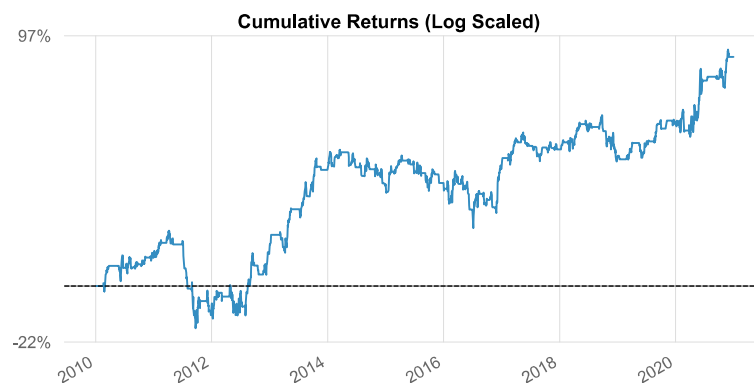
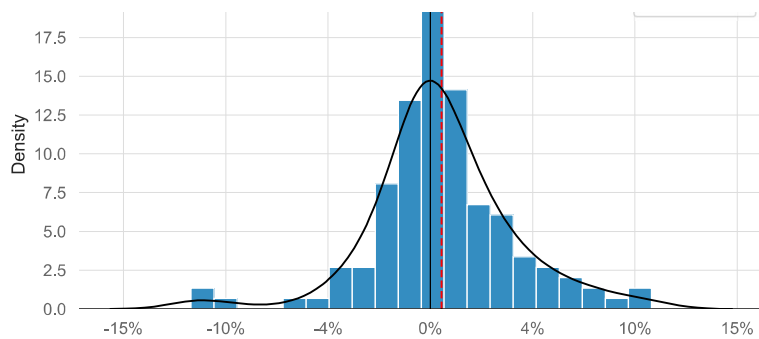


MACD 4 Jan, 2010 - 30 Dec, 2020

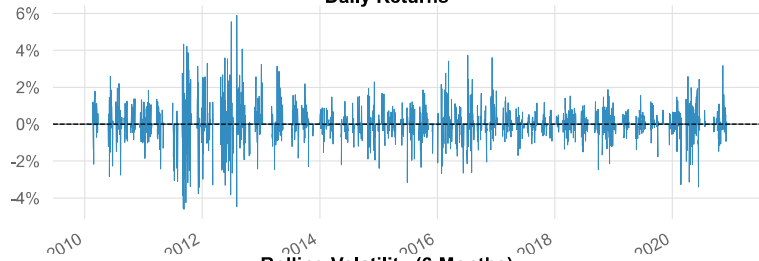
Generated by [QuantStats](#) (v. 0.0.26)

Key Performance Metrics

Metric	Strategy
Risk-Free Rate	0.0%
Time in Market	55.0%
Cumulative Return	89.06%
CAGR%	5.96%
Sharpe	0.53
Sortino	0.76
Max Drawdown	-31.14%
Longest DD Days	1091
Volatility (ann.)	12.36%
Calmar	0.19
Skew	0.09
Kurtosis	8.79
Expected Daily %	0.02%
Expected Monthly %	0.48%
Expected Yearly %	5.96%
Kelly Criterion	6.53%
Risk of Ruin	0.0%
Daily Value-at-Risk	-1.25%
Expected Shortfall (cVaR)	-1.25%
Payoff Ratio	0.98
Profit Factor	1.14
Common Sense Ratio	1.24
CPC Index	0.6
Tail Ratio	1.09
Outlier Win Ratio	8.96
Outlier Loss Ratio	3.42
MTD	-0.52%
3M	4.78%



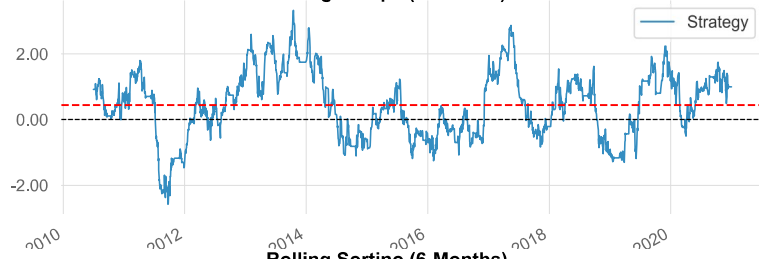
Daily Returns



Rolling Volatility (6-Months)



