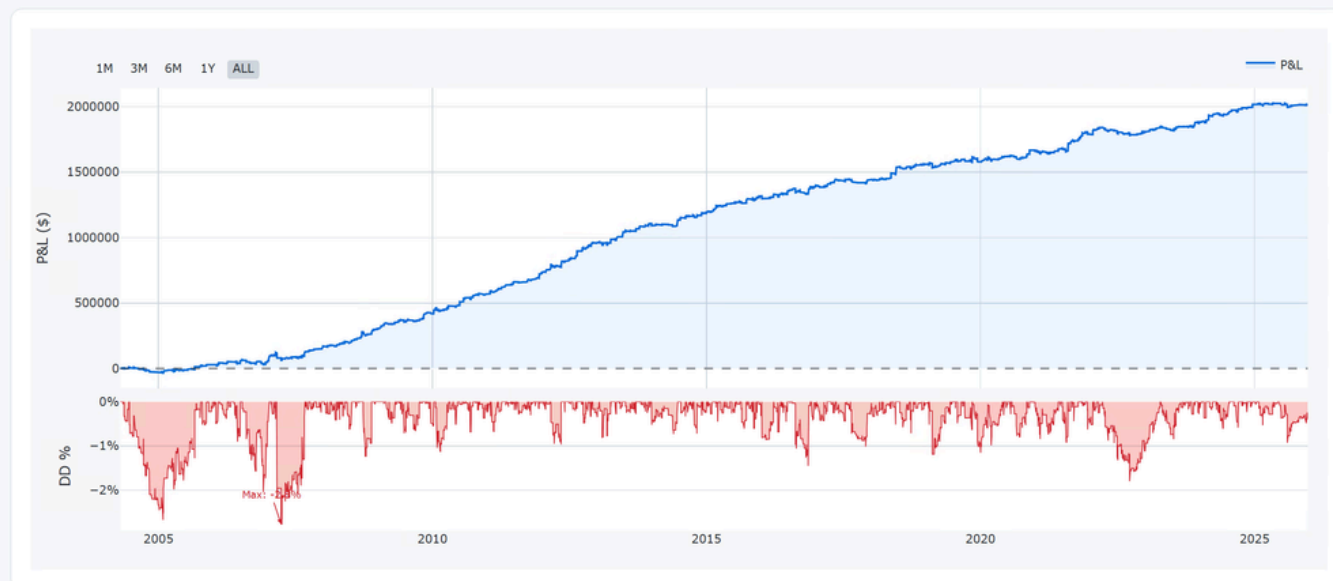
Test Results by Individual Markets

This is what the simulation looks like on Gold (GC):

Performance Summary

NET PROFIT	TOTAL TRADES	WIN RATE	SHARPE RATIO	MAX DRAWDOWN	AVG TRADE	MEDIAN TRADE
$2,013,880	**1,457**	**56.4%**	**1.67**	**2.8%**	**$1,382**	**$840**
+100.7% return	822W / 635L			$58,780		

