

The QMAC Ladder

A moving-average scan, and how its author says to trade it

After Robert T. H. Lee & Peter A. Tryde, Timing Solutions for Swing Traders (Wiley, 2012)

Educational research. Not investment advice. Mezan does not sell trading signals.

READ THIS BEFORE THE RULES

We did not just read this book, we tested it. Over 21 years and 259 monthly rebalances, the ladder DID NOT beat the market after realistic trading costs. It is not an edge and we do not trade it as one.

What it did do is control losses. Used as a filter on a trend book it cut the worst peak-to-trough fall from -51.3% to -30.9%, and that improvement held at every cost level we tested. That is the honest reason this document exists: the setup is a risk tool, not a money machine. The numbers are on the last pages, including the ones that failed.

The one idea worth taking

Most of this book is standard technical analysis. One idea in it is original, and it is the only part we tested: the Queuing Theory of Moving Average Crossovers, or QMAC.

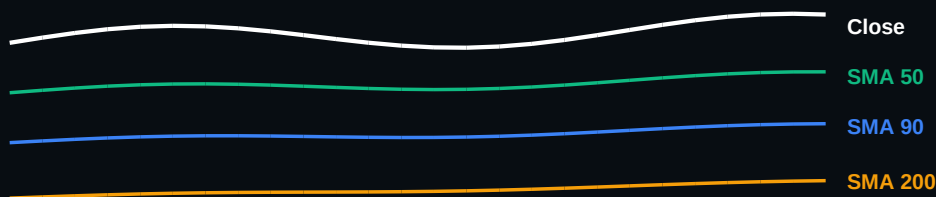
The claim is that in a genuine trend, price and its moving averages line up in strict rank order, shortest to longest. When they do not, Lee argues the move is borrowed time - "the respective rally or retracement most probably will be short-lived".

THE RULE IN ONE LINE

Close > SMA50 > SMA90 > SMA200

Every term must be above the next. This is a PASS/FAIL gate, not a score. A stock ranked 8 out of 10 on this test is not a weaker buy - it is a reject.

Bullish queue — strict rank order



Close above SMA50 above SMA90 above SMA200. Any other ordering is a reject.

The scan we built from it

The scan is a funnel. Each tier removes names, and we mark which rules are Lee's and which thresholds we had to choose because the book states a principle without a number.

Liquidity	20-day dollar volume >= \$5M [our threshold]
QMAC ladder	Close > SMA50 > SMA90 > SMA200 [the book]
Weekly agreement	Weekly close > SMA10w > SMA40w [the book]
Entry trigger	EMA9 > EMA13, close above both [the book]
Volume	2-day vol / 10-day vol >= 100% [the book]
Not extended	(Close - EMA21) / ATR14 <= 3 [our threshold]

Run on 29 September 2026 across every US symbol with usable history, the funnel behaved like this:

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4,055  names with >= 260 sessions, traded in last 5
2,523  + liquidity ($5M dollar volume)
 384   + QMAC ladder          <- removes 85% in ONE step
 342   + weekly agreement
 218   + entry trigger
  53   + volume confirmation
  48   + not extended         = final candidates
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The ladder is doing nearly all the work. Everything after it trims; the ladder decides. That is worth knowing, because it means the other five tiers are convenience, not the signal.

How the book says to trade it

The rules below are Lee's, not ours. Where he gives a number we use his; where he gives only a principle we say so. He is explicit that this is a discretionary system - it produces candidates and context, not automatic orders.

THE GOVERNING RULE

"Look at the weekly, trade on the daily."

Identify the trend on the weekly chart. Time the entry on the daily. Never take a daily signal that fights the weekly direction. Lee's words: act in accordance with what has happened, not in anticipation of what will happen.

Entry

- > Standard signal: the 9-day EMA crosses above the 13-day EMA.
- > Strong signal: price closes above BOTH the 9- and 13-day averages. Lee treats the price crossing as the stronger of the two, because price leads its own averages.
- > Both are only valid while the QMAC ladder is intact and the weekly agrees. A trigger inside a broken ladder is the case the book tells you to skip.
- ! Do not chase. The book's Eight Rules warn that price far above a rising 200-day invites a reaction - which is why our scan caps extension at 3 ATR from the 21 EMA.

Stop loss

Lee's protective stop is volatility-based and ratchets upward, never down:

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stop = Close - 1.3 x ATR(13)
then held at the HIGHEST value of that over the last 13 bars
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So the stop trails a rising position and freezes when price falls - it never loosens. The 1.3 multiple and the 13-bar windows are his defaults.

