VecViz Opportunity At Risk (OaR) Performance Report

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Introduction

Opportunity at Risk, or OaR, as discussed in this report, is an estimate of the maximum amount an investor could gain by being long a ticker at the end of a specified forward time horizon, at a specified level of probability. An accurate OaR measure forecasts gains that are exceeded by actual gains in one minus the specified probability percent of all observations.

The aim of this report is to inform a broad spectrum of readers of the behavior and accuracy of VecViz's OaR estimates, and how they might influence portfolio performance. To do so, we rely upon both comparison to the well-known and still widely used "Sigma" approach to volatility and on well-established statistical tests from the academic literature. Please see the "Important Considerations" section of this report for disclosure of at least some of the many ways this report likely falls short of its objective and other important disclosures.

Evaluation of OaR Estimates

The metrics used in this report to evaluate OaR performance via comparison to Sigma include the mean absolute error (MAE) of breakage rates to the specified probability, Return on OaR Based Capital (ROLOBC), and the alpha of Vector Model ROLOBC to underlying ticker returns. Substantial supporting detail in terms of influential tickers and model dates are provided for each metric and model. The results of this comparative analysis are summarized in the Vector Model OaR "Report Card" section of this report.

We supplement this comparative analysis with two additional tests of Vector Model OaR that are well established in the quantitative finance literature (though more so with regard to Value at Risk, or VaR, than with regard to OaR): the Kupiec Test of breakage consistency with the specified probability and the Christoferson test of breakage independence. The results of these tests are also summarized in the Report Card section.

OaR Breakage Ratios

OaR Breakage refers to forward returns being above the OaR estimate for the corresponding horizon date. Because the Vector Model delivers ticker level probability analytics, breakage is measured at the individual ticker-model date level. and we aggregate it in various ways for evaluation purposes.

For example, 100 tickers tracked over 10 days represents 1,000 ticker-model dates. An ideal estimate of 95% ticker level OaR would generate 50 breaks. Therefore, we compare Vector Model OaR breakage to Sigma's on the basis of MAE to the ideal number of breaks. The model with the smaller MAE is deemed preferable with regard to OaR breakage proximity to target.

However, an ideal OaR estimate wouldn't have all those breaks concentrated in just a couple days or just a few tickers. The breaks generated by an ideal OaR estimate would also be independent with respect to model dates and tickers. Therefore, we also compare the Vector Model's OaR breakage to Sigma's on the basis of variability over time (on average across tickers) and across tickers (on average across dates).

Sigma is known to have some significant shortcomings in measuring the volatility of security price returns. Thus, we supplement the comparison of Vector Model breakage rate MAE to Sigma's MAE with the aforementioned Kupiec test, which tells us whether Vector Model OaR breakage is consistent with targeted breakage with a high degree of confidence (95%). Further, we supplement the comparison of Vector Model breakage variability across model dates with the Christoferson test of date independence.

ROLOBC and its drivers

The metric "ROLOBC" requires some explanation. Return on Long OaR Based Capital, or ROLOBC, attempts to capture the impact on investor returns of using the Vector Model OaR instead of Sigma OaR to size positions. OaR based position weighting might be appropriate for risk tolerant investors who are seeking to maximize returns. Weighting exposures proportionate to their estimated price upside, subject to caps to assure some minimum level of diversification, is consistent with the objectives of such investors, and that is what ROLOBC presumes.

ROLOBC assumes that Sigma earns the return of the underlying ticker and the Vector Model earns a return proportionate to that, where the proportion is the ratio of Vector OaR / Sigma OaR, subject to a cap and floor (we use 300% and 33.33%). So, for example, if Sigma said OaR for ticker ABC was 2.00% and the Vector Model said OaR for ABC was 4.00%, the Vector Model ROLOBC would be double Sigma's. Likewise, if the Vector Model said OaR for ABC was 1.00% the Vector Model's ROLOBC would be half Sigma's. No cost of borrowing or crediting for uninvested funds is incorporated.

For the Vector Model ROLOBC to be higher than Sigma's it signifies that either (1) Vector Model OaR exceeded Sigma's OaR (to the upside) and the ticker traded higher, or (2) Sigma OaR exceeded the Vector Model's OaR (to the upside) and the ticker traded lower.

Note that we do not yet present ROLOBC metrics on VecViz.com. Instead we present ROOBC (Return on OaR Based Capital), which views OaR as a risk metric for short sellers. ROOBC is highly correlated to ROLOBC, but has opposing directionality (if ROOBC is positive ROLOBC is negative and vice versa). Upon further reflection, we have decided that ROLOBC is a way to discuss how OaR can influence investment returns in a way that is relevant to a broader audience. We hope to replace reference to ROOBC on our website to ROLOBC later this year.

Addressing The Tradeoff Between OaR Breakage and ROLOBC

All else equal, assuming a positive drift higher in average asset prices over time, the model with higher average OaR levels will have lower breakage rates and also higher ROLOBC, and vice versa. Thus, relative ROLOBC must be considered in the context of relative breakage rate MAE. In the Report Card we include a metric that directly addresses this concern: comparison of Vector Model ROLOBC to Sigma ROLOBC "Adj. for Avg. VM-Sigma OaR Diff." (adjusted for average Vector Model - Sigma OaR differentials). Specifically, we multiply average aggregate Sigma ROLOBC by the ratio of average aggregate Vector Model OaR to average aggregate Sigma OaR. This multiplication almost entirely eliminates the influence of systematic OaR differentials on the relationship between Vector Model and Sigma ROLOBC. The bias that remains reflects only the aforementioned capping and flooring when calculating Vector Model ROLOBC.

We also provide a more elegant, though less transparent metric that addresses this concern - the alpha of Vector Model ROLOBC to Sigma ROLOBC (i.e., the underlying, equally weighted ticker returns). "Alpha", as discussed in this report, is the intercept of an ordinary least squares regression of Vector Model ROLOBC on the underlying ticker forward returns for corresponding TMD's. It represents the expected Vector Model ROLOBC when Sigma ROLOBC, i.e., the underlying ticker return, is 0.00%.

Determining the drivers of ROLOBC alpha

A ROLOBC Alpha greater than 0.00 across TMD's indicates that Vector Model OaR moved favorably from a market timing and / or ticker selection perspective. We present that statistic alongside an average ROLOBC alpha calculated at the single ticker level across dates. If this second alpha is >0 it indicates that market timing added to the overall alpha, and vice versa. If this second alpha exceeds the overall alpha then it indicates that ticker selection detracted from alpha.

ROLOBC Beta

ROLOBC Beta represents the expected sensitivity of Vector Model ROLOBC to Sigma ROLOBC, i.e., the underlying ticker return. It is the slope of the aforementioned ordinary least squares regression of Vector Model ROLOBC on Sigma ROLOBC. Like outright ROLOBC, it must be considered in the context of Breakage MAE, and like alpha it can be bifurcated to reveal additional insight.

We encourage readers to consider the Vector Model ROLOBC beta to Sigma ROLOBC in the context of how well each model's OaR breakage rates compare to targeted levels. For example, if the Sigma model OaR breakage is well above target and the Vector Model's OaR breakage is close to target, then Vector Model OaR levels are likely higher than Sigma's and the beta of Vector Model ROLOBC to Sigma ROLOBC should be expected to be > 1.00.

A ROLOBC Beta greater than 1.00 across TMD's indicates that Vector Model OaR was higher than Sigma's for more volatile dates and / or tickers. We also present an average Beta alpha calculated at the single ticker level across dates. If this second beta is >1.00 it indicates that Vector Model OaR was higher than Sigma OAR on more volatile days. If this second beta is less than the overall beta then it indicates that Vector Model OaR tended to be less elevated with respect to more volatile tickers than with respect to more volatile dates.

Vector Model Input and Calculation Details

The Vector Model uses systematic price channel identification and scoring in conjunction with machine learning to provide investors with volatility forecasts that reflect the asymmetric, jumpy, clustering, and price dependent behavior of realized and option implied volatility in the financial markets.

The sole input to Vector Model and the Sigma Model out of sample OaR analytics are daily closing prices obtained from QuoteMedia.

The Vector Model was trained upon ~ 60,000 ticker model dates (TMD's) representing ~550 tickers (including equities, currencies, and commodities) and ~ 120 model dates spanning from March 9, 2002 to February 3, 2021. The Out of Sample period starts on 1/31/2022, nearly a full one year from the last model date included in the training data. All OaR estimates discussed in this report are for model dates beyond January 31, 2022, making them fully out of sample.

This report includes Vector Model and Sigma model results for ~150 tickers. Only about twenty of these tickers were included in the Vector Model training data set discussed above. These tickers were selected using the following criteria at the time of selection: Top and Bottom 25 S&P 500 performers, Largest 25 publicly traded issuers in the LQD and HYG etf's, constituents of the Metals and Pharmaceuticals sector within the LQD and HYG etf's, and any other tickers that at the time drew significant financial media attention (Mag 7, meme-related stocks, bitcoin related stocks). We also included several major equity and debt-oriented ETF's. The complete Vector Model OaR coverage universe discussed in this report includes the following tickers:

AA, AAP, AAPL, ABBV, ACGL, ADBE, AMAT, AMC, AMD, AMGN, AMZN, AVGO, AZN, AZO, BA, BAC, BALL, BBY, BHC, BHP, BIIB, BMY, BUD, BXP, CAH, CCL, CDNS, CHTR, CITI, CLF, CMA, CMCSA, CMG, CNC, COST, CPRT, CSCO, CSTM, CTLT, CVS, CYH, CZR, DHI, ELAN, EMB, ETRN, EXPE, FCX, FIS, FITB, FRA, FRCB, FSUGY, GBTC, GE, GILD, GLD, GME, GNRC, GOLD, GOOGL, GS, GSK, GT, GWW, HCA, HD, HLT, HON, HSBC, HYG, IEP, INTC, INTU, IRM, ISRG, JAZZ, JPM, KALU, KEY, KHC, LEN, LLY, LNC, LQD, LUMN, LVS, LW, META, MNST, MOS, MRK, MS, MSFT, MSI, MSTR,

MU, MUB, NAVI, NEM, NFLX, NVDA, NVS, NWL, ON, ORCL, ORLY, OXY, PCG, PEP, PHM, POST, PRGO, PWR, QCOM, QQQ, RIO, SBNY, SBUX, SIVBQ, SLV, SNY, SPY, T, TDG, TEVA, TFC, THC, TLT, TMUS, TRGP, TSLA, TXN, UAA, UNH, USB, VCSH, VFC, VICI, VNO, VST, VZ, WDC, WFC, WRK, WYNN, X, XOM, ZION, ZTS.

The Vector Model is described further in the FAQ and Blog of vecviz.com.

Sigma Details

The core of Sigma, as presented alongside Vector Model output by VecViz, is the standard deviation of price-based returns that very likely gets discussed in any introductory book on risk or portfolio management. This is the same definition of volatility that is utilized in the Black Scholes option pricing formula.

Sigma's flaws as an estimate of forward volatility are well documented. Nevertheless, it remains perhaps the most popular metric for "risk" when it comes to investments, likely because of its simplicity and familiarity.

We present Sigma based on daily logarithmic price returns (akin to % changes in price), and a lookback period of two years. To enhance Sigma's accuracy, we apply a 6-month half-life rate of decay to the weightings applied to the daily returns used to calculate Sigma. This weighting scheme causes the most recent 6-month period to be weighted 8x the least recent 6-month period in the 2 year look back window.

Sigma is converted to probabilities by applying multipliers associated with the standard normal (i.e. Gaussian) distribution with a mean of 0 and sigma of 1.00. Thus, 95% OaR is assumed to be -1.645 sigma's lower than the current price and 99% OaR is presumed to be -2.326 sigma's lower than the current price.

Sigma based probability percentiles for longer time horizons are obtained by multiplying Sigma calculated from daily closing prices by the square root of the number of trading days in the given horizon. In doing so, we are assuming daily returns are independent and identically distributed. So, for example, the multiplier that converts daily horizon sigma to 1 year horizon sigma is the square root of 252 (~15.9).

All calculations for Sigma are based on the same pricing data obtained from QuoteMedia data used to calculate Vector Model OaR.

All Sigma estimates discussed in this report are for dates beyond January 31, 2022, the end of the training period for the Vector Model.

Using this report

This report is ~200 pages long. Some tips to help you navigate: 1) Clicking on the page headings in the Table of Contents will instantly take you to the corresponding page.
2) Use Ctrl-F to search for tickers of interest, to see what Top/Bottom contributor lists they land on, and for what horizons 3) Click Ctrl-Home to return to the Table of Contents

Important considerations about the analytics and performance metrics presented in this report:

1) Past performance is no guarantee of future results. None of the content in this report is investment advice or an offer to buy or sell securities. VecViz is not a SEC investment advisor or broker-dealer. The staff of VecViz actively transacts in securities tied to many of the tickers discussed in this report.
   See VecViz's Terms and Conditions for more context and detail at https://vecviz.com/terms-and-conditions/

2) Read ""Let me warn you…" of the limitations of VecViz's Analytics.", a blog entry on vecviz.com (https://vecviz.com/let-me-warn-you-of-the-limitations-of-vecvizs-analytics/)

3) There are many volatility models that the Vector Model could be compared to beyond Sigma. Thus, even if this report causes you to conclude that the Vector Model's OaR outperforms Sigma OaR, you should not necessarily conclude that Vector Model OaR is the best volatility model for your purposes. See the discussion of some of the other types of volatility models in this blog for more detail: https://vecviz.com/an-llms-comparison-of-vecviz-to-established-vol-models/

4) All breakage rate and ROLOBC performance statistics are as of the end of the horizon only. All interim price movement is ignored. In other words, a stock with a 10d OaR of -15% may have declined 99% the day after the OaR estimate of -15% was calculated, but if it reverts to being only down 14.99% on the 10th day then no breakage occurred as calculated in this report, and its ROLOBC performance will be based on a -14.99% price return.

5) Clearly, all horizons > 1d overlap when considered on a daily basis (except for those utilized in the Kupiec and Christoferson tests). Please note that the volatility of overlapping periodic returns is understated, because each observation shares return experience with other observations for such time horizons.
   Thus, we advise against considering any perceived volatility or volatility related metrics for multi-day horizons in isolation,, including p-values for alpha and beta statistics. However, we do believe that their use is valid for comparing the Vector Model to Sigma, whose multi-day horizon OaR breakage and ROLOBC returns are calculated similarly.

6) We are not considering transaction costs. The turnover and therefore transaction costs experienced by Vector Model ROLOBC based investors resulting in the change in the ratio between Vector Model and Sigma OaR is completely ignored.

7) We are not incorporating any financing charges or margin-related costs for implied “levered” ROLOBC positions.

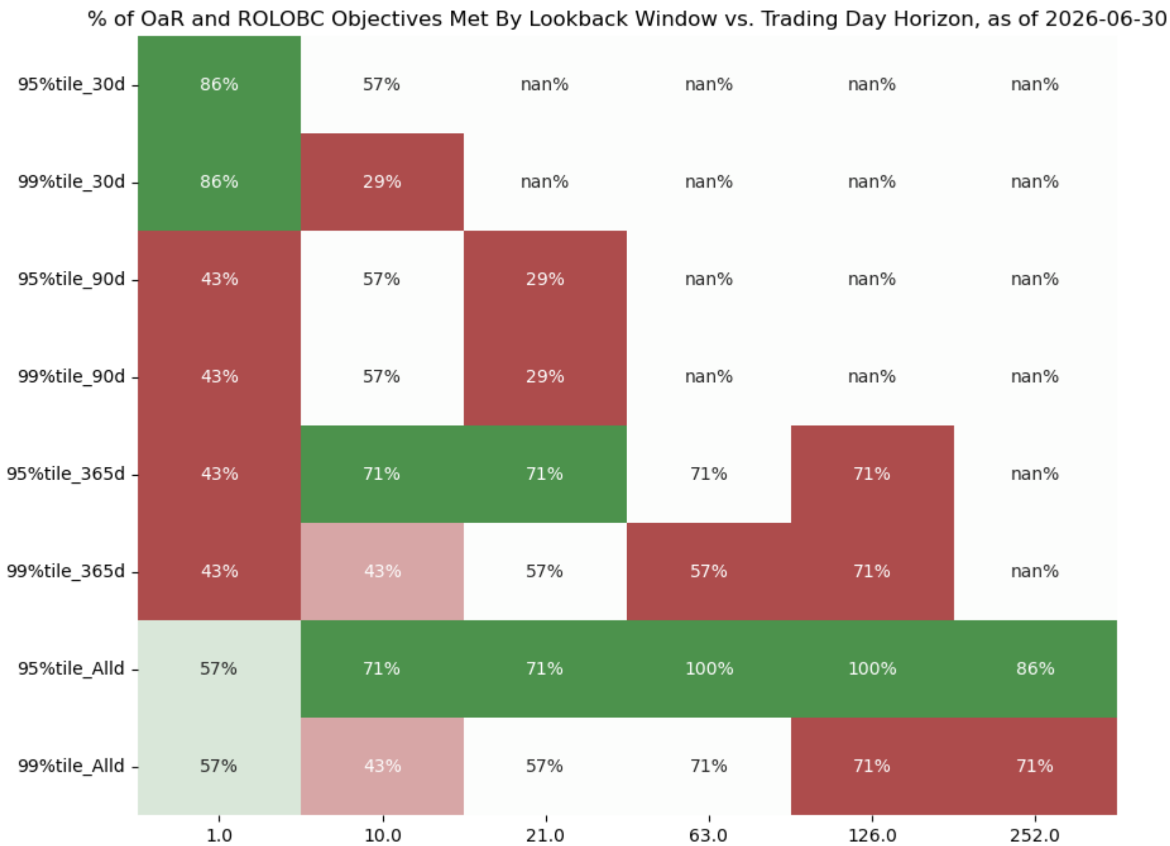
8) Note that OaR for both the Vector Model and Sigma as presented in this report assumes that prices are floored at $0.01. Since the coverage universe for this report includes only listed equities, that assumption is likely appropriate. However, if the Vector Model were applied to commodities or perhaps other potentially illiquid securities we would likely have to remove that floor for such tickers, and the resulting impact on model performance for such tickers has not yet been researched.

Thus, in summary, with the exception of the Kupiec and Christoferson tests, all metrics presented in this report are presented and are to be considered on a comparative basis. Are Vector Model OaR breakage rates closer to target than Sigma’s? Does Vector Model ROLOBC outperform Sigma ROLOBC? Is the relative performance driven by alpha or beta? By timing or ticker selection? What tickers contributed or detracted the most from the relative performance? These are the primary questions this report is structured to answer.

Opportunity At Risk (OaR) Report Cards

Period examined: AllD = 2022-01-31 through 2026-06-29 while 365D /90D/ 30D include the 365/90/30 days ended 2026-06-29, respectively.

Sigma Comparison Report Card:



Vector Model Statistical Testing Report Card:

The Kupiec Proportion of Failures test statistic (listed as OaR_kStat in the table below), and its probability (OaR_pValK) are used to test the null hypothesis that the Vector Model's OaR breakage rate is consistent with expectations. The test statistic is calculated by comparing the number of OaR breaks experienced to the expected number of breaks given the total number of observations and the specified probability level. Breakage is measured at the individual ticker-model date level. The probability of the Kupiec statistic occurring is obtained from the chi-squared distribution. The lower the Kupiec statistic, the higher the p-Value, and the more likely that the Vector Model's OaR breakage rate is consistent with expectations.

The Christoferson OaR Violation Independence test statistic (listed as OaR_chrStat in the table below) and its probability (OaR_pValChr) are used to test the null hypothesis that the OaR model violations are independent. The test statistic focuses on consecutive breakages over time. We measure breakage at the portfolio level, with portfolio breakage for a given period defined as equally weighted ticker level breakage for that period being beyond expectation given the specified probability level. The probability of the Christoferson statistic occurring is obtained from the chi-squared distribution. The lower the Christoferson statistic, the higher the p-Value, and the more likely that Vector Model OaR breakage is independent.

Kupiec and Christoferson test results for Sigma OaR can be found in the Appendix.

Period examined: 2022-01-31 through 2026-06-29. Note that for horizon periods greater than 1d we exclude enough model dates to assure no overlap between observation periods.

Model	Pctile	Horizon	OaR_kStat	OaR_pValK	OaR_chrStat	OaR_pValChr
Vector	95	1	126.32	0	4.94	0.03
Vector	95	10	52.82	0	4.85	0.03
Vector	95	21	53.32	0	0.86	0.35
Vector	95	63	4.47	0.03	0.49	0.49
Vector	95	126	0.71	0.4	nan	0
Vector	95	252	2.09	0.15	nan	0
Vector	99	1	24.75	0	8.06	0
Vector	99	10	64.14	0	3.57	0.06
Vector	99	21	48.27	0	1.56	0.21
Vector	99	63	8.07	0	3.05	0.08
Vector	99	126	8.74	0	0.17	0.68
Vector	99	252	8.33	0	nan	0

Combined Summary Report Card By Objective:

Here we summarize the results by objective, starting with the Sigma comparison-based objectives, for which a sub-total is provided. Each lookback period, horizon and specified percentile receives equal weighting in these calculations.

Then summary results for the statistical tests are provided, with success defined as a p-value for the corresponding test statistic > 0.05, and each horizon and specified percentile receiving equal weighting.")

Period examined: 2022-01-31 through 2026-06-29.

OaR and ROLOBC Criteria	Average Score(%)
1. Closer to Target OaR Breakage Than Sigma	31.25
2. Less Volatile OaR Breakage Across Model Dates Than Sigma	93.75
3. Less Volatile OaR Breakage Across Tickers Than Sigma	34.38
4. Higher ROLOBC Than Sigma	100
5. Higher ROLOBC Than Sigma, Adj. for Avg. VM-Sigma OaR Diff.	34.38
6. Alpha of ROLOBC vs Sigma >0, Across Tickers and Model Dates	56.25
7. Alpha of ROLOBC vs Sigma >0, By Ticker, Across Model Dates	81.25
Overall Comparison to Sigma Average	61.61
Kupiec Test of VaR Proximity to Target	16.6667
Christoferson Test of OaR Date Independence	50

OaR and ROLOBC Criteria By Fwd Hzn	1D	10D	21D	63D	126D	252D
1. Closer to Target OaR Breakage Than Sigma	87.5	0	0	25	25	50
2. Less Volatile OaR Breakage Across Model Dates Than Sigma	100	87.5	100	100	75	100
3. Less Volatile OaR Breakage Across Tickers Than Sigma	0	0	16.67	100	100	100
4. Higher ROLOBC Than Sigma	100	100	100	100	100	100
5. Higher ROLOBC Than Sigma, Adj. for Avg. VM-Sigma OaR Diff.	25	37.5	33.33	50	50	0
6. Alpha of ROLOBC vs Sigma >0, Across Tickers and Model Dates	25	62.5	50	50	100	100
7. Alpha of ROLOBC vs Sigma >0, By Ticker, Across Model Dates	62.5	87.5	66.67	100	100	100
TotalScore	57.14	53.57	52.38	75	78.57	78.57

OaR and ROLOBC Criteria Across Lookback Window	30D	90D	365D	AllD
1. Closer to Target OaR Breakage Than Sigma	50	16.67	20	41.67
2. Less Volatile OaR Breakage Across Model Dates Than Sigma	75	100	90	100
3. Less Volatile OaR Breakage Across Tickers Than Sigma	0	0	50	50
4. Higher ROLOBC Than Sigma	100	100	100	100
5. Higher ROLOBC Than Sigma, Adj. for Avg. VM-Sigma OaR Diff.	75	0	40	33.33
6. Alpha of ROLOBC vs Sigma >0, Across Tickers and Model Dates	75	33.33	40	75

OaR and ROLOBC Criteria Across Lookback Window	30D	90D	365D	AllD
7. Alpha of ROLOBC vs Sigma >0, By Ticker, Across Model Dates	75	50	80	100
TotalScore	64.29	42.86	60	71.43

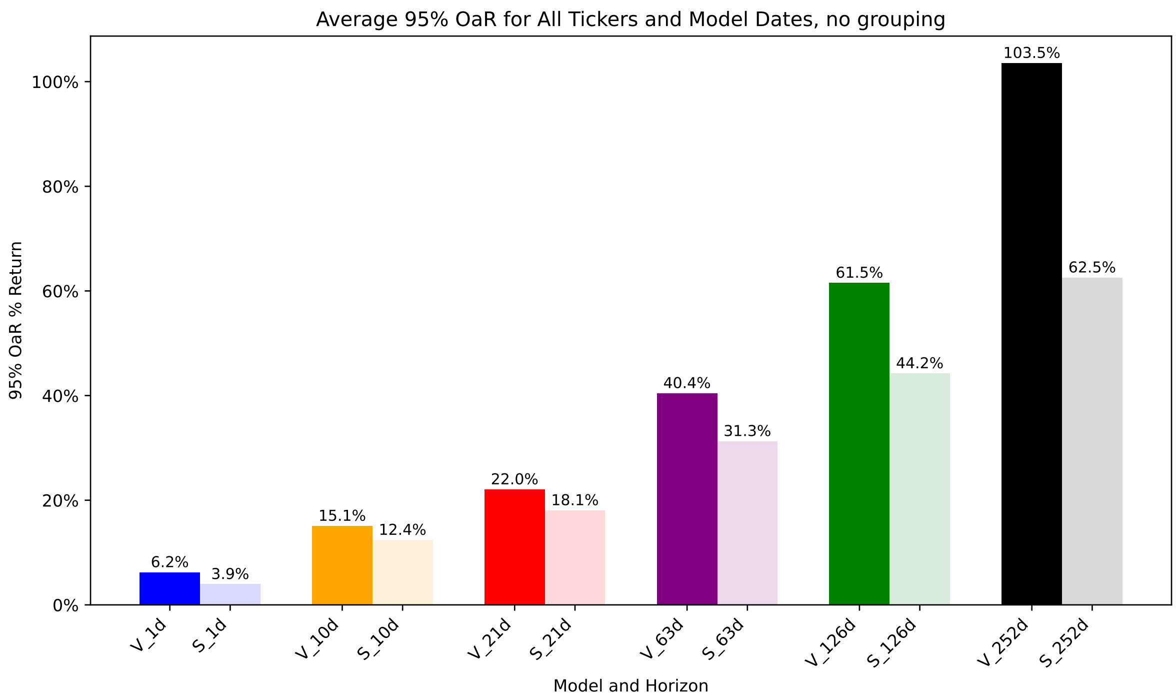
95% Opportunity At Risk (OaR)

Historic Average Levels

Here we compare Vector Model ("V", dark shading) and Sigma ("S", light shading) 95% OaR levels by horizon, on average across tickers. We make this comparison on average across tickers for select cohorts of model dates (ex: P30D), and forward horizons (ex: 21d) for all ticker model dates thru the present.

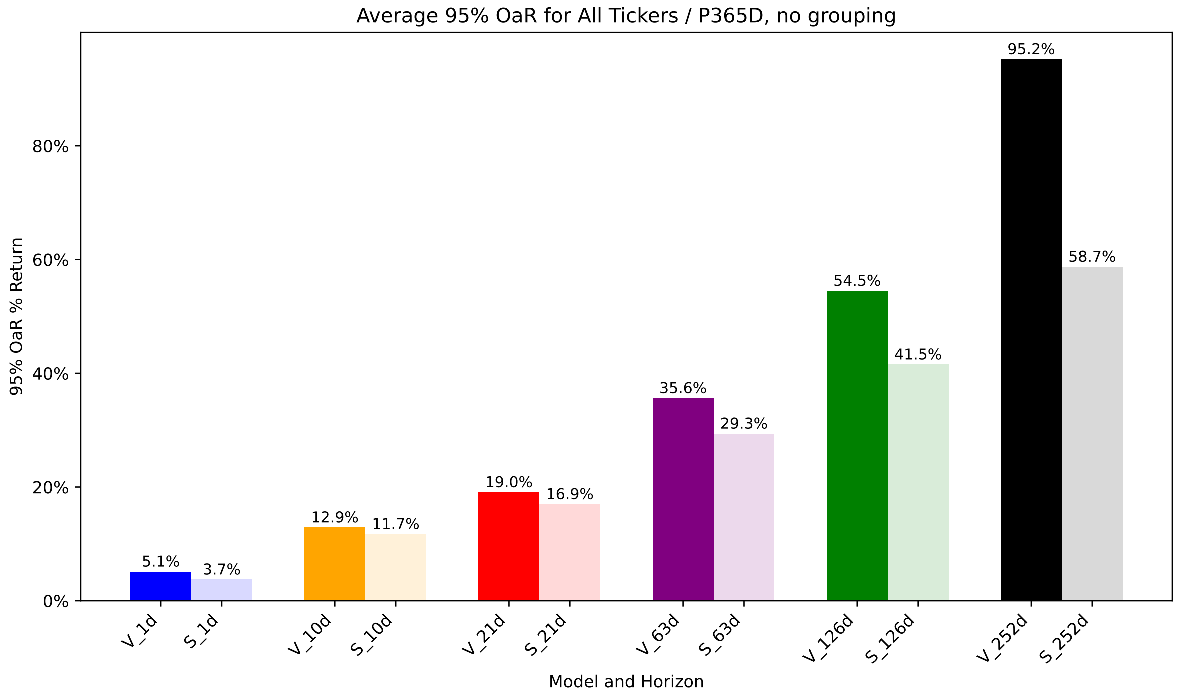
All Out of Sample Model Dates

Period examined: All model dates from 2022-01-31 through 2026-06-29



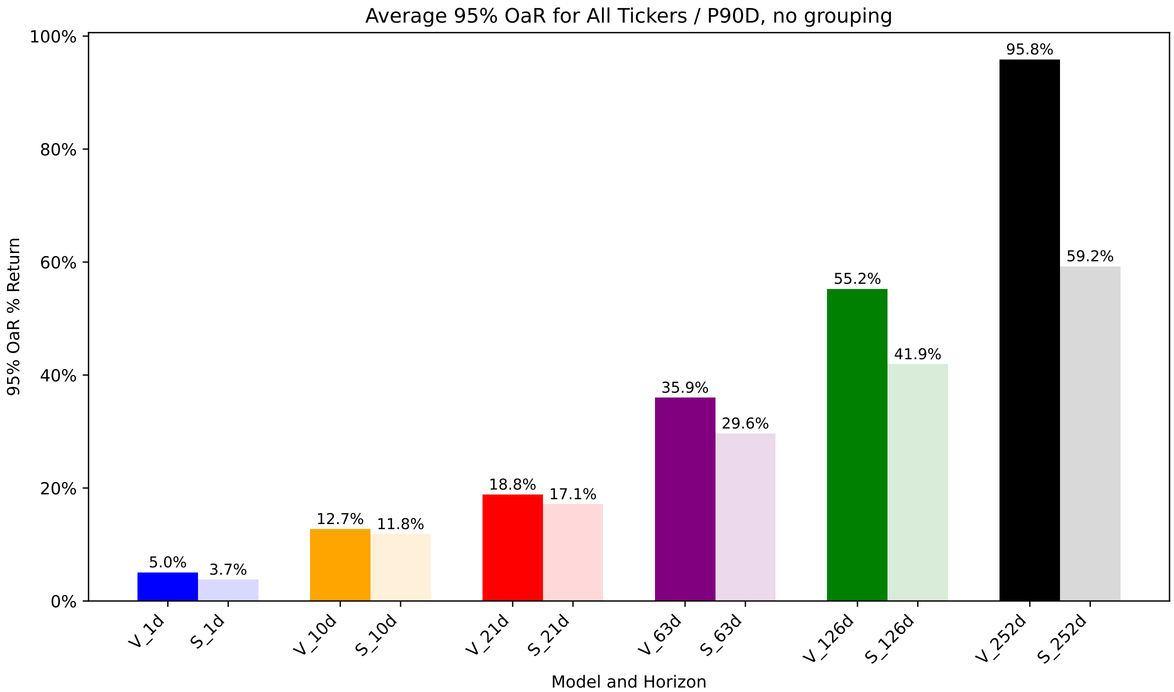
Prior 365 Calendar Days (P365D)

Period examined: All model dates from 2026-06-29 through 2025-07-01



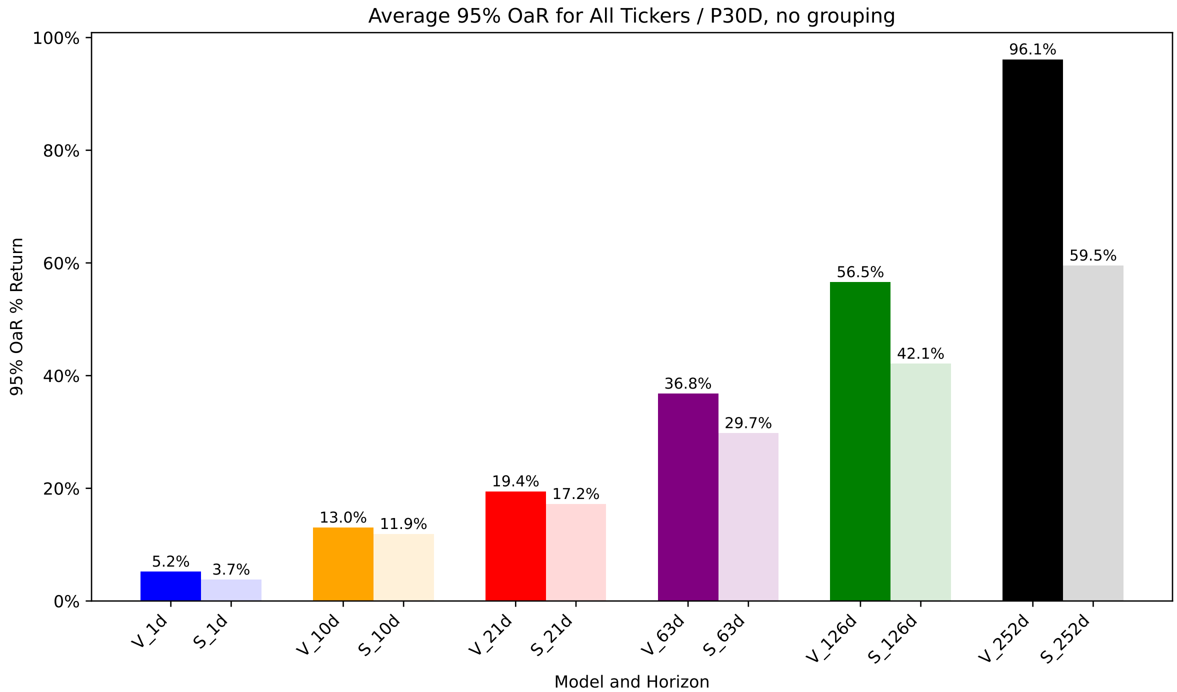
Prior 90 Calendar Days (P90D)

Period examined: All model dates from 2026-06-29 through 2026-04-02



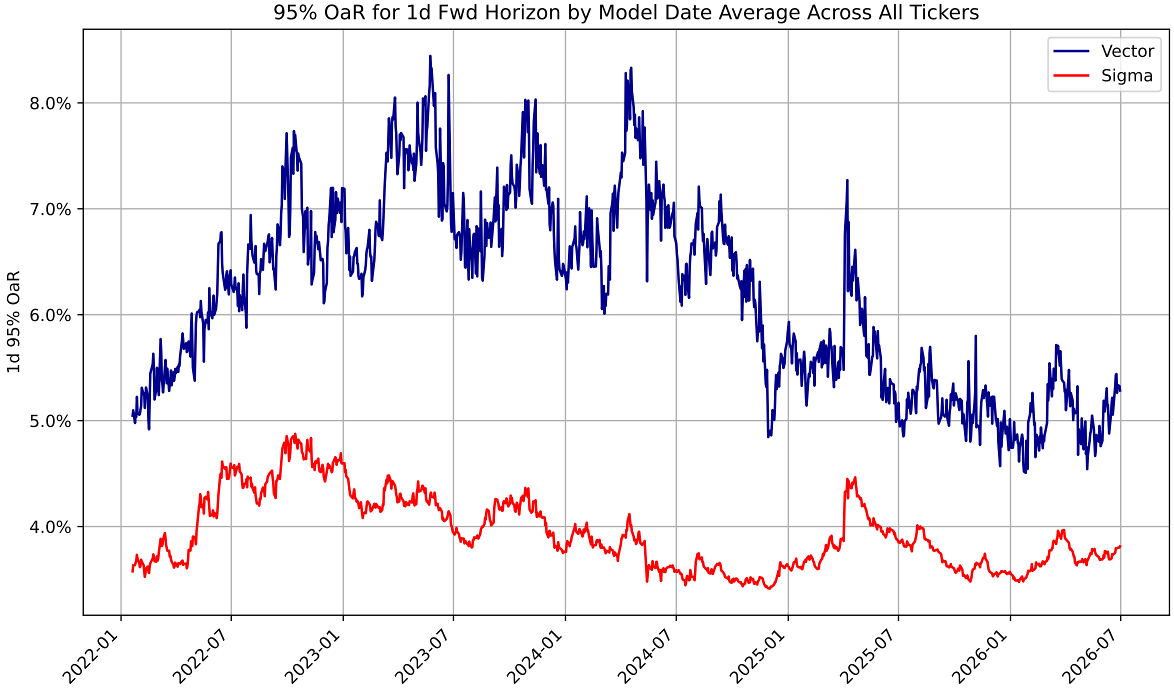
Prior 30 Calendar Days (P30D)

Period examined: All model dates from 2026-06-29 through 2026-06-01

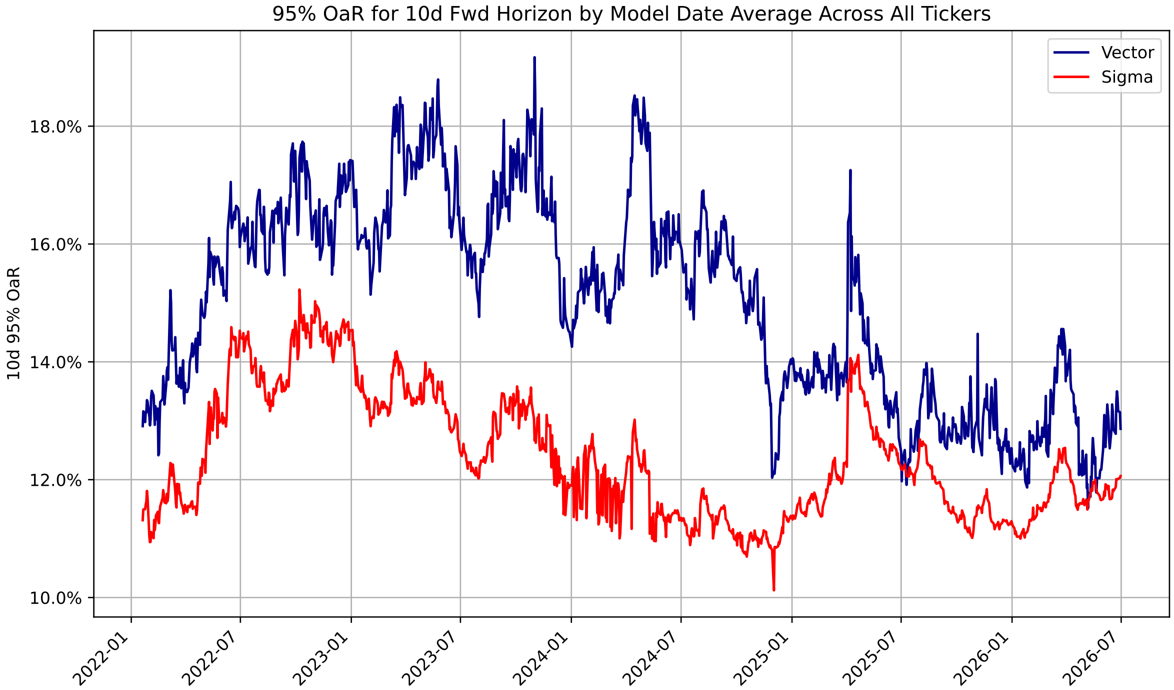


Daily Levels

1d Horizon

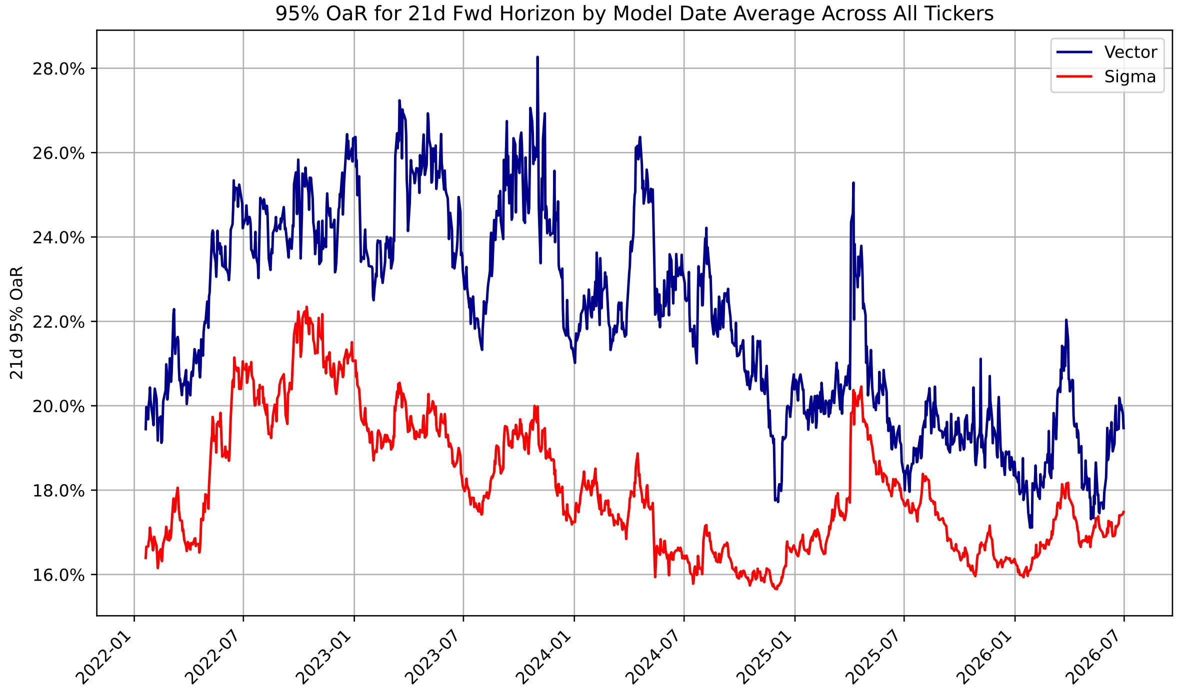


10d Horizon



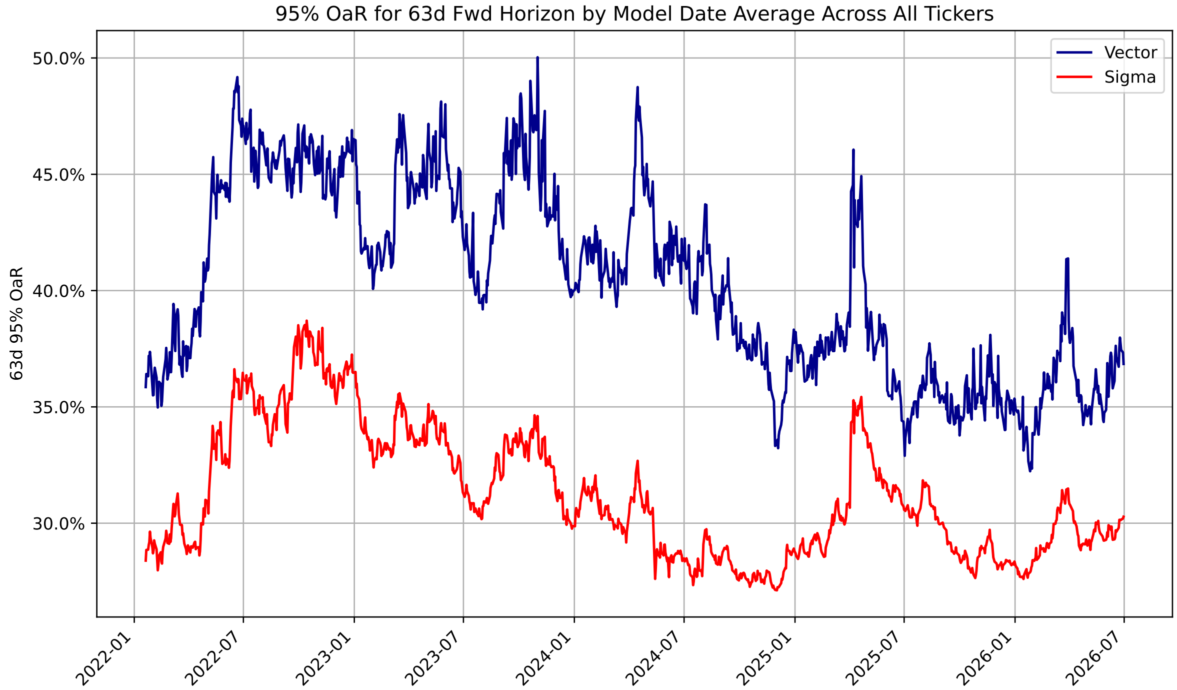
95% OaR for 10d Fwd Horizon by Model Date Average Across All Tickers
Vector
Sigma
10d 95% OaR
18.0%
16.0%
14.0%
12.0%
10.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

21d Horizon



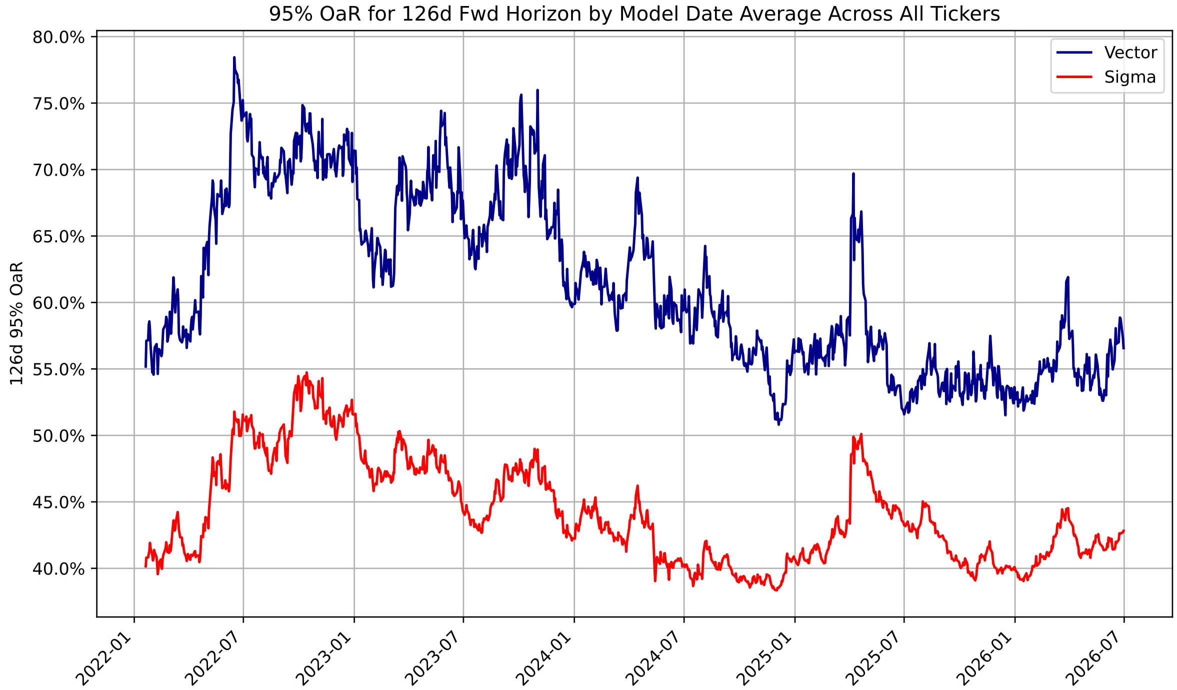
95% OaR for 21d Fwd Horizon by Model Date Average Across All Tickers
Vector
Sigma
21d 95% OaR
28.0%
26.0%
24.0%
22.0%
20.0%
18.0%
16.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

63d Horizon

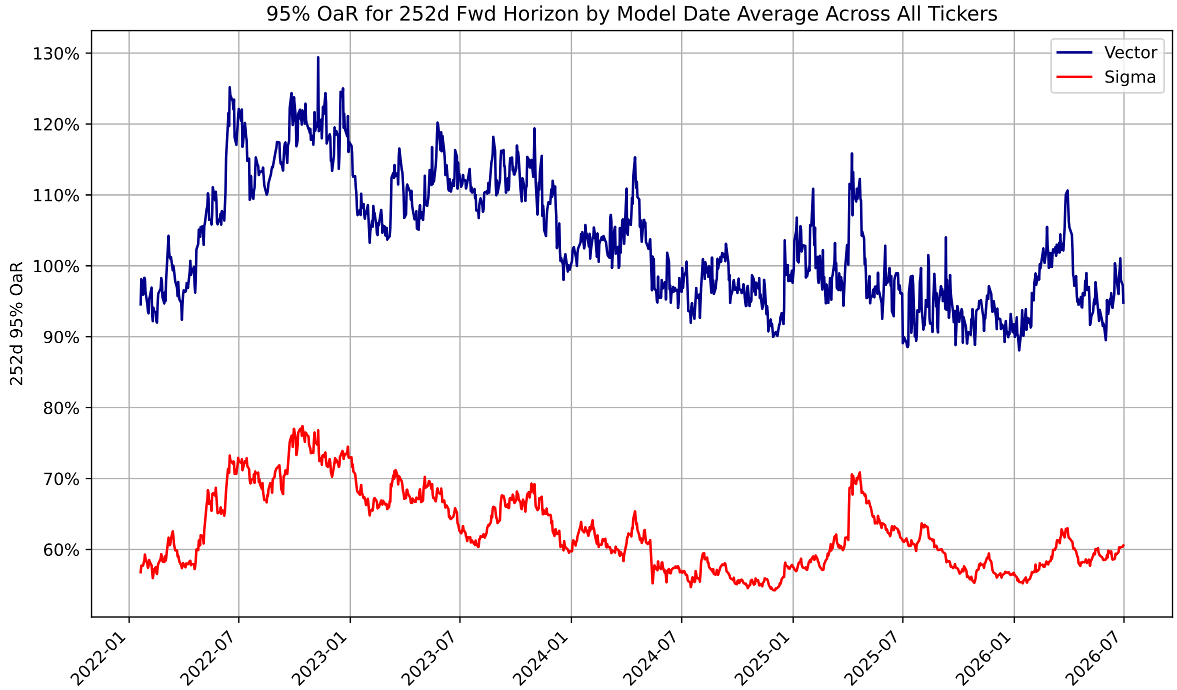


95% OaR for 63d Fwd Horizon by Model Date Average Across All Tickers
63d 95% OaR
50.0%
45.0%
40.0%
35.0%
30.0%
Vector
Sigma
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

126d Horizon



252d Horizon



Performance Summary

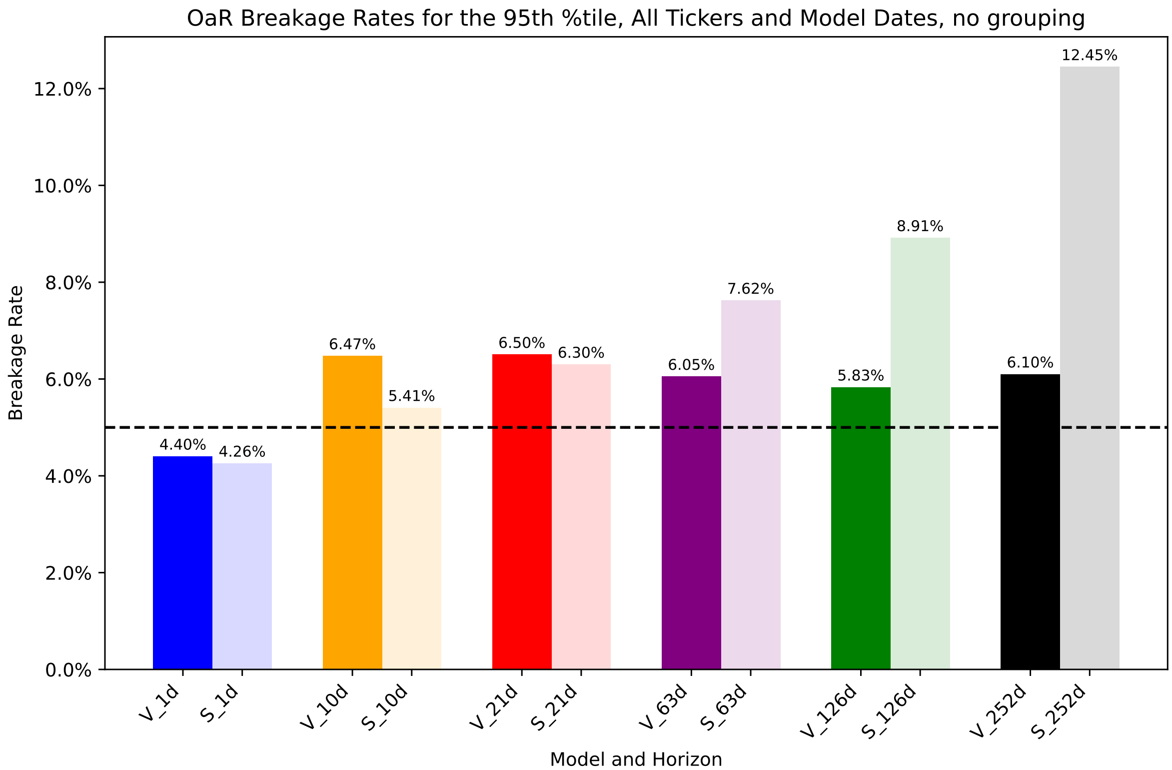
Here we compare the performance of 95% OaR estimates generated by the Vector Model ("V", presented with dark shading) with those generated by Sigma ("S", presented with light shading). This comparison is made on the basis of breakage rates and Return on Long OaR based Capital (ROLOBC), presenting the average results across tickers and model dates for all horizons as of the most recent model date.

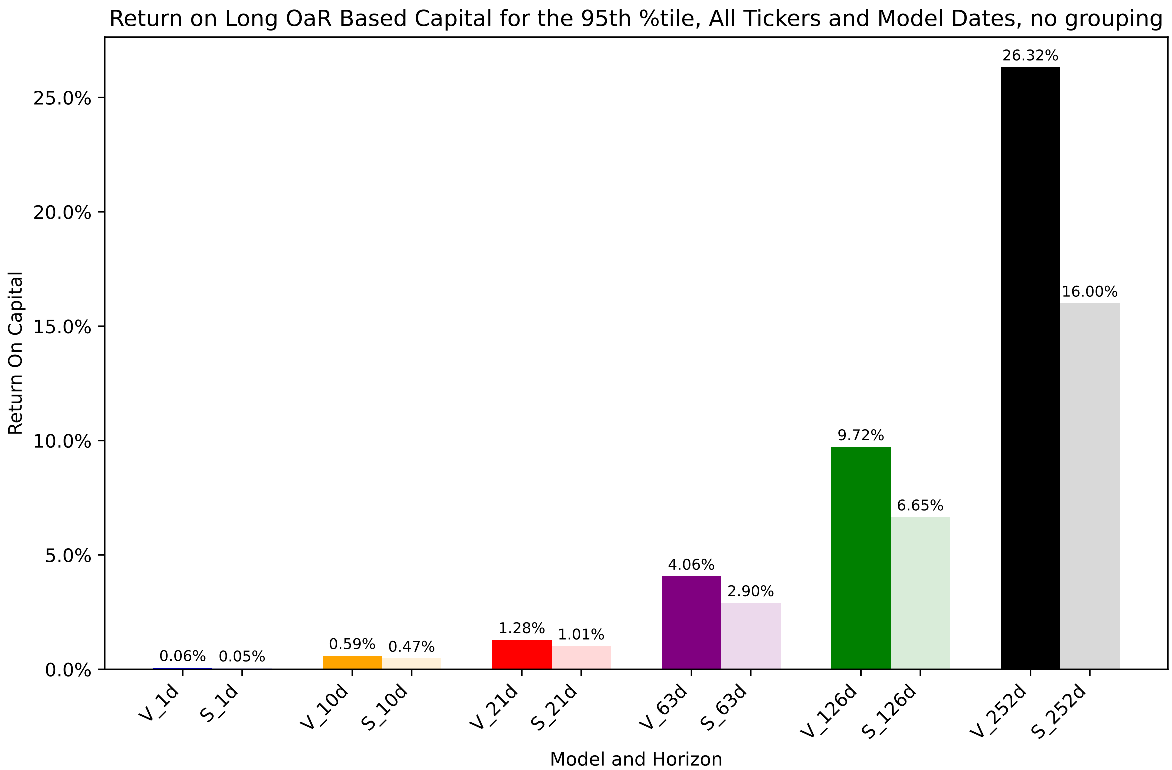
ROLOBC comparisons are made on the basis of outright ROLOBC and the alpha of Vector Model ROLOBC to underlying ticker returns (the proxy for Sigma ROLOBC). As discussed in the Introduction, ROLOBC for Sigma is presumed to be the return of the underlying ticker, and for the Vector Model it is based on the return of the ticker multiplied by the ratio Vector Model based OaR to Sigma model based OaR, with a cap of 3.0x and a floor of 0.333x. Alpha allows us to isolate ROLOBC performance differences between the Vector Model and Sigma apart from any systematic difference between the ROLOBC multiplier for the Vector Model and 1.00x. Alpha across TMD's could be driven by OaR differentials between tickers and / or between dates. Thus we also present average alpha by ticker across model dates.

Results for each horizon reflect the average for all model estimates for that horizon from all model dates for which forward performance is known. Note that periods for all horizons > 1d overlap.

