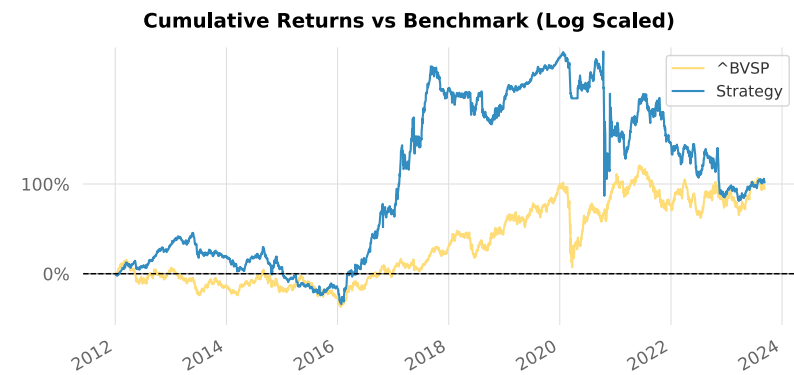
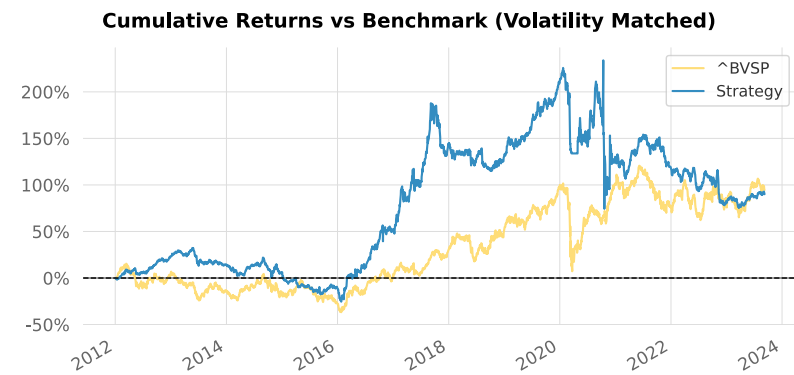
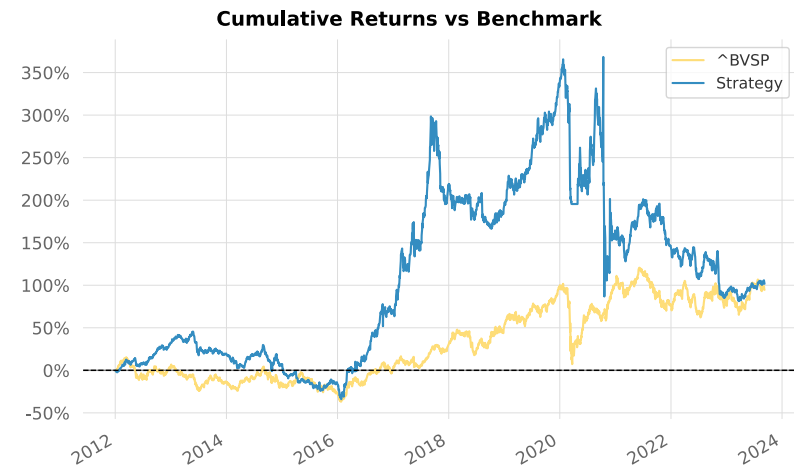


Strategy Tearsheet 4 Jan, 2012 - 8 Sep, 2023

Benchmark is ^BVSP |

Demonstration of a simple strategy.

Important: Transaction costs are not taken into account.

