VecViz Option Fair Value (OFV) Performance Report

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1 April 2025

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Introduction:

VecViz's Option Fair Value (OFV) estimates are calculated by multiplying the output of its Vector Model of price probability by forward prices beyond the given strike price (in a discrete, Riemann sum like manner), and then discounting the value back to the model date at the risk free rate.
Thus, Vec Viz's OFV's are a simple calculation that is worthy of consideration only if there is merit in the price probability output of the Vector Model. Thus, before you review this report, we encourage you to review the performance reports for Vector Model VaR, OaR, and Expected Body, and decide if it is worth it.

The objective of this report is to share what we know about the performance of VecViz's OFV estimates with the intent of helping you deecide whether they are worthy of your consideration when you transact in options and whether they are consistent with the results reported for VecViz's VaR, OaR, and Expected Body.

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.

OFV Evaluation Criteria

In this report we evaluate Vector Model ("V") OFV's by comparing them to OFV's calculated using VecViz's implementation of the "normal" or "Gaussian" distribution based "Sigma" volatility, in combination with the Black Scholes option pricing formula ("SBS").

Specifically, we evaluate OFV's generated by V on the basis of how they compare to Sigma OFV's in terms of

1. approximating the risk-free rate via profitability at expiration of selling matched calls and puts at OFV levels (as a % of underlying ticker model date price).
2. having less severe maximum losses by model date (across tickers) and by ticker (across model dates).
3. having excess average profitability (vs. Sigma) that more than covers excess maximum losses (vs. Sigma) that occur in any lookback period / horizon considered.

Note that none of the criteria listed utilize actual options and actual option prices. All criteria assume transactions in options with standardized model strikes and expiries occurring at the model price, and held through expiration.

Thus, the most this report can tell you regarding the applicability of VecViz's OFV estimates to actual options trading is whether it represents a better valuation guideline than Sigma.

Without comparing either model's OFVs to actual options market prices we cannot say whether both, either or neither of them would actually benefit option trading decision making. That said, even if we did have such data, all OFVs calculated at present are based on closing price data, and thus are not actually executable.

These comparisons encompass each out of sample model date and ticker in our coverage across a consistent set of forward expiration terms and strikes. Strikes are denominated in % out of the money relative to the underlying ticker's model date price. All comparisons utilize the same two moneyness levels: 1% out of the money, which we refer to as "Near the Money", or "NTM", and 20% out of the money, which we refer to as "Deep Out of the Money", or "DOOTM".

Substantial supporting detail in terms of influential tickers and model dates are provided for each metric and model.

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. Please note that no options pricing data was utilized to calibrate the Vector Model.

The Vector Model was trained upon ~ 60,000 ticker model dates 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 fair value estimates discussed in this report are for model dates beyond January 31, 2022, making them fully out of sample.

Vector Model ticker coverage universe as of this report numbers ~150. 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. They are as follows:

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).

We do not currently present "Sigma" based OFV estimates on vecviz.com. We calculate the 'SBS' (Sigma based Black Scholes) OFVs presented in this report by utilizing our Sigma in the Black Scholes option pricing formula. We implement Black Scholes in Python, applying a value of 0.04 for r, the same risk-free rate (RFR) assumption used to calculate Vector Model OFVs. See the Appendix for the associated Python code. We hope to have Sigma OFV estimates on our website for comparison purposes later this year.

All calculations for Sigma and SBS OFVs and their profitability are based on pricing data obtained from the same QuoteMedia data used to calculate Vector Model based OFVs and their profitability.

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 and model date look-back windows.

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

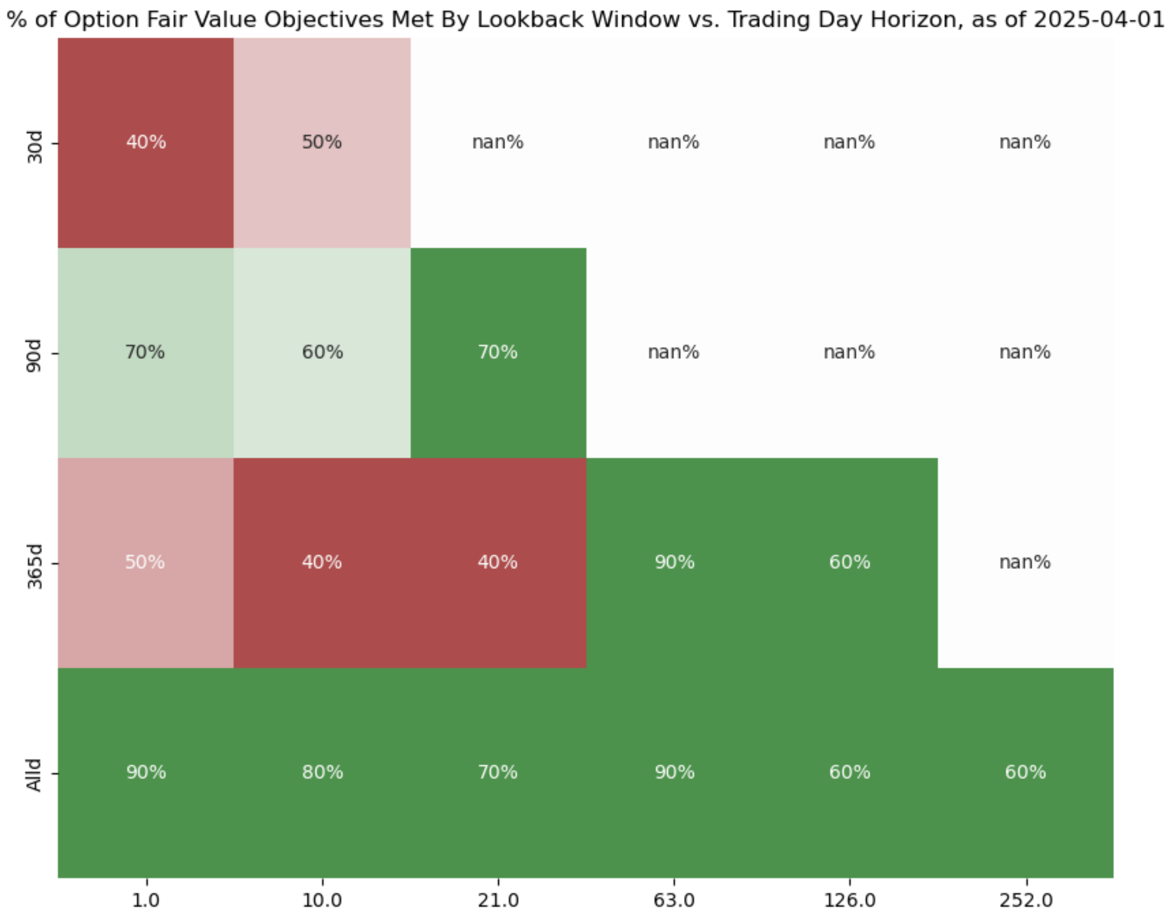
1) Past performance is no guarantee of future results. None of the content in this report is investment advice or an offer to buy or sell securities. VecViz is not a SEC investment advisor or broker-dealer. The staff of VecViz actively transacts in securities tied to many of the tickers discussed in 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. Therefore, there are many alternaive option fair value models beyond Sigma as well. Thus, even if this report causes you to conclude that the Vector Model's OFV outperforms Sigma OFV, you should not necessarily conclude that Vector Model OFV is the best option fair value model for your purposes.
4) Clearly, all horizons (i.e. terms to expiration) > 1d overlap when considered on a daily basis. Please note that the volatility (denoted as "std_dev") 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 volatility related profit and loss metrics for multi-day horizons in isolation. However, we do believe that their use is valid for comparing to sigma based fair value estimates calculated for like horizons and with like frequency.
5) We are not considering liquidity or transaction costs or hedging costs. Many strikes and expirations for many of the tickers presented here were not listed historically, are not listed currently, and may never be listed prospectively. This is especially true for smaller capitalization, low trading volume tickers.

6) We are not incorporating any repo charges or margin related costs when calculating the profit and loss at expiration option sale activity.

Thus, in summary, all metrics presented in this report are presented and are to be considered on a comparative basis. How do Vector Model OFV estimates tend to differ from SBS's across strikes and terms to expiration, for puts and calls? For what strikes and terms to expiration, if any, is the Vector Model's profit and loss closer to the risk-free rate of 4.00% (on an annual basis) than SBS is? What tickers contributed or detracted the most from the relative performance? These are the questions this report is structured to answer.

OFV Objectives "Report Card"

Period examined: AllD = 2022-01-20 through 2025-03-31



OFV Criteria	Average Score(%)
1. Closer RFR Proximity: NTM	43.75
2. Closer RFR Proximity: DOOTM	25
3. Smaller Max Loss By Date: NTM	87.5
4. Smaller Max Loss By Date:: DOOTM	100
5. Avg Excess P&L >Excess Max Loss By Date (if any):NTM	93.75
6. Avg Excess P&L >Excess Max Loss By Date (if any):DOOTM	100
7. Smaller Max Loss By Ticker: NTM	31.25
8. Smaller Max Loss By Ticker: DOOTM	56.25
9. Avg Excess P&L >Excess Max Loss By Ticker (if any):NTM	37.5
10.Avg Excess P&L >Excess Max Loss By Ticker (if any):DOOTM	62.5
Overall Average	63.75

OFV Criteria	Average Score(%)

Observations as of 2025-03-31

1. Vector Model OFV achieved its objectives in 64% of instances on an equally weighted Objective / Lookback Period / Horizon basis.

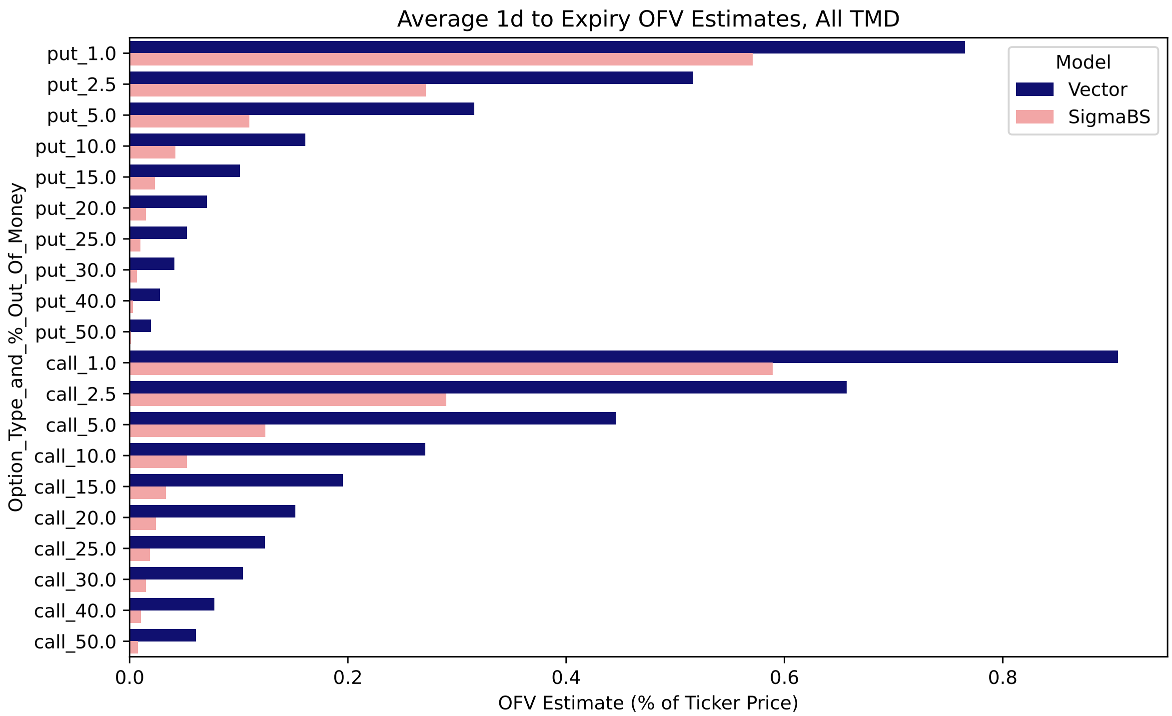
2. Performance in the last 90 days for the 1d/10d/21d horizon is much improved relative to the prior year, though still not as strong as the average for the overall out of sample period.
3. With the exception of RFR proximity, Vector Model performance tends to be better for DOOTM (even numbered criteria) than NTM (odd numbered criteria).
4. Vector Model average option selling profit tends to be further from the RFR than Sigma's
5. Vector Model option selling tends to experience less adverse max losses by date than Sigma, but more severe losses by ticker (particularly for NTM).
6. Average excess P&L vs. Sigma tends to be greater than any excess max loss vs. Sigma, except on a "by ticker" basis for NTM strikes.

Average OFV Levels

Here we compare Vector Model (“V”, dark navy shading) and Sigma based Black Scholes (“BS”, light red shading) levels by horizon, on average across all ticker-model dates for the lookback window indicated.

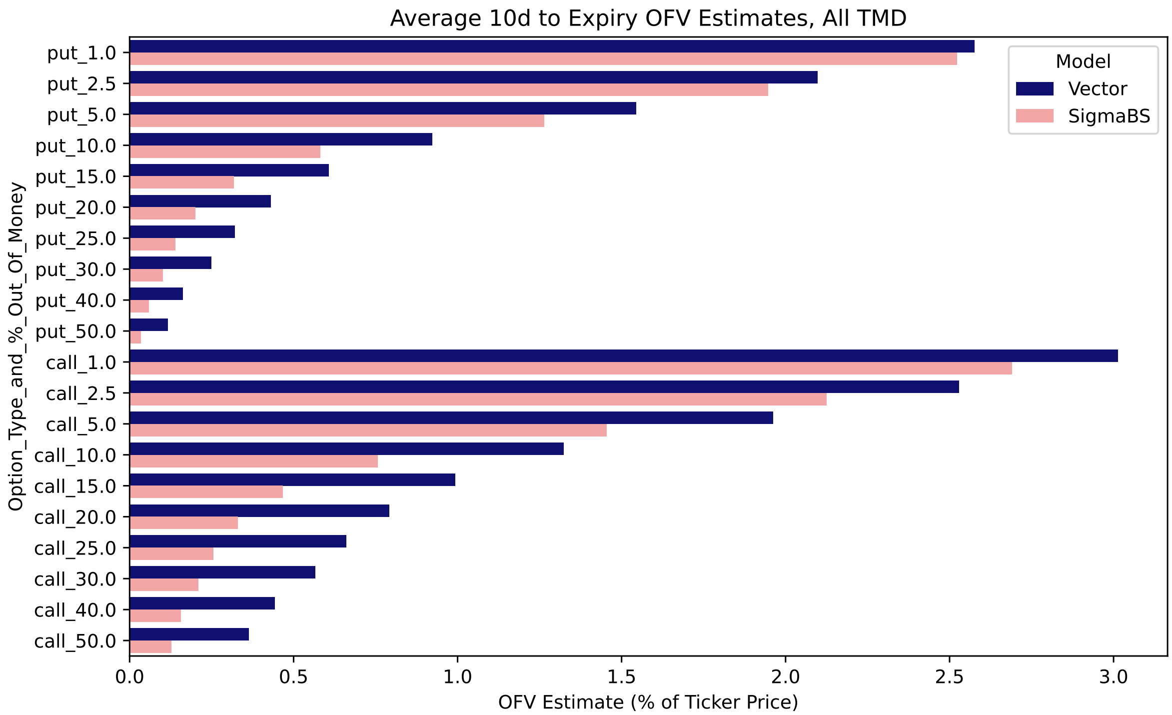
All Out of Sample Model Dates, 1D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



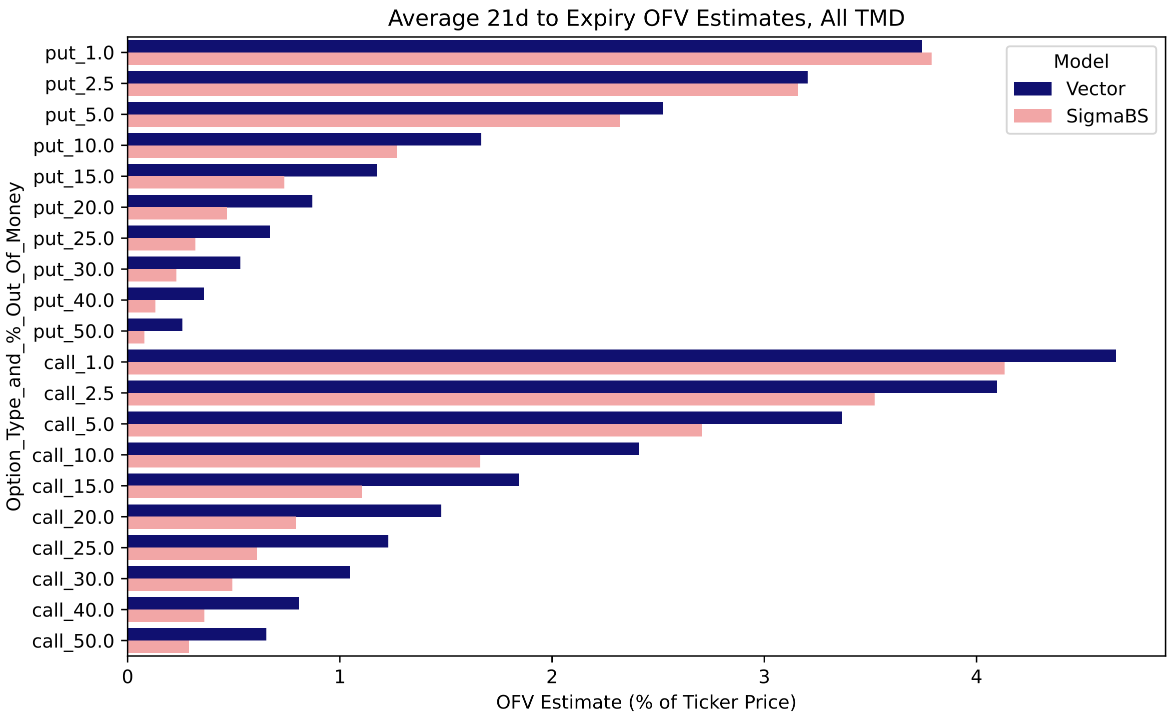
All Out of Sample Model Dates, 10D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



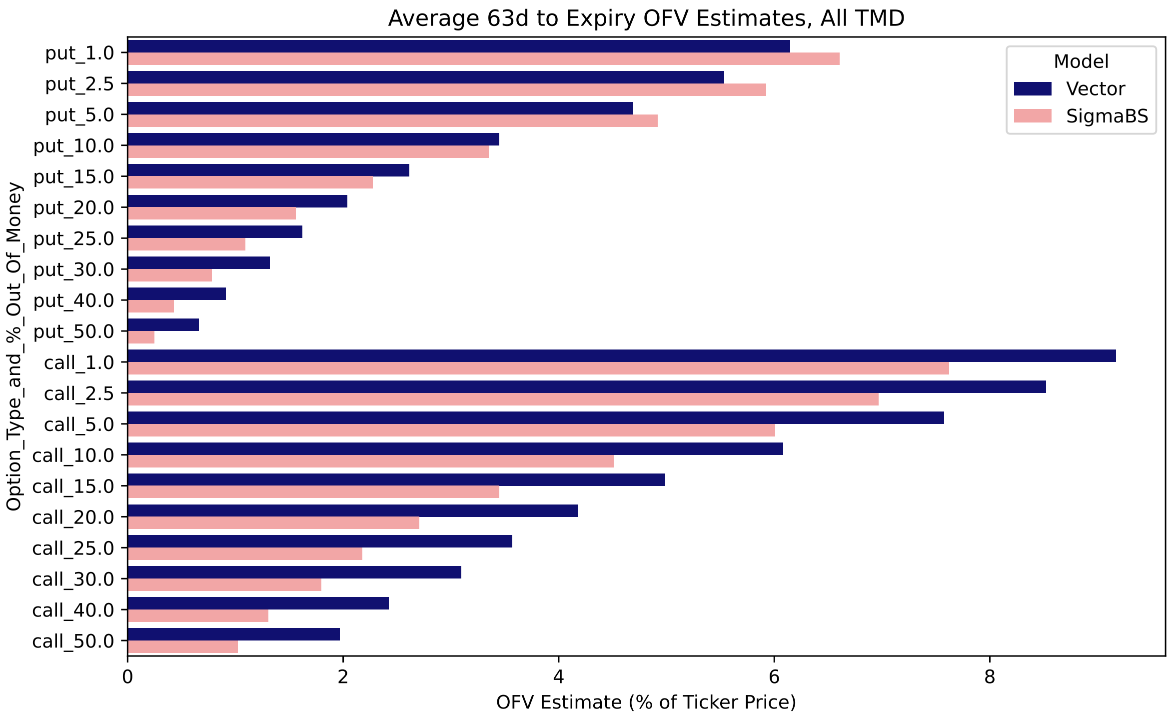
All Out of Sample Model Dates, 21D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



All Out of Sample Model Dates, 63D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



All Out of Sample Model Dates, 126D Horizon

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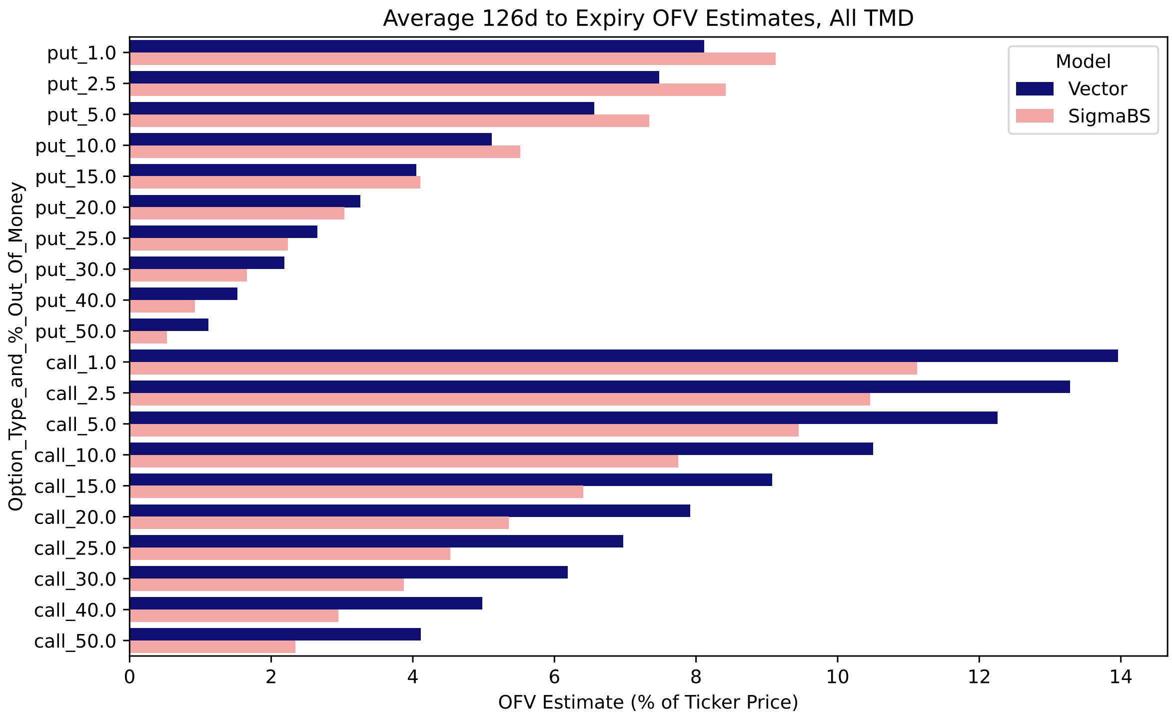

All Out of Sample Model Dates, 252D Horizon

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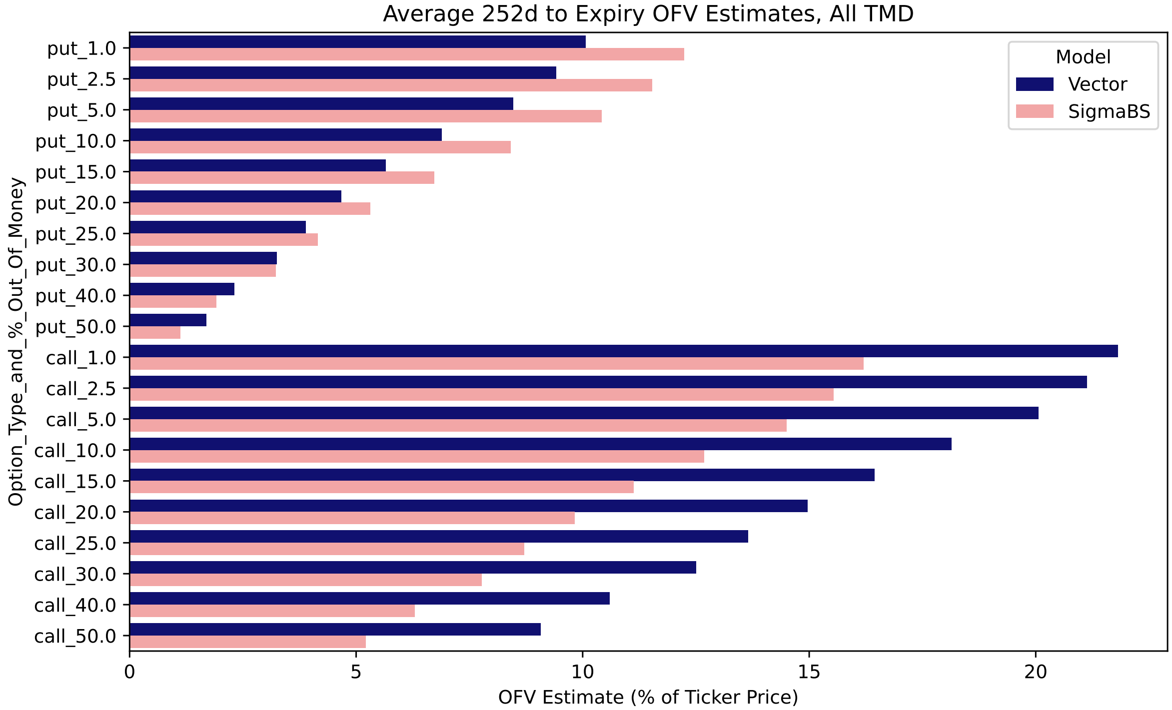
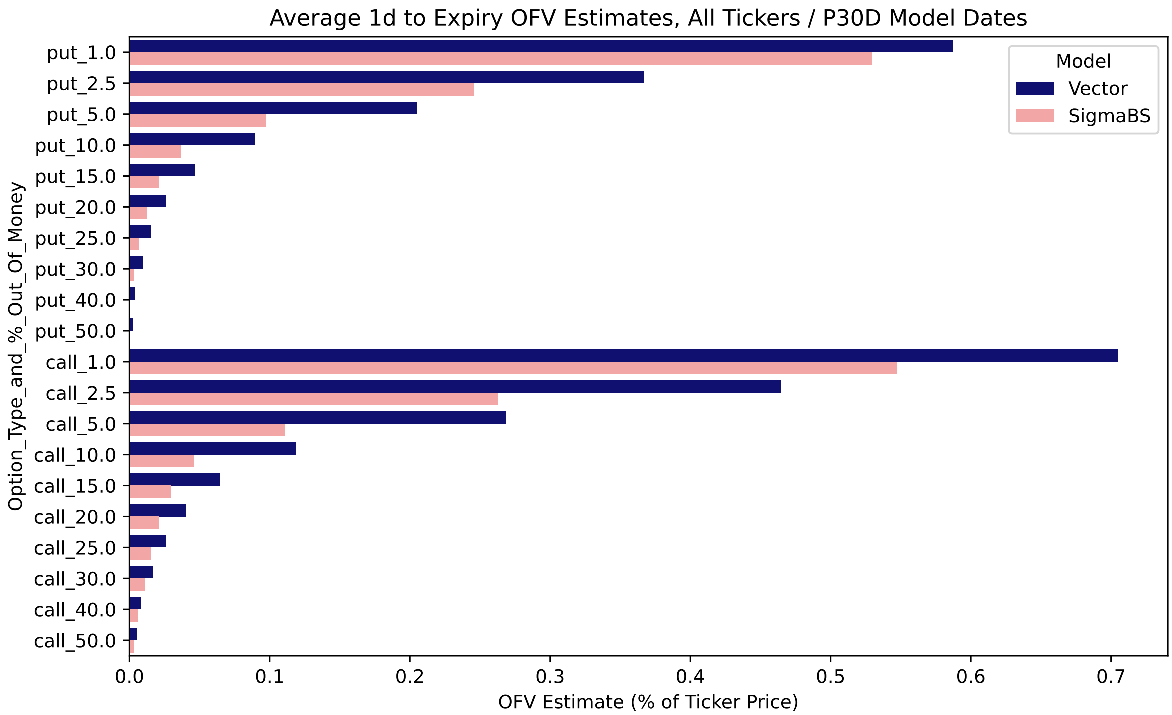


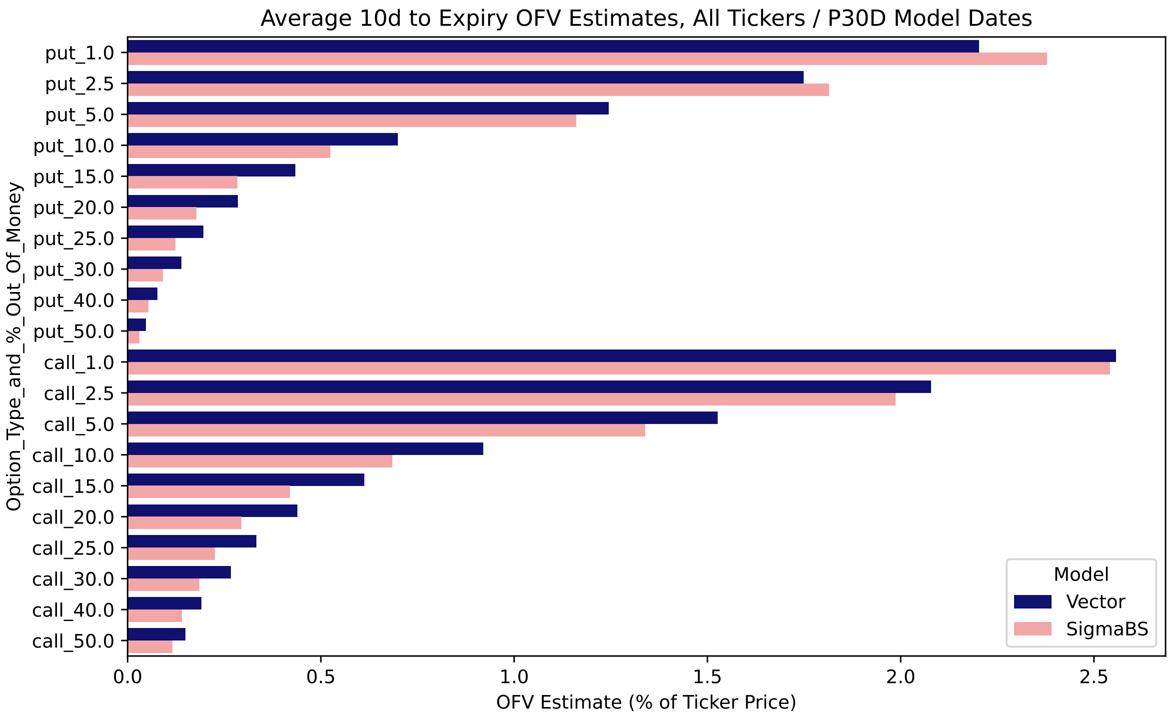
P30D Model Dates, 1D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31



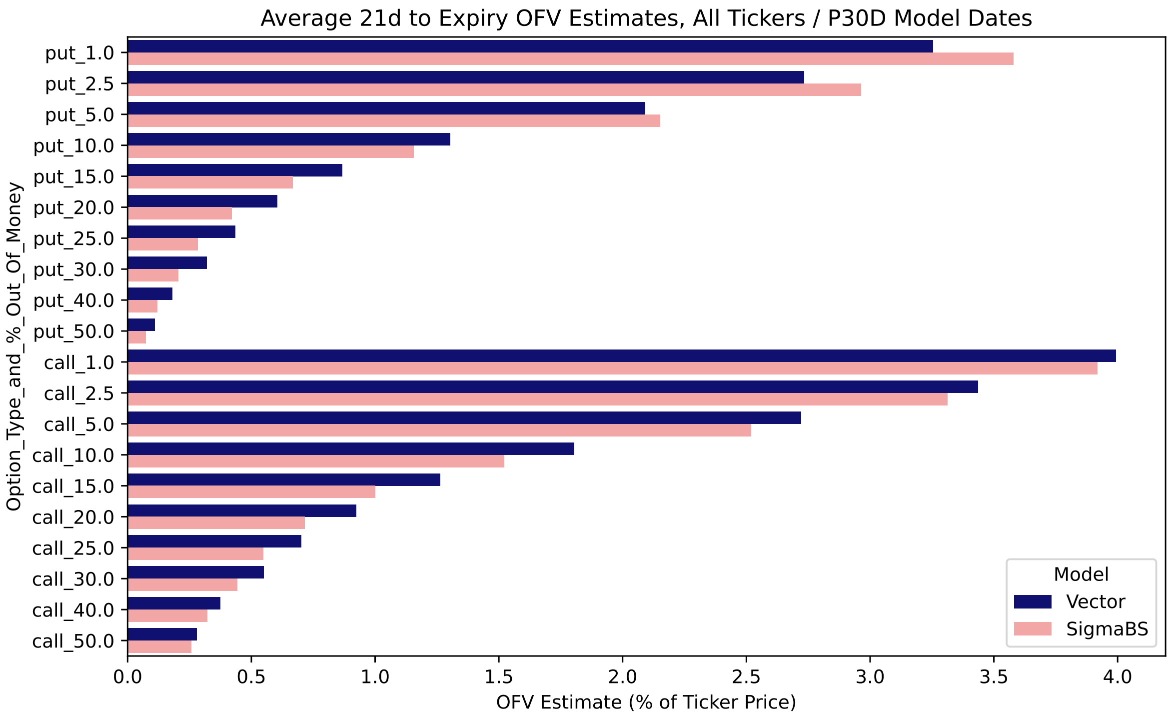
P30D Model Dates, 10D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31



P30D Model Dates, 21D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31



P30D Model Dates, 63D Horizon

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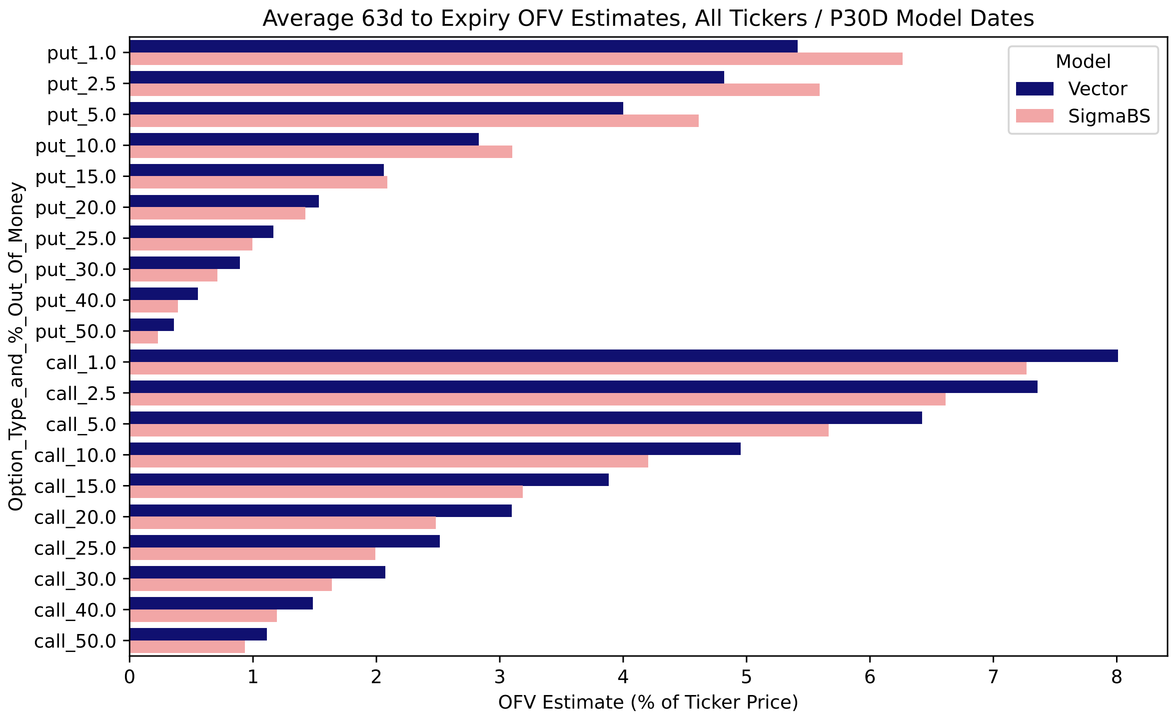
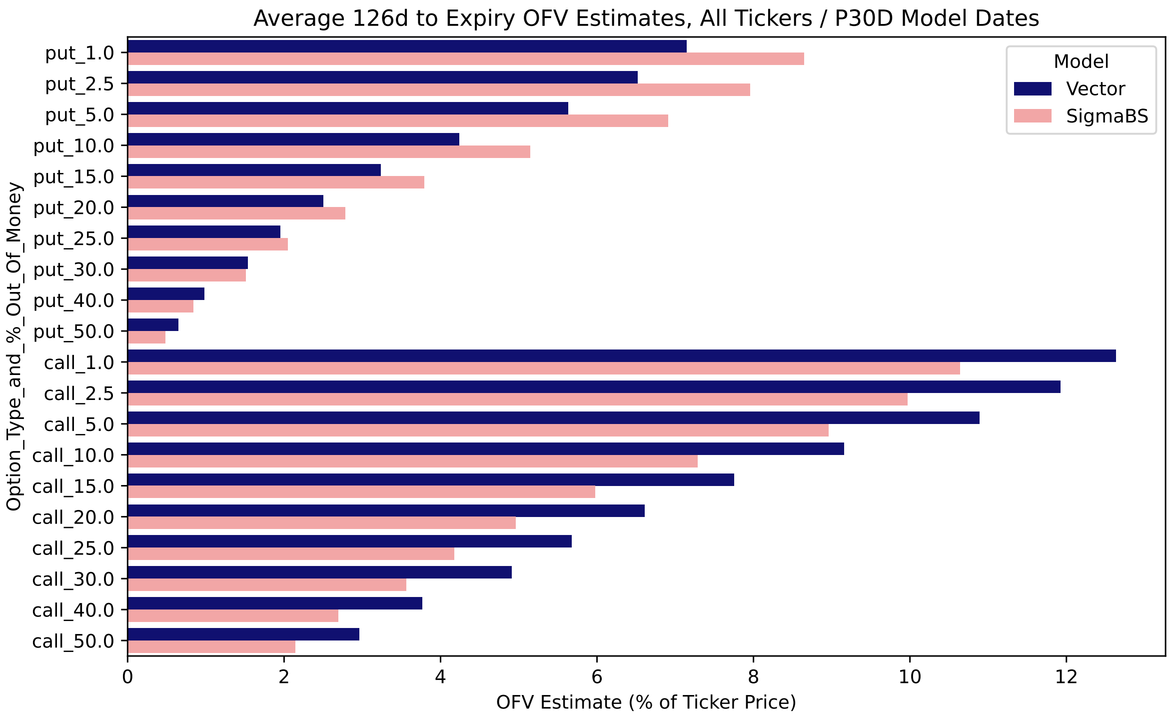