All Out of Sample Model Dates

Period examined: All model dates from 2022-01-31 through 2026-06-29





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across TMD's:

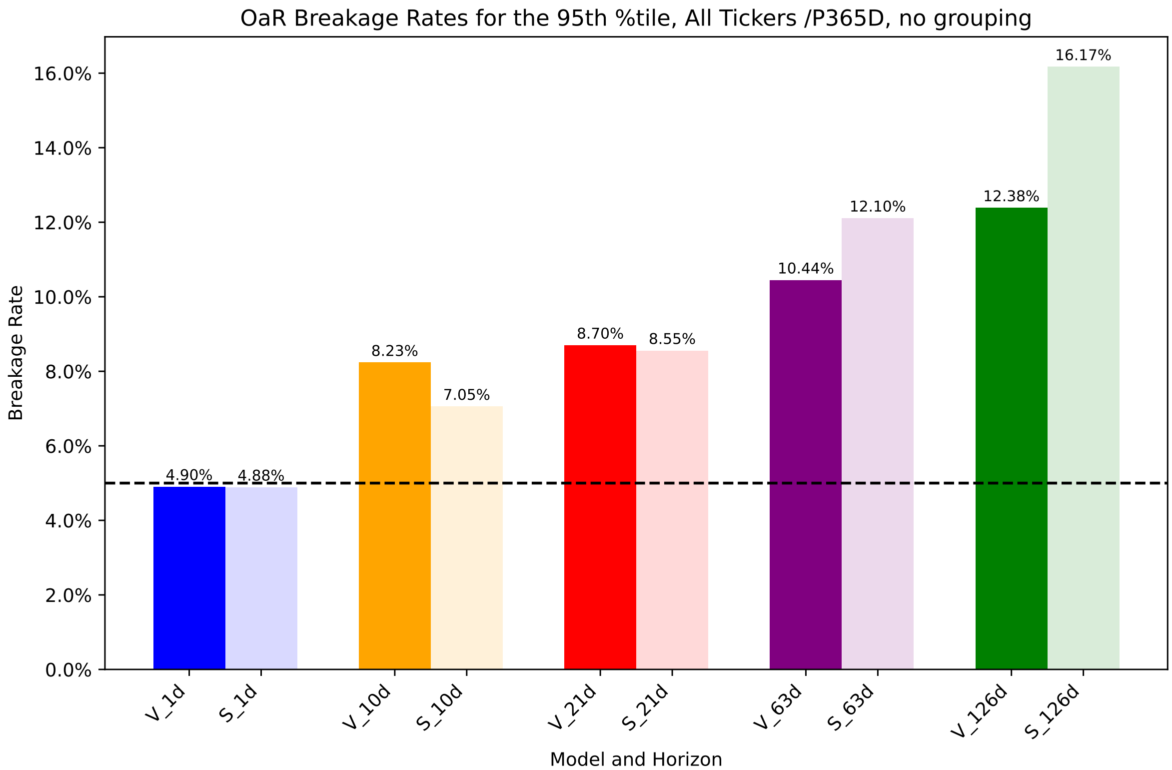
	1d	10d	21d	63d	126d	252d
intercept	-0.00%	0.03%	0.08%	0.21%	0.59%	3.13%
intercept_p_value	36.63%	1.66%	0.01%	0.00%	0.00%	0.00%
slope	143.23%	117.83%	119.75%	132.85%	137.26%	144.97%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

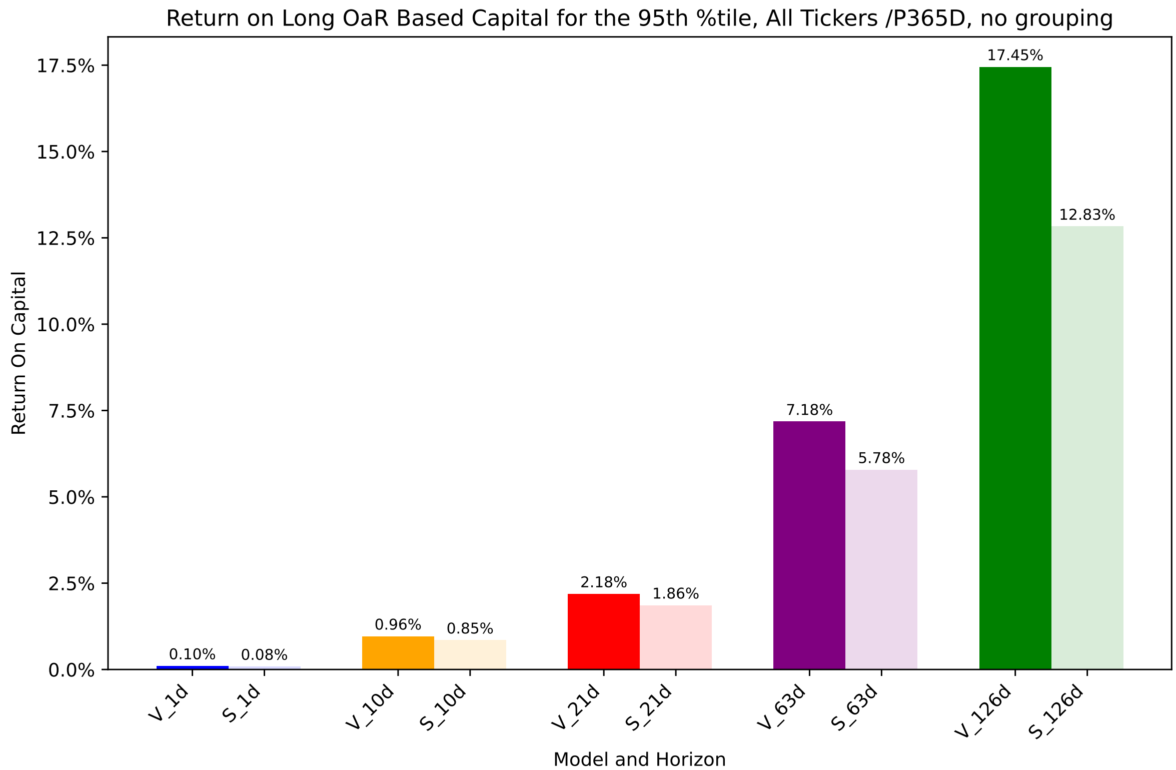
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across Model Dates:

	1d	10d	21d	63d	126d	252d
intercept	-0.04%	-0.20%	-0.56%	-2.28%	-4.43%	-5.59%
intercept_p_value	0.00%	0.15%	0.01%	0.00%	0.00%	0.06%
slope	163.50%	145.72%	163.56%	179.21%	177.60%	168.33%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Prior 365 Calendar Days (P365D)

Period examined: All model dates from 2026-06-29 through 2025-07-01





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across P365D:

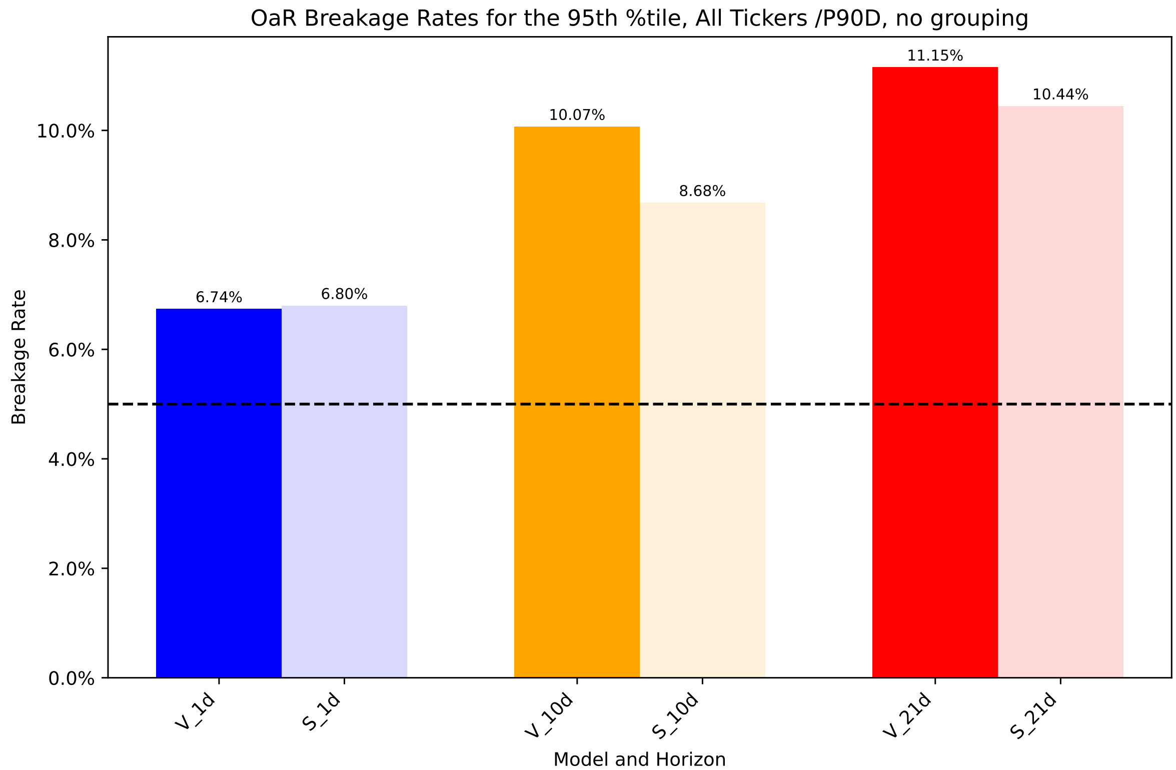
	1d	10d	21d	63d	126d
intercept	-0.01%	0.04%	0.11%	-0.04%	0.60%
intercept_p_value	15.44%	5.38%	0.14%	63.42%	0.01%
slope	134.64%	108.26%	111.72%	124.83%	131.31%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%

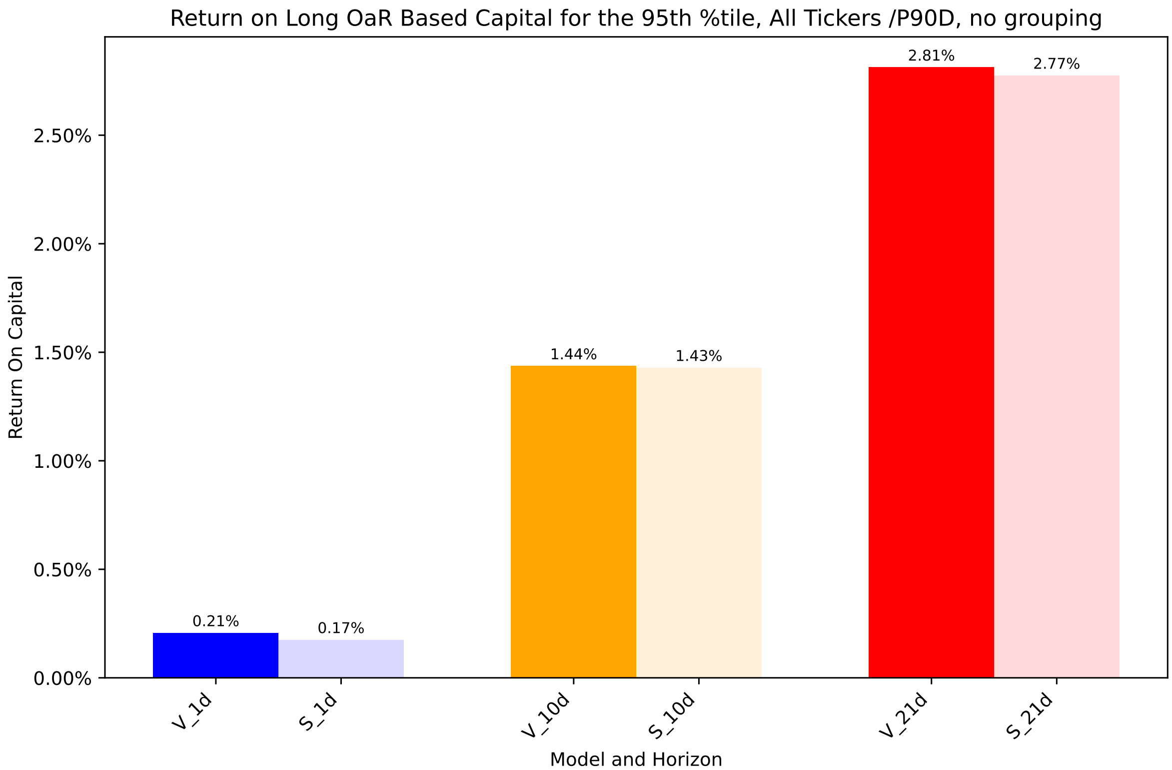
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across P365D:

	1d	10d	21d	63d	126d
intercept	-0.02%	-0.07%	-0.19%	-0.70%	-1.92%
intercept_p_value	6.16%	38.58%	25.04%	16.77%	9.31%
slope	102.19%	109.09%	116.67%	120.29%	133.30%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%

Prior 90 Calendar Days (P90D)

Period examined: All model dates from 2026-06-29 through 2026-04-02





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across P90D:

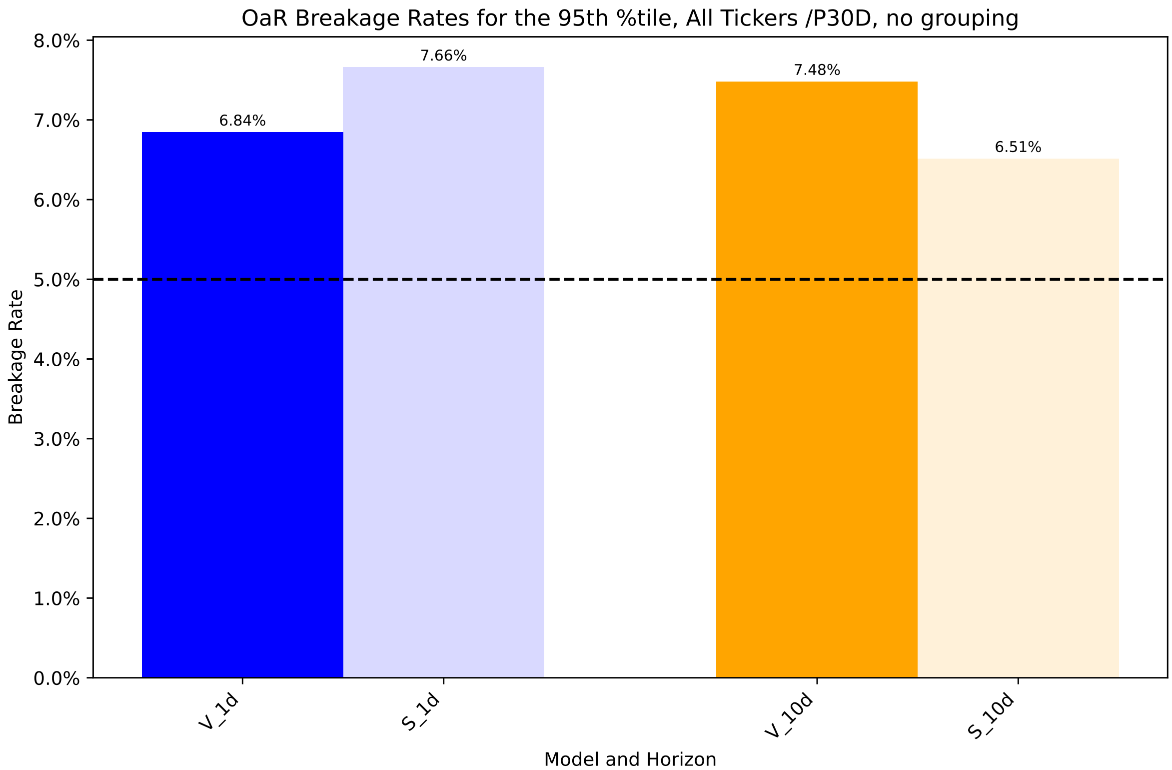
	1d	10d	21d
intercept	-0.02%	0.01%	-0.03%
intercept_p_value	36.81%	89.51%	76.44%
slope	128.69%	100.05%	102.37%
slope_p_value	0.00%	0.00%	0.00%

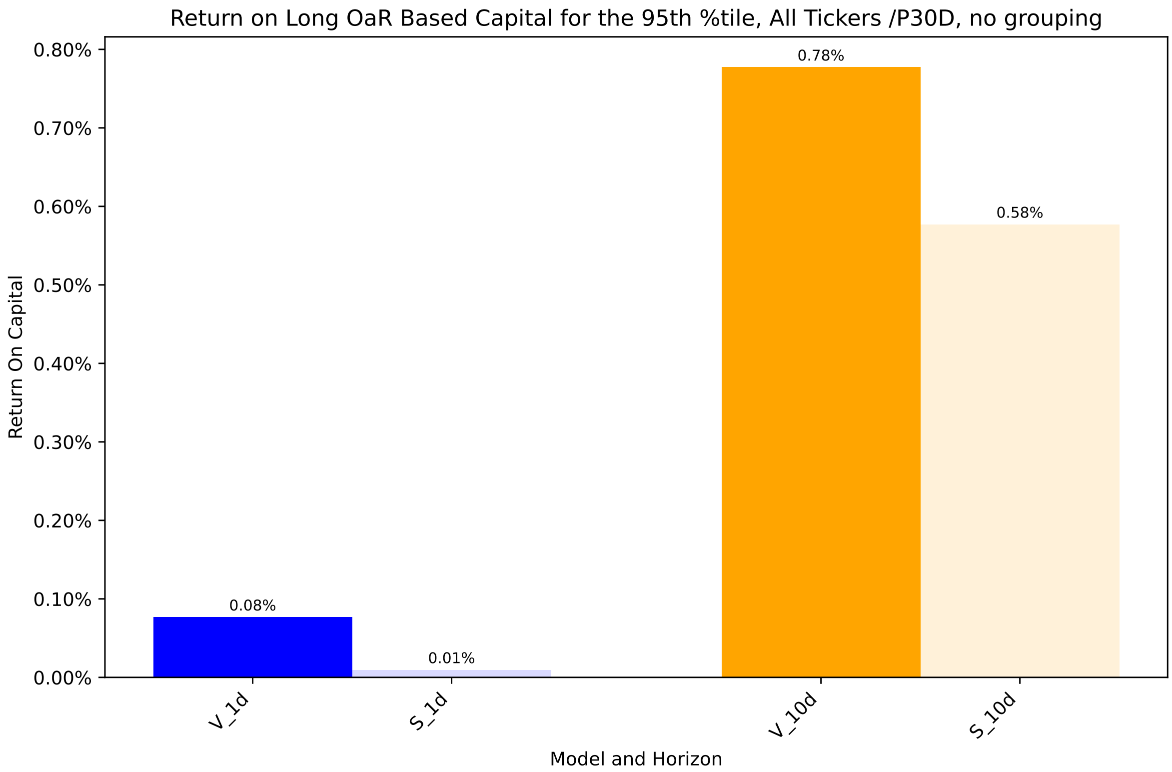
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across P90D:

	1d	10d	21d
intercept	-0.00%	0.12%	0.06%
intercept_p_value	83.68%	57.32%	88.92%
slope	115.39%	121.69%	130.11%
slope_p_value	0.00%	0.00%	0.00%

Prior 30 Calendar Days (P30D)

Period examined: All model dates from 2026-06-29 through 2026-06-01





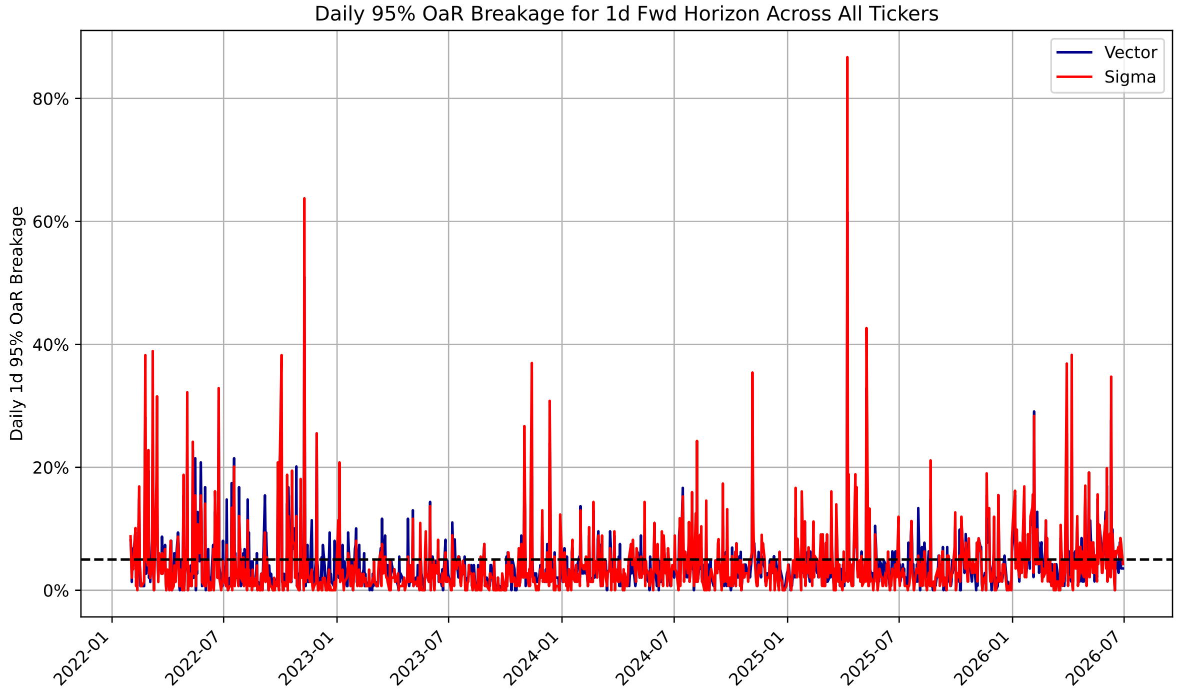

```
Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon
corresponding actual returns across P30D:
                        1d      10d
intercept             0.06%    0.18%
intercept_p_value    11.17%   10.18%
slope               132.11%  103.65%
slope_p_value         0.00%    0.00%
```

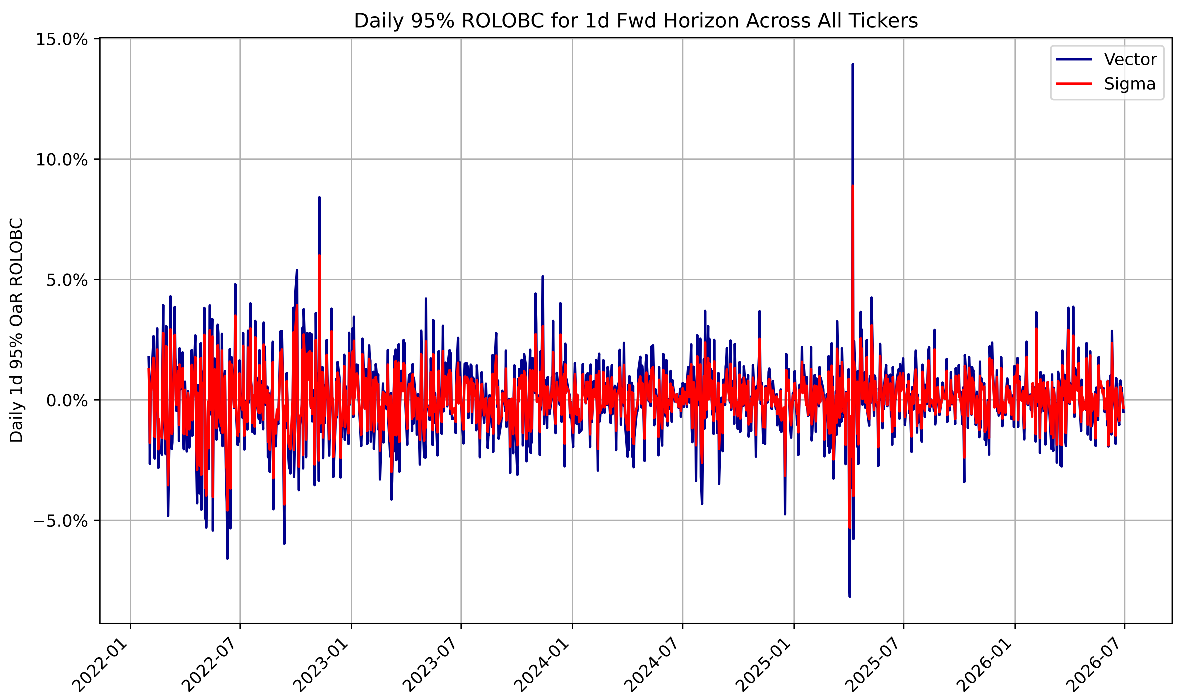
```
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon
corresponding actual returns, by ticker across P30D:
                        1d      10d
intercept            -0.02%   -0.41%
intercept_p_value    67.33%   22.71%
slope               109.92%  124.09%
slope_p_value         0.00%    0.00%
```

Daily Performance

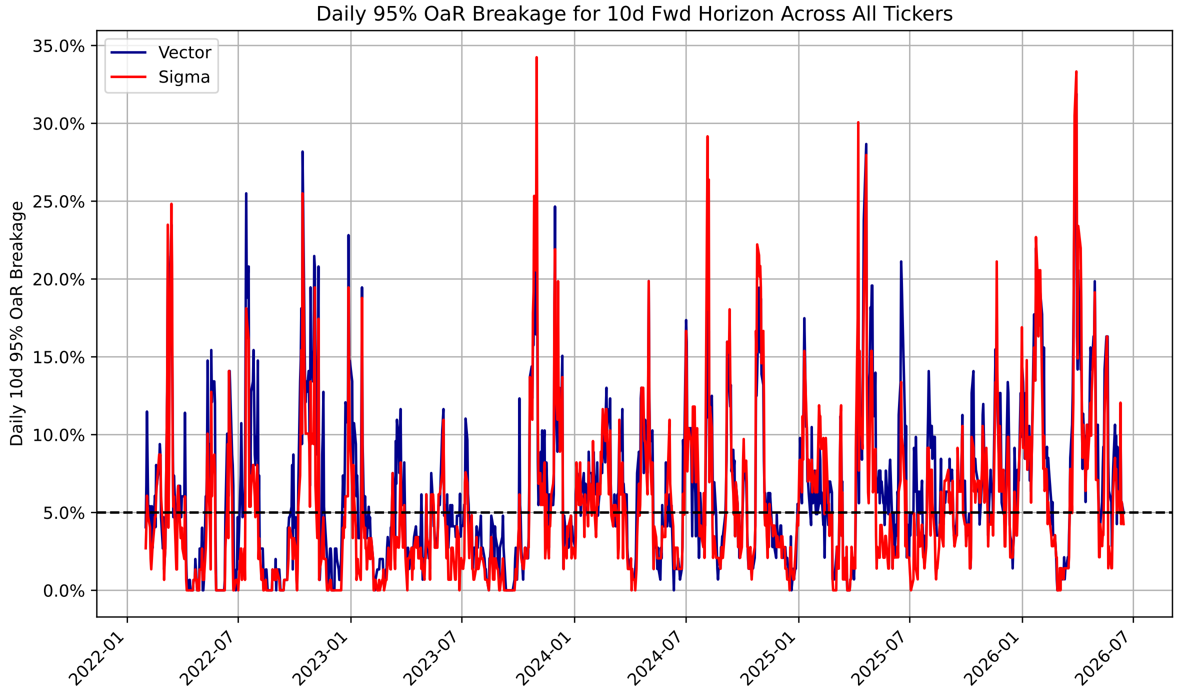
Here we look at the daily breakage and ROLOBC statitics summarized in the preceding section. The daily basis of the presentation allows for observation of the magnitude, frequency and proximity of breakage and ROLOBC outliers.

1d Horizon

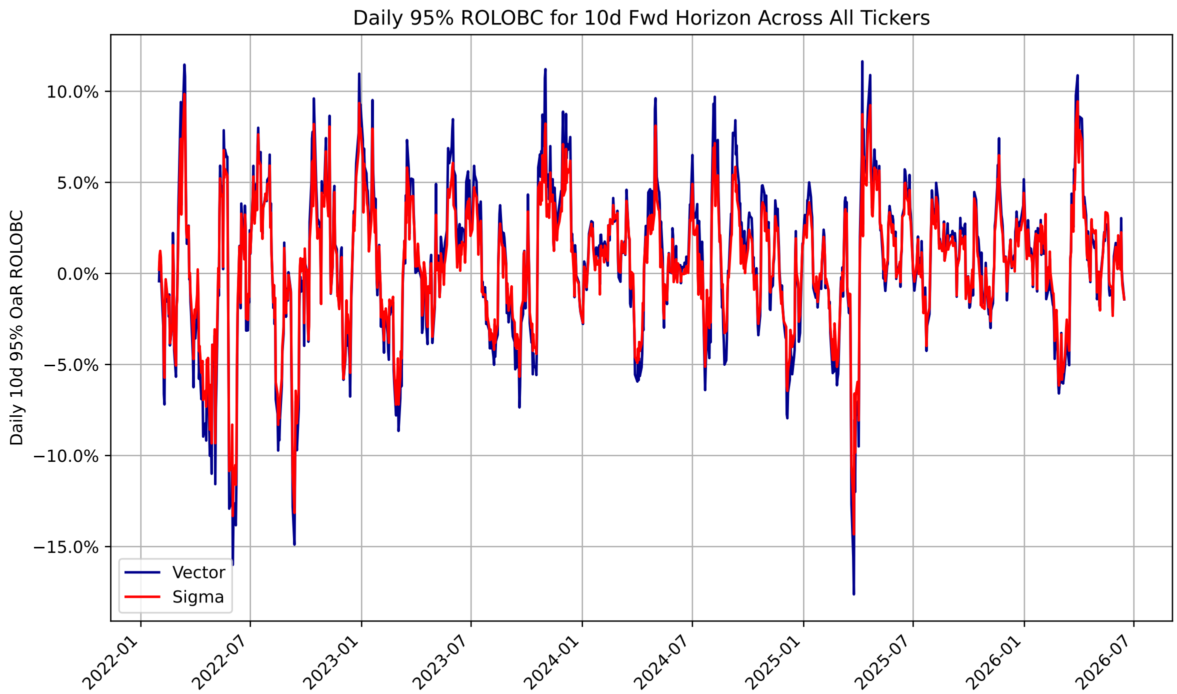



Daily 95% ROLOBC for 1d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 1d 95% OaR ROLOBC
15.0%
10.0%
5.0%
0.0%
−5.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

10d Horizon

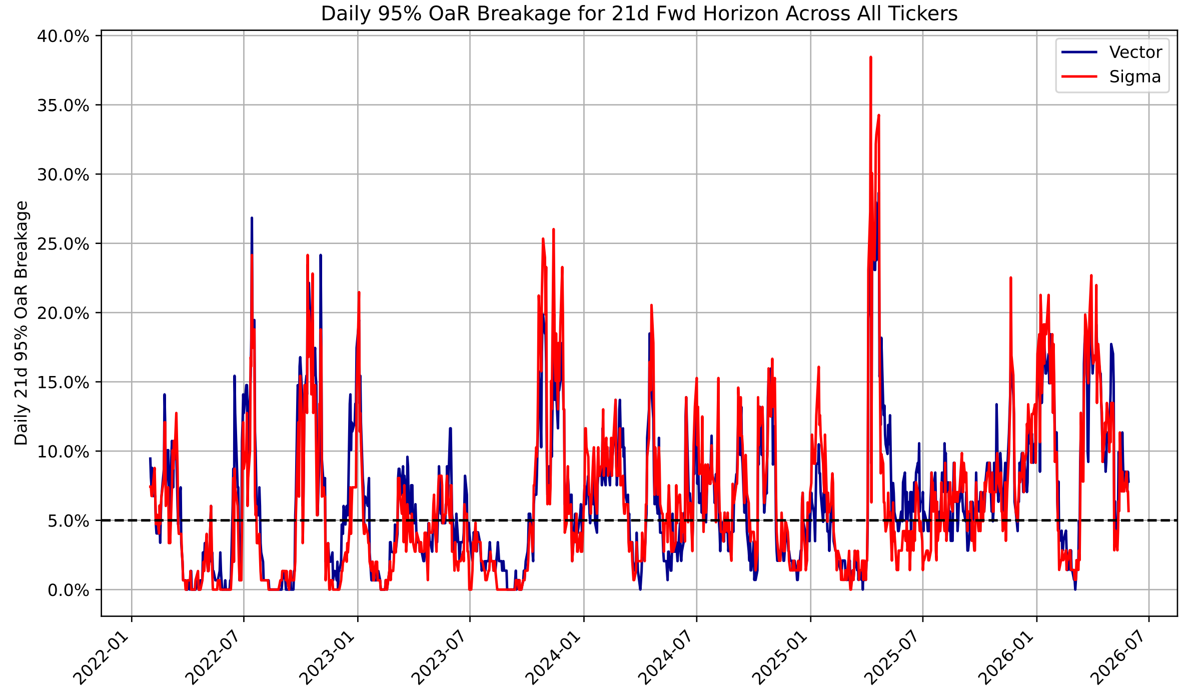


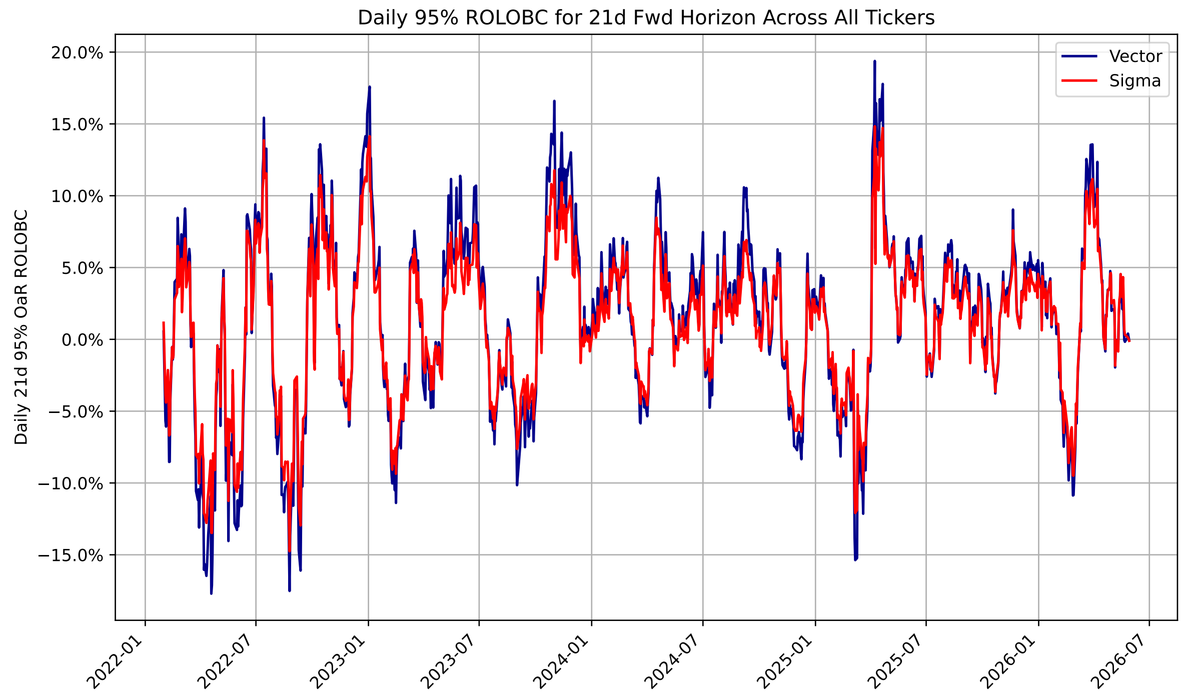
Daily 95% OaR Breakage for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 10d 95% OaR Breakage
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07



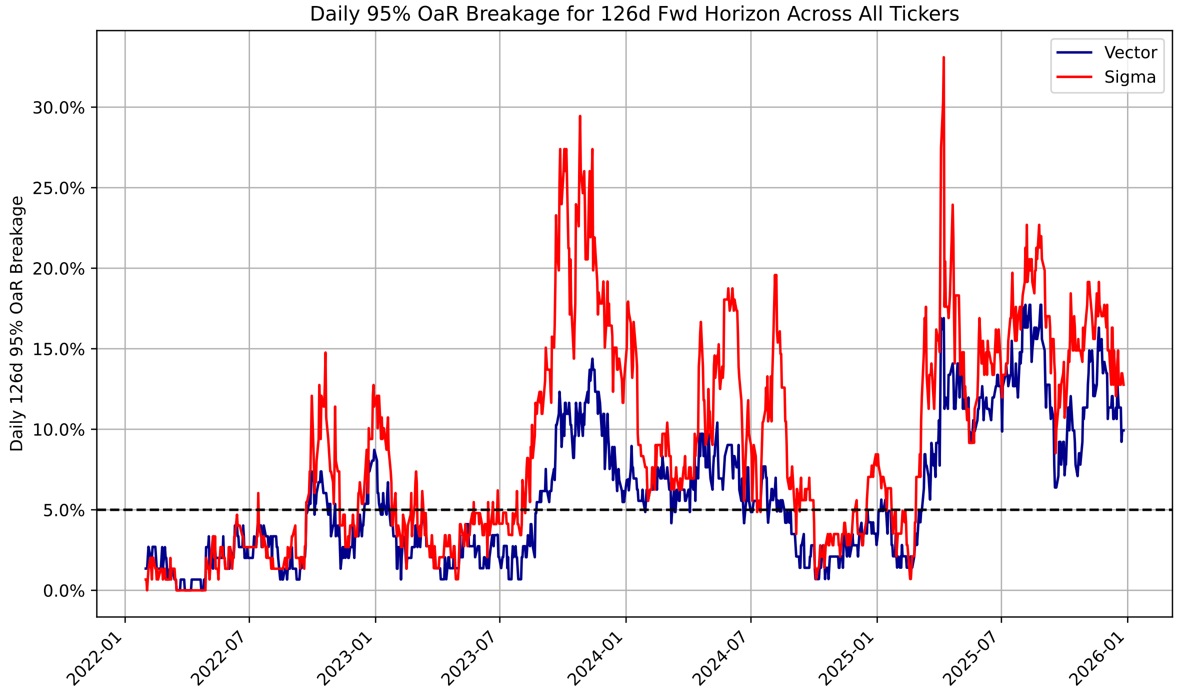
Daily 95% ROLOBC for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 10d 95% OaR ROLOBC
10.0%
5.0%
0.0%
−5.0%
−10.0%
−15.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

21d Horizon

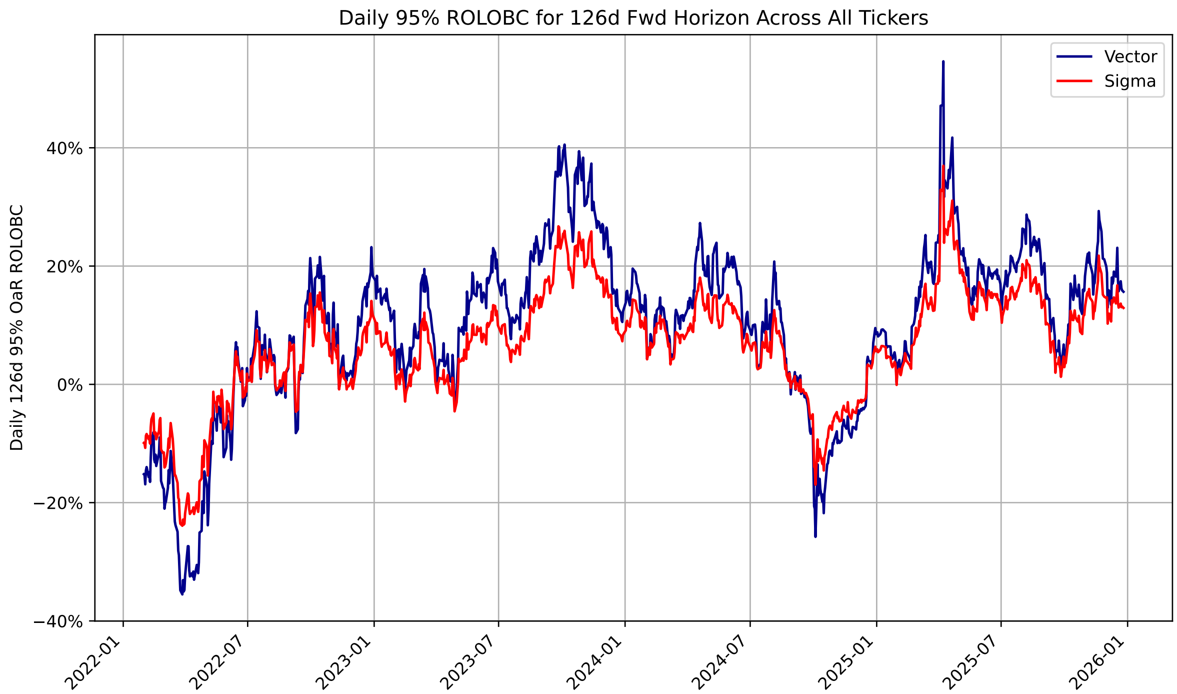

Daily 95% OaR Breakage for 21d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 21d 95% OaR Breakage
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07


Daily 95% ROLOBC for 21d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 21d 95% OaR ROLOBC
20.0%
15.0%
10.0%
5.0%
0.0%
−5.0%
−10.0%
−15.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

63d Horizon

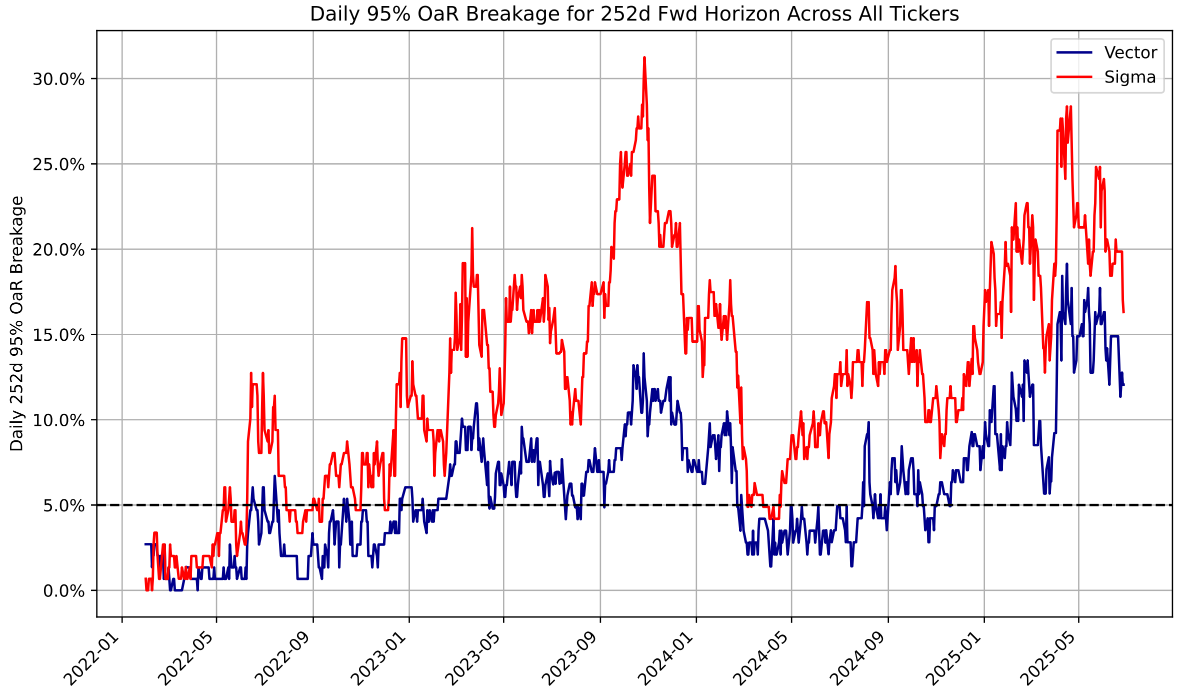


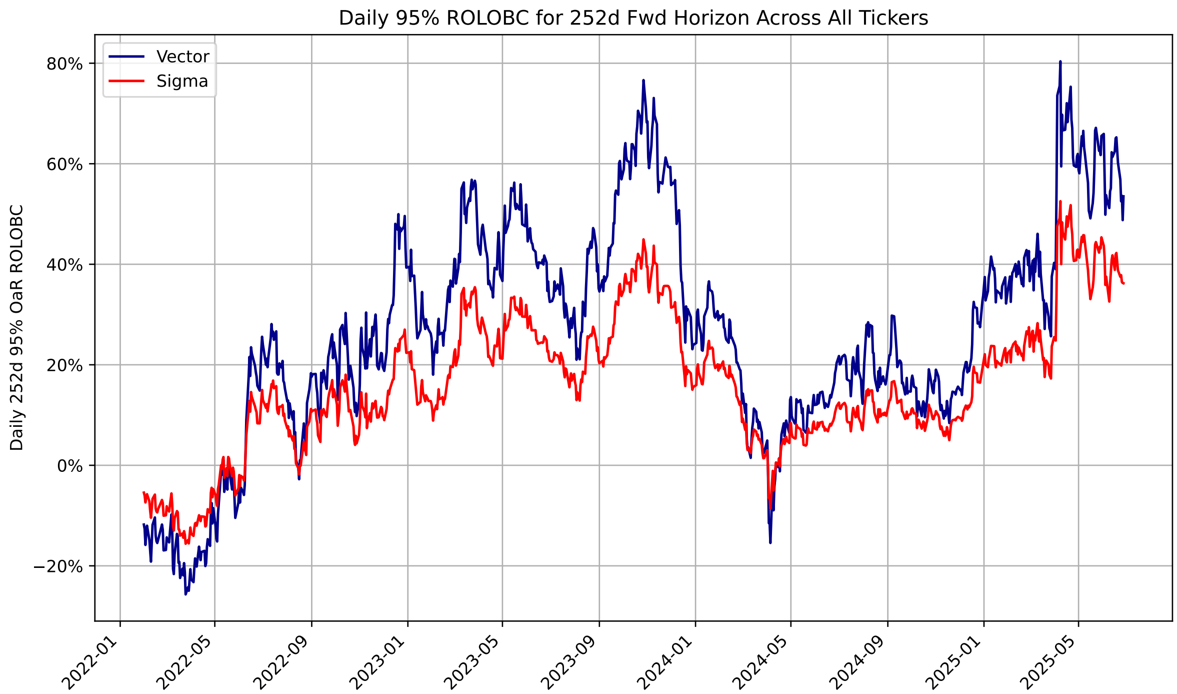
Daily 95% OaR Breakage for 126d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 126d 95% OaR Breakage
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01



Daily 95% ROLOBC for 126d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 126d 95% OaR ROLOBC
40%
20%
0%
−20%
−40%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01

252d Horizon

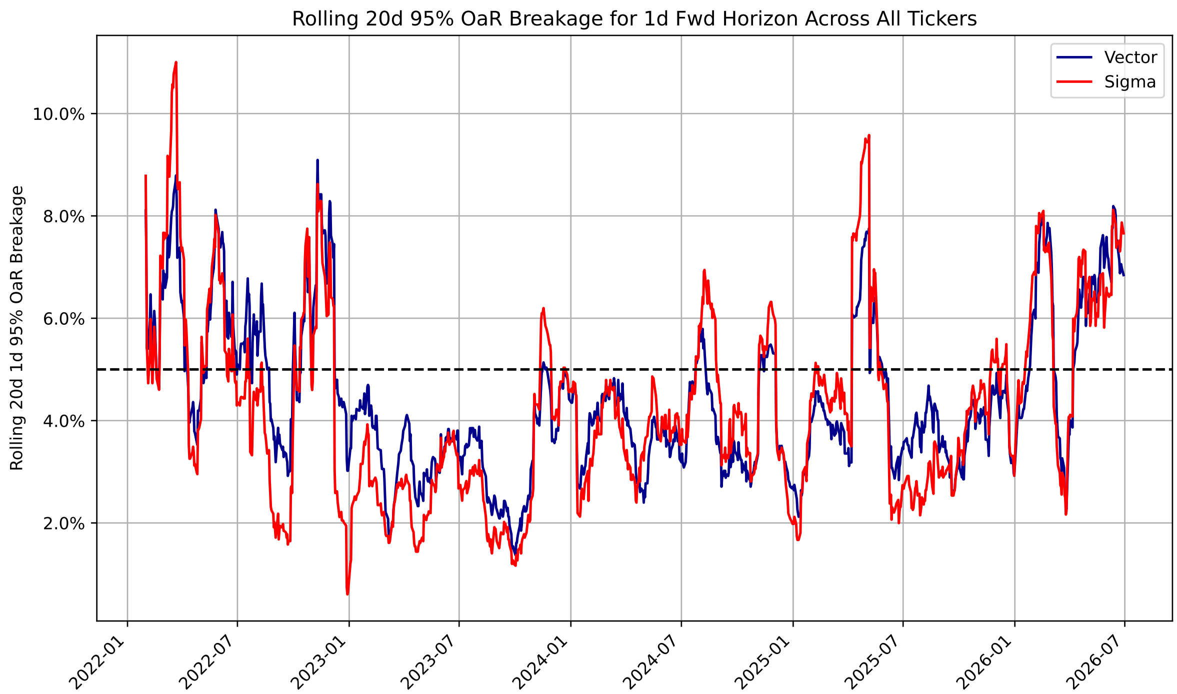


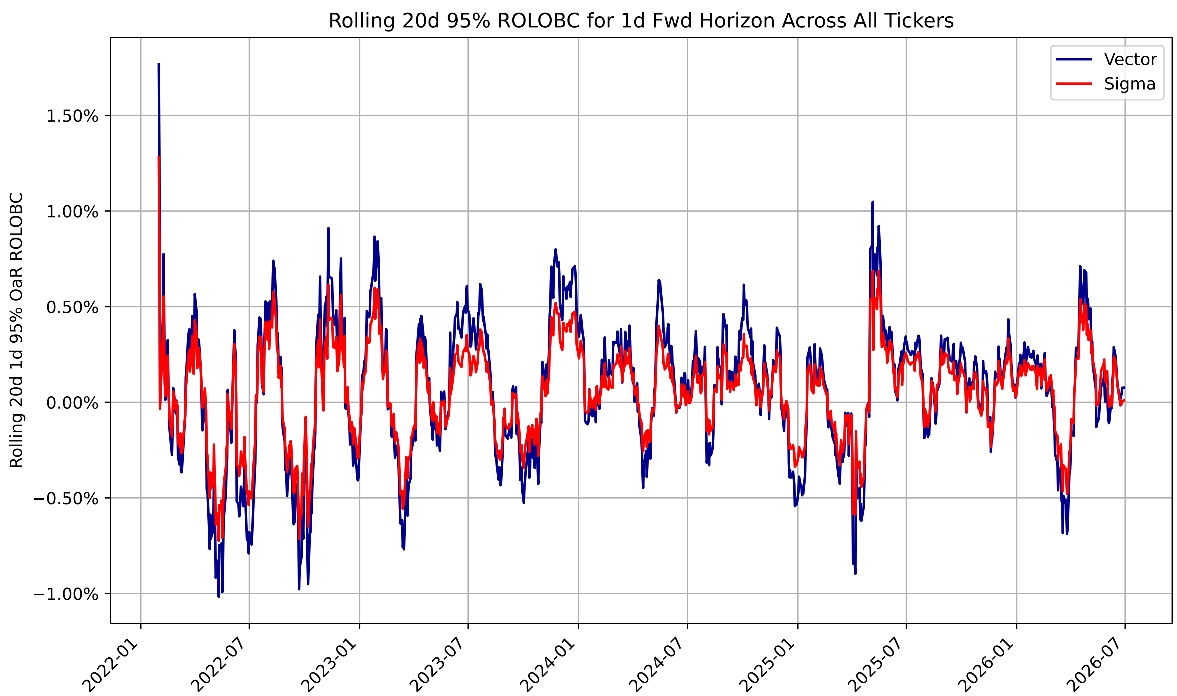


Rolling 20d Performance

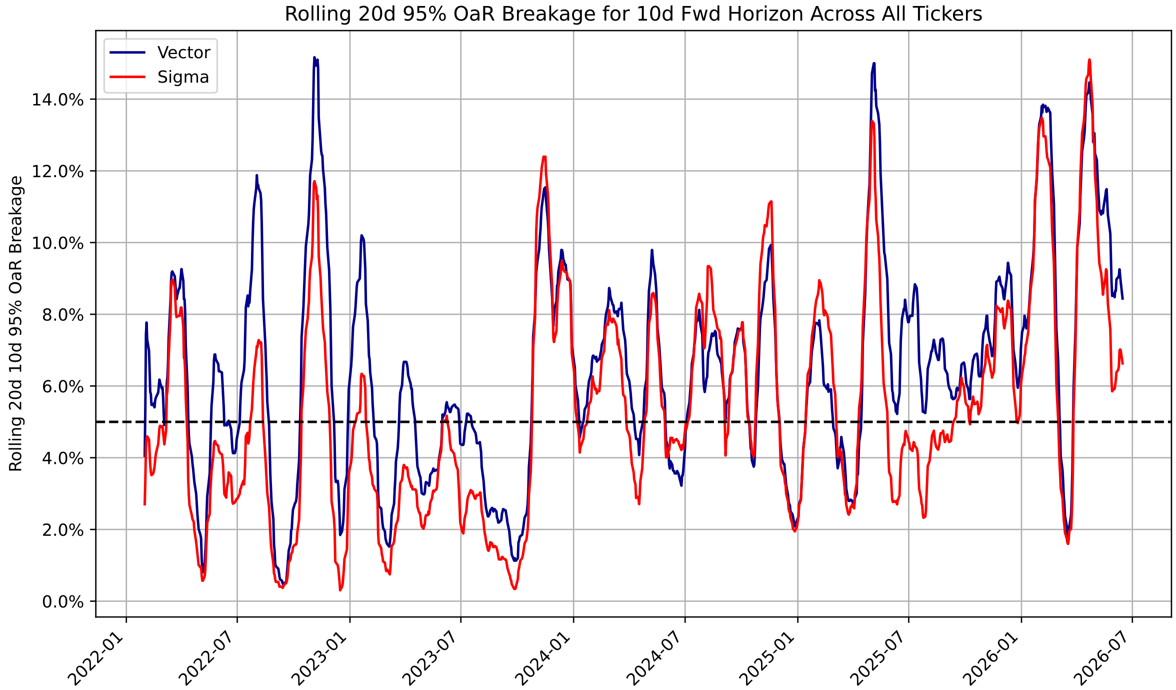
Here we look at 20 day rolling moving averages of the breakage and ROLOBC statitics summarized in the preceding section. These 20day moving averages are averages of daily averages across all tickers.

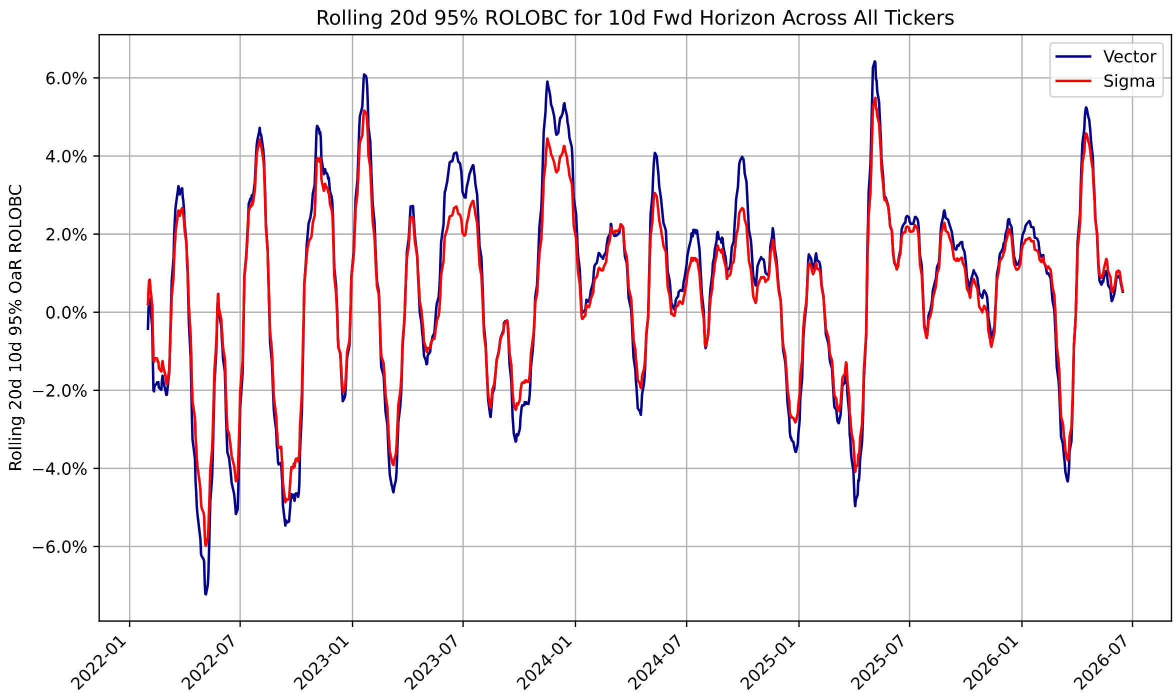
1d Horizon



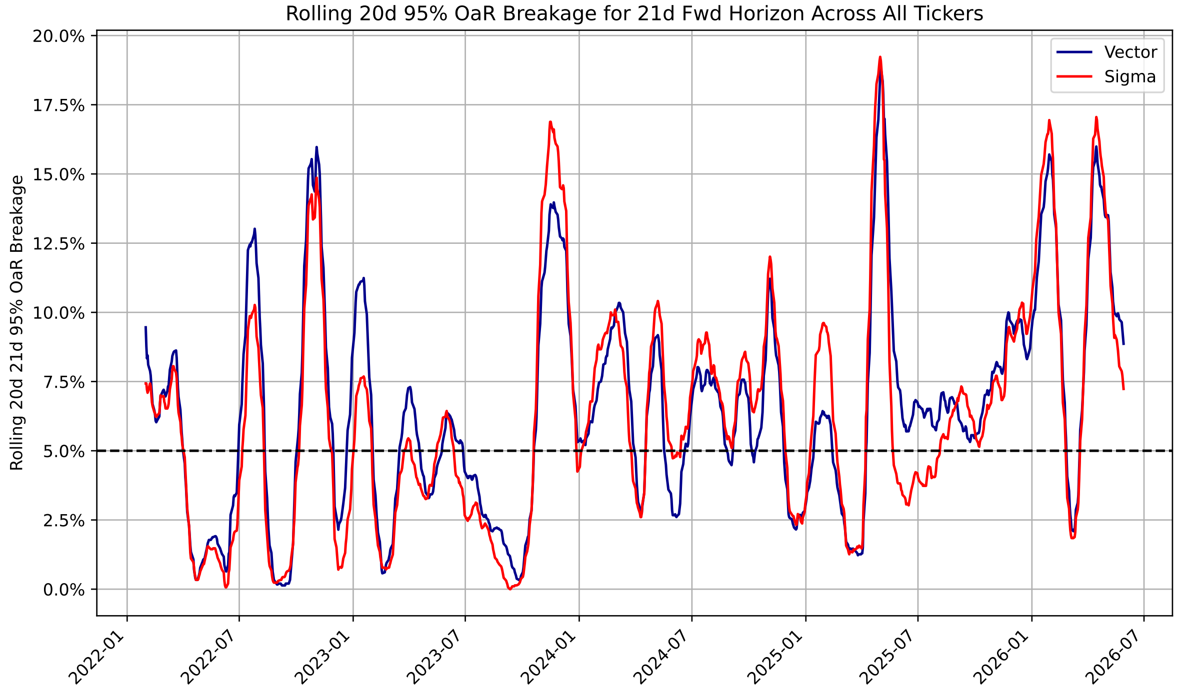

Rolling 20d 95% ROLOBC for 1d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 1d 95% OaR ROLOBC
1.50%
1.00%
0.50%
0.00%
−0.50%
−1.00%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

10d Horizon

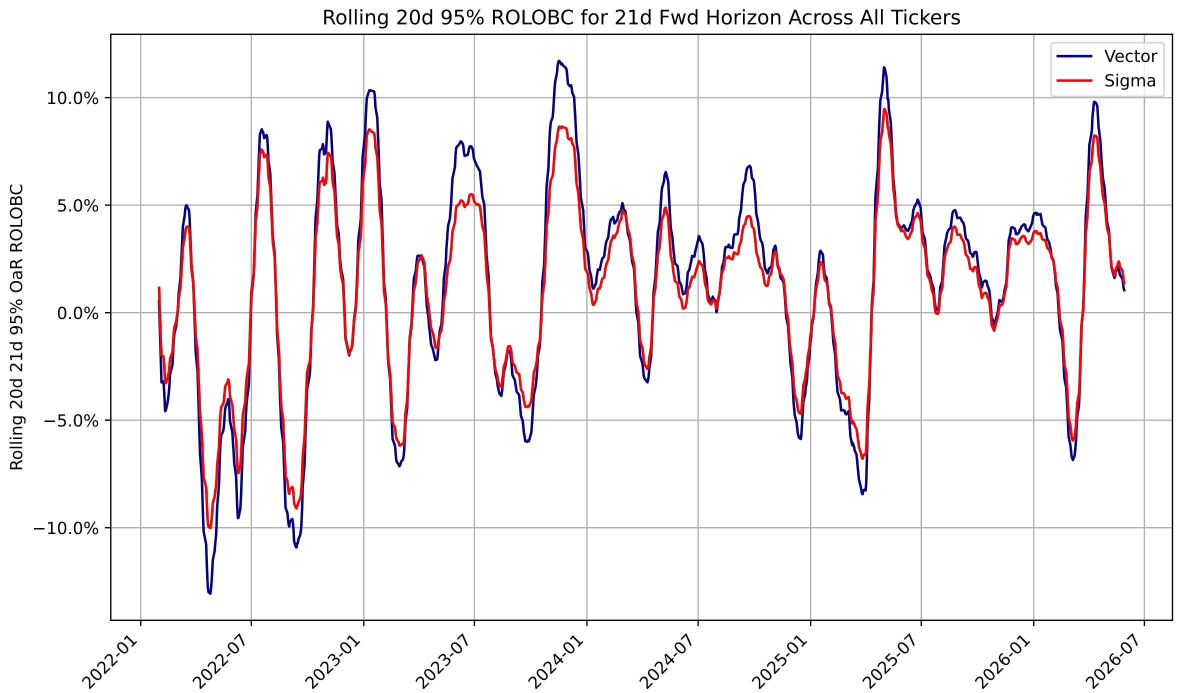

Rolling 20d 95% OaR Breakage for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 10d 95% OaR Breakage
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07


Rolling 20d 95% ROLOBC for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 10d 95% OaR ROLOBC
6.0%
4.0%
2.0%
0.0%
−2.0%
−4.0%
−6.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

21d Horizon

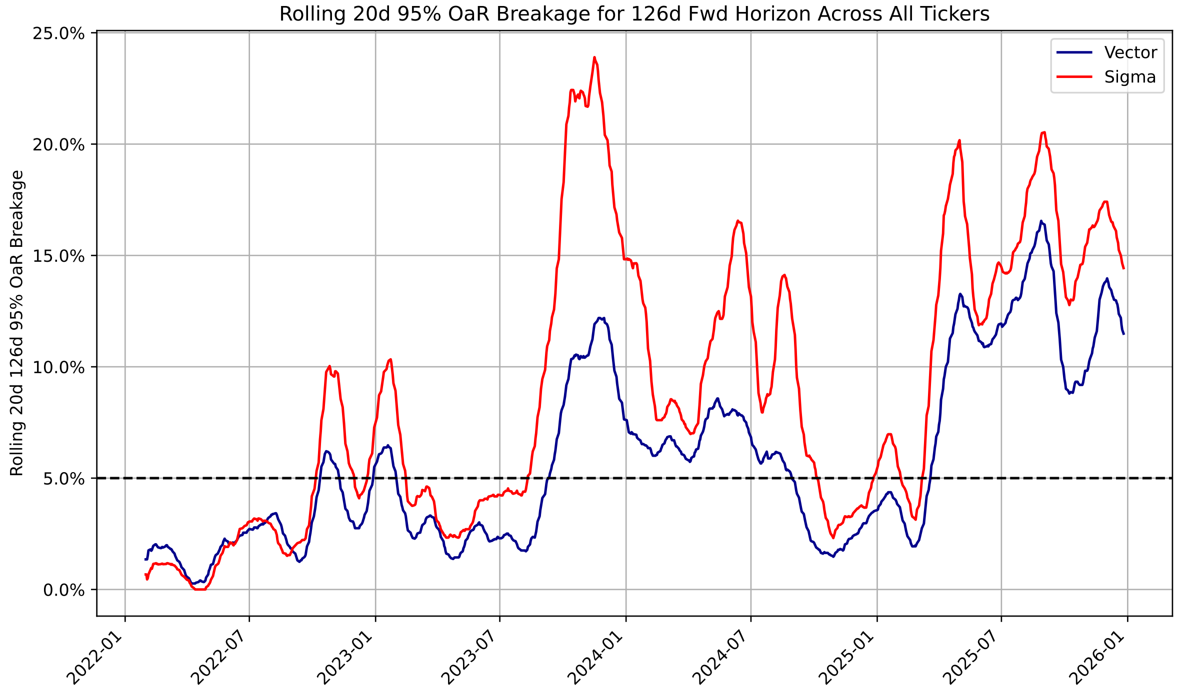


Rolling 20d 95% OaR Breakage for 21d Fwd Horizon Across All Tickers
Rolling 20d 21d 95% OaR Breakage
20.0%
17.5%
15.0%
12.5%
10.0%
7.5%
5.0%
2.5%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07
Vector
Sigma

