

TRADING EDGE · EMPIRICAL FALSIFICATION

RSI Threshold Audit Worksheet

A four-step checklist for testing your charting platform's RSI indicator default against current-regime data.

47%

TSX HIT RATE

41.94%

5-OECD MEAN

\$226K

25-YR GAP

The canonical RSI 70/30 thresholds were calibrated by J. Welles Wilder in 1978 against US equity data from the 1966-1981 sideways regime. They have not been re-validated against the 1982-2000 or 2009-2026 secular bull markets.

Chong, Ng & Liew (2014) bootstrap-tested the rule across five OECD equity markets from 1976 to 2002 and found 41.94% mean sell-signal accuracy, sub-coin-flip on four of five markets.

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THE PROBLEM

Why this audit matters

Most retail charting platforms ship Wilder's 1978 70/30 default unchanged. TradingView labels RSI > 70 as 'Overbought' with a red bar in the indicator panel. Schwab Active Trader Pro screener presets surface RSI > 70 stocks for sell-watchlist generation. The convention dates back fifty years.

The empirical record across markets, however, tells a different story:

Equities

Chong, Ng & Liew (2014) tested RSI(14, 30/70) across the TSX, Dow Jones, Nikkei, Milan, and DAX from 1976 to 2002. Average sell-signal accuracy: 41.94%. Four of five markets were sub-coin-flip.

Cryptocurrency

Zatwarnicki et al (2023) tested long-only RSI 70/30 on Bitcoin and Ethereum 2018-2022. The rule returned 177.70% vs buy-and-hold 275.22% — a 97.52 percentage-point gap over four years.

Acting on a sub-coin-flip signal as a binary sell trigger compounds a 1.5 percentage-point behavioral drag on a portfolio over decades. On an \$80,000 starting balance with \$500 monthly contributions and a 25-year horizon, the gap reaches \$226,637 — equivalent to 9.6 years of maximum 2026 §402(g) elective 401(k) deferrals at \$23,500 per year.

The indicator itself is not broken. The 70/30 threshold framing is. This worksheet walks through four steps to audit your platform's default and, where needed, substitute a regime-aware alternative.

AUDIT FRAMEWORK

1 Identify your charting platform

Most retail platforms ship Wilder's 1978 70/30 default unchanged. The first audit step is locating your current RSI indicator settings so you can record the active Upper Band and Lower Band thresholds.

Platform-specific paths

- TradingView: Open the RSI indicator panel → click the gear icon → Inputs tab → change Upper Band and Lower Band fields.
- Schwab Active Trader Pro: Studies menu → RSI(14) → Edit Properties → Threshold fields. (The screener preset 'Overbought stocks' is a separate setting.)
- Fidelity Active Trader Pro: Chart settings → Indicators → RSI properties. Saved templates carry the old default forward; resave after editing.
- Robinhood (free tier): RSI threshold editing is not exposed. Use a separate charting service for analysis, then execute trades in Robinhood.
- Other platform: Locate RSI settings; record current Upper Band ____ / Lower Band ____.

WHY THIS STEP MATTERS

Saved chart templates often persist the old 70/30 default forward across every login session and every new chart you open.

Resave your template after any threshold change, or every new chart inherits the unaudited default and re-introduces the drag.

AUDIT FRAMEWORK

2 Identify the current market regime

The 70/30 default works best in sideways regimes resembling Wilder's 1966-1981 calibration window. In secular bull and bear markets, mean-reversion thresholds fail empirically. Use the 200-day moving average direction as your primary regime filter.

Regime lookup table

REGIME	200-DAY MA SIGNAL	70/30 DEFAULT APPLIES?
Sideways	Flat $\pm 3\%$ over 6 months	YES — keep 70/30
Secular Bull	Rising consistently 12+ months	NO — switch to Cardwell 60/80
Secular Bear	Falling consistently 12+ months	NO — switch to Cardwell 80/20
Crypto / Momentum	Trending altcoin or large-cap	NO — switch to RSI > 50 filter

Record your regime

- Your asset is in: Sideways / Bull / Bear / Crypto (circle one)
- 200-day MA direction (rising / flat / falling): _____
- Observation period (e.g. last 12 months): _____

AUDIT FRAMEWORK

3 Audit threshold against the 5-OECD baseline

Chong, Ng & Liew (2014) bootstrap-tested RSI(14, 30/70) sell signals across five OECD equity markets from 1976 to 2002. Cross-reference the empirical baseline below against the threshold currently shipping in your platform.

MARKET	RSI 70 SELL HIT RATE	GAP VS COIN-FLIP
TSX (Toronto)	46.7%	-3.3 pp
Dow Jones Industrial	41.5%	-8.5 pp
Nikkei	48.2%	-1.8 pp
Milan (FTSE MIB)	38.6%	-11.4 pp
DAX	34.7%	-15.3 pp
5-OECD MEAN	41.94%	-8.06 pp

Source: Chong, Ng & Liew (2014), Journal of Risk and Financial Management 7(1), Table 3E. Bootstrap-tested 1976-2002.

Record your platform default

- Current Upper Band threshold on your platform: _____
- Current Lower Band threshold on your platform: _____
- Default matches Wilder 70/30 baseline: Yes / No

AUDIT FRAMEWORK

4 Substitute regime-aware thresholds where the default fails

Two peer-reviewed alternatives outperform the bare 1978 default. Select your framework based on the regime identification recorded in Step 2.

FRAMEWORK	THRESHOLDS	BEST FOR	EVIDENCE
Wilder 1978	70 / 30	Sideways regimes	Original calibration
Cardwell range-rule	60-80 bull 80-20 bear	Trending equities	Brown 2012 confirmation
RSI > 50 filter	50 trend-confirm	Crypto + momentum	Zatwarnicki 2023: +498 pp

Apply your selection

- Selected framework: Wilder 70/30 / Cardwell 60-80 / Cardwell 80-20 / RSI>50 filter (circle one)
- New Upper Band threshold: _____ New Lower Band: _____
- Updated chart template saved: Yes / No

BOTTOM LINE

The 1978 RSI 70/30 default is right just 41.94% of the time across five OECD markets. Used as a binary sell trigger, the 1.5 percentage-point behavioral drag compounds into a \$226,637 wealth gap on an \$80,000 portfolio over 25 years — 9.6 years of maximum 401(k) deferrals.

The indicator is not broken. The 70/30 threshold framing is. Substitute regime-aware thresholds where the default fails, and you reverse the wealth-gap outcome on the same data.

References

Chong, T-T.L., Ng, W-K. & Liew, V.K-S. (2014). "Revisiting the Performance of MACD and RSI Oscillators." *Journal of Risk and Financial Management* 7(1): 1-12. doi:10.3390/jrfm7010001

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Educational quantitative analysis based on published peer-reviewed data. Not investment, tax, or legal advice. Consult a licensed professional before acting on any threshold change in a live brokerage account. Hypothetical wealth-gap math assumes continuous engagement with platform default; actual outcomes vary with behavioral abandonment, tax events, and rebalancing.