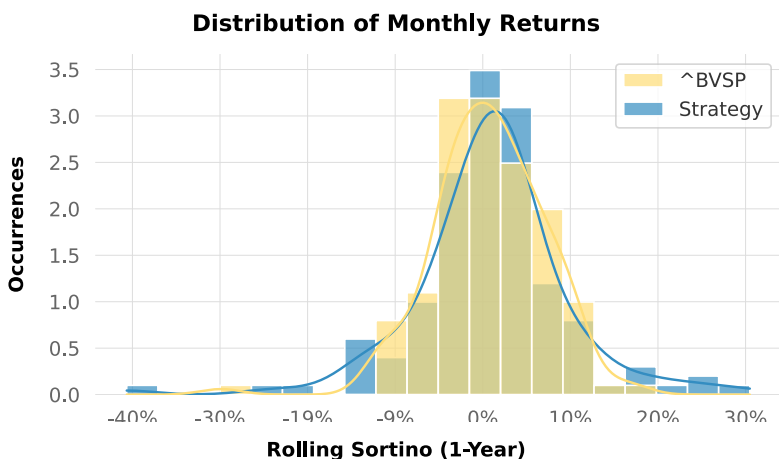
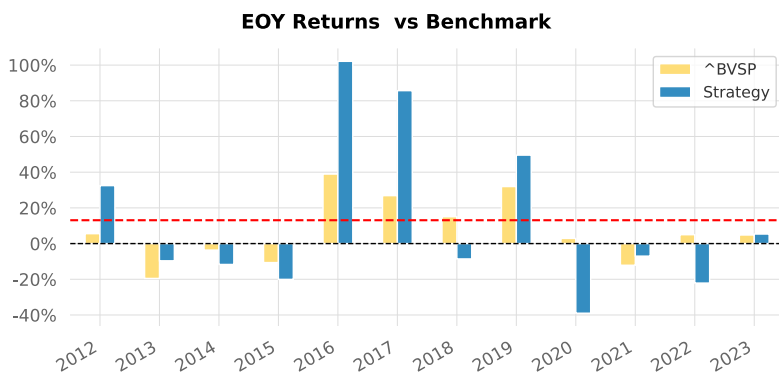
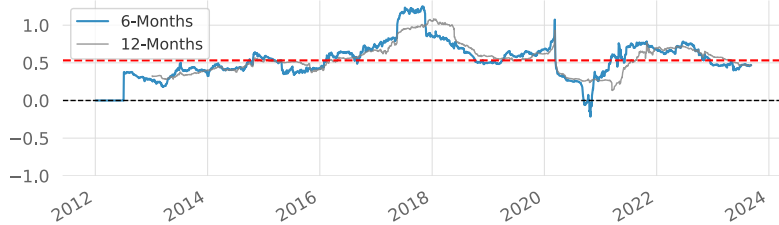
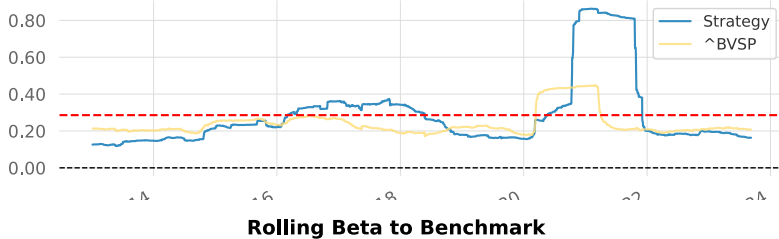
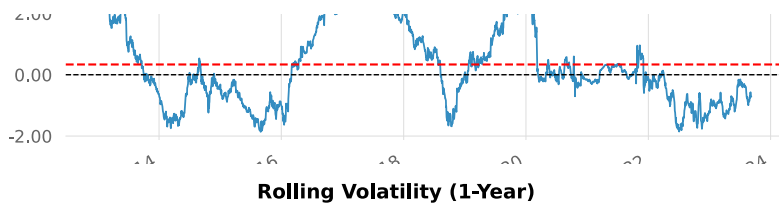


Key Performance Metrics

Metric	^BVSP	Strategy
Cumulative Return	94.57%	101.7%
CAGR %	5.71%	6.03%
Alpha	-	0.07
Beta	-	0.49
Volatility (ann.)	24.48%	33.06%
Correlation	-	36.13%
Sharpe	0.36	0.35
Prob. Sharpe Ratio	88.71%	88.49%
Smart Sharpe	0.32	0.31
Sortino	0.5	0.51
Smart Sortino	0.45	0.46