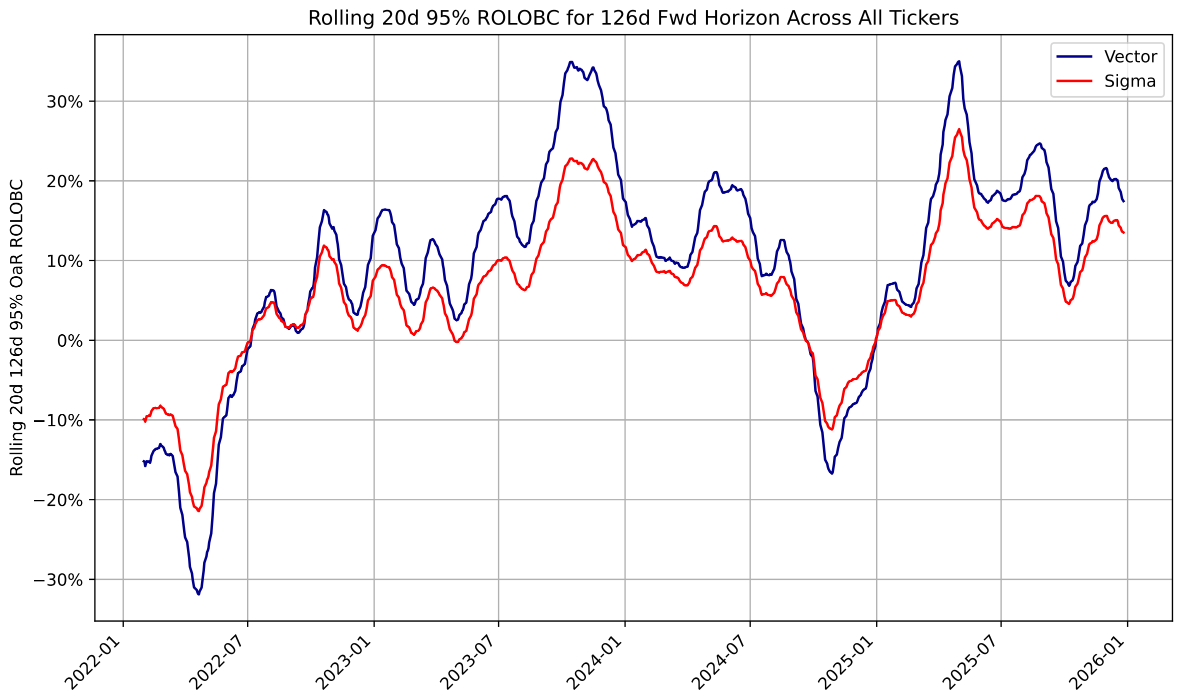


Rolling 20d 95% ROLOBC for 21d Fwd Horizon Across All Tickers
Rolling 20d 21d 95% OaR ROLOBC
10.0%
5.0%
0.0%
−5.0%
−10.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07
Vector
Sigma

63d Horizon

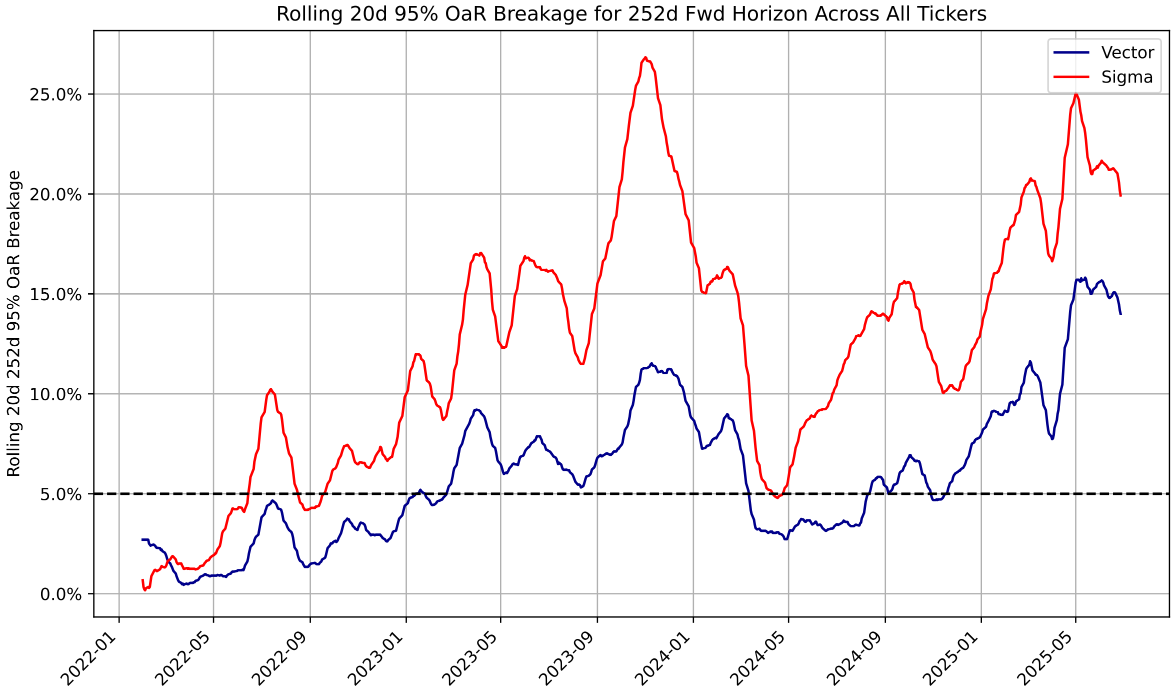


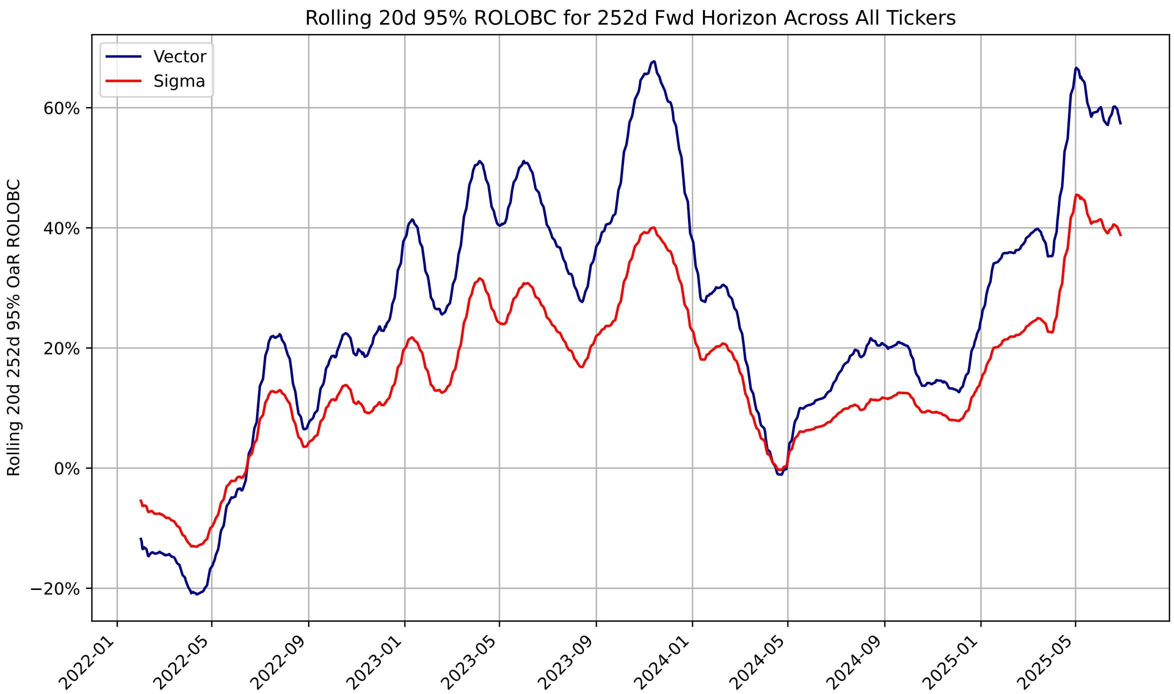
Rolling 20d 95% OaR Breakage for 126d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 126d 95% OaR Breakage
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01



Rolling 20d 95% ROLOBC for 126d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 126d 95% OaR ROLOBC
30%
20%
10%
0%
−10%
−20%
−30%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01

252d Horizon





Top 30 Tickers By OaR Breakage

All TMD: 1d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	SBNY	16.55%	MU	8.59%
1.0	MSTR	15.1%	VST	8.5%
1.0	SIVBQ	12.95%	WDC	8.41%
1.0	SLV	12.31%	SLV	8.05%
1.0	GME	11.12%	GLD	7.59%
1.0	GNRC	10.58%	AMAT	6.78%
1.0	FRCB	10.07%	AVGO	6.69%
1.0	META	9.86%	NVDA	6.51%
1.0	AVGO	9.86%	MSTR	6.42%
1.0	CHTR	9.49%	ON	6.33%
1.0	B	9.31%	NEM	6.33%
1.0	VST	9.31%	INTC	6.33%
1.0	HLT	8.5%	AMD	6.06%
1.0	GILD	8.5%	TXN	5.88%
1.0	WDC	8.5%	PHM	5.88%
1.0	AA	8.05%	FCX	5.79%
1.0	BUD	7.87%	TEVA	5.79%
1.0	NFLX	7.87%	CAH	5.79%
1.0	ORCL	7.78%	PWR	5.79%
1.0	ZTS	7.69%	B	5.7%
1.0	CMA	7.37%	DHI	5.7%
1.0	TEVA	7.23%	HLT	5.61%
1.0	TSLA	7.05%	NVS	5.61%
1.0	BALL	6.87%	XOM	5.52%
1.0	VFC	6.78%	TRGP	5.52%

All TMD: 10d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	WDC	18.78%	MU	12.67%
10.0	MSTR	18.41%	SLV	12.32%
10.0	META	16.77%	WDC	11.94%
10.0	SLV	16.42%	CAH	11.49%
10.0	KALU	16.41%	VST	11.12%
10.0	TEVA	15.77%	GLD	11.03%
10.0	B	15.31%	ORCL	10.57%
10.0	VST	14.49%	NVDA	10.48%
10.0	AVGO	14.31%	LLY	10.3%
10.0	SIVBQ	13.97%	B	9.85%
10.0	IRM	13.86%	INTC	9.85%
10.0	HCA	13.86%	TEVA	9.66%
10.0	GNRC	13.58%	IRM	9.57%
10.0	GILD	13.58%	AMD	9.48%
10.0	GWW	12.67%	GS	9.48%
10.0	ORCL	12.58%	TRGP	9.02%
10.0	CHTR	12.4%	NVS	8.93%
10.0	GME	12.22%	GE	8.84%
10.0	TRGP	12.03%	AMAT	8.66%
10.0	NVS	11.67%	AVGO	8.39%
10.0	EXPE	11.67%	GWW	7.93%
10.0	TXN	11.49%	GOOGL	7.84%
10.0	GLD	11.49%	MSTR	7.75%
10.0	BUD	11.21%	NEM	7.57%
10.0	NEM	11.03%	MS	7.57%

All TMD: 21d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
21.0	AVGO	19.24%	GLD	16.02%
21.0	MSTR	18.97%	CAH	15.84%
21.0	WDC	18.51%	WDC	14.73%
21.0	KALU	16.94%	MU	14.55%
21.0	META	16.21%	TRGP	13.63%
21.0	TEVA	16.02%	ORCL	12.98%
21.0	B	15.65%	LLY	12.8%
21.0	GNRC	15.56%	GE	12.71%
21.0	VST	15.47%	TEVA	12.62%
21.0	TRGP	15.01%	MSTR	12.43%
21.0	IRM	14.83%	IRM	12.25%
21.0	NVS	14.55%	NVDA	11.88%
21.0	SLV	13.82%	VST	11.88%
21.0	BUD	13.81%	GS	11.79%
21.0	CHTR	13.72%	PWR	11.51%
21.0	ORCL	13.72%	SLV	11.43%
21.0	MU	13.17%	AMD	11.42%
21.0	GWW	13.08%	AVGO	11.33%
21.0	NEM	12.98%	NVS	10.77%
21.0	GILD	12.89%	AMGN	10.59%
21.0	ISRG	12.8%	GWW	10.5%
21.0	EXPE	12.62%	MS	10.5%
21.0	HCA	12.62%	X	10.4%
21.0	GME	12.25%	CCL	10.31%
21.0	ETRN	12.14%	TSLA	9.85%

All TMD: 63d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
63.0	AVGO	28.16%	WDC	29.21%
63.0	WDC	26.05%	NVDA	25.19%
63.0	VST	23.75%	GLD	25.19%
63.0	META	22.61%	VST	23.47%
63.0	MSTR	20.31%	MU	23.28%
63.0	MU	18.87%	TRGP	22.8%
63.0	GILD	18.77%	CAH	22.13%
63.0	KALU	18.2%	LLY	19.44%
63.0	GLD	17.62%	AVGO	18.77%
63.0	TEVA	17.53%	TEVA	18.2%
63.0	EXPE	16.95%	GBTC	17.72%
63.0	ETRN	16.7%	GE	16.57%
63.0	SLV	16.3%	AMD	16.48%
63.0	BUD	16.09%	ORCL	16.38%
63.0	IRM	15.9%	SLV	16.2%
63.0	NEM	15.33%	ETRN	16.15%
63.0	TRGP	14.94%	PWR	15.61%
63.0	CAH	13.7%	THC	15.13%
63.0	B	13.51%	GOOGL	14.75%
63.0	GNRC	13.51%	MSTR	14.08%
63.0	ORCL	13.12%	GILD	13.98%
63.0	HCA	12.93%	B	13.98%
63.0	CHTR	12.26%	KALU	13.98%
63.0	MSI	12.16%	NEM	13.51%
63.0	WFC	11.69%	INTC	13.22%
63.0	SIVBQ	11.11%	PHM	13.12%
63.0	THC	10.82%	MRK	13.03%
63.0	XOM	10.82%	IRM	13.03%
63.0	INTC	10.63%	GS	12.93%
63.0	PWR	10.44%	CMG	12.74%

All TMD: 126d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
126.0	VST	35.47%	GLD	44.24%
126.0	AVGO	32.42%	NVDA	38.33%
126.0	GLD	30.78%	VST	35.37%
126.0	MSTR	29.36%	GE	33.64%
126.0	WDC	27.73%	TRGP	33.23%
126.0	TEVA	23.45%	CAH	32.21%
126.0	TRGP	22.94%	AVGO	30.89%
126.0	GILD	22.22%	WDC	29.36%
126.0	META	21.92%	MU	28.34%
126.0	IRM	21.71%	TEVA	25.99%
126.0	GOOGL	20.08%	NEM	24.77%
126.0	NEM	19.78%	MSTR	24.26%
126.0	MU	19.16%	LLY	23.96%
126.0	SLV	18.98%	GILD	22.94%
126.0	CAH	18.45%	HSBC	22.73%
126.0	TMUS	17.84%	AMAT	22.22%
126.0	KALU	17.13%	ORCL	21.3%
126.0	NVDA	16.31%	PHM	21.0%
126.0	LW	16.31%	SLV	20.51%
126.0	EXPE	15.6%	PWR	20.39%
126.0	GE	14.68%	GS	20.18%
126.0	MSI	14.27%	IRM	20.08%
126.0	JAZZ	14.27%	THC	19.57%
126.0	LLY	13.66%	GBTC	17.53%
126.0	INTC	13.35%	META	17.33%
126.0	B	12.74%	GOOGL	17.02%
126.0	AA	12.33%	TMUS	16.62%
126.0	BUD	12.03%	AMD	16.41%
126.0	HCA	11.52%	INTC	16.21%
126.0	NVS	10.7%	KALU	15.6%

All TMD: 252d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
252.0	AVGO	65.03%	GE	70.41%
252.0	VST	55.44%	AVGO	70.29%
252.0	GLD	44.21%	GLD	54.62%
252.0	MSTR	42.81%	VST	52.98%
252.0	NVDA	32.28%	NVDA	52.28%
252.0	META	30.41%	GS	46.67%
252.0	TRGP	30.29%	MSTR	42.69%
252.0	IRM	27.49%	CAH	42.11%
252.0	TEVA	27.25%	PHM	42.11%
252.0	WDC	24.8%	LLY	39.65%
252.0	CAH	24.56%	JPM	38.13%
252.0	GS	22.11%	GBTC	37.31%
252.0	LLY	21.87%	TRGP	36.73%
252.0	GILD	21.64%	META	36.73%
252.0	NEM	21.05%	TEVA	36.26%
252.0	SLV	20.82%	HSBC	36.02%
252.0	B	18.6%	PWR	35.67%
252.0	GOOGL	17.66%	WDC	33.22%
252.0	GE	17.54%	MU	33.22%
252.0	TMUS	16.73%	NFLX	32.28%
252.0	MU	15.32%	ORCL	32.28%
252.0	TDG	15.2%	TMUS	31.58%
252.0	GWW	14.27%	COST	30.18%
252.0	HSBC	12.51%	ACGL	29.82%
252.0	KALU	11.58%	TDG	28.65%
252.0	THC	11.46%	MS	27.25%
252.0	LW	9.82%	GILD	26.78%
252.0	ORCL	9.82%	GOOGL	25.38%
252.0	EXPE	9.82%	IRM	23.98%
252.0	NVS	9.59%	SLV	23.74%

P30D: 1d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	GNRC	40.0%	ON	35.0%
1.0	FITB	35.0%	MU	30.0%
1.0	AMAT	35.0%	INTC	30.0%
1.0	AMD	35.0%	AMAT	25.0%
1.0	WDC	35.0%	TXN	25.0%
1.0	QCOM	30.0%	WDC	25.0%
1.0	GE	25.0%	KALU	20.0%
1.0	KALU	25.0%	ABBV	20.0%
1.0	MRK	20.0%	QQQ	20.0%
1.0	CSTM	20.0%	PHM	20.0%
1.0	KEY	20.0%	NWL	20.0%
1.0	META	20.0%	CSCO	15.0%
1.0	BHP	20.0%	GNRC	15.0%
1.0	ABBV	20.0%	VZ	15.0%
1.0	MSTR	15.0%	BIIB	15.0%
1.0	GWW	15.0%	DHI	15.0%
1.0	EXPE	15.0%	QCOM	15.0%
1.0	PHM	15.0%	FITB	15.0%
1.0	QQQ	15.0%	CAH	15.0%
1.0	BBY	15.0%	BXP	15.0%
1.0	NEM	15.0%	VICI	15.0%
1.0	GILD	15.0%	SPY	15.0%
1.0	INTC	15.0%	AAPL	15.0%
1.0	GSK	15.0%	AMC	15.0%
1.0	FCX	10.0%	AMD	15.0%
1.0	ON	10.0%	BALL	15.0%
1.0	GBTC	10.0%	NVS	15.0%
1.0	NWL	10.0%	MRK	15.0%
1.0	GS	10.0%	GILD	10.0%
1.0	TEVA	10.0%	USB	10.0%

P30D: 10d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	GE	100.0%	NWL	90.91%
10.0	WDC	90.91%	AMAT	90.91%
10.0	BALL	90.91%	BALL	81.82%
10.0	AMAT	90.91%	WDC	72.73%
10.0	NWL	81.82%	GE	63.64%
10.0	GNRC	54.55%	INTC	54.55%
10.0	KEY	54.55%	CAH	54.55%
10.0	AMD	54.55%	USB	45.45%
10.0	EXPE	45.45%	JPM	36.36%
10.0	INTC	36.36%	BAC	36.36%
10.0	ABBV	36.36%	PHM	36.36%
10.0	UNH	27.27%	AMC	27.27%
10.0	AMC	27.27%	ABBV	27.27%
10.0	CVS	27.27%	MRK	18.18%
10.0	GSK	27.27%	EXPE	18.18%
10.0	HLT	27.27%	MU	18.18%
10.0	USB	27.27%	CVS	18.18%
10.0	HCA	18.18%	HD	18.18%
10.0	HSBC	18.18%	GNRC	9.09%
10.0	FITB	18.18%	TDG	9.09%
10.0	LNC	18.18%	FITB	9.09%
10.0	HON	9.09%	HON	9.09%
10.0	MS	9.09%	HSBC	9.09%
10.0	MU	9.09%	DHI	9.09%
10.0	BXP	9.09%	BXP	9.09%
10.0	PHM	9.09%	KEY	9.09%
10.0	VNO	9.09%	AMD	9.09%
10.0	MRK	9.09%	VNO	9.09%
10.0	TXN	9.09%	TXN	9.09%
10.0	GWW	9.09%	VST	9.09%

P90D: 1d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	WDC	31.67%	MU	26.67%
1.0	QCOM	30.0%	INTC	25.0%
1.0	AMD	28.33%	ON	23.33%
1.0	INTC	23.33%	QCOM	21.67%
1.0	AMAT	21.67%	AMAT	18.33%
1.0	MRK	21.67%	AMD	18.33%
1.0	GNRC	21.67%	WDC	18.33%
1.0	CSTM	20.0%	KALU	16.67%
1.0	TXN	20.0%	TXN	16.67%
1.0	MU	20.0%	CVS	15.0%
1.0	KALU	20.0%	CSCO	15.0%
1.0	GE	16.67%	CSTM	15.0%
1.0	QQQ	16.67%	BHP	13.33%
1.0	FCX	15.0%	PHM	11.67%
1.0	FITB	15.0%	QQQ	11.67%
1.0	GWW	15.0%	DHI	11.67%
1.0	KEY	15.0%	MRK	11.67%
1.0	JAZZ	15.0%	TDG	11.67%
1.0	NVDA	15.0%	GNRC	10.0%
1.0	UNH	15.0%	MSFT	10.0%
1.0	BHP	13.33%	HLT	10.0%
1.0	AVGO	13.33%	VICI	10.0%
1.0	META	13.33%	FCX	10.0%
1.0	PWR	13.33%	GOOGL	10.0%
1.0	ON	13.33%	AAPL	10.0%
1.0	IRM	11.67%	HON	10.0%
1.0	CNC	11.67%	GE	10.0%
1.0	AA	11.67%	VZ	10.0%
1.0	ORCL	11.67%	AVGO	10.0%
1.0	B	11.67%	BALL	10.0%

P90D: 10d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	WDC	78.43%	MU	54.9%
10.0	AMD	62.75%	AMD	52.94%
10.0	TXN	50.98%	INTC	47.06%
10.0	UNH	47.06%	WDC	47.06%
10.0	MU	45.1%	ON	43.14%
10.0	INTC	45.1%	QCOM	43.14%
10.0	QCOM	43.14%	CSCO	41.18%
10.0	CNC	41.18%	AMAT	33.33%
10.0	GE	39.22%	TXN	31.37%
10.0	CVS	37.25%	CVS	27.45%
10.0	KALU	37.25%	KALU	27.45%
10.0	GNRC	37.25%	QQQ	27.45%
10.0	AMC	33.33%	GOOGL	25.49%
10.0	ON	31.37%	GNRC	23.53%
10.0	CSTM	29.41%	NWL	23.53%
10.0	AMAT	27.45%	CAH	21.57%
10.0	ORCL	27.45%	ORCL	21.57%
10.0	CSCO	27.45%	CNC	21.57%
10.0	TSLA	25.49%	PWR	19.61%
10.0	VNO	23.53%	MNST	19.61%
10.0	IRM	23.53%	MSFT	19.61%
10.0	AMZN	23.53%	CDNS	19.61%
10.0	EXPE	21.57%	GE	19.61%
10.0	JAZZ	21.57%	BBY	19.61%
10.0	MNST	21.57%	JAZZ	17.65%
10.0	NWL	21.57%	IRM	17.65%
10.0	BALL	21.57%	TEVA	17.65%
10.0	BBY	21.57%	BALL	17.65%
10.0	CDNS	19.61%	BUD	15.69%
10.0	TEVA	19.61%	VNO	15.69%

P90D: 21d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
21.0	MU	90.0%	MU	87.5%
21.0	WDC	90.0%	CSCO	70.0%
21.0	AMD	82.5%	WDC	65.0%
21.0	CVS	67.5%	ON	62.5%
21.0	INTC	60.0%	AMD	60.0%
21.0	CNC	57.5%	QCOM	57.5%
21.0	QCOM	57.5%	MNST	52.5%
21.0	MNST	55.0%	BBY	52.5%
21.0	CSCO	55.0%	INTC	50.0%
21.0	JAZZ	55.0%	QQQ	47.5%
21.0	TXN	55.0%	TXN	42.5%
21.0	BBY	52.5%	CNC	42.5%
21.0	ON	42.5%	AMAT	42.5%
21.0	GE	42.5%	GOOGL	40.0%
21.0	GNRC	42.5%	PWR	37.5%
21.0	AMAT	37.5%	CVS	35.0%
21.0	CSTM	35.0%	AAPL	35.0%
21.0	UNH	35.0%	GNRC	35.0%
21.0	VNO	32.5%	CAH	32.5%
21.0	IRM	32.5%	VNO	32.5%
21.0	AMC	32.5%	CDNS	27.5%
21.0	CDNS	30.0%	GE	27.5%
21.0	KALU	27.5%	BAC	25.0%
21.0	GWW	25.0%	JAZZ	22.5%
21.0	PWR	25.0%	KALU	22.5%
21.0	GOOGL	22.5%	MS	22.5%
21.0	ORCL	22.5%	ORCL	22.5%
21.0	BXP	22.5%	BHP	20.0%
21.0	NWL	22.5%	UNH	20.0%
21.0	CLF	22.5%	BUD	17.5%

P365D: 1d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	WDC	25.2%	WDC	18.4%
1.0	AA	15.2%	MU	17.2%
1.0	SLV	14.46%	SLV	16.87%
1.0	GILD	14.4%	INTC	14.4%
1.0	MU	14.0%	NEM	11.6%
1.0	INTC	13.2%	CSTM	11.6%
1.0	GNRC	13.2%	AA	11.6%
1.0	GWW	12.0%	AMAT	11.6%
1.0	CLF	12.0%	AMD	10.4%
1.0	CSTM	12.0%	BHP	10.0%
1.0	TXN	11.6%	RIO	9.6%
1.0	KALU	11.2%	B	9.6%
1.0	GLD	10.8%	KALU	9.2%
1.0	AMD	10.0%	GLD	8.8%
1.0	NVS	10.0%	XOM	8.4%
1.0	PWR	9.6%	DHI	8.0%
1.0	VFC	9.6%	CSCO	8.0%
1.0	CMA	9.46%	ON	8.0%
1.0	BUD	9.2%	LUMN	7.6%
1.0	MRK	8.8%	NVS	7.6%
1.0	GE	8.8%	GOOGL	7.6%
1.0	FCX	8.8%	AZN	7.6%
1.0	META	8.8%	PHM	7.6%
1.0	UNH	8.8%	HLT	7.2%
1.0	AMZN	8.8%	TXN	7.2%
1.0	AMAT	8.4%	HSBC	6.8%
1.0	EXPE	8.4%	ELAN	6.8%
1.0	QCOM	8.0%	BIIB	6.8%
1.0	CDNS	8.0%	ABBV	6.8%
1.0	PCG	7.6%	AAPL	6.4%

P365D: 10d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	WDC	52.28%	WDC	35.68%
10.0	MU	29.88%	MU	32.78%
10.0	TXN	28.63%	SLV	28.75%
10.0	KALU	28.22%	INTC	27.39%
10.0	INTC	27.39%	B	25.73%
10.0	SLV	27.08%	AMAT	22.82%
10.0	GNRC	24.9%	AMD	21.99%
10.0	EXPE	21.99%	GOOGL	19.92%
10.0	B	21.58%	KALU	19.5%
10.0	GLD	20.75%	GNRC	17.43%
10.0	NVS	20.75%	BHP	16.6%
10.0	GOOGL	19.92%	GLD	16.18%
10.0	AMZN	19.92%	AA	15.77%
10.0	GILD	19.5%	NEM	15.35%
10.0	UNH	19.5%	CSCO	14.52%
10.0	FCX	19.09%	TEVA	14.52%
10.0	AA	19.09%	TXN	14.11%
10.0	CMA	18.71%	RIO	14.11%
10.0	CSTM	18.67%	AZN	13.69%
10.0	BUD	18.26%	ON	13.28%
10.0	AMD	18.26%	HSBC	12.45%
10.0	AMC	16.18%	CSTM	12.03%
10.0	THC	15.35%	IRM	11.62%
10.0	NEM	15.35%	MRK	11.62%
10.0	GSK	14.52%	JAZZ	11.2%
10.0	TEVA	14.52%	BUD	10.79%
10.0	GWW	14.52%	CAH	10.37%
10.0	CVS	14.11%	XOM	10.37%
10.0	AZN	13.69%	CMA	10.07%
10.0	HCA	12.86%	QCOM	9.54%

P365D: 21d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
21.0	WDC	65.22%	WDC	51.3%
21.0	MU	45.22%	MU	48.26%
21.0	INTC	34.78%	B	34.78%
21.0	KALU	32.61%	INTC	31.74%
21.0	NVS	30.87%	SLV	31.0%
21.0	TXN	30.87%	AMD	28.26%
21.0	GNRC	30.43%	GOOGL	27.83%
21.0	CMA	28.91%	GNRC	27.39%
21.0	SLV	27.95%	KALU	23.48%
21.0	EXPE	25.22%	NEM	23.04%
21.0	GLD	24.78%	GLD	23.04%
21.0	GOOGL	23.91%	CSTM	22.61%
21.0	AMD	23.91%	RIO	21.74%
21.0	B	23.48%	AMAT	20.87%
21.0	JAZZ	22.61%	TEVA	20.43%
21.0	CVS	21.74%	CSCO	20.43%
21.0	NEM	20.43%	BHP	19.57%
21.0	BUD	20.0%	HSBC	18.7%
21.0	FCX	19.57%	AA	16.52%
21.0	CSTM	16.52%	ON	16.52%
21.0	HSBC	16.52%	TXN	16.52%
21.0	AA	16.52%	PWR	15.65%
21.0	RIO	15.65%	CAH	15.22%
21.0	UNH	15.22%	IRM	15.22%
21.0	HCA	15.22%	FCX	14.78%
21.0	GILD	14.78%	XOM	14.35%
21.0	MNST	14.35%	JAZZ	13.91%
21.0	PWR	14.35%	OXY	13.91%
21.0	BXP	14.35%	ORCL	13.04%
21.0	GSK	14.35%	TRGP	12.61%

P365D: 63d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
63.0	WDC	100.0%	WDC	100.0%
63.0	MU	93.09%	MU	84.57%
63.0	SLV	61.5%	SLV	61.5%
63.0	KALU	58.51%	CSTM	59.04%
63.0	INTC	56.91%	INTC	56.38%
63.0	GLD	52.66%	B	55.85%
63.0	JAZZ	50.0%	GLD	54.26%
63.0	B	47.34%	KALU	52.66%
63.0	TXN	38.3%	GOOGL	51.6%
63.0	AA	35.11%	AMAT	48.94%
63.0	VZ	31.38%	NEM	42.02%
63.0	GOOGL	31.38%	AMD	40.43%
63.0	TEVA	30.85%	TEVA	40.43%
63.0	PWR	30.32%	RIO	36.17%
63.0	NVS	30.32%	AA	35.11%
63.0	EXPE	30.32%	TXN	34.04%
63.0	CMA	30.23%	CAH	33.51%
63.0	GNRC	29.79%	TRGP	32.45%
63.0	XOM	29.79%	JAZZ	30.32%
63.0	CSTM	28.72%	XOM	30.32%
63.0	FCX	27.13%	BHP	30.32%
63.0	GILD	26.6%	ON	29.79%
63.0	NEM	26.6%	PWR	28.19%
63.0	ON	25.53%	VZ	27.13%
63.0	HCA	25.53%	OXY	24.47%
63.0	CVS	23.94%	CSCO	24.47%
63.0	BUD	22.87%	MRK	24.47%
63.0	AMD	21.81%	CMA	23.26%
63.0	QCOM	20.74%	FCX	22.87%
63.0	GSK	19.68%	HSBC	22.87%

P365D: 126d

Results reflect ticker level average 95% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
126.0	MU	100.0%	MU	100.0%
126.0	WDC	100.0%	WDC	100.0%
126.0	KALU	95.2%	RIO	95.2%
126.0	AA	90.4%	AMAT	95.2%
126.0	JAZZ	88.8%	KALU	92.0%
126.0	SLV	84.68%	CSTM	92.0%
126.0	CSTM	84.0%	AA	90.4%
126.0	INTC	82.4%	INTC	88.8%
126.0	GLD	67.2%	SLV	84.68%
126.0	NVS	65.6%	JAZZ	83.2%
126.0	CMA	60.87%	HSBC	78.4%
126.0	HSBC	52.0%	CMA	78.26%
126.0	GOOGL	52.0%	TEVA	76.0%
126.0	RIO	49.6%	BHP	72.8%
126.0	BUD	49.6%	XOM	71.2%
126.0	GILD	42.4%	TRGP	71.2%
126.0	FCX	42.4%	CAH	64.0%
126.0	GSK	42.4%	PWR	60.0%
126.0	B	42.4%	GOOGL	57.6%
126.0	XOM	40.0%	NEM	54.4%
126.0	NEM	40.0%	GLD	52.8%
126.0	TEVA	40.0%	MRK	49.6%
126.0	TXN	37.6%	B	47.2%
126.0	PWR	33.6%	GSK	47.2%
126.0	ON	32.8%	CSCO	40.8%
126.0	GNRC	32.0%	ON	38.4%
126.0	HCA	30.4%	MNST	37.6%
126.0	ELAN	28.0%	TXN	37.6%
126.0	AMD	27.2%	FCX	36.0%
126.0	CSCO	27.2%	AMD	35.2%

Top 30 Tickers By ROLOBC

All TMD: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	AVGO	0.41%	MU	0.3%
1.0	NVDA	0.4%	WDC	0.28%
1.0	MU	0.38%	MSTR	0.25%
1.0	X	0.38%	NVDA	0.24%
1.0	VST	0.35%	VST	0.23%
1.0	GE	0.32%	AMD	0.21%
1.0	AMD	0.32%	AVGO	0.21%
1.0	WDC	0.3%	PWR	0.2%
1.0	CCL	0.29%	AMAT	0.19%
1.0	AMAT	0.28%	GE	0.17%
1.0	LLY	0.28%	X	0.17%
1.0	PWR	0.27%	LLY	0.17%
1.0	TSLA	0.26%	TEVA	0.16%
1.0	GBTC	0.24%	TRGP	0.16%
1.0	CAH	0.24%	INTC	0.16%
1.0	B	0.21%	GME	0.15%
1.0	TRGP	0.2%	CAH	0.15%
1.0	TDG	0.19%	THC	0.13%
1.0	THC	0.18%	GBTC	0.12%
1.0	PHM	0.18%	ETRN	0.12%
1.0	ON	0.17%	SLV	0.12%
1.0	DHI	0.17%	PHM	0.11%
1.0	JAZZ	0.15%	GS	0.11%
1.0	CDNS	0.15%	IRM	0.11%
1.0	ETRN	0.14%	GOOGL	0.11%
1.0	QQQ	0.14%	CDNS	0.11%
1.0	HLT	0.14%	ON	0.11%
1.0	SLV	0.14%	KALU	0.1%
1.0	FCX	0.14%	GWW	0.1%
1.0	TEVA	0.13%	HSBC	0.1%

All TMD: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	NVDA	4.92%	MU	3.03%
10.0	AVGO	3.7%	WDC	2.95%
10.0	MU	3.51%	MSTR	2.64%
10.0	LLY	3.12%	NVDA	2.41%
10.0	AMD	2.92%	VST	2.27%
10.0	PWR	2.89%	AVGO	2.07%
10.0	TSLA	2.78%	PWR	1.99%
10.0	AMAT	2.75%	AMD	1.98%
10.0	VST	2.7%	AMAT	1.75%
10.0	CCL	2.54%	TEVA	1.67%
10.0	WDC	2.13%	LLY	1.64%
10.0	GE	2.12%	GE	1.63%
10.0	CAH	2.1%	INTC	1.59%
10.0	GBTC	2.01%	X	1.58%
10.0	X	1.67%	TRGP	1.54%
10.0	TEVA	1.62%	CAH	1.49%
10.0	PHM	1.59%	ETRN	1.41%
10.0	CDNS	1.53%	GME	1.27%
10.0	ETRN	1.52%	GBTC	1.18%
10.0	GS	1.48%	THC	1.17%
10.0	SLV	1.47%	SLV	1.16%
10.0	MSTR	1.46%	IRM	1.16%
10.0	INTC	1.43%	GS	1.15%
10.0	QQQ	1.43%	META	1.11%
10.0	HLT	1.4%	CDNS	1.08%
10.0	TRGP	1.39%	PHM	1.07%
10.0	JPM	1.34%	GWW	1.06%
10.0	DHI	1.26%	GOOGL	1.03%
10.0	THC	1.24%	ON	1.02%
10.0	AZO	1.24%	KALU	1.02%

All TMD: 21d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	NVDA	10.3%	MU	6.41%
21.0	MU	7.76%	MSTR	6.34%
21.0	AMD	7.25%	WDC	6.19%
21.0	TSLA	7.0%	NVDA	5.28%
21.0	AMAT	6.53%	VST	4.79%
21.0	PWR	6.21%	AMD	4.46%
21.0	AVGO	6.06%	AVGO	4.41%
21.0	LLY	5.83%	PWR	4.24%
21.0	VST	5.63%	TEVA	3.64%
21.0	CCL	5.43%	AMAT	3.53%
21.0	GBTC	4.94%	ETRN	3.5%
21.0	WDC	4.53%	GE	3.44%
21.0	GE	4.44%	LLY	3.42%
21.0	CAH	4.41%	INTC	3.35%
21.0	MSTR	4.4%	TRGP	3.22%
21.0	TEVA	3.88%	X	3.17%
21.0	PHM	3.67%	CAH	3.08%
21.0	X	3.55%	GBTC	2.67%
21.0	CDNS	3.52%	META	2.51%
21.0	ETRN	3.28%	SLV	2.5%
21.0	QQQ	3.26%	GS	2.47%
21.0	TRGP	3.23%	ORCL	2.45%
21.0	DHI	3.06%	IRM	2.43%
21.0	GS	3.06%	THC	2.34%
21.0	SLV	3.02%	TSLA	2.34%
21.0	CSTM	2.92%	CDNS	2.3%
21.0	INTC	2.85%	ON	2.29%
21.0	AZO	2.83%	GOOGL	2.28%
21.0	JPM	2.75%	GWW	2.25%
21.0	HLT	2.74%	NFLX	2.24%

All TMD: 63d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	NVDA	32.62%	WDC	20.44%
63.0	MU	28.06%	MSTR	19.38%
63.0	MSTR	26.6%	MU	19.17%
63.0	AMD	22.32%	NVDA	17.64%
63.0	AMAT	21.16%	VST	15.68%
63.0	WDC	18.8%	AVGO	13.85%
63.0	CCL	18.4%	AMD	12.99%
63.0	PWR	17.79%	PWR	12.22%
63.0	VST	17.73%	TEVA	10.47%
63.0	GBTC	17.38%	GE	10.37%
63.0	LLY	16.26%	ETRN	10.28%
63.0	AVGO	13.85%	AMAT	9.99%
63.0	CAH	13.2%	GBTC	9.87%
63.0	GE	13.0%	INTC	9.63%
63.0	PHM	12.0%	LLY	9.44%
63.0	TEVA	11.94%	TRGP	9.22%
63.0	TSLA	11.71%	META	9.19%
63.0	TRGP	11.7%	CAH	8.92%
63.0	GOOGL	10.62%	NFLX	8.5%
63.0	THC	10.2%	SLV	8.34%
63.0	DHI	9.88%	THC	7.54%
63.0	SLV	9.8%	GOOGL	7.45%
63.0	QQQ	9.72%	ORCL	7.42%
63.0	GS	9.43%	PHM	7.37%
63.0	ETRN	9.32%	GS	7.31%
63.0	CDNS	9.24%	HSBC	6.69%
63.0	NFLX	8.54%	IRM	6.49%
63.0	JPM	8.53%	CCL	6.31%
63.0	CSTM	8.33%	GWW	6.2%
63.0	B	8.23%	KALU	6.09%

All TMD: 126d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	NVDA	80.98%	WDC	48.93%
126.0	MU	72.08%	MSTR	47.86%
126.0	AMAT	50.26%	MU	45.81%
126.0	GBTC	49.56%	NVDA	43.47%
126.0	MSTR	44.76%	VST	34.86%
126.0	WDC	44.45%	AVGO	29.62%
126.0	AMD	42.79%	GBTC	27.8%
126.0	VST	42.18%	GE	25.13%
126.0	PWR	37.91%	PWR	23.89%
126.0	GE	37.32%	AMD	23.15%
126.0	PHM	33.36%	TEVA	23.04%
126.0	CCL	32.12%	META	22.47%
126.0	THC	30.57%	AMAT	22.21%
126.0	NFLX	29.76%	NFLX	21.24%
126.0	LLY	29.45%	SLV	20.58%
126.0	AVGO	29.12%	TRGP	19.55%
126.0	CAH	26.87%	CAH	19.52%
126.0	TRGP	25.55%	THC	19.51%
126.0	SLV	25.36%	LLY	19.42%
126.0	TEVA	25.24%	ETRN	18.49%
126.0	INTC	25.13%	INTC	17.11%
126.0	ORCL	24.84%	PHM	16.86%
126.0	DHI	24.61%	GOOGL	16.65%
126.0	QQQ	23.53%	GS	15.69%
126.0	B	23.36%	ORCL	15.49%
126.0	TSLA	23.17%	B	14.84%
126.0	AMZN	22.56%	HSBC	14.35%
126.0	MS	22.46%	CCL	13.81%
126.0	GOOGL	21.74%	CSTM	13.68%
126.0	META	21.33%	GLD	13.12%

All TMD: 252d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
252.0	NVDA	230.07%	MSTR	163.63%
252.0	GBTC	180.23%	WDC	120.96%
252.0	MU	178.75%	NVDA	118.09%
252.0	MSTR	161.01%	VST	103.8%
252.0	WDC	143.46%	MU	102.34%
252.0	AMD	116.38%	GBTC	89.68%
252.0	GE	108.67%	AVGO	76.56%
252.0	VST	107.42%	META	61.88%
252.0	NFLX	105.42%	GE	60.65%
252.0	PWR	97.31%	NFLX	55.36%
252.0	AVGO	93.88%	AMD	51.59%
252.0	AMAT	93.46%	PWR	50.29%
252.0	PHM	91.22%	THC	47.06%
252.0	LLY	87.35%	TEVA	44.02%
252.0	CCL	84.04%	AMAT	43.35%
252.0	THC	80.09%	LLY	42.51%
252.0	META	73.32%	PHM	42.12%
252.0	GOOGL	66.18%	TRGP	41.19%
252.0	AMZN	64.16%	SLV	40.63%
252.0	QQQ	63.56%	CAH	39.21%
252.0	JPM	63.13%	CCL	37.04%
252.0	MS	61.55%	GOOGL	36.85%
252.0	CAH	59.35%	ORCL	36.36%
252.0	CDNS	59.25%	ETRN	35.78%
252.0	TRGP	58.94%	GS	34.45%
252.0	ELAN	58.92%	INTC	34.0%
252.0	DHI	58.33%	B	31.66%
252.0	ORCL	58.07%	HSBC	31.58%
252.0	B	53.75%	JPM	30.72%
252.0	COST	51.84%	GLD	29.23%

P30D: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	NWL	4.09%	NWL	3.2%
1.0	AMAT	3.15%	AMAT	2.49%
1.0	CAH	2.71%	INTC	1.4%
1.0	AMC	2.52%	WDC	1.04%
1.0	WDC	2.47%	CYH	1.0%
1.0	VNO	1.95%	CAH	1.0%
1.0	CYH	1.73%	ABBV	0.86%
1.0	INTC	1.71%	MU	0.85%
1.0	ABBV	1.14%	VNO	0.84%
1.0	GT	1.09%	PHM	0.8%
1.0	CMG	1.07%	AMD	0.79%
1.0	BIIB	1.02%	FITB	0.76%
1.0	ACGL	0.99%	BALL	0.76%
1.0	DHI	0.96%	UAA	0.75%
1.0	HD	0.94%	GE	0.73%
1.0	BALL	0.92%	CVS	0.68%
1.0	LLY	0.9%	HD	0.65%
1.0	JPM	0.88%	ZION	0.63%
1.0	PHM	0.85%	USB	0.62%
1.0	UAA	0.81%	EXPE	0.62%
1.0	USB	0.79%	BIIB	0.61%
1.0	PCG	0.77%	BXP	0.59%
1.0	ZION	0.76%	CMG	0.57%
1.0	VST	0.74%	MRK	0.57%
1.0	CVS	0.71%	GT	0.56%
1.0	TDG	0.68%	DHI	0.55%
1.0	WFC	0.68%	LLY	0.54%
1.0	BXP	0.65%	GNRC	0.52%
1.0	KEY	0.64%	BAC	0.51%
1.0	MRK	0.64%	JPM	0.51%

P30D: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	NWL	31.56%	NWL	31.95%
10.0	CAH	30.7%	AMAT	23.39%
10.0	INTC	21.62%	WDC	22.46%
10.0	AMAT	20.77%	INTC	16.87%
10.0	MU	19.8%	MU	13.37%
10.0	VST	16.8%	AMC	13.28%
10.0	CYH	15.94%	GE	10.59%
10.0	HD	12.55%	CAH	10.43%
10.0	AMC	12.26%	BALL	10.07%
10.0	ACGL	11.35%	EXPE	9.74%
10.0	CMG	11.26%	CYH	9.54%
10.0	JPM	10.92%	THC	8.76%
10.0	PHM	10.17%	PHM	8.65%
10.0	TDG	9.5%	VST	8.15%
10.0	THC	8.98%	DHI	7.55%
10.0	DHI	8.67%	CMG	7.24%
10.0	WDC	8.56%	GT	6.71%
10.0	BAC	8.45%	USB	6.61%
10.0	VNO	8.42%	HD	6.58%
10.0	BALL	8.17%	JPM	6.53%
10.0	NAVI	7.33%	AMD	6.49%
10.0	USB	7.29%	CCL	6.43%
10.0	GT	6.9%	ZION	6.08%
10.0	CCL	6.21%	TDG	6.06%
10.0	ZION	5.97%	CVS	6.0%
10.0	PWR	5.49%	BAC	6.0%
10.0	UAA	5.12%	UAA	5.68%
10.0	EXPE	5.07%	ABBV	5.65%
10.0	ABBV	5.07%	GNRC	5.59%
10.0	CVS	4.65%	FITB	5.33%

P90D: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	MU	2.42%	MU	2.13%
1.0	AMC	1.95%	INTC	1.89%
1.0	WDC	1.89%	AMD	1.78%
1.0	AMD	1.64%	WDC	1.42%
1.0	AVGO	1.4%	AMAT	1.32%
1.0	INTC	1.4%	AMC	1.16%
1.0	AMAT	1.37%	NWL	1.08%
1.0	VNO	1.23%	CNC	1.05%
1.0	NWL	1.05%	ON	0.87%
1.0	PWR	1.0%	TXN	0.78%
1.0	CNC	0.96%	QCOM	0.77%
1.0	ON	0.92%	GNRC	0.76%
1.0	CYH	0.79%	VNO	0.75%
1.0	LLY	0.74%	KALU	0.7%
1.0	CSCO	0.74%	CSCO	0.7%
1.0	QQQ	0.72%	UNH	0.7%
1.0	CVS	0.72%	CVS	0.59%
1.0	AAP	0.69%	CDNS	0.54%
1.0	KALU	0.69%	GE	0.5%
1.0	GNRC	0.68%	MNST	0.5%
1.0	VST	0.65%	PWR	0.47%
1.0	SPY	0.62%	JAZZ	0.44%
1.0	QCOM	0.59%	LLY	0.44%
1.0	CDNS	0.58%	BXP	0.43%
1.0	NVDA	0.55%	MS	0.4%
1.0	BIIB	0.54%	QQQ	0.4%
1.0	MS	0.53%	AAP	0.37%
1.0	TDG	0.52%	AVGO	0.37%
1.0	DHI	0.51%	IRM	0.36%
1.0	CCL	0.51%	BIIB	0.35%

P90D: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	MU	26.37%	MU	22.38%
10.0	AMD	19.74%	INTC	18.51%
10.0	INTC	15.22%	AMD	17.64%
10.0	ON	11.86%	WDC	15.06%
10.0	AMAT	11.59%	AMC	12.37%
10.0	CSCO	10.39%	CNC	11.8%
10.0	QCOM	9.99%	ON	10.93%
10.0	CNC	9.74%	QCOM	10.91%
10.0	PWR	8.98%	AMAT	10.76%
10.0	NWL	8.63%	NWL	8.61%
10.0	VNO	7.53%	TXN	8.03%
10.0	AVGO	7.45%	CSCO	7.91%
10.0	WDC	7.45%	GNRC	7.18%
10.0	QQQ	7.01%	VNO	7.09%
10.0	AMC	6.89%	UNH	6.28%
10.0	LLY	6.87%	KALU	6.04%
10.0	CDNS	6.16%	CDNS	5.98%
10.0	GNRC	5.92%	CVS	5.88%
10.0	TXN	4.99%	CLF	5.14%
10.0	LUMN	4.75%	MNST	4.78%
10.0	NVDA	4.65%	PWR	4.69%
10.0	MS	4.61%	MS	4.34%
10.0	CVS	4.52%	LLY	4.25%
10.0	CAH	4.49%	BBY	4.19%
10.0	MNST	4.38%	BXP	4.11%
10.0	KALU	4.14%	GE	3.87%
10.0	GS	4.03%	GS	3.68%
10.0	VST	3.91%	IRM	3.54%
10.0	SPY	3.69%	JAZZ	3.48%
10.0	DHI	3.69%	QQQ	3.45%

P90D: 21d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	MU	65.74%	MU	56.57%
21.0	AMD	52.37%	AMD	40.92%
21.0	CSCO	33.25%	INTC	39.62%
21.0	INTC	32.37%	WDC	30.76%
21.0	QCOM	26.46%	QCOM	29.15%
21.0	ON	25.44%	CNC	27.55%
21.0	AMAT	24.65%	AMC	24.08%
21.0	CNC	21.98%	ON	23.2%
21.0	LLY	20.3%	AMAT	22.25%
21.0	PWR	17.19%	CSCO	20.77%
21.0	WDC	15.91%	CLF	15.86%
21.0	VNO	15.67%	VNO	15.49%
21.0	QQQ	14.77%	TXN	15.18%
21.0	CDNS	14.26%	GNRC	14.28%
21.0	GNRC	12.86%	CDNS	13.51%
21.0	AVGO	12.05%	CVS	13.27%
21.0	BBY	11.34%	UNH	11.83%
21.0	MS	10.36%	LLY	11.82%
21.0	AMC	10.14%	BBY	11.47%
21.0	MNST	10.06%	NWL	11.35%
21.0	NWL	10.06%	KALU	10.88%
21.0	CLF	9.97%	MNST	10.86%
21.0	GS	9.78%	ORCL	9.9%
21.0	NVDA	9.58%	PWR	9.14%
21.0	GOOGL	9.42%	MS	8.96%
21.0	TXN	9.22%	JAZZ	8.8%
21.0	CAH	9.11%	GE	8.73%
21.0	CVS	9.05%	GS	8.33%
21.0	AAPL	8.58%	BXP	7.83%
21.0	ORCL	8.21%	GWW	7.5%

P365D: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	MU	1.18%	WDC	1.02%
1.0	LUMN	0.95%	MU	1.01%
1.0	AMAT	0.94%	INTC	0.84%
1.0	WDC	0.93%	AMD	0.67%
1.0	AMD	0.93%	AMAT	0.61%
1.0	INTC	0.82%	KALU	0.39%
1.0	AVGO	0.64%	CSTM	0.38%
1.0	TEVA	0.55%	JAZZ	0.34%
1.0	PWR	0.53%	LUMN	0.34%
1.0	BHP	0.48%	GNRC	0.34%
1.0	SLV	0.44%	TEVA	0.31%
1.0	CSTM	0.43%	ON	0.31%
1.0	JAZZ	0.42%	GOOGL	0.3%
1.0	KALU	0.4%	PWR	0.29%
1.0	BIIB	0.4%	SLV	0.28%
1.0	LLY	0.39%	AA	0.28%
1.0	CAH	0.39%	CMA	0.27%
1.0	B	0.38%	B	0.27%
1.0	HSBC	0.37%	ELAN	0.25%
1.0	AA	0.35%	BHP	0.24%
1.0	GNRC	0.33%	CSCO	0.23%
1.0	FSUGY	0.33%	NEM	0.23%
1.0	GOOGL	0.33%	BIIB	0.23%
1.0	RIO	0.31%	RIO	0.21%
1.0	CMA	0.28%	LLY	0.2%
1.0	NEM	0.27%	EXPE	0.2%
1.0	CSCO	0.26%	HSBC	0.2%
1.0	GE	0.26%	MRK	0.2%
1.0	MS	0.26%	TRGP	0.19%
1.0	ON	0.25%	FCX	0.19%

P365D: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	MU	11.79%	WDC	10.74%
10.0	AMAT	9.34%	MU	10.62%
10.0	LUMN	9.21%	INTC	8.76%
10.0	AMD	8.88%	AMD	6.55%
10.0	INTC	8.43%	AMAT	5.46%
10.0	WDC	6.53%	CSTM	3.84%
10.0	AVGO	5.25%	LUMN	3.68%
10.0	SLV	5.11%	KALU	3.6%
10.0	PWR	4.24%	ON	3.42%
10.0	BHP	4.15%	GNRC	3.38%
10.0	TEVA	4.05%	JAZZ	3.34%
10.0	CSTM	3.59%	CNC	3.32%
10.0	CSCO	3.35%	TEVA	3.19%
10.0	CAH	3.3%	AA	3.16%
10.0	B	3.22%	GOOGL	3.11%
10.0	GNRC	3.13%	CMA	2.99%
10.0	RIO	3.07%	B	2.9%
10.0	NEM	2.91%	PWR	2.84%
10.0	BIIB	2.85%	SLV	2.78%
10.0	ON	2.84%	CSCO	2.49%
10.0	KALU	2.84%	NEM	2.48%
10.0	GOOGL	2.83%	BHP	2.34%
10.0	AA	2.73%	ELAN	2.34%
10.0	ELAN	2.68%	RIO	2.22%
10.0	LLY	2.66%	CVS	1.98%
10.0	CNC	2.63%	TRGP	1.96%
10.0	JAZZ	2.57%	HSBC	1.94%
10.0	GS	2.5%	BIIB	1.94%
10.0	NVDA	2.34%	FCX	1.94%
10.0	QQQ	2.33%	MNST	1.93%

P365D: 21d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	MU	29.0%	MU	24.43%
21.0	AMD	23.84%	WDC	23.24%
21.0	AMAT	21.62%	INTC	19.64%
21.0	INTC	17.89%	AMD	14.56%
21.0	WDC	16.57%	AMAT	11.22%
21.0	LUMN	15.44%	CSTM	8.8%
21.0	CSTM	11.15%	CNC	8.54%
21.0	SLV	9.91%	LUMN	8.37%
21.0	TEVA	9.75%	ON	8.13%
21.0	BHP	9.71%	KALU	8.07%
21.0	CSCO	9.35%	AA	8.03%
21.0	AVGO	9.3%	TEVA	7.33%
21.0	CNC	8.92%	JAZZ	7.06%
21.0	PWR	8.58%	GNRC	6.9%
21.0	ON	8.51%	GOOGL	6.8%
21.0	B	8.35%	B	6.71%
21.0	AA	7.85%	SLV	6.62%
21.0	BIIB	7.85%	CMA	6.15%
21.0	GOOGL	7.45%	PWR	5.94%
21.0	CAH	7.44%	CSCO	5.82%
21.0	GNRC	7.3%	NEM	5.44%
21.0	RIO	6.9%	BHP	5.09%
21.0	LLY	6.27%	RIO	5.05%
21.0	KALU	6.15%	ELAN	4.99%
21.0	NEM	5.95%	TRGP	4.53%
21.0	TRGP	5.76%	TXN	4.48%
21.0	JAZZ	5.68%	CVS	4.42%
21.0	ELAN	5.67%	FCX	4.4%
21.0	QQQ	4.93%	QCOM	4.22%
21.0	NVDA	4.83%	BIIB	4.18%

P365D: 63d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	MU	115.28%	WDC	82.28%
63.0	AMAT	76.86%	MU	81.13%
63.0	WDC	75.27%	INTC	67.28%
63.0	AMD	70.68%	AMD	43.21%
63.0	LUMN	56.38%	AMAT	37.13%
63.0	INTC	53.77%	CSTM	32.03%
63.0	CSTM	43.32%	AA	31.26%
63.0	BHP	36.75%	KALU	30.51%
63.0	TEVA	36.54%	LUMN	29.51%
63.0	SLV	36.13%	ON	28.03%
63.0	ON	30.89%	SLV	27.71%
63.0	B	30.76%	TEVA	26.37%
63.0	AA	29.88%	CNC	23.16%
63.0	CAH	28.41%	JAZZ	22.69%
63.0	RIO	26.88%	B	21.71%
63.0	TRGP	26.49%	PWR	21.24%
63.0	CSCO	25.79%	GOOGL	21.15%
63.0	GOOGL	25.76%	CMA	19.37%
63.0	LLY	25.7%	RIO	18.36%
63.0	BIIB	25.46%	NEM	18.31%
63.0	KALU	25.32%	TRGP	16.5%
63.0	CNC	24.67%	BHP	16.49%
63.0	NEM	22.94%	FCX	16.06%
63.0	PWR	22.21%	CSCO	15.96%
63.0	JAZZ	19.92%	GNRC	15.47%
63.0	CMA	17.3%	TXN	14.49%
63.0	MRK	16.21%	MRK	13.14%
63.0	GNRC	16.08%	ELAN	13.07%
63.0	OXY	15.35%	LLY	12.91%
63.0	GS	14.86%	BIIB	12.71%

P365D: 126d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	MU	317.65%	WDC	222.39%
126.0	WDC	207.82%	MU	218.01%
126.0	AMAT	198.57%	INTC	130.62%
126.0	INTC	179.27%	AMAT	89.43%
126.0	BHP	109.1%	AA	83.83%
126.0	SLV	105.79%	CSTM	81.12%
126.0	CSTM	98.12%	SLV	76.01%
126.0	TEVA	93.35%	KALU	70.89%
126.0	AMD	87.71%	TEVA	63.15%
126.0	TRGP	84.47%	ON	59.94%
126.0	B	83.88%	AMD	58.47%
126.0	AA	83.19%	B	51.14%
126.0	ON	78.52%	JAZZ	45.45%
126.0	RIO	72.03%	NEM	45.29%
126.0	KALU	65.97%	FCX	44.79%
126.0	LUMN	59.77%	RIO	44.7%
126.0	NEM	58.82%	PWR	43.68%
126.0	PWR	55.79%	CMA	41.75%
126.0	CAH	55.77%	TRGP	41.6%
126.0	CNC	55.4%	CNC	41.09%
126.0	BIIB	50.62%	GOOGL	40.45%
126.0	LLY	49.0%	BHP	39.44%
126.0	FCX	45.56%	LUMN	36.01%
126.0	MRK	45.1%	MRK	33.14%
126.0	CSCO	44.75%	TXN	33.06%
126.0	CMA	44.14%	GNRC	32.43%
126.0	JAZZ	43.61%	XOM	30.05%
126.0	GOOGL	42.28%	HSBC	29.51%
126.0	GWW	39.61%	VFC	27.83%
126.0	XOM	38.17%	CSCO	27.66%

Bottom 30 Tickers By ROLOBC

All TMD: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	SIVBQ	-0.8%	SIVBQ	-0.78%
1.0	IEP	-0.39%	SBNY	-0.45%
1.0	SBNY	-0.38%	FRCB	-0.23%
1.0	UAA	-0.22%	IEP	-0.14%
1.0	NWL	-0.19%	AMC	-0.13%
1.0	CZR	-0.19%	CHTR	-0.09%
1.0	FRCB	-0.17%	PRGO	-0.09%
1.0	GT	-0.16%	FIS	-0.08%
1.0	ZTS	-0.14%	ZTS	-0.07%
1.0	CHTR	-0.14%	BHC	-0.06%
1.0	FIS	-0.1%	VFC	-0.06%
1.0	LNC	-0.1%	ADBE	-0.06%
1.0	PRGO	-0.1%	AAP	-0.06%
1.0	BXP	-0.09%	NWL	-0.06%
1.0	TLT	-0.08%	GT	-0.05%
1.0	ADBE	-0.07%	CMCSA	-0.05%
1.0	INTU	-0.07%	TLT	-0.04%
1.0	BALL	-0.07%	UAA	-0.04%
1.0	VFC	-0.06%	NAVI	-0.04%
1.0	CMCSA	-0.05%	INTU	-0.04%
1.0	NAVI	-0.05%	CZR	-0.03%
1.0	BIIB	-0.04%	KHC	-0.03%
1.0	KHC	-0.04%	BXP	-0.03%
1.0	CTLT	-0.03%	LNC	-0.02%
1.0	AAP	-0.03%	MOS	-0.02%
1.0	AMC	-0.03%	BALL	-0.02%
1.0	GNRC	-0.03%	FRA	-0.02%
1.0	UNH	-0.03%	PEP	-0.02%
1.0	SNY	-0.02%	CTLT	-0.01%
1.0	MUB	-0.01%	LQD	-0.01%

All TMD: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	SIVBQ	-4.46%	SBNY	-4.05%
10.0	IEP	-2.68%	SIVBQ	-3.9%
10.0	SBNY	-2.19%	FRCB	-2.19%
10.0	CZR	-1.77%	IEP	-1.38%
10.0	FRCB	-1.26%	AMC	-1.17%
10.0	NWL	-1.13%	CHTR	-0.99%
10.0	AMC	-1.12%	PRGO	-0.89%
10.0	ZTS	-0.93%	FIS	-0.78%
10.0	INTU	-0.9%	ZTS	-0.69%
10.0	CHTR	-0.88%	NWL	-0.66%
10.0	FIS	-0.87%	VFC	-0.66%
10.0	UAA	-0.84%	AAP	-0.62%
10.0	ADBE	-0.73%	ADBE	-0.57%
10.0	PRGO	-0.7%	GT	-0.57%
10.0	VFC	-0.68%	CMCSA	-0.57%
10.0	BALL	-0.55%	UAA	-0.56%
10.0	BXP	-0.55%	BHC	-0.53%
10.0	NAVI	-0.49%	NAVI	-0.5%
10.0	KHC	-0.44%	CZR	-0.45%
10.0	CMCSA	-0.44%	INTU	-0.4%
10.0	TLT	-0.39%	TLT	-0.39%
10.0	LNC	-0.39%	MOS	-0.32%
10.0	AAP	-0.37%	BXP	-0.31%
10.0	MOS	-0.3%	KHC	-0.29%
10.0	FRA	-0.22%	LNC	-0.24%
10.0	VZ	-0.22%	BALL	-0.22%
10.0	UNH	-0.14%	FRA	-0.18%
10.0	SNY	-0.12%	CYH	-0.13%
10.0	BIIB	-0.11%	LQD	-0.12%
10.0	MUB	-0.1%	PEP	-0.12%