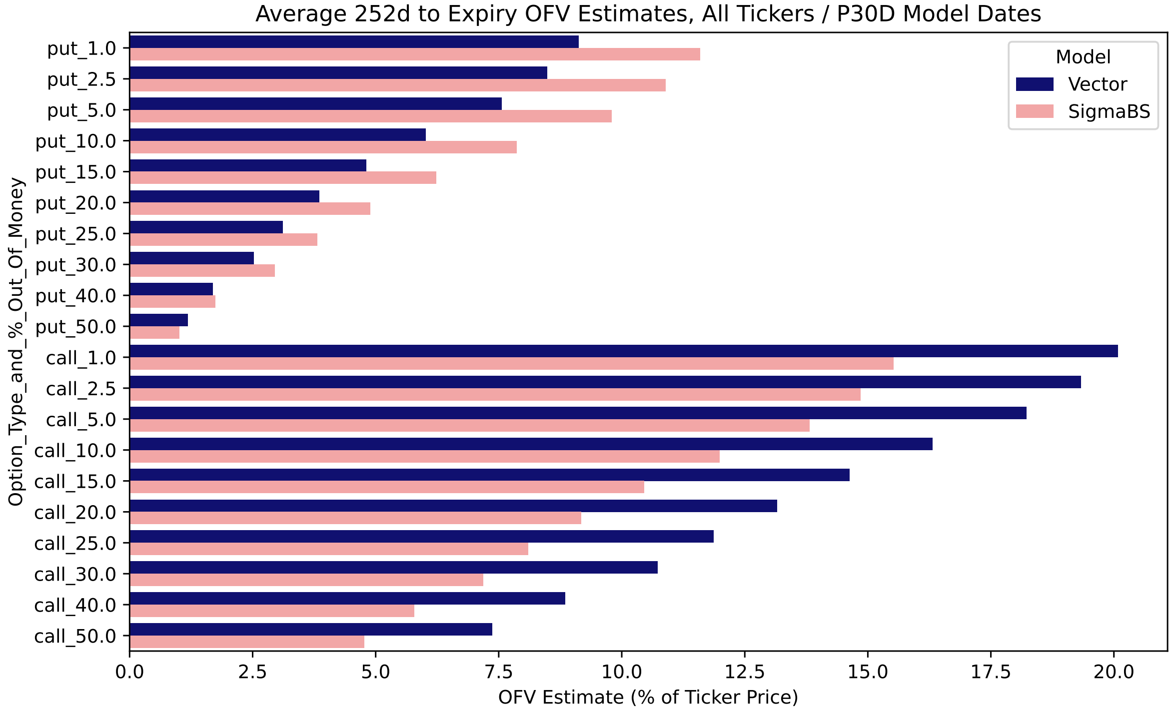
P30D Model Dates, 126D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31



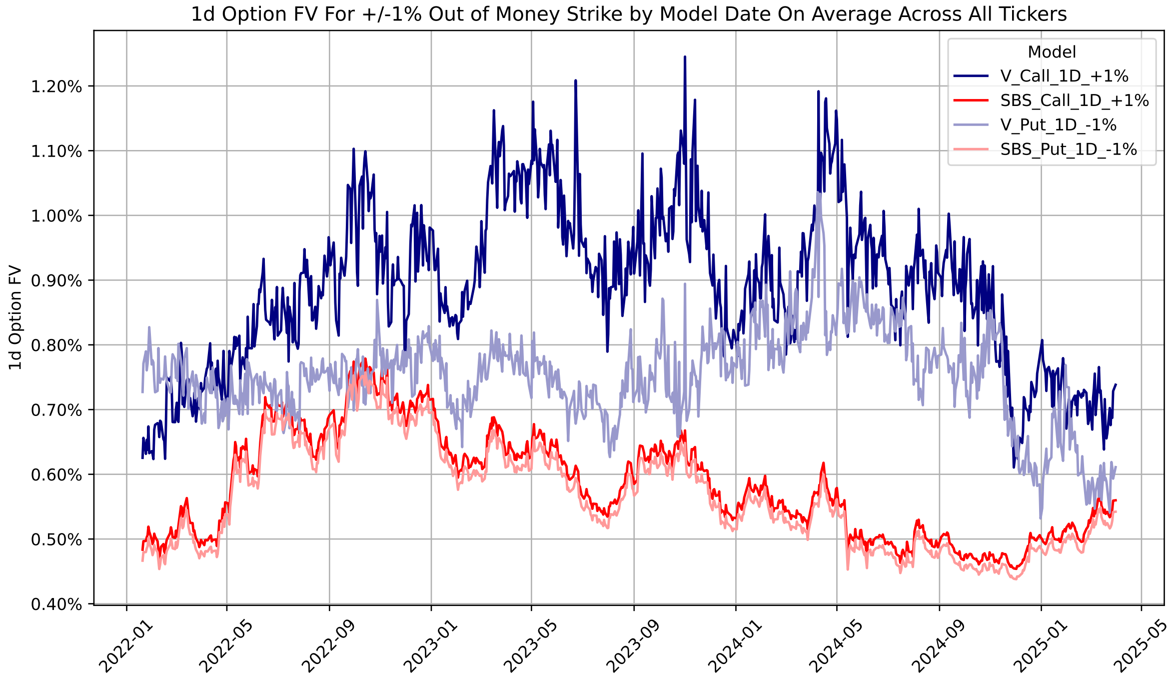
P30D Model Dates, 252D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31

