

7 Filters Before You Trade the Breakout

A pre-trade audit grounded in the Bajgrowicz-Scaillet 2012 FDR-corrected universe. Use this checklist before every squeeze entry on US large-cap equities or ETFs.

The academic record (Sullivan-Timmermann-White 1999 + Bajgrowicz-Scaillet 2012) tested 7,846 trading rules on Dow data from 1897-2011. Zero rules survived post-cost on the 1962-2011 subperiod. The squeeze inherits this verdict by class membership in the channel-breakout subclass.

This checklist screens for the narrow conditions where the squeeze may still carry edge — small-cap microstructure exception (Hsu-Kuan 2005), delta-neutral structure, or exit-timing use only. **If 3 or more filters FAIL, skip the trade.**

THE 7 FILTERS · Run in order. Tick each box after verification.

BandWidth Percentile

Threshold: BB Width at or below 10th percentile of trailing 252 sessions

1

Why it matters: Raw BB Width values are non-comparable across symbols. The 10th-percentile threshold mirrors the data-snooping correction Sullivan-Timmermann-White applied at the universe level.

PASS if: computed percentile at or below 10 on daily close data, 1-year lookback minimum.

Volume Confirmation

Threshold: Volume on breakout day at least 1.5 times the 20-day average

2

Why it matters: Low-volume squeezes resolve into noise more often than directional moves. Volume is the only execution-friction-independent signal that filters fake breakouts.

PASS if: session volume at least 1.5x SMA(volume, 20) AND closes above upper band (long) or below lower band (short).

IV Term-Structure

Threshold: 30-day IV below 60-day IV (contango)

3

Why it matters: Implied-volatility crush on directional bets adds 0.3 percentage points of annualized drag (per the composite drag decomposition). Contango term-structure means the market expects volatility to expand, which the squeeze signal already predicts.

PASS if: 30-day ATM IV below 60-day ATM IV by at least 1.0 vol point.

Earnings Calendar Clearance

Threshold: No earnings event within plus or minus 5 trading days of entry

4

Why it matters: Earnings-driven squeezes are not the universe-tested signal. They are event-driven IV expansions with distinct payoff distributions that the Bajgrowicz-Scaillet framework does not cover.

PASS if: earnings date confirmed more than 5 trading days from entry on both sides; verify via SEC EDGAR 8-K filing calendar OR vendor earnings calendar.

ATR Floor

Threshold: ATR(14) at least 1.5 percent of price

5

Why it matters: Below-ATR-floor squeezes lack the realized volatility for the breakout to overcome bid-ask spread. The 0.5 percentage point transaction cost component compounds across 10 signals per year only when realized moves clear the spread.

PASS if: ATR(14) divided by current close at least 0.015 on daily timeframe.

Directional Bias Hedge

Threshold: Position structured as delta-neutral OR aligned with 200-DMA trend

6

Why it matters: The 50/50 directional ambiguity is the structural property of the squeeze (per Pi42 industry admission and BS 2012 universe test). Delta-neutral structure (straddle/strangle) captures volatility magnitude without paying for direction. 200-DMA alignment uses trend as the directional override.



PASS if: EITHER long straddle/strangle within plus or minus 5 percent of strikes balanced, OR price above 200-DMA for long-only entries.

Position Sizing Discipline

Threshold: Single-trade risk at or below 0.5 percent of account; squeeze-cluster annual risk at or below 5 percent

7

Why it matters: Composite drag of 1.5 percentage points annualized compounds to \$26,328 over 15 years on a \$50,000 account. Position sizing is the only retail-controllable variable that bounds total cluster drag to acceptable levels.



PASS if: stop-loss distance times shares at or below 0.5 percent times account equity; cumulative annual squeeze-cluster losses tracked at or below 5 percent times January 1 equity.

How to Read Your Filter Score

Filters Passed	Action	Why
7 of 7	FULL ENTRY	Conditions match the narrow lane where Hsu-Kuan 2005 or delta-neutral structure preserves edge. Size at full risk budget.
5 to 6 of 7	HALF SIZE	Mixed signal. Reduce position to 50 percent of standard sizing. Review which filter failed before next entry.
3 to 4 of 7	SKIP	Trade falls inside the 7,846-rule universe verdict. Net expected value after costs is negative.
0 to 2 of 7	HARD PASS	Setup matches the unconditional null. Trading this entry is paying the spread on a coin flip with magnitude ceiling equal to magnitude floor.

YOUR NEXT 5 TRADES · TRACK YOUR FILTER PASS RATE

Log five upcoming squeeze setups. Compare your realized win rate against the academic 50 percent baseline. If your sample stays at or below 50 percent, the universe verdict is binding for your book.

Date	Symbol	Filters of 7	Entry	Exit	W / L

What to do with your tracked results: If your 5-trade win rate is at or below 50 percent, the academic null is binding — switch to delta-neutral structure or exit-timing use only. If above 60 percent, extend to 20 trades before claiming edge (bootstrap-corrected outperformance requires $n \geq 20$).

Reference: Bajgrowicz, P. and Scaillet, O. (2012). Technical Trading Revisited. Journal of Financial Economics 106(3): 473-491.