All TMD: 21d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	SIVBQ	-9.97%	SBNY	-11.16%
21.0	SBNY	-6.13%	SIVBQ	-9.37%
21.0	IEP	-6.09%	FRCB	-6.02%
21.0	CZR	-4.31%	IEP	-2.96%
21.0	FRCB	-3.78%	AMC	-2.93%
21.0	NWL	-2.59%	CHTR	-2.05%
21.0	AMC	-2.16%	NWL	-1.82%
21.0	INTU	-2.02%	PRGO	-1.78%
21.0	CHTR	-1.84%	FIS	-1.46%
21.0	ADBE	-1.74%	ZTS	-1.41%
21.0	VFC	-1.7%	VFC	-1.4%
21.0	PRGO	-1.61%	BHC	-1.32%
21.0	ZTS	-1.5%	AAP	-1.25%
21.0	UAA	-1.39%	GT	-1.15%
21.0	FIS	-1.3%	CMCSA	-1.12%
21.0	NAVI	-1.23%	NAVI	-1.12%
21.0	KHC	-1.12%	UAA	-1.08%
21.0	BALL	-1.11%	CZR	-1.02%
21.0	BHC	-1.08%	ADBE	-0.93%
21.0	BXP	-0.98%	TLT	-0.83%
21.0	TLT	-0.97%	MOS	-0.72%
21.0	AAP	-0.88%	BXP	-0.71%
21.0	CMCSA	-0.77%	KHC	-0.69%
21.0	VZ	-0.75%	INTU	-0.64%
21.0	GT	-0.61%	LNC	-0.61%
21.0	CLF	-0.53%	BALL	-0.55%
21.0	CYH	-0.47%	FRA	-0.35%
21.0	FRA	-0.46%	CYH	-0.3%
21.0	MOS	-0.43%	LQD	-0.23%
21.0	LNC	-0.25%	PEP	-0.2%

All TMD: 63d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	SIVBQ	-36.58%	SBNY	-37.59%
63.0	SBNY	-24.57%	SIVBQ	-33.73%
63.0	IEP	-19.47%	FRCB	-24.04%
63.0	FRCB	-18.2%	AMC	-13.25%
63.0	NWL	-12.0%	IEP	-9.66%
63.0	VFC	-7.07%	NWL	-7.11%
63.0	PRGO	-6.91%	PRGO	-5.97%
63.0	CZR	-6.47%	CHTR	-5.25%
63.0	AMC	-6.06%	AAP	-4.3%
63.0	CHTR	-5.26%	MOS	-4.08%
63.0	UAA	-5.01%	CZR	-4.07%
63.0	ADBE	-4.9%	VFC	-3.95%
63.0	AAP	-4.72%	BHC	-3.94%
63.0	GNRC	-3.68%	FIS	-3.82%
63.0	BHC	-3.66%	ZTS	-3.51%
63.0	KHC	-3.64%	NAVI	-3.4%
63.0	BALL	-3.57%	UAA	-3.05%
63.0	FIS	-3.56%	GT	-2.94%
63.0	ZTS	-3.41%	CMCSA	-2.87%
63.0	GT	-3.4%	BXP	-2.83%
63.0	NAVI	-3.18%	KHC	-2.75%
63.0	CLF	-3.16%	ADBE	-2.46%
63.0	MOS	-2.99%	TLT	-2.31%
63.0	TLT	-2.61%	LNC	-1.91%
63.0	BBY	-2.51%	CLF	-1.76%
63.0	CMCSA	-2.43%	BALL	-1.4%
63.0	BXP	-2.03%	BBY	-1.28%
63.0	CYH	-2.0%	FRA	-0.88%
63.0	INTU	-1.87%	CYH	-0.68%
63.0	VZ	-1.75%	LW	-0.57%

All TMD: 126d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	SIVBQ	-79.5%	SIVBQ	-65.15%
126.0	FRCB	-59.03%	SBNY	-64.8%
126.0	SBNY	-45.8%	FRCB	-51.17%
126.0	IEP	-39.8%	AMC	-28.95%
126.0	NWL	-35.42%	IEP	-18.89%
126.0	VFC	-18.16%	NWL	-16.23%
126.0	AMC	-17.43%	PRGO	-11.88%
126.0	PRGO	-15.79%	AAP	-10.26%
126.0	AAP	-11.81%	CHTR	-9.02%
126.0	CHTR	-9.82%	MOS	-8.07%
126.0	GT	-9.74%	CZR	-7.87%
126.0	FIS	-9.44%	VFC	-6.65%
126.0	CZR	-9.12%	FIS	-6.48%
126.0	MOS	-9.09%	NAVI	-5.98%
126.0	KHC	-7.79%	KHC	-5.9%
126.0	BHC	-7.76%	BHC	-5.78%
126.0	CLF	-7.4%	CTLT	-5.69%
126.0	GNRC	-7.36%	ZTS	-5.45%
126.0	ADBE	-6.82%	GT	-5.43%
126.0	UAA	-6.77%	BXP	-5.34%
126.0	CTLT	-6.66%	UAA	-5.24%
126.0	BALL	-5.66%	CMCSA	-4.71%
126.0	TLT	-5.5%	TLT	-4.11%
126.0	NAVI	-5.16%	CNC	-3.97%
126.0	CMCSA	-4.86%	CLF	-3.31%
126.0	BBY	-4.79%	ADBE	-3.19%
126.0	ZTS	-4.5%	UNH	-3.18%
126.0	CVS	-4.44%	LNC	-2.41%
126.0	UNH	-4.11%	LW	-2.34%
126.0	BXP	-4.08%	BBY	-1.97%

All TMD: 252d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
252.0	FRCB	-207.49%	SBNY	-95.75%
252.0	SIVBQ	-176.51%	SIVBQ	-95.29%
252.0	SBNY	-109.04%	FRCB	-91.61%
252.0	IEP	-82.01%	AMC	-54.07%
252.0	NWL	-74.11%	IEP	-39.1%
252.0	AMC	-47.92%	NWL	-30.4%
252.0	AAP	-31.93%	AAP	-22.06%
252.0	CZR	-28.94%	PRGO	-20.35%
252.0	VFC	-27.76%	VFC	-17.45%
252.0	PRGO	-26.34%	CNC	-17.13%
252.0	MOS	-25.35%	CZR	-16.6%
252.0	GT	-24.71%	MOS	-15.12%
252.0	UAA	-24.34%	UAA	-14.81%
252.0	CLF	-21.87%	CHTR	-13.82%
252.0	UNH	-21.5%	KHC	-11.7%
252.0	CNC	-20.43%	GT	-9.8%
252.0	FIS	-18.94%	UNH	-9.31%
252.0	BHC	-16.18%	NAVI	-9.17%
252.0	KHC	-15.68%	CLF	-8.62%
252.0	CHTR	-13.64%	BHC	-8.33%
252.0	CVS	-13.47%	BMY	-7.84%
252.0	CYH	-11.9%	TLT	-7.08%
252.0	TLT	-10.93%	ZTS	-6.74%
252.0	CTLT	-10.5%	CMCSA	-6.41%
252.0	BALL	-9.45%	CTLT	-6.24%
252.0	BMY	-9.4%	CYH	-5.99%
252.0	NAVI	-7.58%	FIS	-5.69%
252.0	CMCSA	-6.8%	LW	-5.6%
252.0	LW	-6.54%	BXP	-5.52%
252.0	GNRC	-6.15%	OXY	-4.95%

P30D: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	ORCL	-2.76%	ORCL	-2.54%
1.0	INTU	-2.45%	MSTR	-2.51%
1.0	MSTR	-2.36%	AA	-1.89%
1.0	LUMN	-2.25%	CLF	-1.72%
1.0	ADBE	-2.21%	LUMN	-1.55%
1.0	OXY	-1.85%	INTU	-1.46%
1.0	AA	-1.68%	ADBE	-1.4%
1.0	T	-1.65%	SLV	-1.11%
1.0	MSFT	-1.31%	MSFT	-1.02%
1.0	FSUGY	-1.27%	FSUGY	-0.97%
1.0	ON	-1.17%	OXY	-0.95%
1.0	LVS	-1.16%	GBTC	-0.94%
1.0	RIO	-1.15%	QCOM	-0.94%
1.0	SLV	-1.1%	NFLX	-0.89%
1.0	CLF	-1.08%	ON	-0.89%
1.0	QCOM	-1.08%	AVGO	-0.88%
1.0	VZ	-1.06%	T	-0.82%
1.0	MOS	-1.06%	LVS	-0.7%
1.0	GBTC	-0.88%	NEM	-0.68%
1.0	CPRT	-0.87%	RIO	-0.66%
1.0	NFLX	-0.82%	B	-0.65%
1.0	CSTM	-0.77%	CPRT	-0.65%
1.0	ZTS	-0.75%	VZ	-0.57%
1.0	AMD	-0.68%	FIS	-0.55%
1.0	XOM	-0.54%	NVDA	-0.54%
1.0	NEM	-0.53%	GLD	-0.53%
1.0	CSCO	-0.51%	TMUS	-0.51%
1.0	B	-0.51%	CDNS	-0.46%
1.0	TSLA	-0.51%	WYNN	-0.45%
1.0	FCX	-0.49%	AMZN	-0.43%

P30D: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	ORCL	-24.24%	AA	-22.11%
10.0	AA	-20.43%	ORCL	-21.68%
10.0	LUMN	-17.35%	MSTR	-18.78%
10.0	CLF	-16.27%	CLF	-16.34%
10.0	OXY	-15.87%	ADBE	-16.06%
10.0	INTU	-15.65%	LUMN	-11.19%
10.0	ON	-14.84%	INTU	-11.13%
10.0	MSTR	-13.96%	OXY	-10.1%
10.0	ADBE	-13.5%	SLV	-10.0%
10.0	PRGO	-10.4%	MSFT	-9.55%
10.0	SLV	-9.57%	NFLX	-9.05%
10.0	MSFT	-9.3%	ON	-7.51%
10.0	AVGO	-7.69%	PRGO	-7.38%
10.0	NFLX	-7.17%	XOM	-7.04%
10.0	LVS	-7.13%	FSUGY	-6.98%
10.0	FSUGY	-7.04%	AVGO	-6.47%
10.0	T	-6.96%	QCOM	-6.4%
10.0	XOM	-6.66%	LVS	-6.38%
10.0	CPRT	-5.91%	RIO	-6.03%
10.0	GOOGL	-5.85%	BHC	-4.85%
10.0	RIO	-5.82%	FIS	-4.55%
10.0	BHC	-5.38%	GLD	-4.4%
10.0	NVDA	-5.15%	CSTM	-4.33%
10.0	QCOM	-4.9%	NVDA	-4.23%
10.0	VICI	-4.0%	T	-4.12%
10.0	CMCSA	-3.82%	META	-4.1%
10.0	TSLA	-3.54%	CPRT	-4.03%
10.0	ZTS	-3.32%	B	-3.98%
10.0	CSCO	-3.28%	AMZN	-3.94%
10.0	WYNN	-3.01%	CDNS	-3.75%

P90D: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	ZTS	-1.63%	ZTS	-0.76%
1.0	CHTR	-1.01%	INTU	-0.71%
1.0	INTU	-0.86%	CHTR	-0.6%
1.0	T	-0.72%	NFLX	-0.51%
1.0	MOS	-0.7%	T	-0.51%
1.0	OXY	-0.62%	AA	-0.46%
1.0	AA	-0.49%	OXY	-0.4%
1.0	NFLX	-0.48%	MSTR	-0.4%
1.0	SLV	-0.45%	MOS	-0.31%
1.0	VZ	-0.42%	HCA	-0.3%
1.0	LVS	-0.41%	SLV	-0.29%
1.0	POST	-0.4%	TMUS	-0.29%
1.0	MSTR	-0.39%	NEM	-0.28%
1.0	B	-0.39%	CPRT	-0.27%
1.0	FIS	-0.37%	FIS	-0.26%
1.0	CPRT	-0.36%	XOM	-0.25%
1.0	ADBE	-0.3%	LVS	-0.25%
1.0	PEP	-0.29%	GLD	-0.24%
1.0	VFC	-0.27%	VZ	-0.24%
1.0	NEM	-0.26%	ADBE	-0.24%
1.0	XOM	-0.26%	PEP	-0.24%
1.0	VICI	-0.26%	POST	-0.2%
1.0	HCA	-0.26%	GBTC	-0.2%
1.0	GILD	-0.25%	ISRG	-0.19%
1.0	AZN	-0.24%	CMCSA	-0.18%
1.0	COST	-0.23%	SNY	-0.18%
1.0	TMUS	-0.22%	B	-0.16%
1.0	ISRG	-0.19%	GILD	-0.16%
1.0	GLD	-0.16%	COST	-0.13%
1.0	SNY	-0.15%	GSK	-0.12%

P90D: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	ZTS	-13.22%	CHTR	-8.65%
10.0	CHTR	-9.25%	ZTS	-7.34%
10.0	INTU	-8.78%	INTU	-6.7%
10.0	T	-5.02%	NFLX	-6.1%
10.0	MOS	-4.6%	HCA	-4.4%
10.0	NFLX	-4.26%	AA	-3.75%
10.0	AA	-4.19%	CMCSA	-3.66%
10.0	HCA	-3.9%	FIS	-3.55%
10.0	OXY	-3.46%	T	-3.54%
10.0	CMCSA	-3.36%	SLV	-3.48%
10.0	LVS	-3.05%	MSTR	-3.29%
10.0	CPRT	-3.03%	ADBE	-3.0%
10.0	SLV	-2.88%	NEM	-2.95%
10.0	MSTR	-2.81%	GLD	-2.71%
10.0	PCG	-2.79%	LVS	-2.69%
10.0	NEM	-2.75%	GBTC	-2.65%
10.0	META	-2.59%	MOS	-2.6%
10.0	THC	-2.59%	OXY	-2.52%
10.0	POST	-2.59%	ISRG	-2.34%
10.0	AZO	-2.58%	BHC	-2.34%
10.0	BHC	-2.58%	POST	-2.21%
10.0	FIS	-2.46%	XOM	-2.16%
10.0	SNY	-2.31%	AZO	-2.14%
10.0	GME	-2.17%	CPRT	-2.09%
10.0	AZN	-2.14%	SNY	-2.05%
10.0	GILD	-2.09%	GILD	-2.03%
10.0	GBTC	-2.05%	AZN	-1.97%
10.0	ADBE	-2.01%	PEP	-1.95%
10.0	PRGO	-2.01%	GSK	-1.92%
10.0	XOM	-1.93%	MSI	-1.76%

P90D: 21d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	ZTS	-26.92%	CHTR	-19.5%
21.0	INTU	-19.79%	ZTS	-18.0%
21.0	CHTR	-19.73%	INTU	-14.87%
21.0	HCA	-11.62%	NFLX	-10.81%
21.0	CPRT	-10.12%	HCA	-10.61%
21.0	MOS	-9.2%	CMCSA	-8.99%
21.0	AZO	-8.86%	MSTR	-8.73%
21.0	CMCSA	-8.72%	FIS	-8.34%
21.0	NFLX	-8.66%	GBTC	-7.53%
21.0	GT	-8.33%	T	-7.41%
21.0	T	-8.02%	AZO	-6.61%
21.0	BHC	-7.57%	SLV	-6.41%
21.0	CMG	-7.37%	POST	-6.16%
21.0	META	-7.03%	NEM	-6.16%
21.0	GBTC	-6.95%	ISRG	-6.13%
21.0	POST	-6.94%	GT	-5.84%
21.0	LVS	-6.69%	BHC	-5.63%
21.0	FIS	-6.68%	GME	-5.63%
21.0	NEM	-6.55%	GLD	-5.52%
21.0	NAVI	-6.34%	VFC	-5.46%
21.0	SLV	-6.23%	LVS	-5.45%
21.0	ACGL	-5.35%	META	-5.23%
21.0	MSTR	-5.22%	MOS	-5.2%
21.0	PRGO	-5.13%	PEP	-4.8%
21.0	THC	-5.08%	CMG	-4.77%
21.0	GME	-5.06%	CPRT	-4.61%
21.0	ADBE	-4.93%	ADBE	-4.5%
21.0	MSI	-4.86%	SNY	-4.36%
21.0	OXY	-4.77%	GSK	-4.16%
21.0	AZN	-4.6%	AZN	-4.14%

P365D: 1d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	MSTR	-0.68%	MSTR	-0.47%
1.0	CHTR	-0.51%	INTU	-0.39%
1.0	ZTS	-0.5%	CHTR	-0.38%
1.0	INTU	-0.46%	PRGO	-0.34%
1.0	PRGO	-0.42%	ZTS	-0.29%
1.0	MOS	-0.42%	FIS	-0.28%
1.0	GT	-0.38%	ADBE	-0.23%
1.0	FIS	-0.38%	NFLX	-0.21%
1.0	CPRT	-0.34%	CPRT	-0.21%
1.0	GBTC	-0.34%	GBTC	-0.2%
1.0	UAA	-0.33%	CMG	-0.18%
1.0	ADBE	-0.33%	NAVI	-0.18%
1.0	CMG	-0.27%	MOS	-0.18%
1.0	NFLX	-0.27%	GT	-0.15%
1.0	VICI	-0.2%	CMCSA	-0.14%
1.0	CMCSA	-0.2%	TMUS	-0.13%
1.0	NAVI	-0.19%	T	-0.12%
1.0	T	-0.18%	ISRG	-0.1%
1.0	ORCL	-0.18%	MSFT	-0.1%
1.0	IEP	-0.17%	ORCL	-0.08%
1.0	CZR	-0.15%	VICI	-0.08%
1.0	ISRG	-0.14%	POST	-0.08%
1.0	MSFT	-0.14%	BHC	-0.08%
1.0	TMUS	-0.13%	META	-0.07%
1.0	FRA	-0.13%	FRA	-0.07%
1.0	LEN	-0.12%	LEN	-0.07%
1.0	POST	-0.11%	AMC	-0.05%
1.0	WYNN	-0.08%	AZO	-0.05%
1.0	BHC	-0.07%	IEP	-0.04%
1.0	SNY	-0.07%	SNY	-0.04%

P365D: 10d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	MSTR	-5.57%	MSTR	-4.86%
10.0	INTU	-3.61%	INTU	-3.9%
10.0	CHTR	-3.5%	CHTR	-3.85%
10.0	ZTS	-3.26%	PRGO	-3.41%
10.0	PRGO	-3.18%	FIS	-2.86%
10.0	MOS	-3.11%	ZTS	-2.58%
10.0	GT	-2.87%	ADBE	-2.34%
10.0	CPRT	-2.82%	NAVI	-2.22%
10.0	GBTC	-2.59%	GBTC	-2.15%
10.0	FIS	-2.58%	NFLX	-1.95%
10.0	ORCL	-2.47%	CPRT	-1.89%
10.0	ADBE	-2.42%	GT	-1.89%
10.0	NFLX	-2.21%	CMG	-1.88%
10.0	CMG	-2.1%	MOS	-1.88%
10.0	NAVI	-2.07%	CMCSA	-1.65%
10.0	AMC	-1.6%	MSFT	-1.06%
10.0	VICI	-1.58%	TMUS	-0.96%
10.0	CMCSA	-1.35%	ISRG	-0.92%
10.0	ISRG	-1.2%	VICI	-0.84%
10.0	META	-1.16%	BHC	-0.81%
10.0	IEP	-1.16%	FRA	-0.8%
10.0	T	-0.98%	T	-0.8%
10.0	FRA	-0.94%	META	-0.74%
10.0	BHC	-0.87%	IEP	-0.7%
10.0	AZO	-0.8%	POST	-0.67%
10.0	TMUS	-0.78%	AZO	-0.65%
10.0	MSFT	-0.74%	ORCL	-0.63%
10.0	SNY	-0.69%	LEN	-0.63%
10.0	KHC	-0.67%	KHC	-0.52%
10.0	UAA	-0.65%	SNY	-0.49%

P365D: 21d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	MSTR	-12.76%	MSTR	-9.3%
21.0	INTU	-8.56%	INTU	-7.88%
21.0	CPRT	-7.45%	CHTR	-7.59%
21.0	PRGO	-6.84%	PRGO	-7.07%
21.0	CHTR	-6.68%	FIS	-6.02%
21.0	GBTC	-6.0%	ZTS	-5.32%
21.0	MOS	-5.92%	GBTC	-4.76%
21.0	ZTS	-5.74%	NAVI	-4.69%
21.0	ADBE	-5.73%	ADBE	-4.34%
21.0	GT	-5.37%	GT	-4.13%
21.0	FIS	-5.13%	MOS	-4.02%
21.0	CMG	-4.87%	CMG	-3.92%
21.0	NFLX	-4.58%	CPRT	-3.77%
21.0	NAVI	-4.13%	NFLX	-3.64%
21.0	ORCL	-3.3%	CMCSA	-3.25%
21.0	CMCSA	-3.19%	TMUS	-2.06%
21.0	BHC	-3.11%	MSFT	-1.98%
21.0	VICI	-2.93%	BHC	-1.79%
21.0	ISRG	-2.81%	IEP	-1.76%
21.0	IEP	-2.77%	FRA	-1.69%
21.0	AMC	-2.59%	ISRG	-1.65%
21.0	AZO	-2.13%	VST	-1.65%
21.0	KHC	-2.09%	VICI	-1.64%
21.0	VST	-2.04%	TDG	-1.61%
21.0	FRA	-2.03%	META	-1.55%
21.0	UAA	-1.94%	LEN	-1.47%
21.0	MSFT	-1.93%	T	-1.46%
21.0	VNO	-1.78%	AZO	-1.45%
21.0	TMUS	-1.7%	KHC	-1.41%
21.0	META	-1.64%	POST	-1.38%

P365D: 63d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	MSTR	-48.44%	MSTR	-23.84%
63.0	PRGO	-24.1%	PRGO	-22.0%
63.0	INTU	-23.09%	INTU	-20.52%
63.0	ORCL	-21.37%	CHTR	-16.04%
63.0	CPRT	-21.0%	FIS	-15.53%
63.0	NFLX	-19.75%	ZTS	-14.04%
63.0	GT	-18.82%	GBTC	-14.03%
63.0	ADBE	-17.84%	NAVI	-13.89%
63.0	GBTC	-17.72%	ADBE	-12.56%
63.0	MOS	-17.55%	CPRT	-11.77%
63.0	FIS	-16.75%	MOS	-11.28%
63.0	CHTR	-13.98%	LEN	-9.65%
63.0	LEN	-13.2%	NFLX	-9.44%
63.0	NAVI	-12.3%	CMG	-9.09%
63.0	ZTS	-11.63%	GT	-9.06%
63.0	CMG	-11.28%	AMC	-8.72%
63.0	MSFT	-10.62%	CMCSA	-7.65%
63.0	BHC	-10.17%	VST	-7.47%
63.0	CMCSA	-8.37%	TMUS	-7.43%
63.0	TMUS	-8.3%	ORCL	-7.43%
63.0	VICI	-8.22%	MSFT	-7.06%
63.0	VST	-7.98%	BHC	-6.94%
63.0	KHC	-6.81%	NWL	-6.32%
63.0	AZO	-6.68%	META	-6.07%
63.0	FRA	-6.52%	LW	-5.9%
63.0	VNO	-5.86%	FRA	-5.8%
63.0	T	-5.73%	AZO	-5.73%
63.0	NWL	-5.69%	HD	-5.7%
63.0	IEP	-5.11%	KHC	-5.24%
63.0	ORLY	-5.08%	VICI	-5.16%

P365D: 126d

Results reflect ticker level average 95% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	MSTR	-98.27%	MSTR	-48.55%
126.0	INTU	-64.85%	AMC	-41.14%
126.0	NFLX	-49.19%	INTU	-40.21%
126.0	PRGO	-49.16%	PRGO	-39.49%
126.0	LEN	-41.9%	GBTC	-31.2%
126.0	CPRT	-40.89%	FIS	-30.07%
126.0	ORCL	-40.08%	NAVI	-29.5%
126.0	FIS	-37.32%	ORCL	-28.32%
126.0	ADBE	-34.79%	CHTR	-26.33%
126.0	GBTC	-32.13%	ADBE	-26.1%
126.0	GT	-27.86%	ZTS	-23.41%
126.0	MSFT	-26.0%	NFLX	-23.37%
126.0	VNO	-25.75%	LW	-22.46%
126.0	BHC	-24.67%	CPRT	-21.22%
126.0	MOS	-24.47%	LEN	-19.18%
126.0	NAVI	-22.9%	MSFT	-18.37%
126.0	CHTR	-20.77%	MOS	-17.27%
126.0	AMC	-20.42%	VNO	-17.23%
126.0	AZO	-19.91%	VST	-16.48%
126.0	ZTS	-19.33%	BXP	-14.74%
126.0	CMG	-18.46%	BHC	-14.46%
126.0	LW	-18.07%	GT	-13.3%
126.0	VST	-15.56%	TMUS	-13.06%
126.0	TMUS	-15.19%	CMG	-13.03%
126.0	VICI	-14.58%	FRA	-11.52%
126.0	KHC	-12.63%	AZO	-11.44%
126.0	ORLY	-12.4%	META	-11.02%
126.0	WYNN	-12.27%	BBY	-10.42%
126.0	NWL	-12.25%	KHC	-10.37%
126.0	IEP	-11.97%	WYNN	-10.22%

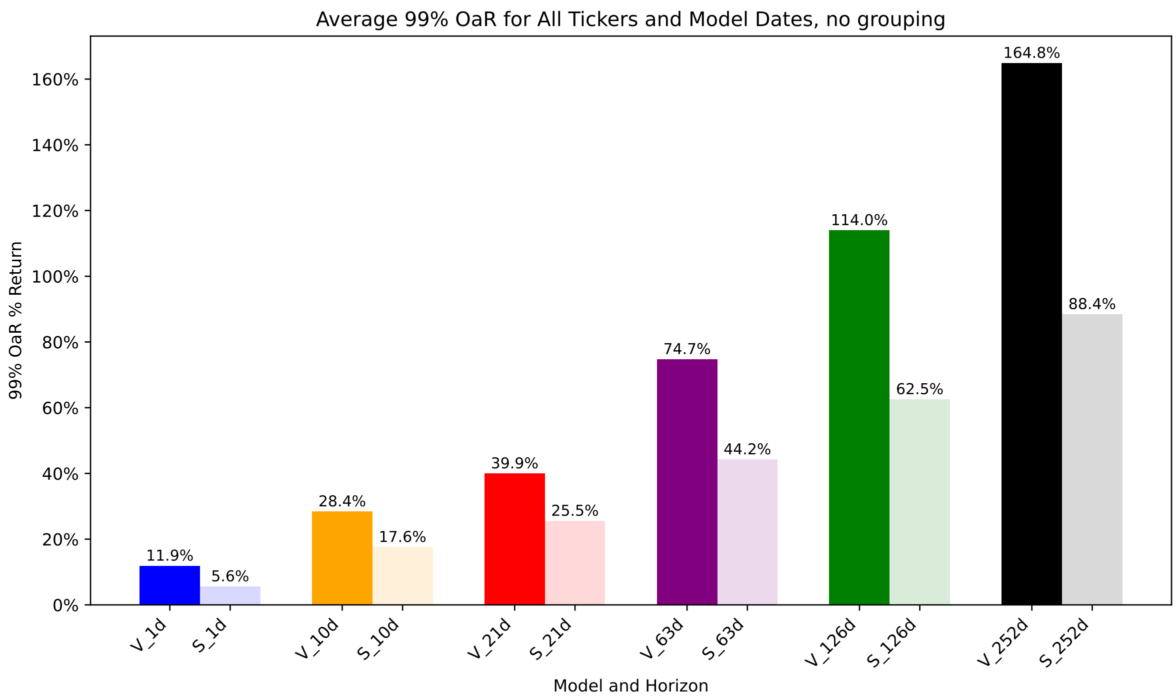
99% Opportunity At Risk (OaR)

Historic Average Levels

Here we compare Vector Model ("V", dark shading) and Sigma ("S", light shading) 99% OaR levels by horizon, on average across tickers. We make this comparison on average across tickers for select cohorts of model dates (ex: P30D), and forward horizons (ex: 21d) for all ticker model dates thru the present.

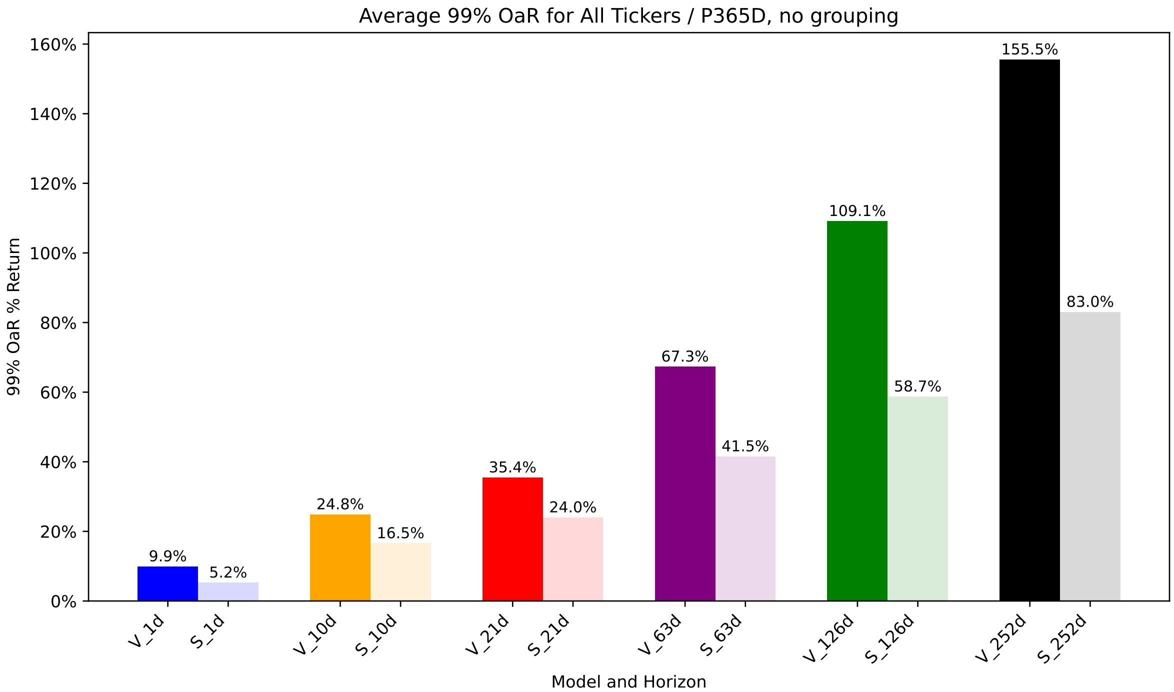
All Out of Sample Model Dates

Period examined: All model dates from 2022-01-31 through 2026-06-29



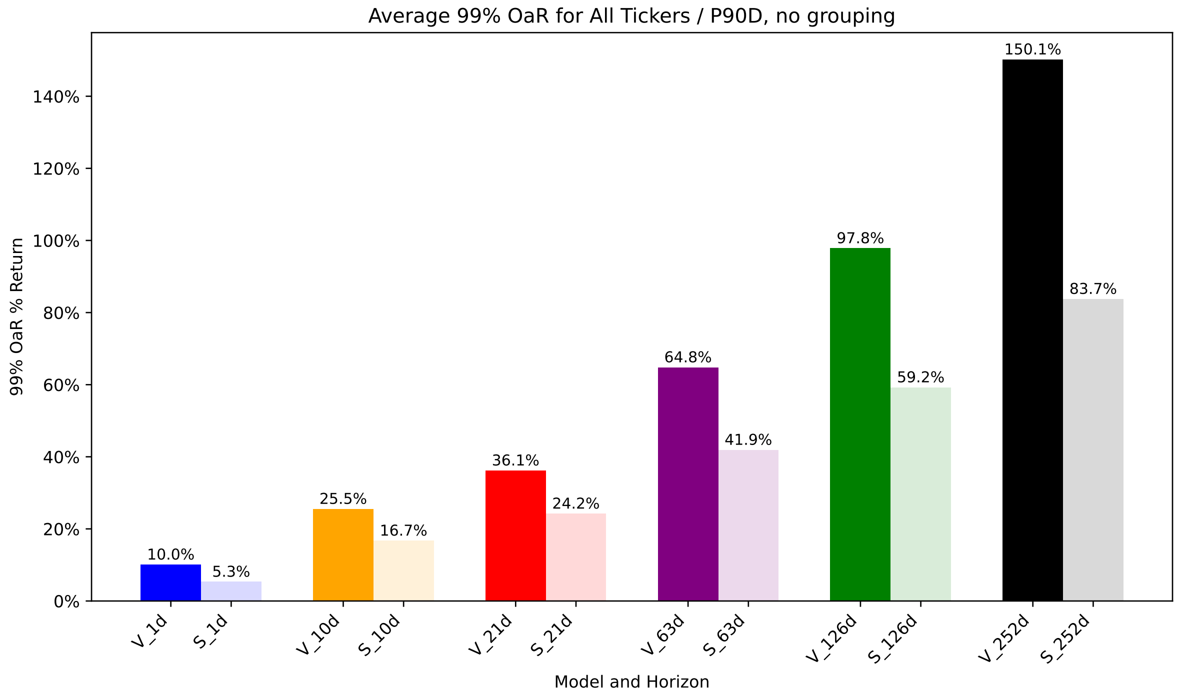
Prior 365 Calendar Days (P365D)

Period examined: All model dates from 2026-06-29 through 2025-07-01



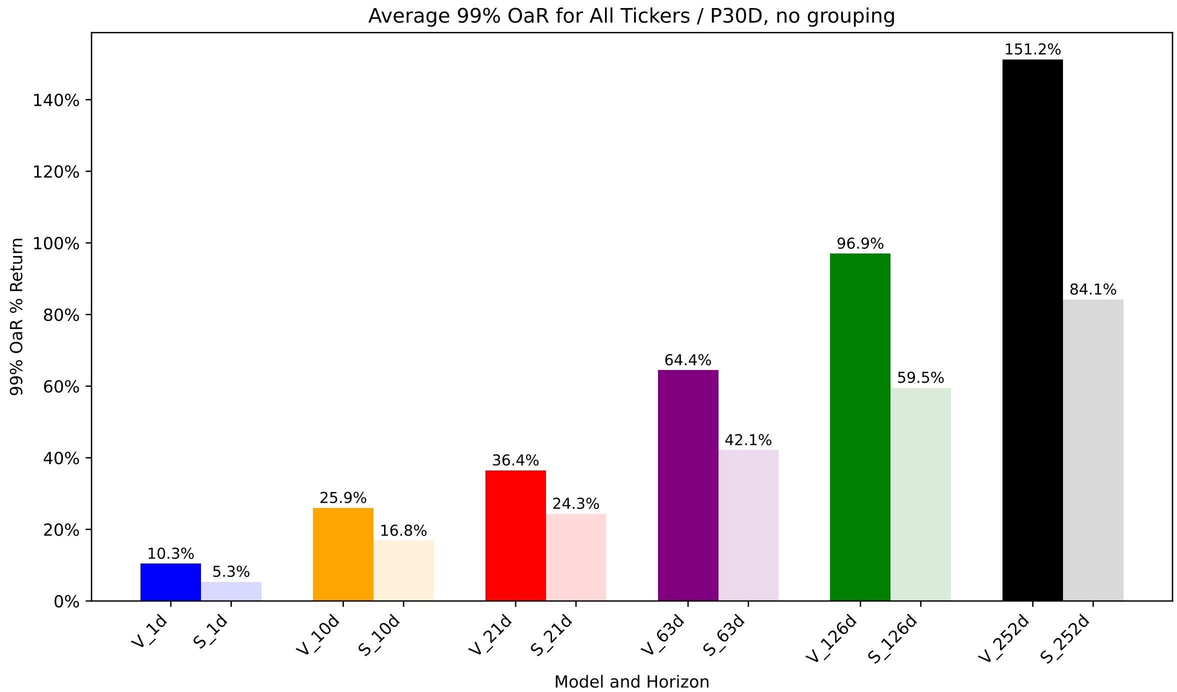
Prior 90 Calendar Days (P90D)

Period examined: All model dates from 2026-06-29 through 2026-04-02



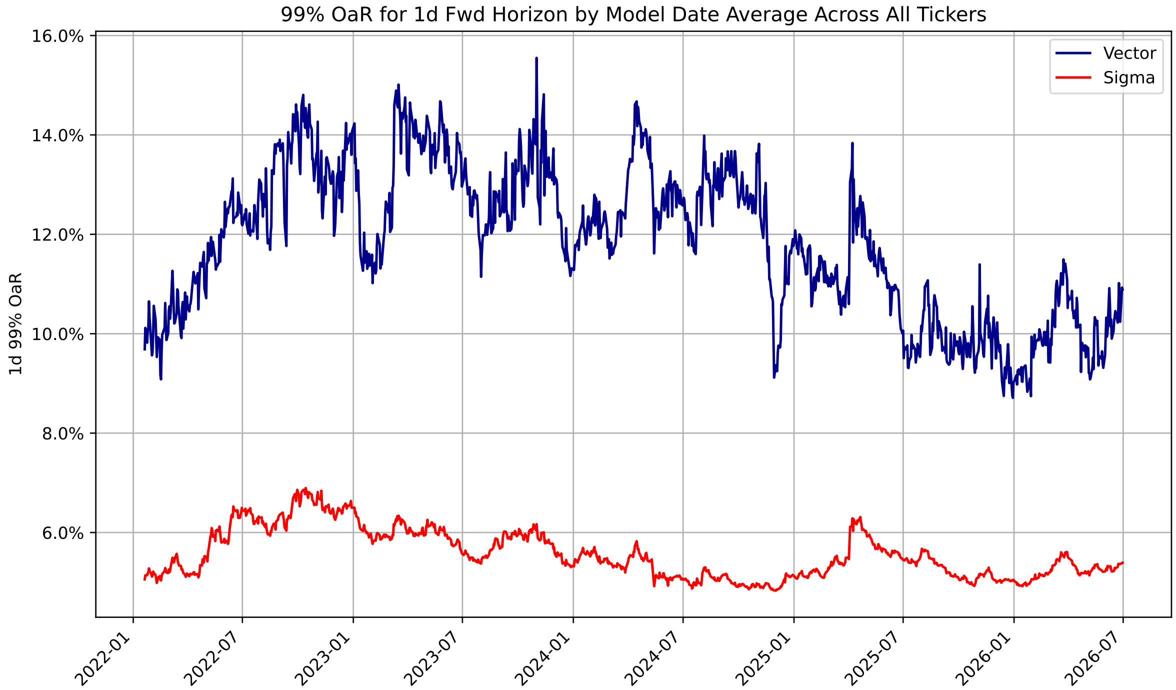
Prior 30 Calendar Days (P30D)

Period examined: All model dates from 2026-06-29 through 2026-06-01

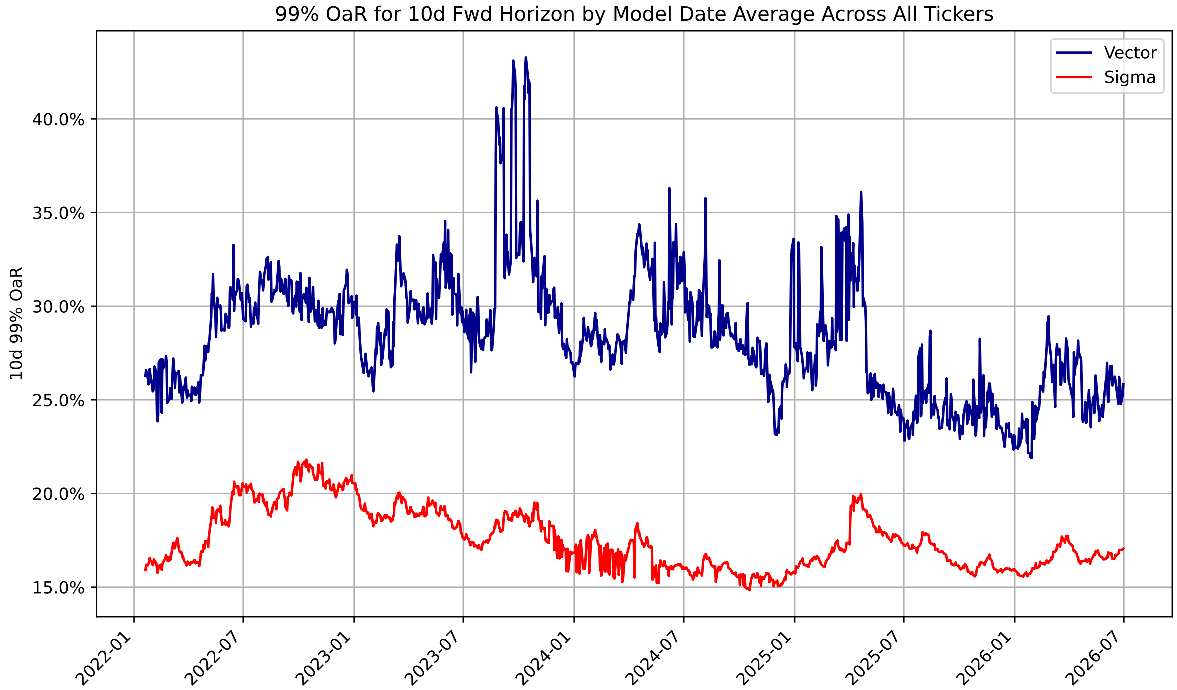


Daily Levels

1d Horizon

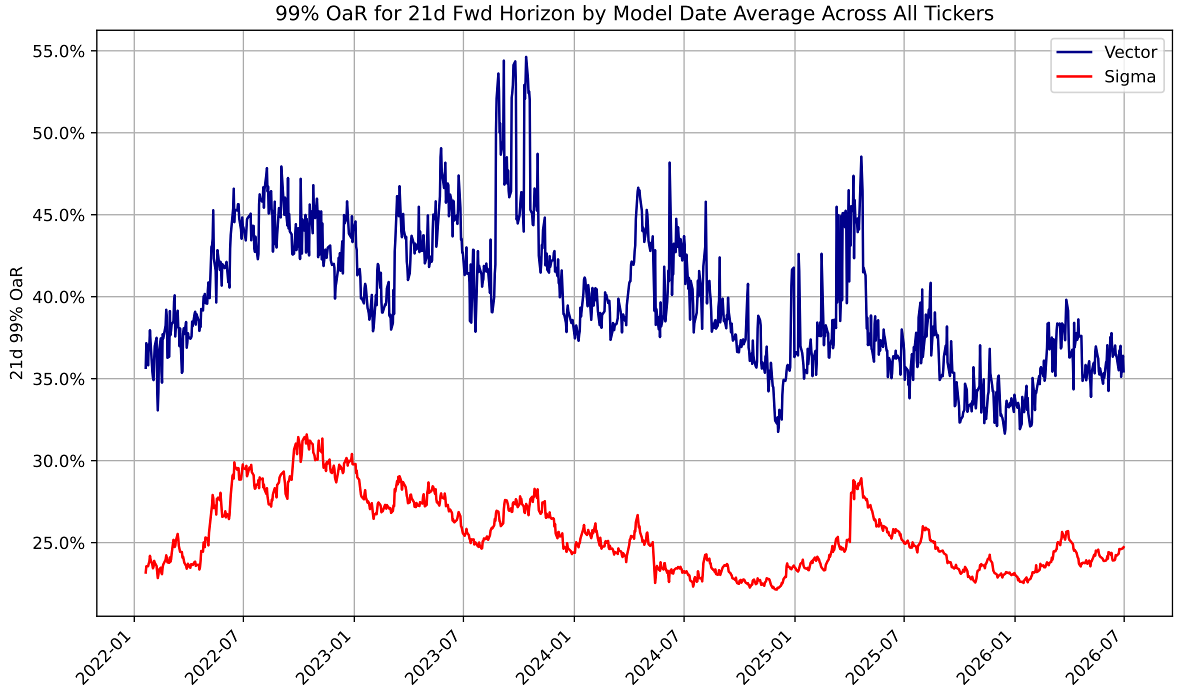


10d Horizon



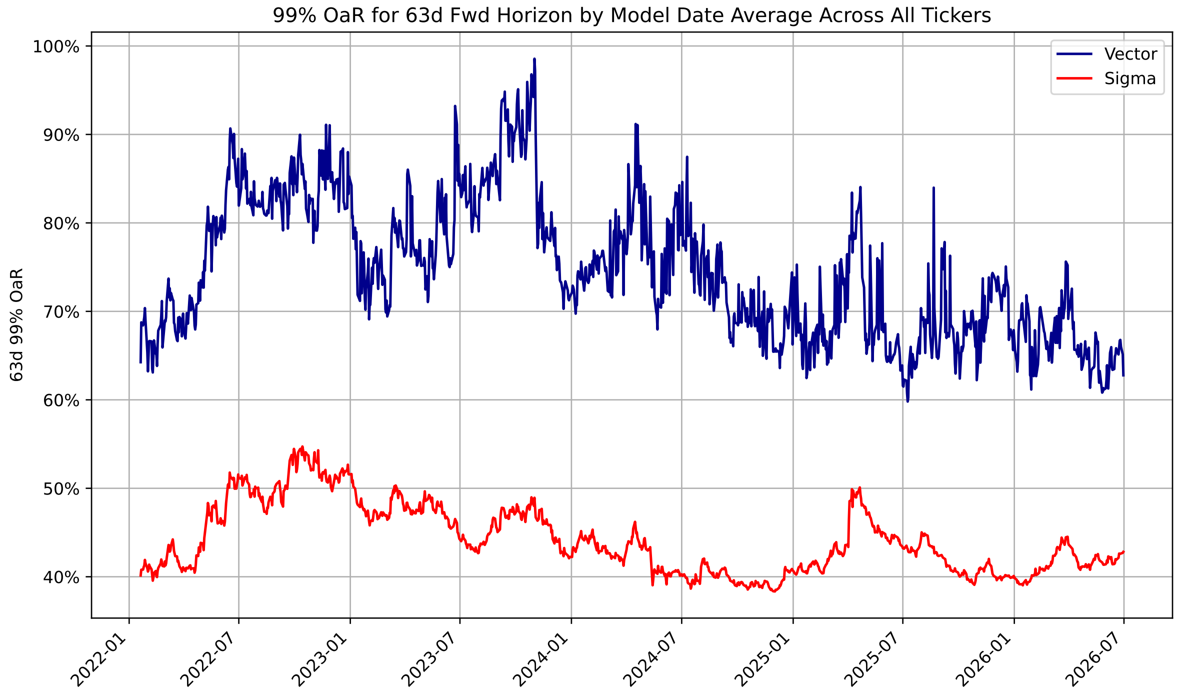
99% OaR for 10d Fwd Horizon by Model Date Average Across All Tickers
Vector
Sigma
10d 99% OaR
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

21d Horizon

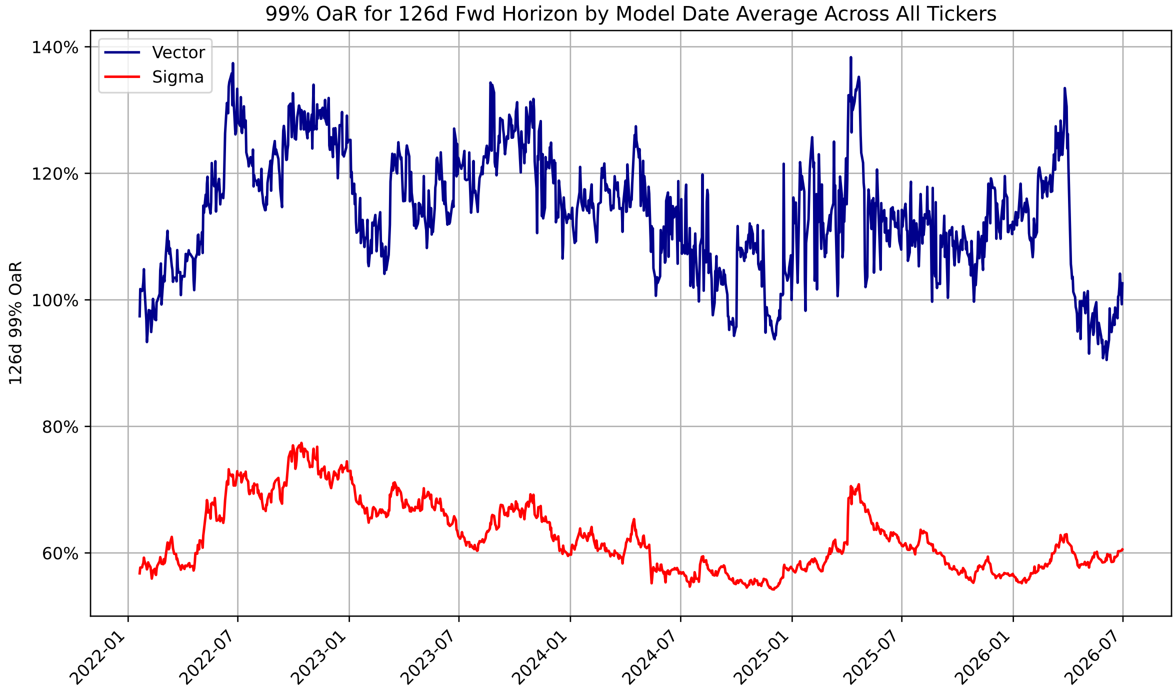


99% OaR for 21d Fwd Horizon by Model Date Average Across All Tickers
Vector
Sigma
21d 99% OaR
55.0%
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

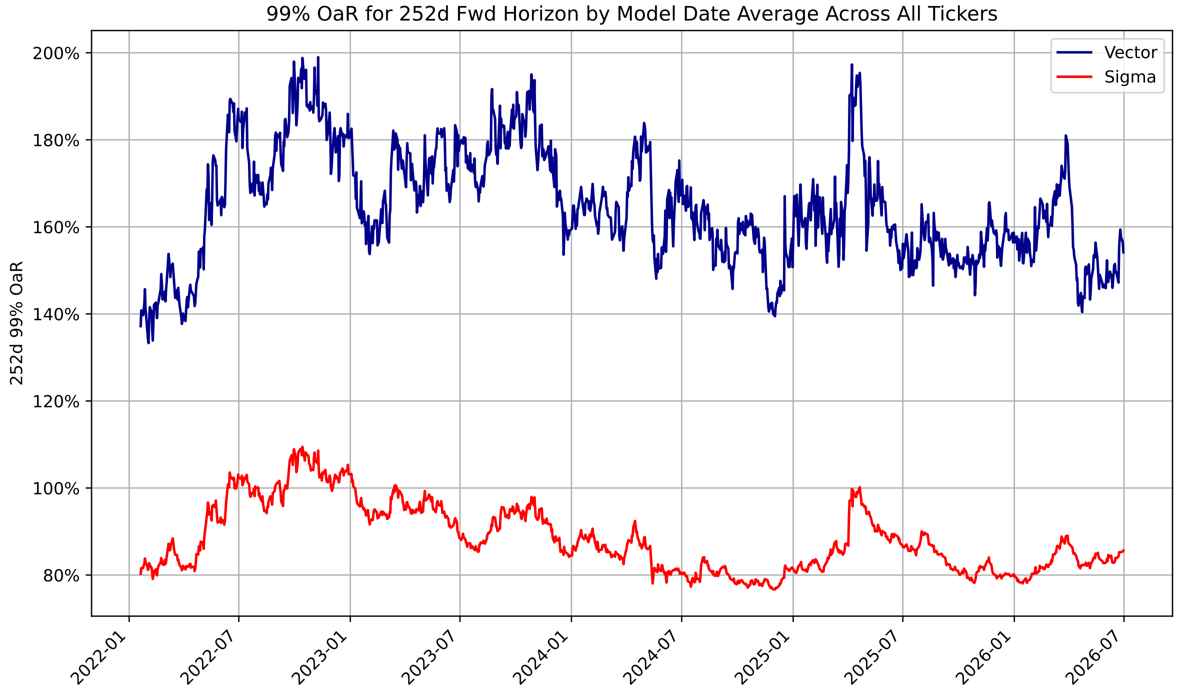
63d Horizon


99% OaR for 63d Fwd Horizon by Model Date Average Across All Tickers
Vector
Sigma
63d 99% OaR
100%
90%
80%
70%
60%
50%
40%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

126d Horizon



252d Horizon



Performance Summary

Here we compare the performance of 99% OaR estimates generated by the Vector Model ("V", presented with dark shading) with those generated by Sigma ("S", presented with light shading). This comparison is made on the basis of OaR breakage rates and Return on Long OaR Based Capital (ROLOBC), presenting the average results across tickers and model dates for model dates in the period indicated.

To faciliate evaluation of OaR breakage we provide dashed horizontal lines at the targetted breakage level. Proximity to that line is the key breakage related criteria.

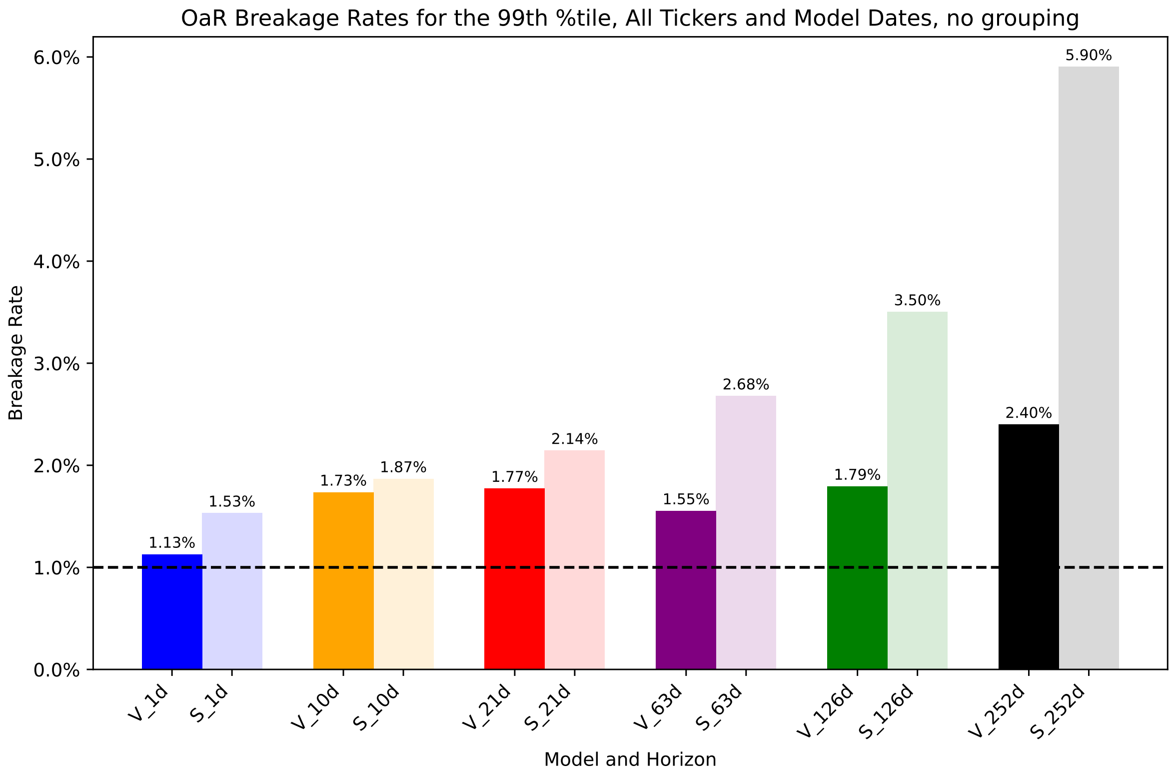
Vector Model ROLOBC can be evalauated on the basis of outright levels relative to Sigma and alpha relative to Sigma ROLOBC (which, as discussed previously, is assigned the underlying ticker price returns). We advise keeping proximity of OaR breakage rates to targetted levels in mind when comparing outright ROLOBC levels. For example, a model with much more benign OaR estimates will likely have higher ROLOBC in the context of an upwardly trending market, but how did it do on OaR breakage rates compared to the other model. This tradeoff between ROLOBC and OaR breakage rate proximity to target is the motivation for including ROLOBC Adjusted for Average Vector Model-Sigma OaR Differentials in the Report Card presented earlier in this report, and for providing the alpha metrics.

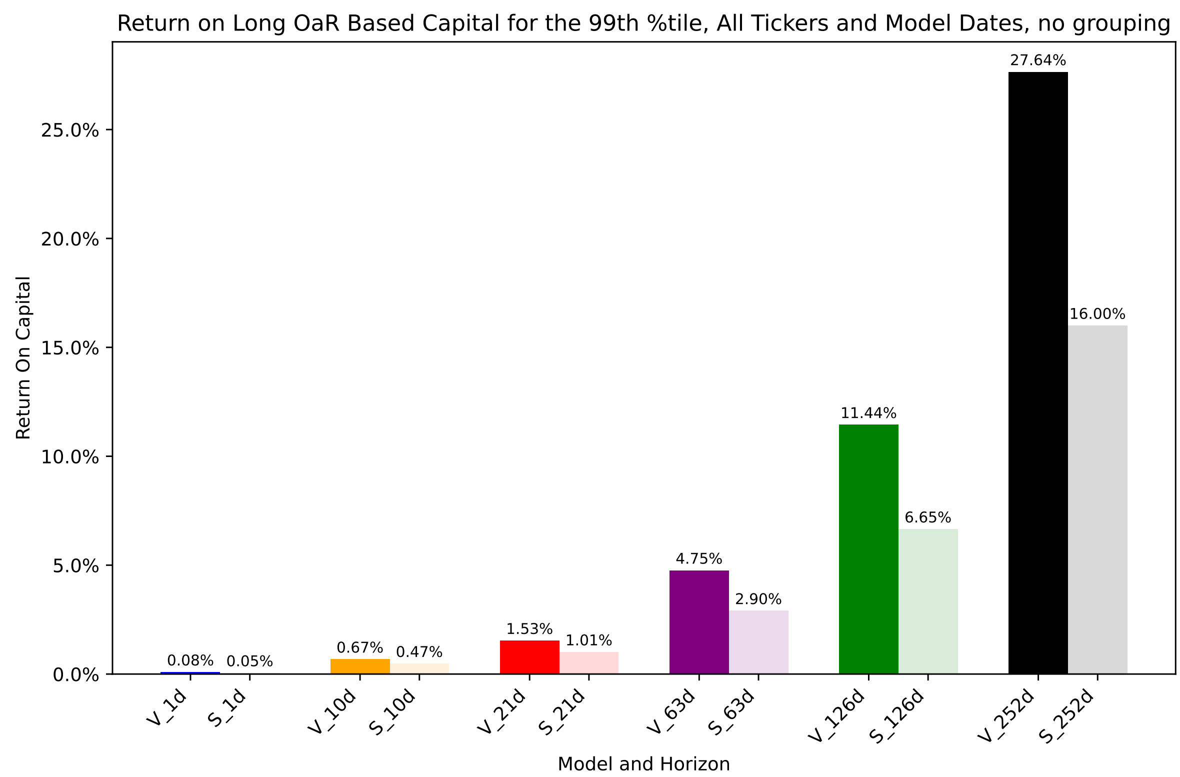
Alpha allows us to isolate ROLOBC performance differences between the Vector Model and Sigma apart from any systematic difference between the ROLOBC multiplier for the Vector Model and 1.00x. Alpha across TMD's could be driven by OaR differentials between tickers and / or between dates. Thus we also present average alpha by ticker across model dates. If this cross-date based alpha is positive, at least some of the overall alpha is driven by OaRiation in Vector Mdoel OaR relative to Sigma across time as opposed to OaRiation in Vector Model OaR relative to Sigma between tickers.

Results for each horizon reflect the average for all model estimates for that horizon from all model dates for which forward performance is known. Note that periods for all horizons > 1d overlap.