Other Performance Metrics

Metric	^BVSP	Strategy
Max Drawdown	-46.82%	-61.29%
Longest DD Days	1802	1193
R^2	0.13	0.13
Information Ratio	0.01	0.01
Calmar	0.12	0.1
Skew	-0.51	1.65
Kurtosis	10.9	106.09
Expected Daily	0.02%	0.02%
Expected Monthly	0.47%	0.5%
Expected Yearly	5.7%	6.02%
Kelly Criterion	-1.03%	9.45%
Risk of Ruin	0.0%	0.0%



Metric	^BVSP	Strategy
Daily Value-at-Risk	-2.5%	-3.38%
Expected Shortfall (cVaR)	-2.5%	-3.38%
Max Consecutive Wins	11	13
Max Consecutive Losses	13	11
Gain/Pain Ratio	0.07	0.09
Gain/Pain (1M)	0.35	0.38
Payoff Ratio	0.95	1.04
Profit Factor	1.07	1.09
Common Sense Ratio	1.04	1.01
CPC Index	0.51	0.61
Tail Ratio	0.98	0.93
Outlier Win Ratio	3.8	4.05
Outlier Loss Ratio	3.67	3.52
MTD	-0.37%	-0.69%
3M	-0.15%	2.26%
6M	10.64%	4.48%
YTD	4.8%	5.34%
1Y	5.06%	-11.85%
3Y (ann.)	6.49%	-17.06%
5Y (ann.)	6.91%	-5.39%
10Y (ann.)	7.73%	4.85%
All-time (ann.)	5.71%	6.03%
Best Day	13.91%	35.7%
Worst Day	-14.78%	-32.18%
Best Month	16.97%	30.49%
Worst Month	-29.9%	-40.65%
Best Year	38.93%	102.11%
Worst Year	-19.52%	-39.01%
Avg. Drawdown	-5.09%	-4.78%
Avg. Drawdown Days	83	60
Recovery Factor	2.16	2.17
Ulcer Index	0.18	0.32
Serenity Index	0.28	0.15

Strategy - Monthly Returns (%)

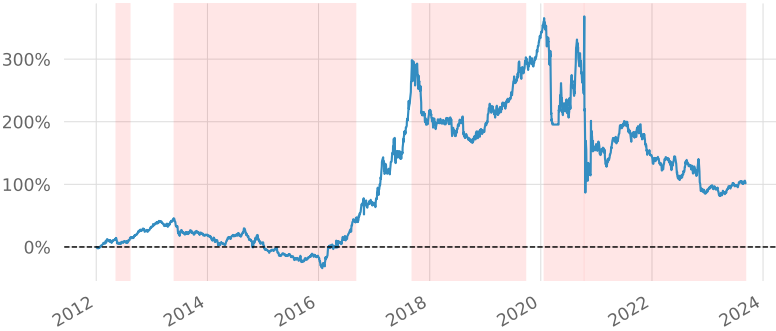
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2012	0.40	5.93	2.60	1.99	-4.11	1.82	0.86	4.13	7.14	4.15	-0.27	4.31
2013	4.79	0.71	-2.75	2.29	1.29	-14.61	1.27	0.54	-0.49	1.00	-1.16	-1.61
2014	-5.74	-1.79	-3.20	-1.98	7.93	3.47	-0.01	10.61	-12.62	-4.63	7.64	-9.25
2015	-11.05	1.54	1.49	-11.39	0.05	0.87	-5.35	-0.46	-3.07	5.03	2.56	-0.86
2016	-12.63	16.90	19.03	3.51	0.22	6.90	12.35	8.67	10.38	11.95	0.84	-1.45
2017	11.77	25.41	-8.58	12.09	1.07	0.11	17.32	24.44	3.33	-6.70	-13.96	5.50
2018	-3.84	-2.21	1.53	1.03	-6.19	0.49	4.96	-8.59	-2.54	3.70	1.69	1.97
2019	13.30	-4.93	2.17	3.11	1.84	3.52	6.53	4.71	3.48	-1.90	2.62	7.57
2020	3.09	-12.12	-24.77	10.08	0.40	-3.26	11.89	20.37	-13.40	-40.65	30.49	-7.32
2021	-6.36	-2.49	2.47	8.47	4.76	6.21	-5.05	-1.65	4.56	-6.16	-7.57	-2.79
2022	-1.83	-4.15	3.87	-2.51	4.20	-15.10	6.28	3.99	-3.13	5.68	-19.75	1.76
2023	3.72	-3.29	-3.62	1.40	3.03	2.73	2.69	-0.44	-0.69	0.00	0.00	0.00