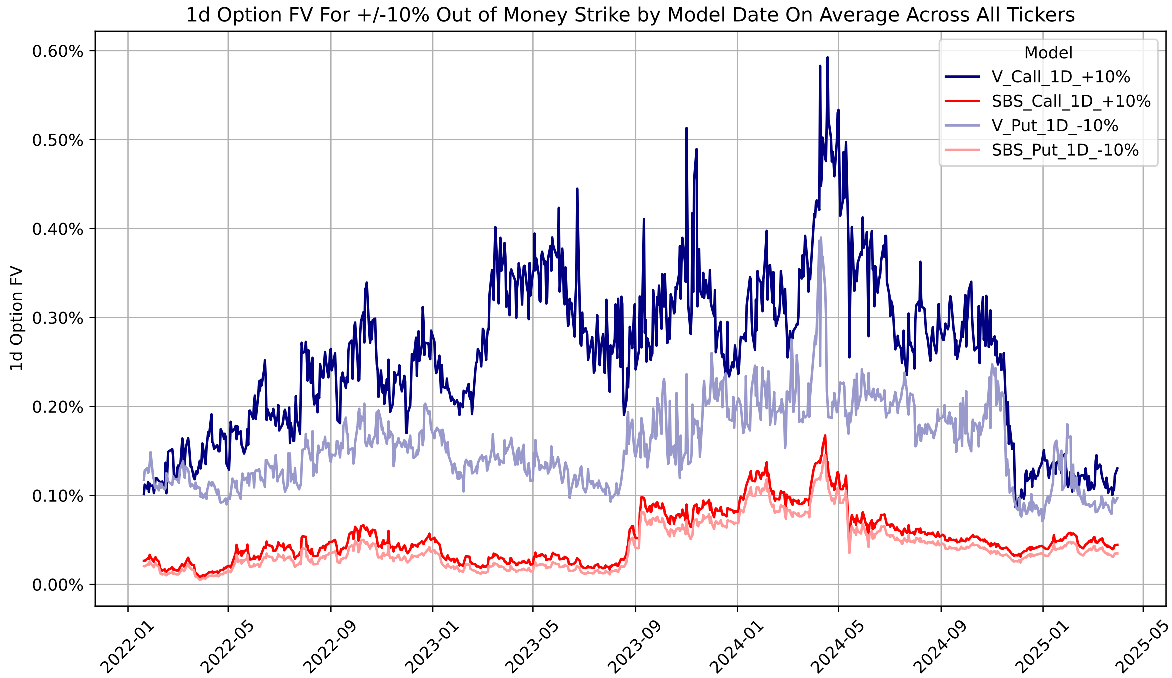


OFV by Model Date Detail

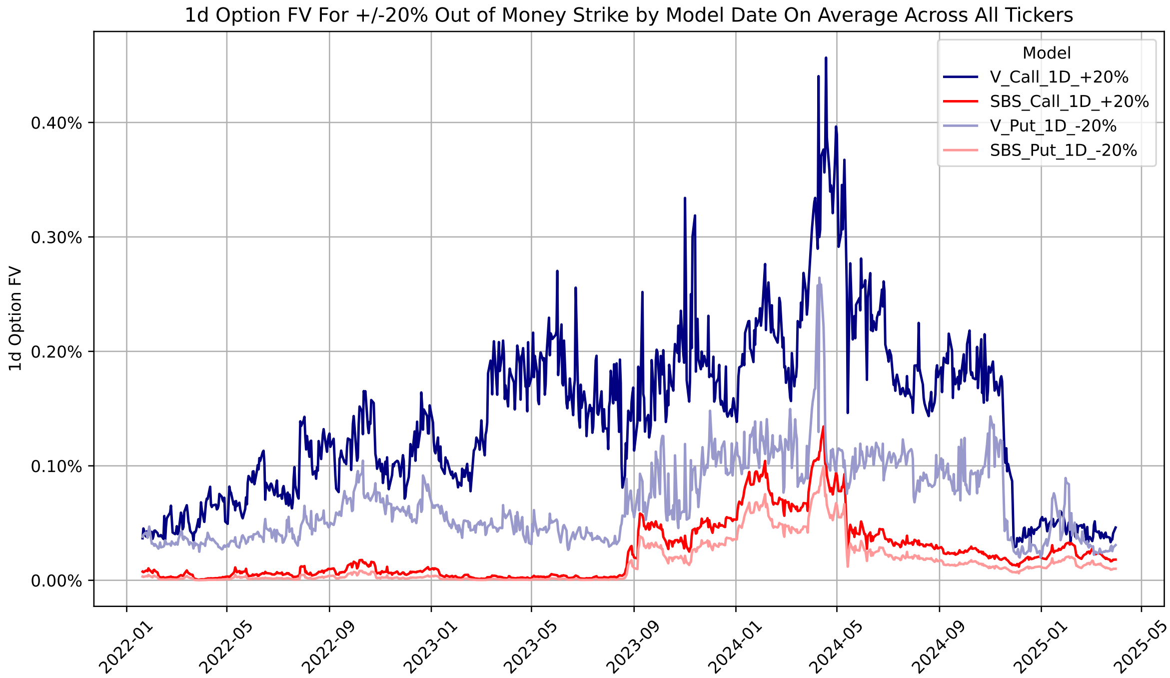
1d Horizon, +/- 1% Out of Money



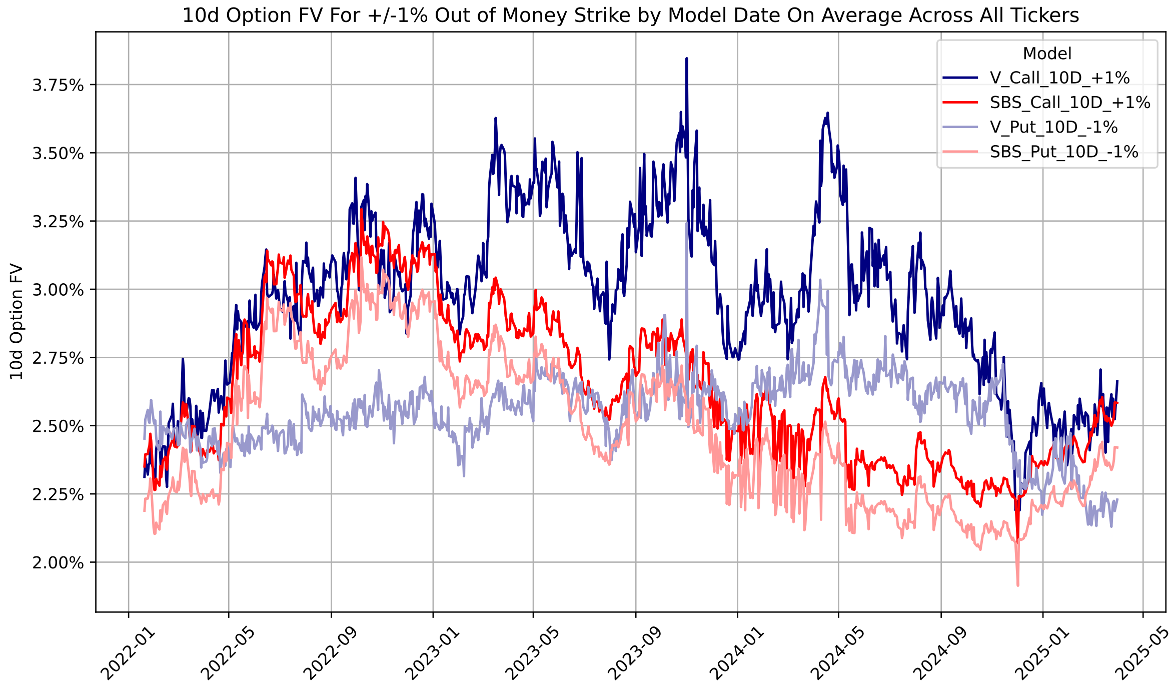
1d Horizon, +/- 10% Out of Money



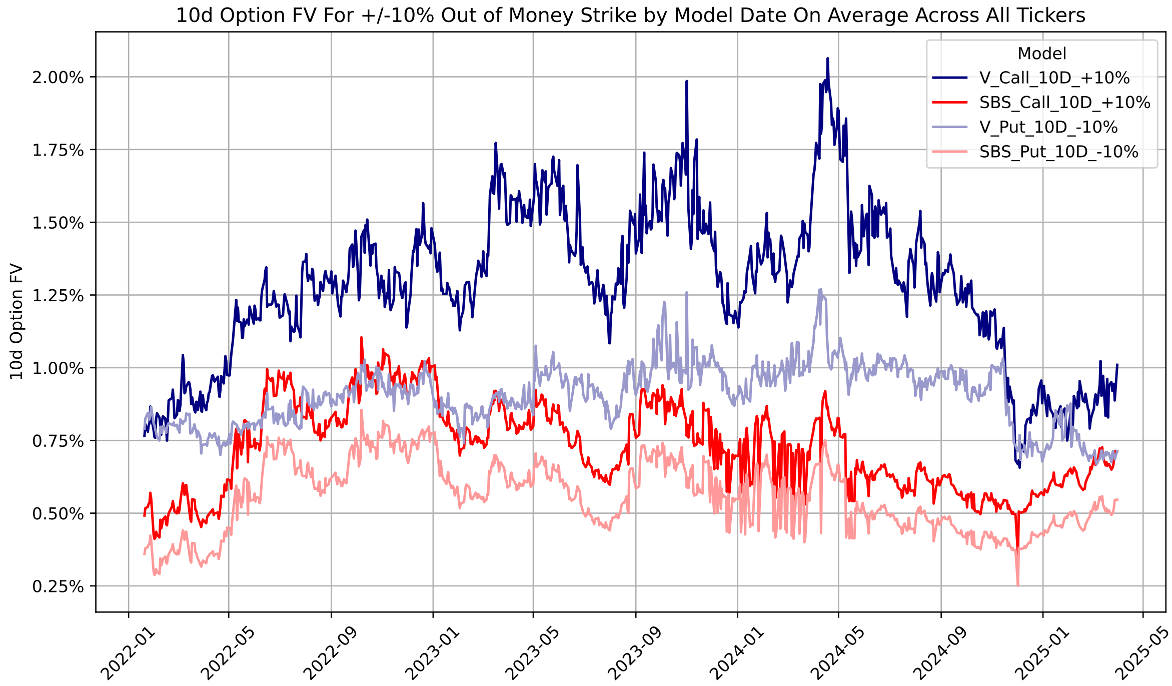
1d Horizon, +/- 20% Out of Money



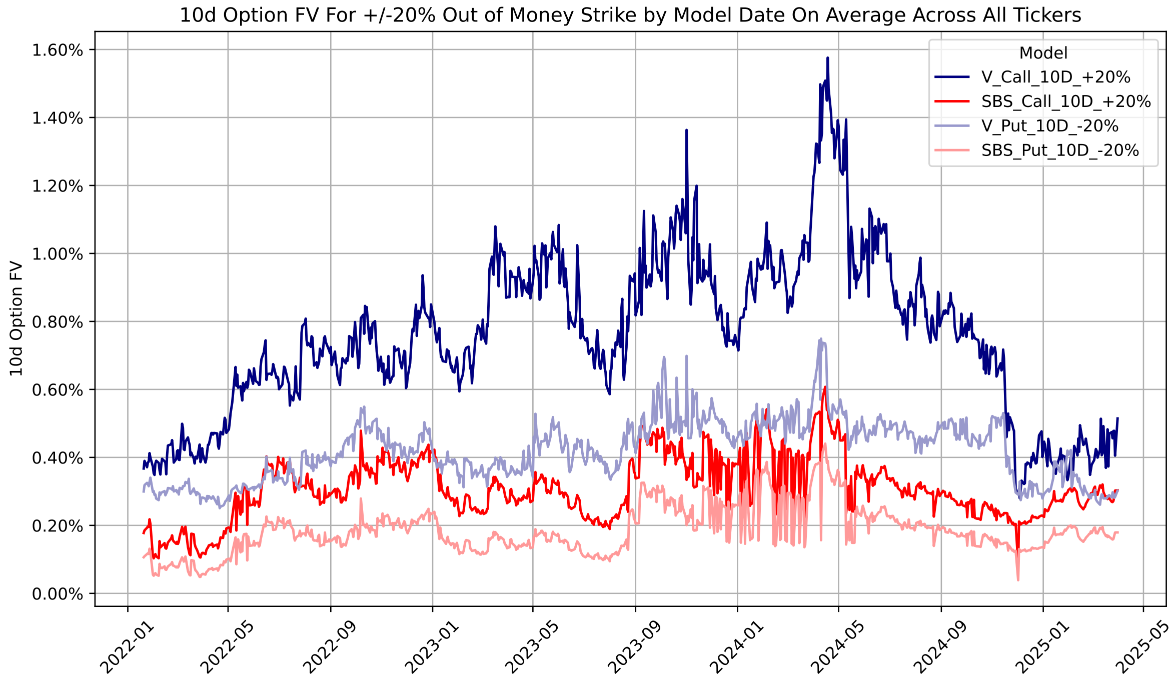
10d Horizon, +/- 1% Out of Money



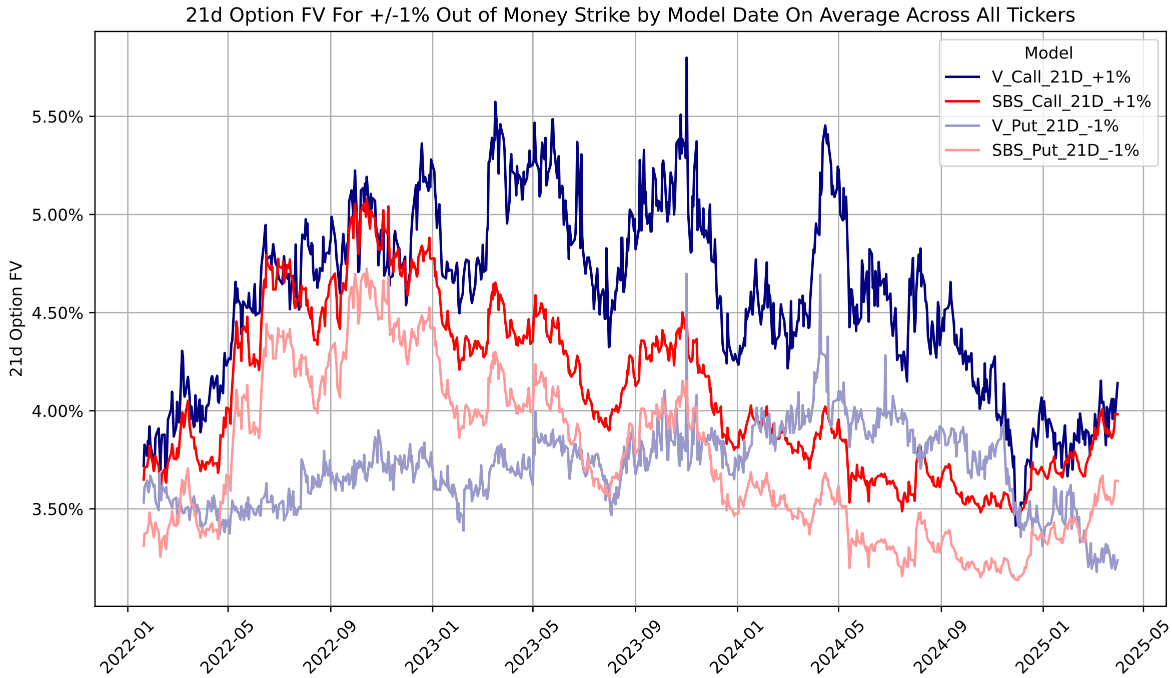
10d Horizon, +/- 10% Out of Money



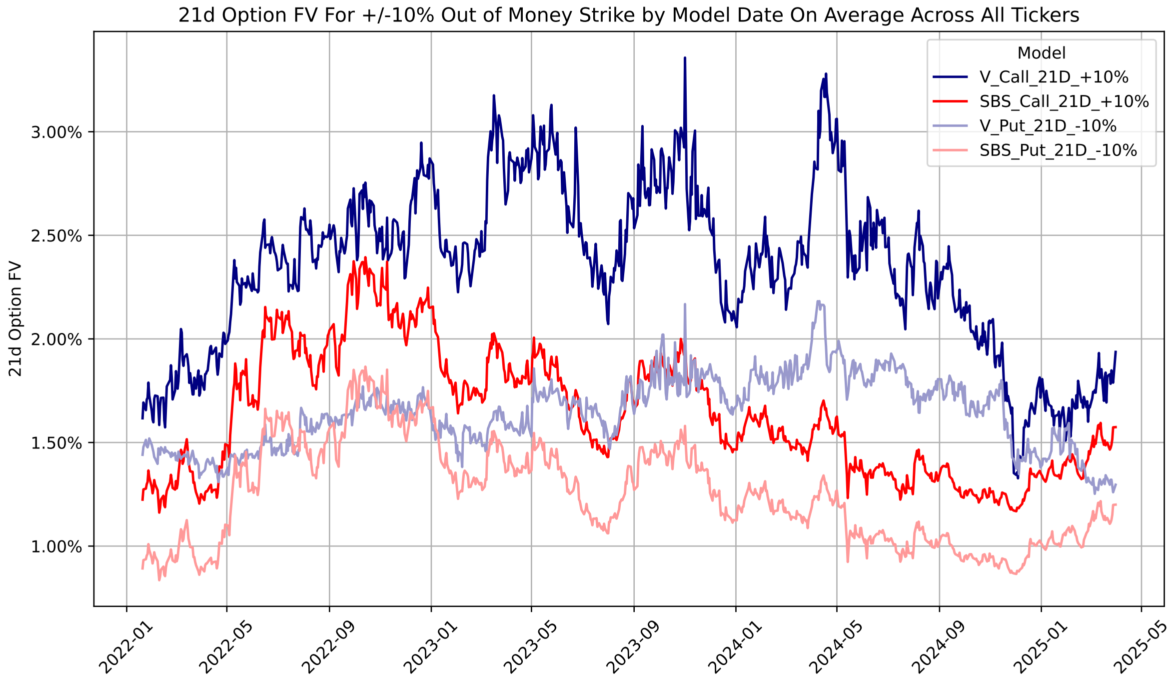
10d Horizon, +/- 20% Out of Money



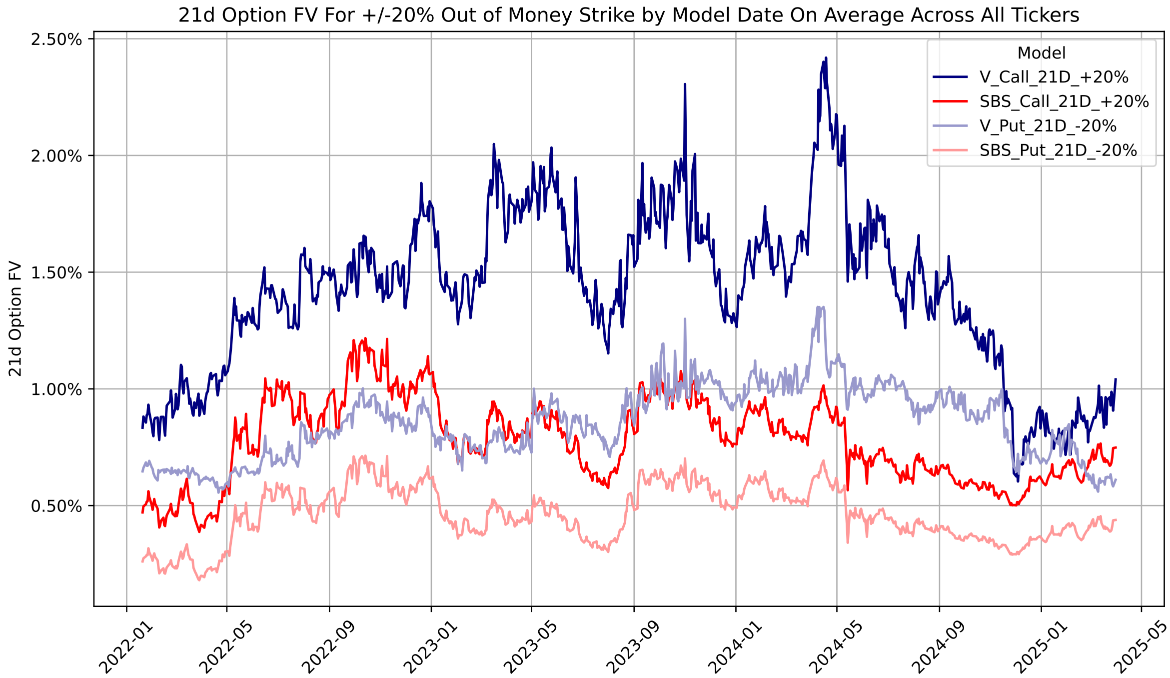
21d Horizon, +/- 1% Out of Money



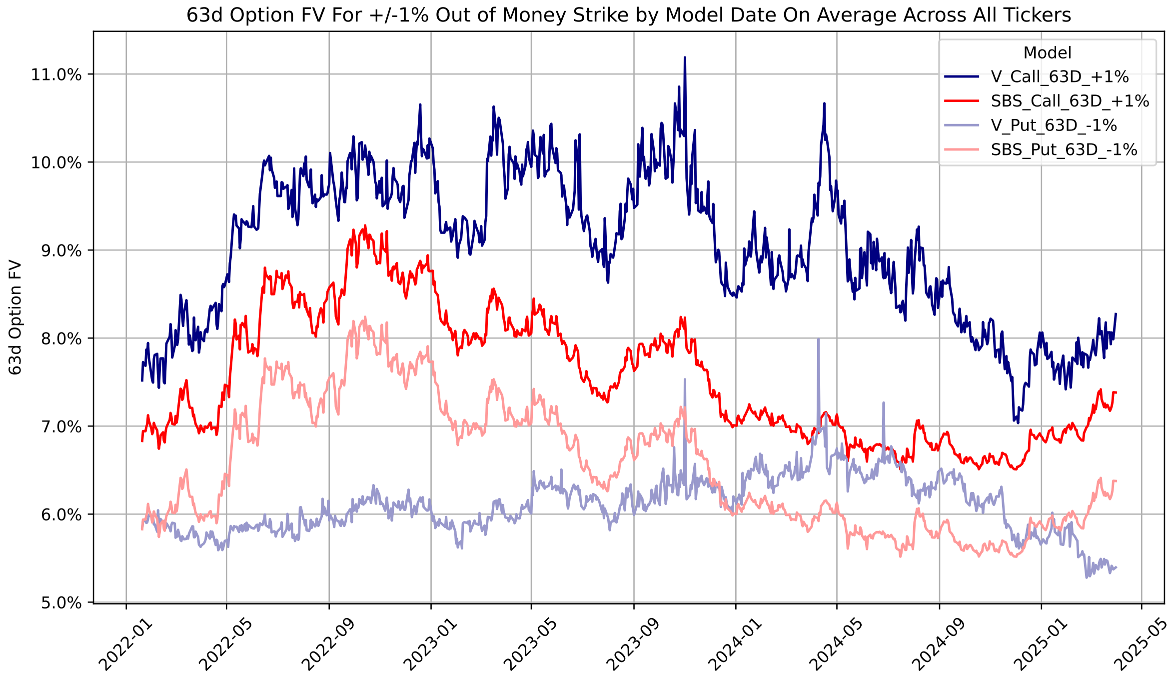
21d Horizon, +/- 10% Out of Money



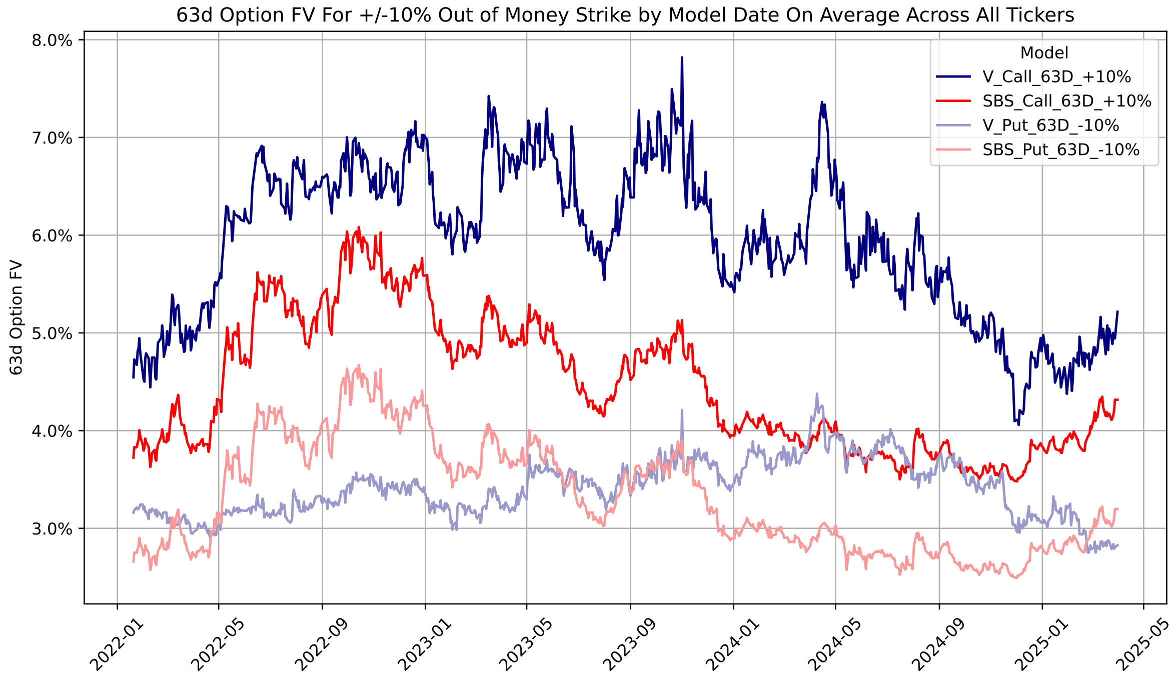
21d Horizon, +/- 20% Out of Money



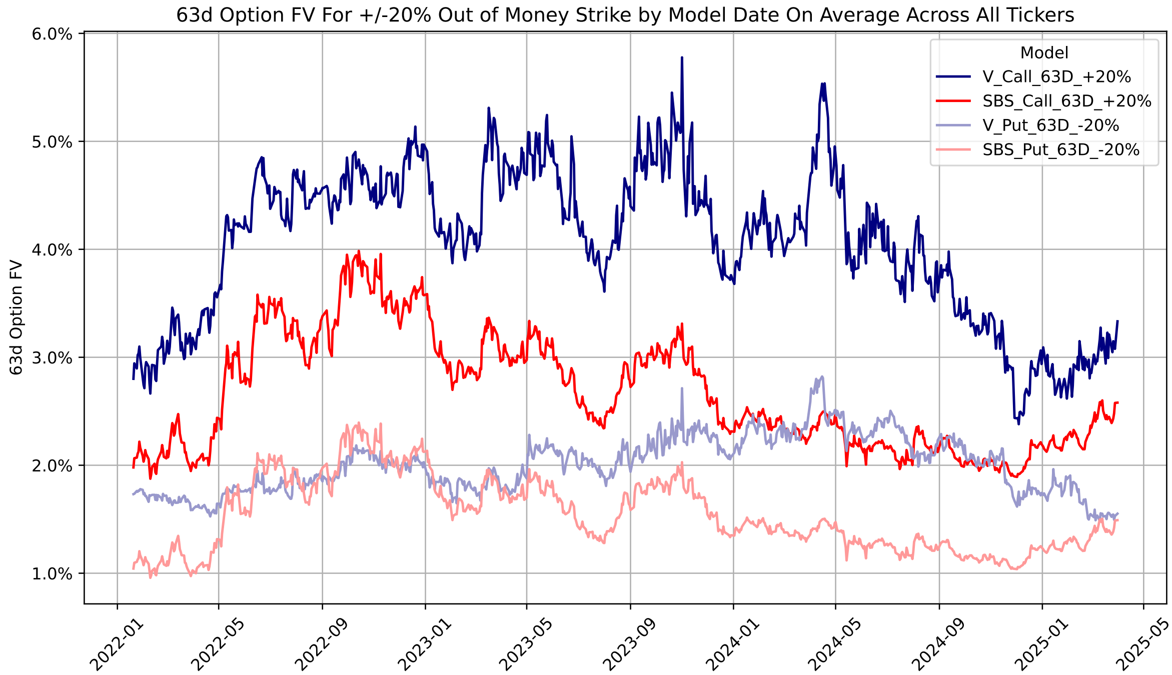
63d Horizon, +/- 1% Out of Money



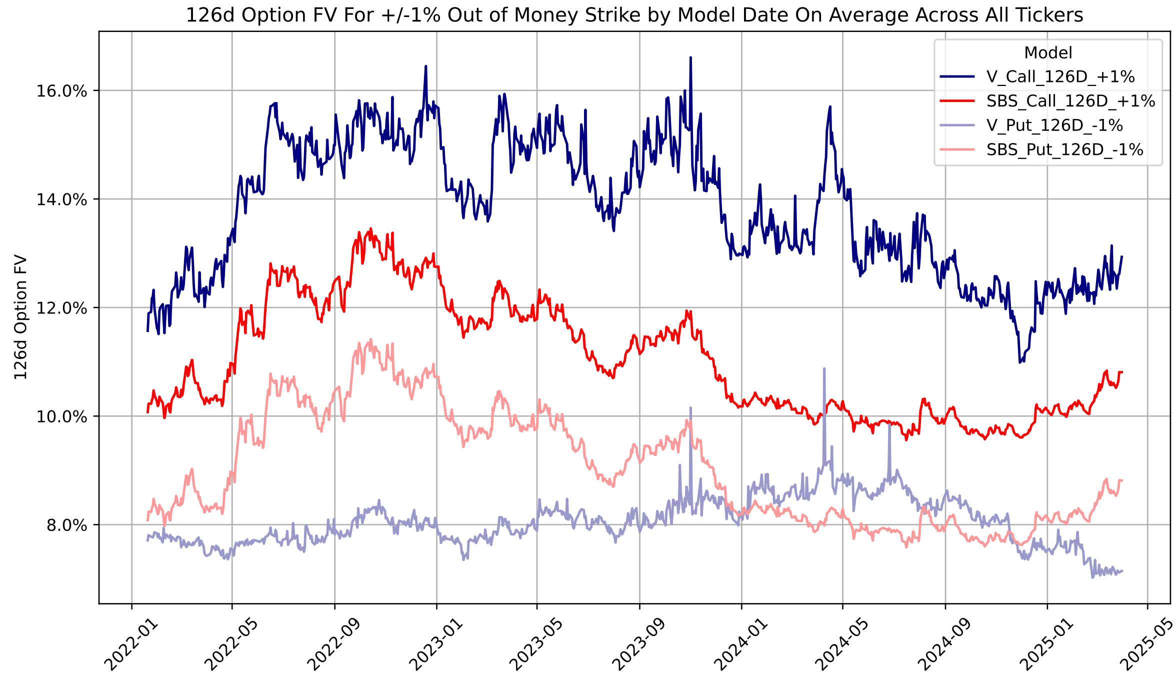
63d Horizon, +/- 10% Out of Money



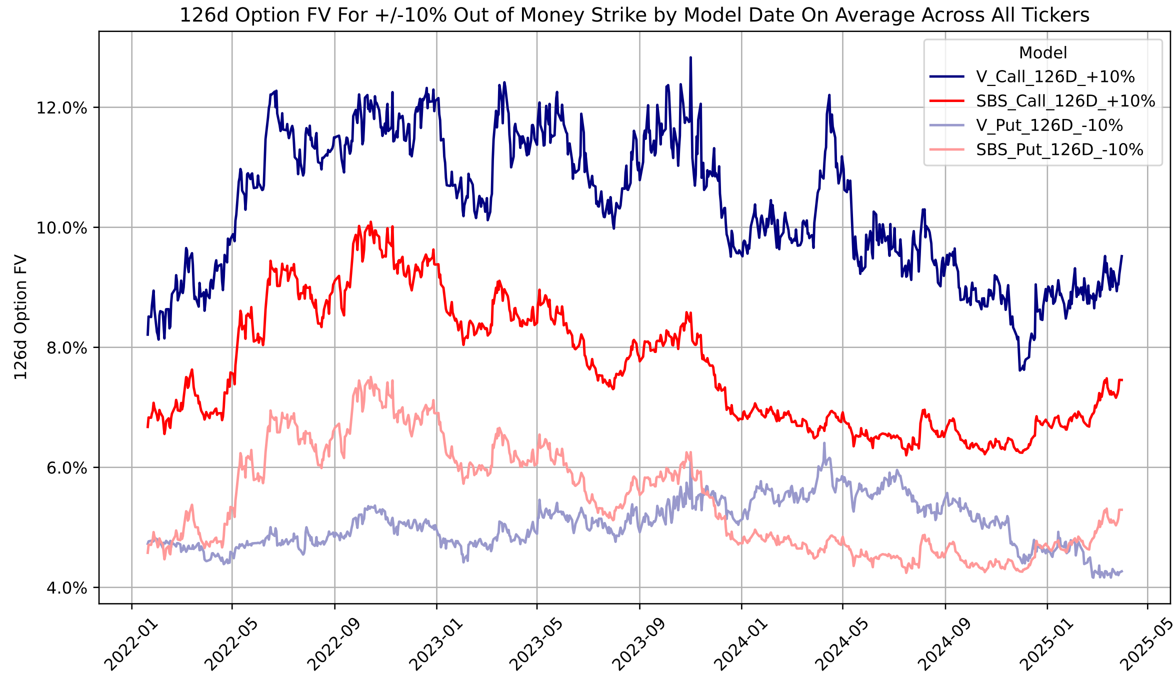
63d Horizon, +/- 20% Out of Money



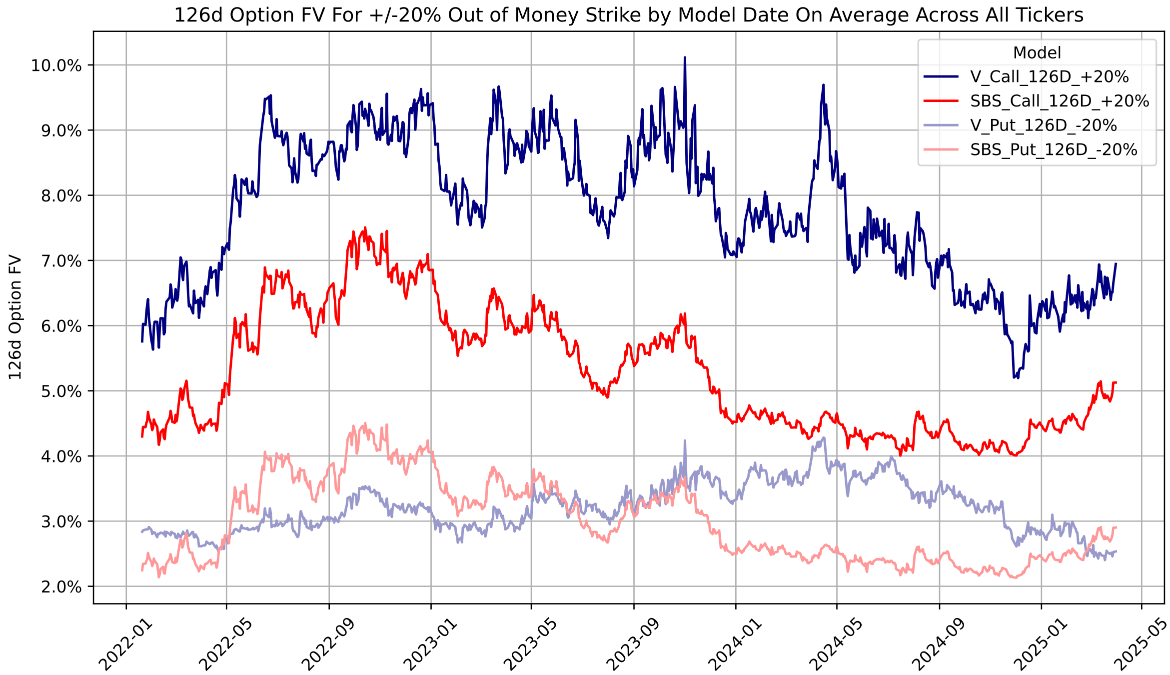
126d Horizon, +/- 1% Out of Money



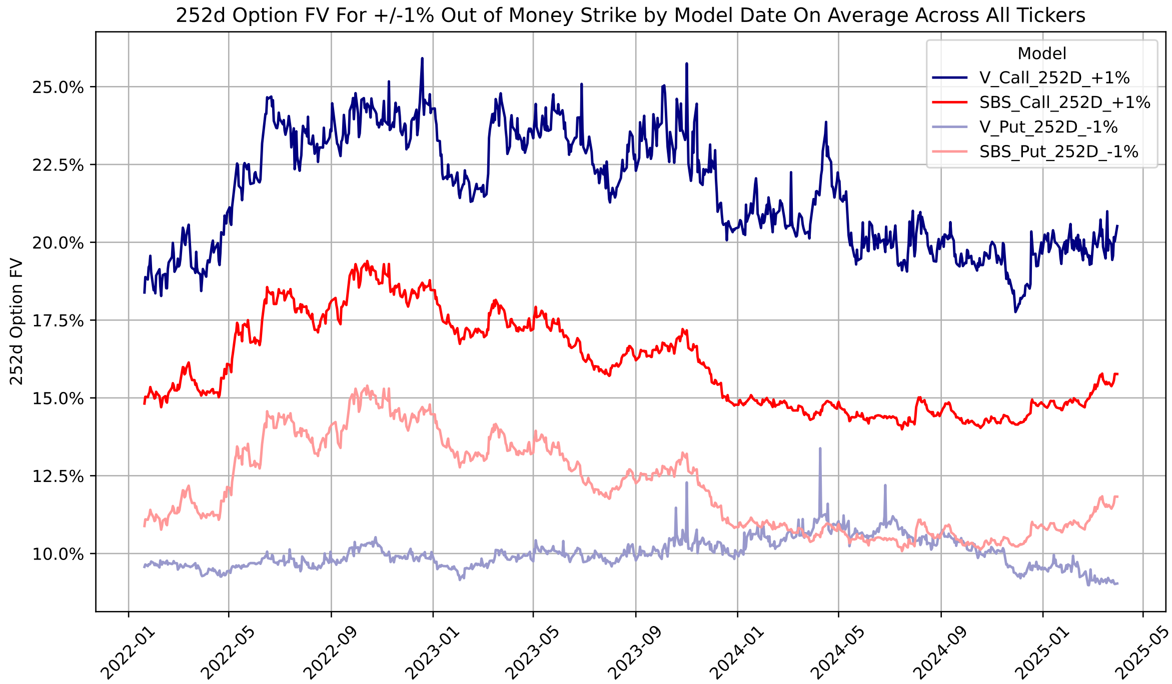
126d Horizon, +/- 10% Out of Money



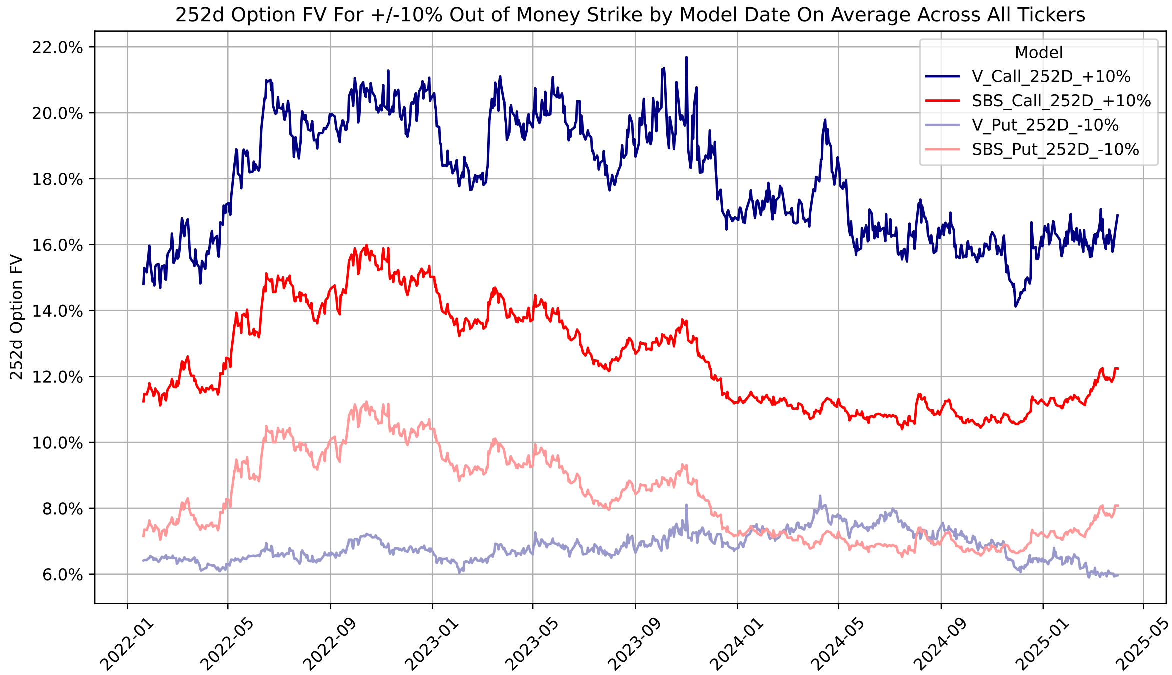
126d Horizon, +/- 20% Out of Money



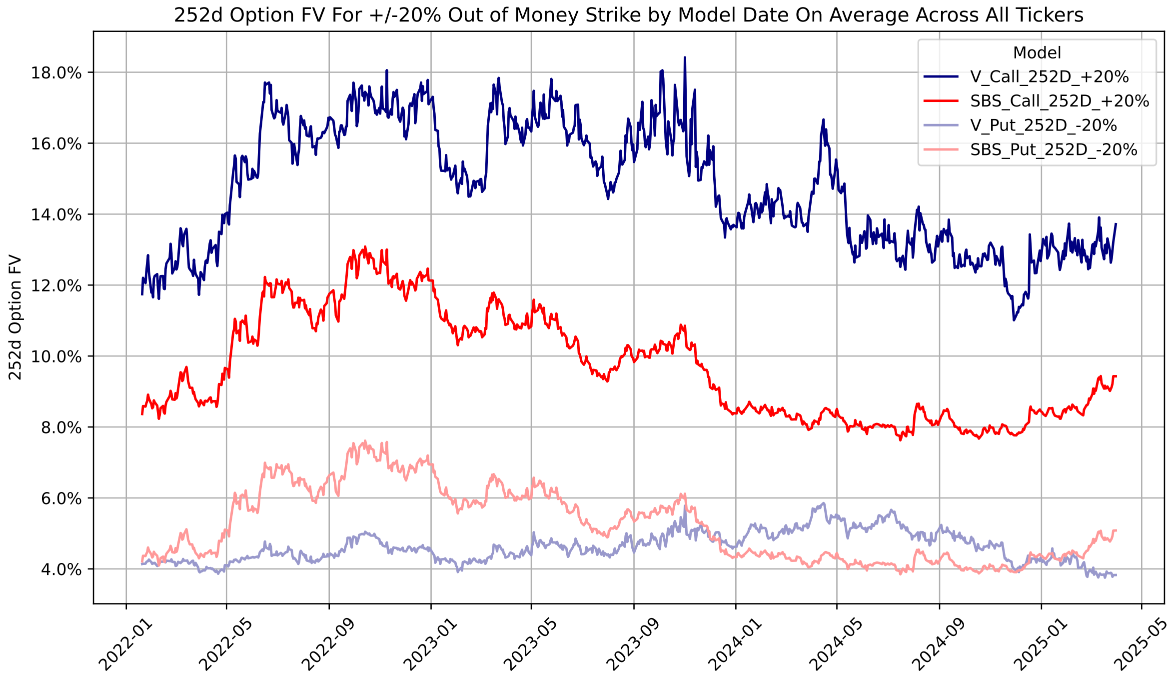
252d Horizon, +/- 1% Out of Money



252d Horizon, +/- 10% Out of Money



252d Horizon, +/- 20% Out of Money



Average OFV Profit at Expiration (% of Ticker Price Basis)

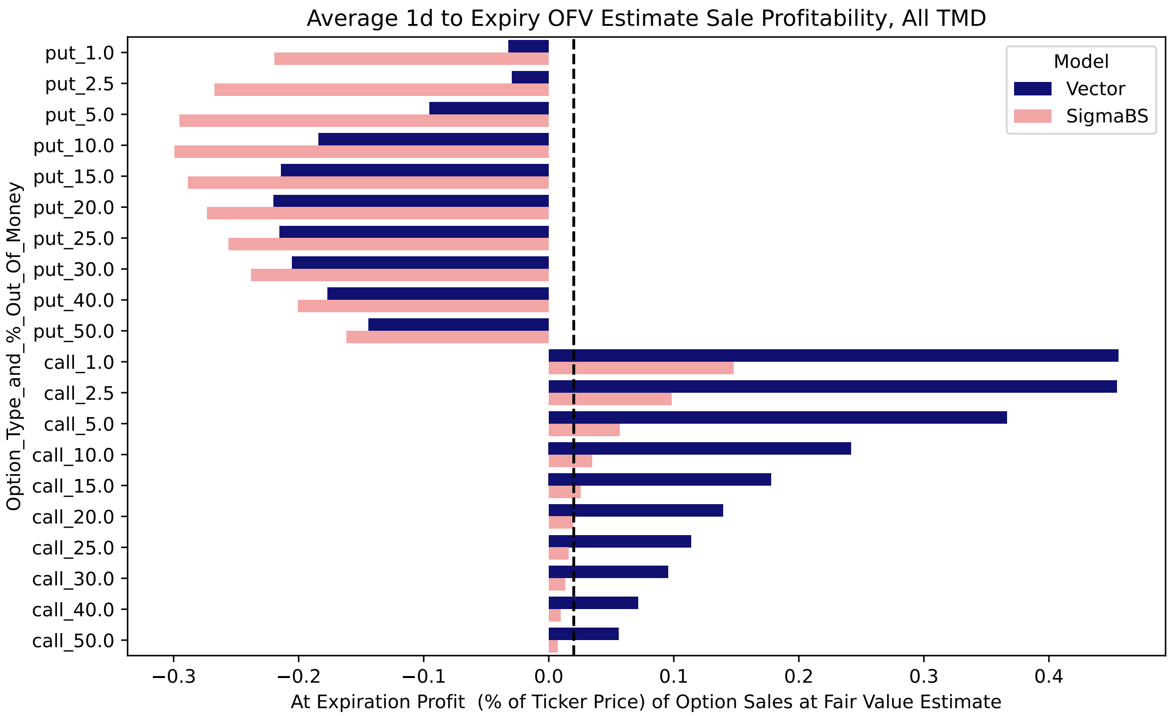
Theoretically, ignoring all transaction costs, delta neutral selling of a large number of call and put options held through expiration should, over time, result in an average return on notional exposure approximating the risk free rate. Assuming an average risk free rate of 4.00% over the out of sample period (started January 2022), the target average profit by time horizon should be approximately 0.02% for the 1d time horizon, 0.16% for 10d, 0.33% for 21d, 0.99% for 63d, 1.98% for 126d, and 4.00% for 252d. Though the closest strike to at the money we consider in this report is +/-1% out of the money, we have denoted these levels on the charts that follow with a dashed black line, as a reference point. Note that we presumed a 4.00% risk free rate when creating the Sigma Black Scholes (SBS) based OFV estimates.

Historic Average Profit Levels

Here we compare Vector Model ("V", dark navy shading) and Sigma based Black Scholes ("BS", light red shading) based option sale profitability levels by horizon, on average across all ticker-model dates for the lookback window indicated.

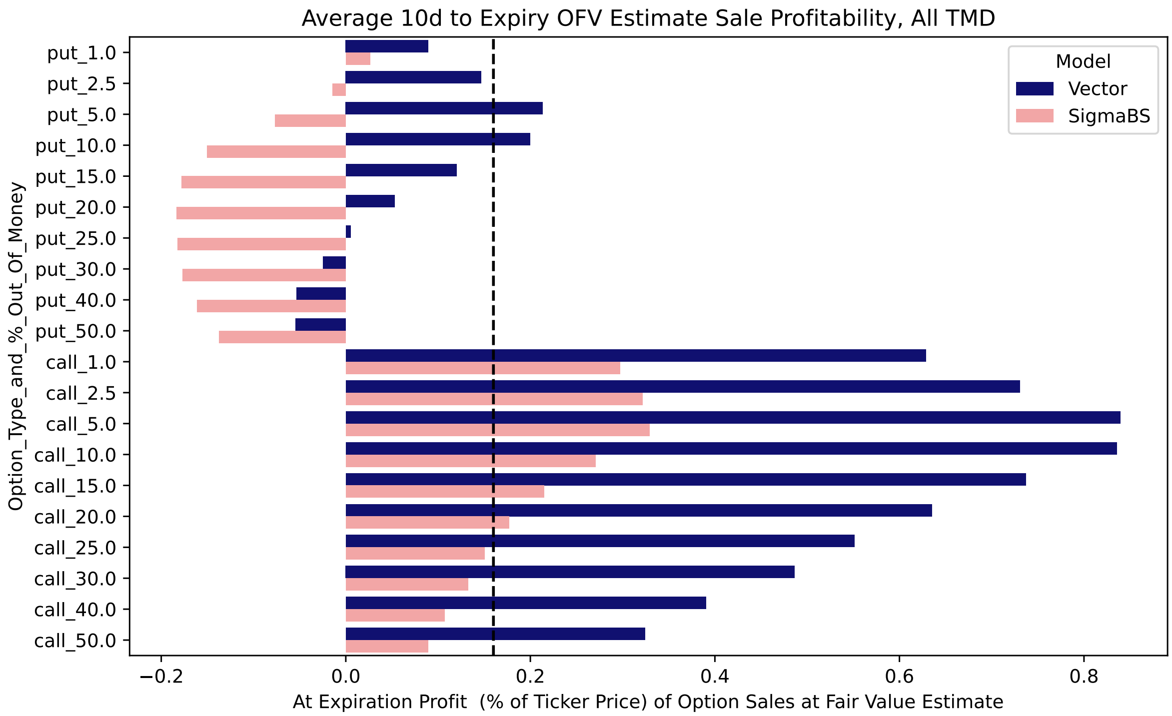
All Out of Sample Model Dates, 1D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31


Average 1d to Expiry OFV Estimate Sale Profitability, All TMD
Model
Vector
SigmaBS
Option_Type_and_%_Out_Of_Money
put_1.0
put_2.5
put_5.0
put_10.0
put_15.0
put_20.0
put_25.0
put_30.0
put_40.0
put_50.0
call_1.0
call_2.5
call_5.0
call_10.0
call_15.0
call_20.0
call_25.0
call_30.0
call_40.0
call_50.0
−0.3
−0.2
−0.1
0.0
0.1
0.2
0.3
0.4
At Expiration Profit (% of Ticker Price) of Option Sales at Fair Value Estimate

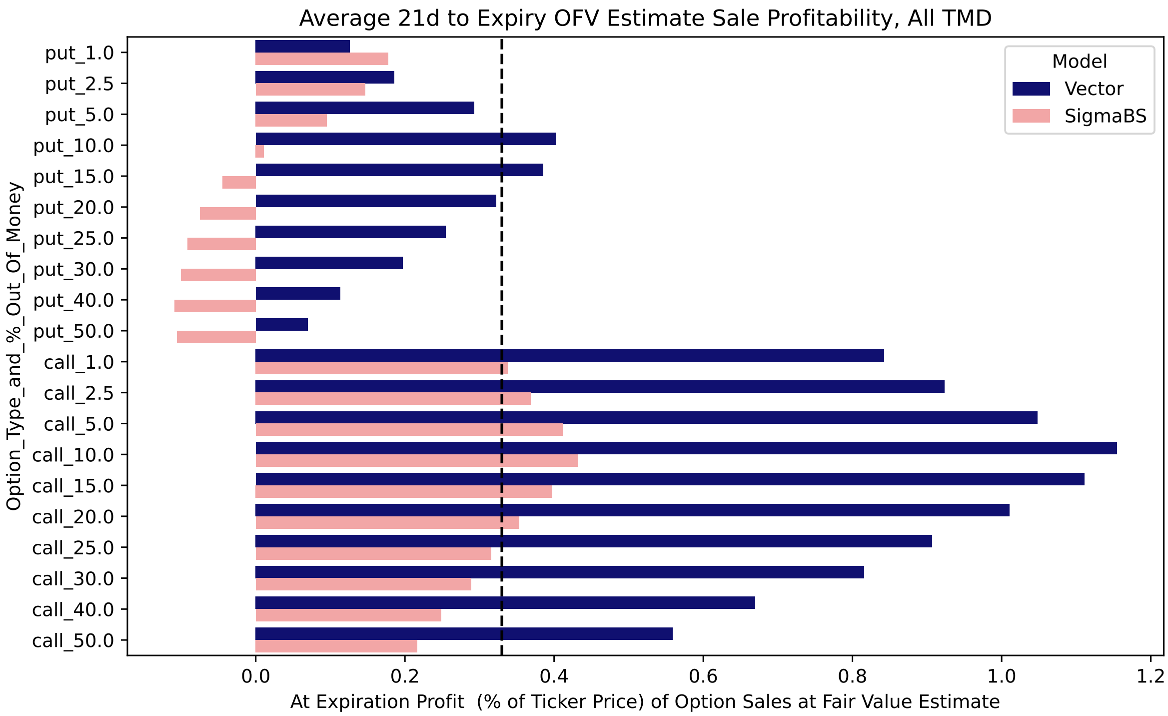
All Out of Sample Model Dates, 10D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



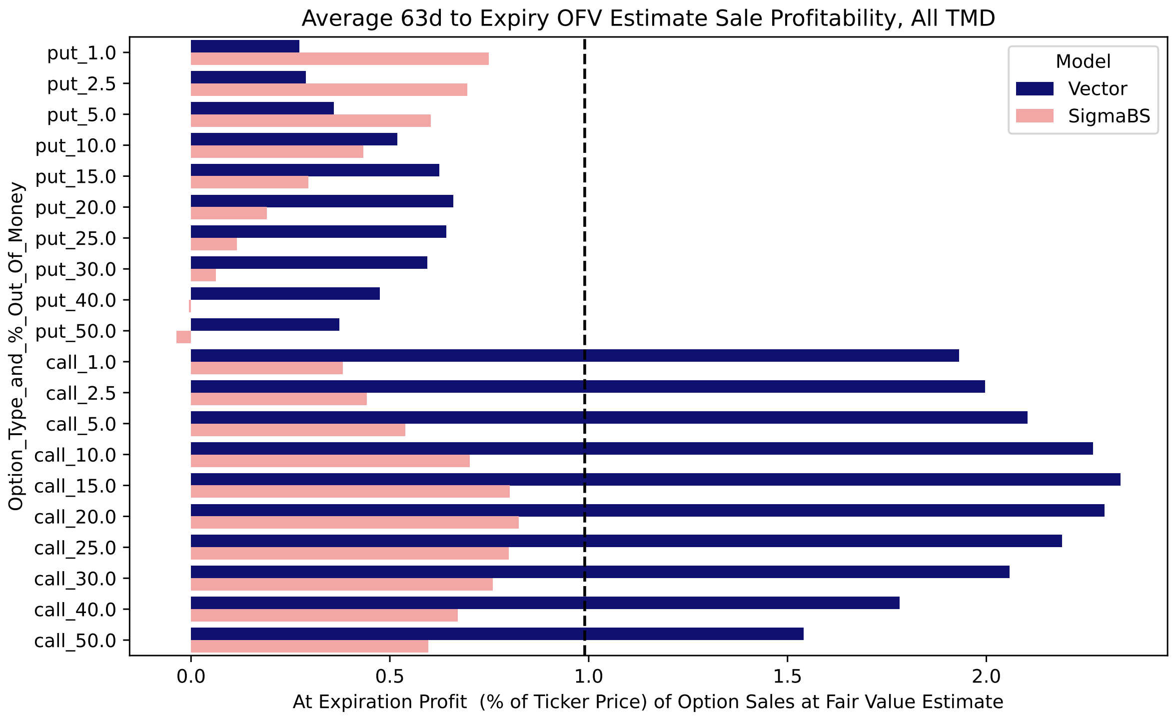
All Out of Sample Model Dates, 21D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



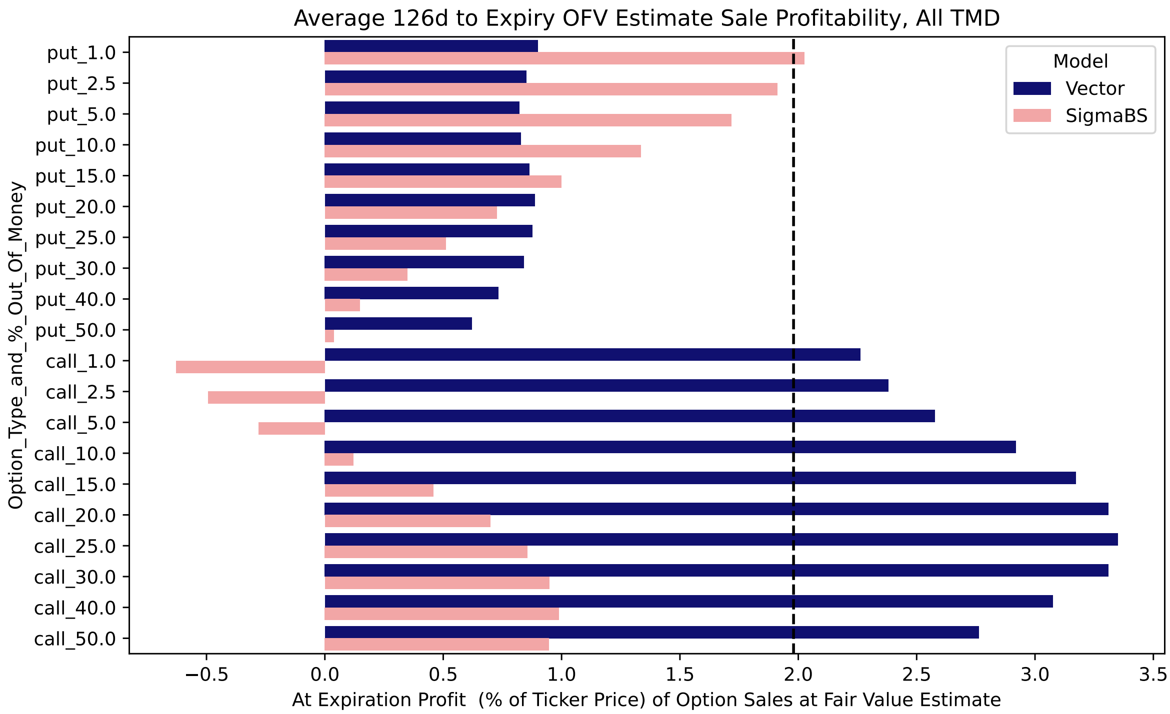
All Out of Sample Model Dates, 63D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



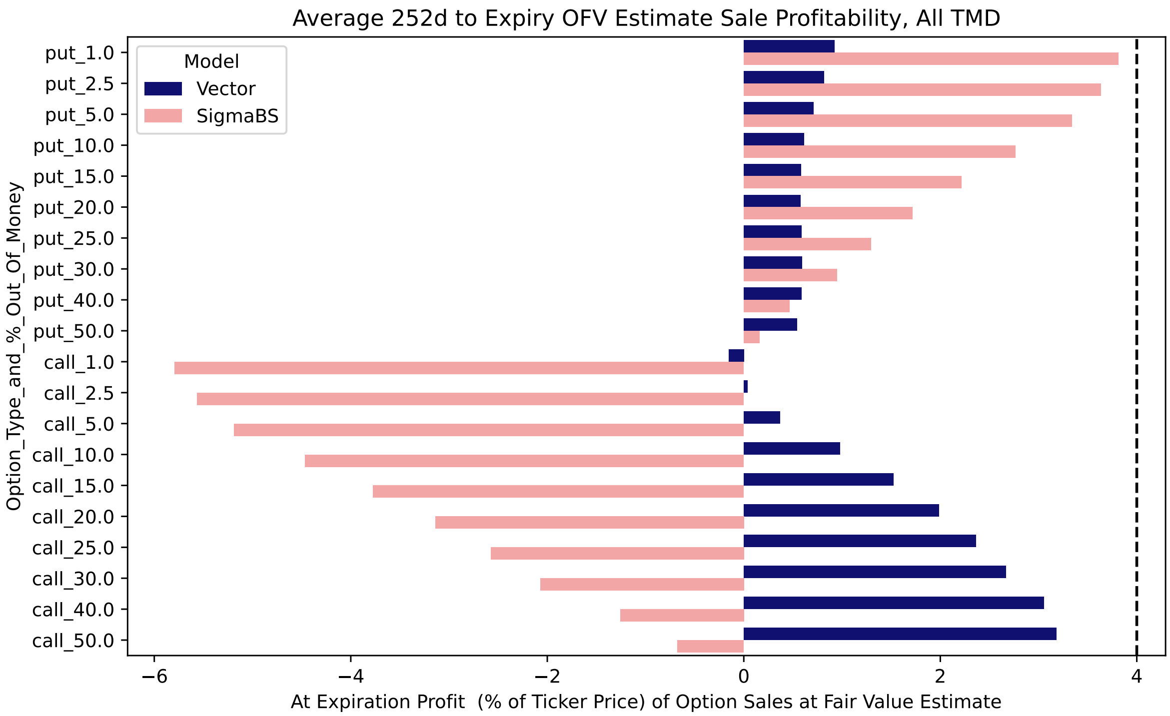
All Out of Sample Model Dates, 126D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



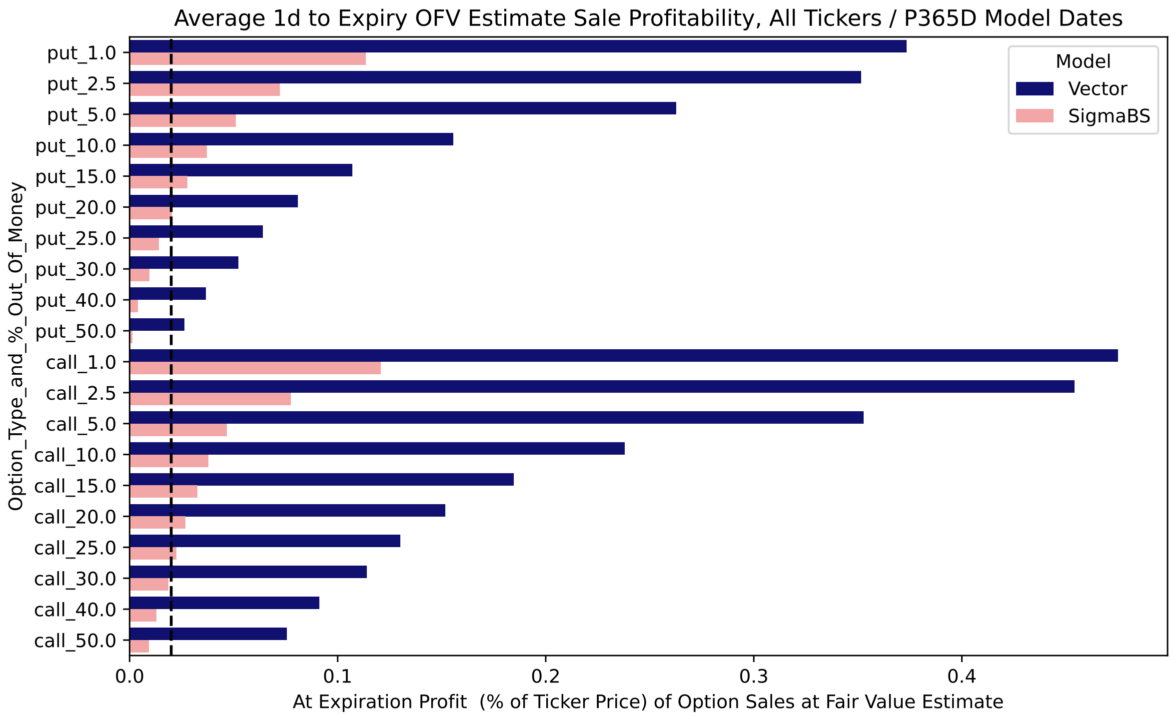
All Out of Sample Model Dates, 252D Horizon

