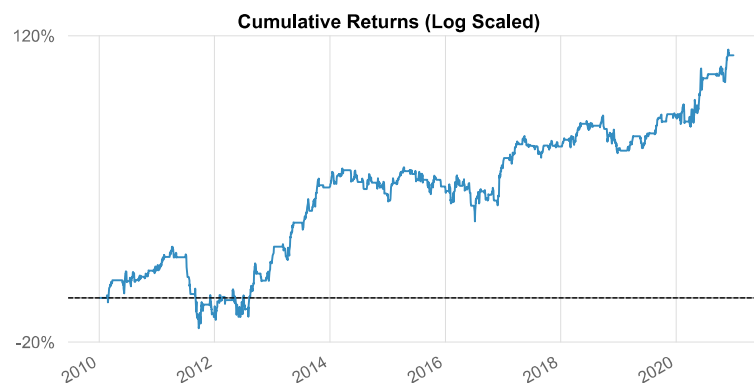
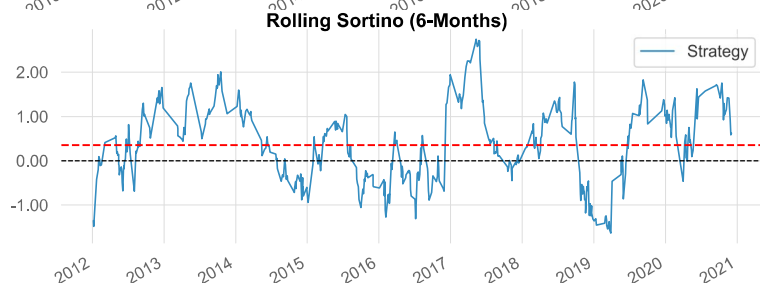
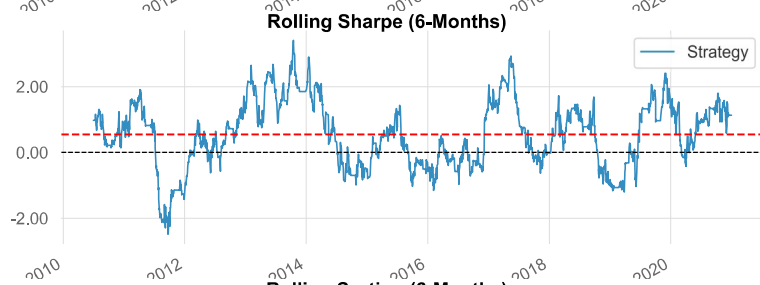
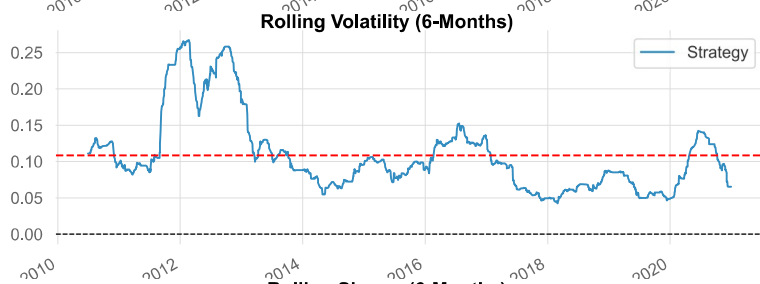
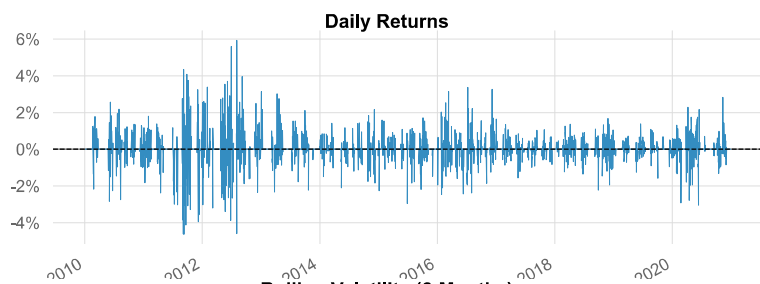
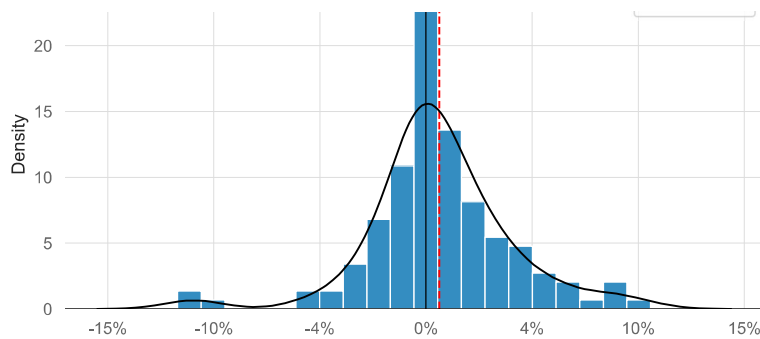


