

# Backtesting Validation Template

From Lesson 24: Backtesting Reality - That Perfect Expectancy Is Lying to You

Use this template to validate backtest results and avoid curve-fitting disasters.

## ⚠️ The Brutal Truth

If your backtest looks too good to be true, it is.

You didn't find the holy grail. You curve-fit to noise, not signal.

## 📋 PRE-BACKTEST: Strategy Definition

**Strategy Name:** \_\_\_\_\_

**Core Thesis:**

**What edge am I trying to capture?**

**Why should this work?** (Behavioral edge, structural inefficiency, etc.)

**Entry Rules (Must Be Objective):**

1.

2.

3.

**Any subjective discretion?** Yes / No If Yes, this strategy can't be backtested reliably

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## Exit Rules:

**Stop Loss:** - \_\_\_\_\_

**Take Profit:** - Target 1: \_\_ (%) of position) - Target 2: \_\_ (%) of position) - Trailing: \_\_ (\_\_\_% of position)

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## Position Sizing:

- Risk per trade: \_\_ %
  - Max portfolio heat: \_\_ %
  - Correlation adjustments: Yes / No
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## Filters (Market Conditions):

- [ ] Regime filter (trending/ranging)
  - [ ] Volatility filter (ATR threshold)
  - [ ] Time-of-day filter
  - [ ] Volume filter
  - [ ] Other: \_\_\_\_\_
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## BACKTEST EXECUTION

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### Data Quality Check:

- [ ] **Tick data or 1-minute bars minimum** (not daily bars)
- [ ] **Includes bid-ask spread** (execution costs matter)
- [ ] **Commission + slippage modeled** (\$0.50-\$2.00 per side realistic)

- [ ] **Dividends/splits adjusted**
- [ ] **Survival bias avoided** (includes delisted stocks)

**Data Source:** \_\_\_\_\_

**Date Range:** \_\_ to \_\_

**Total Trading Days:** \_\_

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### **Results (Raw Numbers):**

**Total Trades:** \_\_

**Winning Trades:** \_\_ **Losing Trades:** \_\_

**Average Winner:** \$\_\_ **Average Loser:** \$\_\_ **Average R:** \_\_

**Total P&L:** \$\_\_ **Total R:** \_\_

**Largest Winner:** \$\_\_ (R) **Largest Loser:** \$\_\_ (R)

**Max Drawdown:** \_\_% (\$\_) **Longest Losing Streak:** \_\_ trades

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### **Performance Metrics:**

**Sharpe Ratio:** \_\_ **Sortino Ratio:** \_\_ **Profit Factor:** \_\_ (Gross Profit ÷ Gross Loss) **Expectancy:** \$\_\_ (Average profit per trade)

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## **RED FLAG DETECTOR**

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### **Critical Questions (Be Brutally Honest):**

#### **1. Sample Size: Is it statistically significant?**

- [ ] **<30 trades:** ❌ Not enough data, pure luck
- [ ] **30-100 trades:** ⚠ Marginal, needs more data

- [ ] **100-300 trades:** Decent sample
- [ ] **300+ trades:** Statistically significant

**My Trade Count:** \_\_

**Verdict:** Pass / Fail / Needs More Data

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## 2. Sharpe Ratio: Is it realistic?

- [ ] **>4.0:** Almost certainly overfit
- [ ] **3.0-4.0:** Suspiciously high, verify
- [ ] **2.0-3.0:** Excellent but rare, double-check
- [ ] **1.5-2.5:** Realistic for skilled trader
- [ ] **1.0-1.5:** Solid, achievable
- [ ] **<1.0:** Not worth trading

**My Sharpe:** \_\_

**Verdict:** Pass / Fail / Suspicious

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## 3. Parameter Optimization: Did I curve-fit?

**Did I test multiple parameter values?** Yes / No

**If Yes:** - Total parameters tested: \_\_ - Parameters selected: \_\_ - Selection criteria: Best P&L / Best Sharpe / Best DD / Other

**RED FLAG:** If you tested 50+ parameter combinations and picked the best one, you curve-fit.

**How I selected parameters:**

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**Verdict:** Clean / Suspicious / Overfit

#### 4. Look-Ahead Bias: Am I cheating?

**Do any rules use future information?**

Examples of look-ahead bias: - [ ] Using "swing high/low" (only known AFTER the swing completes) - [ ] Using "end of day" signals (can't trade at unknown close) - [ ] Using repainting indicators - [ ] Using future volatility/ATR that wasn't available at trade time

**My strategy has look-ahead bias:** Yes / No

**If Yes, where:**

**Verdict:** Clean / Biased

#### 5. Out-of-Sample Testing: Did I validate on unseen data?

**In-Sample Period:** \_\_ to \_\_ **Out-of-Sample Period:** \_\_ to \_\_

METRIC	IN-SAMPLE	OUT-OF-SAMPLE	DIFFERENCE
Avg R	—	—	—
Profit Factor	—	—	—
Sharpe	—	—	—
Max DD	__%	__%	__%

🚩 **RED FLAG:** If out-of-sample results are >20% worse, strategy is overfit.