Period examined: All model dates from 2022-01-20 through 2025-03-31



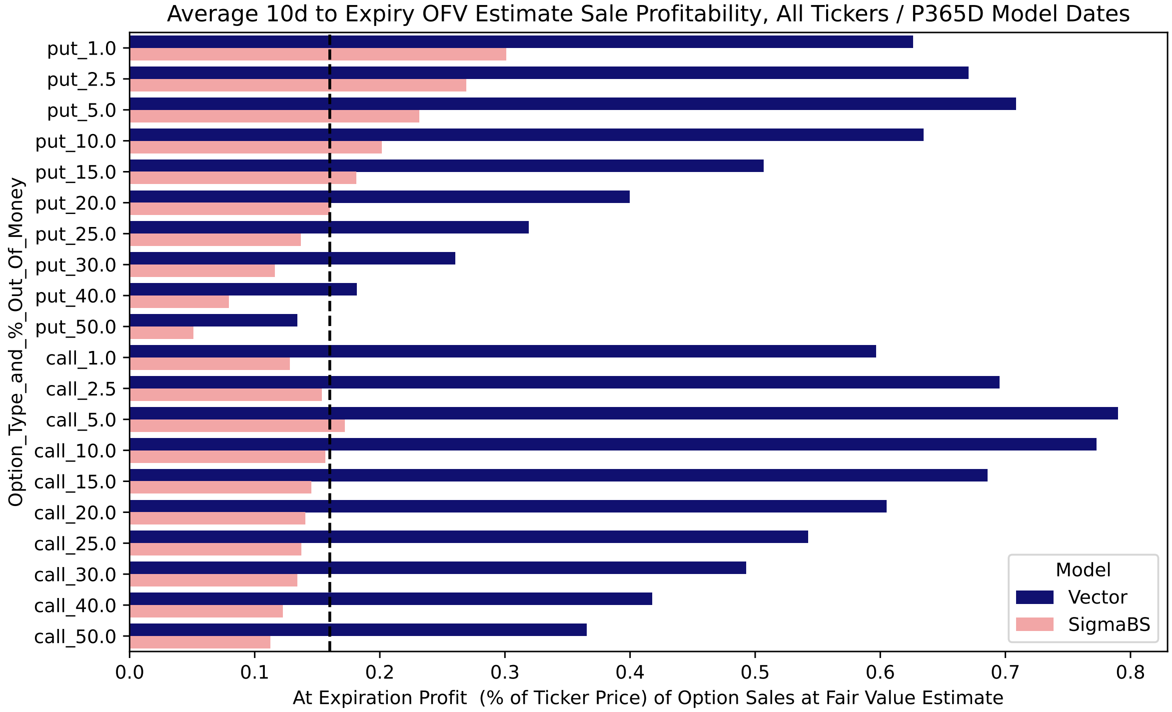
P365D Model Dates, 1D Horizon

Period examined: All model dates from 2024-04-02 through 2025-03-31



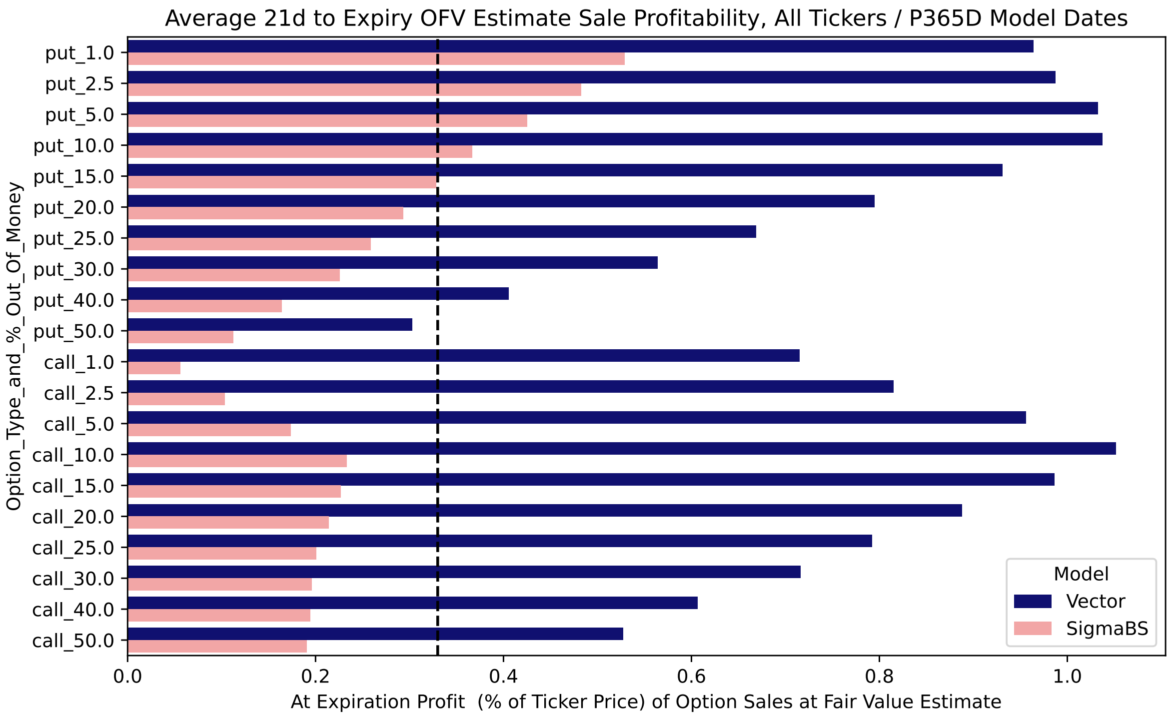
P365D Model Dates, 10D Horizon

Period examined: All model dates from 2024-04-02 through 2025-03-31



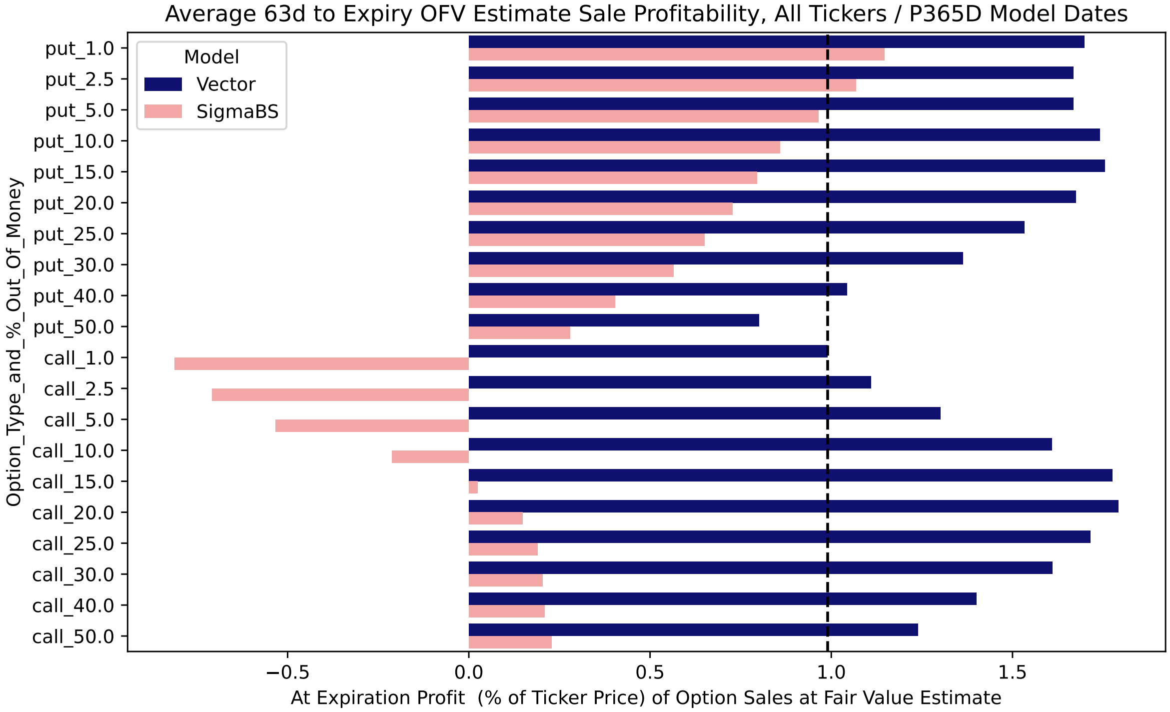
P365D Model Dates, 21D Horizon

Period examined: All model dates from 2024-04-02 through 2025-03-31



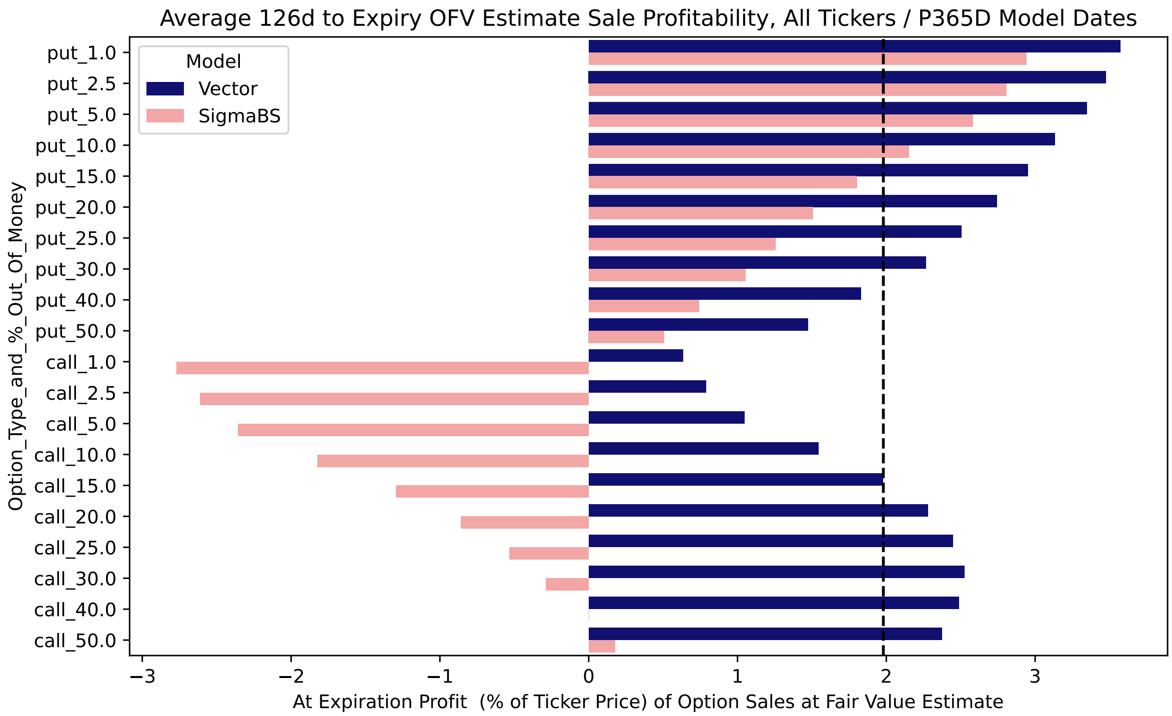
P365D Model Dates, 63D Horizon

Period examined: All model dates from 2024-04-02 through 2025-03-31



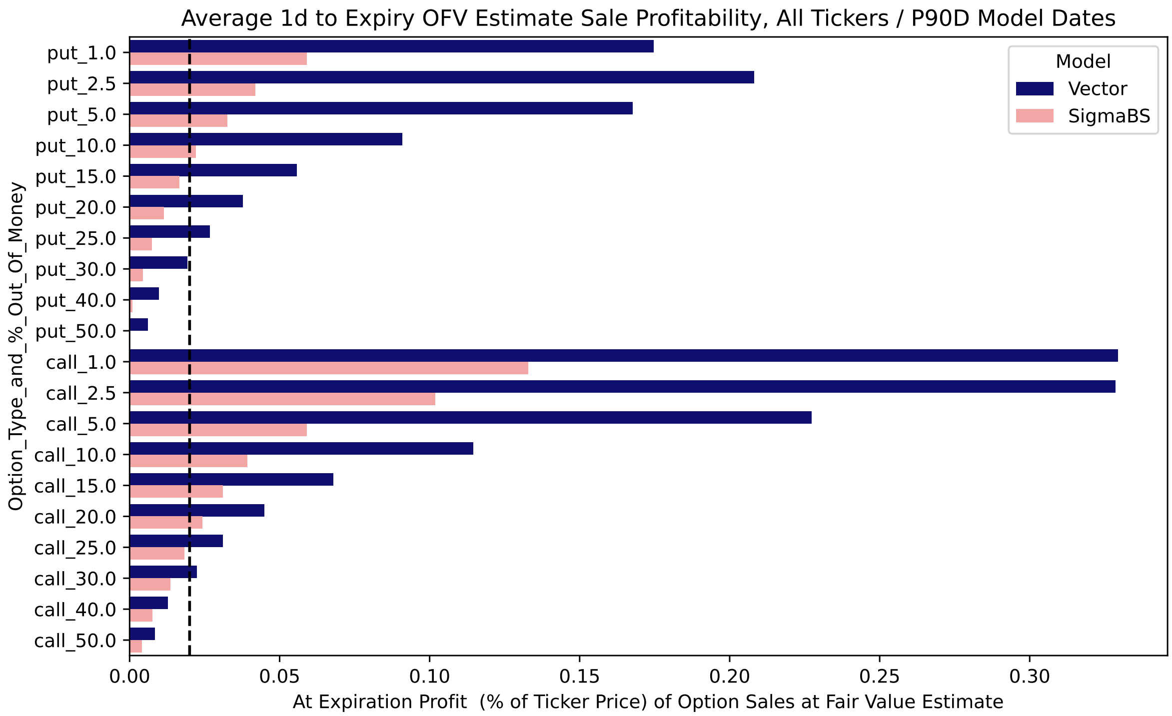
P365D Model Dates, 126D Horizon

Period examined: All model dates from 2024-04-02 through 2025-03-31



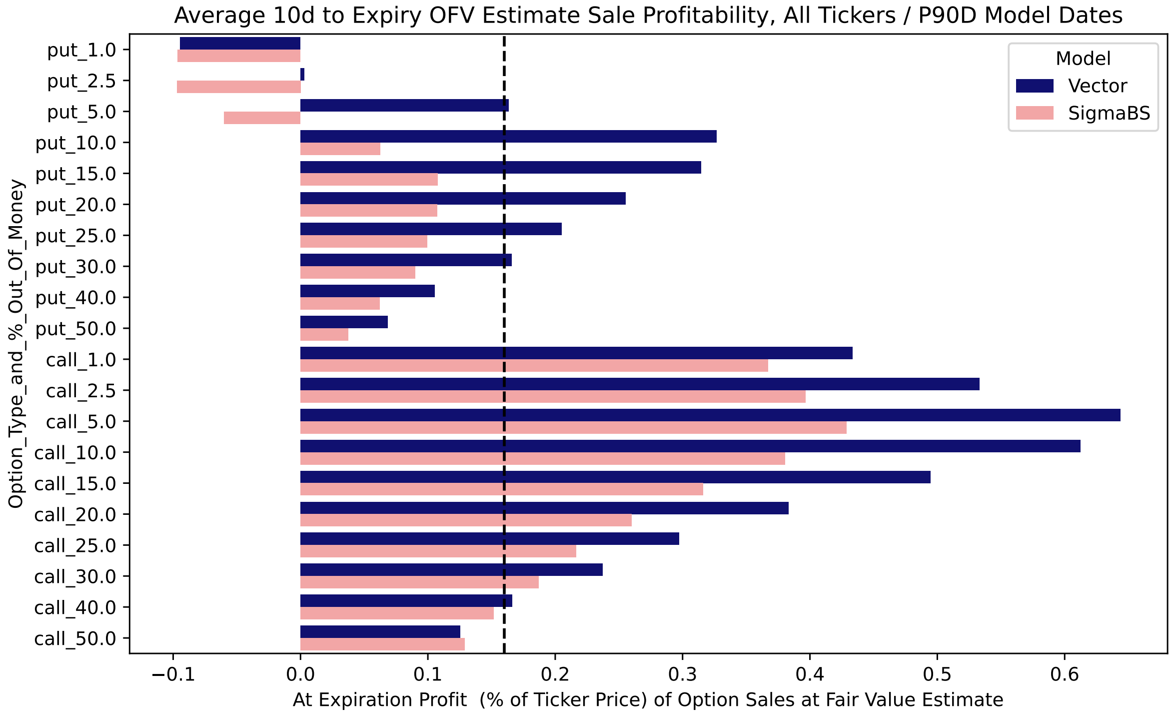
P90D Model Dates, 1D Horizon

Period examined: All model dates from 2025-01-02 through 2025-03-31



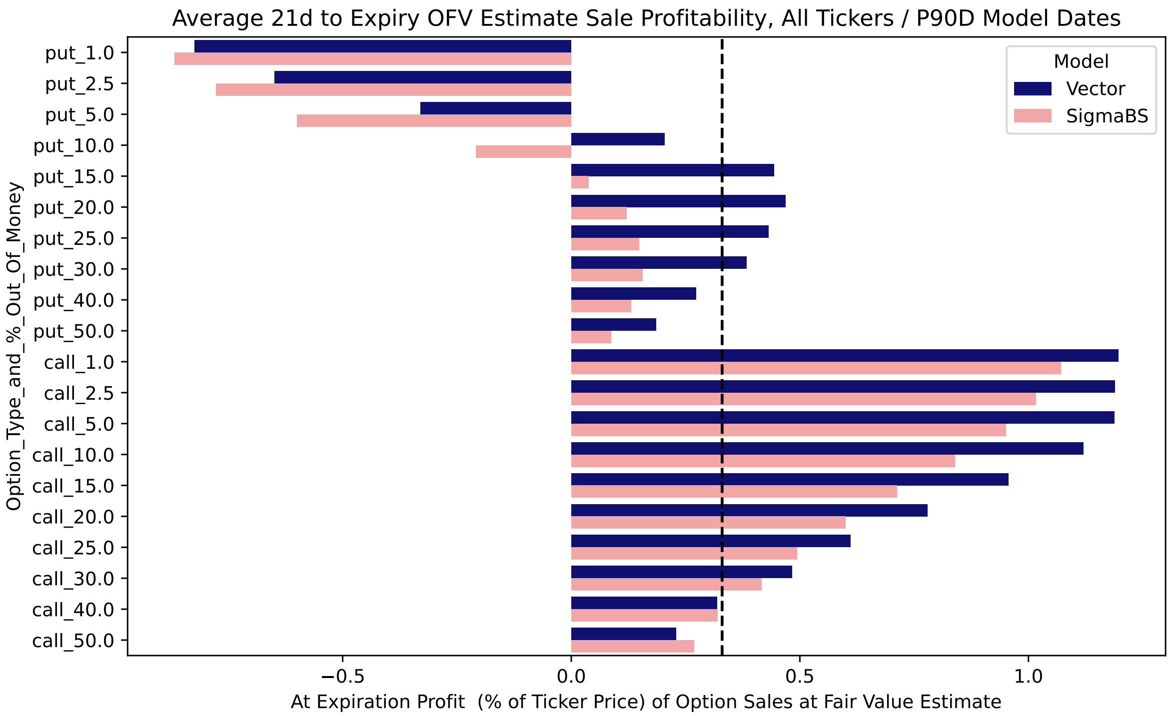
P90D Model Dates, 10D Horizon

Period examined: All model dates from 2025-01-02 through 2025-03-31



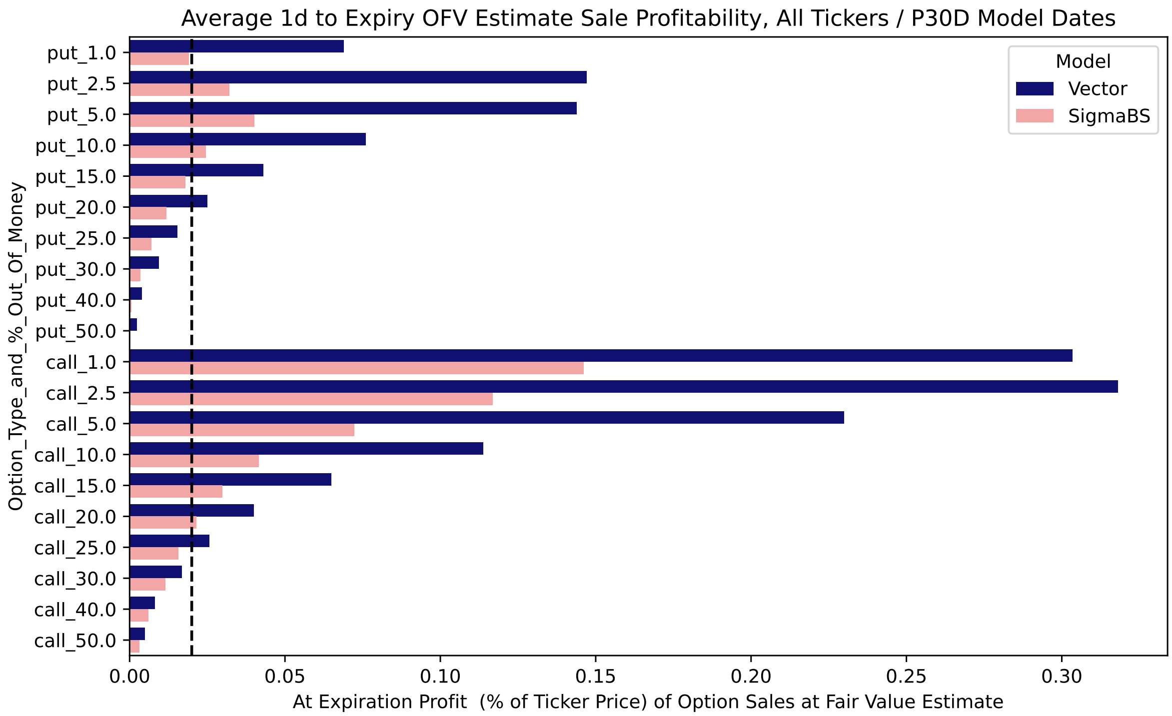
P90D Model Dates, 21D Horizon

Period examined: All model dates from 2025-01-02 through 2025-03-31



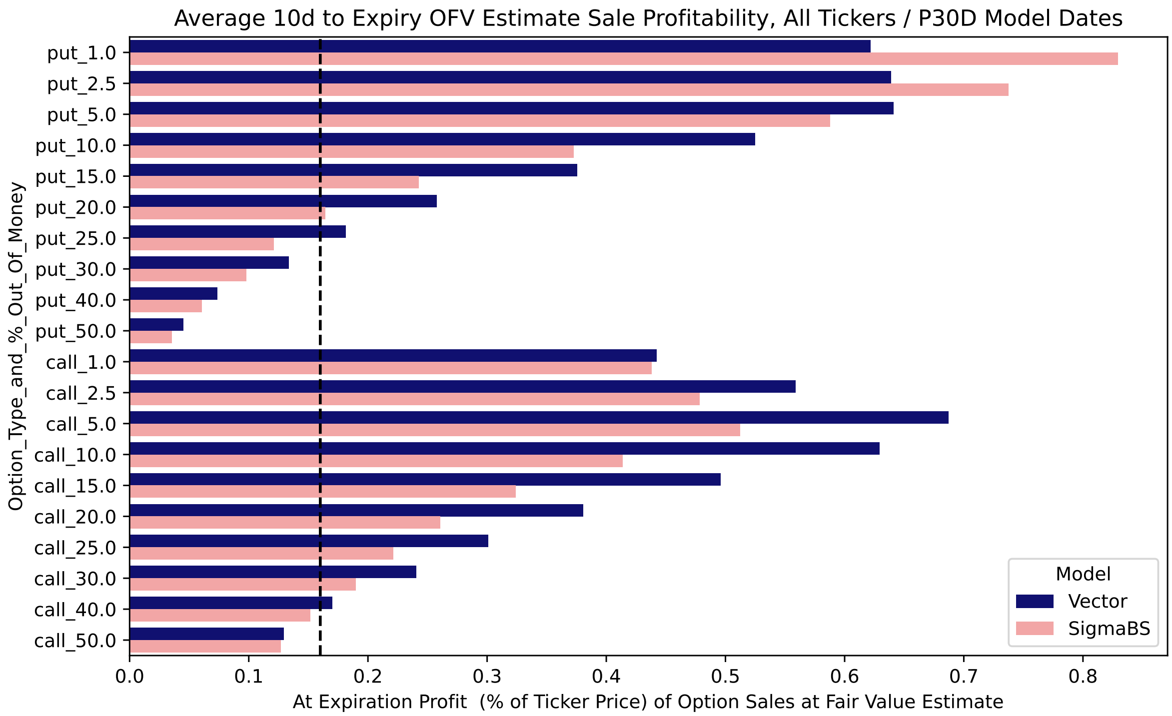
P30D Model Dates, 1D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31