All Out of Sample Model Dates

Period examined: All model dates from 2022-01-31 through 2026-06-29





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across TMD's:

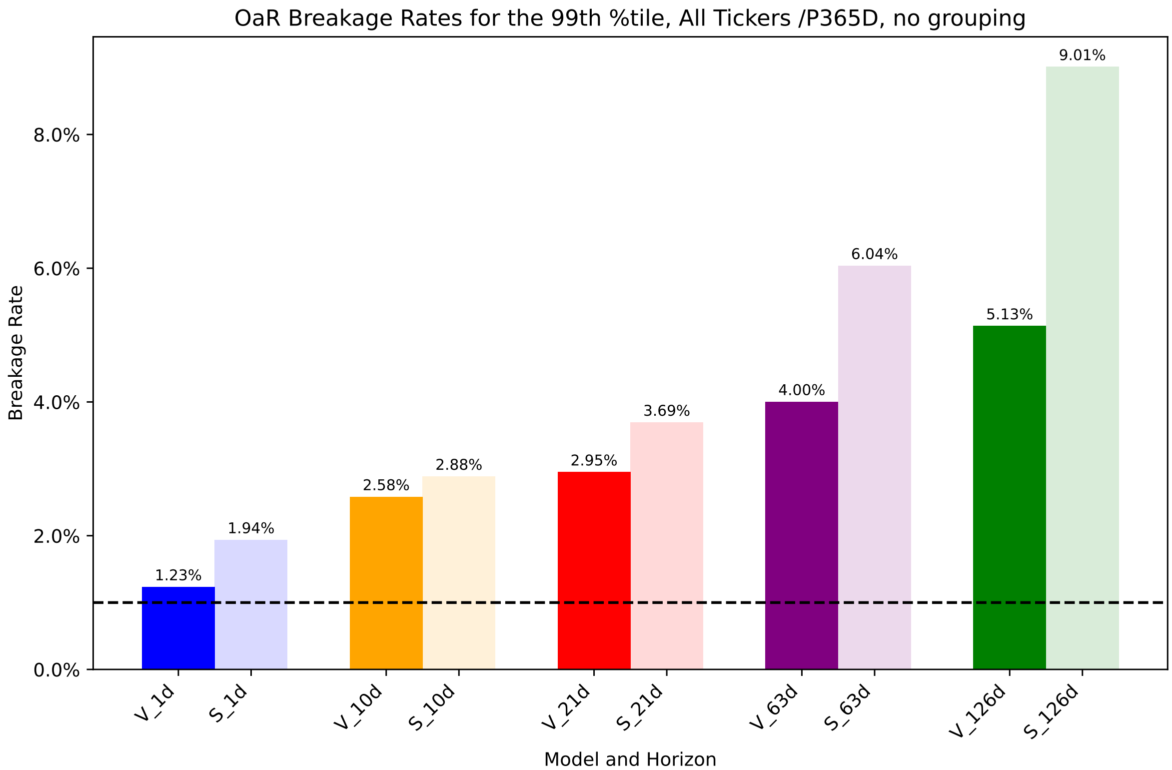
	1d	10d	21d	63d	126d	252d
intercept	-0.00%	-0.02%	0.02%	0.06%	0.24%	1.01%
intercept_p_value	91.10%	13.57%	29.46%	14.06%	0.01%	0.00%
slope	176.84%	147.20%	149.50%	161.92%	168.46%	166.47%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

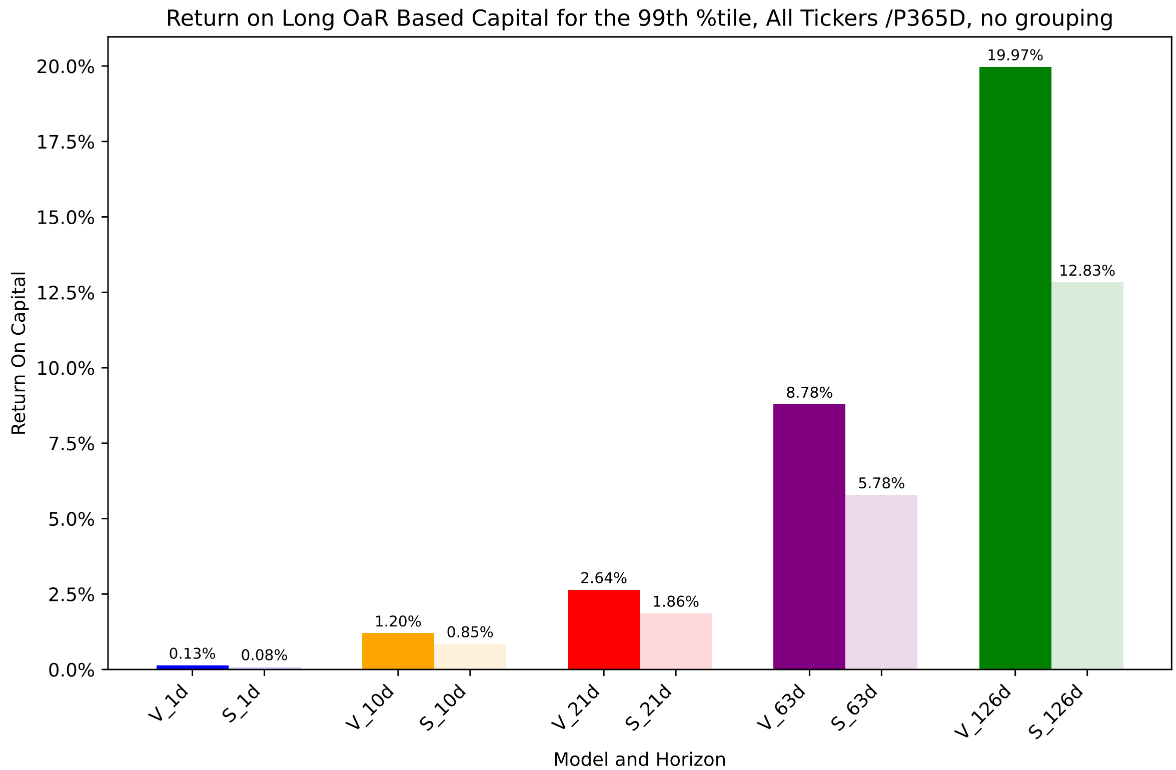
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across Model Dates:

	1d	10d	21d	63d	126d	252d
intercept	-0.04%	-0.20%	-0.56%	-2.28%	-4.43%	-5.59%
intercept_p_value	0.00%	0.15%	0.01%	0.00%	0.00%	0.06%
slope	163.50%	145.72%	163.56%	179.21%	177.60%	168.33%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Prior 365 Calendar Days (P365D)

Period examined: All model dates from 2026-06-29 through 2025-07-01





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across P365D:

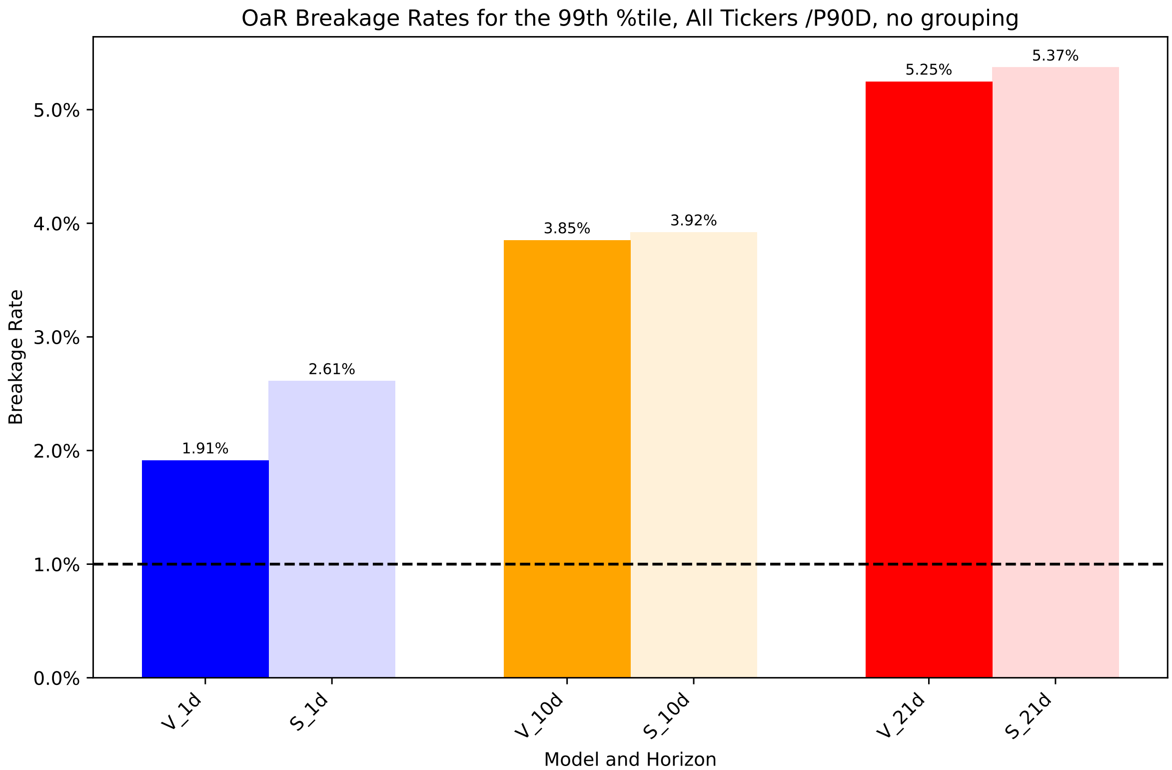
	1d	10d	21d	63d	126d
intercept	-0.01%	-0.00%	-0.01%	-0.32%	0.03%
intercept_p_value	31.74%	94.96%	78.96%	0.39%	89.11%
slope	172.15%	142.28%	142.73%	157.45%	155.44%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%

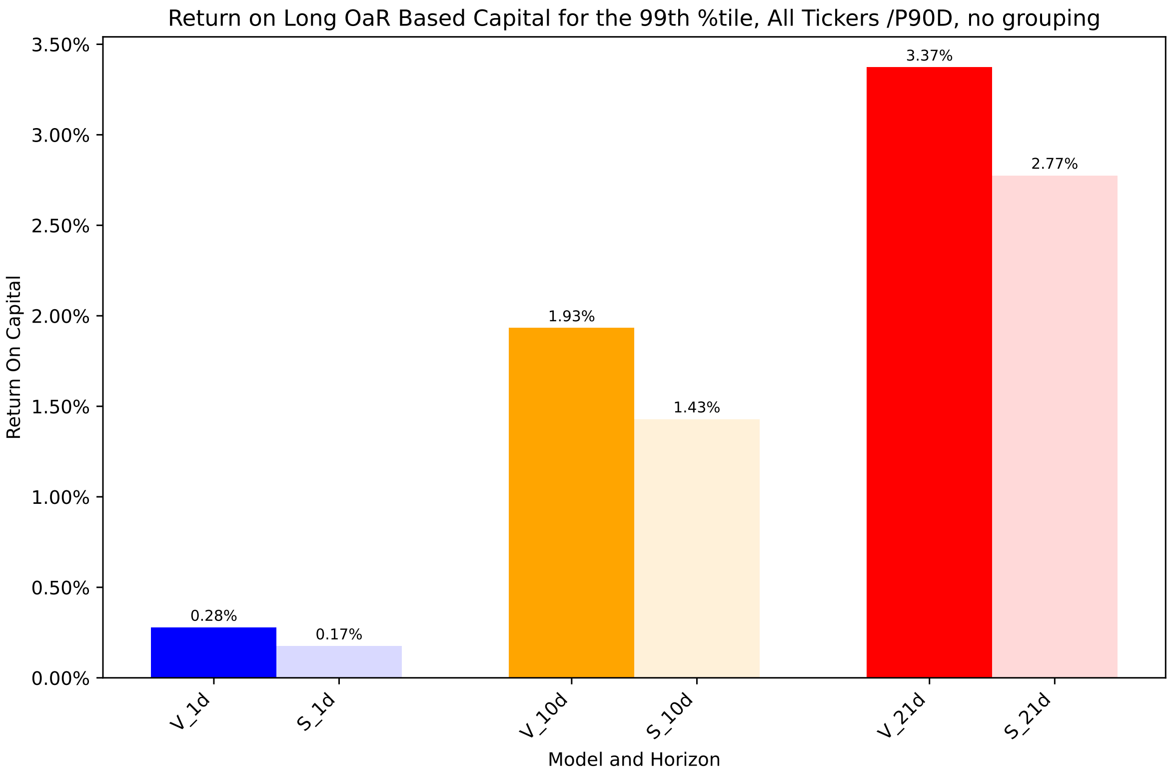
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across P365D:

	1d	10d	21d	63d	126d
intercept	-0.02%	-0.07%	-0.19%	-0.70%	-1.92%
intercept_p_value	6.16%	38.58%	25.04%	16.77%	9.31%
slope	102.19%	109.09%	116.67%	120.29%	133.30%
slope_p_value	0.00%	0.00%	0.00%	0.00%	0.00%

Prior 90 Calendar Days (P90D)

Period examined: All model dates from 2026-06-29 through 2026-04-02





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across P90D:

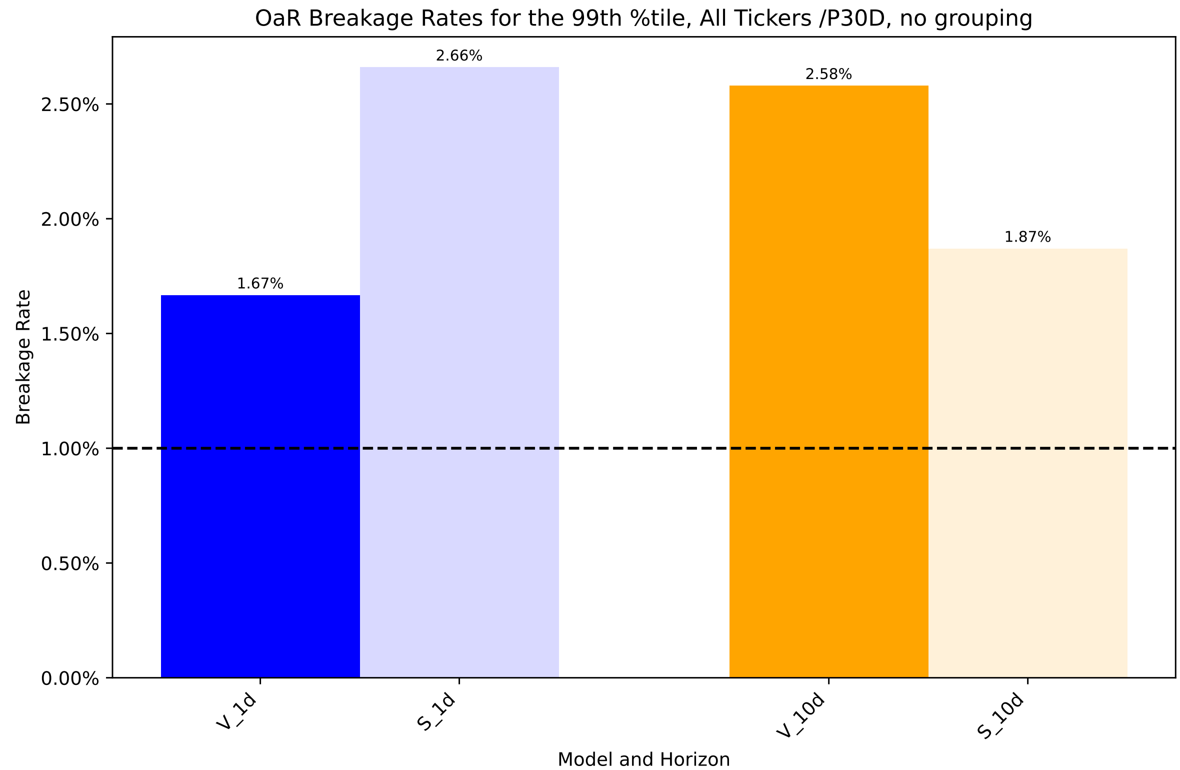
	1d	10d	21d
intercept	-0.02%	0.02%	-0.41%
intercept_p_value	52.21%	81.54%	0.05%
slope	167.40%	134.07%	136.44%
slope_p_value	0.00%	0.00%	0.00%

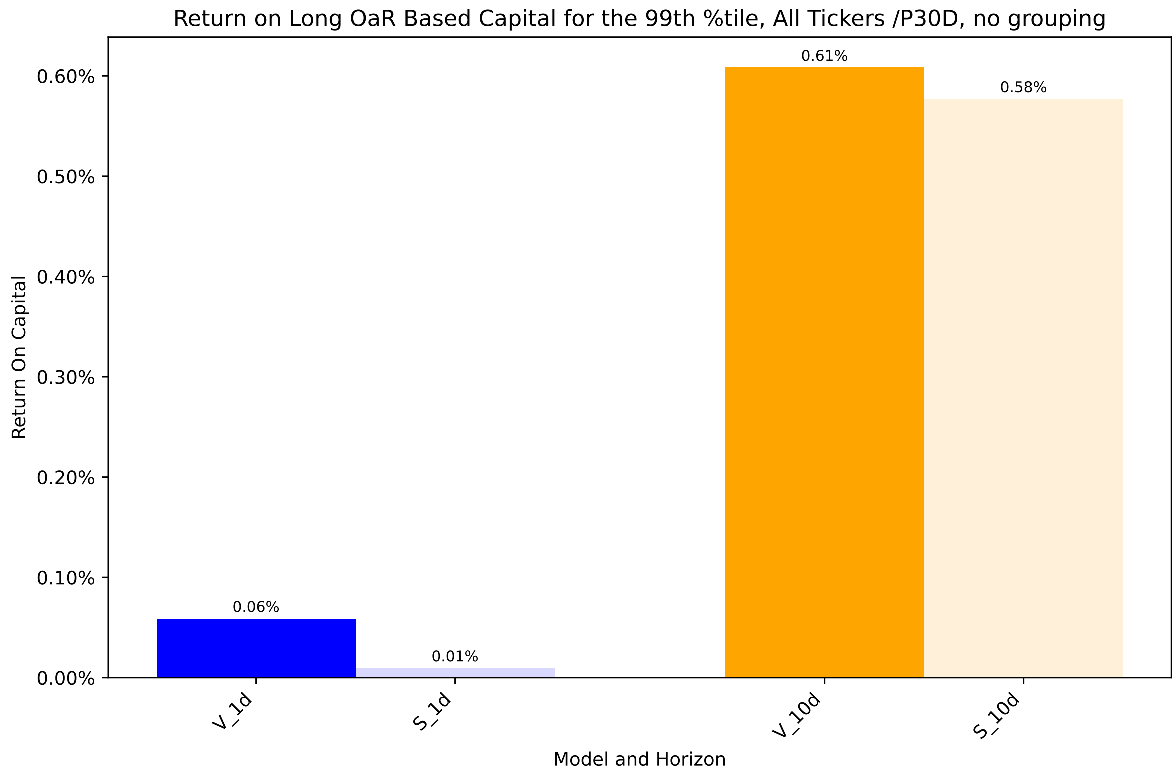
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across P90D:

	1d	10d	21d
intercept	-0.00%	0.12%	0.06%
intercept_p_value	83.68%	57.32%	88.92%
slope	115.39%	121.69%	130.11%
slope_p_value	0.00%	0.00%	0.00%

Prior 30 Calendar Days (P30D)

Period examined: All model dates from 2026-06-29 through 2026-06-01





Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns across P30D:

	1d	10d
intercept	0.04%	-0.22%
intercept_p_value	35.26%	13.57%
slope	174.47%	143.70%
slope_p_value	0.00%	0.00%

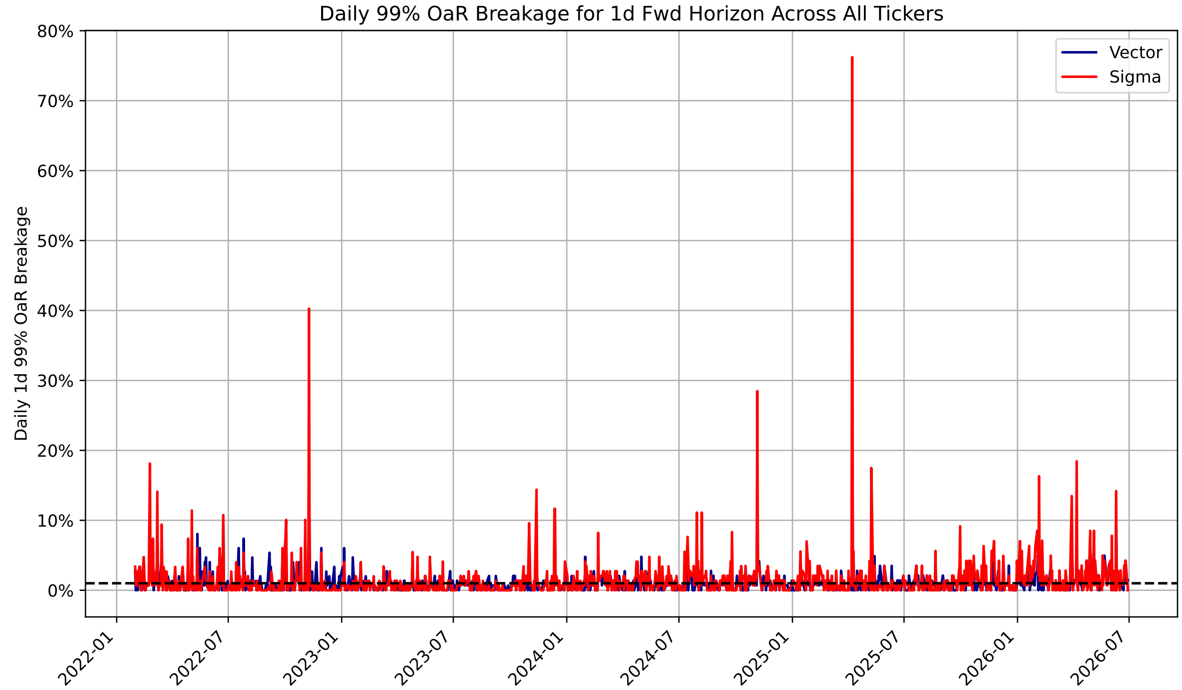
Average Alpha (intercept) and Beta (slope) of Vector Model ROLOBC regressed upon corresponding actual returns, by ticker across P30D:

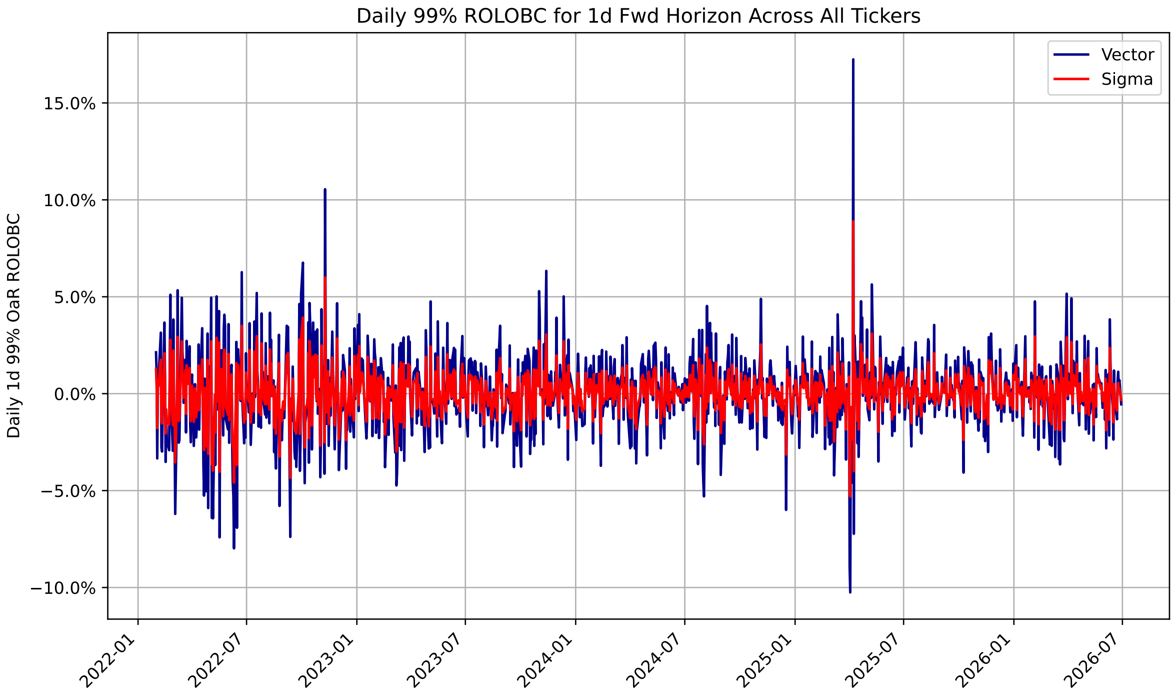
	1d	10d
intercept	-0.02%	-0.41%
intercept_p_value	67.33%	22.71%
slope	109.92%	124.09%
slope_p_value	0.00%	0.00%

Daily Performance

Here we look at the daily breakage and ROLOBC statitics summarized in the preceding section. The daily basis of the presentation allows for observation of the magnitude, frequency and proximity of breakage and ROLOBC outliers.

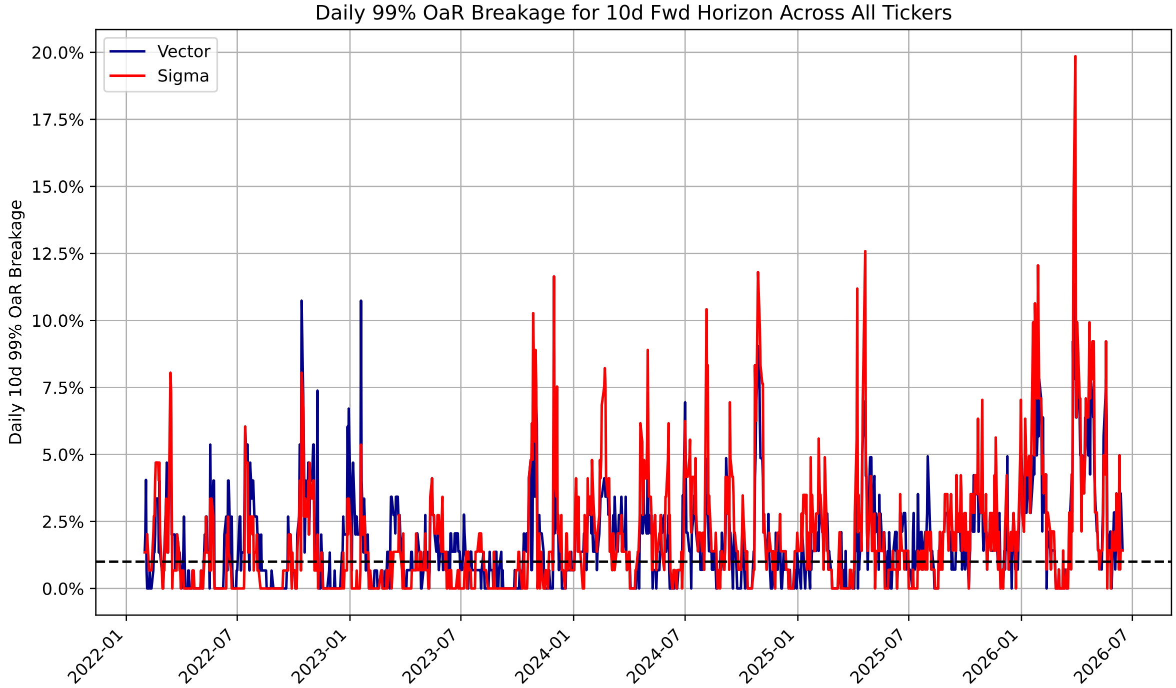
1d Horizon



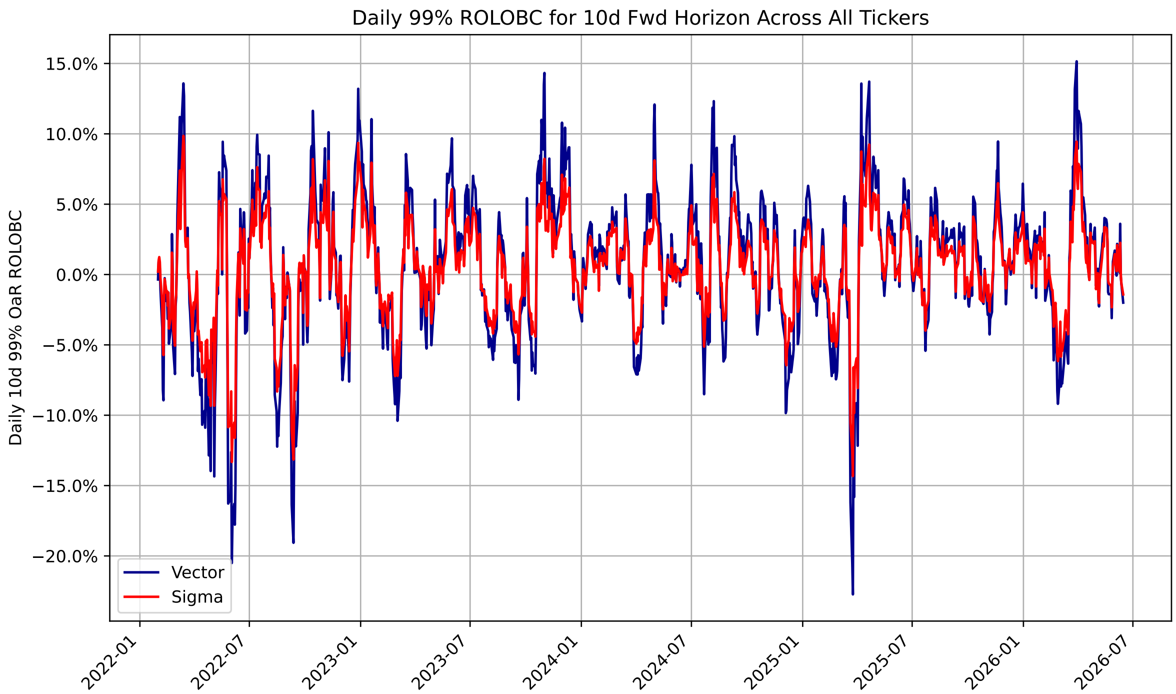


Daily 99% ROLOBC for 1d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 1d 99% OaR ROLOBC
15.0%
10.0%
5.0%
0.0%
−5.0%
−10.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

10d Horizon

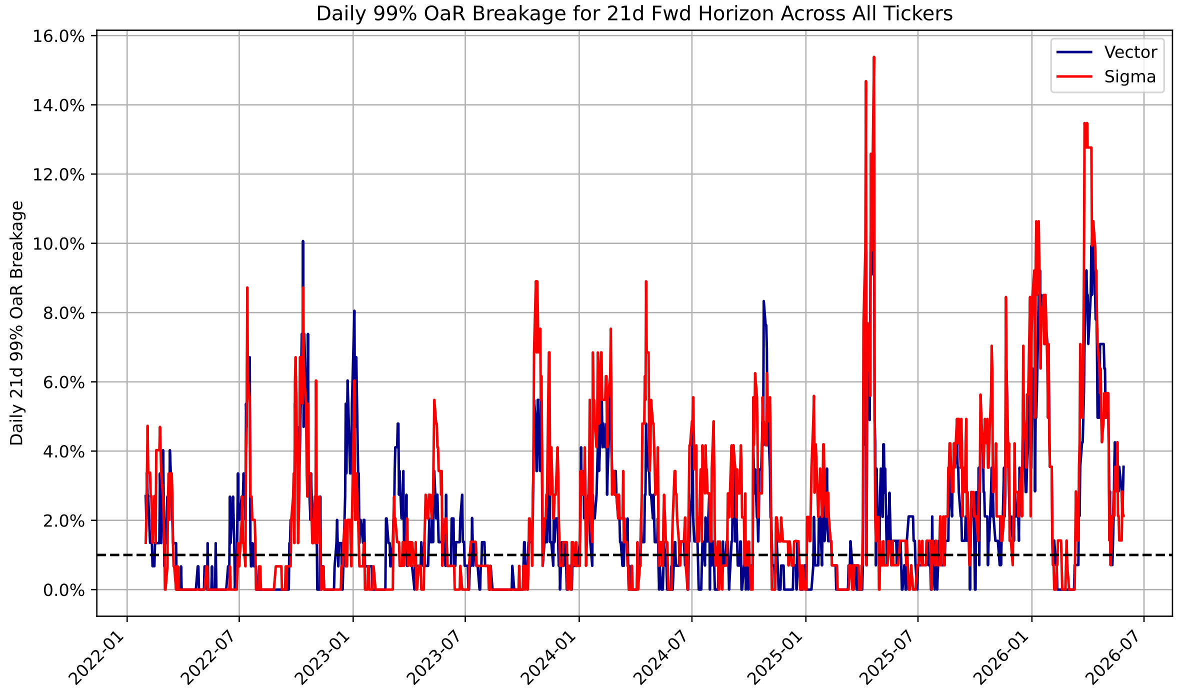


Daily 99% OaR Breakage for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 10d 99% OaR Breakage
20.0%
17.5%
15.0%
12.5%
10.0%
7.5%
5.0%
2.5%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

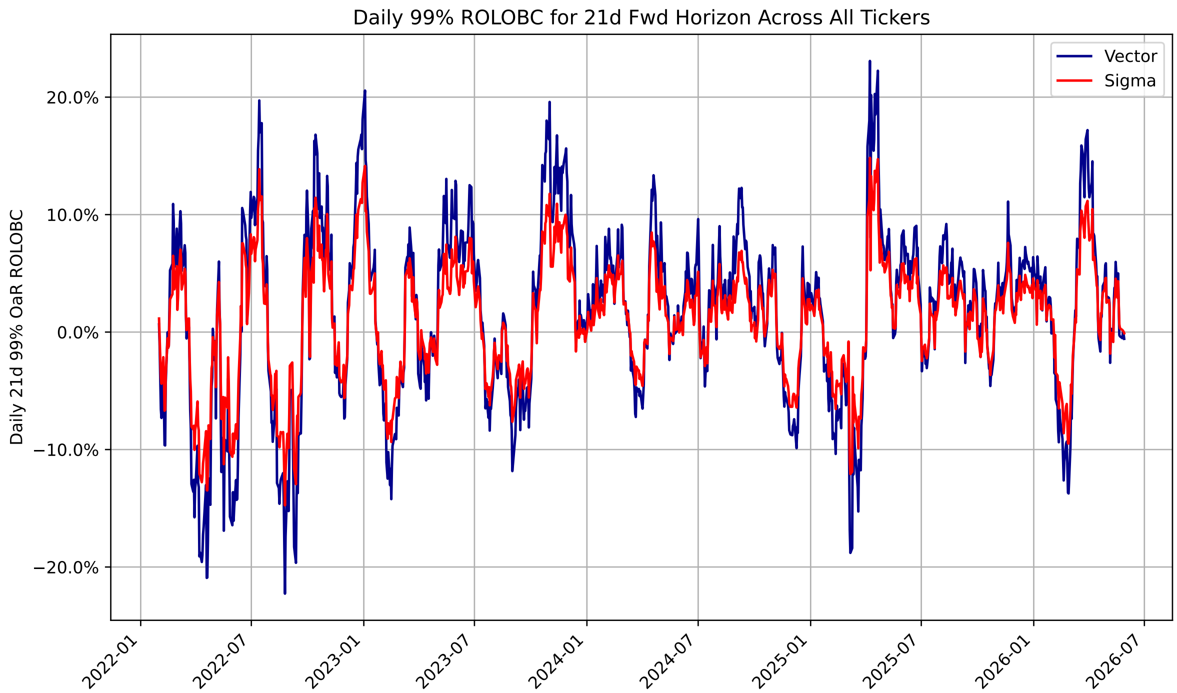


Daily 99% ROLOBC for 10d Fwd Horizon Across All Tickers
Daily 10d 99% OaR ROLOBC
15.0%
10.0%
5.0%
0.0%
−5.0%
−10.0%
−15.0%
−20.0%
Vector
Sigma
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

21d Horizon

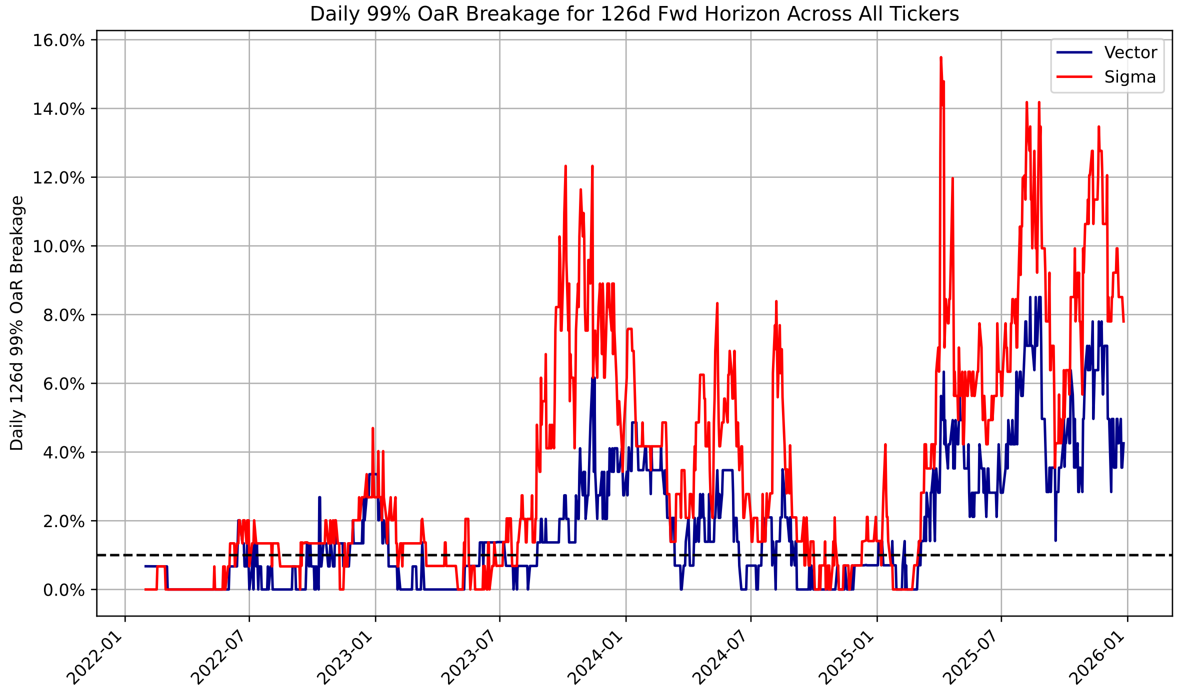


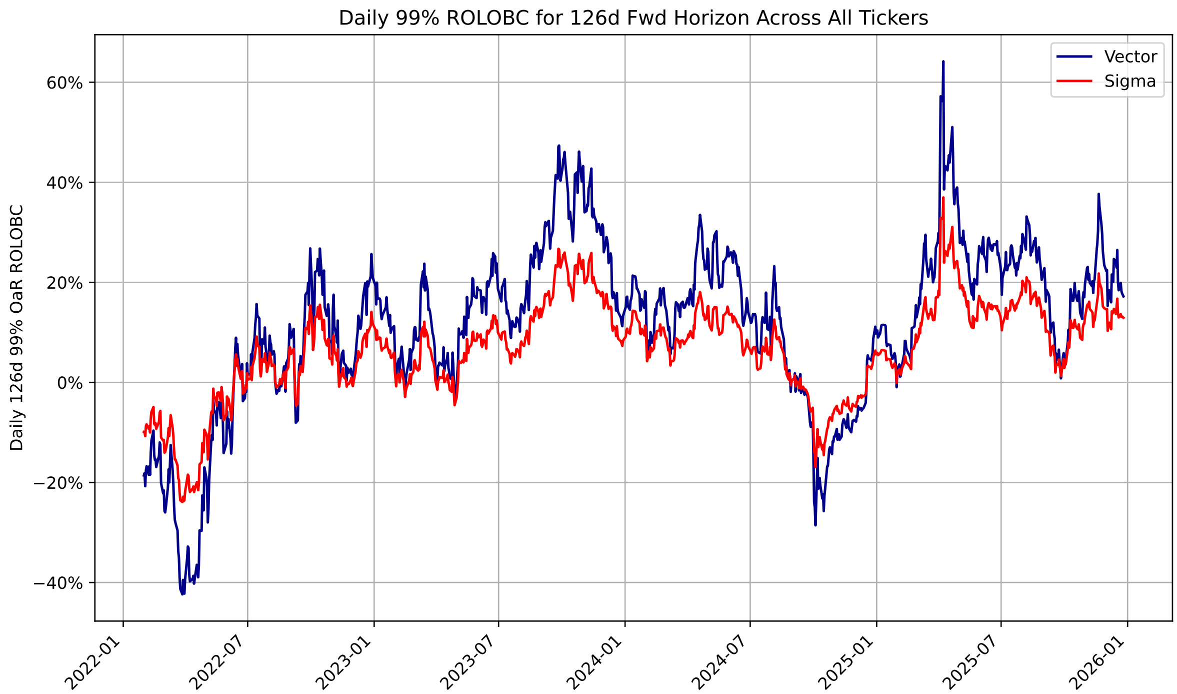
Daily 99% OaR Breakage for 21d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 21d 99% OaR Breakage
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07



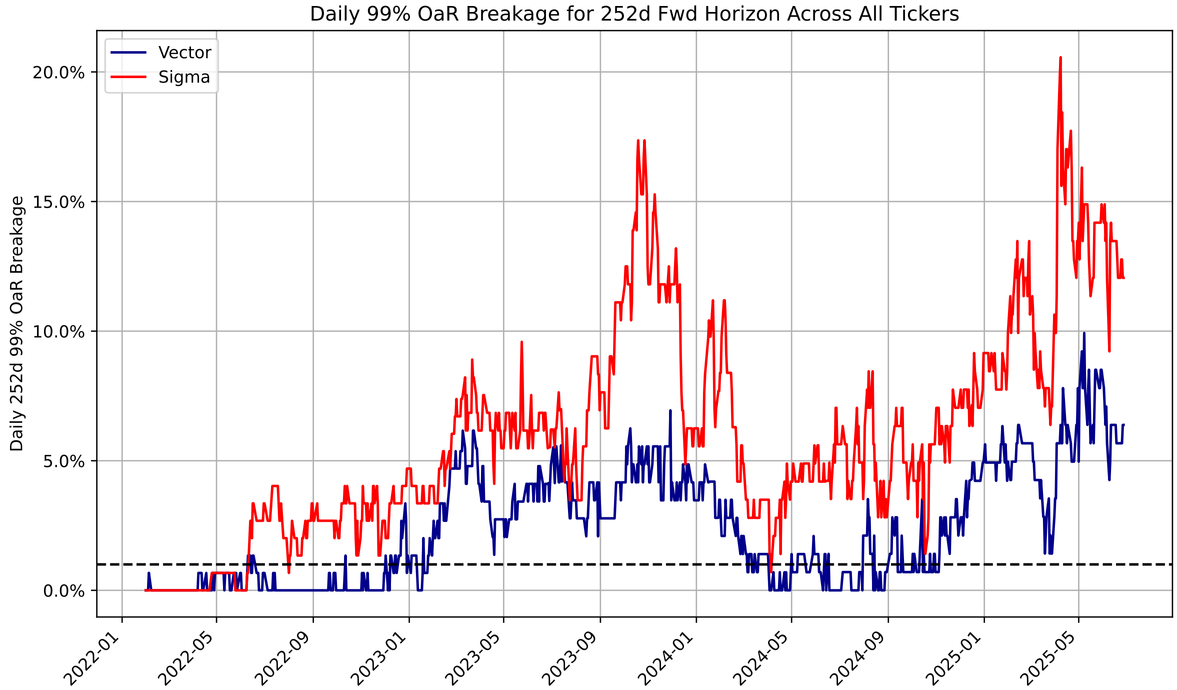
Daily 99% ROLOBC for 21d Fwd Horizon Across All Tickers
Vector
Sigma
Daily 21d 99% OaR ROLOBC
20.0%
10.0%
0.0%
−10.0%
−20.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

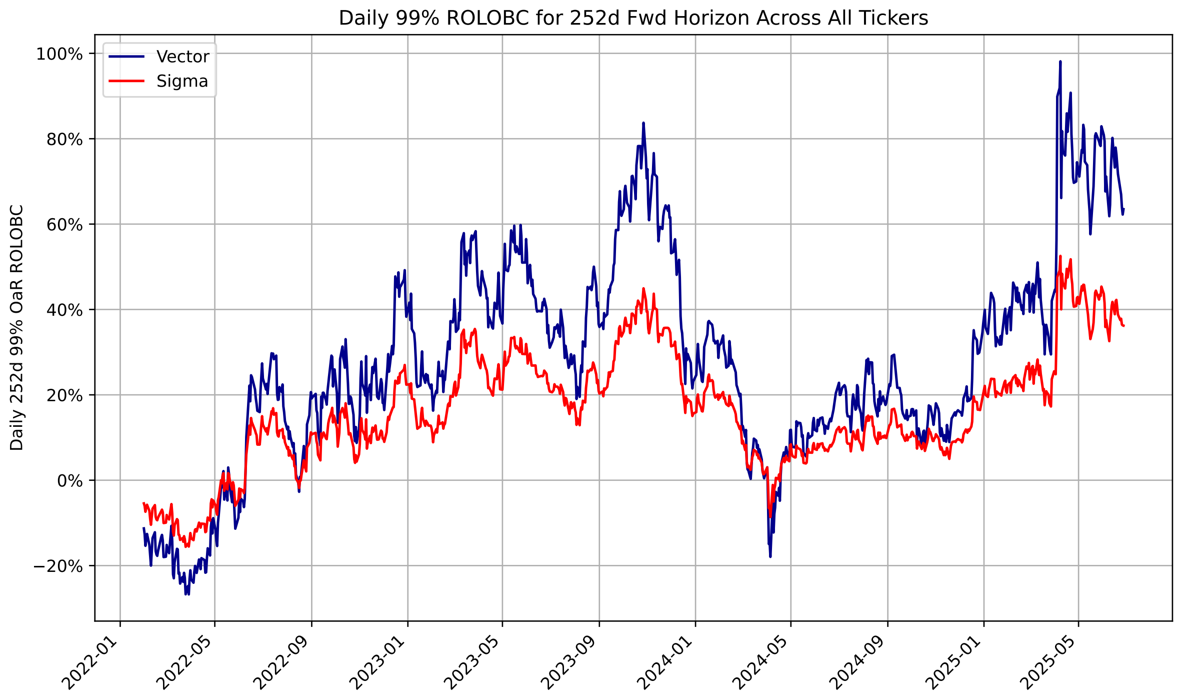
63d Horizon


Daily 99% OaR Breakage for 126d Fwd Horizon Across All Tickers
Daily 126d 99% OaR Breakage
Vector
Sigma
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01


Daily 99% ROLOBC for 126d Fwd Horizon Across All Tickers
Daily 126d 99% OaR ROLOBC
Vector
Sigma
60%
40%
20%
0%
−20%
−40%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01

252d Horizon

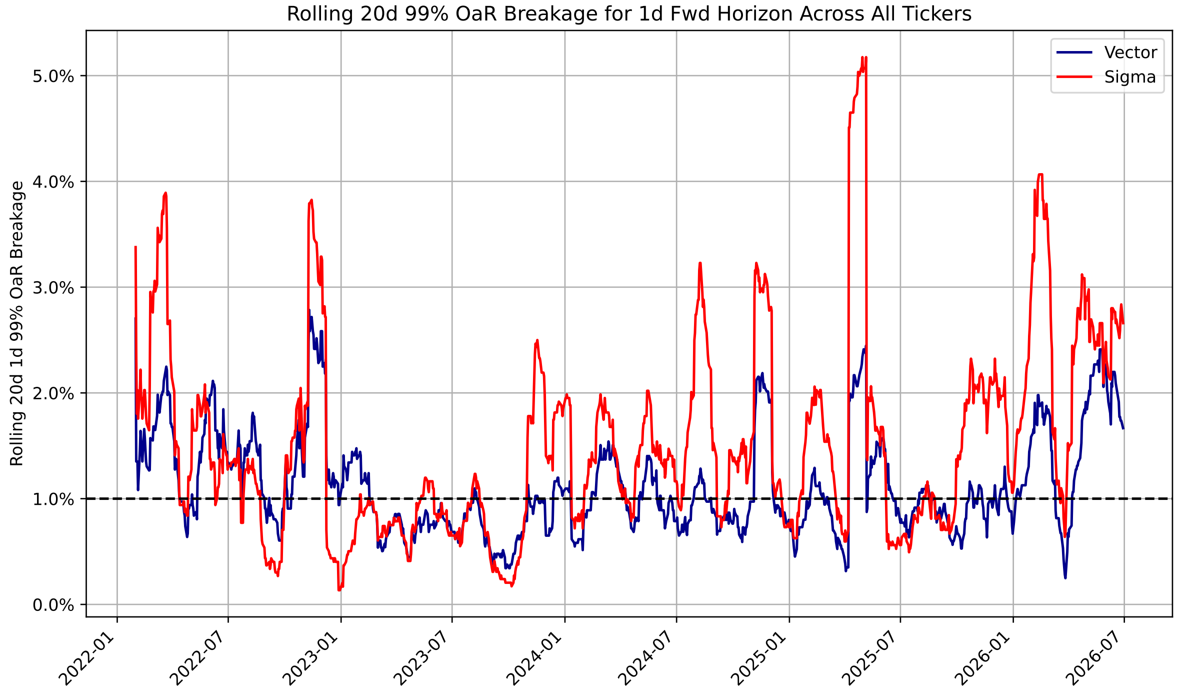


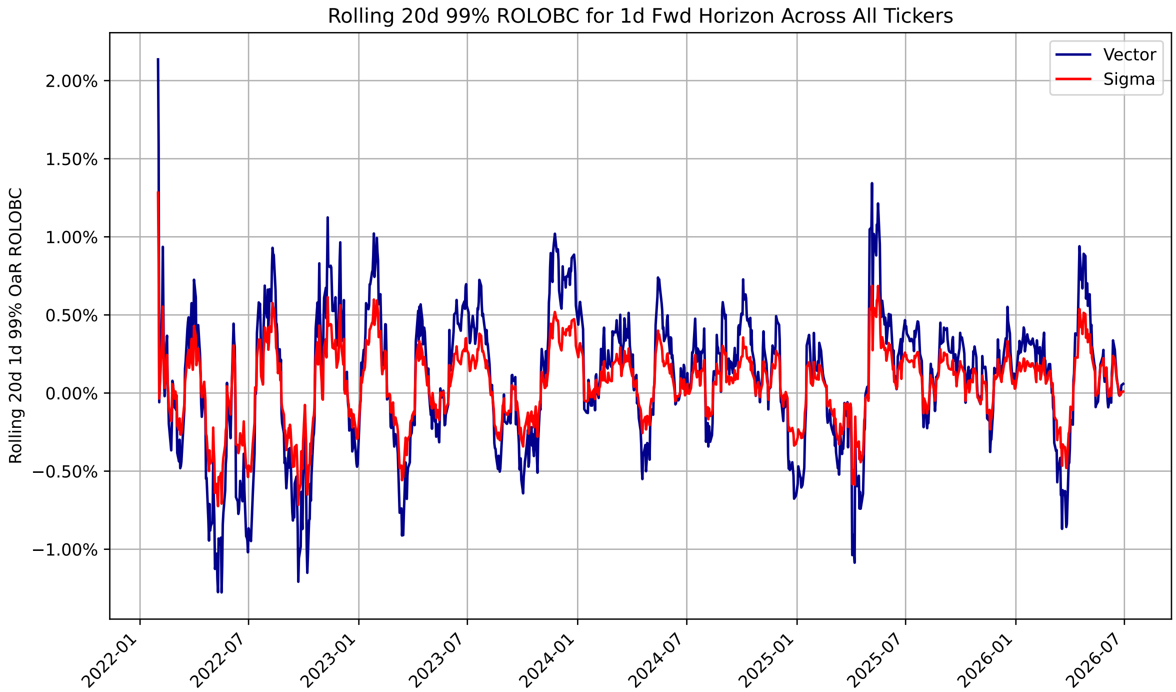


Rolling 20d Performance

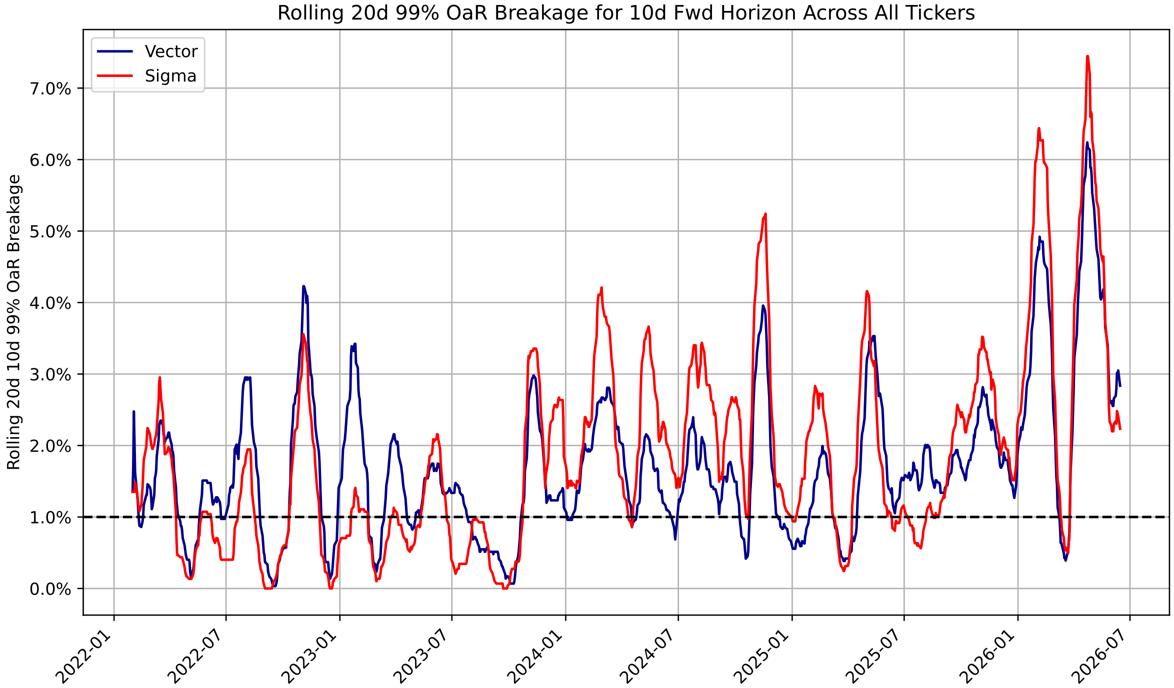
Here we look at 20 day rolling moving averages of the breakage and ROLOBC statitics summarized in the preceding section. These 20day moving averages are averages of daily averages across all tickers.