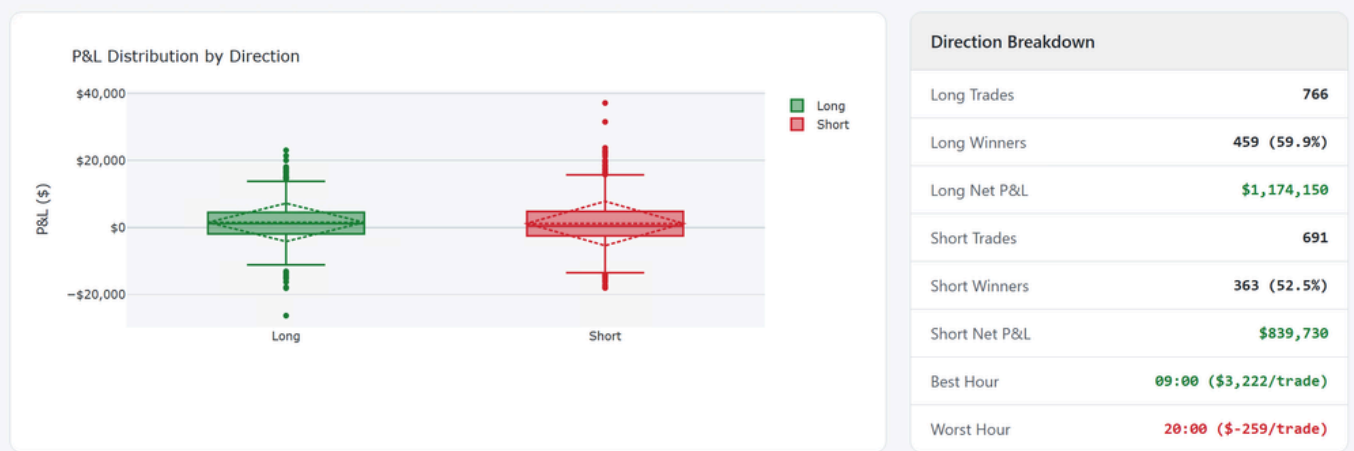| PROFIT FACTOR	CAGR	P&L SKEWNESS	PAYOFF RATIO	TRADES/YEAR
1.87	**3.3%**	**0.44**	**1.44**	**67**
	21.7 years			

Equity Curve & Drawdown

Detailed performance summary for Gold (GC) using the 1-hour breakout strategy. With a Sharpe Ratio of 1.67 and over $2M in theoretical profit, Gold demonstrates exceptionally strong momentum characteristics on swing breakouts.

It is fascinating to see how convincingly the probability works on the short side for Gold:

Long vs Short Comparison

P&L Distribution by Direction

Long
Short

Direction Breakdown	
Long Trades	766
Long Winners	459 (59.9%)
Long Net P&L	$1,174,150
Short Trades	691
Short Winners	363 (52.5%)
Short Net P&L	$839,730
Best Hour	09:00 ($3,222/trade)
Worst Hour	20:00 ($-259/trade)

Long vs. Short comparison specifically for Gold. Notice the robust performance on the Short side.

B) Holding 10 Hours (Intraday Trend)

Let's try holding the position longer. What happens if we give the trade room to breathe for about 10 hours:
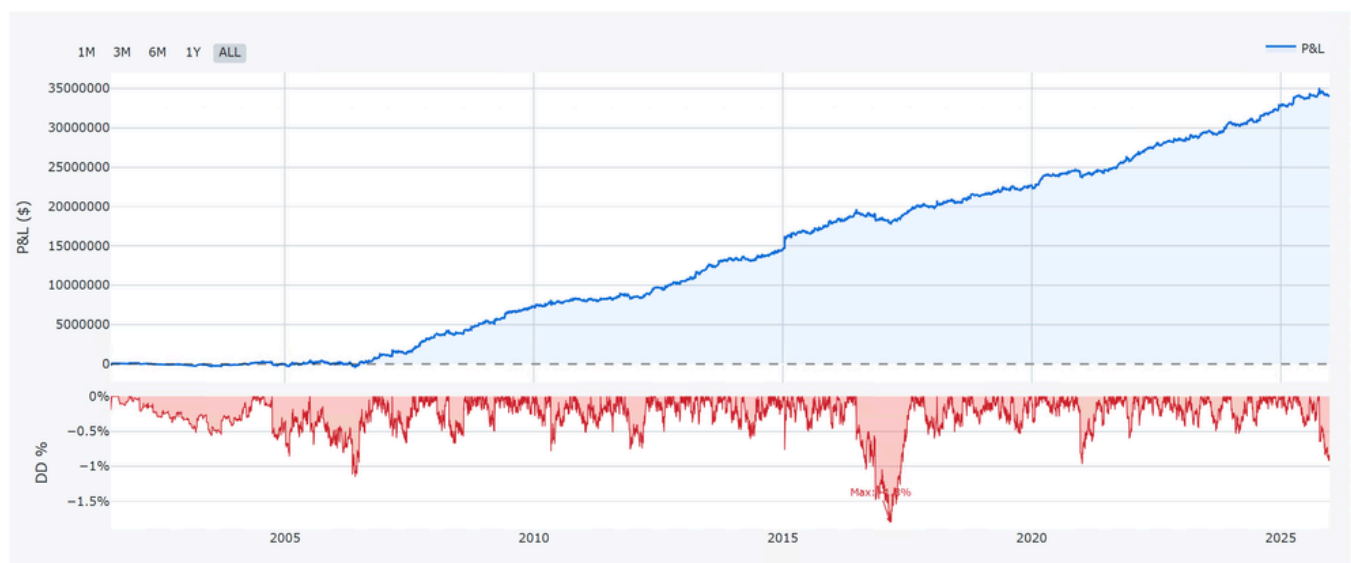
Equity curve for the 10-hour holding period (Intraday Trend)