**Performance Degradation:** \_\_%

**Verdict:** Pass / Fail

#### 6. Walk-Forward Analysis: Is it robust over time?

**Did you test rolling periods?** Yes / No

**If Yes, results by year/quarter:**

PERIOD	TRADES	AVG R	PROFIT FACTOR	TOTAL R
Q1	—	—	—	—
Q2	—	—	—	—
Q3	—	—	—	—
Q4	—	—	—	—

**Consistency Check:** - [ ] All periods positive R - [ ] No single period dominates results - [ ] Similar expectancy across periods

**Verdict:** Consistent / Inconsistent

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## 7. Market Conditions: Did one regime inflate results?

**Performance by Regime:**

REGIME	TRADES	AVG R	PROFIT FACTOR
Trending Up	—	—	—
Trending Down	—	—	—
Ranging	—	—	—
Volatile	—	—	—

🚩 **RED FLAG:** If 80%+ of profit came from one regime that rarely occurs.

**Verdict:** Balanced / Regime-Dependent

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## 8. Cost Reality Check: Did I model slippage?

**Modeled Costs Per Trade:** - Commission: \$\_\_ - Slippage: \$\_\_ - Total: \$\_\_

**Realistic Costs (Manual Entry):** - Should be \$1-3 per side minimum

**Did I use realistic costs?** Yes / No

**If I removed slippage, results would:** - Improve by: \_\_% X (unrealistic) - Stay similar ✓ (robust)

**Verdict:** Realistic / Optimistic

## ✓ VALIDATION SCORECARD

**Score each category:**

CATEGORY	SCORE	WEIGHT
Sample Size (100+ trades)	__/5	×2 = __
Sharpe Ratio (1.5-2.5 realistic)	__/5	×1 = __
No Curve-Fitting	__/5	×2 = __
No Look-Ahead Bias	__/5	×2 = __
Out-of-Sample Validation	__/5	×2 = __
Walk-Forward Consistency	__/5	×1 = __
Regime Balance	__/5	×1 = __
Realistic Costs	__/5	×1 = __

**Total Score:** \_\_ / 60

**Score Interpretation:**

**50-60 points:** ✓ Strategy is likely valid, proceed to paper trading **40-49 points:** ⚠ Some concerns, address red flags before live trading **30-39 points:** 🚩 Multiple issues, significant revision needed **<30 points:** ✗ Overfit or biased, start over with cleaner approach

**My Score:** \_\_\_\_\_

**Decision:** Proceed / Revise / Scrap

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## NEXT STEPS

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### If Score ≥50 (Proceed to Paper Trading):

- [ ] Paper trade for 30-60 trades minimum
- [ ] Track live vs. backtest performance
- [ ] Document any execution challenges
- [ ] Verify slippage assumptions
- [ ] Check emotional difficulty of following rules

**Paper Trading Start Date:** \_\_\_\_\_

**Expected Completion:** \_\_\_\_\_ (after 30+ trades)

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### If Score 40-49 (Revise):

**Red flags identified:** 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

**Revision plan:** 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

**Re-test date:** \_\_\_\_\_

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### If Score <40 (Scrap or Major Overhaul):

**Major issues:** 1. \_\_\_\_\_ 2. \_\_\_\_\_

**Core problem:** Curve-fit / Look-ahead bias / Unrealistic / Sample too small

**Lesson learned:**

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**Next strategy idea:**

## Paper Trading Comparison

**After 30-60 paper trades:**

Metric	Backtest	Paper Trading	Difference
Trades	—	—	—
Avg R	—	—	—
Profit Factor	—	—	—
Total R	—	—	—
Max DD	—%	—%	—%

🚩 **RED FLAGS in Paper Trading:** - Expectancy drops >20%: Strategy may not translate to live - Avg R drops >20%: Slippage worse than expected - Max DD increases >30%: Risk model inadequate - Can't follow rules: Strategy too complex or emotionally difficult

**Performance Difference:**   %

**Decision:** Go Live / More Paper Trading / Revise / Scrap

## Key Principles

**1. Be Skeptical of Great Results** - If backtest shows >5R expectancy, assume error - If Sharpe >3.0, verify extensively - Best strategies are "good enough," not perfect

**2. Out-of-Sample Testing is Non-Negotiable** - Always reserve 30% of data for validation  
- Never optimize on full dataset

**3. Walk-Forward Analysis Reveals Truth** - Test rolling periods - Consistent performance = robust - One great year = curve-fit

**4. Model Reality, Not Fantasy** - Use real slippage (\$1-3 per side) - Include commission - Test during different market conditions

**5. Paper Trade Before Live** - 30-60 trades minimum - Real-time execution reveals issues - Psychology can't be backtested

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**The goal isn't a perfect backtest. It's a robust strategy that works in real time.**

**Be honest. Be skeptical. Be thorough.**

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