1d Horizon

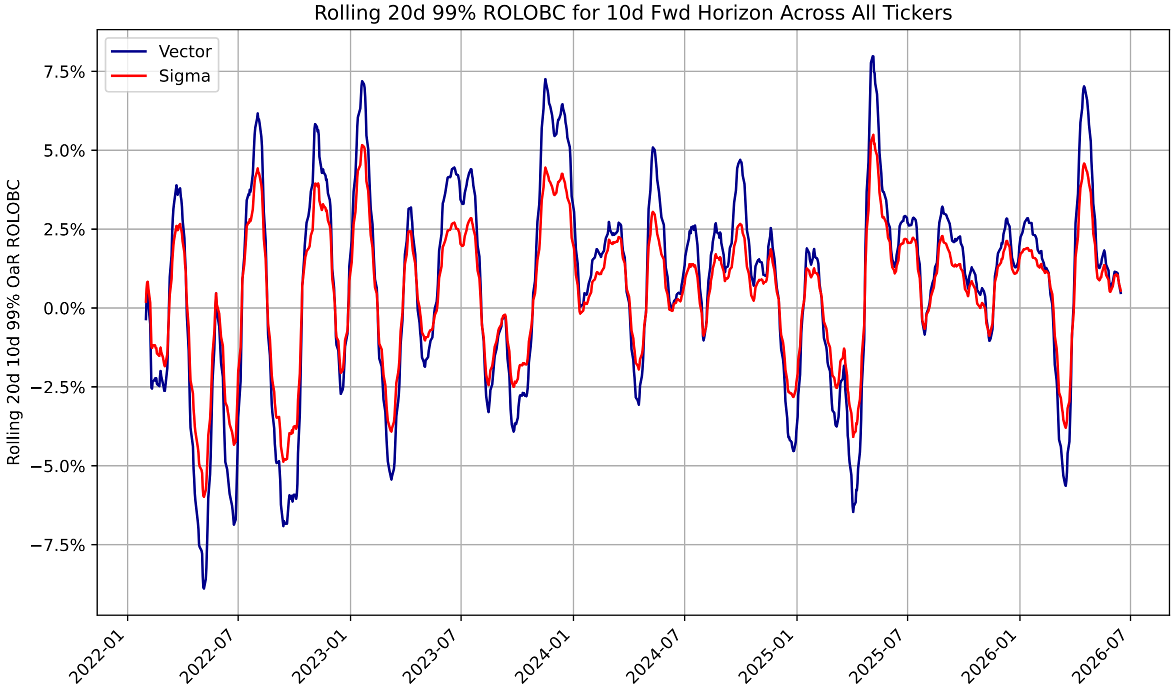



Rolling 20d 99% ROLOBC for 1d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 1d 99% OaR ROLOBC
2.00%
1.50%
1.00%
0.50%
0.00%
−0.50%
−1.00%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

10d Horizon

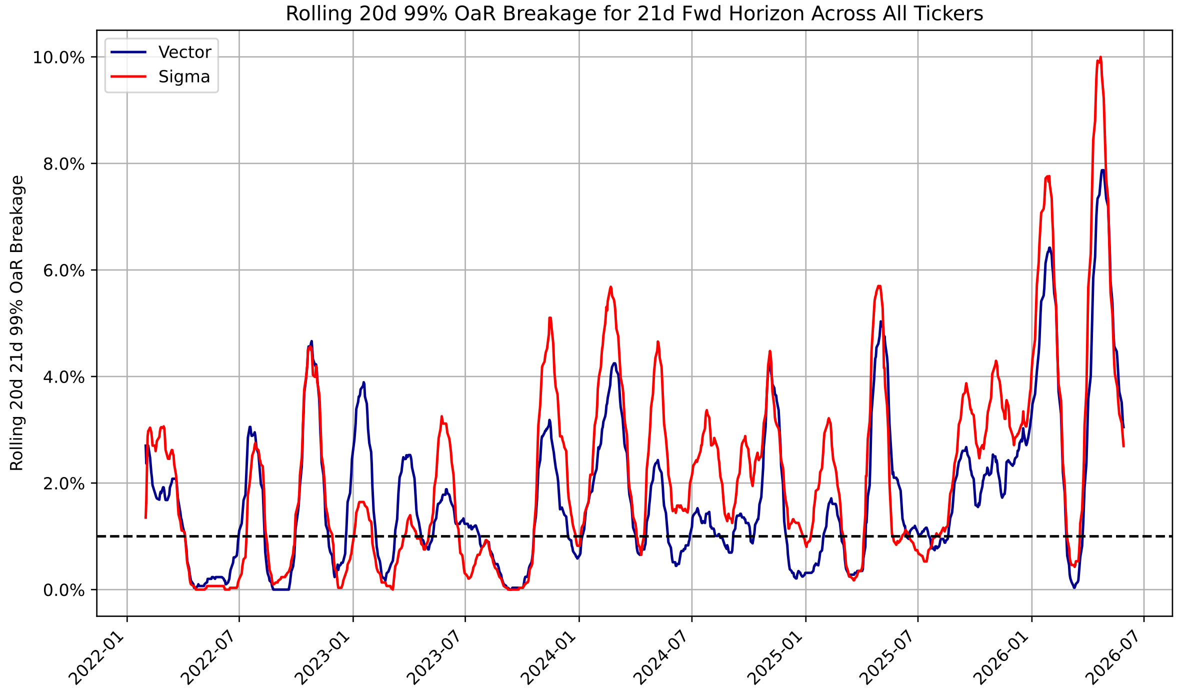


Rolling 20d 99% OaR Breakage for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 10d 99% OaR Breakage
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

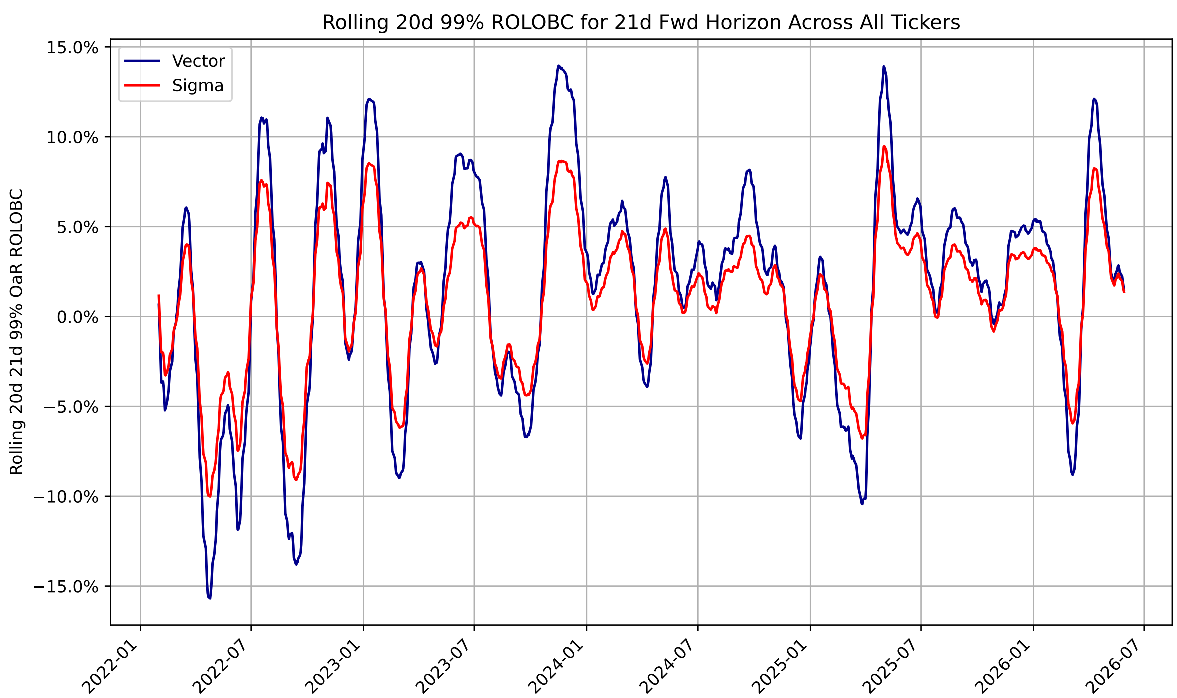


Rolling 20d 99% ROLOBC for 10d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 10d 99% OaR ROLOBC
7.5%
5.0%
2.5%
0.0%
−2.5%
−5.0%
−7.5%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

21d Horizon

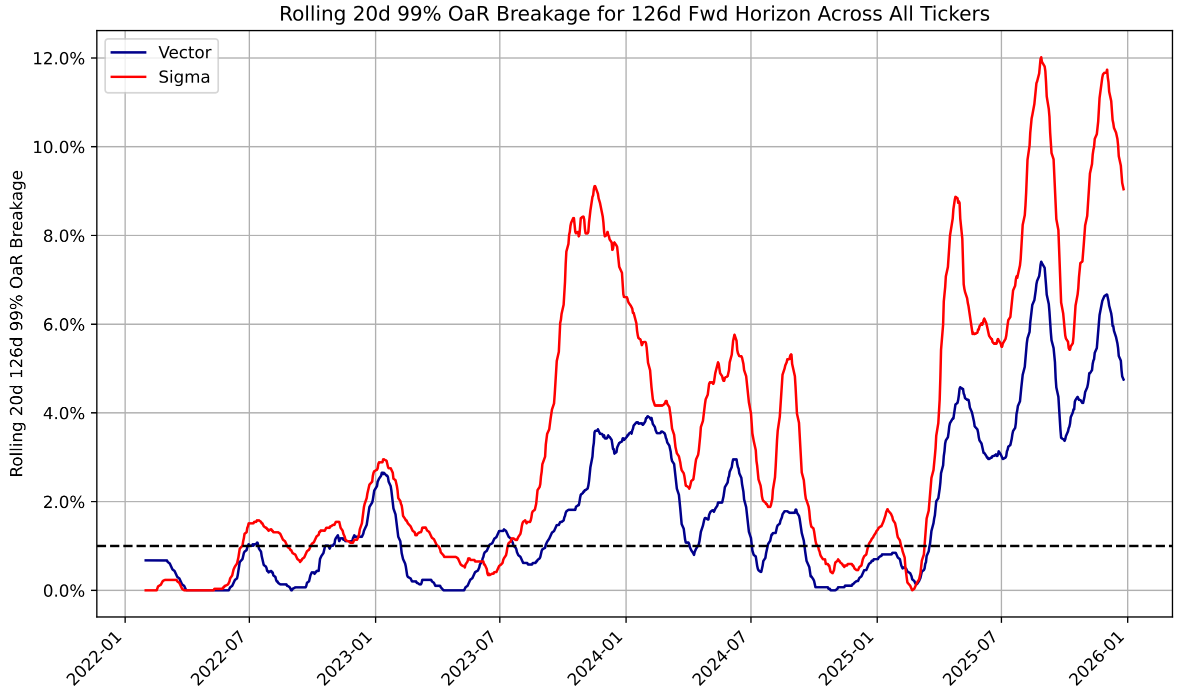


Rolling 20d 99% OaR Breakage for 21d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 21d 99% OaR Breakage
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

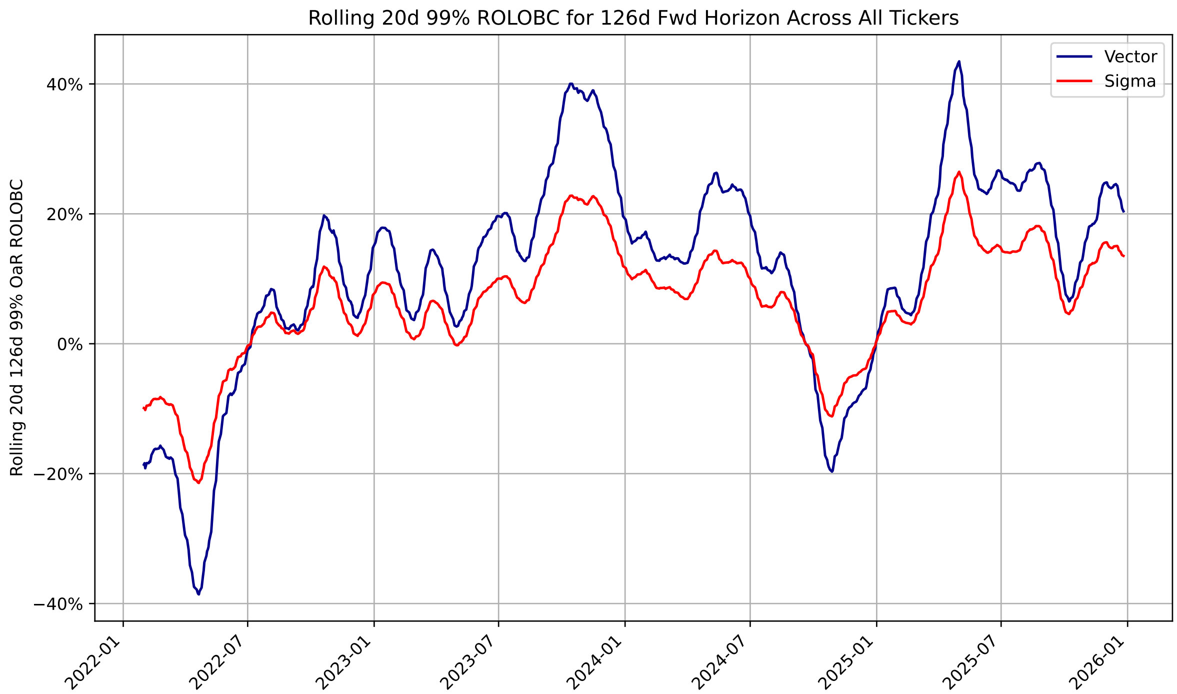


Rolling 20d 99% ROLOBC for 21d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 21d 99% OaR ROLOBC
15.0%
10.0%
5.0%
0.0%
−5.0%
−10.0%
−15.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01
2026-07

63d Horizon

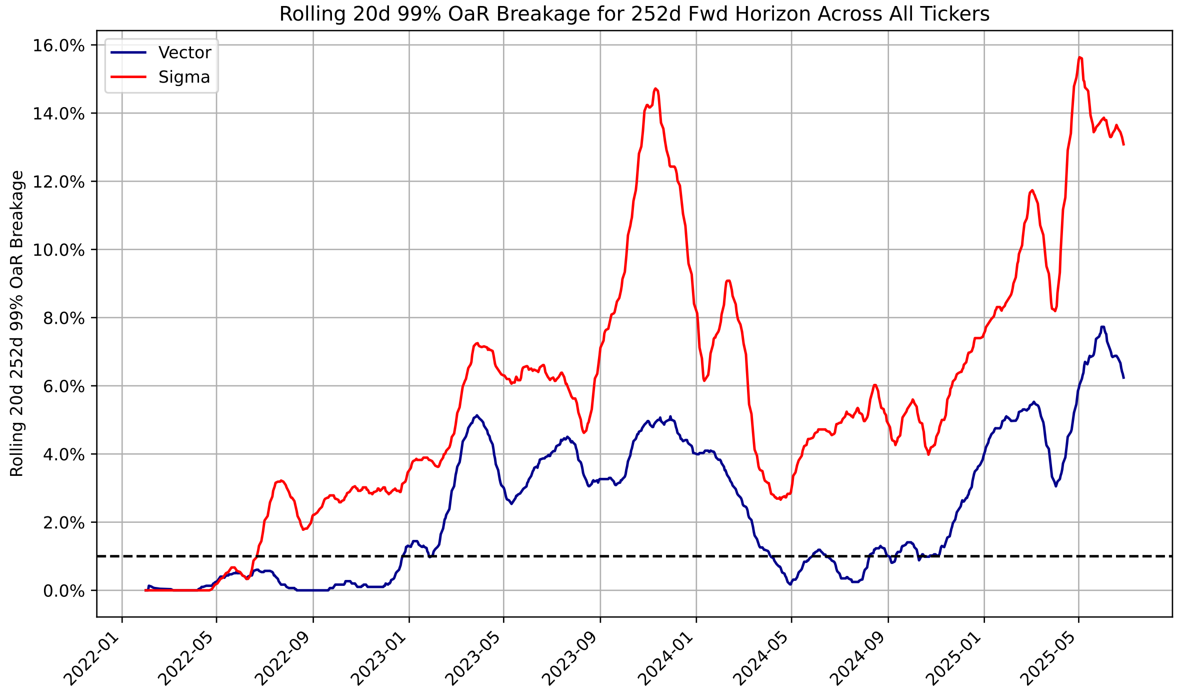


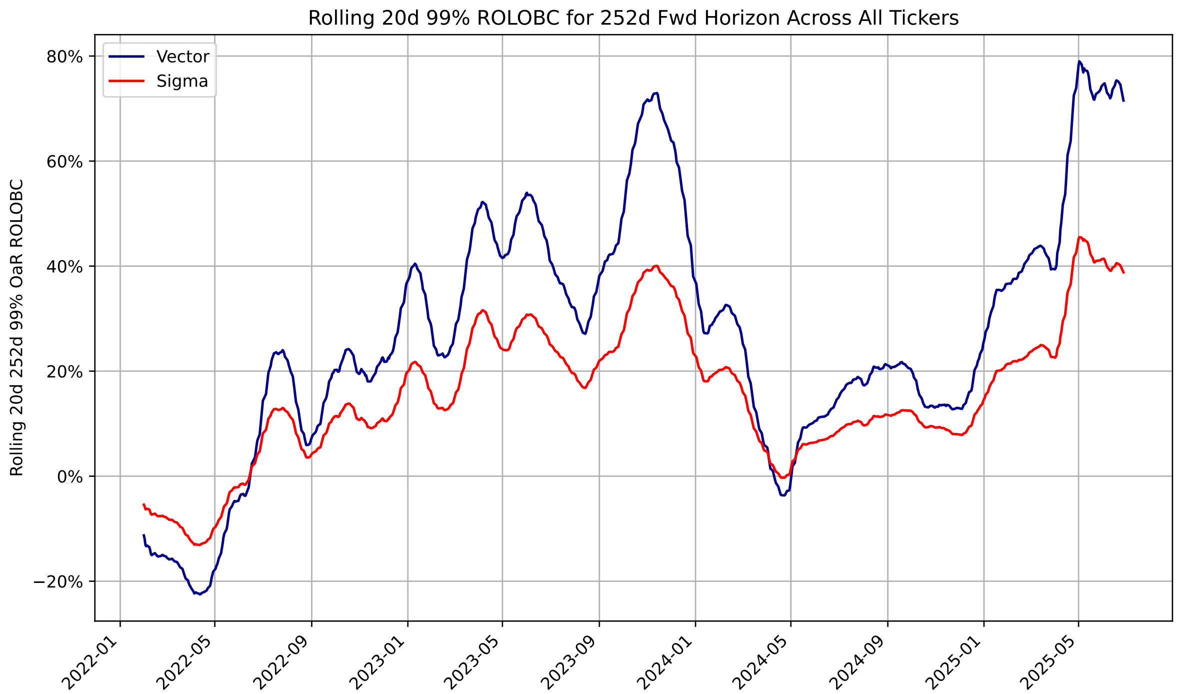
Rolling 20d 99% OaR Breakage for 126d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 126d 99% OaR Breakage
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01



Rolling 20d 99% ROLOBC for 126d Fwd Horizon Across All Tickers
Vector
Sigma
Rolling 20d 126d 99% OaR ROLOBC
40%
20%
0%
−20%
−40%
2022-01
2022-07
2023-01
2023-07
2024-01
2024-07
2025-01
2025-07
2026-01

252d Horizon





Top 30 Tickers By OaR Breakage

All TMD: 1d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	SIVBQ	6.83%	SLV	4.07%
1.0	GME	4.7%	WDC	3.98%
1.0	AVGO	4.61%	VST	3.8%
1.0	WDC	4.52%	MU	3.71%
1.0	MSTR	4.16%	AVGO	2.8%
1.0	VST	4.07%	MSTR	2.71%
1.0	TSLA	3.62%	INTC	2.71%
1.0	FRCB	3.6%	B	2.62%
1.0	META	3.53%	AMD	2.62%
1.0	B	3.16%	CCL	2.53%
1.0	SLV	2.9%	NVDA	2.53%
1.0	HLT	2.89%	SIVBQ	2.52%
1.0	TEVA	2.71%	NEM	2.44%
1.0	NFLX	2.71%	ON	2.35%
1.0	AA	2.62%	GLD	2.35%
1.0	BALL	2.53%	PHM	2.26%
1.0	ACGL	2.53%	LLY	2.26%
1.0	CHTR	2.53%	HSBC	2.26%
1.0	SBNY	2.52%	KALU	2.17%
1.0	INTU	2.44%	GOOGL	2.17%
1.0	BUD	2.44%	PWR	2.17%
1.0	GILD	2.44%	AA	2.08%
1.0	ZTS	2.26%	AMAT	2.08%
1.0	CMA	2.19%	TEVA	1.99%
1.0	GWW	2.08%	AMGN	1.99%
1.0	GNRC	2.08%	CSTM	1.99%
1.0	OXY	2.08%	GS	1.99%
1.0	AMC	2.08%	IRM	1.9%
1.0	JAZZ	1.99%	MRK	1.9%
1.0	ORCL	1.99%	MS	1.81%

All TMD: 10d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	MSTR	10.3%	VST	6.56%
10.0	SIVBQ	9.93%	MU	6.02%
10.0	WDC	8.66%	SLV	5.66%
10.0	VST	7.2%	WDC	5.47%
10.0	AVGO	7.11%	NVDA	5.1%
10.0	META	6.75%	ORCL	5.1%
10.0	GME	5.65%	TEVA	5.01%
10.0	CHTR	5.38%	INTC	4.65%
10.0	GWW	5.01%	X	4.53%
10.0	GNRC	4.92%	AVGO	4.47%
10.0	KALU	4.92%	AMD	4.19%
10.0	GILD	4.56%	CAH	4.1%
10.0	INTC	4.47%	LLY	4.01%
10.0	EXPE	4.38%	GLD	4.01%
10.0	SLV	4.2%	GWW	3.74%
10.0	IRM	4.19%	IRM	3.65%
10.0	ORCL	4.01%	GNRC	3.46%
10.0	ETRN	3.97%	TMUS	3.46%
10.0	TXN	3.92%	AA	3.46%
10.0	ISRG	3.83%	MSTR	3.28%
10.0	NVS	3.74%	PWR	3.19%
10.0	VZ	3.74%	GOOGL	3.19%
10.0	B	3.74%	GILD	3.19%
10.0	SBNY	3.68%	TRGP	3.1%
10.0	MU	3.65%	B	3.01%
10.0	BUD	3.56%	AMGN	3.01%
10.0	TSLA	3.46%	MUB	2.92%
10.0	NFLX	3.37%	THC	2.92%
10.0	ZTS	3.37%	GBTC	2.83%
10.0	AA	3.28%	TSLA	2.83%

All TMD: 21d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
21.0	MSTR	10.87%	MU	9.21%
21.0	WDC	9.85%	VST	8.29%
21.0	SIVBQ	9.63%	NVDA	7.92%
21.0	CHTR	7.37%	TEVA	7.18%
21.0	VST	7.0%	WDC	7.09%
21.0	KALU	7.0%	CAH	6.63%
21.0	MU	6.91%	SLV	6.36%
21.0	GNRC	6.63%	AMD	5.89%
21.0	GWW	6.63%	LLY	5.52%
21.0	AVGO	6.63%	INTC	5.52%
21.0	SLV	5.81%	MSTR	5.43%
21.0	GILD	5.71%	ORCL	5.34%
21.0	META	5.62%	TRGP	5.25%
21.0	B	5.34%	GE	5.16%
21.0	GME	5.06%	AVGO	5.06%
21.0	INTC	5.06%	GILD	4.97%
21.0	ISRG	4.7%	B	4.88%
21.0	TXN	4.6%	ETRN	4.55%
21.0	BUD	4.14%	X	4.35%
21.0	ORCL	4.05%	PWR	4.24%
21.0	TRGP	3.78%	GBTC	4.14%
21.0	CAH	3.68%	TSLA	4.14%
21.0	VZ	3.68%	GWW	4.05%
21.0	JAZZ	3.59%	GLD	3.96%
21.0	QCOM	3.31%	GNRC	3.78%
21.0	TEVA	3.22%	MOS	3.68%
21.0	WFC	3.22%	THC	3.59%
21.0	NVDA	3.04%	TXN	3.59%
21.0	XOM	3.04%	AMGN	3.59%
21.0	BALL	2.85%	TMUS	3.59%

All TMD: 63d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
63.0	WDC	19.06%	WDC	20.79%
63.0	MU	12.36%	MU	17.72%
63.0	AVGO	11.49%	NVDA	15.9%
63.0	VST	10.06%	VST	15.13%
63.0	SLV	9.78%	SLV	11.22%
63.0	KALU	9.1%	GLD	10.92%
63.0	SIVBQ	7.78%	B	10.73%
63.0	MSTR	7.66%	MSTR	10.25%
63.0	ORCL	6.99%	TRGP	8.91%
63.0	EXPE	5.56%	GBTC	8.91%
63.0	NVDA	5.36%	CAH	8.52%
63.0	GME	5.27%	AMD	7.76%
63.0	INTC	5.27%	IRM	7.57%
63.0	IRM	5.17%	LLY	7.47%
63.0	GLD	4.89%	KALU	7.18%
63.0	AA	4.79%	ORCL	6.99%
63.0	WFC	4.5%	INTC	6.8%
63.0	TRGP	4.21%	GILD	6.61%
63.0	B	3.74%	TMUS	6.23%
63.0	NEM	3.64%	GOOGL	6.13%
63.0	GOOGL	3.64%	ETRN	5.99%
63.0	BUD	3.54%	AVGO	5.84%
63.0	META	3.45%	GE	5.75%
63.0	TMUS	3.26%	DHI	5.46%
63.0	CTLT	3.23%	MRK	5.36%
63.0	LW	3.16%	NEM	5.17%
63.0	TXN	3.16%	CSTM	4.79%
63.0	ON	2.78%	CCL	4.69%
63.0	HSBC	2.68%	TEVA	4.69%
63.0	GILD	2.49%	ACGL	4.5%

All TMD: 126d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
126.0	VST	23.55%	MU	26.5%
126.0	WDC	17.74%	VST	26.2%
126.0	MU	17.43%	NVDA	24.46%
126.0	MSTR	15.49%	WDC	23.65%
126.0	AVGO	14.27%	TRGP	20.08%
126.0	IRM	12.33%	GLD	18.25%
126.0	SLV	10.82%	SLV	16.33%
126.0	TRGP	9.17%	MSTR	13.97%
126.0	GOOGL	8.87%	B	13.86%
126.0	KALU	8.36%	GE	13.66%
126.0	META	8.26%	NEM	13.46%
126.0	NVDA	7.44%	THC	12.84%
126.0	GLD	6.83%	GOOGL	11.82%
126.0	NEM	6.42%	IRM	11.82%
126.0	MSI	6.22%	AMAT	11.01%
126.0	EXPE	5.81%	TMUS	11.01%
126.0	AA	4.89%	CAH	10.91%
126.0	LW	4.79%	LLY	10.6%
126.0	B	4.69%	TEVA	9.89%
126.0	NVS	4.69%	RIO	9.79%
126.0	TEVA	4.38%	GBTC	9.48%
126.0	BUD	3.98%	GILD	9.38%
126.0	AMD	3.36%	ACGL	9.07%
126.0	INTC	3.26%	AMD	8.97%
126.0	GSK	3.06%	AA	8.87%
126.0	ON	2.65%	KALU	8.46%
126.0	ACGL	2.65%	ORCL	8.46%
126.0	TXN	2.65%	INTC	7.95%
126.0	GNRC	2.55%	CSTM	7.85%
126.0	ORCL	2.55%	AVGO	7.14%

All TMD: 252d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
252.0	AVGO	42.46%	VST	47.95%
252.0	VST	37.54%	NVDA	46.08%
252.0	MSTR	32.63%	GLD	45.96%
252.0	NVDA	30.88%	AVGO	45.03%
252.0	IRM	17.78%	MSTR	32.75%
252.0	WDC	17.78%	GE	32.51%
252.0	MU	14.39%	LLY	28.89%
252.0	NEM	13.33%	CAH	26.78%
252.0	GLD	13.33%	HSBC	24.21%
252.0	SLV	12.16%	GBTC	24.09%
252.0	LLY	11.58%	MU	23.51%
252.0	B	11.35%	PHM	21.64%
252.0	TEVA	7.02%	WDC	21.17%
252.0	GWW	6.9%	B	20.23%
252.0	GOOGL	6.43%	TRGP	20.12%
252.0	MSI	6.2%	GS	18.95%
252.0	TRGP	6.2%	GOOGL	18.71%
252.0	META	5.5%	NEM	18.25%
252.0	INTC	4.8%	SLV	17.89%
252.0	GNRC	4.8%	TMUS	16.96%
252.0	AA	4.33%	PWR	16.61%
252.0	AMD	4.21%	TEVA	16.14%
252.0	LW	3.63%	COST	15.32%
252.0	CSCO	3.39%	IRM	15.2%
252.0	KALU	2.81%	META	15.09%
252.0	AMAT	2.34%	ACGL	14.15%
252.0	GILD	2.22%	NFLX	13.45%
252.0	ORCL	2.22%	MSI	11.93%
252.0	WFC	1.99%	THC	11.35%
252.0	TMUS	1.75%	JPM	11.11%

P30D: 1d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	WDC	35.0%	AMAT	25.0%
1.0	AMD	25.0%	ON	20.0%
1.0	AMAT	20.0%	MU	20.0%
1.0	KALU	15.0%	WDC	15.0%
1.0	GNRC	10.0%	INTC	15.0%
1.0	META	10.0%	HD	10.0%
1.0	TSLA	10.0%	QQQ	10.0%
1.0	EXPE	10.0%	CLF	10.0%
1.0	ABBV	10.0%	FCX	10.0%
1.0	FCX	10.0%	NVS	10.0%
1.0	GE	5.0%	MRK	10.0%
1.0	PHM	5.0%	ABBV	10.0%
1.0	MSTR	5.0%	EMB	5.0%
1.0	QQQ	5.0%	EXPE	5.0%
1.0	SNY	5.0%	GS	5.0%
1.0	CNC	5.0%	TEVA	5.0%
1.0	GS	5.0%	FITB	5.0%
1.0	GSK	5.0%	SNY	5.0%
1.0	GWW	5.0%	RIO	5.0%
1.0	HD	5.0%	GNRC	5.0%
1.0	AA	5.0%	DHI	5.0%
1.0	MU	5.0%	GOOGL	5.0%
1.0	BHP	5.0%	PHM	5.0%
1.0	ADBE	5.0%	GWW	5.0%
1.0	UNH	5.0%	HON	5.0%
1.0	USB	5.0%	HSBC	5.0%
1.0	MOS	0.0%	CSTM	5.0%
1.0	LUMN	0.0%	JPM	5.0%
1.0	LVS	0.0%	KALU	5.0%
1.0	ORCL	0.0%	KEY	5.0%

P30D: 10d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	GE	81.82%	AMAT	54.55%
10.0	WDC	72.73%	WDC	45.45%
10.0	EXPE	36.36%	ABBV	27.27%
10.0	AMAT	36.36%	CAH	27.27%
10.0	AMD	36.36%	INTC	18.18%
10.0	ABBV	27.27%	NWL	18.18%
10.0	CVS	18.18%	MU	18.18%
10.0	UNH	18.18%	AMC	9.09%
10.0	BALL	18.18%	JPM	9.09%
10.0	GNRC	9.09%	GNRC	9.09%
10.0	MU	9.09%	BALL	9.09%
10.0	NAVI	0.0%	HON	9.09%
10.0	ON	0.0%	GE	9.09%
10.0	NWL	0.0%	PCG	0.0%
10.0	ORLY	0.0%	NVS	0.0%
10.0	NVS	0.0%	ORLY	0.0%
10.0	NVDA	0.0%	ON	0.0%
10.0	OXY	0.0%	ORCL	0.0%
10.0	PCG	0.0%	NVDA	0.0%
10.0	NFLX	0.0%	NFLX	0.0%
10.0	PEP	0.0%	NEM	0.0%
10.0	NEM	0.0%	OXY	0.0%
10.0	ORCL	0.0%	NAVI	0.0%
10.0	MSI	0.0%	AA	0.0%
10.0	MUB	0.0%	MSFT	0.0%
10.0	MSTR	0.0%	MUB	0.0%
10.0	POST	0.0%	MSTR	0.0%
10.0	MSFT	0.0%	MSI	0.0%
10.0	MS	0.0%	PHM	0.0%
10.0	MRK	0.0%	MS	0.0%

P90D: 1d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	WDC	26.67%	ON	18.33%
1.0	AMD	16.67%	INTC	15.0%
1.0	UNH	13.33%	MU	15.0%
1.0	MU	10.0%	AMD	11.67%
1.0	INTC	10.0%	QCOM	10.0%
1.0	QCOM	8.33%	WDC	10.0%
1.0	KALU	8.33%	AMAT	10.0%
1.0	TSLA	6.67%	RIO	6.67%
1.0	CNC	6.67%	CSCO	6.67%
1.0	GNRC	6.67%	HD	6.67%
1.0	AMAT	6.67%	HSBC	6.67%
1.0	GE	6.67%	CSTM	6.67%
1.0	AMC	5.0%	MS	6.67%
1.0	NVDA	5.0%	KALU	6.67%
1.0	BUD	5.0%	CCL	6.67%
1.0	AVGO	5.0%	GS	5.0%
1.0	META	5.0%	CDNS	5.0%
1.0	AA	5.0%	GNRC	5.0%
1.0	JAZZ	5.0%	ORCL	5.0%
1.0	EXPE	5.0%	GE	5.0%
1.0	TXN	5.0%	BUD	5.0%
1.0	FCX	5.0%	NVS	5.0%
1.0	GWW	3.33%	BHP	5.0%
1.0	NFLX	3.33%	HON	5.0%
1.0	ORCL	3.33%	MSFT	5.0%
1.0	GS	3.33%	MRK	5.0%
1.0	CLF	3.33%	ADBE	5.0%
1.0	MNST	3.33%	QQQ	5.0%
1.0	PCG	3.33%	FCX	5.0%
1.0	BAC	3.33%	EMB	3.33%

P90D: 10d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	WDC	47.06%	INTC	39.22%
10.0	INTC	35.29%	AMD	39.22%
10.0	TXN	29.41%	MU	35.29%
10.0	AMD	29.41%	ON	33.33%
10.0	MU	29.41%	CSCO	27.45%
10.0	UNH	29.41%	QCOM	27.45%
10.0	CNC	23.53%	TXN	25.49%
10.0	QCOM	23.53%	WDC	21.57%
10.0	GNRC	23.53%	PWR	19.61%
10.0	ON	21.57%	CNC	19.61%
10.0	GE	21.57%	GNRC	19.61%
10.0	KALU	21.57%	MNST	19.61%
10.0	JAZZ	19.61%	AMAT	17.65%
10.0	BBY	19.61%	GOOGL	17.65%
10.0	EXPE	15.69%	CVS	15.69%
10.0	CSCO	13.73%	BBY	13.73%
10.0	IRM	11.76%	KALU	11.76%
10.0	CSTM	11.76%	TEVA	9.8%
10.0	MNST	11.76%	AA	7.84%
10.0	CLF	9.8%	CAH	7.84%
10.0	CDNS	7.84%	ORCL	7.84%
10.0	AA	7.84%	CDNS	7.84%
10.0	AMZN	7.84%	MSFT	7.84%
10.0	AMAT	7.84%	AMZN	7.84%
10.0	CVS	5.88%	BUD	5.88%
10.0	ORCL	5.88%	ABBV	5.88%
10.0	META	5.88%	NWL	5.88%
10.0	VFC	5.88%	CLF	5.88%
10.0	ABBV	5.88%	HLT	5.88%
10.0	GWW	3.92%	QQQ	5.88%

P90D: 21d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
21.0	WDC	82.5%	MU	77.5%
21.0	MU	70.0%	CSCO	65.0%
21.0	QCOM	55.0%	AMD	57.5%
21.0	INTC	47.5%	QCOM	57.5%
21.0	CNC	42.5%	INTC	45.0%
21.0	TXN	42.5%	ON	40.0%
21.0	AMD	42.5%	CNC	37.5%
21.0	CSCO	40.0%	TXN	35.0%
21.0	JAZZ	40.0%	WDC	35.0%
21.0	GNRC	32.5%	AMAT	30.0%
21.0	BBY	32.5%	MNST	27.5%
21.0	ON	25.0%	PWR	25.0%
21.0	GE	25.0%	GOOGL	22.5%
21.0	KALU	22.5%	GNRC	20.0%
21.0	CVS	20.0%	KALU	20.0%
21.0	CSTM	17.5%	QQQ	20.0%
21.0	UNH	15.0%	CVS	17.5%
21.0	IRM	12.5%	CAH	15.0%
21.0	AMAT	12.5%	BBY	15.0%
21.0	AMZN	10.0%	CDNS	12.5%
21.0	MNST	10.0%	NWL	10.0%
21.0	VNO	7.5%	AMZN	10.0%
21.0	ABBV	7.5%	IRM	7.5%
21.0	BUD	7.5%	GE	7.5%
21.0	CDNS	5.0%	ORCL	7.5%
21.0	ORCL	5.0%	BUD	5.0%
21.0	QQQ	2.5%	LLY	5.0%
21.0	PWR	2.5%	AVGO	5.0%
21.0	MS	2.5%	AA	5.0%
21.0	EXPE	2.5%	MS	2.5%

P365D: 1d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
1.0	WDC	17.2%	WDC	10.8%
1.0	AA	5.2%	SLV	8.84%
1.0	PCG	5.2%	MU	8.4%
1.0	GILD	5.2%	INTC	7.6%
1.0	MU	5.2%	CSTM	6.0%
1.0	TSLA	5.2%	ON	5.6%
1.0	GLD	4.8%	B	5.6%
1.0	GNRC	4.4%	AMD	5.6%
1.0	UNH	4.0%	NEM	5.2%
1.0	AMD	4.0%	AA	4.8%
1.0	CMA	3.38%	BHP	4.4%
1.0	INTC	3.2%	AMAT	4.4%
1.0	CLF	3.2%	KALU	4.4%
1.0	NFLX	3.2%	RIO	4.4%
1.0	TXN	3.2%	CCL	4.4%
1.0	GWW	2.8%	HSBC	4.0%
1.0	AMC	2.8%	CSCO	4.0%
1.0	ORCL	2.8%	LUMN	4.0%
1.0	SLV	2.41%	PHM	3.6%
1.0	NVS	2.4%	DHI	3.6%
1.0	JAZZ	2.4%	BIIB	3.2%
1.0	KALU	2.4%	HD	3.2%
1.0	FCX	2.4%	GS	3.2%
1.0	AMZN	2.4%	GOOGL	3.2%
1.0	QCOM	2.4%	MRK	3.2%
1.0	EXPE	2.0%	TEVA	2.8%
1.0	META	2.0%	AZN	2.8%
1.0	NVDA	1.6%	QCOM	2.8%
1.0	ELAN	1.6%	GNRC	2.8%
1.0	AMAT	1.6%	LEN	2.8%

P365D: 10d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
10.0	WDC	33.61%	INTC	19.09%
10.0	INTC	18.67%	MU	18.67%
10.0	KALU	13.28%	WDC	18.67%
10.0	MU	12.86%	SLV	18.33%
10.0	GNRC	12.45%	AMD	13.69%
10.0	TXN	12.03%	GNRC	13.28%
10.0	SLV	10.0%	GOOGL	12.03%
10.0	GLD	9.96%	AA	10.37%
10.0	BUD	9.96%	B	9.96%
10.0	AA	9.96%	AMAT	9.54%
10.0	JAZZ	9.13%	CSCO	8.3%
10.0	CMA	8.63%	TEVA	7.88%
10.0	AMZN	8.3%	ON	7.88%
10.0	EXPE	8.3%	TXN	7.05%
10.0	UNH	8.3%	KALU	6.64%
10.0	NVS	7.88%	QCOM	5.81%
10.0	AMD	6.22%	ORCL	5.81%
10.0	ON	6.22%	CAH	5.81%
10.0	THC	5.81%	GSK	4.98%
10.0	GILD	5.39%	GILD	4.98%
10.0	GE	5.39%	JAZZ	4.98%
10.0	NFLX	5.39%	GLD	4.56%
10.0	BALL	4.98%	IRM	4.56%
10.0	QCOM	4.98%	BALL	4.56%
10.0	HCA	4.98%	PWR	4.56%
10.0	CNC	4.98%	AZN	4.56%
10.0	GOOGL	4.56%	AMZN	4.56%
10.0	PCG	4.56%	CSTM	4.56%
10.0	IRM	4.15%	LUMN	4.15%
10.0	UAA	4.15%	LVS	4.15%

P365D: 21d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
21.0	WDC	42.61%	MU	34.78%
21.0	MU	27.39%	WDC	31.74%
21.0	INTC	23.91%	SLV	25.76%
21.0	SLV	21.4%	AMD	23.91%
21.0	KALU	20.87%	INTC	23.48%
21.0	GNRC	17.83%	B	21.74%
21.0	JAZZ	16.09%	GNRC	17.39%
21.0	TXN	13.48%	CSCO	13.91%
21.0	QCOM	10.87%	GOOGL	12.17%
21.0	GLD	10.43%	ON	11.74%
21.0	BUD	10.0%	CAH	11.74%
21.0	CNC	9.13%	TXN	11.74%
21.0	GOOGL	9.13%	AMAT	11.3%
21.0	BALL	9.13%	QCOM	10.87%
21.0	AA	9.13%	KALU	10.43%
21.0	B	8.7%	TEVA	10.0%
21.0	THC	8.7%	AA	10.0%
21.0	ON	8.26%	JAZZ	9.13%
21.0	VZ	8.26%	RIO	8.26%
21.0	AMZN	7.39%	CNC	8.26%
21.0	AMD	7.39%	GLD	8.26%
21.0	CSCO	6.96%	XOM	8.26%
21.0	TMUS	6.96%	VZ	7.83%
21.0	UNH	6.52%	BALL	7.39%
21.0	CSTM	6.09%	GSK	6.96%
21.0	BBY	5.65%	CSTM	6.96%
21.0	CAH	5.65%	ISRG	6.09%
21.0	GILD	5.65%	MSI	5.65%
21.0	EXPE	5.65%	TRGP	5.65%
21.0	NVS	5.65%	GILD	5.65%

P365D: 63d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
63.0	WDC	94.68%	WDC	97.87%
63.0	MU	65.96%	MU	75.53%
63.0	SLV	50.27%	SLV	55.61%
63.0	KALU	36.7%	B	49.47%
63.0	INTC	29.26%	INTC	35.11%
63.0	AA	26.6%	KALU	32.45%
63.0	GLD	25.0%	GLD	32.45%
63.0	EXPE	15.43%	CAH	31.91%
63.0	ON	15.43%	CSTM	26.6%
63.0	NVS	13.83%	GOOGL	26.06%
63.0	B	13.83%	AA	25.0%
63.0	FCX	13.3%	TEVA	23.4%
63.0	GOOGL	12.23%	XOM	23.4%
63.0	TXN	12.23%	ON	21.81%
63.0	PWR	11.7%	AMD	21.81%
63.0	HSBC	11.17%	NEM	21.28%
63.0	GSK	10.64%	AMAT	18.62%
63.0	NEM	10.64%	RIO	18.09%
63.0	XOM	10.11%	CSCO	17.02%
63.0	UNH	9.57%	QCOM	15.43%
63.0	AMZN	7.98%	TXN	14.89%
63.0	JAZZ	7.45%	HSBC	13.83%
63.0	QCOM	7.45%	NVS	11.7%
63.0	GNRC	6.91%	BALL	10.64%
63.0	AVGO	6.38%	BHP	10.11%
63.0	CNC	6.38%	FCX	9.57%
63.0	CSCO	6.38%	OXY	9.57%
63.0	CSTM	4.79%	GNRC	7.98%
63.0	VZ	3.19%	LUMN	7.45%
63.0	ELAN	2.66%	JAZZ	6.91%

P365D: 126d

Results reflect ticker level average 99% OaR breakage (OaRBreak) across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	OaRBreak_V	Ticker_S	OaRBreak_S
126.0	MU	99.2%	MU	100.0%
126.0	WDC	92.8%	WDC	100.0%
126.0	KALU	65.6%	SLV	83.87%
126.0	SLV	60.48%	AMAT	79.2%
126.0	GLD	41.6%	RIO	76.0%
126.0	AA	38.4%	AA	69.6%
126.0	NVS	36.8%	KALU	66.4%
126.0	GOOGL	32.0%	CSTM	61.6%
126.0	INTC	25.6%	INTC	60.8%
126.0	GSK	24.0%	TEVA	46.4%
126.0	TXN	20.8%	GLD	43.2%
126.0	ON	20.8%	B	43.2%
126.0	GNRC	20.0%	CAH	41.6%
126.0	AMD	19.2%	NEM	39.2%
126.0	JAZZ	16.8%	GOOGL	33.6%
126.0	NEM	16.0%	BHP	32.8%
126.0	CSTM	14.4%	TXN	32.0%
126.0	AMAT	12.0%	ON	31.2%
126.0	EXPE	10.4%	CSCO	28.8%
126.0	AVGO	9.6%	PWR	27.2%
126.0	XOM	9.6%	AMD	26.4%
126.0	HSBC	9.6%	HSBC	25.6%
126.0	RIO	8.0%	TRGP	22.4%
126.0	B	7.2%	XOM	18.4%
126.0	ELAN	6.4%	GNRC	17.6%
126.0	HCA	5.6%	GSK	16.0%
126.0	GILD	0.8%	JAZZ	14.4%
126.0	CSCO	0.8%	NVS	8.0%
126.0	GS	0.8%	MRK	8.0%
126.0	NWL	0.0%	IRM	7.2%

Top 30 Tickers By ROLOBC

All TMD: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	NVDA	0.53%	MU	0.3%
1.0	MU	0.47%	WDC	0.28%
1.0	X	0.45%	MSTR	0.25%
1.0	PWR	0.43%	NVDA	0.24%
1.0	AVGO	0.41%	VST	0.23%
1.0	LLY	0.38%	AMD	0.21%
1.0	GE	0.37%	AVGO	0.21%
1.0	AMD	0.37%	PWR	0.2%
1.0	WDC	0.36%	AMAT	0.19%
1.0	VST	0.36%	GE	0.17%
1.0	GBTC	0.34%	X	0.17%
1.0	CAH	0.33%	LLY	0.17%
1.0	AMAT	0.32%	TEVA	0.16%
1.0	TRGP	0.28%	TRGP	0.16%
1.0	CCL	0.26%	INTC	0.16%
1.0	CDNS	0.23%	GME	0.15%
1.0	TDG	0.21%	CAH	0.15%
1.0	ON	0.21%	THC	0.13%
1.0	SLV	0.21%	GBTC	0.12%
1.0	TSLA	0.21%	ETRN	0.12%
1.0	PHM	0.2%	SLV	0.12%
1.0	HLT	0.2%	PHM	0.11%
1.0	B	0.2%	GS	0.11%
1.0	JAZZ	0.19%	IRM	0.11%
1.0	INTC	0.19%	GOOGL	0.11%
1.0	CSTM	0.19%	CDNS	0.11%
1.0	DHI	0.18%	ON	0.11%
1.0	THC	0.18%	KALU	0.1%
1.0	GS	0.18%	GWW	0.1%
1.0	MSTR	0.17%	HSBC	0.1%

All TMD: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	NVDA	5.56%	MU	3.03%
10.0	MU	4.52%	WDC	2.95%
10.0	LLY	3.89%	MSTR	2.64%
10.0	AMAT	3.75%	NVDA	2.41%
10.0	AVGO	3.67%	VST	2.27%
10.0	PWR	3.6%	AVGO	2.07%
10.0	WDC	3.18%	PWR	1.99%
10.0	AMD	3.1%	AMD	1.98%
10.0	VST	2.91%	AMAT	1.75%
10.0	CCL	2.67%	TEVA	1.67%
10.0	TEVA	2.63%	LLY	1.64%
10.0	GBTC	2.62%	GE	1.63%
10.0	TSLA	2.58%	INTC	1.59%
10.0	MSTR	2.5%	X	1.58%
10.0	GE	2.49%	TRGP	1.54%
10.0	CAH	2.42%	CAH	1.49%
10.0	X	2.09%	ETRN	1.41%
10.0	CSTM	2.01%	GME	1.27%
10.0	TRGP	2.01%	GBTC	1.18%
10.0	GS	1.95%	THC	1.17%
10.0	PHM	1.91%	SLV	1.16%
10.0	THC	1.74%	IRM	1.16%
10.0	INTC	1.73%	GS	1.15%
10.0	SLV	1.72%	META	1.11%
10.0	DHI	1.55%	CDNS	1.08%
10.0	HLT	1.53%	PHM	1.07%
10.0	TDG	1.5%	GWW	1.06%
10.0	JPM	1.5%	GOOGL	1.03%
10.0	ACGL	1.49%	ON	1.02%
10.0	COST	1.46%	KALU	1.02%

All TMD: 21d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	NVDA	11.11%	MU	6.41%
21.0	AMD	9.76%	MSTR	6.34%
21.0	MU	8.34%	WDC	6.19%
21.0	ETRN	7.53%	NVDA	5.28%
21.0	AMAT	7.34%	VST	4.79%
21.0	VST	7.04%	AMD	4.46%
21.0	TSLA	6.75%	AVGO	4.41%
21.0	AVGO	6.64%	PWR	4.24%
21.0	PWR	6.59%	TEVA	3.64%
21.0	LLY	6.52%	AMAT	3.53%
21.0	GBTC	6.49%	ETRN	3.5%
21.0	MSTR	6.31%	GE	3.44%
21.0	CCL	6.02%	LLY	3.42%
21.0	WDC	5.97%	INTC	3.35%
21.0	TEVA	5.59%	TRGP	3.22%
21.0	GE	5.43%	X	3.17%
21.0	CAH	5.05%	CAH	3.08%
21.0	X	4.44%	GBTC	2.67%
21.0	CDNS	4.34%	META	2.51%
21.0	LUMN	4.04%	SLV	2.5%
21.0	TRGP	4.01%	GS	2.47%
21.0	GS	3.93%	ORCL	2.45%
21.0	PHM	3.89%	IRM	2.43%
21.0	CSTM	3.64%	THC	2.34%
21.0	DHI	3.54%	TSLA	2.34%
21.0	GOOGL	3.38%	CDNS	2.3%
21.0	INTC	3.34%	ON	2.29%
21.0	SLV	3.32%	GOOGL	2.28%
21.0	AA	3.23%	GWW	2.25%
21.0	THC	3.17%	NFLX	2.24%

All TMD: 63d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	NVDA	35.96%	WDC	20.44%
63.0	AMD	33.87%	MSTR	19.38%
63.0	GBTC	29.21%	MU	19.17%
63.0	MU	27.78%	NVDA	17.64%
63.0	MSTR	26.17%	VST	15.68%
63.0	WDC	23.25%	AVGO	13.85%
63.0	PWR	22.86%	AMD	12.99%
63.0	VST	22.05%	PWR	12.22%
63.0	AMAT	20.7%	TEVA	10.47%
63.0	LLY	20.56%	GE	10.37%
63.0	GE	19.21%	ETRN	10.28%
63.0	ETRN	18.76%	AMAT	9.99%
63.0	CCL	17.59%	GBTC	9.87%
63.0	TEVA	16.99%	INTC	9.63%
63.0	AVGO	16.01%	LLY	9.44%
63.0	LUMN	15.95%	TRGP	9.22%
63.0	PHM	15.79%	META	9.19%
63.0	CAH	15.03%	CAH	8.92%
63.0	B	13.83%	NFLX	8.5%
63.0	TRGP	12.41%	SLV	8.34%
63.0	GOOGL	12.37%	THC	7.54%
63.0	MS	12.08%	GOOGL	7.45%
63.0	GS	11.45%	ORCL	7.42%
63.0	CSTM	11.16%	PHM	7.37%
63.0	JPM	11.05%	GS	7.31%
63.0	INTC	11.05%	HSBC	6.69%
63.0	TSLA	11.02%	IRM	6.49%
63.0	X	10.99%	CCL	6.31%
63.0	THC	10.82%	GWW	6.2%
63.0	SLV	10.34%	KALU	6.09%

All TMD: 126d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	NVDA	86.75%	WDC	48.93%
126.0	GBTC	75.42%	MSTR	47.86%
126.0	MU	71.81%	MU	45.81%
126.0	WDC	67.79%	NVDA	43.47%
126.0	MSTR	54.82%	VST	34.86%
126.0	AMD	50.75%	AVGO	29.62%
126.0	PWR	48.88%	GBTC	27.8%
126.0	GE	48.28%	GE	25.13%
126.0	VST	47.41%	PWR	23.89%
126.0	AMAT	47.02%	AMD	23.15%
126.0	LLY	43.16%	TEVA	23.04%
126.0	PHM	39.92%	META	22.47%
126.0	CCL	37.97%	AMAT	22.21%
126.0	THC	37.7%	NFLX	21.24%
126.0	TEVA	36.37%	SLV	20.58%
126.0	CAH	33.91%	TRGP	19.55%
126.0	AVGO	33.91%	CAH	19.52%
126.0	B	33.44%	THC	19.51%
126.0	NFLX	31.29%	LLY	19.42%
126.0	LUMN	30.45%	ETRN	18.49%
126.0	ORCL	30.42%	INTC	17.11%
126.0	TRGP	29.23%	PHM	16.86%
126.0	JPM	28.89%	GOOGL	16.65%
126.0	MS	28.55%	GS	15.69%
126.0	SLV	27.5%	ORCL	15.49%
126.0	INTC	27.11%	B	14.84%
126.0	GOOGL	26.62%	HSBC	14.35%
126.0	TSLA	26.19%	CCL	13.81%
126.0	META	26.15%	CSTM	13.68%
126.0	X	25.56%	GLD	13.12%

All TMD: 252d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
252.0	GBTC	204.8%	MSTR	163.63%
252.0	NVDA	198.23%	WDC	120.96%
252.0	WDC	194.0%	NVDA	118.09%
252.0	MSTR	182.54%	VST	103.8%
252.0	MU	178.72%	MU	102.34%
252.0	GE	139.14%	GBTC	89.68%
252.0	VST	116.5%	AVGO	76.56%
252.0	PHM	107.1%	META	61.88%
252.0	AMD	106.34%	GE	60.65%
252.0	CCL	105.3%	NFLX	55.36%
252.0	THC	101.58%	AMD	51.59%
252.0	AMAT	99.52%	PWR	50.29%
252.0	NFLX	92.62%	THC	47.06%
252.0	AVGO	89.61%	TEVA	44.02%
252.0	META	88.02%	AMAT	43.35%
252.0	TRGP	84.92%	LLY	42.51%
252.0	PWR	83.48%	PHM	42.12%
252.0	TEVA	74.59%	TRGP	41.19%
252.0	SLV	72.49%	SLV	40.63%
252.0	MS	69.65%	CAH	39.21%
252.0	LLY	69.33%	CCL	37.04%
252.0	X	68.34%	GOOGL	36.85%
252.0	GOOGL	65.87%	ORCL	36.36%
252.0	INTC	65.84%	ETRN	35.78%
252.0	CAH	65.81%	GS	34.45%
252.0	ORCL	64.66%	INTC	34.0%
252.0	HSBC	63.76%	B	31.66%
252.0	GS	62.64%	HSBC	31.58%
252.0	QQQ	61.39%	JPM	30.72%
252.0	JPM	57.92%	GLD	29.23%

P30D: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	NWL	7.65%	NWL	3.2%
1.0	AMAT	3.75%	AMAT	2.49%
1.0	INTC	3.12%	INTC	1.4%
1.0	CAH	2.99%	WDC	1.04%
1.0	CYH	2.38%	CYH	1.0%
1.0	VNO	2.34%	CAH	1.0%
1.0	AMC	2.24%	ABBV	0.86%
1.0	BIIB	1.83%	MU	0.85%
1.0	WDC	1.71%	VNO	0.84%
1.0	MU	1.55%	PHM	0.8%
1.0	JPM	1.41%	AMD	0.79%
1.0	DHI	1.41%	FITB	0.76%
1.0	AMGN	1.32%	BALL	0.76%
1.0	AMD	1.3%	UAA	0.75%
1.0	ABBV	1.28%	GE	0.73%
1.0	PHM	1.18%	CVS	0.68%
1.0	GT	1.17%	HD	0.65%
1.0	ACGL	1.16%	ZION	0.63%
1.0	FITB	1.13%	USB	0.62%
1.0	LLY	1.1%	EXPE	0.62%
1.0	CVS	1.06%	BIIB	0.61%
1.0	BALL	1.04%	BXP	0.59%
1.0	CMG	1.0%	CMG	0.57%
1.0	BXP	0.96%	MRK	0.57%
1.0	HD	0.91%	GT	0.56%
1.0	USB	0.85%	DHI	0.55%
1.0	KEY	0.84%	LLY	0.54%
1.0	MRK	0.83%	GNRC	0.52%
1.0	TFC	0.8%	BAC	0.51%
1.0	ZION	0.8%	JPM	0.51%

P30D: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	NWL	48.73%	NWL	31.95%
10.0	AMAT	35.62%	AMAT	23.39%
10.0	CAH	31.11%	WDC	22.46%
10.0	INTC	29.65%	INTC	16.87%
10.0	CYH	28.63%	MU	13.37%
10.0	MU	25.7%	AMC	13.28%
10.0	VST	19.61%	GE	10.59%
10.0	AMC	14.73%	CAH	10.43%
10.0	WDC	14.52%	BALL	10.07%
10.0	THC	12.92%	EXPE	9.74%
10.0	ACGL	12.28%	CYH	9.54%
10.0	JPM	12.14%	THC	8.76%
10.0	VNO	11.63%	PHM	8.65%
10.0	NAVI	11.51%	VST	8.15%
10.0	PHM	10.92%	DHI	7.55%
10.0	CMG	10.92%	CMG	7.24%
10.0	DHI	10.9%	GT	6.71%
10.0	HD	10.31%	USB	6.61%
10.0	GT	10.13%	HD	6.58%
10.0	TDG	9.78%	JPM	6.53%
10.0	BALL	9.68%	AMD	6.49%
10.0	USB	9.65%	CCL	6.43%
10.0	CCL	8.13%	ZION	6.08%
10.0	BAC	8.08%	TDG	6.06%
10.0	FITB	6.28%	CVS	6.0%
10.0	CVS	6.22%	BAC	6.0%
10.0	PWR	6.05%	UAA	5.68%
10.0	GE	5.95%	ABBV	5.65%
10.0	ZION	5.88%	GNRC	5.59%
10.0	KEY	5.74%	FITB	5.33%

P90D: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	MU	3.92%	MU	2.13%
1.0	AMD	2.66%	INTC	1.89%
1.0	INTC	2.64%	AMD	1.78%
1.0	NWL	2.37%	WDC	1.42%
1.0	WDC	1.85%	AMAT	1.32%
1.0	AMAT	1.74%	AMC	1.16%
1.0	AMC	1.72%	NWL	1.08%
1.0	CSCO	1.72%	CNC	1.05%
1.0	VNO	1.45%	ON	0.87%
1.0	ON	1.39%	TXN	0.78%
1.0	PWR	1.28%	QCOM	0.77%
1.0	AVGO	1.27%	GNRC	0.76%
1.0	QCOM	1.19%	VNO	0.75%
1.0	CNC	1.17%	KALU	0.7%
1.0	CDNS	1.16%	CSCO	0.7%
1.0	CVS	1.14%	UNH	0.7%
1.0	BIIB	1.12%	CVS	0.59%
1.0	LLY	0.98%	CDNS	0.54%
1.0	LUMN	0.97%	GE	0.5%
1.0	CYH	0.9%	MNST	0.5%
1.0	QQQ	0.82%	PWR	0.47%
1.0	DHI	0.8%	JAZZ	0.44%
1.0	NVDA	0.79%	LLY	0.44%
1.0	KALU	0.74%	BXP	0.43%
1.0	TDG	0.68%	MS	0.4%
1.0	GNRC	0.67%	QQQ	0.4%
1.0	TXN	0.66%	AAP	0.37%
1.0	BHP	0.64%	AVGO	0.37%
1.0	GE	0.63%	IRM	0.36%
1.0	AAP	0.62%	BIIB	0.35%

P90D: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	MU	37.22%	MU	22.38%
10.0	AMD	29.8%	INTC	18.51%
10.0	AMAT	20.12%	AMD	17.64%
10.0	INTC	19.93%	WDC	15.06%
10.0	NWL	15.53%	AMC	12.37%
10.0	CSCO	14.93%	CNC	11.8%
10.0	QCOM	14.3%	ON	10.93%
10.0	LLY	13.46%	QCOM	10.91%
10.0	AMC	13.08%	AMAT	10.76%
10.0	PWR	12.44%	NWL	8.61%
10.0	VNO	11.87%	TXN	8.03%
10.0	ON	11.71%	CSCO	7.91%
10.0	CVS	10.42%	GNRC	7.18%
10.0	WDC	10.41%	VNO	7.09%
10.0	CNC	9.69%	UNH	6.28%
10.0	AVGO	7.54%	KALU	6.04%
10.0	CDNS	7.36%	CDNS	5.98%
10.0	QQQ	7.23%	CVS	5.88%
10.0	GNRC	6.39%	CLF	5.14%
10.0	MS	6.01%	MNST	4.78%
10.0	CAH	5.77%	PWR	4.69%
10.0	MNST	5.44%	MS	4.34%
10.0	KALU	5.36%	LLY	4.25%
10.0	GOOGL	5.35%	BBY	4.19%
10.0	VST	5.17%	BXP	4.11%
10.0	TXN	5.11%	GE	3.87%
10.0	GS	5.1%	GS	3.68%
10.0	TRGP	5.09%	IRM	3.54%
10.0	NVDA	5.07%	JAZZ	3.48%
10.0	CYH	4.95%	QQQ	3.45%

P90D: 21d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	MU	74.0%	MU	56.57%
21.0	AMD	69.67%	AMD	40.92%
21.0	INTC	48.27%	INTC	39.62%
21.0	AMC	39.38%	WDC	30.76%
21.0	CSCO	38.63%	QCOM	29.15%
21.0	AMAT	36.04%	CNC	27.55%
21.0	LLY	33.52%	AMC	24.08%
21.0	QCOM	29.93%	ON	23.2%
21.0	ON	26.82%	AMAT	22.25%
21.0	CNC	21.46%	CSCO	20.77%
21.0	WDC	18.28%	CLF	15.86%
21.0	CVS	17.86%	VNO	15.49%
21.0	VNO	17.73%	TXN	15.18%
21.0	CLF	17.11%	GNRC	14.28%
21.0	CDNS	16.88%	CDNS	13.51%
21.0	PWR	16.85%	CVS	13.27%
21.0	GS	15.13%	UNH	11.83%
21.0	NWL	14.03%	LLY	11.82%
21.0	CAH	12.51%	BBY	11.47%
21.0	QQQ	12.4%	NWL	11.35%
21.0	MS	12.01%	KALU	10.88%
21.0	GNRC	11.62%	MNST	10.86%
21.0	MNST	11.51%	ORCL	9.9%
21.0	BBY	11.2%	PWR	9.14%
21.0	KALU	10.8%	MS	8.96%
21.0	AVGO	10.8%	JAZZ	8.8%
21.0	UNH	10.42%	GE	8.73%
21.0	TEVA	10.24%	GS	8.33%
21.0	GOOGL	9.91%	BXP	7.83%
21.0	TRGP	9.78%	GWW	7.5%

P365D: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	MU	1.57%	WDC	1.02%
1.0	INTC	1.34%	MU	1.01%
1.0	AMD	1.32%	INTC	0.84%
1.0	AMAT	1.15%	AMD	0.67%
1.0	LUMN	1.01%	AMAT	0.61%
1.0	WDC	0.95%	KALU	0.39%
1.0	CSTM	0.77%	CSTM	0.38%
1.0	SLV	0.75%	JAZZ	0.34%
1.0	PWR	0.66%	LUMN	0.34%
1.0	BHP	0.65%	GNRC	0.34%
1.0	TEVA	0.6%	TEVA	0.31%
1.0	BIIB	0.58%	ON	0.31%
1.0	AVGO	0.56%	GOOGL	0.3%
1.0	LLY	0.51%	PWR	0.29%
1.0	KALU	0.49%	SLV	0.28%
1.0	RIO	0.49%	AA	0.28%
1.0	CAH	0.49%	CMA	0.27%
1.0	JAZZ	0.48%	B	0.27%
1.0	AA	0.45%	ELAN	0.25%
1.0	B	0.44%	BHP	0.24%
1.0	HSBC	0.43%	CSCO	0.23%
1.0	CSCO	0.41%	NEM	0.23%
1.0	NEM	0.41%	BIIB	0.23%
1.0	GOOGL	0.4%	RIO	0.21%
1.0	CLF	0.38%	LLY	0.2%
1.0	ON	0.37%	EXPE	0.2%
1.0	NVDA	0.37%	HSBC	0.2%
1.0	GNRC	0.36%	MRK	0.2%
1.0	MRK	0.34%	TRGP	0.19%
1.0	FSUGY	0.34%	FCX	0.19%

P365D: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	MU	15.87%	WDC	10.74%
10.0	AMAT	12.57%	MU	10.62%
10.0	AMD	11.31%	INTC	8.76%
10.0	LUMN	9.83%	AMD	6.55%
10.0	INTC	9.67%	AMAT	5.46%
10.0	WDC	8.22%	CSTM	3.84%
10.0	CSTM	6.23%	LUMN	3.68%
10.0	SLV	6.09%	KALU	3.6%
10.0	PWR	5.93%	ON	3.42%
10.0	BHP	5.66%	GNRC	3.38%
10.0	TEVA	5.34%	JAZZ	3.34%
10.0	AVGO	5.18%	CNC	3.32%
10.0	GNRC	4.72%	TEVA	3.19%
10.0	CSCO	4.61%	AA	3.16%
10.0	GOOGL	4.46%	GOOGL	3.11%
10.0	BIIB	4.2%	CMA	2.99%
10.0	CAH	4.04%	B	2.9%
10.0	NEM	3.71%	PWR	2.84%
10.0	B	3.69%	SLV	2.78%
10.0	LLY	3.66%	CSCO	2.49%
10.0	RIO	3.6%	NEM	2.48%
10.0	CMA	3.35%	BHP	2.34%
10.0	AA	3.33%	ELAN	2.34%
10.0	GS	3.3%	RIO	2.22%
10.0	ON	3.13%	CVS	1.98%
10.0	TRGP	3.08%	TRGP	1.96%
10.0	KALU	3.01%	HSBC	1.94%
10.0	JAZZ	2.96%	BIIB	1.94%
10.0	NVDA	2.8%	FCX	1.94%
10.0	CNC	2.7%	MNST	1.93%

P365D: 21d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	AMD	31.23%	MU	24.43%
21.0	MU	31.03%	WDC	23.24%
21.0	LUMN	23.05%	INTC	19.64%
21.0	AMAT	21.56%	AMD	14.56%
21.0	INTC	20.7%	AMAT	11.22%
21.0	WDC	19.53%	CSTM	8.8%
21.0	TEVA	15.1%	CNC	8.54%
21.0	CSTM	13.48%	LUMN	8.37%
21.0	BHP	11.37%	ON	8.13%
21.0	SLV	10.82%	KALU	8.07%
21.0	CSCO	10.67%	AA	8.03%
21.0	ON	10.59%	TEVA	7.33%
21.0	GOOGL	10.2%	JAZZ	7.06%
21.0	B	9.69%	GNRC	6.9%
21.0	AVGO	9.38%	GOOGL	6.8%
21.0	AA	9.35%	B	6.71%
21.0	BIIB	8.9%	SLV	6.62%
21.0	LLY	8.81%	CMA	6.15%
21.0	CAH	8.65%	PWR	5.94%
21.0	PWR	8.58%	CSCO	5.82%
21.0	CNC	7.86%	NEM	5.44%
21.0	GNRC	7.76%	BHP	5.09%
21.0	RIO	7.73%	RIO	5.05%
21.0	KALU	7.2%	ELAN	4.99%
21.0	NEM	7.12%	TRGP	4.53%
21.0	GS	7.09%	TXN	4.48%
21.0	ELAN	6.47%	CVS	4.42%
21.0	CMA	6.4%	FCX	4.4%
21.0	TRGP	6.37%	QCOM	4.22%
21.0	JAZZ	6.22%	BIIB	4.18%

P365D: 63d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	AMD	119.54%	WDC	82.28%
63.0	MU	113.46%	MU	81.13%
63.0	WDC	92.24%	INTC	67.28%
63.0	INTC	87.44%	AMD	43.21%
63.0	LUMN	81.08%	AMAT	37.13%
63.0	AMAT	72.21%	CSTM	32.03%
63.0	TEVA	53.35%	AA	31.26%
63.0	CSTM	50.8%	KALU	30.51%
63.0	B	46.98%	LUMN	29.51%
63.0	BHP	46.06%	ON	28.03%
63.0	LLY	37.58%	SLV	27.71%
63.0	SLV	36.4%	TEVA	26.37%
63.0	AA	34.13%	CNC	23.16%
63.0	RIO	33.83%	JAZZ	22.69%
63.0	ON	33.28%	B	21.71%
63.0	GOOGL	32.33%	PWR	21.24%
63.0	NEM	31.18%	GOOGL	21.15%
63.0	KALU	30.76%	CMA	19.37%
63.0	CAH	27.6%	RIO	18.36%
63.0	CSCO	27.19%	NEM	18.31%
63.0	CNC	25.44%	TRGP	16.5%
63.0	OXY	24.8%	BHP	16.49%
63.0	PWR	23.57%	FCX	16.06%
63.0	TRGP	23.56%	CSCO	15.96%
63.0	CMA	23.23%	GNRC	15.47%
63.0	JAZZ	22.93%	TXN	14.49%
63.0	BIIB	22.65%	MRK	13.14%
63.0	TXN	19.47%	ELAN	13.07%
63.0	FSUGY	18.71%	LLY	12.91%
63.0	GS	17.77%	BIIB	12.71%

P365D: 126d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	MU	299.14%	WDC	222.39%
126.0	WDC	288.25%	MU	218.01%
126.0	INTC	239.5%	INTC	130.62%
126.0	AMAT	188.97%	AMAT	89.43%
126.0	B	130.2%	AA	83.83%
126.0	CSTM	125.96%	CSTM	81.12%
126.0	TEVA	124.7%	SLV	76.01%
126.0	BHP	113.35%	KALU	70.89%
126.0	SLV	109.98%	TEVA	63.15%
126.0	AMD	100.44%	ON	59.94%
126.0	AA	99.34%	AMD	58.47%
126.0	PWR	91.23%	B	51.14%
126.0	LUMN	88.16%	JAZZ	45.45%
126.0	NEM	87.4%	NEM	45.29%
126.0	ON	86.05%	FCX	44.79%
126.0	TRGP	81.34%	RIO	44.7%
126.0	RIO	79.99%	PWR	43.68%
126.0	CAH	69.23%	CMA	41.75%
126.0	KALU	67.25%	TRGP	41.6%
126.0	OXY	61.95%	CNC	41.09%
126.0	CSCO	58.54%	GOOGL	40.45%
126.0	LLY	56.76%	BHP	39.44%
126.0	GOOGL	55.02%	LUMN	36.01%
126.0	UAA	53.02%	MRK	33.14%
126.0	FCX	50.95%	TXN	33.06%
126.0	MRK	48.37%	GNRC	32.43%
126.0	CNC	48.27%	XOM	30.05%
126.0	CMA	47.27%	HSBC	29.51%
126.0	JAZZ	47.15%	VFC	27.83%
126.0	BIIB	46.39%	CSCO	27.66%