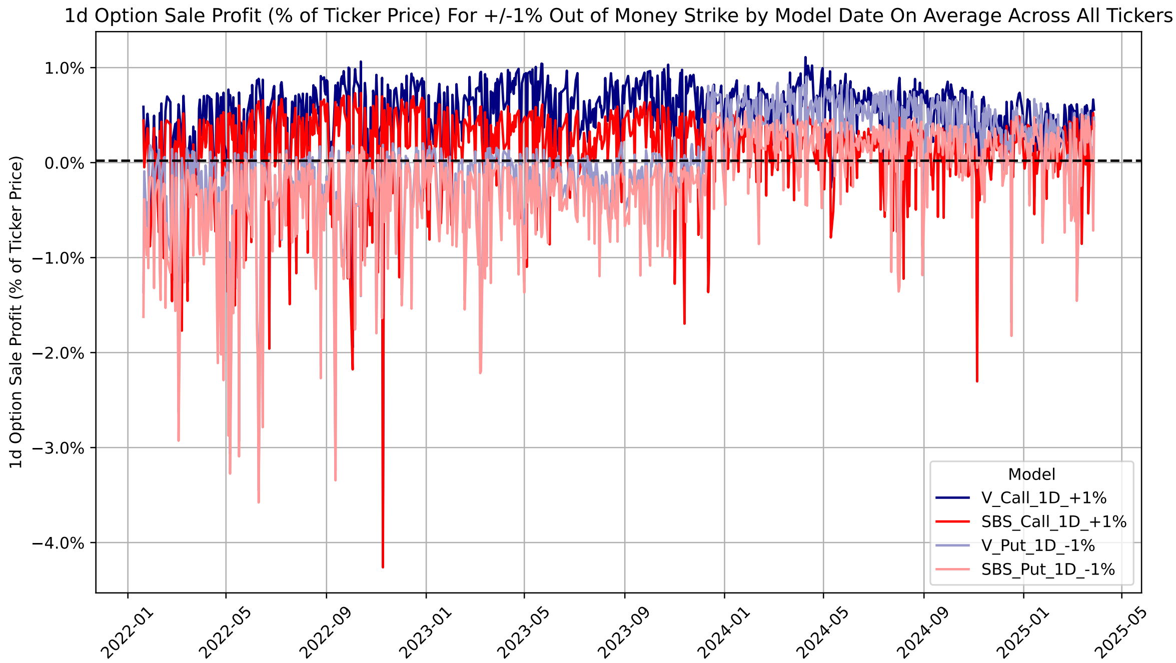
P30D Model Dates, 10D Horizon

Period examined: All model dates from 2025-03-03 through 2025-03-31

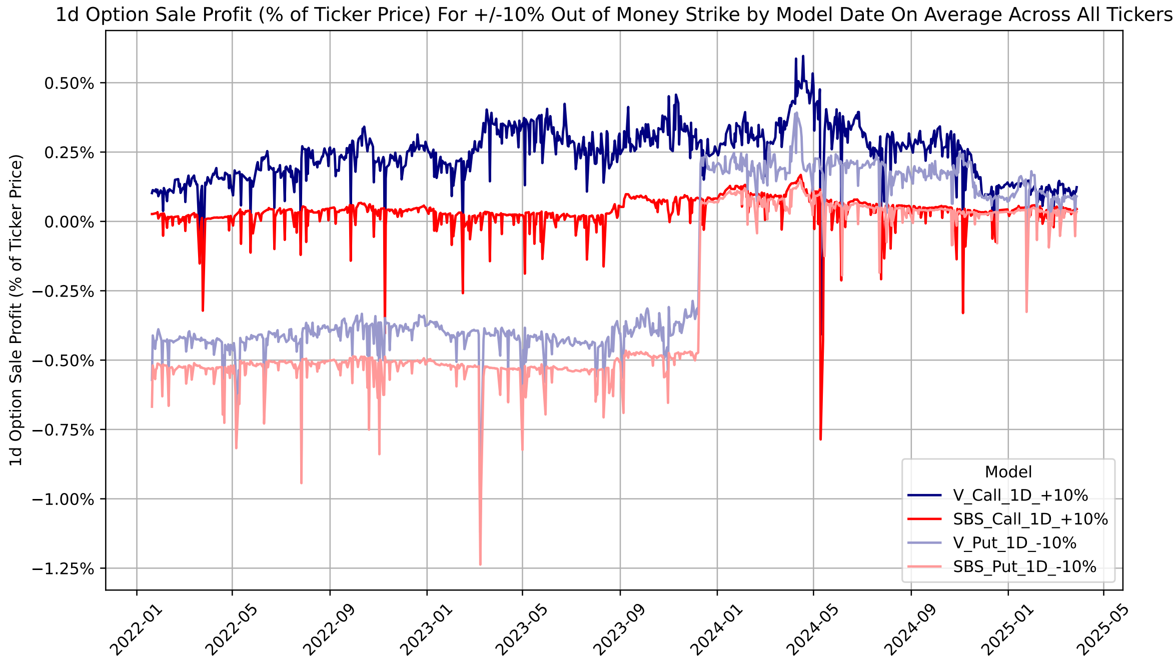


Model Date Detail of Option Sale Profitability

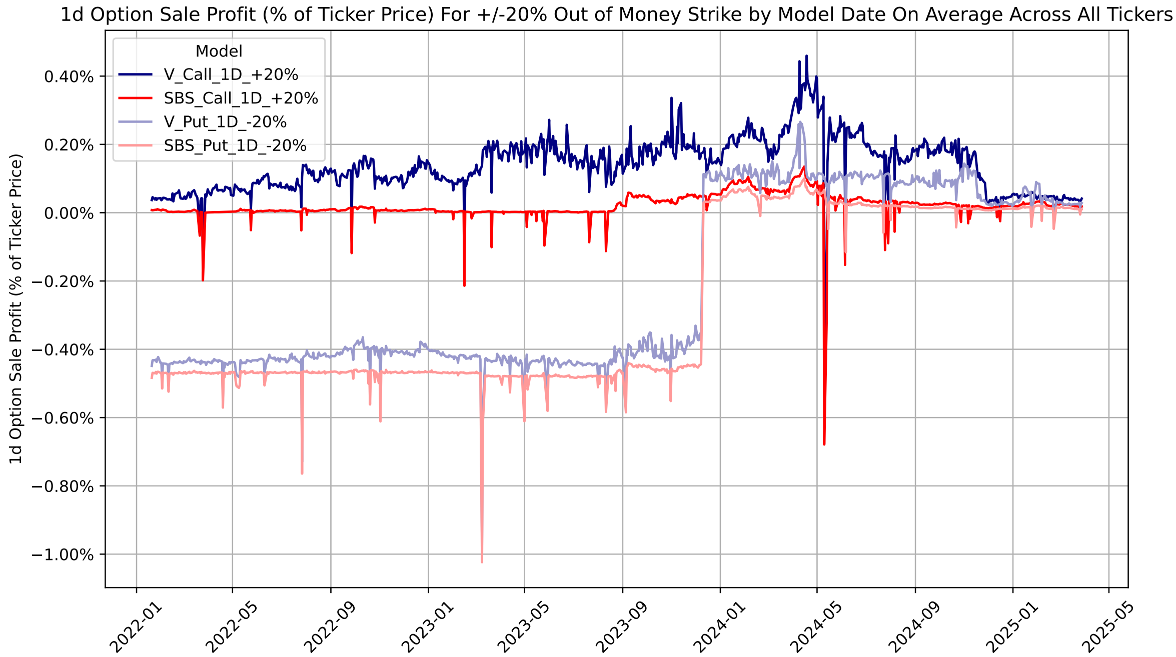
1d Horizon, +/- 1% Out of Money



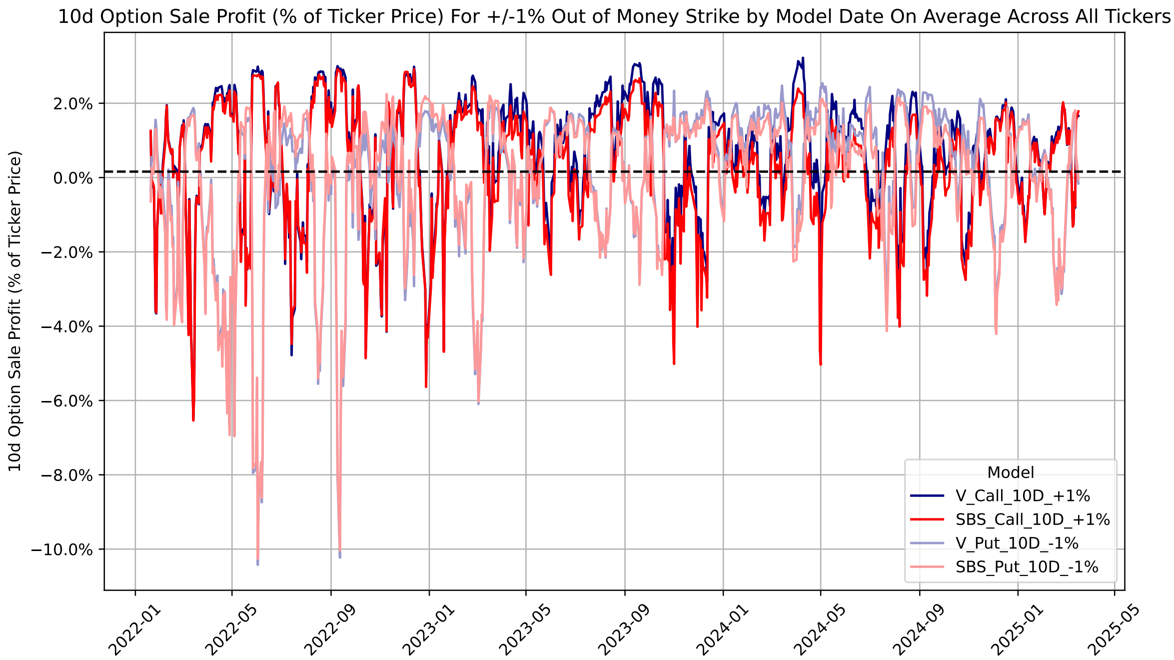
1d Horizon, +/- 10% Out of Money



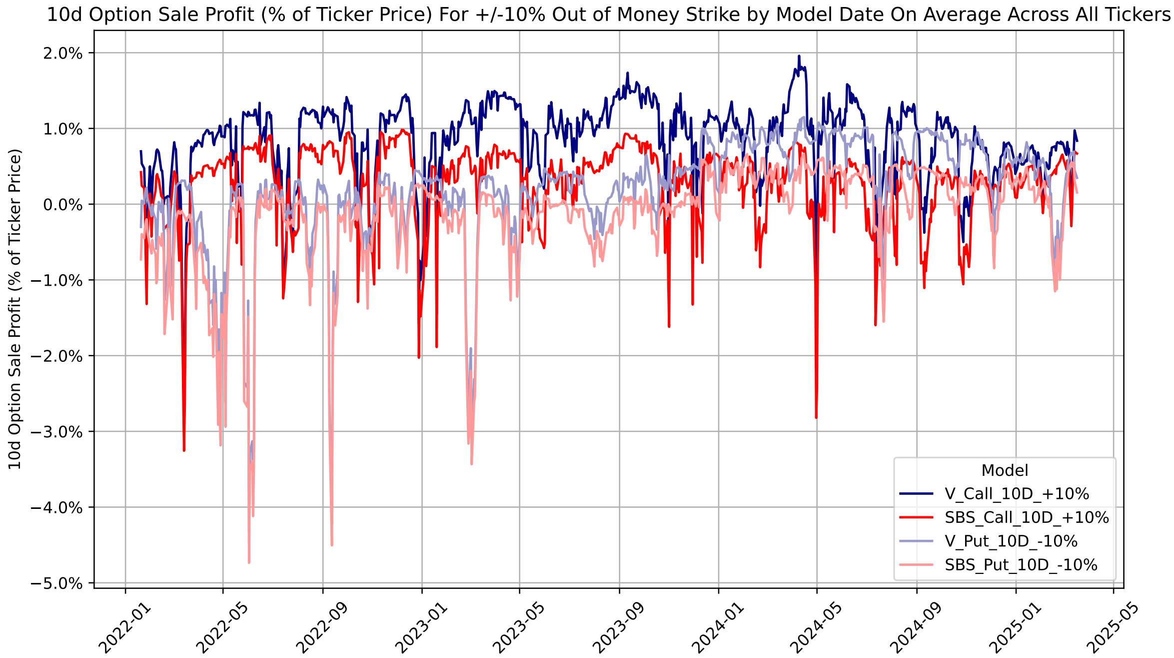
1d Horizon, +/- 20% Out of Money



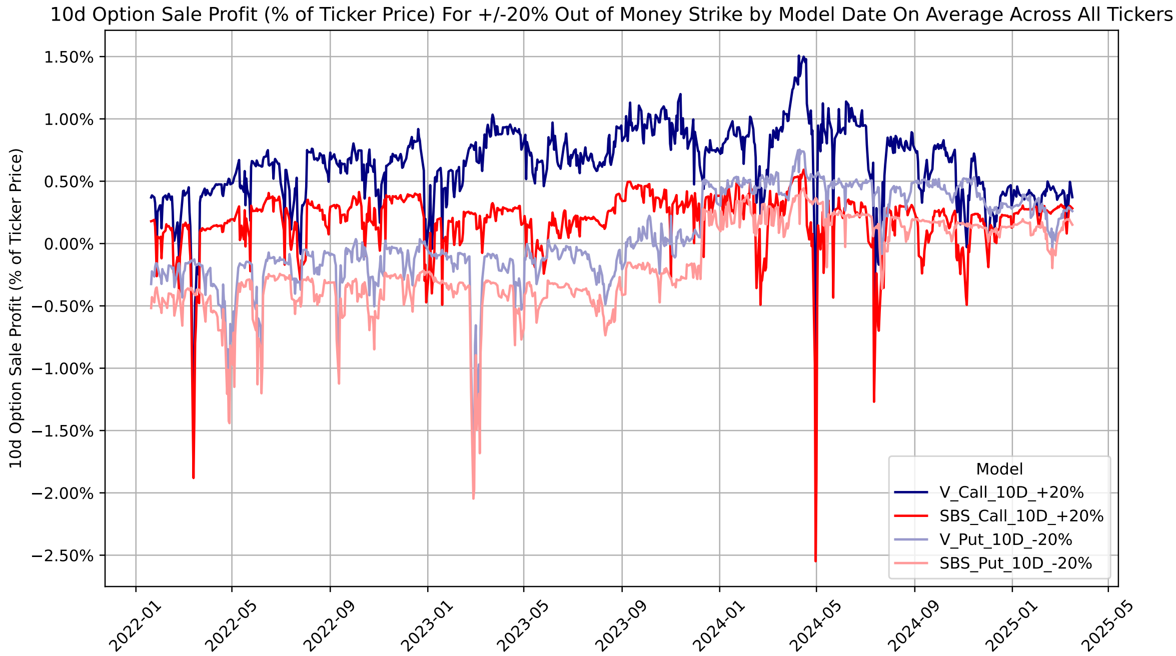
10d Horizon, +/- 1% Out of Money



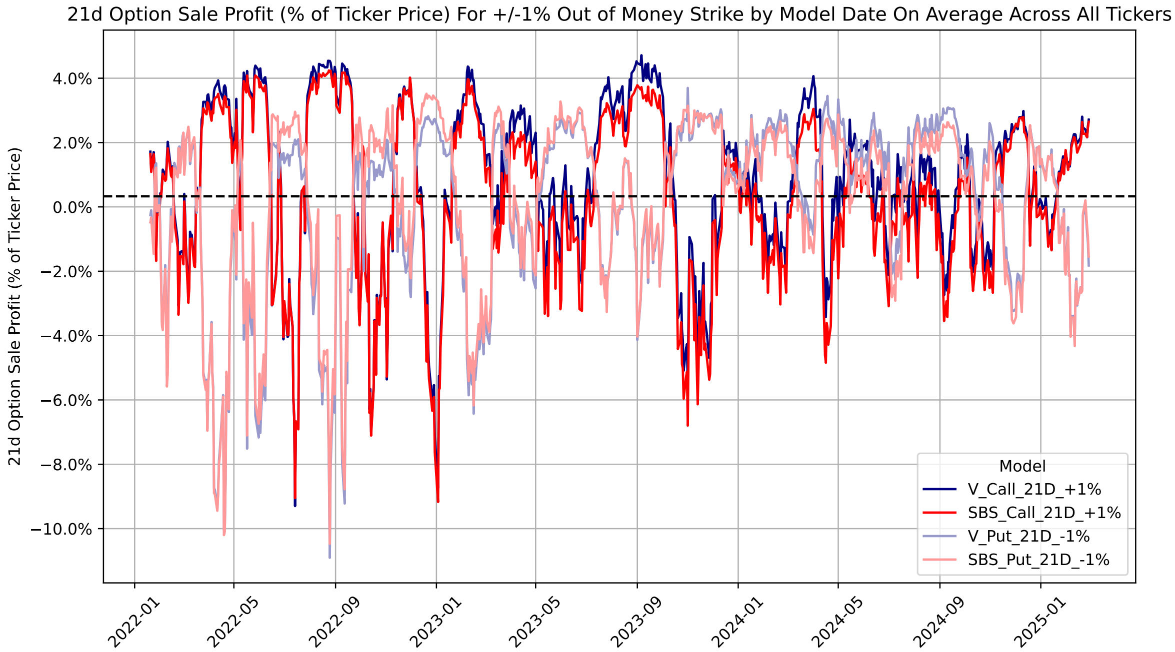
10d Horizon, +/- 10% Out of Money



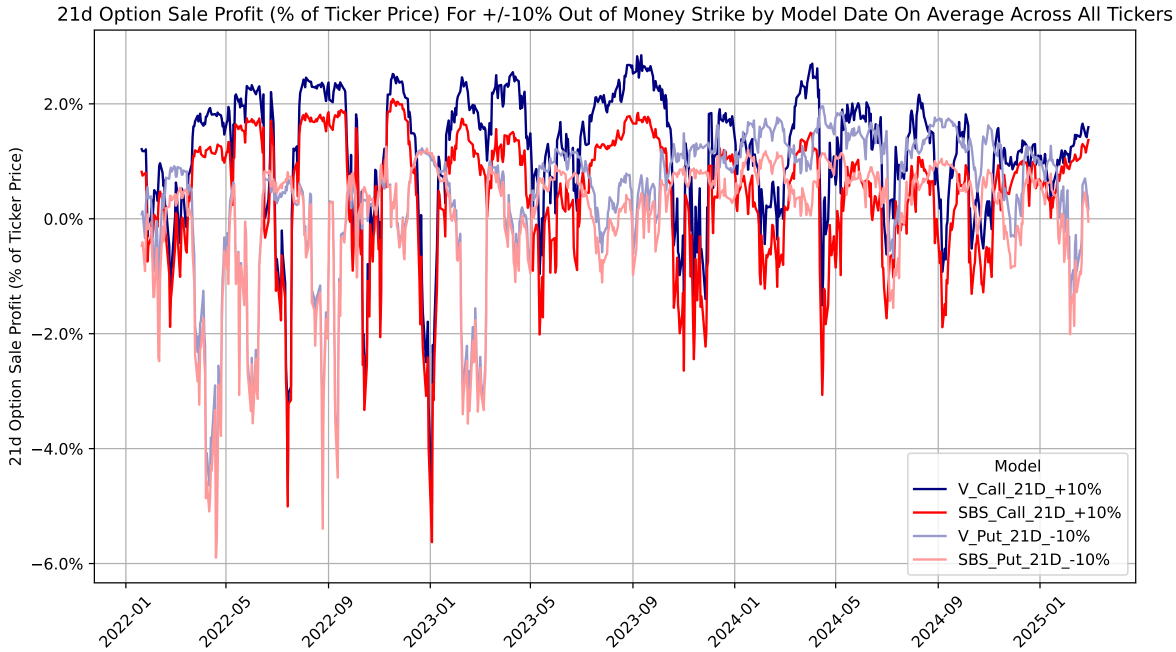
10d Horizon, +/- 20% Out of Money



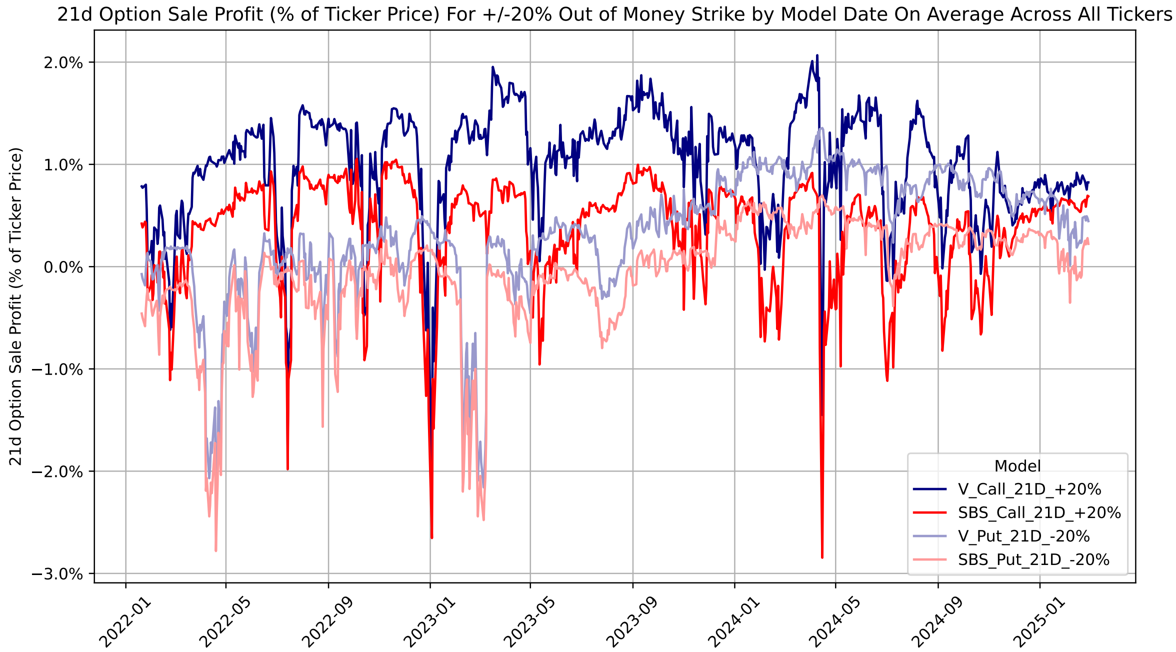
21d Horizon, +/- 1% Out of Money



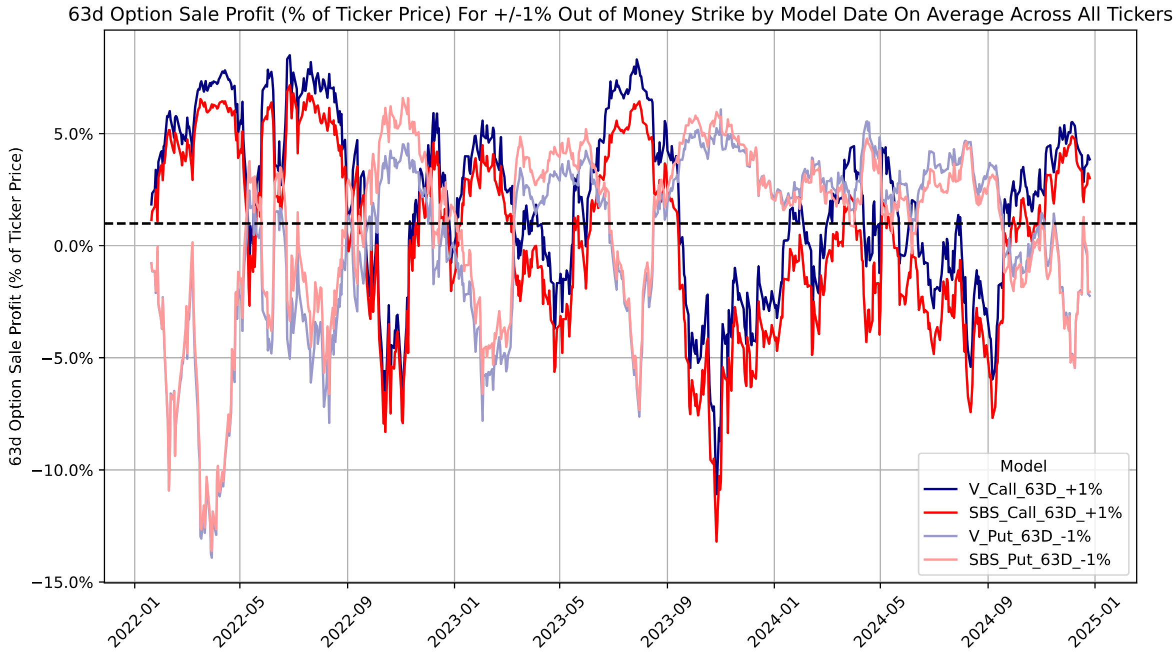
21d Horizon, +/- 10% Out of Money



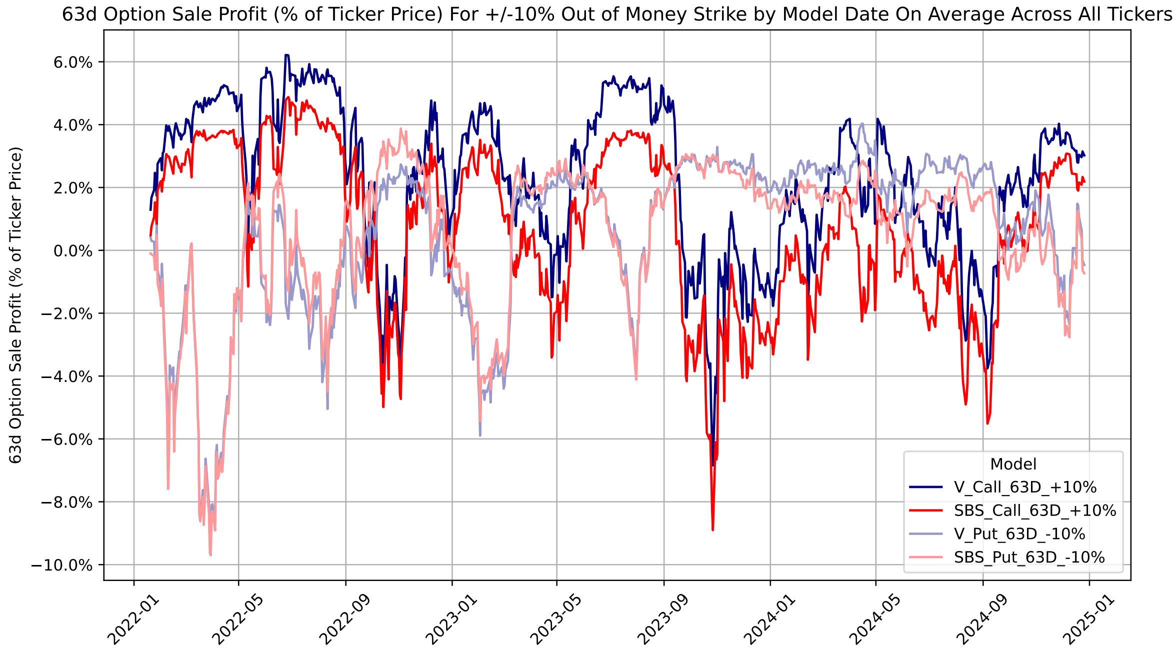
21d Horizon, +/- 20% Out of Money



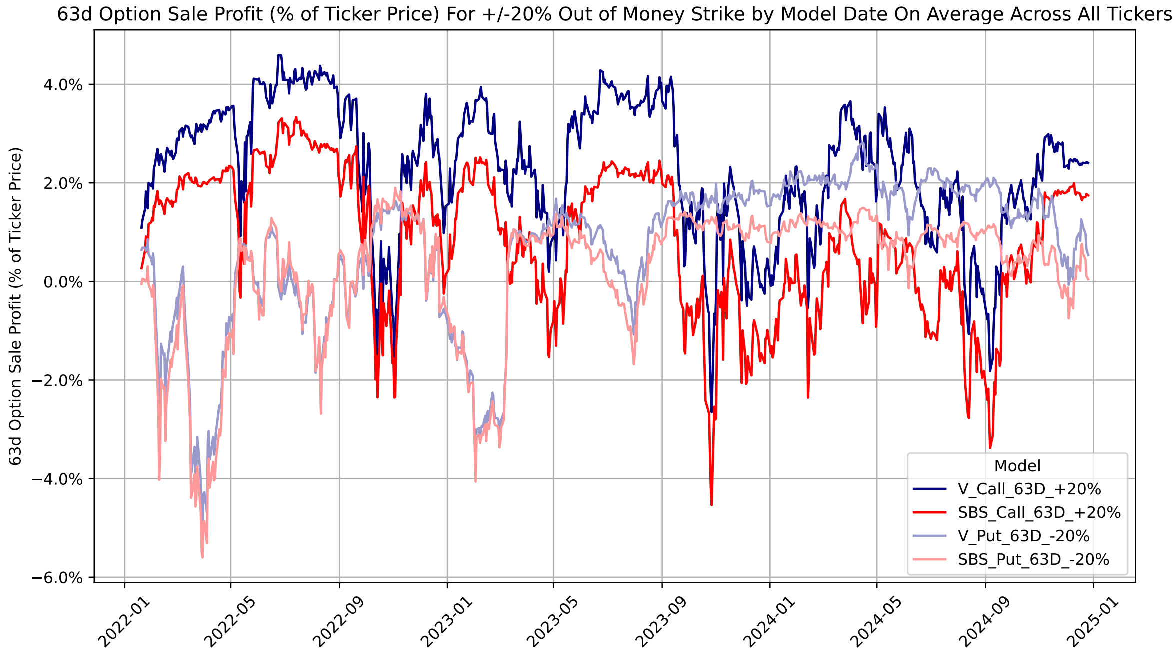
63d Horizon, +/- 1% Out of Money



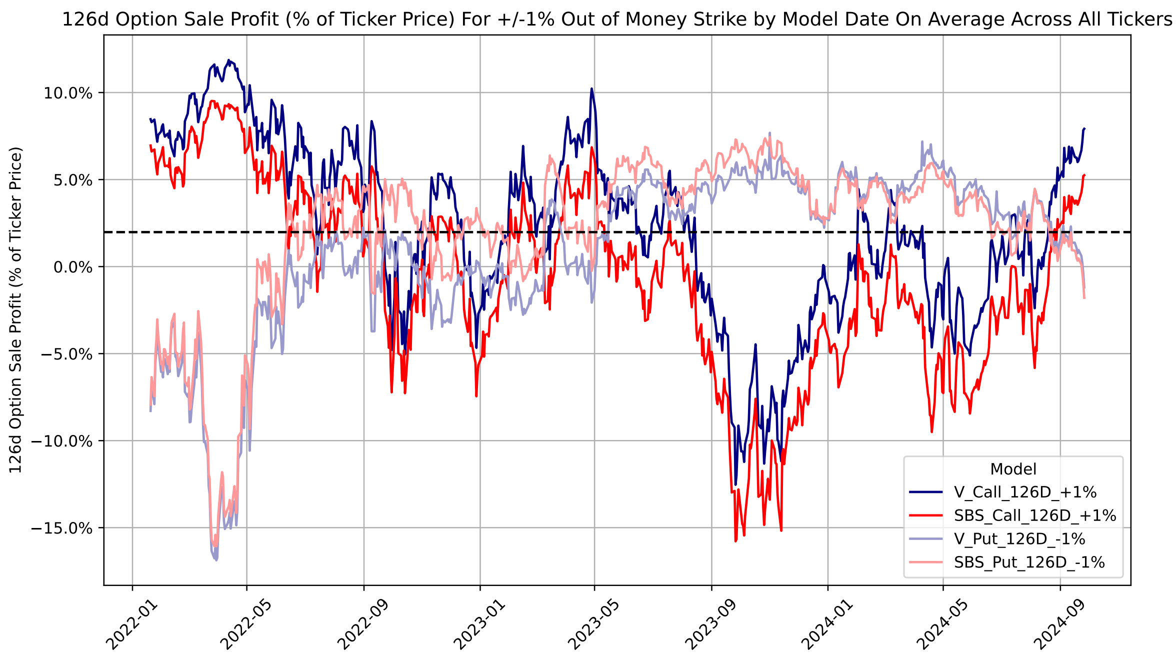
63d Horizon, +/- 10% Out of Money



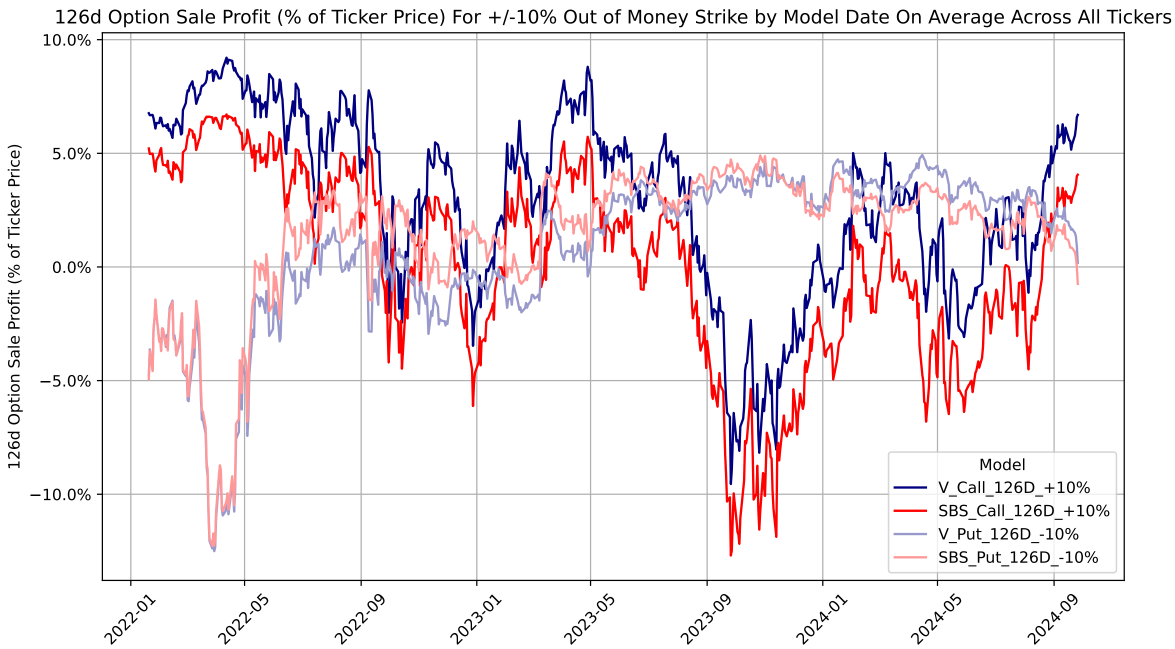
63d Horizon, +/- 20% Out of Money



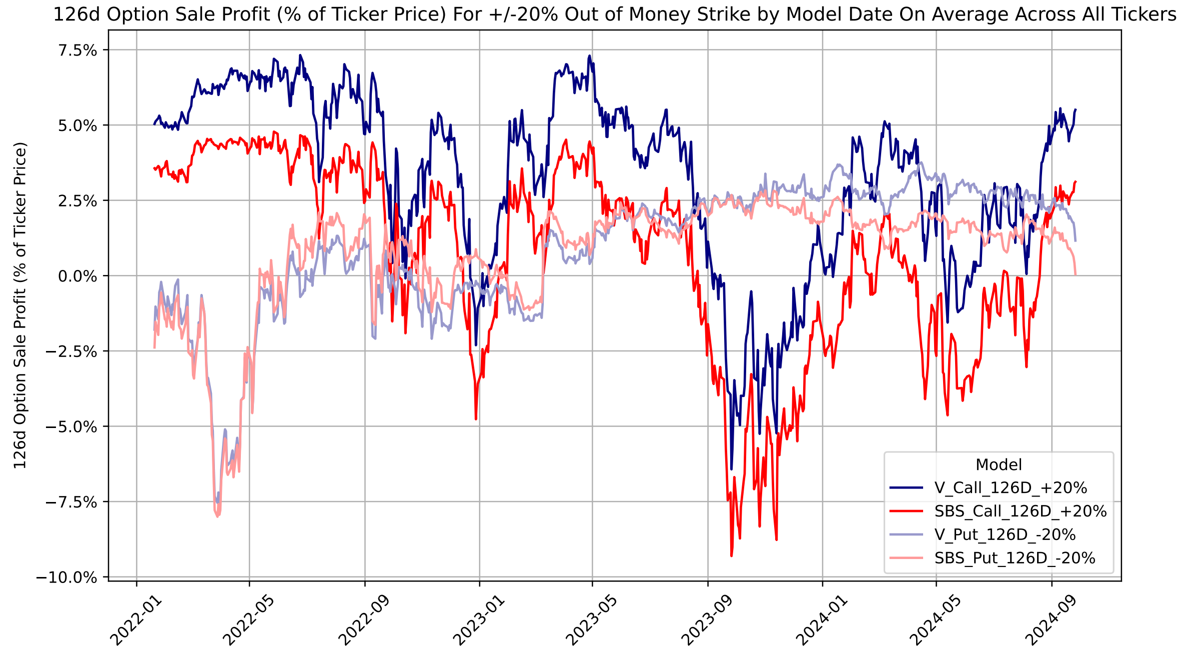
126d Horizon, +/- 1% Out of Money



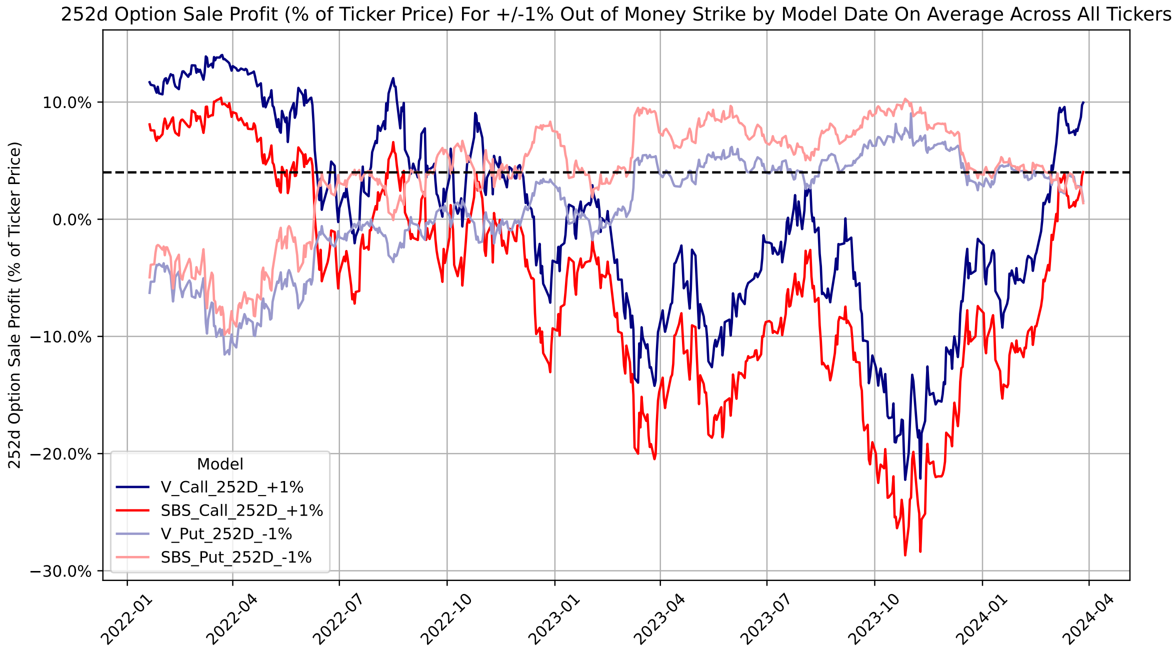
126d Horizon, +/- 10% Out of Money



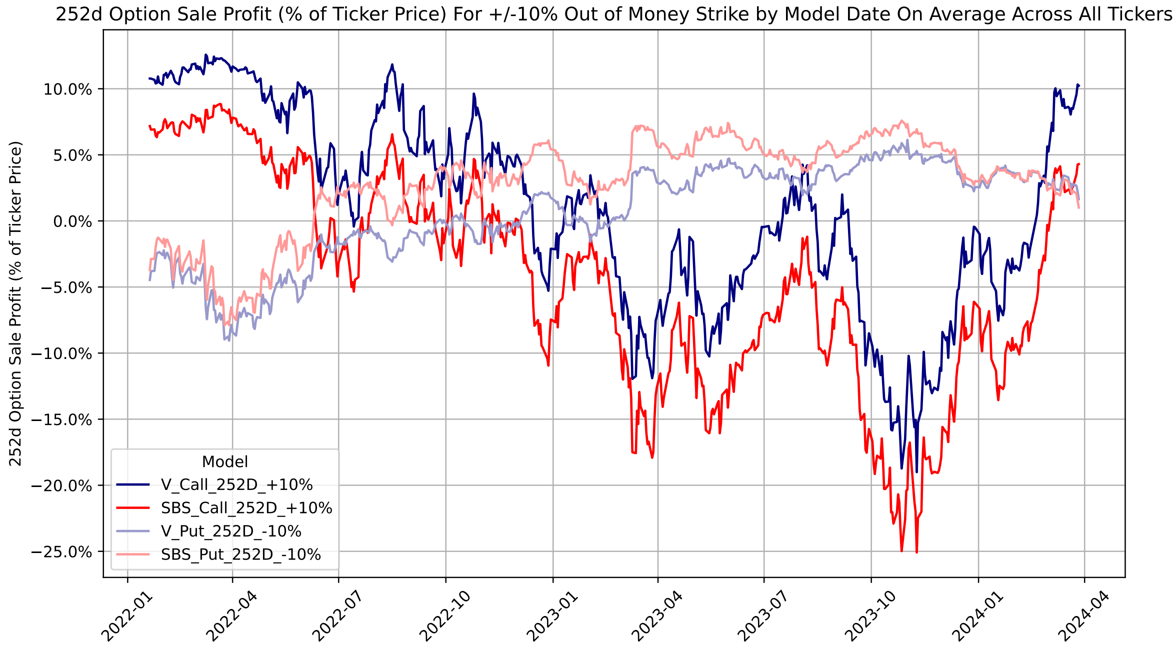
126d Horizon, +/- 20% Out of Money



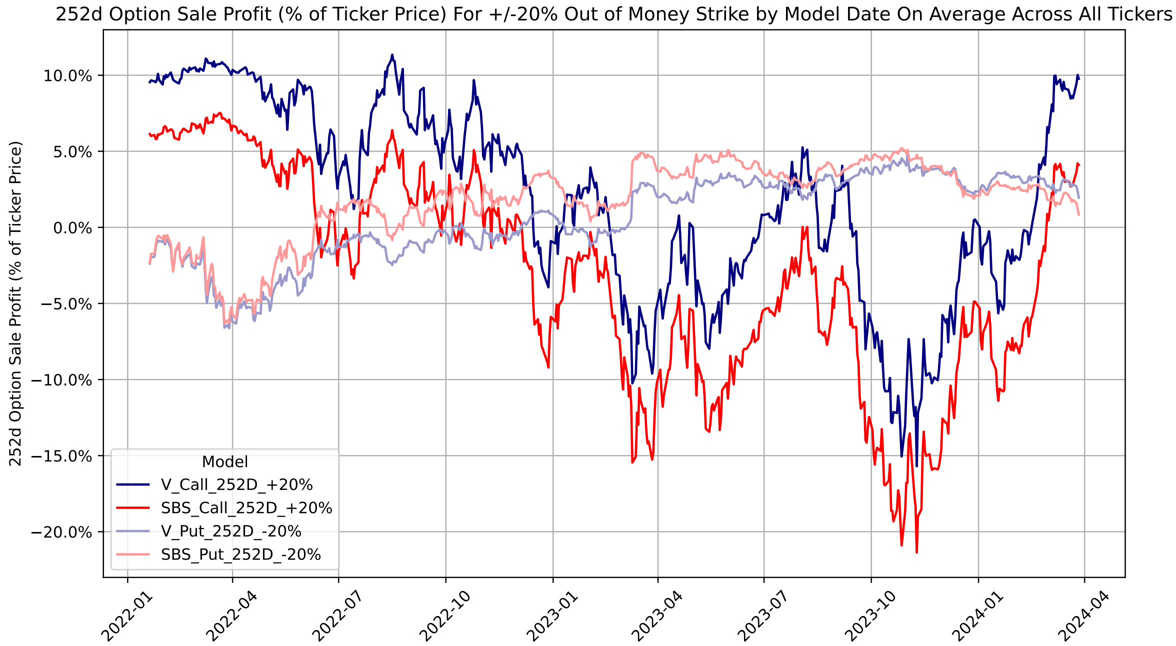
252d Horizon, +/- 1% Out of Money



252d Horizon, +/- 10% Out of Money



252d Horizon, +/- 20% Out of Money



Top 30 Tickers by Option Sale Profitabilty, All TMD's

Calls, 1% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	7.78%	AMC	6.05%
1.0	LUMN	6.21%	CYH	1.44%
1.0	IEP	5.57%	GME	1.33%
1.0	ELAN	2.97%	LUMN	1.16%
1.0	CYH	2.34%	BHC	0.73%
1.0	TSLA	2.15%	IEP	0.71%
1.0	NWL	2.04%	UAA	0.49%
1.0	CCL	1.88%	GBTC	0.47%
1.0	BHC	1.83%	LNC	0.42%
1.0	CZR	1.77%	AAP	0.39%
1.0	T	1.53%	GT	0.39%
1.0	VNO	1.4%	CTLT	0.39%
1.0	MSFT	1.29%	NWL	0.32%
1.0	GT	1.2%	VFC	0.31%
1.0	BXP	1.03%	ELAN	0.3%
1.0	GBTC	1.02%	GNRC	0.28%
1.0	GNRC	0.97%	CZR	0.27%
1.0	MOS	0.92%	CCL	0.25%
1.0	AZO	0.9%	BIIB	0.24%
1.0	X	0.88%	FIS	0.24%
1.0	QQQ	0.88%	CLF	0.23%
1.0	UAA	0.82%	AA	0.21%
1.0	LNC	0.78%	MOS	0.18%
1.0	NVDA	0.66%	CMA	0.18%
1.0	INTC	0.63%	KEY	0.16%
1.0	GE	0.6%	KALU	0.16%
1.0	WRK	0.59%	NFLX	0.16%
1.0	ETRN	0.58%	LW	0.15%
1.0	AMAT	0.53%	EXPE	0.15%
1.0	MS	0.52%	ETRN	0.15%

Calls, 10% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	7.0%	AMC	4.43%
1.0	LUMN	4.71%	CYH	0.49%
1.0	IEP	3.93%	LUMN	0.35%
1.0	ELAN	1.7%	GME	0.27%
1.0	TSLA	1.56%	GBTC	0.22%
1.0	CYH	1.5%	BHC	0.08%
1.0	CCL	1.17%	CCL	0.05%
1.0	CZR	1.1%	LNC	0.02%
1.0	NWL	1.05%	IEP	0.02%
1.0	BHC	1.04%	AAP	0.01%
1.0	GNRC	0.9%	AA	0.01%
1.0	GBTC	0.75%	SBNY	0.01%
1.0	GT	0.6%	MOS	0.0%
1.0	VNO	0.52%	CZR	0.0%
1.0	T	0.45%	FIS	0.0%
1.0	NVDA	0.42%	LW	0.0%
1.0	X	0.4%	BA	0.0%
1.0	MSFT	0.4%	QCOM	0.0%
1.0	LNC	0.38%	FITB	0.0%
1.0	UAA	0.37%	WRK	0.0%
1.0	MOS	0.34%	USB	0.0%
1.0	BXP	0.34%	GOLD	0.0%
1.0	AZO	0.29%	BHP	0.0%
1.0	ETRN	0.27%	GE	0.0%
1.0	ON	0.23%	T	0.0%
1.0	INTC	0.2%	TRGP	0.0%
1.0	AMAT	0.19%	PCG	0.0%
1.0	THC	0.17%	HLT	0.0%
1.0	AMD	0.17%	TDG	0.0%
1.0	WRK	0.16%	GSK	0.0%

Calls, 20% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
1.0	AMC	5.91%	AMC	2.94%
1.0	LUMN	3.5%	CYH	0.09%
1.0	IEP	2.8%	LUMN	0.05%
1.0	ELAN	0.93%	GBTC	0.04%
1.0	TSLA	0.81%	BHC	0.01%
1.0	CYH	0.78%	CCL	0.0%
1.0	CCL	0.66%	LNC	0.0%
1.0	CZR	0.65%	SIVBQ	0.0%
1.0	GNRC	0.55%	CTLT	0.0%
1.0	NWL	0.54%	CZR	0.0%
1.0	BHC	0.51%	GNRC	0.0%
1.0	GBTC	0.33%	AA	0.0%
1.0	GT	0.29%	AAP	0.0%
1.0	ETRN	0.17%	NFLX	0.0%
1.0	X	0.17%	ZION	0.0%
1.0	VNO	0.16%	KEY	0.0%
1.0	NVDA	0.16%	THC	0.0%
1.0	LNC	0.13%	CMA	0.0%
1.0	MSFT	0.12%	AMD	0.0%
1.0	UAA	0.12%	INTC	0.0%
1.0	MOS	0.11%	CSTM	0.0%
1.0	THC	0.1%	VNO	0.0%
1.0	T	0.1%	SBNY	0.0%
1.0	MSTR	0.1%	WYNN	0.0%
1.0	AZO	0.07%	VST	0.0%
1.0	TEVA	0.06%	WDC	0.0%
1.0	BXP	0.06%	FCX	0.0%
1.0	AMAT	0.06%	EXPE	0.0%
1.0	FCX	0.05%	LVS	0.0%
1.0	HSBC	0.04%	FIS	0.0%

Calls, 1% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	21.98%	AMC	17.04%
10.0	LUMN	14.83%	LUMN	3.33%
10.0	IEP	10.24%	CYH	3.28%
10.0	CYH	7.29%	GME	3.24%
10.0	ELAN	6.57%	IEP	2.33%
10.0	NWL	5.8%	UAA	1.91%
10.0	CZR	5.5%	SBNY	1.91%
10.0	CCL	4.08%	BHC	1.88%
10.0	BHC	3.81%	AAP	1.6%
10.0	T	3.23%	LNC	1.54%
10.0	MSFT	3.16%	CZR	1.51%
10.0	TSLA	3.14%	VFC	1.49%
10.0	GT	2.92%	NWL	1.33%
10.0	QQQ	2.22%	GT	1.3%
10.0	GBTC	2.14%	ELAN	1.04%
10.0	VNO	2.06%	GNRC	1.04%
10.0	MOS	2.04%	BIIB	1.04%
10.0	BXP	1.98%	CTLT	1.02%
10.0	UAA	1.9%	SIVBQ	0.86%
10.0	LNC	1.72%	GBTC	0.82%
10.0	PCG	1.65%	AA	0.81%
10.0	GNRC	1.51%	FIS	0.81%
10.0	INTC	1.47%	MOS	0.71%
10.0	AZO	1.36%	CMA	0.71%
10.0	EMB	1.26%	BALL	0.7%
10.0	UNH	1.26%	CSTM	0.69%
10.0	ON	1.2%	NAVI	0.67%
10.0	AMAT	1.16%	KEY	0.65%
10.0	X	1.12%	AVGO	0.65%
10.0	BBY	1.12%	BBY	0.64%

Calls, 10% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	21.43%	AMC	16.59%
10.0	LUMN	13.23%	CYH	3.34%
10.0	IEP	8.72%	GME	2.61%
10.0	CYH	7.21%	LUMN	2.39%
10.0	ELAN	5.51%	IEP	1.47%
10.0	NWL	5.02%	BHC	1.43%
10.0	CZR	5.02%	UAA	1.28%
10.0	CCL	4.25%	LNC	1.22%
10.0	TSLA	3.43%	GBTC	1.2%
10.0	BHC	3.39%	CZR	0.99%
10.0	GBTC	2.55%	SBNY	0.96%
10.0	GT	2.4%	AAP	0.87%
10.0	MSFT	2.26%	VFC	0.84%
10.0	GNRC	2.18%	GT	0.81%
10.0	T	2.06%	GNRC	0.8%
10.0	LNC	1.91%	NWL	0.73%
10.0	VNO	1.86%	AA	0.64%
10.0	UAA	1.82%	CTLT	0.56%
10.0	MOS	1.65%	CCL	0.48%
10.0	PCG	1.63%	CMA	0.48%
10.0	BXP	1.62%	CSTM	0.47%
10.0	QQQ	1.31%	KEY	0.44%
10.0	NVDA	1.27%	FIS	0.43%
10.0	AMAT	1.23%	SIVBQ	0.42%
10.0	AZO	1.2%	KALU	0.38%
10.0	ON	1.19%	ELAN	0.38%
10.0	INTC	1.17%	CLF	0.37%
10.0	X	1.11%	ZION	0.37%
10.0	AMD	1.05%	MOS	0.36%
10.0	CDNS	1.01%	ON	0.32%

Calls, 20% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
10.0	AMC	20.54%	AMC	15.34%
10.0	LUMN	11.41%	CYH	2.63%
10.0	IEP	6.93%	GME	1.62%
10.0	CYH	6.48%	LUMN	1.4%
10.0	ELAN	4.14%	GBTC	1.12%
10.0	CZR	3.97%	BHC	0.85%
10.0	CCL	3.74%	IEP	0.71%
10.0	NWL	3.71%	UAA	0.53%
10.0	TSLA	3.04%	CCL	0.51%
10.0	BHC	2.58%	LNC	0.47%
10.0	GBTC	2.24%	CZR	0.43%
10.0	GNRC	1.99%	GNRC	0.35%
10.0	GT	1.51%	GT	0.31%
10.0	UAA	1.26%	AAP	0.3%
10.0	NVDA	1.22%	VFC	0.3%
10.0	PCG	1.16%	AA	0.28%
10.0	VNO	1.13%	SBNY	0.26%
10.0	LNC	1.12%	CTLT	0.23%
10.0	MSFT	1.04%	SIVBQ	0.21%
10.0	T	0.92%	NWL	0.2%
10.0	AMD	0.85%	CSTM	0.15%
10.0	X	0.84%	CLF	0.15%
10.0	BXP	0.79%	KEY	0.14%
10.0	MOS	0.78%	CMA	0.14%
10.0	SIVBQ	0.77%	NFLX	0.13%
10.0	CDNS	0.72%	ON	0.11%
10.0	CLF	0.71%	ZION	0.11%
10.0	AMAT	0.71%	KALU	0.1%
10.0	ON	0.68%	ELAN	0.08%
10.0	INTC	0.67%	AMD	0.08%