The result? Still excellent.

- **Sharpe Ratio:** 1.55 (almost unchanged compared to 1 hour).
- **Drawdown:** Slightly increased.

- **Characteristics:** With more time, the Long side begins to dominate (due to the natural drift of many markets), while the success of Shorts drops slightly, but remains profitable.

Direction Breakdown	
Long Trades	21973
Long Winners	11446 (52.1%)
Long Net P&L	$20,142,932
Short Trades	21629
Short Winners	10801 (49.9%)
Short Net P&L	$13,895,974
Best Hour	04:00 ($1,775/trade)
Worst Hour	18:00 ($-1,487/trade)

Direction breakdown for the 10-hour hold. As the holding period extends, the natural "Long bias" of the broader market begins to skew results, though the Short side remains profitable.

4. Control Test: Where Does the Edge Disappear?

Every proper research needs a "control group." I therefore performed a test with an exit **after 2 days**. The assumption: Short-term momentum after the breakout should fade, and the result should be random or just copy the market drift.

The "Control Test" showing a 2-day holding period. The edge completely disappears, and the equity curve becomes erratic.

Confirmed.

- **Sharpe Ratio dropped to 0.21.**
- The equity curve is "messy."
- Profit is generated only by longs on markets that experienced strong bull trends. Shorts are in deep losses.

This test is key evidence that **the edge lies in the immediate reaction to the swing breakout.** The longer we wait, the more our advantage dissolves into market noise.

Conclusion and Next Steps

This research has given us a clear answer: **At the level of significant daily swings, markets have a statistically measurable tendency to continue the movement (breakout), not to reverse.**

Moreover, the tendency looks so strong that I plan to build a specific trading system on it. Naturally, with more sophisticated risk management and exits.

If you are looking for a way to trade trends intraday, entries on swing breakouts look like a robust starting point.

Next time, my research will focus on what realistic risk management and, above all, the application of standard costs and slippage will do to these results.
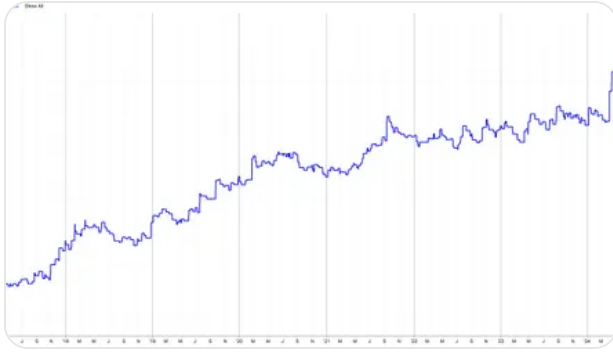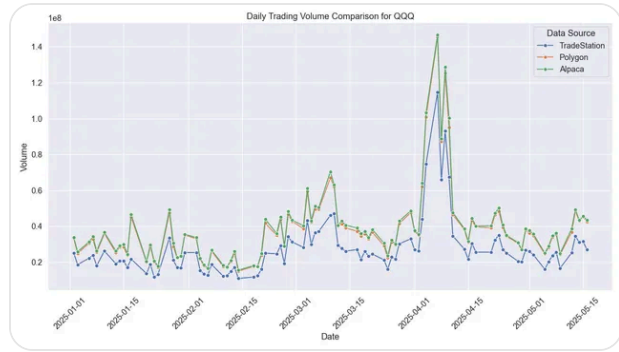
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