Bottom 30 Tickers By ROLOBC

All TMD: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	SIVBQ	-0.91%	SIVBQ	-0.78%
1.0	IEP	-0.41%	SBNY	-0.45%
1.0	SBNY	-0.39%	FRCB	-0.23%
1.0	NWL	-0.28%	IEP	-0.14%
1.0	FRCB	-0.19%	AMC	-0.13%
1.0	ZTS	-0.18%	CHTR	-0.09%
1.0	CHTR	-0.17%	PRGO	-0.09%
1.0	FIS	-0.17%	FIS	-0.08%
1.0	UAA	-0.17%	ZTS	-0.07%
1.0	INTU	-0.17%	BHC	-0.06%
1.0	GT	-0.16%	VFC	-0.06%
1.0	PRGO	-0.14%	ADBE	-0.06%
1.0	CZR	-0.13%	AAP	-0.06%
1.0	AMC	-0.1%	NWL	-0.06%
1.0	ADBE	-0.09%	GT	-0.05%
1.0	NAVI	-0.09%	CMCSA	-0.05%
1.0	BXP	-0.09%	TLT	-0.04%
1.0	CTLT	-0.07%	UAA	-0.04%
1.0	TLT	-0.06%	NAVI	-0.04%
1.0	BALL	-0.06%	INTU	-0.04%
1.0	CMCSA	-0.06%	CZR	-0.03%
1.0	KHC	-0.06%	KHC	-0.03%
1.0	AAP	-0.05%	BXP	-0.03%
1.0	MOS	-0.04%	LNC	-0.02%
1.0	LNC	-0.03%	MOS	-0.02%
1.0	VZ	-0.03%	BALL	-0.02%
1.0	PEP	-0.03%	FRA	-0.02%
1.0	UNH	-0.03%	PEP	-0.02%
1.0	GNRC	-0.02%	CTLT	-0.01%
1.0	VICI	-0.02%	LQD	-0.01%

All TMD: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	SIVBQ	-5.34%	SBNY	-4.05%
10.0	SBNY	-3.67%	SIVBQ	-3.9%
10.0	IEP	-3.19%	FRCB	-2.19%
10.0	NWL	-1.96%	IEP	-1.38%
10.0	FRCB	-1.67%	AMC	-1.17%
10.0	AMC	-1.65%	CHTR	-0.99%
10.0	CZR	-1.59%	PRGO	-0.89%
10.0	GT	-1.3%	FIS	-0.78%
10.0	INTU	-1.16%	ZTS	-0.69%
10.0	CHTR	-1.14%	NWL	-0.66%
10.0	PRGO	-1.06%	VFC	-0.66%
10.0	ZTS	-1.01%	AAP	-0.62%
10.0	FIS	-0.98%	ADBE	-0.57%
10.0	UAA	-0.85%	GT	-0.57%
10.0	ADBE	-0.81%	CMCSA	-0.57%
10.0	VFC	-0.75%	UAA	-0.56%
10.0	BXP	-0.73%	BHC	-0.53%
10.0	AAP	-0.73%	NAVI	-0.5%
10.0	CYH	-0.67%	CZR	-0.45%
10.0	NAVI	-0.53%	INTU	-0.4%
10.0	VZ	-0.52%	TLT	-0.39%
10.0	CNC	-0.43%	MOS	-0.32%
10.0	KHC	-0.43%	BXP	-0.31%
10.0	CMCSA	-0.4%	KHC	-0.29%
10.0	BALL	-0.39%	LNC	-0.24%
10.0	CLF	-0.35%	BALL	-0.22%
10.0	HD	-0.31%	FRA	-0.18%
10.0	TLT	-0.29%	CYH	-0.13%
10.0	FRA	-0.28%	LQD	-0.12%
10.0	BBY	-0.22%	PEP	-0.12%

All TMD: 21d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	SIVBQ	-11.42%	SBNY	-11.16%
21.0	SBNY	-8.31%	SIVBQ	-9.37%
21.0	IEP	-6.05%	FRCB	-6.02%
21.0	FRCB	-4.48%	IEP	-2.96%
21.0	NWL	-4.18%	AMC	-2.93%
21.0	CZR	-2.97%	CHTR	-2.05%
21.0	CHTR	-2.69%	NWL	-1.82%
21.0	GT	-2.63%	PRGO	-1.78%
21.0	ADBE	-2.39%	FIS	-1.46%
21.0	INTU	-2.33%	ZTS	-1.41%
21.0	VFC	-2.18%	VFC	-1.4%
21.0	PRGO	-1.85%	BHC	-1.32%
21.0	FIS	-1.83%	AAP	-1.25%
21.0	AAP	-1.79%	GT	-1.15%
21.0	ZTS	-1.73%	CMCSA	-1.12%
21.0	UAA	-1.61%	NAVI	-1.12%
21.0	BALL	-1.4%	UAA	-1.08%
21.0	BXP	-1.34%	CZR	-1.02%
21.0	NAVI	-1.3%	ADBE	-0.93%
21.0	AMC	-1.08%	TLT	-0.83%
21.0	KHC	-0.94%	MOS	-0.72%
21.0	BBY	-0.93%	BXP	-0.71%
21.0	TLT	-0.88%	KHC	-0.69%
21.0	VZ	-0.74%	INTU	-0.64%
21.0	FRA	-0.6%	LNC	-0.61%
21.0	CMCSA	-0.6%	BALL	-0.55%
21.0	CYH	-0.58%	FRA	-0.35%
21.0	GME	-0.57%	CYH	-0.3%
21.0	HD	-0.47%	LQD	-0.23%
21.0	MOS	-0.47%	PEP	-0.2%

All TMD: 63d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	SIVBQ	-51.27%	SBNY	-37.59%
63.0	SBNY	-33.22%	SIVBQ	-33.73%
63.0	FRCB	-25.04%	FRCB	-24.04%
63.0	IEP	-20.98%	AMC	-13.25%
63.0	NWL	-14.72%	IEP	-9.66%
63.0	PRGO	-9.52%	NWL	-7.11%
63.0	BHC	-9.08%	PRGO	-5.97%
63.0	CLF	-8.82%	CHTR	-5.25%
63.0	VFC	-7.88%	AAP	-4.3%
63.0	AMC	-7.66%	MOS	-4.08%
63.0	UAA	-7.08%	CZR	-4.07%
63.0	GT	-6.76%	VFC	-3.95%
63.0	AAP	-6.31%	BHC	-3.94%
63.0	FIS	-5.93%	FIS	-3.82%
63.0	CZR	-5.88%	ZTS	-3.51%
63.0	CHTR	-5.75%	NAVI	-3.4%
63.0	ZTS	-5.06%	UAA	-3.05%
63.0	CYH	-4.92%	GT	-2.94%
63.0	MOS	-4.74%	CMCSA	-2.87%
63.0	GNRC	-4.66%	BXP	-2.83%
63.0	ADBE	-4.47%	KHC	-2.75%
63.0	KHC	-4.41%	ADBE	-2.46%
63.0	BALL	-4.29%	TLT	-2.31%
63.0	BBY	-3.58%	LNC	-1.91%
63.0	TLT	-3.1%	CLF	-1.76%
63.0	NAVI	-3.09%	BALL	-1.4%
63.0	CMCSA	-2.85%	BBY	-1.28%
63.0	CVS	-2.43%	FRA	-0.88%
63.0	FRA	-2.24%	CYH	-0.68%
63.0	BXP	-2.22%	LW	-0.57%

All TMD: 126d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	FRCB	-125.62%	SIVBQ	-65.15%
126.0	SIVBQ	-88.65%	SBNY	-64.8%
126.0	SBNY	-70.11%	FRCB	-51.17%
126.0	AMC	-40.97%	AMC	-28.95%
126.0	IEP	-40.68%	IEP	-18.89%
126.0	NWL	-39.09%	NWL	-16.23%
126.0	PRGO	-21.96%	PRGO	-11.88%
126.0	VFC	-20.33%	AAP	-10.26%
126.0	BHC	-14.38%	CHTR	-9.02%
126.0	AAP	-14.0%	MOS	-8.07%
126.0	CHTR	-12.86%	CZR	-7.87%
126.0	MOS	-12.55%	VFC	-6.65%
126.0	CLF	-12.35%	FIS	-6.48%
126.0	FIS	-12.1%	NAVI	-5.98%
126.0	GT	-11.91%	KHC	-5.9%
126.0	CTLT	-11.71%	BHC	-5.78%
126.0	UAA	-11.59%	CTLT	-5.69%
126.0	CZR	-11.59%	ZTS	-5.45%
126.0	CNC	-8.55%	GT	-5.43%
126.0	KHC	-8.37%	BXP	-5.34%
126.0	ZTS	-7.83%	UAA	-5.24%
126.0	GNRC	-6.86%	CMCSA	-4.71%
126.0	BALL	-6.65%	TLT	-4.11%
126.0	NAVI	-6.49%	CNC	-3.97%
126.0	TLT	-6.34%	CLF	-3.31%
126.0	UNH	-6.22%	ADBE	-3.19%
126.0	GME	-5.25%	UNH	-3.18%
126.0	BBY	-4.92%	LNC	-2.41%
126.0	CMCSA	-4.56%	LW	-2.34%
126.0	BXP	-4.32%	BBY	-1.97%

All TMD: 252d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
252.0	FRCB	-207.06%	SBNY	-95.75%
252.0	SBNY	-152.31%	SIVBQ	-95.29%
252.0	SIVBQ	-151.21%	FRCB	-91.61%
252.0	IEP	-88.06%	AMC	-54.07%
252.0	NWL	-78.08%	IEP	-39.1%
252.0	AMC	-71.16%	NWL	-30.4%
252.0	PRGO	-39.42%	AAP	-22.06%
252.0	AAP	-38.92%	PRGO	-20.35%
252.0	VFC	-34.0%	VFC	-17.45%
252.0	CZR	-33.81%	CNC	-17.13%
252.0	MOS	-32.38%	CZR	-16.6%
252.0	GT	-29.66%	MOS	-15.12%
252.0	UAA	-29.44%	UAA	-14.81%
252.0	CLF	-28.05%	CHTR	-13.82%
252.0	CNC	-25.77%	KHC	-11.7%
252.0	BHC	-21.65%	GT	-9.8%
252.0	KHC	-20.32%	UNH	-9.31%
252.0	CTLT	-19.6%	NAVI	-9.17%
252.0	UNH	-18.67%	CLF	-8.62%
252.0	CHTR	-18.0%	BHC	-8.33%
252.0	FIS	-15.37%	BMY	-7.84%
252.0	TLT	-11.94%	TLT	-7.08%
252.0	NAVI	-9.94%	ZTS	-6.74%
252.0	BMY	-9.93%	CMCSA	-6.41%
252.0	ZTS	-9.55%	CTLT	-6.24%
252.0	CMCSA	-9.43%	CYH	-5.99%
252.0	OXY	-9.11%	FIS	-5.69%
252.0	CYH	-8.65%	LW	-5.6%
252.0	LW	-7.74%	BXP	-5.52%
252.0	CVS	-6.61%	OXY	-4.95%

P30D: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	ORCL	-4.73%	ORCL	-2.54%
1.0	LUMN	-3.79%	MSTR	-2.51%
1.0	MSTR	-3.39%	AA	-1.89%
1.0	ON	-2.86%	CLF	-1.72%
1.0	INTU	-2.54%	LUMN	-1.55%
1.0	AA	-2.46%	INTU	-1.46%
1.0	T	-2.34%	ADBE	-1.4%
1.0	ADBE	-2.31%	SLV	-1.11%
1.0	CLF	-2.16%	MSFT	-1.02%
1.0	OXY	-2.11%	FSUGY	-0.97%
1.0	GBTC	-1.6%	OXY	-0.95%
1.0	TSLA	-1.59%	GBTC	-0.94%
1.0	QCOM	-1.56%	QCOM	-0.94%
1.0	LVS	-1.53%	NFLX	-0.89%
1.0	FSUGY	-1.49%	ON	-0.89%
1.0	MSFT	-1.43%	AVGO	-0.88%
1.0	SLV	-1.37%	T	-0.82%
1.0	MOS	-1.23%	LVS	-0.7%
1.0	AVGO	-1.14%	NEM	-0.68%
1.0	RIO	-1.13%	RIO	-0.66%
1.0	VZ	-0.97%	B	-0.65%
1.0	B	-0.91%	CPRT	-0.65%
1.0	NEM	-0.9%	VZ	-0.57%
1.0	CPRT	-0.87%	FIS	-0.55%
1.0	BHC	-0.81%	NVDA	-0.54%
1.0	ZTS	-0.75%	GLD	-0.53%
1.0	XOM	-0.75%	TMUS	-0.51%
1.0	GOOGL	-0.74%	CDNS	-0.46%
1.0	VICI	-0.71%	WYNN	-0.45%
1.0	NFLX	-0.69%	AMZN	-0.43%

P30D: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	ORCL	-42.78%	AA	-22.11%
10.0	LUMN	-30.87%	ORCL	-21.68%
10.0	OXY	-30.31%	MSTR	-18.78%
10.0	CLF	-26.55%	CLF	-16.34%
10.0	AA	-25.35%	ADBE	-16.06%
10.0	SLV	-22.05%	LUMN	-11.19%
10.0	MSTR	-18.67%	INTU	-11.13%
10.0	ADBE	-17.48%	OXY	-10.1%
10.0	INTU	-16.14%	SLV	-10.0%
10.0	PRGO	-15.89%	MSFT	-9.55%
10.0	ON	-15.33%	NFLX	-9.05%
10.0	BHC	-12.0%	ON	-7.51%
10.0	FSUGY	-10.31%	PRGO	-7.38%
10.0	MSFT	-10.31%	XOM	-7.04%
10.0	XOM	-9.47%	FSUGY	-6.98%
10.0	AVGO	-8.72%	AVGO	-6.47%
10.0	NFLX	-8.38%	QCOM	-6.4%
10.0	QCOM	-8.24%	LVS	-6.38%
10.0	LVS	-7.9%	RIO	-6.03%
10.0	TSLA	-7.77%	BHC	-4.85%
10.0	VICI	-7.68%	FIS	-4.55%
10.0	NVDA	-7.52%	GLD	-4.4%
10.0	T	-7.43%	CSTM	-4.33%
10.0	GOOGL	-6.99%	NVDA	-4.23%
10.0	CPRT	-6.68%	T	-4.12%
10.0	RIO	-6.01%	META	-4.1%
10.0	CDNS	-5.07%	CPRT	-4.03%
10.0	FIS	-4.7%	B	-3.98%
10.0	AMZN	-4.64%	AMZN	-3.94%
10.0	CHTR	-4.52%	CDNS	-3.75%

P90D: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	ZTS	-1.78%	ZTS	-0.76%
1.0	INTU	-1.59%	INTU	-0.71%
1.0	T	-1.27%	CHTR	-0.6%
1.0	CHTR	-1.07%	NFLX	-0.51%
1.0	OXY	-0.95%	T	-0.51%
1.0	MOS	-0.83%	AA	-0.46%
1.0	AA	-0.71%	OXY	-0.4%
1.0	NFLX	-0.69%	MSTR	-0.4%
1.0	MSTR	-0.53%	MOS	-0.31%
1.0	LVS	-0.51%	HCA	-0.3%
1.0	SLV	-0.5%	SLV	-0.29%
1.0	B	-0.5%	TMUS	-0.29%
1.0	POST	-0.48%	NEM	-0.28%
1.0	HCA	-0.39%	CPRT	-0.27%
1.0	VZ	-0.38%	FIS	-0.26%
1.0	FIS	-0.36%	XOM	-0.25%
1.0	CPRT	-0.36%	LVS	-0.25%
1.0	SNY	-0.35%	GLD	-0.24%
1.0	THC	-0.35%	VZ	-0.24%
1.0	GBTC	-0.33%	ADBE	-0.24%
1.0	XOM	-0.31%	PEP	-0.24%
1.0	PEP	-0.31%	POST	-0.2%
1.0	TMUS	-0.3%	GBTC	-0.2%
1.0	GLD	-0.29%	ISRG	-0.19%
1.0	GILD	-0.28%	CMCSA	-0.18%
1.0	NEM	-0.28%	SNY	-0.18%
1.0	VFC	-0.27%	B	-0.16%
1.0	AZN	-0.23%	GILD	-0.16%
1.0	ISRG	-0.22%	COST	-0.13%
1.0	ORCL	-0.22%	GSK	-0.12%

P90D: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	CHTR	-14.39%	CHTR	-8.65%
10.0	ZTS	-11.88%	ZTS	-7.34%
10.0	INTU	-9.49%	INTU	-6.7%
10.0	HCA	-6.31%	NFLX	-6.1%
10.0	OXY	-6.22%	HCA	-4.4%
10.0	NFLX	-5.67%	AA	-3.75%
10.0	SLV	-5.6%	CMCSA	-3.66%
10.0	T	-5.54%	FIS	-3.55%
10.0	MOS	-5.14%	T	-3.54%
10.0	BHC	-4.97%	SLV	-3.48%
10.0	AA	-4.14%	MSTR	-3.29%
10.0	CMCSA	-4.05%	ADBE	-3.0%
10.0	THC	-3.62%	NEM	-2.95%
10.0	AZO	-3.62%	GLD	-2.71%
10.0	FIS	-3.48%	LVS	-2.69%
10.0	NEM	-3.46%	GBTC	-2.65%
10.0	PCG	-3.39%	MOS	-2.6%
10.0	LVS	-3.37%	OXY	-2.52%
10.0	CPRT	-3.36%	ISRG	-2.34%
10.0	POST	-3.3%	BHC	-2.34%
10.0	PRGO	-3.18%	POST	-2.21%
10.0	ADBE	-3.16%	XOM	-2.16%
10.0	GBTC	-3.0%	AZO	-2.14%
10.0	GME	-2.9%	CPRT	-2.09%
10.0	MSTR	-2.79%	SNY	-2.05%
10.0	SNY	-2.7%	GILD	-2.03%
10.0	B	-2.66%	AZN	-1.97%
10.0	XOM	-2.42%	PEP	-1.95%
10.0	META	-2.34%	GSK	-1.92%
10.0	ISRG	-2.3%	MSI	-1.76%

P90D: 21d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	CHTR	-43.24%	CHTR	-19.5%
21.0	ZTS	-29.05%	ZTS	-18.0%
21.0	INTU	-23.87%	INTU	-14.87%
21.0	GT	-14.64%	NFLX	-10.81%
21.0	NFLX	-14.04%	HCA	-10.61%
21.0	HCA	-13.87%	CMCSA	-8.99%
21.0	BHC	-11.27%	MSTR	-8.73%
21.0	AZO	-10.91%	FIS	-8.34%
21.0	FIS	-10.84%	GBTC	-7.53%
21.0	T	-10.77%	T	-7.41%
21.0	GBTC	-10.19%	AZO	-6.61%
21.0	MOS	-10.15%	SLV	-6.41%
21.0	MSTR	-10.01%	POST	-6.16%
21.0	SLV	-9.83%	NEM	-6.16%
21.0	CPRT	-9.0%	ISRG	-6.13%
21.0	LVS	-8.79%	GT	-5.84%
21.0	THC	-8.54%	BHC	-5.63%
21.0	POST	-8.32%	GME	-5.63%
21.0	CMCSA	-8.02%	GLD	-5.52%
21.0	VFC	-7.95%	VFC	-5.46%
21.0	OXY	-7.57%	LVS	-5.45%
21.0	PRGO	-7.37%	META	-5.23%
21.0	GME	-7.19%	MOS	-5.2%
21.0	NEM	-6.99%	PEP	-4.8%
21.0	ISRG	-6.97%	CMG	-4.77%
21.0	ADBE	-6.83%	CPRT	-4.61%
21.0	META	-6.5%	ADBE	-4.5%
21.0	NAVI	-6.46%	SNY	-4.36%
21.0	CMG	-6.12%	GSK	-4.16%
21.0	ACGL	-6.09%	AZN	-4.14%

P365D: 1d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
1.0	MSTR	-0.77%	MSTR	-0.47%
1.0	INTU	-0.76%	INTU	-0.39%
1.0	PRGO	-0.7%	CHTR	-0.38%
1.0	CHTR	-0.62%	PRGO	-0.34%
1.0	FIS	-0.52%	ZTS	-0.29%
1.0	ZTS	-0.5%	FIS	-0.28%
1.0	GT	-0.44%	ADBE	-0.23%
1.0	MOS	-0.43%	NFLX	-0.21%
1.0	CPRT	-0.42%	CPRT	-0.21%
1.0	NFLX	-0.42%	GBTC	-0.2%
1.0	ORCL	-0.37%	CMG	-0.18%
1.0	CMG	-0.34%	NAVI	-0.18%
1.0	NAVI	-0.31%	MOS	-0.18%
1.0	ADBE	-0.3%	GT	-0.15%
1.0	UAA	-0.28%	CMCSA	-0.14%
1.0	VICI	-0.26%	TMUS	-0.13%
1.0	T	-0.25%	T	-0.12%
1.0	CMCSA	-0.25%	ISRG	-0.1%
1.0	GBTC	-0.24%	MSFT	-0.1%
1.0	MSFT	-0.2%	ORCL	-0.08%
1.0	IEP	-0.2%	VICI	-0.08%
1.0	ISRG	-0.18%	POST	-0.08%
1.0	TMUS	-0.16%	BHC	-0.08%
1.0	LEN	-0.16%	META	-0.07%
1.0	FRA	-0.15%	FRA	-0.07%
1.0	CZR	-0.14%	LEN	-0.07%
1.0	POST	-0.12%	AMC	-0.05%
1.0	AZO	-0.1%	AZO	-0.05%
1.0	SNY	-0.09%	IEP	-0.04%
1.0	META	-0.09%	SNY	-0.04%

P365D: 10d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
10.0	MSTR	-6.53%	MSTR	-4.86%
10.0	PRGO	-4.75%	INTU	-3.9%
10.0	GT	-4.75%	CHTR	-3.85%
10.0	CHTR	-4.62%	PRGO	-3.41%
10.0	INTU	-4.54%	FIS	-2.86%
10.0	GBTC	-3.65%	ZTS	-2.58%
10.0	NFLX	-3.52%	ADBE	-2.34%
10.0	MOS	-3.3%	NAVI	-2.22%
10.0	ORCL	-3.23%	GBTC	-2.15%
10.0	FIS	-3.18%	NFLX	-1.95%
10.0	CPRT	-3.06%	CPRT	-1.89%
10.0	ADBE	-3.02%	GT	-1.89%
10.0	ZTS	-2.93%	CMG	-1.88%
10.0	CMG	-2.85%	MOS	-1.88%
10.0	NAVI	-2.18%	CMCSA	-1.65%
10.0	BHC	-2.08%	MSFT	-1.06%
10.0	CMCSA	-1.93%	TMUS	-0.96%
10.0	VICI	-1.74%	ISRG	-0.92%
10.0	IEP	-1.72%	VICI	-0.84%
10.0	ISRG	-1.52%	BHC	-0.81%
10.0	T	-1.45%	FRA	-0.8%
10.0	AMC	-1.19%	T	-0.8%
10.0	MSFT	-1.18%	META	-0.74%
10.0	AZO	-1.17%	IEP	-0.7%
10.0	META	-1.16%	POST	-0.67%
10.0	UAA	-1.15%	AZO	-0.65%
10.0	FRA	-1.08%	ORCL	-0.63%
10.0	TMUS	-0.91%	LEN	-0.63%
10.0	SNY	-0.81%	KHC	-0.52%
10.0	KHC	-0.79%	SNY	-0.49%

P365D: 21d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
21.0	MSTR	-18.0%	MSTR	-9.3%
21.0	GT	-9.79%	INTU	-7.88%
21.0	CHTR	-9.76%	CHTR	-7.59%
21.0	INTU	-9.72%	PRGO	-7.07%
21.0	PRGO	-8.19%	FIS	-6.02%
21.0	ADBE	-7.83%	ZTS	-5.32%
21.0	GBTC	-7.42%	GBTC	-4.76%
21.0	FIS	-7.41%	NAVI	-4.69%
21.0	CPRT	-7.06%	ADBE	-4.34%
21.0	NFLX	-6.42%	GT	-4.13%
21.0	MOS	-6.42%	MOS	-4.02%
21.0	ZTS	-6.12%	CMG	-3.92%
21.0	NAVI	-5.49%	CPRT	-3.77%
21.0	CMG	-5.48%	NFLX	-3.64%
21.0	ORCL	-4.62%	CMCSA	-3.25%
21.0	UAA	-3.72%	TMUS	-2.06%
21.0	IEP	-3.72%	MSFT	-1.98%
21.0	BHC	-3.55%	BHC	-1.79%
21.0	CMCSA	-3.37%	IEP	-1.76%
21.0	ISRG	-3.15%	FRA	-1.69%
21.0	T	-3.14%	ISRG	-1.65%
21.0	VICI	-2.69%	VST	-1.65%
21.0	TMUS	-2.46%	VICI	-1.64%
21.0	FRA	-2.31%	TDG	-1.61%
21.0	VNO	-2.02%	META	-1.55%
21.0	VST	-1.95%	LEN	-1.47%
21.0	KHC	-1.82%	T	-1.46%
21.0	MSFT	-1.74%	AZO	-1.45%
21.0	AZO	-1.54%	KHC	-1.41%
21.0	GME	-1.42%	POST	-1.38%

P365D: 63d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
63.0	MSTR	-55.49%	MSTR	-23.84%
63.0	PRGO	-30.72%	PRGO	-22.0%
63.0	NFLX	-25.62%	INTU	-20.52%
63.0	INTU	-23.66%	CHTR	-16.04%
63.0	GT	-22.81%	FIS	-15.53%
63.0	ADBE	-22.33%	ZTS	-14.04%
63.0	FIS	-21.84%	GBTC	-14.03%
63.0	CPRT	-20.31%	NAVI	-13.89%
63.0	MOS	-19.9%	ADBE	-12.56%
63.0	CHTR	-18.27%	CPRT	-11.77%
63.0	GBTC	-18.0%	MOS	-11.28%
63.0	ZTS	-17.31%	LEN	-9.65%
63.0	ORCL	-16.52%	NFLX	-9.44%
63.0	NAVI	-13.55%	CMG	-9.09%
63.0	NWL	-12.97%	GT	-9.06%
63.0	BHC	-12.79%	AMC	-8.72%
63.0	CMG	-11.65%	CMCSA	-7.65%
63.0	LEN	-11.35%	VST	-7.47%
63.0	MSFT	-10.26%	TMUS	-7.43%
63.0	TMUS	-9.65%	ORCL	-7.43%
63.0	CMCSA	-9.31%	MSFT	-7.06%
63.0	VICI	-8.99%	BHC	-6.94%
63.0	KHC	-8.58%	NWL	-6.32%
63.0	ORLY	-8.23%	META	-6.07%
63.0	VNO	-7.76%	LW	-5.9%
63.0	CCL	-7.33%	FRA	-5.8%
63.0	VST	-7.31%	AZO	-5.73%
63.0	CLF	-7.29%	HD	-5.7%
63.0	AZO	-7.06%	KHC	-5.24%
63.0	T	-6.69%	VICI	-5.16%

P365D: 126d

Results reflect ticker level average 99% OaR based ROLOBC across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Horizon	Ticker_V	ROLOBC_V	Ticker_S	ROLOBC_S
126.0	AMC	-115.81%	MSTR	-48.55%
126.0	INTU	-103.96%	AMC	-41.14%
126.0	MSTR	-73.94%	INTU	-40.21%
126.0	PRGO	-63.23%	PRGO	-39.49%
126.0	NFLX	-58.43%	GBTC	-31.2%
126.0	FIS	-56.45%	FIS	-30.07%
126.0	GBTC	-39.89%	NAVI	-29.5%
126.0	MOS	-39.86%	ORCL	-28.32%
126.0	LEN	-39.41%	CHTR	-26.33%
126.0	ORCL	-38.1%	ADBE	-26.1%
126.0	CPRT	-37.64%	ZTS	-23.41%
126.0	GT	-36.49%	NFLX	-23.37%
126.0	ZTS	-35.37%	LW	-22.46%
126.0	ADBE	-35.08%	CPRT	-21.22%
126.0	MSFT	-34.21%	LEN	-19.18%
126.0	VNO	-32.73%	MSFT	-18.37%
126.0	NAVI	-32.03%	MOS	-17.27%
126.0	BHC	-31.07%	VNO	-17.23%
126.0	AZO	-30.21%	VST	-16.48%
126.0	CHTR	-27.52%	BXP	-14.74%
126.0	NWL	-25.31%	BHC	-14.46%
126.0	LW	-21.6%	GT	-13.3%
126.0	CMG	-21.27%	TMUS	-13.06%
126.0	WYNN	-17.89%	CMG	-13.03%
126.0	TMUS	-17.47%	FRA	-11.52%
126.0	ORLY	-17.26%	AZO	-11.44%
126.0	VICI	-16.39%	META	-11.02%
126.0	VST	-15.14%	BBY	-10.42%
126.0	KHC	-14.85%	KHC	-10.37%
126.0	TDG	-12.7%	WYNN	-10.22%

Appendix 1: Top 25 Ticker Level Differences in VM vs. Sigma 95% and 99% OaR Breakage

All TMD: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	SBNY	12.59%	SIVBQ	4.32%
1.0	GME	9.49%	GME	3.53%
1.0	MSTR	8.68%	META	2.44%
1.0	SIVBQ	7.91%	TSLA	2.35%
1.0	META	6.69%	AVGO	1.81%
1.0	CHTR	6.6%	FRCB	1.8%
1.0	GNRC	6.33%	AMC	1.63%
1.0	FRCB	5.76%	NFLX	1.63%
1.0	NFLX	5.24%	HLT	1.63%
1.0	BUD	4.34%	MSTR	1.45%
1.0	SLV	4.25%	BALL	1.36%
1.0	ZTS	4.16%	INTU	1.18%
1.0	VFC	4.16%	BUD	1.18%
1.0	CMA	3.98%	ACGL	1.08%
1.0	FRA	3.8%	ZTS	0.99%
1.0	CLF	3.71%	CHTR	0.99%
1.0	B	3.62%	CMA	0.8%
1.0	ORCL	3.53%	SPY	0.72%
1.0	GILD	3.53%	TEVA	0.72%
1.0	AVGO	3.16%	SBNY	0.72%
1.0	AMC	3.16%	GILD	0.63%
1.0	BALL	2.98%	AAP	0.54%
1.0	HLT	2.89%	GNRC	0.54%
1.0	INTU	2.89%	FRA	0.54%
1.0	AA	2.8%	WDC	0.54%

All TMD: 10d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	SIVBQ	12.13%	SIVBQ	9.56%
10.0	META	11.12%	MSTR	7.02%
10.0	MSTR	10.67%	META	4.74%
10.0	SBNY	10.66%	GME	4.65%
10.0	KALU	9.3%	CHTR	3.83%
10.0	GME	9.12%	SBNY	3.68%
10.0	HCA	8.75%	WDC	3.19%
10.0	FRCB	8.09%	KALU	3.01%
10.0	BALL	8.02%	ZTS	2.92%
10.0	CHTR	7.66%	AVGO	2.64%
10.0	GNRC	7.2%	CMA	2.51%
10.0	AMC	6.84%	AMC	2.28%
10.0	WDC	6.84%	EXPE	2.28%
10.0	CMA	6.63%	VZ	2.19%
10.0	GILD	6.56%	ETRN	2.15%
10.0	TEVA	6.11%	TXN	2.01%
10.0	AVGO	5.93%	HCA	2.01%
10.0	BXP	5.74%	XOM	1.73%
10.0	EXPE	5.74%	BALL	1.73%
10.0	B	5.47%	NVS	1.55%
10.0	VFC	5.38%	ISRG	1.55%
10.0	HD	5.2%	FRCB	1.47%
10.0	TDG	4.83%	GNRC	1.46%
10.0	GWW	4.74%	GILD	1.37%
10.0	ZTS	4.65%	GWW	1.28%

All TMD: 21d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
21.0	META	10.59%	SIVBQ	9.26%
21.0	GME	10.31%	CHTR	6.63%
21.0	FRCB	8.89%	MSTR	5.43%
21.0	CMA	8.43%	KALU	4.05%
21.0	KALU	8.2%	META	3.5%
21.0	GNRC	8.2%	GME	3.41%
21.0	SIVBQ	8.15%	GNRC	2.85%
21.0	AVGO	7.92%	WDC	2.76%
21.0	CHTR	7.46%	ISRG	2.67%
21.0	AMC	7.46%	GWW	2.58%
21.0	EXPE	7.09%	CMA	2.13%
21.0	ZTS	6.54%	ZTS	2.12%
21.0	MSTR	6.54%	SBNY	1.85%
21.0	B	5.89%	VZ	1.75%
21.0	HCA	5.8%	JAZZ	1.66%
21.0	SBNY	5.56%	LW	1.66%
21.0	ISRG	5.43%	AVGO	1.57%
21.0	BXP	5.25%	AAPL	1.47%
21.0	LW	5.16%	NEM	1.38%
21.0	BUD	5.06%	AMC	1.38%
21.0	BALL	4.88%	EXPE	1.38%
21.0	VZ	4.7%	BALL	1.29%
21.0	NAVI	4.7%	HD	1.29%
21.0	VFC	4.6%	SNY	1.29%
21.0	GILD	4.51%	TXN	1.01%

All TMD: 63d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
63.0	SIVBQ	11.11%	SIVBQ	7.78%
63.0	CHTR	10.63%	AVGO	5.65%
63.0	META	10.44%	EXPE	4.6%
63.0	EXPE	9.58%	GME	4.5%
63.0	AVGO	9.39%	CTLT	3.23%
63.0	LW	7.95%	LW	3.16%
63.0	CMA	6.69%	KALU	1.92%
63.0	MSTR	6.23%	GSK	1.63%
63.0	BUD	6.03%	UNH	1.44%
63.0	GME	5.56%	AMZN	1.44%
63.0	GNRC	4.98%	WFC	1.34%
63.0	GILD	4.79%	CHTR	1.05%
63.0	VFC	4.69%	BXP	1.05%
63.0	CTLT	4.69%	HD	0.77%
63.0	KALU	4.21%	CMA	0.53%
63.0	SNY	4.12%	AMC	0.48%
63.0	BXP	4.02%	FCX	0.48%
63.0	XOM	3.93%	AZO	0.38%
63.0	JAZZ	3.83%	VFC	0.38%
63.0	BALL	3.64%	GWW	0.29%
63.0	HCA	3.45%	KHC	0.29%
63.0	AAP	3.16%	SNY	0.29%
63.0	AMC	3.07%	BUD	0.29%
63.0	IRM	2.87%	AA	0.29%
63.0	FRCB	2.22%	JAZZ	0.19%

All TMD: 126d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
126.0	LW	11.52%	AVGO	7.14%
126.0	VFC	8.97%	EXPE	4.99%
126.0	EXPE	6.93%	LW	4.79%
126.0	GME	5.4%	NVS	3.47%
126.0	MSTR	5.1%	BUD	2.65%
126.0	AAP	4.89%	MSI	2.34%
126.0	META	4.59%	OXY	1.63%
126.0	BALL	4.49%	MSTR	1.53%
126.0	CMA	4.21%	META	1.22%
126.0	BXP	3.98%	CMA	1.14%
126.0	CHTR	3.87%	VFC	1.12%
126.0	GOOGL	3.06%	BALL	1.12%
126.0	BUD	2.96%	ETRN	1.02%
126.0	HCA	2.14%	GSK	1.02%
126.0	CTLT	1.78%	GME	1.02%
126.0	IRM	1.63%	HCA	0.82%
126.0	AVGO	1.53%	IRM	0.51%
126.0	KALU	1.53%	GNRC	0.2%
126.0	XOM	1.22%	FRCB	0.0%
126.0	TMUS	1.22%	FSUGY	0.0%
126.0	NWL	1.12%	FITB	0.0%
126.0	BAC	1.02%	FIS	0.0%
126.0	GNRC	1.02%	FCX	0.0%
126.0	AMC	0.82%	ORLY	0.0%
126.0	KHC	0.82%	EMB	0.0%

All TMD: 252d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
252.0	EXPE	6.78%	LW	3.63%
252.0	IRM	3.51%	GWW	3.63%
252.0	GME	3.27%	IRM	2.57%
252.0	VST	2.46%	ORLY	1.4%
252.0	BA	1.52%	EXPE	1.17%
252.0	OXY	1.52%	CVS	0.35%
252.0	BALL	1.4%	GNRC	0.23%
252.0	GNRC	1.4%	XOM	0.12%
252.0	KEY	1.29%	ZTS	0.0%
252.0	CHTR	0.58%	GT	0.0%
252.0	MSTR	0.12%	PRGO	0.0%
252.0	CYH	0.0%	QQQ	0.0%
252.0	MUB	0.0%	GME	0.0%
252.0	MOS	0.0%	SBNY	0.0%
252.0	CTLT	0.0%	SIVBQ	0.0%
252.0	LQD	0.0%	SBUX	0.0%
252.0	NAVI	0.0%	HD	0.0%
252.0	NWL	0.0%	SNY	0.0%
252.0	CZR	0.0%	FSUGY	0.0%
252.0	ZTS	0.0%	FRCB	0.0%
252.0	EMB	0.0%	FRA	0.0%
252.0	LNC	0.0%	FITB	0.0%
252.0	KHC	0.0%	FIS	0.0%
252.0	FRA	0.0%	POST	0.0%
252.0	FRCB	0.0%	HON	0.0%

P30D: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	GNRC	25.0%	WDC	20.0%
1.0	AMD	20.0%	AMD	20.0%
1.0	FITB	20.0%	META	10.0%
1.0	GE	15.0%	KALU	10.0%
1.0	QCOM	15.0%	CNC	5.0%
1.0	BBY	15.0%	GSK	5.0%
1.0	KEY	15.0%	EXPE	5.0%
1.0	HLT	10.0%	MSTR	5.0%
1.0	CSTM	10.0%	GE	5.0%
1.0	MSTR	10.0%	UNH	5.0%
1.0	BHP	10.0%	GNRC	5.0%
1.0	META	10.0%	TSLA	5.0%
1.0	GBTC	10.0%	ADBE	5.0%
1.0	AMAT	10.0%	LNC	0.0%
1.0	WDC	10.0%	MSI	0.0%
1.0	GWW	10.0%	ORLY	0.0%
1.0	ORCL	5.0%	ORCL	0.0%
1.0	FSUGY	5.0%	NVDA	0.0%
1.0	LNC	5.0%	NFLX	0.0%
1.0	GILD	5.0%	NEM	0.0%
1.0	EXPE	5.0%	NAVI	0.0%
1.0	KALU	5.0%	INTU	0.0%
1.0	MRK	5.0%	MUB	0.0%
1.0	CYH	5.0%	IRM	0.0%
1.0	GSK	5.0%	MOS	0.0%

P30D: 10d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	GNRC	45.45%	GE	72.73%
10.0	KEY	45.45%	EXPE	36.36%
10.0	AMD	45.45%	AMD	36.36%
10.0	GE	36.36%	WDC	27.27%
10.0	UNH	27.27%	CVS	18.18%
10.0	GSK	27.27%	UNH	18.18%
10.0	EXPE	27.27%	BALL	9.09%
10.0	HLT	27.27%	NVS	0.0%
10.0	LNC	18.18%	NAVI	0.0%
10.0	WDC	18.18%	NEM	0.0%
10.0	HCA	18.18%	NFLX	0.0%
10.0	MS	9.09%	NVDA	0.0%
10.0	GWW	9.09%	ORCL	0.0%
10.0	BALL	9.09%	ON	0.0%
10.0	FITB	9.09%	MSTR	0.0%
10.0	HSBC	9.09%	ORLY	0.0%
10.0	CVS	9.09%	OXY	0.0%
10.0	ABBV	9.09%	PCG	0.0%
10.0	MUB	0.0%	PEP	0.0%
10.0	NFLX	0.0%	PHM	0.0%
10.0	NVDA	0.0%	MUB	0.0%
10.0	NVS	0.0%	AA	0.0%
10.0	NEM	0.0%	MSI	0.0%
10.0	NAVI	0.0%	POST	0.0%
10.0	ON	0.0%	MS	0.0%

P90D: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	WDC	13.33%	WDC	16.67%
1.0	GNRC	11.67%	UNH	11.67%
1.0	KEY	11.67%	TSLA	5.0%
1.0	LNC	10.0%	AVGO	5.0%
1.0	AMD	10.0%	AMD	5.0%
1.0	MRK	10.0%	EXPE	3.33%
1.0	UNH	10.0%	CNC	3.33%
1.0	FITB	8.33%	NFLX	3.33%
1.0	QCOM	8.33%	META	3.33%
1.0	JAZZ	8.33%	UAA	3.33%
1.0	GE	6.67%	JAZZ	3.33%
1.0	TSLA	6.67%	KALU	1.67%
1.0	B	6.67%	MSTR	1.67%
1.0	IRM	6.67%	GE	1.67%
1.0	NVDA	6.67%	GLD	1.67%
1.0	GWW	6.67%	NVDA	1.67%
1.0	FCX	5.0%	PCG	1.67%
1.0	PWR	5.0%	GNRC	1.67%
1.0	META	5.0%	AA	1.67%
1.0	CYH	5.0%	GSK	1.67%
1.0	CSTM	5.0%	TXN	1.67%
1.0	MSTR	5.0%	BAC	1.67%
1.0	NFLX	5.0%	AMC	1.67%
1.0	CNC	5.0%	AMZN	1.67%
1.0	AA	5.0%	LVS	0.0%

P90D: 10d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	UNH	37.25%	UNH	29.41%
10.0	WDC	31.37%	WDC	25.49%
10.0	CSTM	23.53%	GE	17.65%
10.0	TSLA	21.57%	JAZZ	17.65%
10.0	GE	19.61%	EXPE	15.69%
10.0	AMC	19.61%	CSTM	11.76%
10.0	CNC	19.61%	KALU	9.8%
10.0	TXN	19.61%	IRM	7.84%
10.0	KEY	15.69%	BBY	5.88%
10.0	GNRC	13.73%	CLF	3.92%
10.0	AMZN	13.73%	META	3.92%
10.0	HLT	11.76%	GNRC	3.92%
10.0	EXPE	11.76%	CNC	3.92%
10.0	CVS	9.8%	TXN	3.92%
10.0	GSK	9.8%	B	3.92%
10.0	SBUX	9.8%	GWW	3.92%
10.0	KALU	9.8%	VFC	3.92%
10.0	AMD	9.8%	UAA	1.96%
10.0	AA	7.84%	BAC	1.96%
10.0	VNO	7.84%	BALL	1.96%
10.0	BXP	7.84%	LUMN	1.96%
10.0	PCG	7.84%	HSBC	1.96%
10.0	IRM	5.88%	MRK	1.96%
10.0	GWW	5.88%	NAVI	0.0%
10.0	ORCL	5.88%	MUB	0.0%

P90D: 21d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
21.0	CVS	32.5%	WDC	47.5%
21.0	JAZZ	32.5%	JAZZ	40.0%
21.0	CSTM	27.5%	GE	17.5%
21.0	WDC	25.0%	BBY	17.5%
21.0	BXP	22.5%	CSTM	17.5%
21.0	AMD	22.5%	GNRC	12.5%
21.0	AMC	20.0%	UNH	12.5%
21.0	IRM	17.5%	VNO	7.5%
21.0	GWW	15.0%	TXN	7.5%
21.0	GE	15.0%	CNC	5.0%
21.0	UNH	15.0%	IRM	5.0%
21.0	CLF	15.0%	ABBV	5.0%
21.0	CNC	15.0%	EXPE	2.5%
21.0	TXN	12.5%	CVS	2.5%
21.0	TSLA	12.5%	KALU	2.5%
21.0	EXPE	12.5%	INTC	2.5%
21.0	INTC	10.0%	BUD	2.5%
21.0	AAP	10.0%	MSFT	0.0%
21.0	GNRC	7.5%	NEM	0.0%
21.0	NWL	7.5%	NAVI	0.0%
21.0	HLT	5.0%	NVDA	0.0%
21.0	KALU	5.0%	MUB	0.0%
21.0	MSTR	5.0%	MSTR	0.0%
21.0	MNST	2.5%	MSI	0.0%
21.0	MU	2.5%	NFLX	0.0%

P365D: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	GILD	8.8%	WDC	6.4%
1.0	VFC	8.4%	TSLA	4.8%
1.0	CLF	7.6%	PCG	4.0%
1.0	WDC	6.8%	GILD	2.8%
1.0	GNRC	6.8%	GLD	2.8%
1.0	UNH	6.4%	UNH	2.8%
1.0	BUD	6.0%	NFLX	2.4%
1.0	TSLA	5.6%	AMC	2.0%
1.0	GWW	5.6%	GNRC	1.6%
1.0	CMA	5.41%	TXN	1.6%
1.0	NFLX	5.2%	AMZN	1.6%
1.0	META	4.8%	CMA	1.35%
1.0	TXN	4.4%	CLF	1.2%
1.0	LNC	4.4%	NWL	1.2%
1.0	KEY	4.4%	ORCL	1.2%
1.0	PWR	4.0%	UAA	1.2%
1.0	AMZN	4.0%	BAC	0.8%
1.0	CYH	3.6%	MSTR	0.8%
1.0	AA	3.6%	IEP	0.8%
1.0	PCG	3.2%	ZTS	0.8%
1.0	CDNS	3.2%	THC	0.4%
1.0	GE	3.2%	MSI	0.4%
1.0	IEP	2.8%	AAP	0.4%
1.0	FCX	2.8%	GWW	0.4%
1.0	EXPE	2.8%	VFC	0.4%

P365D: 10d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	WDC	16.6%	WDC	14.94%
10.0	TXN	14.52%	UNH	7.47%
10.0	AMZN	14.11%	BUD	6.64%
10.0	UNH	13.69%	KALU	6.64%
10.0	AMC	12.86%	NVS	6.22%
10.0	EXPE	12.86%	GLD	5.39%
10.0	GILD	12.45%	CMA	5.04%
10.0	NVS	11.2%	TXN	4.98%
10.0	FCX	9.54%	EXPE	4.56%
10.0	THC	9.54%	GE	4.15%
10.0	KALU	8.71%	JAZZ	4.15%
10.0	VFC	8.71%	AMZN	3.73%
10.0	CMA	8.63%	HCA	3.32%
10.0	BXP	7.88%	UAA	3.32%
10.0	TSLA	7.88%	VFC	2.9%
10.0	GNRC	7.47%	VST	2.07%
10.0	BUD	7.47%	THC	2.07%
10.0	SBUX	7.05%	NFLX	2.07%
10.0	CLF	6.64%	TMUS	2.07%
10.0	CSTM	6.64%	META	2.07%
10.0	GWW	6.22%	TSLA	2.07%
10.0	CVS	6.22%	FCX	1.66%
10.0	TDG	5.81%	AAP	1.66%
10.0	CNC	5.81%	BBY	1.24%
10.0	GSK	5.39%	PCG	1.24%

P365D: 21d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
21.0	CMA	21.09%	WDC	10.87%
21.0	NVS	18.7%	KALU	10.43%
21.0	EXPE	18.26%	JAZZ	6.96%
21.0	TXN	14.35%	TMUS	6.09%
21.0	WDC	13.91%	BUD	6.09%
21.0	CVS	11.74%	EXPE	4.78%
21.0	AMC	11.74%	THC	4.78%
21.0	BXP	10.87%	UAA	3.48%
21.0	VFC	10.87%	UNH	3.48%
21.0	KALU	9.13%	FCX	3.48%
21.0	BUD	8.7%	CMA	3.12%
21.0	CLF	8.7%	BBY	3.04%
21.0	JAZZ	8.7%	GE	3.04%
21.0	GILD	6.52%	AMZN	2.61%
21.0	UAA	6.09%	GLD	2.17%
21.0	GWW	6.09%	NVS	1.74%
21.0	GSK	5.22%	TXN	1.74%
21.0	FCX	4.78%	BALL	1.74%
21.0	AMZN	4.78%	AAP	1.74%
21.0	HCA	4.78%	VNO	1.3%
21.0	TDG	4.35%	FITB	1.3%
21.0	PCG	4.35%	CVS	0.87%
21.0	AAP	4.35%	META	0.87%
21.0	SBUX	3.91%	CNC	0.87%
21.0	VZ	3.91%	IRM	0.87%

P365D: 63d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
63.0	EXPE	22.87%	EXPE	15.43%
63.0	JAZZ	19.68%	GSK	9.04%
63.0	GILD	19.68%	UNH	7.98%
63.0	HCA	13.83%	AMZN	7.98%
63.0	NVS	12.23%	AVGO	6.38%
63.0	TSLA	12.23%	PWR	4.79%
63.0	THC	12.23%	KALU	4.26%
63.0	PCG	11.17%	FCX	3.72%
63.0	VFC	11.17%	NVS	2.13%
63.0	CVS	10.11%	TSLA	1.6%
63.0	BUD	9.04%	GILD	1.6%
63.0	BXP	8.51%	AAPL	1.6%
63.0	MU	8.51%	AA	1.6%
63.0	CNC	7.45%	CMA	1.16%
63.0	CMA	6.98%	ORCL	1.06%
63.0	GNRC	6.91%	JAZZ	0.53%
63.0	AAP	6.38%	GE	0.53%
63.0	AMC	5.85%	THC	0.53%
63.0	KALU	5.85%	PCG	0.53%
63.0	UNH	5.32%	MSFT	0.0%
63.0	TXN	4.26%	MSTR	0.0%
63.0	FCX	4.26%	MOS	0.0%
63.0	AVGO	4.26%	META	0.0%
63.0	VZ	4.26%	LW	0.0%
63.0	AMZN	3.19%	KHC	0.0%

P365D: 126d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
126.0	GILD	35.2%	NVS	28.8%
126.0	NVS	33.6%	EXPE	10.4%
126.0	BUD	31.2%	AVGO	9.6%
126.0	GLD	14.4%	GSK	8.0%
126.0	PCG	10.4%	HCA	4.8%
126.0	GS	10.4%	GNRC	2.4%
126.0	AVGO	9.6%	JAZZ	2.4%
126.0	EXPE	8.8%	ELAN	1.6%
126.0	CVS	8.8%	GS	0.8%
126.0	THC	6.4%	GILD	0.8%
126.0	FCX	6.4%	MSFT	0.0%
126.0	JAZZ	5.6%	MSI	0.0%
126.0	VFC	5.6%	ISRG	0.0%
126.0	HCA	4.8%	MSTR	0.0%
126.0	AAP	4.8%	MOS	0.0%
126.0	KALU	3.2%	MUB	0.0%
126.0	AAPL	2.4%	NAVI	0.0%
126.0	QCOM	2.4%	NFLX	0.0%
126.0	ELAN	1.6%	NVDA	0.0%
126.0	GNRC	0.8%	MS	0.0%
126.0	VZ	0.0%	LUMN	0.0%
126.0	MUB	0.0%	META	0.0%
126.0	MU	0.0%	LW	0.0%
126.0	MSTR	0.0%	LVS	0.0%
126.0	MSI	0.0%	ORCL	0.0%

Appendix 2: Bottom 25 Ticker Level Differences in VM vs. Sigma 95% and 99% OaR Breakage

All TMD: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	MOS	-4.07%	HSBC	-2.08%
1.0	EMB	-3.98%	CCL	-2.08%
1.0	HYG	-3.8%	PHM	-1.81%
1.0	DHI	-3.53%	MU	-1.81%
1.0	PHM	-3.53%	LLY	-1.72%
1.0	VCSH	-3.53%	NVDA	-1.72%
1.0	BHP	-3.25%	ON	-1.72%
1.0	HSBC	-3.25%	LVS	-1.63%
1.0	MS	-3.16%	CSCO	-1.63%
1.0	ON	-3.16%	INTC	-1.63%
1.0	CCL	-2.98%	WYNN	-1.63%
1.0	AZN	-2.98%	T	-1.54%
1.0	CAH	-2.89%	DHI	-1.45%
1.0	TLT	-2.8%	MS	-1.45%
1.0	CSCO	-2.8%	BHP	-1.45%
1.0	X	-2.72%	GE	-1.36%
1.0	MUB	-2.62%	HYG	-1.36%
1.0	VNO	-2.62%	LUMN	-1.36%
1.0	T	-2.62%	AMAT	-1.36%
1.0	LVS	-2.62%	CDNS	-1.36%
1.0	COST	-2.44%	MUB	-1.27%
1.0	AMAT	-2.44%	MOS	-1.27%
1.0	MSFT	-2.35%	MNST	-1.27%
1.0	MU	-2.35%	COST	-1.27%
1.0	GE	-2.26%	VNO	-1.27%

All TMD: 10d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	MUB	-6.39%	NVDA	-3.92%
10.0	LLY	-5.83%	LLY	-3.28%
10.0	CCL	-4.74%	X	-3.22%
10.0	NVDA	-4.65%	MUB	-2.92%
10.0	CSCO	-4.65%	PWR	-2.83%
10.0	MS	-4.38%	DHI	-2.64%
10.0	AMAT	-4.28%	AMD	-2.64%
10.0	COST	-4.19%	GBTC	-2.64%
10.0	T	-4.19%	MU	-2.37%
10.0	PHM	-4.19%	LUMN	-2.37%
10.0	BHP	-4.19%	CPRT	-2.37%
10.0	CDNS	-3.83%	T	-2.28%
10.0	CAH	-3.83%	MS	-2.19%
10.0	AMD	-3.46%	TMUS	-2.19%
10.0	JPM	-3.37%	CCL	-2.1%
10.0	BA	-3.37%	TEVA	-2.1%
10.0	DHI	-3.19%	CSCO	-2.01%
10.0	CYH	-3.01%	LVS	-2.01%
10.0	LUMN	-3.01%	COST	-1.82%
10.0	VCSH	-2.92%	PHM	-1.82%
10.0	FSUGY	-2.92%	AMAT	-1.82%
10.0	MOS	-2.73%	BHP	-1.64%
10.0	CPRT	-2.73%	CDNS	-1.55%
10.0	CMG	-2.55%	POST	-1.55%
10.0	EMB	-2.37%	SLV	-1.46%

All TMD: 21d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
21.0	CCL	-8.29%	NVDA	-4.88%
21.0	LLY	-7.92%	ETRN	-4.38%
21.0	MUB	-7.28%	AMD	-4.33%
21.0	COST	-7.18%	TEVA	-3.96%
21.0	MS	-6.54%	GBTC	-3.87%
21.0	DHI	-5.99%	LLY	-3.87%
21.0	NVDA	-5.52%	PWR	-3.78%
21.0	PHM	-5.43%	GE	-3.5%
21.0	AMAT	-5.06%	DHI	-3.31%
21.0	CAH	-4.97%	LUMN	-3.13%
21.0	GLD	-4.79%	MUB	-3.04%
21.0	GE	-4.79%	WYNN	-3.04%
21.0	CDNS	-4.7%	CAH	-2.95%
21.0	JPM	-4.51%	AMAT	-2.85%
21.0	PWR	-4.33%	X	-2.78%
21.0	AZN	-4.33%	MOS	-2.67%
21.0	T	-4.05%	LVS	-2.67%
21.0	QQQ	-4.05%	MU	-2.3%
21.0	LEN	-3.87%	BA	-2.3%
21.0	GBTC	-3.87%	T	-2.3%
21.0	BHP	-3.78%	AMGN	-2.12%
21.0	AMD	-3.68%	CCL	-1.93%
21.0	CMG	-3.59%	TSLA	-1.93%
21.0	VNO	-3.5%	TMUS	-1.84%
21.0	CPRT	-3.5%	GSK	-1.75%

All TMD: 63d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
63.0	NVDA	-16.95%	NVDA	-10.54%
63.0	LLY	-11.11%	GBTC	-8.14%
63.0	AMAT	-11.02%	AMD	-7.76%
63.0	VNO	-10.54%	LLY	-7.47%
63.0	GBTC	-10.34%	CAH	-7.47%
63.0	DHI	-10.34%	B	-6.99%
63.0	AMD	-10.25%	GLD	-6.03%
63.0	CMG	-9.58%	ETRN	-5.99%
63.0	CCL	-9.1%	DHI	-5.46%
63.0	PHM	-8.62%	GE	-5.46%
63.0	CAH	-8.43%	MU	-5.36%
63.0	TRGP	-7.85%	VST	-5.08%
63.0	JPM	-7.85%	MRK	-4.69%
63.0	LVS	-7.85%	TRGP	-4.69%
63.0	GLD	-7.57%	MUB	-4.22%
63.0	GE	-6.9%	MS	-4.21%
63.0	LUMN	-6.9%	GILD	-4.12%
63.0	T	-6.51%	PHM	-4.02%
63.0	HLT	-6.32%	CSTM	-3.93%
63.0	COST	-6.32%	THC	-3.74%
63.0	GS	-6.23%	AMAT	-3.74%
63.0	CSTM	-5.94%	CCL	-3.54%
63.0	CPRT	-5.94%	LUMN	-3.16%
63.0	MRK	-5.84%	TMUS	-2.97%
63.0	NFLX	-5.65%	ACGL	-2.97%

All TMD: 126d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
126.0	NVDA	-22.02%	NVDA	-17.02%
126.0	AMAT	-20.08%	GE	-12.95%
126.0	GE	-18.96%	THC	-11.42%
126.0	PHM	-18.65%	GLD	-11.42%
126.0	PWR	-14.78%	TRGP	-10.91%
126.0	JPM	-14.58%	LLY	-10.6%
126.0	CAH	-13.76%	AMAT	-9.48%
126.0	GS	-13.56%	GBTC	-9.48%
126.0	GLD	-13.46%	B	-9.17%
126.0	HSBC	-13.15%	TMUS	-9.07%
126.0	T	-13.05%	MU	-9.07%
126.0	COST	-12.64%	RIO	-8.77%
126.0	MRK	-12.33%	CAH	-8.46%
126.0	GBTC	-12.33%	GILD	-7.34%
126.0	ORCL	-12.13%	PWR	-7.14%
126.0	NFLX	-10.81%	NEM	-7.03%
126.0	LLY	-10.3%	ACGL	-6.42%
126.0	TRGP	-10.3%	CMG	-6.42%
126.0	MS	-10.09%	CSTM	-6.01%
126.0	CSCO	-9.99%	WDC	-5.91%
126.0	GWW	-9.58%	ORCL	-5.91%
126.0	THC	-9.38%	AMD	-5.61%
126.0	AMD	-9.28%	PHM	-5.61%
126.0	MSFT	-9.28%	SLV	-5.51%
126.0	MU	-9.17%	TEVA	-5.5%

All TMD: 252d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
252.0	GE	-52.87%	GLD	-32.63%
252.0	PHM	-38.71%	GE	-31.11%
252.0	JPM	-33.22%	CAH	-26.32%
252.0	GBTC	-32.28%	HSBC	-24.09%
252.0	PWR	-31.58%	GBTC	-23.86%
252.0	NFLX	-29.59%	PHM	-21.64%
252.0	COST	-27.13%	GS	-18.71%
252.0	MS	-25.96%	LLY	-17.31%
252.0	GS	-24.56%	PWR	-15.91%
252.0	ACGL	-23.63%	COST	-15.32%
252.0	HSBC	-23.51%	NVDA	-15.2%
252.0	ORCL	-22.46%	TMUS	-15.2%
252.0	NVDA	-20.0%	ACGL	-13.92%
252.0	T	-18.48%	TRGP	-13.92%
252.0	MU	-17.89%	NFLX	-12.87%
252.0	LLY	-17.78%	GOOGL	-12.28%
252.0	CAH	-17.54%	VST	-10.41%
252.0	CSCO	-16.96%	JPM	-10.18%
252.0	AMAT	-16.49%	META	-9.59%
252.0	CPRT	-16.49%	THC	-9.59%
252.0	DHI	-15.56%	T	-9.36%
252.0	ISRG	-15.32%	MU	-9.12%
252.0	TMUS	-14.85%	TEVA	-9.12%
252.0	CMG	-13.8%	B	-8.89%
252.0	AMD	-13.8%	AMAT	-8.54%

P30D: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	ON	-25.0%	ON	-20.0%
1.0	MU	-20.0%	MU	-15.0%
1.0	TXN	-15.0%	INTC	-15.0%
1.0	CAH	-15.0%	CLF	-10.0%
1.0	AMC	-15.0%	NVS	-10.0%
1.0	INTC	-15.0%	MRK	-10.0%
1.0	NWL	-10.0%	CAH	-5.0%
1.0	TFC	-10.0%	CCL	-5.0%
1.0	TLT	-10.0%	TFC	-5.0%
1.0	SPY	-10.0%	CHTR	-5.0%
1.0	BUD	-10.0%	TEVA	-5.0%
1.0	BIIB	-10.0%	HON	-5.0%
1.0	DHI	-10.0%	RIO	-5.0%
1.0	BA	-10.0%	CSTM	-5.0%
1.0	TDG	-10.0%	DHI	-5.0%
1.0	MOS	-10.0%	QQQ	-5.0%
1.0	ACGL	-10.0%	EMB	-5.0%
1.0	VNO	-10.0%	NWL	-5.0%
1.0	LLY	-5.0%	GOOGL	-5.0%
1.0	ELAN	-5.0%	FITB	-5.0%
1.0	KHC	-5.0%	HD	-5.0%
1.0	EMB	-5.0%	CSCO	-5.0%
1.0	JPM	-5.0%	HSBC	-5.0%
1.0	SBUX	-5.0%	AMGN	-5.0%
1.0	QQQ	-5.0%	KEY	-5.0%

