Issue No. 41 / Companion to candlestick-patterns-win-rate

The 6-Test Candlestick Setup Audit

How to clear cost-adjusted break-even before sizing real capital.

THIRTY-YEAR WEALTH GAP

$211,818

$60,000 starter account · $400 monthly · 7% vs 6% paths

53% wins.
54% break-even.
-0.05% per trade.

A 53% candle pattern reads like edge. Once a 0.20% round-trip cost lands on the same line, the per-trade EV flips negative. The break-even win rate climbs to 54%. Over thirty years, that one percentage point compounds to $211,818.

This six-test audit is the gate to run on every candle setup before position sizing. Pin it to your desk. Run it before the next signal.

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Author, Q1 2026 Balance Sheet Stress Report (SSRN / Zenodo)

1 Test win rate, average win, average loss

WHAT TO DO

Pull at least 50 setups from your trade log. For each entry that triggered the candle pattern under audit, record three numbers before any commission or slippage adjustment:

- actual win rate (count of winning trades / total)
- average win size as a percentage move
- average loss size as a percentage move

Bulkowski's catalog provides a per-pattern reference; your own brokerage data anchors the validation.

WHY IT MATTERS

These three numbers settle whether the candle setup even hits coin-flip territory before costs. A 53% win rate with equal 2.5% wins and losses sits one percentage point short of break-even.

CHECKLIST

- ☐ Sample size ≥ 50 documented trades
- ☐ Win rate calculated from actual fills, not advertised figures
- ☐ Average win and loss measured as % of entry, not absolute dollars
- ☐ Source: brokerage trade log + Bulkowski cross-reference

2 Subtract round-trip cost from EV

Slippage on liquid stocks runs 0.05%-0.15% per round trip; thin tickers run higher. Use your platform's actual fill data, not the advertised commission. The cost line is where intuition fails: a setup reading marginally positive on raw expectancy lands negative once the round-trip cost lands on the same line.

EXPECTED VALUE FORMULA

$$EV\_per\_trade = (p \times W) - (q \times L) - cost$$

3 Validate sample size + out-of-sample

A 53% reading inside 30 trades is noise; the same reading across 500 trades carries weight. Reserve at least 20% of your data as untouched out-of-sample. If the setup falls apart there, the in-sample 53% was overfit to the testing window, not a property of the pattern.

CHECKLIST FOR STEPS 2 + 3

- [ ] Round-trip cost includes commission + slippage + spread
- [ ] EV calculation completed: (0.53 × 0.025) - (0.47 × 0.025) - 0.002 = -0.05%
- [ ] Sample size ≥ 100 trades (preferred ≥ 500)
- [ ] 20% of data reserved as out-of-sample, untouched during fitting

4 Position sizing rule (THE GATE)

Above 54%	Full size
53% - 54%	Fractional or skip
Below 53%	Zero size

5 Cost monitoring after deployment

Re-measure round-trip cost monthly using actual fills. Brokerage fee schedules change; slippage drifts with liquidity conditions. A setup that cleared 54% in January may slip back below break-even in April if costs shift up.

6 Sample-window refresh

Rolling 6-12 month sample window. Drop trades older than the window. Re-run Steps 1-4 on the fresh sample. Pattern win rates drift with regime changes; what worked in trending markets fails in chop. The audit is not one-and-done.

What changes the $211,818 gap

Base case: $60K starter, $400/mo, 7% vs 6% paths, 30 years.

ASSUMPTION CHANGED	SCENARIO	30-YEAR GAP
Base case (53% / 0.20% cost)	Headline	**$211,818**
Cost 0.30% (drag 1.5%)	Higher cost	**$298,290**
Cost 0.10% (drag 0.5%)	Lower cost	**$112,999**
Win rate 55% (drag 0.5%)	Higher win rate	**$112,999**
Win rate 54% (drag 0%)	At break-even	**$0**
Win rate 50% (drag 1.4%)	Coin flip	**$281,904**
Trade frequency 40/yr (drag 2.0%)	Doubled activity	**$374,010**
Trade frequency 10/yr (drag 0.5%)	Halved activity	**$112,999**
Asym wins +0.5% (small gain)	Asymmetric wins	**-$12,159 (gain)**
Asym losses bigger (drag 1.5%)	Asymmetric losses	**$298,290**
Horizon 20y (drag 1%)	Shorter horizon	**$67,266**
Initial $120K (drag 1%)	Larger initial	**$337,453**

TheFinSense original calculation, May 2026.
All values Python-recounted within ±$10 tolerance across 55 cells.

Source stack

Three independent measurement traditions converge on the same verdict.

FOUNDATIONAL **Bulkowski / ThePatternSite**

53% bullish-kicking pattern reversal rate; 4.7M-bar dataset across 103 candle patterns.

→ *thepatternsite.com/Kicking.html*

SUPPORTING **Tharavanij, Siraprapasiri & Rajchamaha (2017)**

50-stock SET50 ten-year study; %D, RSI, MFI filters did not increase candle profitability.

→ *doi.org/10.1177/2158244017736799*

CONFIRMATORY **Caginalp & Laurent (1998)**

S&P 500 narrow uptrend reversal: 67.33% under strict conditions vs 52.78% baseline.

→ *doi.org/10.1080/135048698334637*

RELATED **Hwang, D. (2026)**

Q1 2026 Balance Sheet Stress Report: Three-Regime Classification of S&P 500 Equity.

→ *papers.ssrn.com/abstract=6614679*

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Math-driven personal finance research covering financial-statement diagnostics, equity-denominator risk, and concentrated-position screening. Every calculation is Python-verified against a 3-regime framework.

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