Calls, 1% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 21D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	31.06%	AMC	26.84%
21.0	LUMN	19.37%	CYH	5.96%
21.0	IEP	13.54%	GME	5.31%
21.0	ELAN	8.84%	LUMN	4.71%
21.0	CZR	8.47%	SBNY	4.33%
21.0	CYH	8.38%	IEP	3.87%
21.0	NWL	7.73%	BHC	3.36%
21.0	BHC	6.32%	UAA	2.88%
21.0	GT	6.05%	VFC	2.82%
21.0	CCL	5.29%	LNC	2.68%
21.0	MSFT	4.38%	GT	2.67%
21.0	T	4.18%	AAP	2.53%
21.0	TSLA	3.73%	SIVBQ	2.42%
21.0	LNC	3.5%	CZR	2.41%
21.0	UAA	3.4%	NWL	2.02%
21.0	QQQ	3.13%	BIIB	1.5%
21.0	MOS	2.98%	CSTM	1.47%
21.0	INTC	2.9%	GNRC	1.45%
21.0	VNO	2.63%	AA	1.37%
21.0	BXP	2.57%	FRCB	1.35%
21.0	AMAT	2.35%	MOS	1.32%
21.0	ON	2.33%	ELAN	1.29%
21.0	GNRC	2.27%	BALL	1.26%
21.0	GBTC	2.19%	NAVI	1.21%
21.0	AZO	2.08%	FIS	1.21%
21.0	EMB	1.98%	INTC	1.2%
21.0	PCG	1.94%	KEY	1.16%
21.0	BBY	1.94%	CTLT	1.12%
21.0	FSUGY	1.88%	ZION	1.1%
21.0	SIVBQ	1.83%	CMA	1.08%

Calls, 10% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 21D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	30.46%	AMC	26.98%
21.0	LUMN	17.42%	CYH	6.36%
21.0	IEP	12.07%	GME	5.04%
21.0	CYH	8.53%	LUMN	3.68%
21.0	ELAN	7.86%	BHC	3.15%
21.0	CZR	7.77%	IEP	3.04%
21.0	NWL	6.9%	SBNY	2.5%
21.0	BHC	5.92%	LNC	2.31%
21.0	CCL	5.4%	UAA	2.24%
21.0	GT	5.16%	VFC	2.16%
21.0	TSLA	3.79%	GT	1.98%
21.0	MSFT	3.65%	AAP	1.81%
21.0	LNC	3.45%	CZR	1.78%
21.0	T	3.36%	GNRC	1.44%
21.0	UAA	3.14%	NWL	1.4%
21.0	GNRC	2.96%	CSTM	1.19%
21.0	VNO	2.76%	AA	1.13%
21.0	GBTC	2.6%	FIS	1.09%
21.0	QQQ	2.6%	SIVBQ	1.01%
21.0	INTC	2.51%	CTLT	0.93%
21.0	PCG	2.38%	INTC	0.9%
21.0	MOS	2.32%	CMA	0.86%
21.0	BXP	2.31%	KEY	0.86%
21.0	AMAT	2.28%	KALU	0.75%
21.0	AZO	2.19%	INTU	0.69%
21.0	ON	2.07%	ON	0.68%
21.0	AMD	1.83%	CLF	0.68%
21.0	FSUGY	1.7%	BALL	0.67%
21.0	GOOGL	1.63%	ELAN	0.66%
21.0	CDNS	1.6%	FRCB	0.64%

Calls, 20% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 21D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
21.0	AMC	29.52%	AMC	26.34%
21.0	LUMN	15.4%	CYH	6.1%
21.0	IEP	9.98%	GME	4.35%
21.0	CYH	8.31%	BHC	2.71%
21.0	ELAN	6.69%	LUMN	2.55%
21.0	CZR	6.68%	IEP	2.01%
21.0	NWL	5.76%	UAA	1.51%
21.0	BHC	5.29%	LNC	1.43%
21.0	CCL	5.28%	VFC	1.22%
21.0	GT	3.76%	GNRC	1.17%
21.0	TSLA	3.73%	CZR	1.11%
21.0	GNRC	3.22%	GT	1.11%
21.0	GBTC	2.79%	SBNY	1.1%
21.0	UAA	2.69%	AA	0.99%
21.0	LNC	2.61%	GBTC	0.93%
21.0	VNO	2.39%	NWL	0.9%
21.0	MSFT	2.0%	AAP	0.9%
21.0	T	1.85%	CTLT	0.58%
21.0	PCG	1.81%	CSTM	0.55%
21.0	AMD	1.72%	KEY	0.48%
21.0	AMAT	1.69%	CMA	0.47%
21.0	INTC	1.68%	INTC	0.46%
21.0	BXP	1.57%	ELAN	0.43%
21.0	MOS	1.46%	FIS	0.41%
21.0	ON	1.4%	NFLX	0.4%
21.0	X	1.38%	KALU	0.35%
21.0	FSUGY	1.22%	SIVBQ	0.35%
21.0	CDNS	1.21%	ON	0.32%
21.0	AZO	1.18%	ZION	0.32%
21.0	QQQ	1.16%	CCL	0.3%

Calls, 1% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 63D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	59.74%	AMC	45.15%
63.0	LUMN	30.15%	GME	12.0%
63.0	IEP	25.1%	SBNY	10.65%
63.0	CZR	20.5%	IEP	10.59%
63.0	CYH	16.4%	CYH	8.65%
63.0	NWL	15.07%	BHC	7.82%
63.0	ELAN	15.01%	CZR	7.59%
63.0	GT	14.3%	SIVBQ	7.23%
63.0	BHC	13.98%	MOS	6.53%
63.0	CCL	12.24%	GT	6.4%
63.0	MOS	10.1%	LNC	6.0%
63.0	SIVBQ	8.43%	UAA	5.76%
63.0	UAA	8.32%	AAP	5.63%
63.0	LNC	7.85%	NWL	5.54%
63.0	ON	7.74%	LUMN	5.49%
63.0	INTC	7.49%	VFC	5.41%
63.0	TSLA	7.21%	AA	4.95%
63.0	T	6.99%	FRCB	4.67%
63.0	MSFT	6.97%	GNRC	4.51%
63.0	SBNY	5.89%	CLF	4.26%
63.0	CLF	5.67%	PRGO	4.14%
63.0	FSUGY	5.63%	NAVI	3.58%
63.0	QQQ	5.5%	ON	3.37%
63.0	GNRC	5.48%	BHP	3.29%
63.0	BBY	5.33%	CNC	3.23%
63.0	UNH	5.2%	CSTM	3.15%
63.0	AMAT	4.71%	BIIB	3.14%
63.0	BHP	4.54%	ELAN	3.14%
63.0	INTU	4.45%	INTC	3.07%
63.0	VNO	4.35%	FIS	2.88%

Calls, 10% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 63D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	57.49%	AMC	44.73%
63.0	LUMN	27.52%	GME	12.4%
63.0	IEP	21.94%	CYH	8.89%
63.0	CZR	19.16%	IEP	8.08%
63.0	CYH	15.44%	BHC	7.73%
63.0	ELAN	13.79%	SBNY	7.35%
63.0	NWL	13.74%	CZR	6.66%
63.0	GT	13.23%	GT	5.84%
63.0	BHC	13.09%	LNC	5.83%
63.0	CCL	12.11%	UAA	5.04%
63.0	MOS	7.97%	SIVBQ	4.92%
63.0	LNC	7.68%	GNRC	4.7%
63.0	ON	7.54%	NWL	4.66%
63.0	UAA	7.41%	MOS	4.54%
63.0	TSLA	7.34%	LUMN	4.51%
63.0	T	7.23%	VFC	4.43%
63.0	INTC	6.82%	AAP	4.25%
63.0	MSFT	6.8%	AA	4.23%
63.0	SIVBQ	6.32%	CLF	3.62%
63.0	QQQ	6.04%	ON	3.3%
63.0	GNRC	5.84%	CSTM	3.07%
63.0	BBY	5.16%	FIS	2.93%
63.0	AMAT	5.07%	PRGO	2.83%
63.0	CLF	5.04%	FRCB	2.81%
63.0	FSUGY	4.61%	KEY	2.76%
63.0	INTU	4.56%	INTC	2.72%
63.0	AZO	4.47%	NAVI	2.67%
63.0	UNH	4.47%	ELAN	2.37%
63.0	MS	4.31%	CMA	2.37%
63.0	PCG	4.24%	CNC	2.36%

Calls, 20% Out of the Money, 63D Time Horizon, All TMD’s

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 63D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
63.0	AMC	55.15%	AMC	43.93%
63.0	LUMN	25.38%	GME	12.31%
63.0	IEP	18.72%	CYH	9.06%
63.0	CZR	17.23%	BHC	7.4%
63.0	CYH	14.84%	IEP	6.08%
63.0	NWL	12.17%	CZR	5.34%
63.0	BHC	12.17%	LNC	4.94%
63.0	ELAN	12.09%	GT	4.73%
63.0	CCL	12.09%	SBNY	4.71%
63.0	GT	11.47%	GNRC	4.53%
63.0	TSLA	7.5%	UAA	4.24%
63.0	LNC	6.82%	NWL	3.69%
63.0	UAA	6.71%	AA	3.67%
63.0	ON	6.6%	LUMN	3.59%
63.0	GNRC	6.09%	VFC	3.53%
63.0	T	5.93%	SIVBQ	3.39%
63.0	MOS	5.67%	AAP	3.3%
63.0	INTC	5.64%	CLF	3.01%
63.0	MSFT	5.54%	ON	2.67%
63.0	SIVBQ	5.22%	MOS	2.64%
63.0	AMAT	4.89%	CSTM	2.44%
63.0	CLF	4.56%	FIS	2.26%
63.0	QQQ	4.48%	KEY	2.23%
63.0	VNO	4.08%	INTC	2.16%
63.0	AMZN	3.97%	CMA	1.86%
63.0	X	3.95%	NAVI	1.73%
63.0	PCG	3.93%	KALU	1.69%
63.0	BBY	3.89%	FRCB	1.6%
63.0	MS	3.85%	ZION	1.6%
63.0	INTU	3.83%	BBY	1.59%

Calls, 1% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 126D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	93.04%	AMC	58.27%
126.0	LUMN	41.78%	GME	20.2%
126.0	CZR	32.57%	BHC	16.03%
126.0	IEP	29.68%	SIVBQ	15.95%
126.0	BHC	26.96%	SBNY	15.66%
126.0	NWL	26.03%	CYH	15.44%
126.0	CYH	23.77%	IEP	15.22%
126.0	GT	22.99%	CZR	13.99%
126.0	ELAN	22.08%	MOS	12.58%
126.0	SIVBQ	19.62%	GT	12.4%
126.0	MOS	17.4%	NWL	11.58%
126.0	CCL	17.29%	UAA	11.02%
126.0	UAA	15.73%	AA	10.74%
126.0	LNC	13.8%	FRCB	10.52%
126.0	CLF	13.79%	AAP	10.36%
126.0	TSLA	11.37%	LNC	9.95%
126.0	FSUGY	10.94%	CLF	9.4%
126.0	BBY	10.85%	CTLT	8.85%
126.0	AA	10.57%	PRGO	8.41%
126.0	INTC	10.4%	GNRC	7.99%
126.0	FRCB	9.75%	VFC	7.69%
126.0	SBNY	9.69%	NAVI	7.55%
126.0	UNH	9.27%	KALU	6.56%
126.0	PRGO	9.01%	BHP	6.43%
126.0	INTU	8.93%	CVS	6.18%
126.0	MSFT	8.71%	OXY	5.67%
126.0	ON	8.62%	JAZZ	5.54%
126.0	GNRC	8.61%	CMA	5.42%
126.0	AAP	8.41%	CNC	5.32%
126.0	CVS	8.36%	BALL	5.32%

Calls, 10% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 126D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	90.8%	AMC	58.46%
126.0	LUMN	38.69%	GME	21.34%
126.0	CZR	30.9%	BHC	16.39%
126.0	IEP	26.11%	CYH	16.3%
126.0	BHC	26.02%	CZR	12.92%
126.0	NWL	23.37%	SIVBQ	12.53%
126.0	CYH	22.79%	IEP	12.27%
126.0	GT	21.47%	SBNY	12.22%
126.0	ELAN	20.63%	GT	11.65%
126.0	CCL	18.45%	UAA	10.97%
126.0	SIVBQ	16.04%	LNC	10.5%
126.0	UAA	14.96%	AA	10.44%
126.0	MOS	14.38%	MOS	9.8%
126.0	LNC	14.05%	NWL	9.51%
126.0	CLF	13.0%	CTLT	9.01%
126.0	TSLA	11.65%	CLF	8.9%
126.0	BBY	10.8%	GNRC	8.26%
126.0	FSUGY	10.65%	AAP	7.93%
126.0	INTC	10.06%	FRCB	7.01%
126.0	AA	9.83%	NAVI	6.52%
126.0	INTU	9.64%	PRGO	6.23%
126.0	MSFT	9.5%	VFC	6.17%
126.0	ON	9.4%	CMA	5.49%
126.0	UNH	9.0%	KALU	5.39%
126.0	T	8.97%	BBY	5.0%
126.0	GNRC	8.62%	ON	4.96%
126.0	MS	8.09%	BHP	4.82%
126.0	QQQ	8.07%	OXY	4.55%
126.0	PCG	7.3%	LUMN	4.46%
126.0	PRGO	7.03%	CNC	4.28%

Calls, 20% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 126D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
126.0	AMC	88.29%	AMC	58.12%
126.0	LUMN	36.44%	GME	22.25%
126.0	CZR	28.38%	CYH	16.83%
126.0	BHC	24.59%	BHC	15.88%
126.0	IEP	22.44%	CZR	11.05%
126.0	CYH	22.03%	UAA	10.49%
126.0	NWL	20.68%	GT	10.19%
126.0	ELAN	19.49%	LNC	9.86%
126.0	CCL	19.43%	IEP	9.81%
126.0	GT	19.25%	SIVBQ	9.54%
126.0	UAA	14.13%	AA	9.4%
126.0	LNC	13.16%	SBNY	9.24%
126.0	SIVBQ	13.11%	GNRC	8.36%
126.0	CLF	11.78%	CTLT	8.07%
126.0	TSLA	11.73%	CLF	7.95%
126.0	MOS	11.44%	NWL	7.46%
126.0	FSUGY	10.31%	MOS	7.25%
126.0	INTU	9.79%	AAP	6.06%
126.0	INTC	9.55%	CMA	5.35%
126.0	MSFT	9.53%	ON	5.27%
126.0	ON	9.5%	VFC	4.99%
126.0	BBY	9.45%	NAVI	4.56%
126.0	T	8.82%	ZION	4.42%
126.0	GNRC	8.71%	BBY	4.42%
126.0	AA	8.61%	FRCB	4.33%
126.0	MS	8.46%	KALU	4.19%
126.0	QQQ	8.26%	CSTM	4.15%
126.0	PCG	7.99%	PRGO	3.91%
126.0	VNO	7.78%	LUMN	3.84%
126.0	AMZN	7.34%	ELAN	3.69%

Calls, 1% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 252D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	AMC	96.98%	AMC	68.93%
252.0	LUMN	71.99%	CYH	38.22%
252.0	CYH	52.98%	GME	31.72%
252.0	CZR	51.73%	BHC	28.03%
252.0	BHC	47.34%	UAA	25.53%
252.0	NWL	44.23%	SIVBQ	23.09%
252.0	UAA	36.63%	SBNY	22.74%
252.0	ELAN	34.11%	CZR	22.73%
252.0	TSLA	32.66%	CLF	20.02%
252.0	CLF	31.53%	IEP	19.98%
252.0	GT	31.43%	AAP	19.86%
252.0	IEP	31.17%	MOS	19.74%
252.0	SIVBQ	31.05%	NWL	19.18%
252.0	MOS	29.89%	GT	18.61%
252.0	CCL	29.19%	VFC	17.38%
252.0	VFC	28.66%	AA	16.84%
252.0	LNC	22.23%	FRCB	15.51%
252.0	BBY	21.79%	PRGO	14.34%
252.0	FSUGY	21.49%	OXY	12.79%
252.0	AAP	20.96%	BHP	12.74%
252.0	UNH	20.09%	JAZZ	11.97%
252.0	FRCB	18.82%	NAVI	11.75%
252.0	SBNY	18.13%	KALU	11.55%
252.0	AA	17.72%	CVS	11.48%
252.0	PRGO	16.12%	LNC	11.4%
252.0	INTC	15.87%	RIO	11.29%
252.0	CVS	15.11%	LUMN	11.21%
252.0	BA	14.83%	GNRC	11.14%
252.0	BHP	14.45%	CHTR	10.96%
252.0	GME	13.71%	CNC	10.26%

Calls, 10% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 252D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	AMC	92.99%	AMC	67.58%
252.0	LUMN	68.82%	CYH	39.06%
252.0	CYH	51.15%	GME	32.71%
252.0	CZR	49.31%	BHC	28.44%
252.0	BHC	45.89%	UAA	23.9%
252.0	NWL	41.25%	CZR	21.28%
252.0	ELAN	33.97%	SIVBQ	19.8%
252.0	UAA	33.54%	SBNY	19.43%
252.0	TSLA	32.14%	CLF	19.14%
252.0	CCL	30.83%	GT	18.54%
252.0	GT	30.19%	NWL	17.14%
252.0	CLF	29.98%	AA	16.81%
252.0	IEP	27.35%	MOS	16.77%
252.0	SIVBQ	27.29%	IEP	16.63%
252.0	VFC	26.71%	AAP	16.44%
252.0	MOS	26.51%	VFC	16.08%
252.0	LNC	22.53%	GNRC	12.61%
252.0	FSUGY	21.88%	LNC	12.51%
252.0	BBY	21.59%	FRCB	11.93%
252.0	UNH	18.91%	LUMN	11.5%
252.0	AAP	17.43%	KALU	11.34%
252.0	AA	16.92%	OXY	11.22%
252.0	INTU	16.12%	BHP	11.1%
252.0	PCG	15.38%	PRGO	11.04%
252.0	FRCB	15.36%	NAVI	10.86%
252.0	INTC	14.74%	CTLT	10.42%
252.0	SBNY	14.6%	RIO	10.17%
252.0	VNO	14.54%	JAZZ	9.23%
252.0	BA	14.39%	BBY	9.2%
252.0	BXP	13.61%	GOLD	9.18%

Calls, 20% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 252D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
252.0	AMC	89.09%	AMC	66.19%
252.0	LUMN	67.45%	CYH	39.53%
252.0	CYH	49.61%	GME	33.53%
252.0	CZR	46.59%	BHC	27.85%
252.0	BHC	43.87%	UAA	22.04%
252.0	NWL	38.39%	CZR	19.42%
252.0	CCL	33.81%	GT	18.05%
252.0	ELAN	33.57%	CLF	17.62%
252.0	TSLA	31.36%	SIVBQ	16.7%
252.0	UAA	30.73%	AA	16.35%
252.0	GT	28.73%	SBNY	16.33%
252.0	CLF	27.84%	NWL	15.14%
252.0	VFC	24.66%	VFC	14.64%
252.0	SIVBQ	23.77%	IEP	13.9%
252.0	IEP	23.7%	MOS	13.88%
252.0	MOS	23.05%	LNC	13.82%
252.0	LNC	22.92%	GNRC	13.79%
252.0	FSUGY	21.51%	AAP	13.4%
252.0	BBY	19.85%	LUMN	12.15%
252.0	INTU	18.64%	CTLT	11.16%
252.0	PCG	16.97%	KALU	10.67%
252.0	VNO	16.25%	NAVI	9.11%
252.0	AA	15.78%	FSUGY	8.92%
252.0	UNH	15.6%	FRCB	8.83%
252.0	AAP	14.41%	OXY	8.71%
252.0	BA	13.63%	BHP	8.57%
252.0	INTC	13.61%	BBY	8.36%
252.0	GME	12.98%	CMA	8.35%
252.0	FRCB	12.53%	PRGO	7.98%
252.0	GNRC	12.38%	GOLD	7.93%

Puts, 1% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	5.58%	AMC	5.86%
1.0	LUMN	1.96%	GME	1.54%
1.0	GBTC	1.95%	CYH	1.38%
1.0	CZR	1.76%	LUMN	1.07%
1.0	CYH	1.71%	BHC	0.67%
1.0	AMAT	1.7%	GBTC	0.61%
1.0	CCL	1.41%	IEP	0.54%
1.0	NVDA	1.28%	UAA	0.41%
1.0	VNO	1.17%	CTLT	0.35%
1.0	PHM	1.09%	LNC	0.33%
1.0	MSFT	0.94%	GT	0.33%
1.0	PCG	0.91%	CCL	0.28%
1.0	GT	0.9%	ELAN	0.26%
1.0	PWR	0.86%	NWL	0.25%
1.0	MS	0.82%	NFLX	0.23%
1.0	ELAN	0.81%	GNRC	0.22%
1.0	THC	0.77%	BIIB	0.22%
1.0	IEP	0.77%	AAP	0.21%
1.0	ETRN	0.71%	VFC	0.2%
1.0	QQQ	0.68%	X	0.19%
1.0	LNC	0.63%	CZR	0.19%
1.0	TRGP	0.63%	ETRN	0.19%
1.0	MOS	0.62%	META	0.19%
1.0	X	0.59%	FIS	0.19%
1.0	LLY	0.58%	AA	0.18%
1.0	CPRT	0.57%	CLF	0.18%
1.0	VST	0.56%	EXPE	0.16%
1.0	AZO	0.55%	KEY	0.16%
1.0	GE	0.55%	MSTR	0.15%
1.0	TEVA	0.55%	CMA	0.15%

Puts, 10% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	5.04%	AMC	3.86%
1.0	LUMN	1.33%	GME	0.38%
1.0	GBTC	1.13%	CYH	0.33%
1.0	CYH	1.0%	LUMN	0.27%
1.0	CCL	0.93%	GBTC	0.14%
1.0	CZR	0.79%	CCL	0.01%
1.0	NVDA	0.52%	BHC	0.0%
1.0	VNO	0.51%	CLF	0.0%
1.0	PCG	0.43%	CZR	0.0%
1.0	GT	0.42%	VNO	0.0%
1.0	TSLA	0.38%	FCX	0.0%
1.0	AMAT	0.36%	FSUGY	0.0%
1.0	IEP	0.34%	BIIB	0.0%
1.0	ELAN	0.31%	QCOM	0.0%
1.0	NWL	0.31%	INTU	0.0%
1.0	LNC	0.31%	PHM	0.0%
1.0	BHC	0.25%	LEN	0.0%
1.0	MSFT	0.23%	DHI	0.0%
1.0	PWR	0.21%	BXP	0.0%
1.0	MU	0.21%	GOLD	0.0%
1.0	ETRN	0.2%	BHP	0.0%
1.0	PHM	0.19%	RIO	0.0%
1.0	GNRC	0.18%	GOOGL	0.0%
1.0	DHI	0.15%	CDNS	0.0%
1.0	TEVA	0.15%	CMG	0.0%
1.0	LEN	0.15%	HLT	0.0%
1.0	CPRT	0.14%	WFC	0.0%
1.0	THC	0.13%	CPRT	0.0%
1.0	X	0.13%	TDG	0.0%
1.0	VST	0.13%	BAC	0.0%

Puts, 20% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
1.0	AMC	3.86%	AMC	1.97%
1.0	LUMN	0.83%	LUMN	0.01%
1.0	CCL	0.6%	GBTC	0.01%
1.0	GBTC	0.47%	GME	0.0%
1.0	CYH	0.42%	CZR	0.0%
1.0	PCG	0.29%	NVDA	0.0%
1.0	VNO	0.21%	AA	0.0%
1.0	GT	0.17%	CLF	0.0%
1.0	NWL	0.17%	VFC	0.0%
1.0	CZR	0.16%	TSLA	0.0%
1.0	IEP	0.15%	AMD	0.0%
1.0	BHC	0.14%	X	0.0%
1.0	NVDA	0.14%	VNO	0.0%
1.0	LNC	0.12%	ETRN	0.0%
1.0	TSLA	0.12%	WYNN	0.0%
1.0	ELAN	0.12%	FCX	0.0%
1.0	MU	0.08%	LVS	0.0%
1.0	ETRN	0.07%	EXPE	0.0%
1.0	AMAT	0.06%	MOS	0.0%
1.0	LVS	0.06%	KALU	0.0%
1.0	CPRT	0.06%	FSUGY	0.0%
1.0	GNRC	0.05%	MU	0.0%
1.0	PWR	0.05%	AMAT	0.0%
1.0	TEVA	0.05%	TFC	0.0%
1.0	MSFT	0.05%	TEVA	0.0%
1.0	DHI	0.05%	BIIB	0.0%
1.0	LEN	0.05%	AMZN	0.0%
1.0	ADBE	0.05%	BA	0.0%
1.0	THC	0.04%	NAVI	0.0%
1.0	AA	0.03%	BBY	0.0%

Puts, 1% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	7.9%	AMC	15.13%
10.0	GBTC	5.26%	GME	5.01%
10.0	CYH	4.14%	GBTC	2.58%
10.0	LUMN	3.84%	LUMN	2.53%
10.0	AMAT	3.06%	CYH	2.29%
10.0	PHM	2.88%	MSTR	1.33%
10.0	NVDA	2.7%	BHC	1.15%
10.0	CCL	2.65%	UAA	0.93%
10.0	VNO	2.51%	NFLX	0.93%
10.0	PWR	2.45%	LNC	0.89%
10.0	PCG	2.36%	CTLT	0.69%
10.0	MSFT	2.18%	META	0.69%
10.0	TRGP	1.96%	GT	0.65%
10.0	CPRT	1.88%	ETRN	0.64%
10.0	ACGL	1.72%	CCL	0.61%
10.0	CZR	1.68%	BIIB	0.6%
10.0	GT	1.68%	X	0.6%
10.0	THC	1.61%	CZR	0.6%
10.0	CSCO	1.5%	OXY	0.59%
10.0	ETRN	1.46%	IEP	0.58%
10.0	DHI	1.44%	TDG	0.57%
10.0	MNST	1.43%	GE	0.54%
10.0	QQQ	1.43%	AA	0.52%
10.0	X	1.43%	TMUS	0.5%
10.0	TXN	1.42%	TRGP	0.5%
10.0	LNC	1.4%	GNRC	0.49%
10.0	LLY	1.37%	THC	0.49%
10.0	LEN	1.33%	NVDA	0.48%
10.0	IEP	1.33%	PHM	0.47%
10.0	MS	1.3%	PWR	0.45%

Puts, 10% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	8.74%	AMC	14.01%
10.0	GBTC	4.42%	GME	4.4%
10.0	LUMN	4.37%	LUMN	2.58%
10.0	CYH	4.25%	CYH	2.03%
10.0	CCL	2.85%	GBTC	1.75%
10.0	VNO	2.23%	BHC	0.67%
10.0	AMAT	2.15%	UAA	0.61%
10.0	NVDA	1.97%	MSTR	0.55%
10.0	PHM	1.73%	CCL	0.46%
10.0	GT	1.7%	IEP	0.32%
10.0	CZR	1.58%	CZR	0.31%
10.0	IEP	1.47%	AA	0.28%
10.0	PWR	1.45%	LNC	0.27%
10.0	MSFT	1.37%	BIIB	0.27%
10.0	PCG	1.33%	MOS	0.23%
10.0	LNC	1.27%	GT	0.23%
10.0	MU	1.23%	GNRC	0.2%
10.0	CPRT	1.16%	WYNN	0.19%
10.0	THC	1.13%	VFC	0.18%
10.0	ETRN	1.06%	AMD	0.18%
10.0	ON	0.96%	LVS	0.17%
10.0	X	0.96%	OXY	0.15%
10.0	FSUGY	0.95%	NFLX	0.15%
10.0	ACGL	0.92%	ELAN	0.14%
10.0	MOS	0.9%	ON	0.14%
10.0	DHI	0.89%	ETRN	0.14%
10.0	BBY	0.89%	QCOM	0.13%
10.0	LEN	0.88%	NAVI	0.12%
10.0	TXN	0.87%	THC	0.1%
10.0	ELAN	0.84%	AMAT	0.08%

Puts, 20% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
10.0	AMC	8.66%	AMC	11.38%
10.0	LUMN	4.03%	GME	2.57%
10.0	CYH	3.84%	LUMN	1.78%
10.0	GBTC	2.79%	CYH	1.29%
10.0	CCL	2.38%	GBTC	0.85%
10.0	VNO	1.37%	CCL	0.17%
10.0	IEP	1.21%	BHC	0.16%
10.0	GT	1.17%	UAA	0.15%
10.0	NVDA	1.08%	AA	0.08%
10.0	AMAT	1.02%	NVDA	0.07%
10.0	PCG	0.94%	ELAN	0.04%
10.0	LNC	0.89%	AMD	0.04%
10.0	CZR	0.81%	MOS	0.02%
10.0	NWL	0.7%	CZR	0.02%
10.0	MU	0.69%	GNRC	0.01%
10.0	PHM	0.67%	MSTR	0.01%
10.0	PWR	0.67%	LVS	0.01%
10.0	THC	0.62%	BIIB	0.01%
10.0	X	0.6%	WYNN	0.01%
10.0	TSLA	0.54%	AMAT	0.01%
10.0	ETRN	0.52%	QCOM	0.01%
10.0	CPRT	0.5%	NAVI	0.0%
10.0	ON	0.5%	OXY	0.0%
10.0	ADBE	0.48%	FSUGY	0.0%
10.0	ELAN	0.47%	LEN	0.0%
10.0	MSFT	0.45%	PHM	0.0%
10.0	FSUGY	0.44%	INTU	0.0%
10.0	BHC	0.41%	GOLD	0.0%
10.0	BBY	0.4%	DHI	0.0%
10.0	AMD	0.39%	BHP	0.0%

Puts, 1% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 21D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	11.33%	AMC	22.27%
21.0	GBTC	5.7%	GME	7.84%
21.0	CYH	4.99%	CYH	4.08%
21.0	PHM	4.38%	GBTC	3.7%
21.0	LUMN	4.31%	LUMN	3.24%
21.0	NVDA	4.23%	MSTR	2.32%
21.0	AMAT	4.09%	NFLX	1.73%
21.0	PWR	3.64%	BHC	1.52%
21.0	MSFT	3.28%	META	1.45%
21.0	CPRT	2.92%	LNC	1.31%
21.0	CCL	2.86%	NVDA	1.26%
21.0	TRGP	2.85%	GT	1.23%
21.0	PCG	2.76%	LLY	1.15%
21.0	LLY	2.6%	INTU	1.12%
21.0	MU	2.5%	OXY	1.06%
21.0	ACGL	2.46%	TRGP	1.03%
21.0	VNO	2.4%	TDG	1.02%
21.0	CSCO	2.21%	TMUS	0.95%
21.0	GT	2.2%	AZO	0.94%
21.0	QQQ	2.05%	UAA	0.91%
21.0	TXN	2.05%	CDNS	0.89%
21.0	MNST	1.95%	PHM	0.88%
21.0	DHI	1.94%	ORLY	0.87%
21.0	X	1.91%	ETRN	0.85%
21.0	MS	1.9%	PWR	0.82%
21.0	AZO	1.87%	GE	0.8%
21.0	LEN	1.79%	VST	0.8%
21.0	IEP	1.79%	LVS	0.79%
21.0	ETRN	1.75%	WYNN	0.77%
21.0	THC	1.72%	MU	0.76%

Puts, 10% Out of the Money, 21D Time Horizon, All TMD’s

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 21D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	12.36%	AMC	20.98%
21.0	CYH	5.53%	GME	7.22%
21.0	LUMN	5.34%	CYH	3.84%
21.0	GBTC	5.25%	LUMN	3.76%
21.0	CCL	3.38%	GBTC	2.96%
21.0	AMAT	3.26%	MSTR	1.65%
21.0	PHM	3.25%	BHC	1.16%
21.0	NVDA	3.13%	GT	0.97%
21.0	VNO	2.7%	UAA	0.96%
21.0	GT	2.55%	LNC	0.84%
21.0	IEP	2.5%	BIIB	0.71%
21.0	PWR	2.46%	WYNN	0.69%
21.0	MSFT	2.38%	CZR	0.66%
21.0	MU	2.33%	AA	0.66%
21.0	CPRT	2.1%	OXY	0.61%
21.0	DHI	1.79%	CCL	0.58%
21.0	ON	1.79%	LVS	0.57%
21.0	PCG	1.76%	ON	0.49%
21.0	LEN	1.67%	ETRN	0.46%
21.0	LNC	1.65%	MOS	0.46%
21.0	FSUGY	1.64%	QCOM	0.44%
21.0	ACGL	1.63%	NAVI	0.44%
21.0	TXN	1.6%	META	0.42%
21.0	CZR	1.6%	NFLX	0.42%
21.0	ETRN	1.6%	NVDA	0.39%
21.0	X	1.57%	INTU	0.37%
21.0	BBY	1.52%	DHI	0.36%
21.0	TRGP	1.51%	PHM	0.35%
21.0	THC	1.5%	AMAT	0.34%
21.0	MOS	1.43%	BBY	0.34%

Puts, 20% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 21D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
21.0	AMC	13.04%	AMC	18.48%
21.0	CYH	6.2%	GME	5.46%
21.0	LUMN	5.89%	CYH	3.47%
21.0	GBTC	3.86%	LUMN	3.32%
21.0	CCL	3.52%	GBTC	1.97%
21.0	IEP	2.53%	MSTR	0.97%
21.0	VNO	2.08%	UAA	0.59%
21.0	AMAT	2.0%	CCL	0.55%
21.0	NVDA	1.98%	BHC	0.53%
21.0	GT	1.94%	CZR	0.43%
21.0	PHM	1.71%	GT	0.3%
21.0	MU	1.63%	AA	0.3%
21.0	FSUGY	1.47%	LNC	0.24%
21.0	ON	1.42%	WYNN	0.21%
21.0	PWR	1.41%	ETRN	0.2%
21.0	CZR	1.38%	ON	0.16%
21.0	LNC	1.28%	CLF	0.16%
21.0	PCG	1.27%	MOS	0.16%
21.0	X	1.26%	VFC	0.15%
21.0	THC	1.23%	LVS	0.14%
21.0	ETRN	1.18%	THC	0.13%
21.0	CPRT	1.13%	IEP	0.12%
21.0	MSFT	1.08%	BIIB	0.11%
21.0	ELAN	1.03%	NVDA	0.11%
21.0	BBY	0.99%	AMD	0.09%
21.0	ADBE	0.95%	QCOM	0.09%
21.0	DHI	0.94%	OXY	0.08%
21.0	MOS	0.92%	AMAT	0.08%
21.0	LEN	0.91%	BBY	0.08%
21.0	CDNS	0.91%	ELAN	0.07%

Puts, 1% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 63D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	11.9%	AMC	28.36%
63.0	PHM	7.75%	GME	15.38%
63.0	GBTC	7.42%	MSTR	8.76%
63.0	PWR	6.95%	GBTC	6.81%
63.0	NVDA	6.86%	CYH	5.86%
63.0	CYH	6.48%	NFLX	3.86%
63.0	AMAT	5.79%	VST	3.54%
63.0	CPRT	5.63%	META	3.53%
63.0	MSFT	5.33%	TRGP	3.43%
63.0	TRGP	5.24%	NVDA	3.36%
63.0	ACGL	4.9%	CCL	3.3%
63.0	MU	4.77%	AZO	3.17%
63.0	LLY	4.68%	PWR	3.05%
63.0	HLT	4.64%	CDNS	3.04%
63.0	MS	4.4%	INTU	3.03%
63.0	TXN	4.34%	TEVA	3.03%
63.0	AZO	4.32%	TDG	2.85%
63.0	ETRN	4.19%	HLT	2.82%
63.0	CDNS	4.18%	TMUS	2.81%
63.0	ON	4.09%	LLY	2.81%
63.0	X	4.01%	GT	2.72%
63.0	CSCO	3.97%	GE	2.61%
63.0	VST	3.92%	OXY	2.57%
63.0	LUMN	3.88%	ETRN	2.55%
63.0	CCL	3.78%	ORLY	2.55%
63.0	MNST	3.61%	ON	2.53%
63.0	PCG	3.51%	ORCL	2.4%
63.0	JPM	3.47%	XOM	2.38%
63.0	GT	3.43%	MSI	2.32%
63.0	ORLY	3.42%	GWW	2.3%