P30D: 10d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	CAH	-54.55%	CAH	-27.27%
10.0	JPM	-36.36%	INTC	-18.18%
10.0	BAC	-36.36%	NWL	-18.18%
10.0	PHM	-27.27%	AMAT	-18.18%
10.0	INTC	-18.18%	JPM	-9.09%
10.0	HD	-18.18%	MU	-9.09%
10.0	USB	-18.18%	AMC	-9.09%
10.0	DHI	-9.09%	HON	-9.09%
10.0	NWL	-9.09%	MUB	0.0%
10.0	MU	-9.09%	NAVI	0.0%
10.0	TDG	-9.09%	NEM	0.0%
10.0	MRK	-9.09%	NVS	0.0%
10.0	VST	-9.09%	NVDA	0.0%
10.0	LVS	0.0%	MSTR	0.0%
10.0	ORCL	0.0%	ON	0.0%
10.0	KALU	0.0%	ORCL	0.0%
10.0	ON	0.0%	ORLY	0.0%
10.0	KHC	0.0%	NFLX	0.0%
10.0	NVS	0.0%	MSI	0.0%
10.0	NVDA	0.0%	MRK	0.0%
10.0	NFLX	0.0%	MS	0.0%
10.0	NEM	0.0%	OXY	0.0%
10.0	NAVI	0.0%	MOS	0.0%
10.0	LUMN	0.0%	MNST	0.0%
10.0	MUB	0.0%	META	0.0%

P90D: 1d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	TDG	-10.0%	ON	-16.67%
1.0	ON	-10.0%	CCL	-6.67%
1.0	EMB	-8.33%	MS	-6.67%
1.0	OXY	-8.33%	HSBC	-6.67%
1.0	INTU	-8.33%	HD	-5.0%
1.0	CVS	-6.67%	CSCO	-5.0%
1.0	DHI	-6.67%	MRK	-5.0%
1.0	PHM	-6.67%	MU	-5.0%
1.0	TFC	-6.67%	INTC	-5.0%
1.0	HSBC	-6.67%	CSTM	-5.0%
1.0	MU	-6.67%	NVS	-5.0%
1.0	VICI	-6.67%	RIO	-5.0%
1.0	BA	-6.67%	EMB	-3.33%
1.0	CAH	-5.0%	QQQ	-3.33%
1.0	BIIB	-5.0%	HON	-3.33%
1.0	SPY	-5.0%	TDG	-3.33%
1.0	MSFT	-5.0%	HLT	-3.33%
1.0	ADBE	-5.0%	CHTR	-3.33%
1.0	AAP	-5.0%	ORLY	-3.33%
1.0	AAPL	-5.0%	CDNS	-3.33%
1.0	XOM	-5.0%	CAH	-3.33%
1.0	CSCO	-5.0%	MSFT	-3.33%
1.0	HYG	-5.0%	DHI	-3.33%
1.0	HD	-5.0%	LLY	-3.33%
1.0	VZ	-5.0%	ADBE	-3.33%

P90D: 10d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	CAH	-19.61%	PWR	-19.61%
10.0	MSFT	-17.65%	GOOGL	-17.65%
10.0	QQQ	-15.69%	CSCO	-13.73%
10.0	CSCO	-13.73%	ON	-11.76%
10.0	ON	-11.76%	AMAT	-9.8%
10.0	BHP	-9.8%	AMD	-9.8%
10.0	MU	-9.8%	CVS	-9.8%
10.0	JPM	-7.84%	CAH	-7.84%
10.0	PHM	-7.84%	MNST	-7.84%
10.0	BAC	-7.84%	MSFT	-7.84%
10.0	SPY	-5.88%	NWL	-5.88%
10.0	DHI	-5.88%	MU	-5.88%
10.0	EMB	-5.88%	TEVA	-5.88%
10.0	COST	-5.88%	HLT	-5.88%
10.0	USB	-5.88%	QQQ	-3.92%
10.0	AVGO	-5.88%	BHP	-3.92%
10.0	GOOGL	-5.88%	SPY	-3.92%
10.0	AMAT	-5.88%	QCOM	-3.92%
10.0	OXY	-3.92%	BUD	-3.92%
10.0	HD	-3.92%	INTC	-3.92%
10.0	LLY	-3.92%	MS	-3.92%
10.0	AAPL	-3.92%	HON	-3.92%
10.0	FCX	-3.92%	AVGO	-3.92%
10.0	NWL	-1.96%	AMC	-1.96%
10.0	MUB	-1.96%	RIO	-1.96%

P90D: 21d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
21.0	QQQ	-35.0%	CSCO	-25.0%
21.0	AAPL	-30.0%	GOOGL	-22.5%
21.0	CAH	-30.0%	PWR	-22.5%
21.0	ON	-20.0%	MNST	-17.5%
21.0	GOOGL	-17.5%	AMAT	-17.5%
21.0	BHP	-15.0%	QQQ	-17.5%
21.0	CSCO	-15.0%	ON	-15.0%
21.0	SPY	-15.0%	AMD	-15.0%
21.0	BAC	-15.0%	CAH	-15.0%
21.0	TRGP	-12.5%	NWL	-10.0%
21.0	PWR	-12.5%	MU	-7.5%
21.0	LLY	-12.5%	CDNS	-7.5%
21.0	FITB	-10.0%	LLY	-5.0%
21.0	GS	-7.5%	AA	-5.0%
21.0	CCL	-5.0%	AVGO	-5.0%
21.0	AMAT	-5.0%	TEVA	-2.5%
21.0	MS	-5.0%	AMC	-2.5%
21.0	ELAN	-5.0%	SPY	-2.5%
21.0	PHM	-2.5%	BHP	-2.5%
21.0	MSFT	-2.5%	QCOM	-2.5%
21.0	HD	-2.5%	TRGP	-2.5%
21.0	USB	-2.5%	ORCL	-2.5%
21.0	COST	-2.5%	NEM	0.0%
21.0	RIO	-2.5%	MUB	0.0%
21.0	LQD	0.0%	MSFT	0.0%

P365D: 1d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
1.0	BHP	-6.4%	SLV	-6.43%
1.0	RIO	-6.4%	B	-4.8%
1.0	PHM	-5.2%	CSTM	-4.4%
1.0	BIIB	-5.2%	ON	-4.4%
1.0	XOM	-4.8%	INTC	-4.4%
1.0	NEM	-4.4%	RIO	-4.0%
1.0	OXY	-4.0%	NEM	-4.0%
1.0	EMB	-4.0%	CSCO	-3.6%
1.0	CAH	-4.0%	HSBC	-3.6%
1.0	MOS	-4.0%	LUMN	-3.6%
1.0	LUMN	-4.0%	BHP	-3.6%
1.0	DHI	-4.0%	BIIB	-3.2%
1.0	HSBC	-3.6%	MU	-3.2%
1.0	VICI	-3.6%	DHI	-3.2%
1.0	BA	-3.6%	PHM	-3.2%
1.0	AZO	-3.6%	AMAT	-2.8%
1.0	TFC	-3.6%	CCL	-2.8%
1.0	MS	-3.6%	MRK	-2.8%
1.0	AMAT	-3.2%	LEN	-2.4%
1.0	TEVA	-3.2%	ORLY	-2.4%
1.0	MU	-3.2%	OXY	-2.4%
1.0	POST	-3.2%	GS	-2.4%
1.0	HYG	-3.2%	AZN	-2.0%
1.0	CSCO	-2.8%	PEP	-2.0%
1.0	TLT	-2.8%	T	-2.0%

P365D: 10d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
10.0	BHP	-14.52%	SLV	-8.33%
10.0	AMAT	-13.69%	GOOGL	-7.47%
10.0	PHM	-7.88%	AMD	-7.47%
10.0	CSCO	-6.64%	TEVA	-7.05%
10.0	RIO	-6.22%	AMAT	-7.05%
10.0	COST	-4.98%	B	-6.22%
10.0	CAH	-4.98%	MU	-5.81%
10.0	MRK	-4.98%	CSCO	-5.39%
10.0	OXY	-4.98%	PWR	-4.56%
10.0	MSFT	-4.56%	BHP	-4.15%
10.0	AVGO	-4.15%	ORCL	-4.15%
10.0	B	-4.15%	T	-4.15%
10.0	PEP	-4.15%	LVS	-4.15%
10.0	GS	-3.73%	RIO	-3.73%
10.0	AMD	-3.73%	MSI	-3.73%
10.0	DHI	-3.32%	LUMN	-3.73%
10.0	QQQ	-3.32%	PEP	-3.73%
10.0	LUMN	-3.32%	MS	-2.49%
10.0	EMB	-3.32%	AZN	-2.49%
10.0	BA	-3.32%	COST	-2.49%
10.0	AZO	-3.32%	BHC	-2.49%
10.0	MU	-2.9%	NEM	-2.49%
10.0	MUB	-2.9%	SPY	-2.07%
10.0	BMY	-2.49%	QQQ	-2.07%
10.0	FSUGY	-2.49%	OXY	-2.07%

P365D: 21d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
21.0	BHP	-18.7%	AMD	-16.52%
21.0	AMAT	-12.61%	B	-13.04%
21.0	B	-11.3%	TEVA	-10.0%
21.0	OXY	-9.57%	AMAT	-9.13%
21.0	QQQ	-9.57%	MU	-7.39%
21.0	CSCO	-9.57%	CSCO	-6.96%
21.0	BA	-9.57%	RIO	-6.52%
21.0	CAH	-6.96%	CAH	-6.09%
21.0	LLY	-6.52%	T	-5.22%
21.0	ORCL	-6.52%	QQQ	-5.22%
21.0	TEVA	-6.52%	MSI	-5.22%
21.0	SPY	-6.52%	PEP	-5.22%
21.0	RIO	-6.09%	LUMN	-4.78%
21.0	CSTM	-6.09%	LLY	-4.78%
21.0	GS	-6.09%	TRGP	-4.78%
21.0	LVS	-5.22%	OXY	-4.78%
21.0	CCL	-4.78%	PWR	-4.78%
21.0	LNC	-4.78%	GSK	-4.78%
21.0	COST	-4.78%	SLV	-4.37%
21.0	AMD	-4.35%	BHP	-4.35%
21.0	DHI	-4.35%	ORCL	-4.35%
21.0	LEN	-4.35%	AVGO	-4.35%
21.0	AZN	-3.91%	LVS	-4.35%
21.0	TRGP	-3.91%	ON	-3.48%
21.0	PHM	-3.91%	XOM	-3.48%

P365D: 63d

The columns labeled "OaRBreak_VmS" represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
63.0	AMAT	-42.02%	B	-35.64%
63.0	CAH	-32.98%	CAH	-31.91%
63.0	CSTM	-30.32%	TEVA	-23.4%
63.0	BHP	-26.06%	CSTM	-21.81%
63.0	TRGP	-26.06%	AMD	-21.81%
63.0	RIO	-22.34%	AMAT	-18.09%
63.0	LLY	-21.28%	RIO	-18.09%
63.0	GOOGL	-20.21%	GOOGL	-13.83%
63.0	AMD	-18.62%	XOM	-13.3%
63.0	QQQ	-16.49%	CSCO	-10.64%
63.0	MNST	-15.96%	NEM	-10.64%
63.0	NEM	-15.43%	BHP	-10.11%
63.0	OXY	-15.43%	OXY	-9.57%
63.0	GWW	-14.36%	MU	-9.57%
63.0	BMY	-13.83%	BALL	-9.57%
63.0	GS	-12.23%	QCOM	-7.98%
63.0	LUMN	-11.7%	GLD	-7.45%
63.0	BIIB	-10.11%	LUMN	-7.45%
63.0	IRM	-10.11%	MSI	-6.38%
63.0	TEVA	-9.57%	ON	-6.38%
63.0	MRK	-9.04%	MS	-6.38%
63.0	B	-8.51%	INTC	-5.85%
63.0	CDNS	-7.98%	SLV	-5.35%
63.0	HON	-7.98%	TRGP	-5.32%
63.0	VNO	-7.98%	LLY	-5.32%

P365D: 126d

The columns labeled “OaRBreak_VmS” represent the average amount by which Vector Model OaR Breakage exceeds Sigma OaR breakage for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95OaRBreak_VmS	Ticker	99OaRBreak_VmS
126.0	AMAT	-78.4%	RIO	-68.0%
126.0	TRGP	-71.2%	AMAT	-67.2%
126.0	BHP	-69.6%	CSTM	-47.2%
126.0	CAH	-63.2%	TEVA	-46.4%
126.0	RIO	-45.6%	CAH	-41.6%
126.0	MRK	-38.4%	B	-36.0%
126.0	MNST	-36.8%	INTC	-35.2%
126.0	TEVA	-36.0%	BHP	-32.8%
126.0	XOM	-31.2%	AA	-31.2%
126.0	AZN	-28.8%	CSCO	-28.0%
126.0	GWW	-28.0%	PWR	-27.2%
126.0	PWR	-26.4%	SLV	-23.39%
126.0	HSBC	-26.4%	NEM	-23.2%
126.0	BIIB	-23.2%	TRGP	-22.4%
126.0	CMA	-17.39%	HSBC	-16.0%
126.0	IRM	-16.8%	TXN	-11.2%
126.0	NEM	-14.4%	ON	-10.4%
126.0	OXY	-13.6%	XOM	-8.8%
126.0	CSCO	-13.6%	MRK	-8.0%
126.0	CSTM	-8.0%	WDC	-7.2%
126.0	AMD	-8.0%	IRM	-7.2%
126.0	LLY	-7.2%	AMD	-7.2%
126.0	AMGN	-7.2%	MNST	-5.6%
126.0	INTC	-6.4%	GLD	-1.6%
126.0	ON	-5.6%	GOOGL	-1.6%

Appendix 3: Top 25 Ticker Level Differences in VM vs. Sigma 95% and 99% ROLOBC

All TMD: 1d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	X	0.21%	NVDA	0.29%
1.0	AVGO	0.2%	X	0.29%
1.0	CCL	0.19%	PWR	0.23%
1.0	TSLA	0.16%	GBTC	0.22%
1.0	NVDA	0.16%	LLY	0.21%
1.0	GE	0.15%	GE	0.21%
1.0	B	0.13%	AVGO	0.2%
1.0	GBTC	0.12%	CAH	0.18%
1.0	VST	0.12%	MU	0.17%
1.0	LLY	0.11%	CCL	0.16%
1.0	TDG	0.11%	AMD	0.16%
1.0	AMD	0.11%	TDG	0.13%
1.0	AMC	0.1%	TRGP	0.13%
1.0	CAH	0.09%	AMAT	0.13%
1.0	DHI	0.09%	VST	0.13%
1.0	AMAT	0.09%	CDNS	0.12%
1.0	JAZZ	0.08%	JAZZ	0.12%
1.0	CYH	0.08%	CYH	0.11%
1.0	MU	0.08%	B	0.11%
1.0	SBNY	0.07%	TSLA	0.11%
1.0	LVS	0.07%	HLT	0.11%
1.0	AZO	0.07%	ON	0.11%
1.0	PWR	0.07%	WYNN	0.1%
1.0	PHM	0.06%	DHI	0.1%
1.0	MSFT	0.06%	LVS	0.1%

All TMD: 10d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	NVDA	2.51%	NVDA	3.15%
10.0	SBNY	1.86%	LLY	2.26%
10.0	TSLA	1.79%	AMAT	2.0%
10.0	AVGO	1.63%	CCL	1.73%
10.0	CCL	1.61%	PWR	1.61%
10.0	LLY	1.48%	AVGO	1.61%
10.0	AMAT	1.0%	TSLA	1.6%
10.0	AMD	0.94%	MU	1.49%
10.0	FRCB	0.93%	GBTC	1.45%
10.0	PWR	0.9%	AMD	1.12%
10.0	GBTC	0.83%	CSTM	1.04%
10.0	MSFT	0.81%	TEVA	0.96%
10.0	BHC	0.74%	CAH	0.92%
10.0	AZO	0.72%	AZO	0.89%
10.0	QQQ	0.7%	LUMN	0.86%
10.0	LVS	0.63%	GE	0.86%
10.0	CAH	0.6%	PHM	0.84%
10.0	PHM	0.53%	GS	0.8%
10.0	JPM	0.51%	COST	0.79%
10.0	HLT	0.5%	DHI	0.77%
10.0	GT	0.49%	ACGL	0.77%
10.0	GE	0.49%	PCG	0.7%
10.0	DHI	0.48%	T	0.69%
10.0	MU	0.48%	TDG	0.69%
10.0	ELAN	0.46%	QQQ	0.69%

All TMD: 21d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
21.0	SBNY	5.03%	NVDA	5.83%
21.0	NVDA	5.02%	AMD	5.3%
21.0	TSLA	4.66%	TSLA	4.41%
21.0	CCL	3.4%	ETRN	4.03%
21.0	AMAT	3.0%	CCL	3.99%
21.0	AMD	2.79%	GBTC	3.83%
21.0	LLY	2.41%	AMAT	3.81%
21.0	GBTC	2.27%	LLY	3.11%
21.0	FRCB	2.24%	LUMN	3.08%
21.0	PWR	1.97%	SBNY	2.85%
21.0	AZO	1.71%	PWR	2.35%
21.0	PCG	1.7%	VST	2.25%
21.0	QQQ	1.66%	AVGO	2.22%
21.0	AVGO	1.64%	AA	2.21%
21.0	ELAN	1.51%	CDNS	2.04%
21.0	DHI	1.46%	PCG	2.01%
21.0	PHM	1.46%	GE	2.0%
21.0	MU	1.35%	CAH	1.97%
21.0	CAH	1.33%	TEVA	1.95%
21.0	MSFT	1.28%	MU	1.94%
21.0	CDNS	1.22%	DHI	1.93%
21.0	JPM	1.05%	AMC	1.86%
21.0	LVS	1.05%	AZO	1.84%
21.0	GE	1.01%	ELAN	1.81%
21.0	WYNN	0.95%	PHM	1.68%

All TMD: 63d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
63.0	NVDA	14.98%	AMD	20.88%
63.0	SBNY	13.02%	GBTC	19.34%
63.0	CCL	12.09%	NVDA	18.33%
63.0	AMAT	11.17%	LUMN	12.2%
63.0	AMD	9.33%	CCL	11.28%
63.0	MU	8.89%	LLY	11.13%
63.0	GBTC	7.51%	AMAT	10.7%
63.0	MSTR	7.22%	PWR	10.64%
63.0	AMC	7.19%	GE	8.84%
63.0	LLY	6.82%	MU	8.6%
63.0	TSLA	5.9%	ETRN	8.48%
63.0	FRCB	5.84%	PHM	8.42%
63.0	PWR	5.58%	B	8.32%
63.0	QQQ	5.02%	MSTR	6.79%
63.0	ELAN	5.0%	MS	6.53%
63.0	VNO	4.89%	TEVA	6.52%
63.0	PCG	4.64%	VST	6.36%
63.0	PHM	4.63%	CAH	6.11%
63.0	DHI	4.56%	ELAN	5.65%
63.0	CAH	4.28%	AMC	5.59%
63.0	MSFT	3.7%	JPM	5.55%
63.0	AZO	3.6%	TSLA	5.21%
63.0	LVS	3.52%	CSTM	5.1%
63.0	AMZN	3.35%	X	5.07%
63.0	CDNS	3.25%	PCG	5.0%

All TMD: 126d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
126.0	NVDA	37.51%	GBTC	47.62%
126.0	AMAT	28.04%	NVDA	43.28%
126.0	MU	26.27%	AMD	27.6%
126.0	GBTC	21.76%	MU	26.0%
126.0	AMD	19.64%	PWR	24.99%
126.0	SBNY	19.0%	AMAT	24.81%
126.0	CCL	18.31%	CCL	24.17%
126.0	PHM	16.5%	LLY	23.74%
126.0	PWR	14.02%	GE	23.15%
126.0	QQQ	13.37%	PHM	23.06%
126.0	DHI	13.12%	LUMN	23.03%
126.0	VNO	13.09%	WDC	18.86%
126.0	AMZN	13.02%	B	18.61%
126.0	GE	12.19%	THC	18.19%
126.0	AMC	11.52%	MS	17.09%
126.0	TSLA	11.22%	JPM	16.26%
126.0	THC	11.06%	ORCL	14.93%
126.0	MS	11.0%	CAH	14.4%
126.0	PCG	10.35%	TSLA	14.24%
126.0	LLY	10.03%	TEVA	13.32%
126.0	ELAN	9.61%	X	13.25%
126.0	ORCL	9.35%	QQQ	12.89%
126.0	MSFT	8.67%	VST	12.55%
126.0	NFLX	8.52%	DHI	12.37%
126.0	B	8.52%	AMZN	12.32%

All TMD: 252d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
252.0	NVDA	111.98%	GBTC	115.13%
252.0	GBTC	90.55%	NVDA	80.13%
252.0	MU	76.41%	GE	78.49%
252.0	AMD	64.79%	MU	76.38%
252.0	AMAT	50.11%	WDC	73.03%
252.0	NFLX	50.06%	CCL	68.27%
252.0	PHM	49.09%	PHM	64.98%
252.0	GE	48.02%	AMAT	56.18%
252.0	PWR	47.02%	AMD	54.75%
252.0	CCL	47.0%	THC	54.52%
252.0	LLY	44.83%	MS	45.15%
252.0	QQQ	39.14%	TRGP	43.73%
252.0	AMZN	38.85%	X	41.64%
252.0	ELAN	38.76%	ELAN	37.42%
252.0	MS	37.05%	NFLX	37.26%
252.0	VNO	35.79%	QQQ	36.98%
252.0	CDNS	33.6%	PWR	33.19%
252.0	THC	33.04%	HSBC	32.18%
252.0	JPM	32.4%	SLV	31.86%
252.0	DHI	32.39%	INTC	31.84%
252.0	MSFT	31.18%	TEVA	30.58%
252.0	GOOGL	29.33%	GOOGL	29.02%
252.0	COST	28.83%	T	28.76%
252.0	ACGL	26.77%	ORCL	28.31%
252.0	SPY	25.97%	GS	28.19%

P30D: 1d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	AMC	2.64%	NWL	4.45%
1.0	CAH	1.71%	AMC	2.37%
1.0	WDC	1.42%	CAH	2.0%
1.0	VNO	1.1%	INTC	1.72%
1.0	NWL	0.89%	VNO	1.5%
1.0	CYH	0.73%	CYH	1.39%
1.0	AVGO	0.7%	AMAT	1.26%
1.0	AMAT	0.66%	BIIB	1.22%
1.0	CLF	0.64%	JPM	0.91%
1.0	VST	0.58%	DHI	0.86%
1.0	PCG	0.55%	AMGN	0.82%
1.0	ACGL	0.53%	ACGL	0.7%
1.0	GT	0.53%	MU	0.69%
1.0	CMG	0.5%	WDC	0.67%
1.0	BHP	0.48%	GT	0.6%
1.0	DHI	0.41%	AMZN	0.58%
1.0	BIIB	0.41%	LLY	0.56%
1.0	NVDA	0.4%	AMD	0.51%
1.0	JPM	0.38%	TFC	0.48%
1.0	LLY	0.36%	VST	0.44%
1.0	WFC	0.33%	PCG	0.43%
1.0	CCL	0.31%	CMG	0.43%
1.0	CDNS	0.31%	ABBV	0.42%
1.0	INTC	0.3%	ORLY	0.41%
1.0	TDG	0.3%	CVS	0.38%

P30D: 10d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	CAH	20.28%	CAH	20.69%
10.0	VST	8.65%	CYH	19.09%
10.0	ACGL	6.72%	NWL	16.78%
10.0	MU	6.44%	INTC	12.78%
10.0	CYH	6.39%	MU	12.33%
10.0	HD	5.97%	AMAT	12.24%
10.0	MSTR	4.82%	VST	11.47%
10.0	INTC	4.75%	ACGL	7.64%
10.0	JPM	4.39%	NAVI	7.21%
10.0	CMG	4.02%	VNO	6.54%
10.0	TDG	3.44%	JPM	5.61%
10.0	VNO	3.33%	THC	4.16%
10.0	PWR	3.19%	PWR	3.74%
10.0	NAVI	3.04%	HD	3.73%
10.0	ADBE	2.56%	TDG	3.73%
10.0	BAC	2.45%	CMG	3.68%
10.0	NFLX	1.87%	LLY	3.46%
10.0	TLT	1.77%	GT	3.43%
10.0	GLD	1.73%	DHI	3.35%
10.0	FIS	1.71%	USB	3.05%
10.0	AA	1.68%	TLT	2.81%
10.0	CDNS	1.66%	WFC	2.35%
10.0	PHM	1.52%	PHM	2.28%
10.0	QCOM	1.5%	VFC	2.22%
10.0	META	1.46%	BAC	2.09%

P90D: 1d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	AVGO	1.04%	MU	1.79%
1.0	AMC	0.79%	NWL	1.29%
1.0	CYH	0.54%	CSCO	1.02%
1.0	PWR	0.53%	AVGO	0.9%
1.0	VST	0.53%	AMD	0.89%
1.0	VNO	0.48%	PWR	0.82%
1.0	WDC	0.47%	BIIB	0.76%
1.0	SPY	0.4%	INTC	0.76%
1.0	QQQ	0.32%	LUMN	0.71%
1.0	NVDA	0.32%	VNO	0.7%
1.0	AAP	0.32%	CYH	0.65%
1.0	LLY	0.3%	CDNS	0.62%
1.0	MU	0.29%	AMC	0.56%
1.0	TDG	0.28%	NVDA	0.55%
1.0	SBUX	0.27%	CVS	0.54%
1.0	CCL	0.27%	LLY	0.54%
1.0	HSBC	0.24%	ON	0.52%
1.0	PRGO	0.24%	DHI	0.51%
1.0	BHP	0.23%	VST	0.45%
1.0	DHI	0.23%	TDG	0.43%
1.0	CAH	0.22%	WDC	0.43%
1.0	PHM	0.22%	QQQ	0.43%
1.0	LUMN	0.21%	AMAT	0.42%
1.0	LW	0.21%	TRGP	0.42%
1.0	BIIB	0.18%	QCOM	0.41%

P90D: 10d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	AVGO	5.65%	MU	14.84%
10.0	PWR	4.29%	AMD	12.16%
10.0	MU	3.99%	AMAT	9.36%
10.0	QQQ	3.56%	LLY	9.21%
10.0	NVDA	2.94%	PWR	7.75%
10.0	VST	2.83%	CSCO	7.02%
10.0	CAH	2.73%	NWL	6.91%
10.0	LLY	2.62%	AVGO	5.73%
10.0	CSCO	2.48%	VNO	4.77%
10.0	LUMN	2.25%	CVS	4.53%
10.0	AMD	2.1%	CYH	4.1%
10.0	CYH	2.03%	VST	4.09%
10.0	SPY	1.96%	CAH	4.0%
10.0	MSFT	1.93%	QQQ	3.78%
10.0	NFLX	1.84%	QCOM	3.39%
10.0	TDG	1.67%	NVDA	3.37%
10.0	CZR	1.49%	TRGP	3.17%
10.0	JPM	1.35%	GOOGL	2.92%
10.0	GT	1.28%	SPY	2.75%
10.0	BHP	1.17%	TDG	1.77%
10.0	GLD	1.12%	MSFT	1.74%
10.0	FIS	1.09%	HLT	1.71%
10.0	DHI	1.06%	MS	1.67%
10.0	ADBE	0.99%	BIIB	1.53%
10.0	HD	0.94%	CZR	1.51%

P90D: 21d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
21.0	CSCO	12.48%	AMD	28.75%
21.0	AMD	11.45%	LLY	21.71%
21.0	AVGO	9.67%	CSCO	17.87%
21.0	MU	9.17%	MU	17.43%
21.0	LLY	8.48%	AMC	15.3%
21.0	PWR	8.05%	AMAT	13.79%
21.0	QQQ	7.43%	CAH	9.18%
21.0	NVDA	6.33%	INTC	8.65%
21.0	CAH	5.78%	AVGO	8.41%
21.0	GOOGL	4.61%	PWR	7.71%
21.0	TDG	3.97%	GS	6.8%
21.0	SPY	3.63%	TEVA	6.7%
21.0	LUMN	3.59%	GOOGL	5.11%
21.0	MSTR	3.51%	QQQ	5.06%
21.0	TRGP	3.1%	TRGP	4.72%
21.0	CZR	2.98%	NVDA	4.63%
21.0	CYH	2.46%	CVS	4.59%
21.0	AAPL	2.4%	SPY	4.53%
21.0	AMAT	2.4%	CYH	4.14%
21.0	GLD	2.25%	ON	3.63%
21.0	ON	2.24%	BIIB	3.62%
21.0	NFLX	2.15%	TDG	3.56%
21.0	AMZN	1.95%	CDNS	3.38%
21.0	BHP	1.9%	CZR	3.31%
21.0	JPM	1.81%	MS	3.05%

P365D: 1d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	LUMN	0.61%	LUMN	0.67%
1.0	AVGO	0.46%	AMD	0.65%
1.0	AMAT	0.34%	MU	0.56%
1.0	AMD	0.26%	AMAT	0.54%
1.0	BHP	0.25%	INTC	0.5%
1.0	TEVA	0.24%	SLV	0.47%
1.0	PWR	0.24%	BHP	0.42%
1.0	CAH	0.23%	CSTM	0.4%
1.0	VST	0.22%	AVGO	0.37%
1.0	AMC	0.22%	PWR	0.37%
1.0	FSUGY	0.21%	BIIB	0.36%
1.0	LLY	0.19%	CAH	0.32%
1.0	BIIB	0.18%	LLY	0.31%
1.0	HSBC	0.17%	TEVA	0.29%
1.0	MU	0.16%	RIO	0.28%
1.0	SLV	0.16%	HSBC	0.24%
1.0	SPY	0.14%	NVDA	0.24%
1.0	PHM	0.13%	CLF	0.23%
1.0	OXY	0.13%	CYH	0.22%
1.0	B	0.11%	FSUGY	0.22%
1.0	QQQ	0.11%	LW	0.2%
1.0	BMY	0.11%	NWL	0.2%
1.0	ACGL	0.09%	KEY	0.19%
1.0	RIO	0.09%	CSCO	0.18%
1.0	LVS	0.09%	ZION	0.18%

P365D: 10d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	LUMN	5.54%	AMAT	7.11%
10.0	AMAT	3.88%	LUMN	6.15%
10.0	AVGO	3.48%	MU	5.25%
10.0	SLV	2.33%	AMD	4.76%
10.0	AMD	2.33%	AVGO	3.41%
10.0	CYH	1.88%	BHP	3.32%
10.0	BHP	1.81%	SLV	3.32%
10.0	CAH	1.65%	PWR	3.08%
10.0	PWR	1.4%	CSTM	2.39%
10.0	NVDA	1.25%	CAH	2.39%
10.0	NWL	1.25%	BIIB	2.26%
10.0	MU	1.17%	TEVA	2.15%
10.0	QQQ	1.16%	CSCO	2.12%
10.0	BIIB	0.91%	CYH	1.87%
10.0	JPM	0.9%	LLY	1.81%
10.0	CSCO	0.86%	NVDA	1.71%
10.0	TEVA	0.86%	LNC	1.69%
10.0	RIO	0.85%	GS	1.48%
10.0	LLY	0.81%	RIO	1.38%
10.0	FSUGY	0.72%	LW	1.37%
10.0	GS	0.68%	GOOGL	1.35%
10.0	ACGL	0.67%	GNRC	1.34%
10.0	BMY	0.67%	QQQ	1.26%
10.0	SPY	0.67%	NEM	1.23%
10.0	LW	0.62%	TRGP	1.12%

P365D: 21d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
21.0	AMAT	10.39%	AMD	16.67%
21.0	AMD	9.29%	LUMN	14.68%
21.0	LUMN	7.07%	AMAT	10.33%
21.0	AVGO	5.52%	TEVA	7.77%
21.0	BHP	4.62%	MU	6.61%
21.0	MU	4.57%	BHP	6.28%
21.0	CAH	4.07%	AVGO	5.61%
21.0	BIIB	3.67%	CAH	5.28%
21.0	CSCO	3.53%	CSCO	4.85%
21.0	SLV	3.29%	LLY	4.83%
21.0	PWR	2.64%	BIIB	4.72%
21.0	NVDA	2.61%	CSTM	4.68%
21.0	TEVA	2.42%	SLV	4.2%
21.0	QQQ	2.4%	GOOGL	3.4%
21.0	CSTM	2.36%	GE	3.27%
21.0	NWL	2.29%	GS	3.16%
21.0	LLY	2.29%	LNC	3.16%
21.0	CYH	1.87%	PCG	3.14%
21.0	LNC	1.85%	B	2.97%
21.0	RIO	1.85%	LVS	2.89%
21.0	B	1.63%	RIO	2.68%
21.0	TFC	1.46%	PWR	2.64%
21.0	PHM	1.42%	GSK	2.51%
21.0	SPY	1.38%	ON	2.46%
21.0	LVS	1.38%	FSUGY	2.41%

P365D: 63d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
63.0	AMAT	39.73%	AMD	76.33%
63.0	MU	34.15%	LUMN	51.57%
63.0	AMD	27.47%	AMAT	35.08%
63.0	LUMN	26.87%	MU	32.33%
63.0	BHP	20.26%	BHP	29.58%
63.0	CAH	16.69%	TEVA	26.99%
63.0	LLY	12.78%	B	25.28%
63.0	BIIB	12.75%	LLY	24.67%
63.0	CSTM	11.3%	INTC	20.16%
63.0	AMC	11.2%	CSTM	18.77%
63.0	TEVA	10.17%	CAH	15.88%
63.0	TRGP	9.99%	RIO	15.48%
63.0	CSCO	9.83%	OXY	14.94%
63.0	B	9.05%	NEM	12.87%
63.0	RIO	8.53%	AMC	12.46%
63.0	SLV	8.41%	FSUGY	11.26%
63.0	NVDA	5.79%	CSCO	11.22%
63.0	OXY	5.49%	GOOGL	11.19%
63.0	FSUGY	5.34%	WDC	9.96%
63.0	GS	4.77%	BIIB	9.94%
63.0	NEM	4.63%	SLV	8.69%
63.0	GOOGL	4.61%	ZION	8.49%
63.0	GWW	3.88%	GS	7.68%
63.0	AVGO	3.53%	QCOM	7.26%
63.0	QQQ	3.44%	TRGP	7.06%

P365D: 126d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
126.0	AMAT	109.14%	INTC	108.88%
126.0	MU	99.64%	AMAT	99.54%
126.0	BHP	69.66%	MU	81.13%
126.0	INTC	48.65%	B	79.06%
126.0	TRGP	42.87%	BHP	73.91%
126.0	B	32.73%	WDC	65.85%
126.0	TEVA	30.2%	TEVA	61.55%
126.0	SLV	29.78%	LUMN	52.15%
126.0	CAH	29.41%	PWR	47.56%
126.0	AMD	29.24%	CSTM	44.85%
126.0	RIO	27.33%	CAH	42.87%
126.0	LLY	26.29%	NEM	42.11%
126.0	LUMN	23.76%	AMD	41.97%
126.0	BIIB	23.24%	TRGP	39.74%
126.0	GWW	21.63%	OXY	38.98%
126.0	AMC	20.72%	RIO	35.28%
126.0	ON	18.57%	LLY	34.04%
126.0	FSUGY	17.78%	SLV	33.97%
126.0	CSCO	17.08%	UAA	31.71%
126.0	CSTM	17.01%	CSCO	30.87%
126.0	OXY	14.36%	ON	26.11%
126.0	CNC	14.31%	IRM	23.27%
126.0	NEM	13.53%	FSUGY	23.0%
126.0	MNST	13.26%	MNST	19.65%
126.0	PWR	12.11%	GWW	19.28%

Appendix 4: Bottom 25 Ticker Level Differences in VM vs. Sigma 95% and 99% ROLOBC

All TMD: 1d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	IEP	-0.25%	IEP	-0.27%
1.0	MSTR	-0.23%	NWL	-0.22%
1.0	UAA	-0.18%	SIVBQ	-0.14%
1.0	CZR	-0.16%	INTU	-0.13%
1.0	NWL	-0.13%	UAA	-0.13%
1.0	GT	-0.11%	GT	-0.11%
1.0	GNRC	-0.09%	CZR	-0.1%
1.0	LNC	-0.08%	ZTS	-0.1%
1.0	ZTS	-0.07%	FIS	-0.09%
1.0	BXP	-0.07%	GNRC	-0.09%
1.0	NFLX	-0.07%	CHTR	-0.08%
1.0	META	-0.06%	MSTR	-0.07%
1.0	ORCL	-0.06%	META	-0.07%
1.0	BIIB	-0.06%	BXP	-0.06%
1.0	CHTR	-0.05%	CTLT	-0.06%
1.0	BALL	-0.04%	PRGO	-0.05%
1.0	BA	-0.04%	NAVI	-0.05%
1.0	UNH	-0.04%	BALL	-0.04%
1.0	AAPL	-0.04%	UNH	-0.04%
1.0	TLT	-0.04%	ADBE	-0.03%
1.0	GME	-0.03%	KHC	-0.03%
1.0	INTU	-0.03%	VICI	-0.03%
1.0	TEVA	-0.03%	TLT	-0.02%
1.0	INTC	-0.03%	VZ	-0.02%
1.0	AA	-0.03%	BIIB	-0.02%

All TMD: 10d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	CZR	-1.32%	IEP	-1.8%
10.0	IEP	-1.3%	SIVBQ	-1.44%
10.0	MSTR	-1.18%	NWL	-1.3%
10.0	WDC	-0.82%	CZR	-1.14%
10.0	ORCL	-0.8%	GME	-0.88%
10.0	META	-0.69%	ORCL	-0.86%
10.0	GNRC	-0.6%	INTU	-0.76%
10.0	SIVBQ	-0.56%	GT	-0.73%
10.0	INTU	-0.5%	META	-0.6%
10.0	NFLX	-0.48%	CLF	-0.58%
10.0	NWL	-0.47%	CNC	-0.57%
10.0	GOOGL	-0.41%	ETRN	-0.55%
10.0	AA	-0.4%	CYH	-0.53%
10.0	MS	-0.34%	AMC	-0.48%
10.0	BALL	-0.33%	VZ	-0.48%
10.0	KALU	-0.31%	OXY	-0.45%
10.0	GME	-0.31%	BXP	-0.42%
10.0	UAA	-0.29%	NFLX	-0.41%
10.0	AAPL	-0.26%	VNO	-0.37%
10.0	CLF	-0.26%	HD	-0.36%
10.0	UNH	-0.24%	ON	-0.32%
10.0	ZTS	-0.24%	ZTS	-0.32%
10.0	OXY	-0.23%	KALU	-0.32%
10.0	HCA	-0.23%	BAC	-0.3%
10.0	BXP	-0.23%	UAA	-0.29%

All TMD: 21d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
21.0	CZR	-3.3%	IEP	-3.08%
21.0	IEP	-3.13%	GME	-2.54%
21.0	MSTR	-1.94%	NWL	-2.35%
21.0	WDC	-1.66%	SIVBQ	-2.05%
21.0	GME	-1.6%	CZR	-1.95%
21.0	INTU	-1.38%	INTU	-1.69%
21.0	GNRC	-1.22%	GT	-1.48%
21.0	META	-1.21%	ADBE	-1.45%
21.0	CLF	-1.08%	GNRC	-1.44%
21.0	ORCL	-1.02%	BBY	-0.9%
21.0	KALU	-0.92%	NFLX	-0.87%
21.0	LUMN	-0.91%	CLF	-0.85%
21.0	ADBE	-0.81%	BALL	-0.85%
21.0	NWL	-0.76%	META	-0.8%
21.0	VZ	-0.68%	VFC	-0.78%
21.0	SIVBQ	-0.6%	VZ	-0.66%
21.0	BALL	-0.56%	ISRG	-0.65%
21.0	BAC	-0.55%	CHTR	-0.65%
21.0	INTC	-0.5%	BXP	-0.63%
21.0	FSUGY	-0.5%	KALU	-0.61%
21.0	CMA	-0.47%	HD	-0.59%
21.0	CPRT	-0.47%	AAP	-0.54%
21.0	OXY	-0.45%	UAA	-0.53%
21.0	AAPL	-0.43%	ORCL	-0.48%
21.0	KHC	-0.42%	KEY	-0.46%

All TMD: 63d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
63.0	IEP	-9.81%	SIVBQ	-17.54%
63.0	GNRC	-6.58%	IEP	-11.32%
63.0	NWL	-4.89%	NWL	-7.61%
63.0	META	-4.43%	GNRC	-7.56%
63.0	VFC	-3.12%	CLF	-7.07%
63.0	INTC	-3.04%	BHC	-5.14%
63.0	GME	-2.93%	CYH	-4.24%
63.0	SIVBQ	-2.85%	GME	-4.15%
63.0	ADBE	-2.44%	UAA	-4.03%
63.0	CZR	-2.4%	VFC	-3.94%
63.0	BALL	-2.17%	GT	-3.82%
63.0	UAA	-1.96%	PRGO	-3.55%
63.0	WDC	-1.65%	BALL	-2.89%
63.0	VZ	-1.6%	CVS	-2.47%
63.0	CLF	-1.41%	BBY	-2.3%
63.0	AA	-1.4%	FIS	-2.1%
63.0	INTU	-1.32%	ADBE	-2.01%
63.0	CYH	-1.32%	AAP	-2.0%
63.0	CVS	-1.29%	AA	-1.86%
63.0	BBY	-1.22%	CZR	-1.81%
63.0	QCOM	-1.22%	KEY	-1.69%
63.0	ORCL	-1.11%	KHC	-1.66%
63.0	KALU	-1.11%	VZ	-1.58%
63.0	ETRN	-0.97%	ZTS	-1.55%
63.0	ON	-0.96%	FRA	-1.36%

All TMD: 126d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
126.0	IEP	-20.92%	FRCB	-74.45%
126.0	NWL	-19.19%	SIVBQ	-23.49%
126.0	SIVBQ	-14.35%	NWL	-22.87%
126.0	VFC	-11.51%	IEP	-21.79%
126.0	GNRC	-11.01%	VFC	-13.68%
126.0	FRCB	-7.86%	AMC	-12.02%
126.0	WDC	-4.48%	GNRC	-10.51%
126.0	GT	-4.31%	PRGO	-10.08%
126.0	CLF	-4.08%	CLF	-9.04%
126.0	PRGO	-3.91%	BHC	-8.59%
126.0	BALL	-3.85%	GME	-6.81%
126.0	ADBE	-3.63%	GT	-6.47%
126.0	CVS	-3.61%	UAA	-6.36%
126.0	GME	-3.28%	CTLT	-6.01%
126.0	VZ	-3.26%	FIS	-5.62%
126.0	MSTR	-3.11%	SBNY	-5.31%
126.0	FIS	-2.95%	BALL	-4.84%
126.0	CYH	-2.9%	CNC	-4.58%
126.0	BBY	-2.81%	MOS	-4.48%
126.0	CMA	-2.38%	CHTR	-3.84%
126.0	AA	-2.3%	AAP	-3.73%
126.0	BHC	-1.98%	CZR	-3.72%
126.0	KHC	-1.89%	UNH	-3.04%
126.0	AAP	-1.55%	BBY	-2.94%
126.0	UAA	-1.53%	CMA	-2.91%

All TMD: 252d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2022-01-31 through 2026-06-29

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
252.0	FRCB	-115.88%	FRCB	-115.45%
252.0	SIVBQ	-81.22%	SBNY	-56.56%
252.0	NWL	-43.71%	SIVBQ	-55.92%
252.0	IEP	-42.91%	IEP	-48.96%
252.0	GNRC	-15.8%	NWL	-47.68%
252.0	GT	-14.91%	GT	-19.87%
252.0	SBNY	-13.3%	CLF	-19.43%
252.0	FIS	-13.26%	PRGO	-19.08%
252.0	CLF	-13.25%	MOS	-17.26%
252.0	CZR	-12.34%	CZR	-17.21%
252.0	UNH	-12.19%	AMC	-17.09%
252.0	VFC	-10.31%	AAP	-16.86%
252.0	MOS	-10.24%	VFC	-16.55%
252.0	CVS	-10.21%	UAA	-14.63%
252.0	AAP	-9.86%	CTLT	-13.37%
252.0	UAA	-9.52%	BHC	-13.32%
252.0	AA	-8.66%	GNRC	-13.12%
252.0	BHC	-7.85%	FIS	-9.69%
252.0	BALL	-6.92%	UNH	-9.36%
252.0	KEY	-6.11%	CNC	-8.64%
252.0	PRGO	-5.99%	KHC	-8.62%
252.0	CYH	-5.91%	KEY	-5.9%
252.0	ADBE	-5.84%	TLT	-4.86%
252.0	GME	-5.19%	LNC	-4.71%
252.0	CMA	-4.27%	CHTR	-4.18%

P30D: 1d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	AMD	-1.47%	LUMN	-2.25%
1.0	INTU	-0.99%	ORCL	-2.19%
1.0	OXY	-0.9%	ON	-1.98%
1.0	T	-0.83%	TSLA	-1.71%
1.0	ADBE	-0.81%	T	-1.51%
1.0	LUMN	-0.7%	OXY	-1.16%
1.0	MOS	-0.65%	INTU	-1.07%
1.0	TSLA	-0.63%	ADBE	-0.91%
1.0	MU	-0.55%	MSTR	-0.88%
1.0	RIO	-0.49%	LVS	-0.83%
1.0	VZ	-0.49%	MOS	-0.82%
1.0	VFC	-0.47%	GBTC	-0.66%
1.0	TXN	-0.47%	QCOM	-0.62%
1.0	LVS	-0.46%	AA	-0.57%
1.0	CSTM	-0.39%	TXN	-0.55%
1.0	ZTS	-0.39%	FSUGY	-0.53%
1.0	CSCO	-0.39%	BHC	-0.51%
1.0	FSUGY	-0.3%	GOOGL	-0.51%
1.0	GNRC	-0.3%	VICI	-0.5%
1.0	MSFT	-0.29%	RIO	-0.47%
1.0	ON	-0.28%	CLF	-0.44%
1.0	FCX	-0.24%	VFC	-0.42%
1.0	CPRT	-0.22%	MSFT	-0.41%
1.0	ORCL	-0.22%	VZ	-0.4%
1.0	VICI	-0.2%	ZTS	-0.39%

P30D: 10d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-06-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	WDC	-13.91%	ORCL	-21.1%
10.0	ON	-7.33%	OXY	-20.2%
10.0	GE	-6.29%	LUMN	-19.68%
10.0	LUMN	-6.16%	SLV	-12.05%
10.0	OXY	-5.77%	CLF	-10.21%
10.0	EXPE	-4.67%	PRGO	-8.51%
10.0	INTU	-4.52%	WDC	-7.95%
10.0	AMD	-4.17%	ON	-7.83%
10.0	GOOGL	-3.33%	BHC	-7.15%
10.0	PRGO	-3.02%	TSLA	-5.25%
10.0	T	-2.83%	INTU	-5.01%
10.0	AMAT	-2.62%	GE	-4.64%
10.0	GNRC	-2.6%	VICI	-4.54%
10.0	ORCL	-2.55%	EXPE	-4.52%
10.0	BALL	-1.9%	GOOGL	-4.47%
10.0	CPRT	-1.89%	AMD	-4.17%
10.0	UNH	-1.71%	FSUGY	-3.33%
10.0	KEY	-1.6%	T	-3.3%
10.0	CVS	-1.35%	NVDA	-3.29%
10.0	TXN	-1.28%	AA	-3.24%
10.0	AVGO	-1.22%	CHTR	-2.99%
10.0	GWW	-1.19%	CPRT	-2.65%
10.0	LNC	-1.17%	XOM	-2.42%
10.0	AMC	-1.03%	AVGO	-2.26%
10.0	TSLA	-1.01%	QCOM	-1.84%

P90D: 1d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	ZTS	-0.87%	ZTS	-1.02%
1.0	INTC	-0.48%	INTU	-0.89%
1.0	CHTR	-0.41%	T	-0.77%
1.0	MOS	-0.39%	OXY	-0.54%
1.0	UNH	-0.35%	MOS	-0.51%
1.0	TXN	-0.32%	CHTR	-0.46%
1.0	VFC	-0.29%	TSLA	-0.44%
1.0	UAA	-0.28%	THC	-0.37%
1.0	TSLA	-0.28%	UNH	-0.34%
1.0	B	-0.23%	B	-0.33%
1.0	OXY	-0.22%	ORCL	-0.31%
1.0	T	-0.21%	VFC	-0.29%
1.0	POST	-0.2%	POST	-0.28%
1.0	JAZZ	-0.2%	LVS	-0.26%
1.0	VICI	-0.2%	AA	-0.25%
1.0	QCOM	-0.18%	JAZZ	-0.24%
1.0	VZ	-0.17%	SLV	-0.21%
1.0	LVS	-0.16%	UAA	-0.19%
1.0	SLV	-0.16%	MRK	-0.19%
1.0	FCX	-0.15%	NFLX	-0.17%
1.0	INTU	-0.15%	SNY	-0.17%
1.0	LEN	-0.13%	VICI	-0.15%
1.0	AZN	-0.13%	VZ	-0.14%
1.0	AMD	-0.13%	GBTC	-0.14%
1.0	ORCL	-0.11%	CLF	-0.13%

P90D: 10d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	WDC	-7.61%	CHTR	-5.74%
10.0	ZTS	-5.89%	WDC	-4.65%
10.0	AMC	-5.48%	ORCL	-4.58%
10.0	UNH	-3.45%	ZTS	-4.55%
10.0	INTC	-3.29%	OXY	-3.7%
10.0	CLF	-3.27%	TXN	-2.92%
10.0	TXN	-3.04%	INTU	-2.79%
10.0	ORCL	-2.81%	THC	-2.7%
10.0	INTU	-2.08%	BHC	-2.63%
10.0	CNC	-2.06%	UNH	-2.6%
10.0	MOS	-2.0%	MOS	-2.54%
10.0	KALU	-1.89%	TSLA	-2.48%
10.0	TSLA	-1.81%	PCG	-2.34%
10.0	PCG	-1.75%	SLV	-2.11%
10.0	THC	-1.68%	CNC	-2.11%
10.0	GE	-1.58%	T	-2.0%
10.0	T	-1.48%	HCA	-1.91%
10.0	JAZZ	-1.38%	CLF	-1.76%
10.0	CVS	-1.37%	PRGO	-1.56%
10.0	GNRC	-1.26%	EXPE	-1.55%
10.0	CSTM	-0.95%	AZO	-1.48%
10.0	META	-0.95%	GE	-1.31%
10.0	OXY	-0.94%	CPRT	-1.28%
10.0	CPRT	-0.94%	GME	-1.26%
10.0	QCOM	-0.93%	VICI	-1.25%

P90D: 21d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2026-04-02

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
21.0	WDC	-14.85%	CHTR	-23.74%
21.0	AMC	-13.94%	WDC	-12.48%
21.0	ZTS	-8.91%	ZTS	-11.05%
21.0	INTC	-7.26%	INTU	-9.0%
21.0	TXN	-5.96%	GT	-8.81%
21.0	CLF	-5.89%	CNC	-6.08%
21.0	CNC	-5.56%	TXN	-5.85%
21.0	CPRT	-5.51%	BHC	-5.64%
21.0	INTU	-4.92%	MOS	-4.95%
21.0	UNH	-4.48%	THC	-4.49%
21.0	CVS	-4.22%	CPRT	-4.39%
21.0	MOS	-4.0%	AZO	-4.3%
21.0	JAZZ	-3.78%	OXY	-4.29%
21.0	KALU	-3.23%	ACGL	-3.57%
21.0	ACGL	-2.82%	SLV	-3.42%
21.0	NAVI	-2.73%	T	-3.36%
21.0	QCOM	-2.69%	LVS	-3.34%
21.0	CMG	-2.6%	PRGO	-3.31%
21.0	GT	-2.5%	HCA	-3.26%
21.0	GE	-2.44%	NFLX	-3.23%
21.0	CSTM	-2.44%	JAZZ	-3.04%
21.0	AZO	-2.24%	NAVI	-2.85%
21.0	PCG	-2.13%	CSTM	-2.7%
21.0	BHC	-1.94%	GBTC	-2.66%
21.0	META	-1.8%	GNRC	-2.66%

P365D: 1d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
1.0	UAA	-0.35%	INTU	-0.36%
1.0	MOS	-0.24%	PRGO	-0.36%
1.0	GT	-0.23%	UAA	-0.3%
1.0	ZTS	-0.21%	MSTR	-0.3%
1.0	MSTR	-0.21%	GT	-0.29%
1.0	CZR	-0.2%	ORCL	-0.28%
1.0	CNC	-0.18%	MOS	-0.25%
1.0	CHTR	-0.14%	CHTR	-0.24%
1.0	GBTC	-0.13%	FIS	-0.24%
1.0	VFC	-0.13%	ZTS	-0.21%
1.0	UNH	-0.13%	CPRT	-0.21%
1.0	IEP	-0.13%	NFLX	-0.2%
1.0	CPRT	-0.12%	CZR	-0.2%
1.0	VICI	-0.12%	CNC	-0.18%
1.0	JPM	-0.11%	VICI	-0.18%
1.0	ORCL	-0.1%	IEP	-0.16%
1.0	ADBE	-0.1%	CMG	-0.15%
1.0	FIS	-0.1%	TSLA	-0.14%
1.0	GILD	-0.09%	T	-0.13%
1.0	WDC	-0.09%	NAVI	-0.12%
1.0	VNO	-0.09%	VFC	-0.12%
1.0	CMG	-0.08%	UNH	-0.11%
1.0	PRGO	-0.08%	CMCSA	-0.11%
1.0	IRM	-0.08%	MSFT	-0.11%
1.0	WYNN	-0.08%	THC	-0.1%

P365D: 10d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
10.0	WDC	-4.21%	GT	-2.86%
10.0	ORCL	-1.84%	ORCL	-2.59%
10.0	AMC	-1.79%	WDC	-2.53%
10.0	MOS	-1.23%	MSTR	-1.67%
10.0	EXPE	-1.21%	NFLX	-1.56%
10.0	VFC	-1.0%	GBTC	-1.49%
10.0	GT	-0.98%	MOS	-1.42%
10.0	UNH	-0.94%	AMC	-1.38%
10.0	CPRT	-0.93%	PRGO	-1.34%
10.0	CZR	-0.83%	EXPE	-1.32%
10.0	VNO	-0.79%	BHC	-1.27%
10.0	CMA	-0.78%	CPRT	-1.17%
10.0	JAZZ	-0.77%	UAA	-1.12%
10.0	KALU	-0.76%	IEP	-1.01%
10.0	VICI	-0.75%	CMG	-0.97%
10.0	MSTR	-0.71%	CZR	-0.92%
10.0	CNC	-0.69%	VICI	-0.91%
10.0	ZTS	-0.68%	CHTR	-0.77%
10.0	TSLA	-0.67%	ADBE	-0.68%
10.0	UAA	-0.62%	T	-0.65%
10.0	BALL	-0.58%	VNO	-0.65%
10.0	ON	-0.57%	INTU	-0.64%
10.0	ORLY	-0.5%	GME	-0.63%
10.0	CLF	-0.49%	CNC	-0.61%
10.0	FCX	-0.48%	BUD	-0.61%

P365D: 21d

The columns labeled "ROLOBC_VmS" represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
21.0	WDC	-6.67%	MSTR	-8.7%
21.0	CPRT	-3.68%	GT	-5.65%
21.0	MSTR	-3.45%	ORCL	-3.85%
21.0	ORCL	-2.53%	WDC	-3.71%
21.0	EXPE	-2.32%	ADBE	-3.49%
21.0	AMC	-2.11%	UAA	-3.48%
21.0	UNH	-2.05%	CPRT	-3.28%
21.0	VNO	-1.96%	NFLX	-2.78%
21.0	VFC	-1.92%	GBTC	-2.66%
21.0	KALU	-1.91%	MOS	-2.39%
21.0	MOS	-1.9%	VNO	-2.2%
21.0	CMA	-1.81%	CHTR	-2.16%
21.0	INTC	-1.75%	EXPE	-2.02%
21.0	UAA	-1.7%	IEP	-1.95%
21.0	TXN	-1.69%	INTU	-1.84%
21.0	CZR	-1.57%	BHC	-1.76%
21.0	ADBE	-1.39%	T	-1.68%
21.0	JAZZ	-1.38%	BUD	-1.63%
21.0	BHC	-1.32%	CMG	-1.57%
21.0	VICI	-1.29%	ISRG	-1.5%
21.0	GBTC	-1.24%	VFC	-1.46%
21.0	GT	-1.24%	FIS	-1.39%
21.0	CVS	-1.23%	GME	-1.2%
21.0	ISRG	-1.16%	THC	-1.18%
21.0	IEP	-1.01%	PRGO	-1.12%

P365D: 63d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
63.0	MSTR	-24.61%	MSTR	-31.66%
63.0	ORCL	-13.95%	NFLX	-16.18%
63.0	INTC	-13.51%	GT	-13.75%
63.0	NFLX	-10.31%	CLF	-11.92%
63.0	GT	-9.76%	ADBE	-9.77%
63.0	CPRT	-9.23%	ORCL	-9.09%
63.0	WDC	-7.01%	PRGO	-8.72%
63.0	MOS	-6.27%	MOS	-8.62%
63.0	ADBE	-5.27%	CPRT	-8.54%
63.0	KALU	-5.2%	NWL	-6.65%
63.0	TXN	-4.99%	FIS	-6.31%
63.0	VFC	-4.7%	BHC	-5.85%
63.0	EXPE	-3.83%	ORLY	-5.31%
63.0	GBTC	-3.69%	CCL	-4.9%
63.0	UNH	-3.57%	VFC	-4.65%
63.0	MSFT	-3.56%	EXPE	-4.45%
63.0	LEN	-3.55%	GBTC	-3.97%
63.0	BHC	-3.23%	VICI	-3.83%
63.0	VICI	-3.05%	CDNS	-3.43%
63.0	QCOM	-3.05%	KHC	-3.35%
63.0	CVS	-2.8%	ZTS	-3.27%
63.0	JAZZ	-2.77%	WYNN	-3.23%
63.0	NVS	-2.64%	MSFT	-3.2%
63.0	INTU	-2.58%	INTU	-3.15%
63.0	ISRG	-2.57%	VNO	-3.12%

P365D: 126d

The columns labeled “ROLOBC_VmS” represent the average amount by which Vector Model ROLOBC exceeds Sigma ROLOBC for the given ticker across all model dates for which actual results for the stated horizon are known (periods for all horizons > 1d overlap).

Period examined: All model dates from 2026-06-29 through 2025-07-01

Hzn	Ticker	95ROLOBC_VmS	Ticker	99ROLOBC_VmS
126.0	MSTR	-49.71%	AMC	-74.67%
126.0	NFLX	-25.82%	INTU	-63.75%
126.0	INTU	-24.65%	NFLX	-35.06%
126.0	LEN	-22.72%	FIS	-26.38%
126.0	CPRT	-19.67%	MSTR	-25.39%
126.0	WDC	-14.57%	PRGO	-23.74%
126.0	GT	-14.55%	GT	-23.18%
126.0	ORCL	-11.76%	MOS	-22.59%
126.0	BHC	-10.21%	LEN	-20.23%
126.0	PRGO	-9.67%	AZO	-18.78%
126.0	VFC	-9.33%	BHC	-16.61%
126.0	ADBE	-8.69%	CPRT	-16.41%
126.0	VNO	-8.52%	NWL	-15.96%
126.0	AZO	-8.48%	MSFT	-15.83%
126.0	MSFT	-7.63%	VNO	-15.5%
126.0	FIS	-7.26%	ZTS	-11.96%
126.0	MOS	-7.2%	ORLY	-10.63%
126.0	NVS	-6.66%	ORCL	-9.77%
126.0	ORLY	-5.76%	ADBE	-8.98%
126.0	CMG	-5.43%	GBTC	-8.69%
126.0	VICI	-4.99%	CMG	-8.24%
126.0	GILD	-4.99%	WYNN	-7.67%
126.0	KALU	-4.92%	VICI	-6.8%
126.0	IEP	-4.26%	TDG	-5.49%
126.0	TXN	-4.03%	NVS	-5.14%

Appendix 5: Kupiec and Christoferson Tests for Sigma

The Kupiec Proportion of Failures test statistic (listed as OaR_kStat in the table below), and its probability (OaR_pValK) are used to test the null hypothesis that the OaR model breakage is consistent with expectations. The test statistic is calculated by comparing the number of OaR breaks experienced to the expected number of breaks given the total number of observations and the specified probability level. Breakage was measured at the individual ticker-model date level. The probabilty of the Kupiec statistic occuring is obtained from the chi-squared distribution. The lower the statitic, the higher the p-Value, and the more likely that Sigma's OaR breakage is consistent with expectations.

The Christoferson OaR Violation Indepence test statistic (listed as OaR_chrStat in the table below) and its probabilty (OaR_pValChr) are used to test the null hypothesis that the OaR model violations are independent. The test statistic focuses on consecutive breakages over time. We measure breakage at the portfolio level, with portfolio breakage for a given period defined as equally weighted ticker level breakage for that period being beyond expecataion given the specified probability level. The probabilty of the Christoferson statistic occuring is obtained from the chi-squared distribution. The lower the statitic, the higher the p-Value, and the more likely that Sigma OaR breakage is independent.

Kupiec and Christoferson results for the Vector Model can be found in the Report Card section.

Period examined: 2022-01-31 through 2026-06-29. Note that for horizon periods greater than 1d we exclude enough model dates to assure no overlap between observation periods.

Model	Pctile	Horizon	OaR_kStat	OaR_pValK	OaR_chrStat	OaR_pValChr
Sigma	95	1	196.54	0	9.08	0
Sigma	95	10	0.2	0.66	2.96	0.09
Sigma	95	21	38.55	0	0.02	0.89
Sigma	95	63	24.85	0	0.08	0.77
Sigma	95	126	5.86	0.02	0.54	0.46
Sigma	95	252	36.82	0	nan	0
Sigma	99	1	391.46	0	17.27	0
Sigma	99	10	84.22	0	1.03	0.31
Sigma	99	21	84.56	0	2.21	0.14
Sigma	99	63	51.93	0	nan	0
Sigma	99	126	28.65	0	0.17	0.68
Sigma	99	252	51.06	0	nan	0