



Report

Trend-Persistence Trading Strategies

Jantz LLC

November 19, 2021

Task 1

- Develop a Trend-Persistence (TP) strategy for Intraday Trading on REITs.
- **Trend-Persistence:** An upward or downward trend in the price movement of a given security in some time interval.
- **Trend-Persistence Strategy** → Stay Short on Expected Flops (ExpF) (downward trend) and Stay Long on Expected Tops (ExpT) (upward trend)

Are there persistent trends in Intraday REITs?

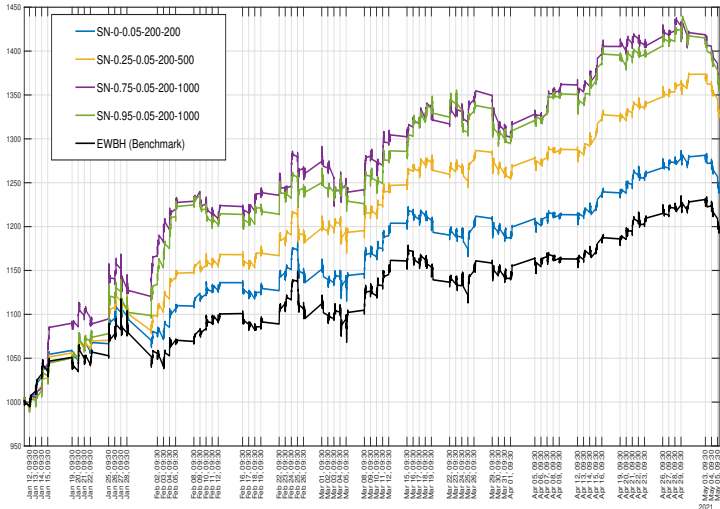
Summary Results

Model Type	Total Return	Annualized Return	CVaRl	CVaRu	Max Drawdown
EWBH (Benchmark)	19.72%	76.50%	-0.136%	0.129%	0.0714
1. Sharpe Ratio MS					
SR 5-30 100	17.57%	66.59%	-0.209%	0.225%	0.2141
2.OPMTS					
SN-gh-0.75-0.05-200-1-100	20.23%	78.80%	-0.129%	0.133%	0.071
SN-gh-0.95-0.05-200-1-100	22.02%	87.32%	-0.119%	0.126%	0.048
SN-gh-0.00-0.05-200-1-200	44.56%	219.78%	-0.210%	0.223%	0.076
SN-gh-0.25-0.05-200-1-500	129.64%	1276.82%	-0.438%	0.466%	0.207
3. Mixed Strategy - long					
SN-gh-0.75-0.05-200-1-100	23.02%	92.21%	-0.110%	0.110%	0.085
SN-gh-0.85-0.05-200-1-100	23.03%	92.29%	-0.110%	0.110%	0.085
4. Mixed Strategy - long/short					
SN-gh-0.00-0.05-200-1-200	24.28%	98.33%	-0.126%	0.120%	0.066
SN-gh-0.25-0.05-200-1-200	22.23%	88.20%	-0.129%	0.122%	0.067
SN-gh-0.00-0.05-200-1-500	27.17%	113.24%	-0.125%	0.121%	0.057
SN-gh-0.25-0.05-200-1-500	32.78%	144.34%	-0.123%	0.120%	0.055
SN-gh-0.75-0.05-200-1-1000	35.68%	161.53%	-0.140%	0.140%	0.058
SN-gh-0.95-0.05-200-1-1000	35.66%	161.37%	-0.140%	0.141%	0.060

Reward-Risk Ratios

MODEL TYPE	SR	Sortino	STARR	Rachev	Gini
EWBH (Benchmark)	0.996%	1.355%	0.438%	94.572%	2.150%
1. Sharpe Ratio					
SR 5-30 100	0.509%	0.802%	0.254%	107.353%	1.250%
2. OP-PTS					
SN-gh-0.75-0.05-200-1-100	0.964%	1.464%	0.471%	103.168%	2.258%
SN-gh-0.95-0.05-200-1-100	1.113%	1.741%	0.550%	105.503%	2.605%
SN-gh-0.00-0.05-200-1-200	1.198%	1.860%	0.577%	106.180%	2.759%
SN-gh-0.25-0.05-200-1-500	1.264%	2.007%	0.625%	106.470%	3.135%
3. Mixed Strategy - long					
SN-gh-0.75-0.05-200-1-100	1.341%	1.891%	0.618%	99.875%	2.914%
SN-gh-0.95-0.05-200-1-100	1.272%	1.802%	0.579%	99.262%	2.796%
4. Mixed Strategy - long/short					
SN-gh-0.00-0.05-200-1-200	1.292%	1.769%	0.568%	95.189%	2.810%
SN-gh-0.25-0.05-200-1-200	1.177%	1.614%	0.513%	94.506%	2.542%
SN-gh-0.00-0.05-200-1-500	1.436%	2.016%	0.631%	96.384%	3.136%
SN-gh-0.25-0.05-200-1-500	1.721%	2.420%	0.760%	97.631%	3.780%
SN-gh-0.75-0.05-200-1-1000	1.566%	2.272%	0.719%	100.122%	3.528%
SN-gh-0.95-0.05-200-1-1000	1.577%	2.317%	0.717%	100.349%	3.512%

4. Mixed Strategy - Equally weighted with long-short adjustments



1. Test strategies on a set of 10 Crypto Currencies.
2. Test strategies on Russell 3000.
3. Directly solve the optimisation problem with the correct number of winners/losers .
→ Define the optimal portfolio problem as a Mixed Integer Programming (MIP) problem.