Puts, 10% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 63D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	14.49%	AMC	28.19%
63.0	CYH	7.32%	GME	14.49%
63.0	GBTC	6.85%	MSTR	6.63%
63.0	PHM	6.47%	CYH	5.76%
63.0	NVDA	5.4%	GBTC	5.54%
63.0	LUMN	5.1%	LUMN	3.29%
63.0	AMAT	5.08%	GT	2.63%
63.0	PWR	4.89%	CCL	2.59%
63.0	MU	4.48%	OXY	2.34%
63.0	CPRT	4.21%	BHC	2.1%
63.0	MSFT	4.16%	ON	1.98%
63.0	GT	4.11%	NVDA	1.94%
63.0	ON	4.11%	META	1.92%
63.0	CCL	3.89%	ETRN	1.8%
63.0	X	3.76%	NAVI	1.78%
63.0	ETRN	3.69%	CZR	1.77%
63.0	ACGL	3.51%	TEVA	1.75%
63.0	TXN	3.38%	VST	1.68%
63.0	CDNS	3.3%	MOS	1.67%
63.0	IEP	3.28%	AMAT	1.66%
63.0	CSCO	3.06%	INTU	1.61%
63.0	TRGP	3.0%	CDNS	1.52%
63.0	FSUGY	2.97%	UAA	1.47%
63.0	MS	2.9%	X	1.47%
63.0	HLT	2.82%	WYNN	1.45%
63.0	MNST	2.75%	MU	1.39%
63.0	MOS	2.7%	NFLX	1.35%
63.0	CMG	2.55%	AMD	1.34%
63.0	UNH	2.52%	QCOM	1.33%
63.0	LLY	2.48%	TRGP	1.33%

Puts, 20% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 63D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
63.0	AMC	16.79%	AMC	26.65%
63.0	CYH	8.54%	GME	13.0%
63.0	LUMN	7.42%	CYH	5.4%
63.0	GBTC	5.96%	MSTR	4.45%
63.0	IEP	4.86%	GBTC	4.31%
63.0	PHM	4.7%	LUMN	4.2%
63.0	GT	4.05%	GT	1.98%
63.0	NVDA	4.0%	CCL	1.68%
63.0	CCL	3.91%	AA	1.53%
63.0	AMAT	3.9%	BHC	1.46%
63.0	MU	3.81%	UAA	1.4%
63.0	ON	3.41%	CZR	1.39%
63.0	ETRN	3.31%	ETRN	1.25%
63.0	X	3.22%	VFC	1.23%
63.0	PWR	3.15%	AMD	1.13%
63.0	FSUGY	2.86%	NVDA	1.05%
63.0	CPRT	2.62%	WYNN	0.99%
63.0	WRK	2.57%	LVS	0.98%
63.0	ADBE	2.42%	AMAT	0.95%
63.0	CDNS	2.4%	ON	0.93%
63.0	MSFT	2.39%	OXY	0.93%
63.0	BBY	2.31%	MOS	0.91%
63.0	ELAN	2.2%	META	0.86%
63.0	MOS	2.18%	LNC	0.84%
63.0	ACGL	2.18%	QCOM	0.83%
63.0	CSCO	2.13%	BIIB	0.8%
63.0	VNO	2.09%	NAVI	0.79%
63.0	TXN	1.99%	TEVA	0.77%
63.0	DHI	1.98%	WRK	0.72%
63.0	LVS	1.93%	KALU	0.72%

Puts, 1% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 126D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	CYH	13.36%	AMC	27.22%
126.0	PWR	11.48%	GME	22.07%
126.0	PHM	11.28%	MSTR	18.17%
126.0	NVDA	10.4%	CYH	14.49%
126.0	GBTC	10.33%	GBTC	12.08%
126.0	CCL	10.16%	CCL	9.77%
126.0	AMC	9.53%	NFLX	9.24%
126.0	CPRT	9.16%	BHC	8.61%
126.0	ETRN	8.74%	NVDA	7.58%
126.0	CMG	8.28%	TEVA	6.95%
126.0	X	8.09%	PWR	6.75%
126.0	ACGL	7.75%	ETRN	6.58%
126.0	MS	7.75%	INTU	6.45%
126.0	TRGP	7.71%	VST	6.17%
126.0	MSFT	7.58%	CDNS	6.11%
126.0	AMAT	7.42%	TRGP	6.06%
126.0	CDNS	7.17%	META	5.96%
126.0	HLT	7.04%	X	5.9%
126.0	TXN	7.03%	CMG	5.81%
126.0	MU	6.4%	TDG	5.63%
126.0	LLY	6.31%	GWW	5.48%
126.0	JPM	6.26%	ISRG	5.39%
126.0	CSCO	6.06%	PHM	5.28%
126.0	ON	6.06%	AZO	5.25%
126.0	PCG	6.04%	GT	5.18%
126.0	AZO	5.99%	ORLY	5.14%
126.0	DHI	5.92%	HLT	5.12%
126.0	VST	5.81%	ORCL	5.09%
126.0	GE	5.78%	LLY	5.09%
126.0	ORLY	5.67%	ON	4.9%

Puts, 10% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 126D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	CYH	13.38%	AMC	26.77%
126.0	AMC	12.13%	GME	20.78%
126.0	PHM	9.17%	MSTR	14.97%
126.0	GBTC	8.96%	CYH	13.35%
126.0	CCL	8.86%	GBTC	9.72%
126.0	PWR	8.13%	BHC	7.52%
126.0	NVDA	7.87%	CCL	7.34%
126.0	X	7.54%	NFLX	5.82%
126.0	ETRN	6.68%	GT	5.39%
126.0	CPRT	6.58%	TEVA	4.9%
126.0	AMAT	6.29%	CZR	4.85%
126.0	MSFT	6.03%	NVDA	4.83%
126.0	MS	5.97%	X	4.65%
126.0	TXN	5.95%	INTU	4.52%
126.0	CMG	5.94%	ETRN	4.17%
126.0	LUMN	5.93%	UAA	4.17%
126.0	MU	5.84%	NAVI	3.92%
126.0	GT	5.8%	ON	3.9%
126.0	ON	5.66%	WYNN	3.77%
126.0	CDNS	5.57%	LVS	3.72%
126.0	ACGL	5.48%	CDNS	3.68%
126.0	CSCO	5.2%	KALU	3.57%
126.0	TRGP	4.86%	VST	3.55%
126.0	HLT	4.84%	META	3.54%
126.0	MNST	4.29%	PWR	3.47%
126.0	BBY	4.29%	QCOM	3.44%
126.0	DHI	4.27%	CMG	3.25%
126.0	JPM	4.21%	PHM	3.23%
126.0	PCG	4.19%	TRGP	3.18%
126.0	UNH	4.18%	OXY	3.16%

Puts, 20% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 126D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
126.0	AMC	15.39%	AMC	25.76%
126.0	CYH	13.8%	GME	18.94%
126.0	LUMN	8.2%	CYH	11.66%
126.0	CCL	7.74%	MSTR	11.47%
126.0	GBTC	7.56%	GBTC	7.48%
126.0	PHM	6.78%	BHC	5.55%
126.0	X	6.56%	CCL	4.8%
126.0	GT	6.3%	GT	4.69%
126.0	NVDA	5.57%	CZR	4.01%
126.0	AMAT	5.28%	UAA	3.57%
126.0	MU	5.27%	KALU	3.22%
126.0	ETRN	5.24%	NFLX	3.19%
126.0	PWR	5.23%	X	2.97%
126.0	ON	5.04%	AA	2.91%
126.0	MOS	4.67%	WYNN	2.9%
126.0	CPRT	4.23%	MOS	2.87%
126.0	CDNS	4.01%	ON	2.83%
126.0	TXN	3.82%	AMD	2.79%
126.0	CSCO	3.79%	TEVA	2.76%
126.0	MSFT	3.76%	LVS	2.71%
126.0	MS	3.72%	TSLA	2.67%
126.0	FSUGY	3.63%	NVDA	2.65%
126.0	LVS	3.6%	LUMN	2.4%
126.0	CMG	3.6%	QCOM	2.32%
126.0	ADBE	3.58%	ETRN	2.31%
126.0	BBY	3.58%	OXY	2.29%
126.0	THC	3.58%	INTU	2.23%
126.0	ACGL	3.51%	NAVI	2.12%
126.0	WRK	3.38%	META	1.9%
126.0	JPM	3.07%	BA	1.88%

Puts, 1% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 252D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	CYH	26.54%	CYH	30.57%
252.0	GBTC	18.84%	MSTR	28.49%
252.0	NVDA	18.73%	GME	28.14%
252.0	PHM	16.38%	GBTC	26.28%
252.0	CCL	15.91%	CCL	18.79%
252.0	PWR	15.21%	NFLX	17.59%
252.0	X	13.63%	NVDA	16.8%
252.0	MU	13.55%	BHC	16.33%
252.0	ETRN	13.54%	META	15.73%
252.0	AMAT	13.01%	TEVA	13.15%
252.0	CPRT	11.91%	THC	12.88%
252.0	THC	11.26%	ETRN	12.6%
252.0	MSFT	11.21%	X	12.23%
252.0	CMG	11.13%	FCX	12.08%
252.0	MS	10.94%	AMAT	12.07%
252.0	TXN	10.88%	AMD	11.83%
252.0	CDNS	10.73%	MU	10.96%
252.0	TRGP	10.48%	TSLA	10.94%
252.0	JPM	10.25%	PHM	10.85%
252.0	ACGL	10.15%	WYNN	10.55%
252.0	HLT	9.96%	INTU	10.52%
252.0	CSCO	9.91%	HCA	10.31%
252.0	GE	9.85%	ISRG	10.18%
252.0	DHI	9.77%	DHI	10.0%
252.0	HCA	9.57%	TRGP	9.81%
252.0	FCX	8.92%	EXPE	9.75%
252.0	LLY	8.83%	CDNS	9.69%
252.0	BBY	8.68%	PWR	9.68%
252.0	IRM	8.56%	TDG	9.49%
252.0	TEVA	8.37%	CMG	9.4%

Puts, 10% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 252D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	CYH	26.93%	CYH	29.35%
252.0	GBTC	16.5%	GME	27.07%
252.0	NVDA	15.24%	MSTR	24.14%
252.0	CCL	14.09%	GBTC	22.39%
252.0	PHM	13.01%	CCL	15.52%
252.0	X	12.1%	BHC	15.08%
252.0	PWR	11.55%	NFLX	13.81%
252.0	ETRN	11.48%	NVDA	12.71%
252.0	MU	11.43%	META	11.9%
252.0	AMAT	10.46%	UAA	10.63%
252.0	MS	8.87%	TSLA	10.31%
252.0	TXN	8.84%	FCX	10.13%
252.0	CSCO	8.83%	ETRN	9.95%
252.0	THC	8.67%	X	9.83%
252.0	CPRT	8.63%	TEVA	9.76%
252.0	MSFT	8.54%	THC	9.57%
252.0	CDNS	8.14%	WYNN	9.48%
252.0	CMG	8.11%	AMD	9.41%
252.0	BBY	8.01%	AMAT	9.09%
252.0	FCX	7.84%	MU	8.21%
252.0	JPM	7.54%	CZR	7.95%
252.0	TRGP	7.26%	INTU	7.92%
252.0	DHI	7.22%	GT	7.51%
252.0	HLT	7.14%	BBY	7.47%
252.0	ACGL	6.89%	PHM	7.17%
252.0	HCA	6.45%	ISRG	7.09%
252.0	GE	6.35%	KALU	6.98%
252.0	MNST	6.24%	EXPE	6.97%
252.0	UNH	6.07%	DHI	6.92%
252.0	TEVA	5.99%	QCOM	6.71%

Puts, 20% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 252D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
252.0	CYH	27.48%	CYH	27.1%
252.0	GBTC	14.3%	GME	25.57%
252.0	CCL	12.64%	MSTR	19.65%
252.0	NVDA	11.77%	GBTC	18.53%
252.0	X	10.78%	BHC	12.96%
252.0	PHM	9.78%	CCL	12.13%
252.0	ETRN	9.74%	UAA	10.25%
252.0	MU	9.35%	NFLX	9.77%
252.0	PWR	8.22%	NVDA	8.75%
252.0	AMAT	7.8%	AMC	8.63%
252.0	THC	6.61%	TSLA	8.49%
252.0	BBY	6.6%	CZR	8.34%
252.0	CSCO	6.5%	META	8.13%
252.0	TXN	6.16%	GT	7.61%
252.0	MS	6.14%	X	7.46%
252.0	CDNS	6.07%	ETRN	7.32%
252.0	CPRT	5.9%	WYNN	7.15%
252.0	GT	5.88%	AMD	6.94%
252.0	FCX	5.76%	FCX	6.86%
252.0	ON	5.76%	THC	6.68%
252.0	MSFT	5.53%	TEVA	6.26%
252.0	CZR	5.53%	AMAT	6.02%
252.0	CMG	5.48%	KALU	5.72%
252.0	JPM	5.09%	MU	5.58%
252.0	DHI	4.93%	OXY	5.37%
252.0	ADBE	4.85%	WDC	5.32%
252.0	HLT	4.65%	ON	5.32%
252.0	AMD	4.62%	LVS	5.29%
252.0	LVS	4.57%	BBY	5.19%
252.0	FSUGY	4.57%	QCOM	5.12%

Bottom 30 Tickers by Option Sale Profitabilty,All TMD's

Calls,1% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	GME	-1.11%	VST	-0.25%
1.0	MSTR	-0.91%	MSTR	-0.24%
1.0	SBNY	-0.41%	NVDA	-0.18%
1.0	FRCB	-0.27%	PWR	-0.05%
1.0	VST	-0.19%	TRGP	-0.05%
1.0	CHTR	-0.13%	ACGL	-0.04%
1.0	TRGP	-0.11%	MU	-0.04%
1.0	AA	-0.11%	CDNS	-0.03%
1.0	CMA	-0.1%	LLY	-0.03%
1.0	BALL	-0.1%	PHM	-0.03%
1.0	KALU	-0.07%	IRM	-0.03%
1.0	GOLD	-0.06%	CAH	-0.02%
1.0	VFC	-0.06%	GLD	-0.01%
1.0	META	-0.05%	SLV	-0.01%
1.0	IRM	-0.05%	POST	-0.01%
1.0	SLV	-0.05%	TXN	-0.01%
1.0	NAVI	-0.04%	XOM	-0.01%
1.0	HCA	-0.04%	GILD	-0.01%
1.0	OXY	-0.04%	HYG	-0.0%
1.0	SNY	-0.04%	NVS	-0.0%
1.0	SIVBQ	-0.03%	DHI	-0.0%
1.0	INTU	-0.03%	EMB	-0.0%
1.0	XOM	-0.02%	MUB	-0.0%
1.0	CLF	-0.0%	VCSH	-0.0%
1.0	GILD	0.0%	ON	0.0%
1.0	ZTS	0.02%	CMG	0.0%
1.0	SBUX	0.02%	AMGN	0.0%
1.0	POST	0.02%	MSI	0.0%
1.0	MUB	0.02%	LQD	0.0%
1.0	WFC	0.02%	BMY	0.0%

Calls,10% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	GME	-0.41%	MSTR	-0.09%
1.0	SBUX	-0.02%	X	-0.05%
1.0	FRCB	-0.01%	NWL	-0.05%
1.0	META	-0.01%	TEVA	-0.05%
1.0	GILD	-0.0%	META	-0.04%
1.0	TMUS	-0.0%	ETRN	-0.04%
1.0	BALL	-0.0%	BIIB	-0.04%
1.0	FRA	0.0%	VFC	-0.03%
1.0	VCSH	0.0%	NVDA	-0.03%
1.0	MUB	0.0%	TSLA	-0.03%
1.0	HYG	0.0%	AVGO	-0.02%
1.0	GLD	0.0%	ELAN	-0.02%
1.0	POST	0.0%	VNO	-0.02%
1.0	CAH	0.0%	VST	-0.02%
1.0	NVS	0.0%	EXPE	-0.02%
1.0	LQD	0.0%	SBUX	-0.02%
1.0	ABBV	0.0%	SIVBQ	-0.02%
1.0	SNY	0.0%	CLF	-0.02%
1.0	PEP	0.0%	ZION	-0.02%
1.0	ORLY	0.0%	CSTM	-0.01%
1.0	HON	0.0%	OXY	-0.01%
1.0	CHTR	0.0%	BBY	-0.01%
1.0	NAVI	0.0%	PRGO	-0.01%
1.0	AMGN	0.0%	LVS	-0.01%
1.0	MRK	0.0%	THC	-0.01%
1.0	AZN	0.0%	MU	-0.01%
1.0	VICI	0.0%	CHTR	-0.01%
1.0	HD	0.0%	INTC	-0.01%
1.0	MSI	0.0%	CMG	-0.01%
1.0	IRM	0.0%	GT	-0.01%

Calls,20% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
1.0	GME	-0.22%	GME	-0.1%
1.0	BIIB	-0.01%	X	-0.03%
1.0	SBUX	-0.01%	NWL	-0.03%
1.0	VFC	-0.0%	BIIB	-0.02%
1.0	ZTS	0.0%	ETRN	-0.02%
1.0	MNST	0.0%	TEVA	-0.02%
1.0	LQD	0.0%	MSTR	-0.01%
1.0	IRM	0.0%	VFC	-0.01%
1.0	CAH	0.0%	UAA	-0.01%
1.0	HYG	0.0%	IEP	-0.01%
1.0	HON	0.0%	ELAN	-0.01%
1.0	HLT	0.0%	SBUX	-0.01%
1.0	HCA	0.0%	AVGO	-0.01%
1.0	GLD	0.0%	NVDA	-0.01%
1.0	GILD	0.0%	META	-0.0%
1.0	FRCB	0.0%	TSLA	-0.0%
1.0	CDNS	0.0%	GT	-0.0%
1.0	MRK	0.0%	PRGO	-0.0%
1.0	NVS	0.0%	CLF	-0.0%
1.0	FRA	0.0%	VCSH	0.0%
1.0	ORLY	0.0%	MUB	0.0%
1.0	PEP	0.0%	LQD	0.0%
1.0	POST	0.0%	HYG	0.0%
1.0	AZN	0.0%	EMB	0.0%
1.0	SLV	0.0%	GLD	0.0%
1.0	AMGN	0.0%	FRA	0.0%
1.0	MUB	0.0%	PEP	0.0%
1.0	TMUS	0.0%	NVS	0.0%
1.0	TXN	0.0%	TLT	0.0%
1.0	VCSH	0.0%	SPY	0.0%

Calls,1% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	MSTR	-5.16%	MSTR	-3.15%
10.0	GME	-4.52%	VST	-2.0%
10.0	VST	-2.42%	NVDA	-1.79%
10.0	TEVA	-1.78%	TEVA	-1.04%
10.0	META	-1.69%	LLY	-0.95%
10.0	TRGP	-1.46%	TRGP	-0.79%
10.0	IRM	-1.24%	TSLA	-0.77%
10.0	GOLD	-1.15%	IRM	-0.65%
10.0	CHTR	-0.98%	CAH	-0.65%
10.0	KALU	-0.96%	PWR	-0.55%
10.0	SLV	-0.93%	X	-0.54%
10.0	HCA	-0.87%	ORCL	-0.53%
10.0	GILD	-0.86%	GE	-0.53%
10.0	GWW	-0.8%	CMG	-0.48%
10.0	EXPE	-0.78%	GS	-0.47%
10.0	WFC	-0.78%	GWW	-0.44%
10.0	FRCB	-0.72%	MS	-0.42%
10.0	ORCL	-0.71%	TMUS	-0.4%
10.0	CMA	-0.7%	ABBV	-0.39%
10.0	WDC	-0.64%	GILD	-0.38%
10.0	ISRG	-0.63%	SLV	-0.37%
10.0	TMUS	-0.63%	JPM	-0.37%
10.0	AA	-0.61%	ACGL	-0.36%
10.0	NFLX	-0.6%	CPRT	-0.35%
10.0	NEM	-0.57%	WFC	-0.35%
10.0	AMGN	-0.56%	PHM	-0.33%
10.0	CAH	-0.55%	COST	-0.32%
10.0	GS	-0.54%	CDNS	-0.32%
10.0	BUD	-0.53%	GLD	-0.3%
10.0	MSI	-0.53%	NFLX	-0.29%

Calls,10% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GME	-3.74%	MSTR	-2.27%
10.0	MSTR	-3.41%	VST	-1.06%
10.0	VST	-0.96%	NVDA	-0.69%
10.0	TEVA	-0.59%	TEVA	-0.68%
10.0	META	-0.27%	TSLA	-0.63%
10.0	EXPE	-0.23%	X	-0.46%
10.0	ETRN	-0.2%	ETRN	-0.41%
10.0	CHTR	-0.16%	AVGO	-0.3%
10.0	KALU	-0.16%	LLY	-0.23%
10.0	GOLD	-0.15%	ORCL	-0.2%
10.0	TRGP	-0.15%	GWW	-0.19%
10.0	CTLT	-0.13%	SBUX	-0.12%
10.0	GWW	-0.12%	OXY	-0.12%
10.0	IRM	-0.12%	CMG	-0.12%
10.0	GILD	-0.09%	DHI	-0.11%
10.0	SBUX	-0.09%	GILD	-0.11%
10.0	ISRG	-0.07%	TMUS	-0.11%
10.0	HCA	-0.07%	TRGP	-0.09%
10.0	AA	-0.05%	IRM	-0.09%
10.0	VFC	-0.03%	PWR	-0.07%
10.0	TMUS	-0.02%	CAH	-0.07%
10.0	BUD	-0.02%	ACGL	-0.07%
10.0	NAVI	-0.01%	GE	-0.07%
10.0	MSI	-0.01%	CVS	-0.06%
10.0	AVGO	-0.01%	ISRG	-0.05%
10.0	POST	-0.01%	AMGN	-0.05%
10.0	NVS	-0.01%	CDNS	-0.05%
10.0	SLV	-0.0%	GS	-0.04%
10.0	CMA	-0.0%	BMY	-0.04%
10.0	MUB	0.0%	MU	-0.04%

Calls,20% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
10.0	GME	-2.72%	MSTR	-1.35%
10.0	MSTR	-1.5%	ETRN	-0.51%
10.0	VST	-0.3%	TSLA	-0.42%
10.0	ETRN	-0.22%	VST	-0.41%
10.0	AVGO	-0.12%	TEVA	-0.34%
10.0	TEVA	-0.12%	X	-0.26%
10.0	ISRG	-0.04%	AVGO	-0.25%
10.0	META	-0.03%	OXY	-0.17%
10.0	SBUX	-0.03%	BIIB	-0.08%
10.0	CTLT	-0.01%	NVDA	-0.08%
10.0	HCA	-0.0%	ISRG	-0.05%
10.0	TMUS	-0.0%	SBUX	-0.05%
10.0	VCSH	0.0%	FSUGY	-0.04%
10.0	MUB	0.0%	DHI	-0.04%
10.0	FRA	0.0%	MU	-0.03%
10.0	LQD	0.0%	WYNN	-0.02%
10.0	POST	0.0%	BMY	-0.01%
10.0	NVS	0.0%	LLY	-0.01%
10.0	PEP	0.0%	HCA	-0.01%
10.0	GILD	0.0%	GWW	-0.01%
10.0	SNY	0.0%	CMG	-0.0%
10.0	MSI	0.0%	TMUS	-0.0%
10.0	HON	0.0%	T	-0.0%
10.0	FRCB	0.0%	RIO	-0.0%
10.0	GLD	0.01%	GE	-0.0%
10.0	BUD	0.01%	ACGL	-0.0%
10.0	IRM	0.01%	GILD	-0.0%
10.0	GOLD	0.01%	VCSH	0.0%
10.0	BMY	0.01%	MUB	0.0%
10.0	MNST	0.01%	LQD	0.0%

Calls,1% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 21D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	MSTR	-10.32%	MSTR	-7.76%
21.0	GME	-6.02%	VST	-4.28%
21.0	VST	-4.9%	NVDA	-3.69%
21.0	TEVA	-3.34%	TEVA	-2.22%
21.0	META	-3.23%	LLY	-2.04%
21.0	TRGP	-2.75%	TSLA	-2.03%
21.0	IRM	-2.21%	TRGP	-1.87%
21.0	GOLD	-1.78%	ETRN	-1.87%
21.0	GWW	-1.68%	GE	-1.74%
21.0	HCA	-1.68%	X	-1.7%
21.0	ETRN	-1.61%	CAH	-1.51%
21.0	ORCL	-1.59%	PWR	-1.45%
21.0	GILD	-1.48%	THC	-1.41%
21.0	CHTR	-1.41%	IRM	-1.38%
21.0	ISRG	-1.39%	ORCL	-1.36%
21.0	CAH	-1.24%	GWW	-1.22%
21.0	LLY	-1.23%	CMG	-1.1%
21.0	AMGN	-1.18%	META	-1.06%
21.0	KALU	-1.18%	PHM	-1.03%
21.0	BUD	-1.14%	ISRG	-1.02%
21.0	WFC	-1.14%	COST	-1.01%
21.0	NFLX	-1.12%	ACGL	-1.01%
21.0	EXPE	-1.11%	NFLX	-0.97%
21.0	SLV	-1.11%	GS	-0.91%
21.0	MSI	-1.1%	ABBV	-0.85%
21.0	THC	-1.08%	TMUS	-0.83%
21.0	ACGL	-1.02%	AMGN	-0.8%
21.0	PWR	-0.96%	GILD	-0.79%
21.0	GS	-0.96%	TDG	-0.75%
21.0	NEM	-0.95%	JPM	-0.7%

Calls,10% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 21D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	MSTR	-8.94%	MSTR	-6.87%
21.0	GME	-5.51%	VST	-2.69%
21.0	VST	-2.75%	NVDA	-2.43%
21.0	TEVA	-1.74%	TSLA	-2.02%
21.0	META	-1.29%	ETRN	-1.66%
21.0	ETRN	-1.12%	TEVA	-1.5%
21.0	TRGP	-0.69%	X	-1.24%
21.0	CHTR	-0.65%	LLY	-0.8%
21.0	KALU	-0.58%	GE	-0.77%
21.0	GILD	-0.53%	GWW	-0.56%
21.0	GWW	-0.51%	GILD	-0.47%
21.0	CTLT	-0.5%	ORCL	-0.46%
21.0	EXPE	-0.49%	TRGP	-0.45%
21.0	BUD	-0.46%	CAH	-0.45%
21.0	IRM	-0.4%	CMG	-0.43%
21.0	GOLD	-0.4%	THC	-0.39%
21.0	CMA	-0.32%	GS	-0.35%
21.0	ISRG	-0.26%	PWR	-0.33%
21.0	HCA	-0.25%	BUD	-0.29%
21.0	WFC	-0.23%	ISRG	-0.29%
21.0	SBUX	-0.2%	DHI	-0.24%
21.0	FRCB	-0.2%	PHM	-0.24%
21.0	CAH	-0.19%	AMGN	-0.23%
21.0	OXY	-0.15%	ACGL	-0.23%
21.0	SLV	-0.13%	IRM	-0.21%
21.0	GS	-0.13%	AVGO	-0.2%
21.0	NVS	-0.12%	SBUX	-0.19%
21.0	AMGN	-0.12%	CPRT	-0.17%
21.0	MSI	-0.11%	NVS	-0.17%
21.0	NEM	-0.11%	VNO	-0.15%

Calls,20% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 21D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
21.0	MSTR	-6.65%	MSTR	-5.64%
21.0	GME	-4.39%	VST	-1.81%
21.0	VST	-1.65%	TSLA	-1.67%
21.0	ETRN	-0.85%	ETRN	-1.67%
21.0	TEVA	-0.62%	NVDA	-1.17%
21.0	META	-0.28%	X	-0.84%
21.0	EXPE	-0.19%	TEVA	-0.8%
21.0	CTLT	-0.19%	AVGO	-0.38%
21.0	KALU	-0.1%	OXY	-0.29%
21.0	GILD	-0.1%	GE	-0.16%
21.0	AVGO	-0.09%	GILD	-0.12%
21.0	CHTR	-0.03%	ISRG	-0.09%
21.0	BUD	-0.01%	SBUX	-0.07%
21.0	OXY	-0.01%	CMG	-0.06%
21.0	SBUX	-0.01%	ADBE	-0.06%
21.0	CMA	-0.01%	GWW	-0.06%
21.0	VCSH	0.0%	WYNN	-0.05%
21.0	LQD	0.0%	CVS	-0.05%
21.0	MUB	0.0%	DHI	-0.04%
21.0	GWW	0.0%	CAH	-0.04%
21.0	HON	0.0%	ACGL	-0.04%
21.0	FRA	0.0%	BUD	-0.03%
21.0	HCA	0.0%	GS	-0.03%
21.0	PEP	0.0%	LLY	-0.02%
21.0	NVS	0.01%	TMUS	-0.02%
21.0	POST	0.01%	ORCL	-0.02%
21.0	XOM	0.01%	JPM	-0.02%
21.0	ISRG	0.01%	PWR	-0.02%
21.0	GLD	0.01%	HON	-0.02%
21.0	SNY	0.02%	VNO	-0.02%

Calls,1% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 63D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	MSTR	-25.88%	MSTR	-21.48%
63.0	VST	-16.34%	VST	-15.63%
63.0	META	-10.77%	NVDA	-14.99%
63.0	NVDA	-8.98%	META	-7.65%
63.0	ETRN	-6.85%	GBTC	-7.47%
63.0	TRGP	-6.71%	LLY	-6.68%
63.0	GME	-5.54%	ETRN	-6.21%
63.0	LLY	-5.52%	NFLX	-5.98%
63.0	IRM	-5.07%	GE	-5.88%
63.0	TEVA	-4.99%	THC	-5.59%
63.0	THC	-4.68%	PHM	-5.5%
63.0	CAH	-3.97%	TRGP	-5.43%
63.0	PHM	-3.86%	CMG	-4.41%
63.0	NFLX	-3.85%	PWR	-4.39%
63.0	GWW	-3.74%	CAH	-4.29%
63.0	GILD	-3.64%	ISRG	-3.98%
63.0	LW	-3.4%	TEVA	-3.75%
63.0	ISRG	-3.31%	IRM	-3.62%
63.0	HCA	-3.01%	TSLA	-3.59%
63.0	ACGL	-3.0%	DHI	-3.57%
63.0	ORCL	-2.98%	ACGL	-3.51%
63.0	CMG	-2.87%	ORCL	-3.51%
63.0	MSI	-2.78%	GWW	-3.31%
63.0	PWR	-2.73%	GILD	-2.88%
63.0	TDG	-2.56%	TDG	-2.82%
63.0	GE	-2.47%	VNO	-2.77%
63.0	EXPE	-2.4%	JPM	-2.47%
63.0	TMUS	-2.2%	MSI	-2.44%
63.0	GBTC	-1.93%	CPRT	-2.3%
63.0	LEN	-1.8%	LEN	-2.19%

Calls,10% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 63D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	MSTR	-23.78%	MSTR	-19.14%
63.0	VST	-13.52%	VST	-13.15%
63.0	META	-8.45%	NVDA	-12.72%
63.0	NVDA	-6.81%	GBTC	-5.87%
63.0	ETRN	-5.64%	META	-5.81%
63.0	GME	-5.35%	ETRN	-5.04%
63.0	TRGP	-3.86%	THC	-4.36%
63.0	THC	-3.63%	LLY	-3.94%
63.0	TEVA	-2.83%	PHM	-3.69%
63.0	IRM	-2.77%	GE	-3.4%
63.0	GILD	-2.41%	TSLA	-3.21%
63.0	LLY	-2.34%	TRGP	-3.02%
63.0	PHM	-1.98%	NFLX	-2.99%
63.0	EXPE	-1.88%	CMG	-2.82%
63.0	LW	-1.73%	VNO	-2.78%
63.0	CAH	-1.61%	TEVA	-2.2%
63.0	ISRG	-1.47%	ISRG	-2.18%
63.0	GWW	-1.43%	GILD	-2.18%
63.0	HCA	-1.39%	DHI	-2.16%
63.0	CTLT	-1.37%	CAH	-1.95%
63.0	CMG	-1.36%	ORCL	-1.91%
63.0	KALU	-1.32%	PWR	-1.87%
63.0	ORCL	-1.05%	IRM	-1.78%
63.0	CHTR	-1.05%	ACGL	-1.65%
63.0	WFC	-0.96%	X	-1.5%
63.0	GBTC	-0.94%	CCL	-1.33%
63.0	NFLX	-0.92%	GWW	-1.32%
63.0	ACGL	-0.87%	TDG	-0.93%
63.0	SNY	-0.68%	AMD	-0.93%
63.0	POST	-0.65%	MRK	-0.85%

Calls,20% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 63D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
63.0	MSTR	-20.82%	MSTR	-16.64%
63.0	VST	-10.13%	VST	-10.21%
63.0	META	-6.07%	NVDA	-9.85%
63.0	GME	-4.78%	META	-4.31%
63.0	NVDA	-4.44%	ETRN	-3.88%
63.0	ETRN	-4.06%	GBTC	-3.74%
63.0	THC	-1.82%	TSLA	-2.6%
63.0	CTLT	-1.29%	THC	-2.4%
63.0	TRGP	-1.27%	VNO	-2.29%
63.0	IRM	-1.12%	PHM	-1.63%
63.0	EXPE	-1.07%	LLY	-1.42%
63.0	GILD	-0.93%	GE	-1.38%
63.0	TEVA	-0.68%	GILD	-1.02%
63.0	KALU	-0.55%	X	-0.98%
63.0	LW	-0.25%	DHI	-0.94%
63.0	CHTR	-0.25%	TRGP	-0.93%
63.0	ISRG	-0.2%	ISRG	-0.82%
63.0	CAH	-0.14%	TEVA	-0.72%
63.0	PHM	-0.11%	CMG	-0.7%
63.0	HCA	-0.11%	IRM	-0.69%
63.0	MRK	-0.09%	AMD	-0.65%
63.0	HSBC	-0.08%	ACGL	-0.64%
63.0	ACGL	-0.07%	CCL	-0.63%
63.0	WFC	-0.06%	ORCL	-0.61%
63.0	POST	-0.02%	CAH	-0.44%
63.0	SNY	-0.0%	NFLX	-0.39%
63.0	VCSH	-0.0%	HSBC	-0.34%
63.0	MUB	0.0%	PCG	-0.29%
63.0	LQD	0.01%	MRK	-0.24%
63.0	NVS	0.06%	ABBV	-0.06%

Calls,1% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 126D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	MSTR	-62.72%	MSTR	-55.8%
126.0	VST	-38.9%	NVDA	-43.6%
126.0	NVDA	-34.1%	VST	-38.17%
126.0	META	-25.72%	GBTC	-26.56%
126.0	GBTC	-17.32%	META	-22.63%
126.0	TRGP	-15.55%	GE	-17.22%
126.0	LLY	-14.72%	NFLX	-16.45%
126.0	GE	-12.53%	LLY	-15.96%
126.0	THC	-12.42%	PHM	-14.87%
126.0	IRM	-12.23%	THC	-14.69%
126.0	TEVA	-11.21%	TRGP	-13.91%
126.0	PHM	-10.95%	PWR	-10.56%
126.0	ETRN	-10.44%	ORCL	-10.24%
126.0	NFLX	-9.82%	IRM	-10.1%
126.0	CAH	-8.95%	ACGL	-9.92%
126.0	GWW	-8.86%	CAH	-9.42%
126.0	ACGL	-8.58%	ISRG	-9.06%
126.0	PWR	-8.43%	ETRN	-8.85%
126.0	ORCL	-8.35%	TEVA	-8.69%
126.0	TDG	-8.11%	TDG	-8.62%
126.0	MSI	-7.6%	GWW	-8.47%
126.0	GILD	-7.19%	DHI	-8.18%
126.0	TMUS	-6.16%	MSI	-7.72%
126.0	HCA	-6.15%	VNO	-7.44%
126.0	ISRG	-5.74%	CMG	-7.18%
126.0	HLT	-5.63%	JPM	-6.84%
126.0	GS	-4.97%	GILD	-6.57%
126.0	LEN	-4.76%	COST	-6.55%
126.0	LW	-4.69%	TMUS	-6.38%
126.0	GLD	-4.66%	CPRT	-6.23%

Calls,10% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 126D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	MSTR	-60.06%	MSTR	-52.36%
126.0	VST	-35.28%	NVDA	-40.07%
126.0	NVDA	-30.76%	VST	-34.71%
126.0	META	-22.11%	GBTC	-23.51%
126.0	GBTC	-15.27%	META	-19.2%
126.0	TRGP	-11.56%	THC	-13.49%
126.0	THC	-11.49%	GE	-13.14%
126.0	LLY	-10.41%	LLY	-12.1%
126.0	TEVA	-8.86%	NFLX	-11.85%
126.0	IRM	-8.85%	PHM	-11.72%
126.0	GE	-8.66%	TRGP	-10.29%
126.0	ETRN	-8.33%	ACGL	-6.99%
126.0	PHM	-7.76%	ORCL	-6.97%
126.0	GILD	-5.85%	IRM	-6.96%
126.0	NFLX	-5.58%	TEVA	-6.71%
126.0	ACGL	-5.42%	PWR	-6.63%
126.0	CAH	-5.09%	ETRN	-6.5%
126.0	GWW	-5.04%	VNO	-6.37%
126.0	ORCL	-4.93%	ISRG	-5.75%
126.0	TDG	-4.71%	CAH	-5.61%
126.0	PWR	-4.18%	GILD	-5.6%
126.0	HCA	-3.97%	TDG	-5.37%
126.0	LW	-3.88%	DHI	-5.14%
126.0	MSI	-3.87%	CMG	-5.04%
126.0	TMUS	-2.99%	GWW	-4.85%
126.0	GS	-2.67%	TSLA	-4.57%
126.0	ISRG	-2.58%	AMD	-4.13%
126.0	EXPE	-2.39%	MSI	-4.04%
126.0	WDC	-2.39%	COST	-3.64%
126.0	CMG	-2.36%	TMUS	-3.56%