Metric	^BVSP	Strategy
Avg. Up Month	5.17%	6.72%
Avg. Down Month	-5.87%	-7.8%
Win Days	50.81%	53.79%
Win Month	56.03%	60.28%
Win Quarter	61.7%	53.19%
Win Year	66.67%	41.67%

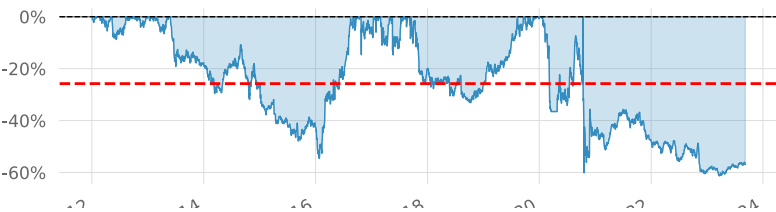
EOY Returns vs Benchmark

Year	^BVSP	Strategy	Multiplier	Won
2012	5.54%	32.47%	5.86	+
2013	-19.52%	-9.64%	0.49	+
2014	-3.63%	-11.69%	3.22	-
2015	-10.64%	-20.05%	1.88	-
2016	38.93%	102.11%	2.62	+
2017	26.86%	85.68%	3.19	+
2018	15.03%	-8.58%	-0.57	-
2019	31.95%	49.54%	1.55	+
2020	2.88%	-39.01%	-13.53	-
2021	-12.14%	-7.03%	0.58	+
2022	4.97%	-22.12%	-4.45	-
2023	4.80%	5.34%	1.11	+

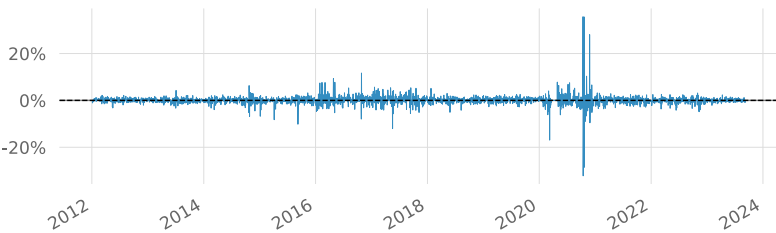
Strategy - Worst 5 Drawdown Periods



Underwater Plot



Daily Returns



Worst 10 Drawdowns

Started	Recovered	Drawdown	Days
2020-10-14	2023-09-08	-61.29%	1060
2013-05-28	2016-09-01	-54.60%	1193
2020-01-24	2020-10-09	-36.54%	260
2017-09-08	2019-09-23	-33.11%	746
2017-05-17	2017-07-13	-14.72%	58
2016-10-25	2017-01-16	-14.60%	84
2017-03-02	2017-04-27	-11.24%	57
2012-05-11	2012-08-09	-8.76%	91
2013-02-19	2013-05-07	-6.56%	78
2017-01-26	2017-02-03	-5.97%	9

Strategy - Return Quantiles