Rolling Sharpe (6-Months)



Rolling Sortino (6-Months)



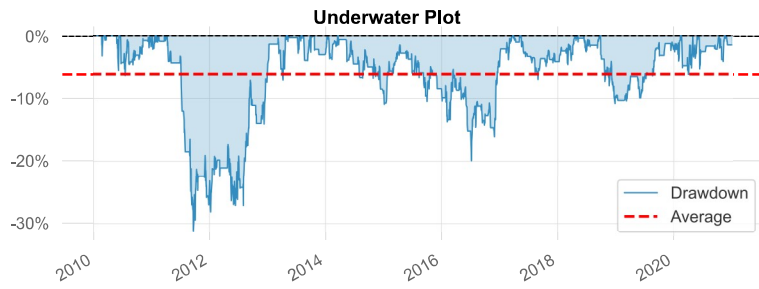
Metric	Strategy
6M	5.17%
YTD	16.18%
1Y	16.18%
3Y (ann.)	7.31%
5Y (ann.)	6.18%
10Y (ann.)	5.37%
All-time (ann.)	5.96%
Best Day	5.89%
Worst Day	-4.61%
Best Month	10.81%
Worst Month	-11.7%
Best Year	29.07%
Worst Year	-19.04%
Avg. Drawdown	-2.52%
Avg. Drawdown Days	65
Recovery Factor	2.86
Ulcer Index	1.01
Avg. Up Month	3.04%
Avg. Down Month	-2.08%
Win Days %	53.69%
Win Month %	52.03%
Win Quarter %	65.91%
Win Year %	72.73%

EOY Returns

Year	Return	Cumulative
2010	10.97%%	10.98%
2011	-19.26%%	-19.04%
2012	24.61%%	25.2%
2013	26.06%%	29.07%
2014	-4.04%%	-4.34%
2015	1.21%%	0.79%
2016	5.02%%	4.02%



Year	Return	Cumulative
2017	5.19%%	5.11%
2018	-1.57%%	-1.92%
2019	8.22%%	8.4%
2020	15.76%%	16.18%



Worst 10 Drawdowns

Started	Recovered	Drawdown	Days
2011-04-11	2013-04-23	-31.14%	743
2014-03-21	2017-03-16	-19.92%	1091
2018-09-26	2020-02-11	-10.80%	503
2017-05-17	2018-04-17	-6.96%	335
2010-06-21	2010-12-21	-6.34%	183
2020-02-18	2020-04-29	-6.16%	71
2010-05-28	2010-06-14	-5.53%	17
2020-06-09	2020-10-12	-5.28%	125
2020-10-13	2020-11-16	-4.10%	34
2013-08-19	2013-10-02	-3.97%	44

2010	0.00	-0.94	8.82	0.00	-0.69	0.09	1.56	-1.42	1.11	1.07	1.34	-0.10
2011	2.22	3.00	1.45	-0.14	-1.81	0.00	-11.37	-1.97	-11.70	5.68	0.00	-4.65
2012	5.30	2.97	-1.57	3.81	-9.63	7.90	-5.17	10.81	5.89	-3.23	3.15	4.33
2013	6.55	0.00	-3.98	8.44	4.04	0.00	1.64	2.20	1.36	7.02	-0.86	0.08
2014	1.11	2.66	0.88	0.00	-2.67	-1.28	-1.16	0.63	0.04	1.35	-2.32	-3.48
2015	3.59	0.82	2.54	-0.02	-0.24	-3.07	1.61	-1.52	-3.88	4.21	-0.57	-2.34
2016	-0.39	-1.34	2.71	-0.28	-1.37	-6.64	4.71	-0.03	-1.42	1.11	-2.44	10.26
2017	2.85	-0.58	5.73	-1.01	-0.36	-0.57	-0.20	-2.37	2.26	0.73	-0.64	-0.59
2018	1.78	-0.13	-0.31	3.67	1.28	-1.02	0.34	0.00	-0.23	-2.59	-0.02	-4.49
2019	-0.59	0.81	1.78	1.58	-3.61	3.14	1.03	2.08	3.19	-2.06	1.94	-0.95
2020	-1.89	0.48	0.00	4.89	2.21	4.52	0.89	0.00	-0.22	-1.91	7.06	-0.52
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

