# Tactical allocation into Long Leveraged ETFs

Written by: Ryan Chew

## 1. Strategy overview

This report outlines the performance of a tactical long-only leveraged ETF strategy based on the underlying index's volatility conditions. I found that even though the leveraged ETF and the underlying index are highly correlated, their volatility and behaviour around moving averages differ. This strategy captures the market upside during low volatility periods while minimizing drawdowns using trailing-stops and Moving Average (MA)-based exit rules. The entry signal is generated when the tracked index's price crosses the leveraged ETF's MA, showing that momentum/trend is strong across both instruments. After back-testing from 2009-2025, the strategy delivered an annualized return of 22.18%, with a Sharp ratio of 0.54.

## 2. Descriptive statistics

The passive approach exhibits higher volatility, more extreme negative skew and significantly fatter tails than the rotational strategy, the strategy's return distribution is tighter and more symmetric with lower probability of extreme losses. This statistical profile supports the observed outperformance in risk-adjusted terms, despite slightly lower mean returns.

| Metric | Strategy | Passive approach leveraged ETF |
|---|---|---|
| Mean | 0.12% | 0.15% |
| Standard Deviation | 2.58% | 3.22% |
| Skewness | -0.31 | -0.51 |
| Kurtosis | 5.03 | 11.23 |



Strategy daily returns



Leveraged ETF daily returns
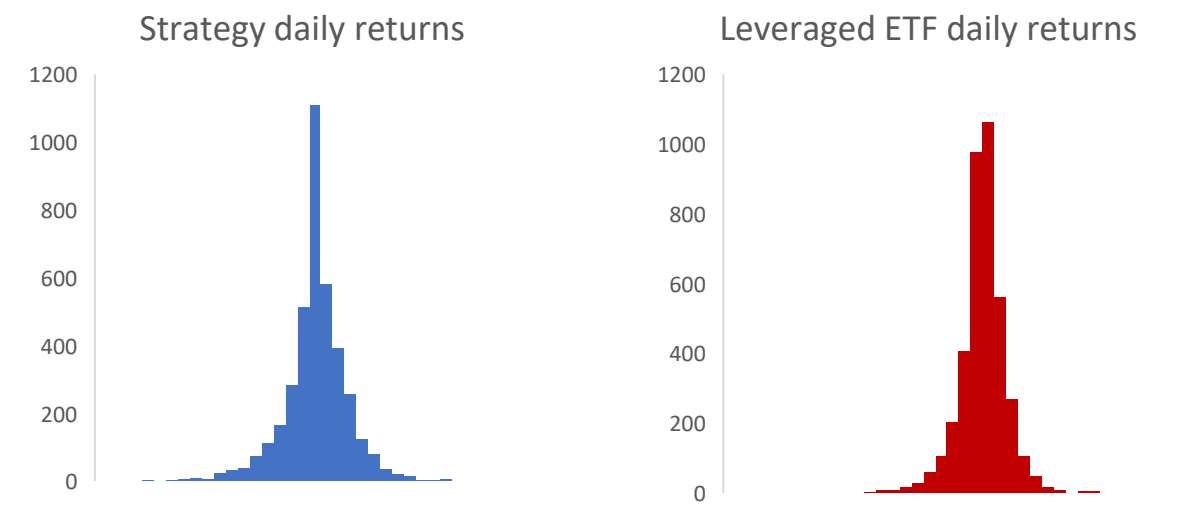
### 3. Performance metrics

| Metric | Strategy | Passive approach leveraged ETF |
|---|---|---|
| Total returns | 2465% | 4082% |
| Annualized returns | 22.18% | 26.28% |
| Annualized volatility | 40.95% | 51.12% |
| Sharpe Ratio | 0.54 | 0.51 |
| Max drawdown | -17.34% | -33.87% |
| Beta (CAPM) | 0.80 | 1 (def) |
| Beta (Regression) | 0.64 | 1 (def) |
| $R^2$ (Regression) | 0.65 | - |

The strategy has given a higher return per unit risk and lower drawdown. Though its total return is lower, the strategy beats the buy-and-hold on a risk-adjusted basis.



Performance comparison



Sharpe Ratio



Regression Strategy v Leveraged ETF

$y = 0.6479x + 0.0002$