MACD 4 Jan, 2010 - 30 Dec, 2020

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

Key Performance Metrics

Metric	Strategy
Risk-Free Rate	0.0%
Time in Market	55.0%
Cumulative Return	111.12%
CAGR%	7.03%
Sharpe	0.62
Sortino	0.91
Max Drawdown	-30.2%
Longest DD Days	640
Volatility (ann.)	11.93%
Calmar	0.23
Skew	0.08
Kurtosis	9.82
Expected Daily %	0.03%
Expected Monthly %	0.57%
Expected Yearly %	7.03%
Kelly Criterion	7.85%
Risk of Ruin	0.0%
Daily Value-at-Risk	-1.21%
Expected Shortfall (cVaR)	-1.21%
Payoff Ratio	0.98
Profit Factor	1.17
Common Sense Ratio	1.32
CPC Index	0.62
Tail Ratio	1.13
Outlier Win Ratio	9.21
Outlier Loss Ratio	3.49
MTD	-0.38%
3M	4.62%



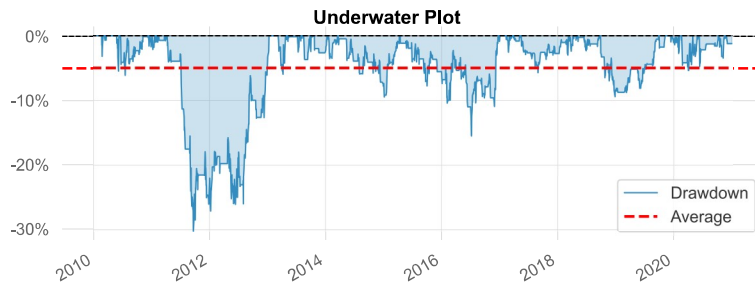
Metric	Strategy
6M	5.23%
YTD	15.55%
1Y	15.55%
3Y (ann.)	7.62%
5Y (ann.)	6.92%
10Y (ann.)	6.39%
All-time (ann.)	7.03%
Best Day	5.93%
Worst Day	-4.63%
Best Month	10.58%
Worst Month	-11.7%
Best Year	30.07%
Worst Year	-17.7%
Avg. Drawdown	-2.18%
Avg. Drawdown Days	48
Recovery Factor	3.68
Ulcer Index	1.01
Avg. Up Month	2.83%
Avg. Down Month	-2.0%
Win Days %	54.32%
Win Month %	55.28%
Win Quarter %	68.18%
Win Year %	72.73%

EOY Returns

Year	Return	Cumulative
2010	12.3%%	12.48%
2011	-17.64%%	-17.7%
2012	24.67%%	25.24%
2013	26.8%%	30.07%
2014	-2.3%%	-2.62%
2015	3.17%%	2.83%
2016	6.49%%	5.75%



Year	Return	Cumulative
2017	6.1%%	6.11%
2018	-0.56%%	-0.86%
2019	8.53%%	8.77%
2020	15.06%%	15.55%



Worst 10 Drawdowns

Started	Recovered	Drawdown	Days
2011-04-11	2013-01-10	-30.20%	640
2015-04-14	2016-12-23	-15.48%	619
2014-03-21	2015-04-13	-9.46%	388
2018-09-26	2019-09-27	-9.41%	366
2010-06-21	2010-11-09	-6.12%	141
2013-03-11	2013-04-23	-5.94%	43
2017-05-17	2018-04-09	-5.71%	327
2010-05-28	2010-06-14	-5.46%	17
2020-02-18	2020-04-29	-5.38%	71
2020-06-09	2020-10-06	-4.75%	119

2010	0.00	-0.87	8.99	0.00	-0.63	0.24	1.62	-1.05	1.32	1.12	1.48	-0.04
2011	2.40	3.10	1.48	0.06	-1.64	0.00	-10.89	-1.74	-11.70	5.69	0.00	-4.48
2012	5.52	2.83	-1.35	4.00	-10.25	8.34	-5.25	10.58	5.89	-2.93	3.12	4.20
2013	6.52	0.00	-3.48	8.40	4.04	0.00	1.81	2.25	1.36	6.90	-0.67	0.12
2014	1.18	2.72	1.14	0.00	-2.37	-1.12	-1.07	0.76	0.15	1.33	-2.05	-3.15
2015	3.55	0.94	2.82	0.13	-0.18	-2.74	1.78	-1.27	-3.48	3.96	-0.41	-1.98
2016	-0.21	-1.09	2.50	-0.10	-0.96	-5.85	4.35	0.25	-0.94	1.17	-2.06	9.27
2017	2.72	-0.49	5.23	-0.82	-0.29	-0.14	-0.04	-1.98	2.15	0.70	-0.45	-0.44
2018	1.75	-0.08	-0.28	3.31	1.26	-0.88	0.40	0.00	-0.17	-2.21	0.12	-3.91
2019	-0.29	0.76	1.59	1.51	-3.10	2.83	1.15	1.89	2.99	-1.75	1.86	-0.81
2020	-1.68	0.65	0.04	4.34	2.10	4.13	0.92	0.00	-0.04	-1.51	6.32	-0.38
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

