Systematic Rotation Through Tariff Volatility

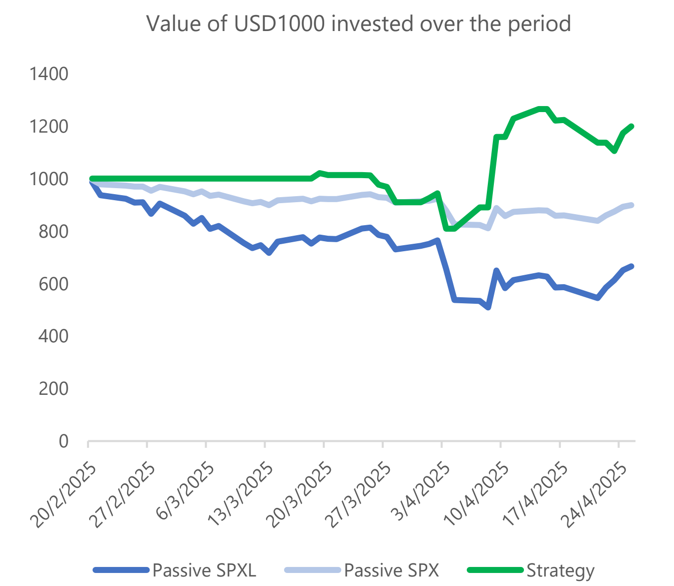
Summary

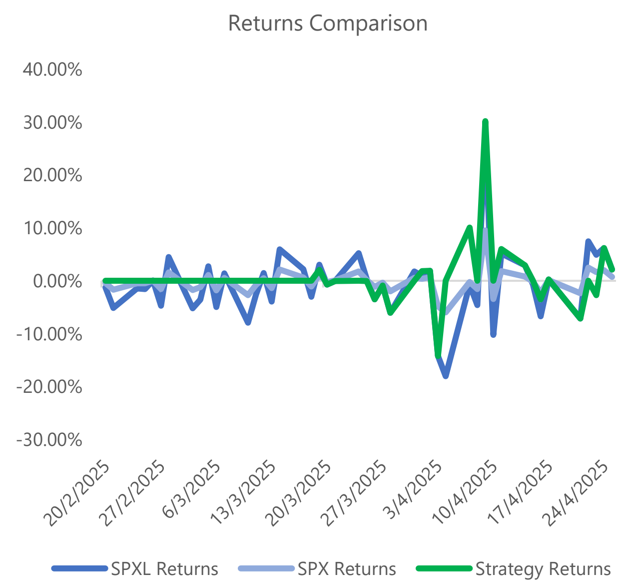
The strategy systematically rotates into the 3x leveraged long ETF, *SPXL*, when its trading price is above a selected Moving Average (MA) threshold [10, 20, 50, 100, 200] and exits when the price falls below the respective MA. Given the current environment of heightened market volatility, driven by uncertainty surrounding tariff policies introduced by the Trump administration, I conducted a back test of the strategy over a 46-day period, from 19 February 2025 to 25 April 2025, capturing the escalation of trade tensions and associated market reactions. Transaction costs and the average bid-ask spread of SPXL have been incorporated into the back test to reflect realistic trading conditions.

Below are the performance results for the MA20 variant of the strategy, along with a Monte Carlo simulation illustrating the distribution of potential cumulative returns under resampled return scenarios.

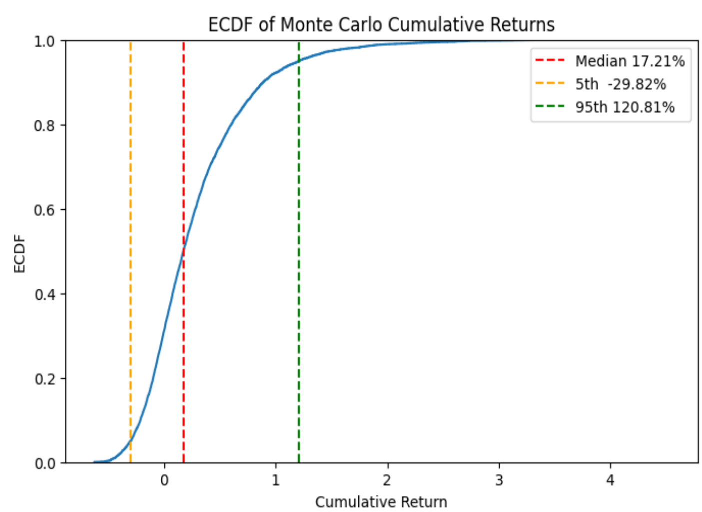
Performance

	Strategy	Passive SPXL	Passive SPX
Total Returns	**19.87%**	-33.45%	-10.08%
Average Daily Returns	**0.54%**	-0.67%	-0.21%
Standard Deviation	**5.62%**	6.71%	2.29%
Daily Sharpe Ratio	**0.095**	-0.099	-0.090





Simulations



The Monte Carlo simulation of cumulative returns exhibits a positively skewed distribution, suggesting a greater likelihood of outsized gains relative to losses. Based on 5,000 simulated paths, the probability of achieving a positive return over the 46-day period is estimated at 68.78%.

The backtest and simulation are based on historical data and resampling. Actual future performance may differ