THE AUTHOR'S OWN WARNING

Lee publishes this formula and then writes, in the same paragraph: "It is not recommended to be used in trading."

He means the parameters are illustrative and untuned. Treat $1.3 \times \text{ATR}(13)$ as a starting point to test, not a setting to trust. His broader point stands: a stop set too tight is taken out by noise, one set too wide never protects anything.

Exit

- > Mirror of the entry: exit when the 9-day EMA crosses below the 13-day, or price closes below both mid-term averages.
- > Exit also when the QMAC ladder breaks - that is the whole thesis. If the queue is disordered the move is, in Lee's words, most probably short-lived.

- > The protective stop is the backstop, not the plan. It exists for the move that gaps past your exit signal.
- * Trend followers are paid by a minority of trades. Lee: catching 80 percent of a move is a good outcome; the last 20 percent is "for lucky traders and ambitious daydreamers".

Position sizing and risk

Risk per trade	1% to 5% of the portfolio - Lee gives the range, not a number
Reward to risk	At least 3:1 before the trade is worth taking
Liquidity floor	Never trade size you cannot exit; check average daily volume
Diversification	More names is not automatically less risk - only what you can manage

A worked example. On a 100,000 account risking 1% you can lose 1,000 on the trade. If the stop sits 4% below entry, the position is 25,000 - because 4% of 25,000 is your 1,000. The stop distance sets the size; the size never sets the stop.

What we measured

We ran the ladder through our own backtest harness: 2005 to 2026, 259 monthly rebalances, long-only, no leverage, costs charged on turnover. The benchmark is the equal-weighted eligible universe, which returned +457.5% over the same periods.

book	cost	total	CAGR	Sharpe	maxDD
trend	30bps	444.2%	8.2%	0.51	-51.3%
qmac alone	30bps	308.1%	6.7%	0.42	-35.5%
trend+qmac	30bps	374.2%	7.5%	0.48	-30.9%
trend+qmac	15bps	573.2%	9.2%	0.59	-30.2%
trend+qmac	10bps	656.5%	9.8%	0.62	-29.9%
market		457.5%			

- ✗ It is not an edge. At realistic costs nothing here beats simply owning the universe. As a standalone strategy the ladder is worse than the trend signal it resembles on every measure except one.
- > That one measure is drawdown, and the effect is large. Used as a filter the worst fall went from -51.3% to -30.9%, and it held at every cost level - so it is structural, not an artifact of the fee assumption.
- ! Cost decides everything else. Filtering nearly doubles trading (turnover 0.52 to 0.91) because names cross in and out of the ladder. Below about 15bps that is worth paying; at 30bps it is not.

Return per unit of pain, measured properly as CAGR divided by worst drawdown: the plain trend book scores 0.18, the ladder-filtered book 0.30. Roughly 1.7 times better for the same money at risk.

What we threw away

- ✗ The financial astrology chapter. Lunar-phase entries and planetary aspects are not permissible for a Muslim investor, and the evidence offered is a quoted marketing line and a 44-trade test. It is excluded entirely.
- ✗ The 2-day versus 10-day volume ratio as a gate. On live data it cut 374 candidates to 53 on a comparison that flips near-randomly day to day - churn without a view. Useful as a sort, not as a filter.
- ✗ The BIC colour indicator. The book describes what it does and never publishes the rule, so it cannot be reproduced or checked.

Honest limits

- > It failed our test. Two of three pass conditions, twice - never all three. We do not publish signals from it and neither should you treat it as one.
- > No live evidence. Every figure above is a hypothetical backtest of a rule chosen after seeing the whole period.
- > The book contains no backtest at all. Lee states plainly that his parameters are not optimised and his charts are illustrations chosen after the fact.
- > Costs are assumed. Whether your fills land nearer 10bps or 30bps decides whether the filter helps or hurts, and only live trading answers that.

Educational research only. Nothing here is a recommendation to buy or sell any security, or advice on whether any strategy is suitable for you. Backtested results are hypothetical, carry the benefit of hindsight in the design of the rules, and are not an indicator of future results. Mezan does not sell trading signals. Sources: Robert T. H. Lee and Peter A. Tryde, *Timing Solutions for Swing Traders* (John Wiley & Sons, 2012); Mezan research, measured 30 September 2026.