Calls,20% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 126D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
126.0	MSTR	-56.33%	MSTR	-48.43%
126.0	VST	-30.67%	NVDA	-35.94%
126.0	NVDA	-27.08%	VST	-30.51%
126.0	META	-17.62%	GBTC	-19.75%
126.0	GBTC	-12.52%	META	-15.38%
126.0	THC	-9.83%	THC	-11.55%
126.0	TRGP	-7.68%	GE	-9.05%
126.0	ETRN	-6.04%	PHM	-7.93%
126.0	TEVA	-5.9%	LLY	-7.7%
126.0	LLY	-5.84%	NFLX	-7.05%
126.0	IRM	-5.58%	TRGP	-6.91%
126.0	GE	-5.05%	VNO	-4.91%
126.0	PHM	-4.17%	ETRN	-4.43%
126.0	GILD	-3.64%	TEVA	-4.4%
126.0	ACGL	-2.21%	IRM	-4.25%
126.0	ORCL	-1.88%	ORCL	-3.82%
126.0	GWW	-1.88%	GILD	-3.78%
126.0	LW	-1.85%	TSLA	-3.78%
126.0	CAH	-1.77%	ACGL	-3.63%
126.0	TDG	-1.66%	CMG	-3.58%
126.0	WDC	-1.6%	AMD	-2.94%
126.0	NFLX	-1.38%	PWR	-2.87%
126.0	HCA	-1.36%	TDG	-2.34%
126.0	CMG	-1.29%	CAH	-2.2%
126.0	EXPE	-1.21%	GWW	-1.78%
126.0	MSI	-0.69%	DHI	-1.76%
126.0	WFC	-0.57%	ISRG	-1.73%
126.0	PWR	-0.49%	X	-1.61%
126.0	TMUS	-0.38%	WYNN	-1.48%
126.0	POST	-0.37%	MU	-1.46%

Calls,1% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 252D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	MSTR	-207.78%	MSTR	-197.8%
252.0	NVDA	-121.73%	NVDA	-136.61%
252.0	VST	-119.8%	VST	-116.52%
252.0	GBTC	-79.57%	GBTC	-96.77%
252.0	META	-66.77%	META	-64.96%
252.0	LLY	-45.9%	GE	-49.14%
252.0	PHM	-40.77%	LLY	-47.89%
252.0	GE	-39.15%	PHM	-47.62%
252.0	TRGP	-36.1%	NFLX	-43.71%
252.0	THC	-30.11%	THC	-36.38%
252.0	IRM	-29.9%	TRGP	-36.23%
252.0	TDG	-29.13%	PWR	-30.04%
252.0	TEVA	-27.75%	TDG	-29.42%
252.0	NFLX	-27.64%	ACGL	-27.51%
252.0	GWW	-26.08%	IRM	-26.44%
252.0	PWR	-24.75%	DHI	-26.01%
252.0	ACGL	-23.23%	ISRG	-25.01%
252.0	ORCL	-20.94%	TEVA	-24.83%
252.0	CAH	-19.85%	ORCL	-24.67%
252.0	MSI	-18.96%	GWW	-24.3%
252.0	CMG	-18.93%	CMG	-23.99%
252.0	LEN	-18.65%	LEN	-22.62%
252.0	ETRN	-18.3%	CPRT	-20.81%
252.0	HLT	-17.92%	COST	-20.44%
252.0	ISRG	-17.18%	MSI	-19.79%
252.0	CPRT	-17.0%	CAH	-19.48%
252.0	JPM	-16.02%	JPM	-18.83%
252.0	WDC	-15.19%	AMD	-18.68%
252.0	DHI	-13.71%	CDNS	-18.26%
252.0	TMUS	-11.72%	AMAT	-18.24%

Calls,10% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 252D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	MSTR	-204.0%	MSTR	-192.8%
252.0	NVDA	-117.3%	NVDA	-131.71%
252.0	VST	-115.56%	VST	-112.36%
252.0	GBTC	-76.52%	GBTC	-92.17%
252.0	META	-62.3%	META	-60.31%
252.0	LLY	-40.48%	GE	-43.89%
252.0	PHM	-36.18%	PHM	-43.03%
252.0	GE	-34.11%	LLY	-42.65%
252.0	TRGP	-31.58%	NFLX	-39.03%
252.0	THC	-26.55%	THC	-32.28%
252.0	IRM	-25.41%	TRGP	-31.89%
252.0	TEVA	-24.32%	PWR	-24.88%
252.0	NFLX	-23.64%	TDG	-24.14%
252.0	TDG	-23.64%	ACGL	-22.62%
252.0	GWW	-20.96%	IRM	-22.09%
252.0	PWR	-19.43%	DHI	-21.83%
252.0	ACGL	-18.12%	TEVA	-21.32%
252.0	ETRN	-16.12%	ISRG	-20.65%
252.0	ORCL	-15.67%	CMG	-19.51%
252.0	CAH	-14.76%	ORCL	-19.44%
252.0	LEN	-14.74%	GWW	-19.41%
252.0	CMG	-14.48%	LEN	-18.51%
252.0	HLT	-13.7%	COST	-16.96%
252.0	MSI	-13.66%	CPRT	-15.98%
252.0	ISRG	-13.06%	AMD	-15.51%
252.0	WDC	-12.88%	ETRN	-14.78%
252.0	CPRT	-12.32%	AMAT	-14.73%
252.0	JPM	-11.72%	JPM	-14.55%
252.0	DHI	-9.82%	MSI	-14.55%
252.0	LW	-9.14%	CAH	-14.52%

Calls,20% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 252D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
252.0	MSTR	-199.0%	MSTR	-187.02%
252.0	NVDA	-111.98%	NVDA	-125.77%
252.0	VST	-110.4%	VST	-107.52%
252.0	GBTC	-72.73%	GBTC	-86.83%
252.0	META	-56.66%	META	-54.71%
252.0	LLY	-33.98%	PHM	-37.82%
252.0	PHM	-31.03%	GE	-37.33%
252.0	GE	-28.16%	LLY	-36.09%
252.0	TRGP	-26.06%	NFLX	-33.24%
252.0	THC	-22.58%	THC	-27.63%
252.0	TEVA	-20.65%	TRGP	-26.69%
252.0	IRM	-20.44%	PWR	-18.43%
252.0	NFLX	-18.76%	TDG	-18.17%
252.0	TDG	-17.47%	TEVA	-17.94%
252.0	GWW	-14.57%	IRM	-17.22%
252.0	ETRN	-13.7%	DHI	-16.86%
252.0	PWR	-13.09%	ACGL	-16.44%
252.0	ACGL	-12.21%	ISRG	-15.23%
252.0	ORCL	-10.1%	CMG	-14.57%
252.0	WDC	-10.09%	ORCL	-13.68%
252.0	LEN	-10.02%	LEN	-13.58%
252.0	CMG	-9.97%	COST	-13.18%
252.0	CAH	-9.04%	GWW	-13.17%
252.0	HLT	-8.81%	ETRN	-12.17%
252.0	ISRG	-8.1%	AMD	-12.08%
252.0	MSI	-7.66%	AMAT	-10.77%
252.0	LW	-7.61%	CPRT	-10.63%
252.0	CPRT	-7.6%	MU	-9.99%
252.0	JPM	-7.05%	AMZN	-9.88%
252.0	GS	-6.39%	JPM	-9.5%

Puts, 1% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AVGO	-52.08%	AVGO	-52.63%
1.0	SIVBQ	-1.19%	SIVBQ	-0.7%
1.0	SBNY	-1.0%	SBNY	-0.25%
1.0	MSTR	-0.84%	FRCB	-0.16%
1.0	GME	-0.79%	VST	-0.09%
1.0	CHTR	-0.27%	NVDA	-0.02%
1.0	FRCB	-0.27%	IRM	-0.02%
1.0	AAP	-0.18%	PEP	-0.02%
1.0	KALU	-0.17%	ACGL	-0.02%
1.0	VFC	-0.15%	UNH	-0.01%
1.0	GOLD	-0.14%	NVS	-0.01%
1.0	QCOM	-0.12%	FRA	-0.01%
1.0	META	-0.11%	VZ	-0.01%
1.0	OXY	-0.11%	QQQ	-0.01%
1.0	AMZN	-0.1%	GOOGL	-0.01%
1.0	EXPE	-0.09%	SPY	-0.01%
1.0	UAA	-0.09%	EMB	-0.0%
1.0	SLV	-0.08%	GLD	-0.0%
1.0	BALL	-0.06%	TXN	-0.0%
1.0	JAZZ	-0.06%	HYG	-0.0%
1.0	CMA	-0.06%	LQD	-0.0%
1.0	BUD	-0.05%	MU	-0.0%
1.0	CDNS	-0.03%	TRGP	-0.0%
1.0	NEM	-0.03%	PCG	-0.0%
1.0	BHP	-0.02%	MUB	-0.0%
1.0	CVS	-0.02%	VCSH	0.0%
1.0	ZTS	-0.01%	ABBV	0.0%
1.0	XOM	-0.01%	HSBC	0.0%
1.0	SNY	-0.01%	TLT	0.0%
1.0	ZION	-0.01%	AZN	0.0%

Puts, 10% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AVGO	-47.36%	AVGO	-47.5%
1.0	SIVBQ	-0.54%	SIVBQ	-0.56%
1.0	GME	-0.12%	MSTR	-0.07%
1.0	MSTR	-0.1%	SBNY	-0.07%
1.0	SBNY	-0.05%	FRCB	-0.06%
1.0	FRCB	-0.03%	CTLT	-0.06%
1.0	SNY	-0.01%	AAP	-0.05%
1.0	CTLT	-0.01%	LW	-0.05%
1.0	CHTR	-0.01%	GT	-0.04%
1.0	EXPE	-0.01%	NFLX	-0.04%
1.0	LW	-0.01%	META	-0.04%
1.0	META	-0.01%	THC	-0.03%
1.0	GSK	-0.0%	FIS	-0.03%
1.0	VCSH	0.0%	IEP	-0.03%
1.0	MUB	0.0%	EXPE	-0.03%
1.0	FRA	0.0%	NWL	-0.03%
1.0	HYG	0.0%	VST	-0.03%
1.0	CVS	0.0%	CSTM	-0.03%
1.0	LQD	0.0%	GNRC	-0.03%
1.0	TLT	0.0%	CMA	-0.03%
1.0	BHP	0.0%	ZION	-0.02%
1.0	OXY	0.0%	WDC	-0.02%
1.0	BMY	0.0%	ADBE	-0.02%
1.0	SLV	0.0%	INTC	-0.02%
1.0	BUD	0.0%	KEY	-0.02%
1.0	GILD	0.0%	ETRN	-0.02%
1.0	FITB	0.0%	TSLA	-0.02%
1.0	POST	0.0%	LNC	-0.02%
1.0	GOLD	0.0%	CHTR	-0.02%
1.0	GLD	0.0%	GE	-0.02%

Puts, 20% Out of the Money, 1D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
1.0	AVGO	-41.52%	AVGO	-41.55%
1.0	SIVBQ	-0.43%	SIVBQ	-0.43%
1.0	GME	-0.04%	BHC	-0.04%
1.0	MSTR	-0.02%	CTLT	-0.02%
1.0	CTLT	-0.02%	MSTR	-0.02%
1.0	META	-0.01%	NFLX	-0.02%
1.0	CSTM	-0.01%	AAP	-0.02%
1.0	SBNY	-0.01%	LNC	-0.02%
1.0	LW	-0.01%	THC	-0.01%
1.0	KEY	-0.01%	META	-0.01%
1.0	NFLX	-0.0%	GNRC	-0.01%
1.0	FIS	-0.0%	WDC	-0.01%
1.0	VZ	0.0%	LW	-0.01%
1.0	VICI	0.0%	VST	-0.01%
1.0	EMB	0.0%	CSTM	-0.01%
1.0	VCSH	0.0%	SBNY	-0.01%
1.0	FITB	0.0%	FIS	-0.01%
1.0	FRA	0.0%	CMA	-0.01%
1.0	GILD	0.0%	GT	-0.01%
1.0	GLD	0.0%	KEY	-0.01%
1.0	HSBC	0.0%	CYH	-0.01%
1.0	SNY	0.0%	NWL	-0.01%
1.0	HYG	0.0%	INTC	-0.01%
1.0	TLT	0.0%	ZION	-0.01%
1.0	PEP	0.0%	UAA	-0.0%
1.0	OXY	0.0%	IEP	-0.0%
1.0	MSI	0.0%	CCL	-0.0%
1.0	SLV	0.0%	GE	-0.0%
1.0	NVS	0.0%	HCA	-0.0%
1.0	MUB	0.0%	ON	-0.0%

Puts, 1% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AVGO	-51.22%	AVGO	-52.06%
10.0	SIVBQ	-4.79%	SIVBQ	-2.72%
10.0	SBNY	-4.69%	SBNY	-1.82%
10.0	GME	-2.41%	FRCB	-1.49%
10.0	FRCB	-2.28%	CVS	-0.45%
10.0	MSTR	-2.13%	TSLA	-0.28%
10.0	AAP	-2.06%	AAP	-0.25%
10.0	CHTR	-1.52%	GSK	-0.23%
10.0	VFC	-1.23%	MS	-0.22%
10.0	KALU	-1.14%	BAC	-0.2%
10.0	GNRC	-1.08%	INTC	-0.19%
10.0	GOLD	-1.06%	NEM	-0.17%
10.0	TSLA	-1.05%	FSUGY	-0.15%
10.0	NEM	-0.96%	VZ	-0.14%
10.0	UAA	-0.96%	WDC	-0.14%
10.0	CVS	-0.91%	TLT	-0.14%
10.0	META	-0.85%	PEP	-0.13%
10.0	KEY	-0.7%	CHTR	-0.13%
10.0	BALL	-0.68%	KHC	-0.11%
10.0	CMA	-0.67%	LQD	-0.1%
10.0	GSK	-0.65%	FRA	-0.09%
10.0	BHP	-0.62%	MUB	-0.08%
10.0	PRGO	-0.62%	EMB	-0.07%
10.0	CLF	-0.6%	WFC	-0.05%
10.0	ZTS	-0.59%	TEVA	-0.04%
10.0	CTLT	-0.59%	NVS	-0.04%
10.0	OXY	-0.58%	UNH	-0.03%
10.0	SLV	-0.57%	ADBE	-0.03%
10.0	BUD	-0.57%	BMY	-0.03%
10.0	AA	-0.57%	LW	-0.02%

Puts, 10% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AVGO	-47.12%	AVGO	-47.86%
10.0	SIVBQ	-2.5%	SIVBQ	-2.0%
10.0	SBNY	-1.59%	FRCB	-0.94%
10.0	MSTR	-1.36%	SBNY	-0.84%
10.0	FRCB	-0.88%	LW	-0.38%
10.0	GME	-0.84%	WDC	-0.27%
10.0	AAP	-0.66%	CTLT	-0.26%
10.0	CTLT	-0.63%	AAP	-0.24%
10.0	META	-0.36%	CHTR	-0.22%
10.0	CHTR	-0.36%	CVS	-0.22%
10.0	KALU	-0.26%	VST	-0.21%
10.0	CVS	-0.15%	TSLA	-0.17%
10.0	CLF	-0.15%	ADBE	-0.16%
10.0	GNRC	-0.15%	GSK	-0.14%
10.0	GSK	-0.09%	PCG	-0.13%
10.0	NEM	-0.08%	EXPE	-0.12%
10.0	AMZN	-0.07%	WFC	-0.1%
10.0	EXPE	-0.05%	TEVA	-0.1%
10.0	SNY	-0.05%	NEM	-0.09%
10.0	FITB	-0.0%	FIS	-0.09%
10.0	VCSH	0.0%	BAC	-0.09%
10.0	MUB	0.0%	USB	-0.08%
10.0	BALL	0.0%	BA	-0.08%
10.0	LQD	0.0%	IRM	-0.08%
10.0	VFC	0.01%	FITB	-0.08%
10.0	BHP	0.01%	INTC	-0.08%
10.0	OXY	0.01%	X	-0.08%
10.0	CMA	0.01%	TRGP	-0.08%
10.0	BUD	0.01%	HLT	-0.08%
10.0	GOLD	0.01%	WRK	-0.07%

Puts, 20% Out of the Money, 10D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
10.0	AVGO	-41.61%	AVGO	-41.93%
10.0	SIVBQ	-1.56%	SIVBQ	-1.58%
10.0	FRCB	-0.63%	FRCB	-0.65%
10.0	MSTR	-0.59%	CTLT	-0.32%
10.0	CTLT	-0.33%	SBNY	-0.29%
10.0	SBNY	-0.31%	AAP	-0.26%
10.0	AAP	-0.14%	NFLX	-0.19%
10.0	GME	-0.12%	ZION	-0.19%
10.0	META	-0.12%	WDC	-0.16%
10.0	NFLX	-0.04%	CMA	-0.16%
10.0	KEY	-0.04%	INTC	-0.15%
10.0	CHTR	-0.04%	LW	-0.13%
10.0	FITB	-0.03%	META	-0.13%
10.0	ZION	-0.02%	KEY	-0.11%
10.0	MUB	0.0%	TFC	-0.1%
10.0	VCSH	0.0%	EXPE	-0.09%
10.0	FRA	0.0%	KALU	-0.08%
10.0	LQD	0.0%	LNC	-0.07%
10.0	EMB	0.0%	FITB	-0.06%
10.0	TLT	0.0%	CHTR	-0.05%
10.0	OXY	0.0%	VST	-0.05%
10.0	BUD	0.0%	AMZN	-0.04%
10.0	HYG	0.01%	ADBE	-0.04%
10.0	AMZN	0.01%	USB	-0.04%
10.0	SNY	0.01%	CSTM	-0.04%
10.0	TMUS	0.01%	NWL	-0.04%
10.0	ZTS	0.01%	IEP	-0.03%
10.0	CVS	0.01%	TSLA	-0.03%
10.0	CMA	0.01%	ETRN	-0.03%
10.0	GSK	0.02%	GT	-0.03%

Puts, 1% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 21D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AVGO	-50.87%	AVGO	-51.65%
21.0	SBNY	-10.34%	SIVBQ	-6.55%
21.0	SIVBQ	-9.36%	SBNY	-6.2%
21.0	FRCB	-5.85%	FRCB	-4.62%
21.0	AAP	-4.1%	AAP	-1.4%
21.0	GME	-2.99%	CVS	-0.8%
21.0	MSTR	-2.7%	GSK	-0.72%
21.0	CHTR	-2.66%	TSLA	-0.69%
21.0	GNRC	-2.53%	NEM	-0.59%
21.0	VFC	-2.2%	NWL	-0.58%
21.0	TSLA	-2.18%	LW	-0.52%
21.0	UAA	-2.09%	CHTR	-0.49%
21.0	NEM	-1.86%	ELAN	-0.46%
21.0	KALU	-1.72%	TLT	-0.46%
21.0	AA	-1.69%	BAC	-0.36%
21.0	GOLD	-1.68%	VZ	-0.33%
21.0	CVS	-1.55%	LQD	-0.32%
21.0	GSK	-1.48%	INTC	-0.32%
21.0	CTLT	-1.47%	BXP	-0.3%
21.0	CMA	-1.31%	KHC	-0.29%
21.0	CLF	-1.28%	FSUGY	-0.27%
21.0	BALL	-1.16%	EMB	-0.26%
21.0	BUD	-1.1%	MUB	-0.22%
21.0	KEY	-1.06%	USB	-0.22%
21.0	META	-1.0%	BA	-0.21%
21.0	ZION	-0.96%	FRA	-0.2%
21.0	PRGO	-0.93%	BMY	-0.19%
21.0	NWL	-0.93%	PEP	-0.18%
21.0	BHC	-0.93%	MS	-0.17%
21.0	ZTS	-0.89%	GOLD	-0.17%

Puts, 10% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 21D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AVGO	-47.17%	AVGO	-48.07%
21.0	SIVBQ	-6.37%	SIVBQ	-5.25%
21.0	SBNY	-5.78%	SBNY	-3.94%
21.0	FRCB	-3.78%	FRCB	-3.64%
21.0	AAP	-1.99%	AAP	-0.8%
21.0	MSTR	-1.89%	LW	-0.67%
21.0	GME	-1.45%	WDC	-0.52%
21.0	CTLT	-1.41%	GSK	-0.47%
21.0	GNRC	-1.15%	CVS	-0.43%
21.0	CHTR	-0.91%	TSLA	-0.42%
21.0	KALU	-0.7%	NEM	-0.38%
21.0	NEM	-0.68%	NWL	-0.33%
21.0	VFC	-0.68%	CHTR	-0.31%
21.0	META	-0.59%	INTC	-0.29%
21.0	CLF	-0.54%	CTLT	-0.27%
21.0	TSLA	-0.53%	ELAN	-0.18%
21.0	AA	-0.52%	BAC	-0.17%
21.0	GSK	-0.49%	TEVA	-0.17%
21.0	UAA	-0.45%	COST	-0.16%
21.0	CVS	-0.41%	BA	-0.14%
21.0	CMA	-0.3%	PCG	-0.14%
21.0	GOLD	-0.29%	VST	-0.12%
21.0	WDC	-0.28%	SNY	-0.11%
21.0	ZION	-0.2%	AZN	-0.1%
21.0	AMZN	-0.15%	AMZN	-0.1%
21.0	BHC	-0.14%	ADBE	-0.09%
21.0	FIS	-0.13%	IRM	-0.09%
21.0	SNY	-0.12%	USB	-0.06%
21.0	KEY	-0.1%	BXP	-0.06%
21.0	BHP	-0.09%	MS	-0.06%

Puts, 20% Out of the Money, 21D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 21D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
21.0	AVGO	-41.78%	AVGO	-42.38%
21.0	SIVBQ	-4.42%	SIVBQ	-4.36%
21.0	SBNY	-3.27%	FRCB	-2.93%
21.0	FRCB	-2.88%	SBNY	-2.9%
21.0	MSTR	-0.8%	AAP	-0.46%
21.0	CTLT	-0.74%	CTLT	-0.4%
21.0	AAP	-0.64%	WDC	-0.35%
21.0	GNRC	-0.31%	NFLX	-0.32%
21.0	GME	-0.23%	ZION	-0.28%
21.0	NFLX	-0.19%	INTC	-0.26%
21.0	META	-0.18%	CMA	-0.22%
21.0	ZION	-0.13%	TSLA	-0.19%
21.0	KEY	-0.08%	LW	-0.17%
21.0	CHTR	-0.08%	TFC	-0.17%
21.0	GSK	-0.07%	ADBE	-0.13%
21.0	NEM	-0.06%	FITB	-0.13%
21.0	CMA	-0.04%	GSK	-0.13%
21.0	KALU	-0.0%	NWL	-0.11%
21.0	MUB	0.0%	NEM	-0.11%
21.0	VCSH	0.0%	AMZN	-0.11%
21.0	FRA	0.0%	KEY	-0.11%
21.0	EMB	0.0%	VST	-0.1%
21.0	LQD	0.01%	FCX	-0.1%
21.0	TLT	0.01%	USB	-0.1%
21.0	ZTS	0.01%	BA	-0.1%
21.0	HYG	0.02%	EXPE	-0.09%
21.0	TMUS	0.02%	CVS	-0.08%
21.0	CVS	0.02%	CHTR	-0.07%
21.0	BUD	0.02%	X	-0.05%
21.0	WDC	0.03%	BXP	-0.05%

Puts, 1% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 63D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AVGO	-50.87%	AVGO	-51.07%
63.0	SBNY	-33.84%	SBNY	-26.61%
63.0	SIVBQ	-30.82%	SIVBQ	-26.24%
63.0	FRCB	-21.82%	FRCB	-19.45%
63.0	AAP	-10.17%	AAP	-5.46%
63.0	VFC	-5.79%	BXP	-2.82%
63.0	CHTR	-5.69%	INTC	-2.41%
63.0	UAA	-4.97%	ELAN	-1.99%
63.0	AA	-4.57%	NEM	-1.97%
63.0	GNRC	-4.52%	CVS	-1.92%
63.0	NEM	-4.45%	IEP	-1.88%
63.0	CTLT	-4.29%	CHTR	-1.82%
63.0	BXP	-4.09%	GSK	-1.76%
63.0	CLF	-3.65%	NWL	-1.66%
63.0	KALU	-3.48%	LW	-1.63%
63.0	CVS	-3.19%	TLT	-1.5%
63.0	BALL	-3.15%	BMY	-1.48%
63.0	GME	-3.08%	BALL	-1.44%
63.0	GSK	-3.02%	VFC	-1.22%
63.0	BHC	-2.92%	CLF	-1.02%
63.0	NWL	-2.84%	VNO	-0.81%
63.0	GOLD	-2.72%	VZ	-0.8%
63.0	INTC	-2.59%	LQD	-0.71%
63.0	BIIB	-2.57%	CMCSA	-0.71%
63.0	CMA	-2.43%	KHC	-0.61%
63.0	TSLA	-2.27%	CSTM	-0.6%
63.0	TLT	-2.18%	MUB	-0.55%
63.0	BUD	-2.11%	EMB	-0.39%
63.0	ZION	-1.94%	BUD	-0.36%
63.0	FIS	-1.94%	USB	-0.35%

Puts, 10% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 63D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AVGO	-47.94%	AVGO	-48.5%
63.0	SBNY	-27.22%	SIVBQ	-22.87%
63.0	SIVBQ	-25.79%	SBNY	-22.31%
63.0	FRCB	-18.19%	FRCB	-16.99%
63.0	AAP	-6.52%	AAP	-3.23%
63.0	CTLT	-4.14%	GSK	-1.96%
63.0	GNRC	-3.59%	INTC	-1.63%
63.0	CHTR	-3.19%	LW	-1.57%
63.0	VFC	-3.05%	BXP	-1.44%
63.0	UAA	-2.8%	NEM	-1.27%
63.0	NEM	-2.69%	CHTR	-1.02%
63.0	AA	-2.45%	IEP	-0.95%
63.0	GSK	-2.28%	CVS	-0.93%
63.0	KALU	-2.1%	ELAN	-0.89%
63.0	CLF	-1.98%	CTLT	-0.82%
63.0	BHC	-1.88%	NWL	-0.61%
63.0	GME	-1.78%	VNO	-0.59%
63.0	BXP	-1.74%	BALL	-0.49%
63.0	ZION	-1.63%	TLT	-0.39%
63.0	CMA	-1.5%	BMY	-0.38%
63.0	CVS	-1.33%	VZ	-0.21%
63.0	KEY	-1.28%	CMCSA	-0.2%
63.0	INTC	-1.25%	SNY	-0.18%
63.0	BALL	-1.21%	HCA	-0.17%
63.0	GOLD	-1.18%	CSTM	-0.13%
63.0	META	-1.1%	USB	-0.11%
63.0	TSLA	-1.06%	EMB	-0.1%
63.0	AMZN	-0.98%	GOLD	-0.1%
63.0	NWL	-0.83%	CLF	-0.08%
63.0	FIS	-0.79%	FRA	-0.07%

Puts, 20% Out of the Money, 63D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 63D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
63.0	AVGO	-42.9%	AVGO	-43.75%
63.0	SIVBQ	-20.05%	SIVBQ	-18.88%
63.0	SBNY	-19.53%	SBNY	-17.22%
63.0	FRCB	-14.86%	FRCB	-14.57%
63.0	CTLT	-3.17%	AAP	-1.39%
63.0	AAP	-2.98%	GSK	-1.35%
63.0	GNRC	-2.42%	CTLT	-1.21%
63.0	GSK	-1.21%	NEM	-0.81%
63.0	NFLX	-1.19%	INTC	-0.69%
63.0	NEM	-1.18%	LW	-0.58%
63.0	ZION	-1.05%	ZION	-0.4%
63.0	CHTR	-0.99%	CHTR	-0.39%
63.0	UAA	-0.84%	VNO	-0.36%
63.0	MSTR	-0.81%	NFLX	-0.34%
63.0	BHC	-0.8%	BXP	-0.33%
63.0	KEY	-0.75%	AMZN	-0.26%
63.0	CMA	-0.65%	CVS	-0.23%
63.0	AA	-0.59%	USB	-0.23%
63.0	CLF	-0.54%	TFC	-0.22%
63.0	META	-0.5%	KEY	-0.22%
63.0	AMZN	-0.36%	HCA	-0.16%
63.0	KALU	-0.36%	GNRC	-0.14%
63.0	VFC	-0.26%	CMA	-0.09%
63.0	CVS	-0.12%	VZ	-0.07%
63.0	BHP	-0.07%	GOLD	-0.07%
63.0	GOLD	-0.06%	IEP	-0.06%
63.0	TSLA	-0.04%	EXPE	-0.05%
63.0	BUD	-0.03%	SNY	-0.03%
63.0	VCSH	0.0%	VCSH	0.0%
63.0	MUB	0.0%	MUB	0.0%

Puts, 1% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 126D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	SBNY	-59.61%	AVGO	-52.91%
126.0	SIVBQ	-56.57%	SBNY	-49.65%
126.0	AVGO	-53.6%	SIVBQ	-49.47%
126.0	FRCB	-43.93%	FRCB	-40.52%
126.0	AAP	-19.16%	AAP	-12.4%
126.0	VFC	-11.94%	IEP	-8.2%
126.0	CHTR	-8.37%	INTC	-6.47%
126.0	INTC	-6.46%	VFC	-4.89%
126.0	NEM	-6.29%	CVS	-4.15%
126.0	GNRC	-6.25%	GSK	-3.87%
126.0	NWL	-6.22%	ELAN	-3.67%
126.0	CVS	-5.82%	NWL	-3.54%
126.0	CTLT	-5.71%	BMY	-3.46%
126.0	GSK	-5.58%	CHTR	-2.9%
126.0	IEP	-5.16%	NEM	-2.69%
126.0	BXP	-5.03%	BXP	-2.53%
126.0	UAA	-4.73%	TLT	-2.06%
126.0	AA	-4.67%	VZ	-1.94%
126.0	BIIB	-4.65%	CSTM	-1.7%
126.0	CLF	-4.62%	LW	-1.07%
126.0	FIS	-4.05%	CNC	-0.99%
126.0	CMA	-3.81%	MOS	-0.86%
126.0	CSTM	-3.8%	KHC	-0.82%
126.0	GME	-3.47%	CLF	-0.8%
126.0	BMY	-3.35%	BALL	-0.69%
126.0	BALL	-3.22%	VNO	-0.68%
126.0	TLT	-3.13%	MRK	-0.61%
126.0	ELAN	-2.86%	LQD	-0.59%
126.0	ZION	-2.68%	MUB	-0.53%
126.0	KALU	-2.64%	VCSH	-0.32%

Puts, 10% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 126D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	SBNY	-52.83%	AVGO	-50.25%
126.0	AVGO	-50.48%	SBNY	-45.02%
126.0	SIVBQ	-50.3%	SIVBQ	-44.85%
126.0	FRCB	-38.06%	FRCB	-35.85%
126.0	AAP	-14.55%	AAP	-9.18%
126.0	VFC	-8.39%	IEP	-6.49%
126.0	CHTR	-6.18%	INTC	-5.67%
126.0	GNRC	-5.55%	GSK	-3.46%
126.0	CTLT	-5.14%	VFC	-2.8%
126.0	INTC	-5.1%	CHTR	-2.33%
126.0	GSK	-4.17%	CVS	-2.32%
126.0	NEM	-4.01%	ELAN	-2.29%
126.0	BXP	-3.44%	BXP	-1.99%
126.0	AA	-3.21%	CSTM	-1.87%
126.0	UAA	-3.21%	BMY	-1.52%
126.0	CLF	-3.21%	NEM	-1.45%
126.0	CVS	-3.16%	NWL	-1.45%
126.0	CSTM	-3.07%	VZ	-1.17%
126.0	NWL	-2.99%	VNO	-1.05%
126.0	CMA	-2.66%	MRK	-0.64%
126.0	FIS	-2.5%	LW	-0.64%
126.0	BIIB	-2.48%	TLT	-0.47%
126.0	ZION	-2.43%	BALL	-0.29%
126.0	IEP	-2.4%	EMB	-0.26%
126.0	GME	-2.33%	CLF	-0.22%
126.0	KEY	-2.29%	LQD	-0.05%
126.0	BALL	-1.84%	CNC	-0.03%
126.0	META	-1.39%	TFC	-0.01%
126.0	BMY	-1.19%	VCSH	0.0%
126.0	TSLA	-1.17%	MUB	0.0%

Puts, 20% Out of the Money, 126D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 126D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
126.0	AVGO	-45.25%	AVGO	-45.73%
126.0	SBNY	-43.62%	SBNY	-38.78%
126.0	SIVBQ	-41.98%	SIVBQ	-38.67%
126.0	FRCB	-32.19%	FRCB	-31.27%
126.0	AAP	-9.42%	AAP	-6.0%
126.0	GNRC	-4.52%	IEP	-4.38%
126.0	VFC	-3.85%	INTC	-3.69%
126.0	CTLT	-3.76%	GSK	-2.57%
126.0	CHTR	-3.06%	CHTR	-1.3%
126.0	INTC	-2.53%	CSTM	-1.28%
126.0	GSK	-2.4%	ELAN	-1.2%
126.0	NEM	-1.88%	BXP	-1.12%
126.0	ZION	-1.58%	VNO	-0.83%
126.0	KEY	-1.47%	NEM	-0.68%
126.0	AA	-1.44%	CVS	-0.49%
126.0	CLF	-1.41%	LW	-0.43%
126.0	CMA	-1.39%	VFC	-0.4%
126.0	CSTM	-1.36%	VZ	-0.23%
126.0	BXP	-1.34%	BALL	-0.15%
126.0	UAA	-1.3%	KEY	-0.13%
126.0	META	-1.08%	MRK	-0.09%
126.0	BIIB	-0.86%	VCSH	0.0%
126.0	FIS	-0.61%	MUB	0.0%
126.0	GME	-0.61%	HYG	0.0%
126.0	CVS	-0.51%	LQD	0.0%
126.0	BALL	-0.48%	EMB	0.01%
126.0	EXPE	-0.16%	GLD	0.02%
126.0	BHP	-0.02%	FRA	0.02%
126.0	MUB	0.0%	BMY	0.05%
126.0	VCSH	0.0%	PEP	0.08%

Puts, 1% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 252D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	SBNY	-88.7%	FRCB	-77.21%
252.0	SIVBQ	-85.02%	SBNY	-75.16%
252.0	FRCB	-82.23%	SIVBQ	-74.08%
252.0	AVGO	-61.74%	AVGO	-60.26%
252.0	AAP	-34.39%	IEP	-26.52%
252.0	IEP	-27.69%	AAP	-25.0%
252.0	AMC	-27.64%	NWL	-12.79%
252.0	VFC	-21.96%	VFC	-12.62%
252.0	NWL	-18.11%	CVS	-11.98%
252.0	CVS	-14.26%	BMY	-10.39%
252.0	CMA	-11.5%	MOS	-8.27%
252.0	MOS	-11.03%	INTC	-7.75%
252.0	CTLT	-10.99%	LUMN	-7.24%
252.0	CHTR	-10.59%	LW	-5.63%
252.0	BMY	-10.34%	TLT	-3.97%
252.0	BIIB	-9.91%	BXP	-3.19%
252.0	AA	-9.31%	CHTR	-3.07%
252.0	GNRC	-8.74%	TFC	-2.96%
252.0	LUMN	-8.72%	CMA	-2.71%
252.0	FIS	-8.6%	BIIB	-2.61%
252.0	ZION	-8.58%	VZ	-2.16%
252.0	INTC	-7.88%	CNC	-1.83%
252.0	KEY	-7.39%	PRGO	-1.8%
252.0	BXP	-7.12%	JAZZ	-1.78%
252.0	NEM	-6.67%	GSK	-1.64%
252.0	LNC	-6.38%	KEY	-1.64%
252.0	TFC	-6.37%	ZION	-1.54%
252.0	JAZZ	-6.14%	NEM	-1.36%
252.0	TLT	-5.7%	FIS	-1.04%
252.0	GME	-5.38%	ELAN	-0.63%

Puts, 10% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 252D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	SBNY	-82.29%	FRCB	-72.2%
252.0	SIVBQ	-78.92%	SBNY	-70.8%
252.0	FRCB	-75.97%	SIVBQ	-69.74%
252.0	AVGO	-57.37%	AVGO	-56.34%
252.0	AAP	-28.53%	IEP	-22.56%
252.0	IEP	-22.79%	AAP	-20.54%
252.0	AMC	-22.43%	VFC	-10.6%
252.0	VFC	-18.35%	NWL	-9.83%
252.0	NWL	-13.95%	BMY	-7.0%
252.0	CMA	-9.86%	CVS	-6.9%
252.0	CTLT	-9.43%	LUMN	-6.78%
252.0	GNRC	-8.47%	INTC	-6.66%
252.0	LUMN	-8.34%	LW	-5.08%
252.0	CVS	-8.32%	MOS	-4.25%
252.0	AA	-7.29%	BXP	-3.25%
252.0	ZION	-7.26%	CMA	-2.41%
252.0	BIIB	-7.06%	TFC	-2.39%
252.0	FIS	-6.98%	VZ	-1.89%
252.0	CHTR	-6.97%	GSK	-1.61%
252.0	BMY	-6.73%	KEY	-1.35%
252.0	BXP	-6.2%	ZION	-1.24%
252.0	MOS	-6.19%	CHTR	-1.01%
252.0	INTC	-6.17%	BIIB	-0.94%
252.0	KEY	-5.92%	FIS	-0.89%
252.0	LNC	-5.4%	ELAN	-0.74%
252.0	TFC	-4.76%	LNC	-0.46%
252.0	NEM	-4.35%	CTLT	-0.42%
252.0	GME	-3.65%	TLT	-0.4%
252.0	GSK	-3.46%	WRK	-0.3%
252.0	LW	-3.27%	NEM	-0.07%

Puts, 20% Out of the Money, 252D Time Horizon, All TMD's

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 252D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2022-01-20 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
252.0	SBNY	-73.54%	FRCB	-65.63%
252.0	SIVBQ	-70.92%	SBNY	-65.2%
252.0	FRCB	-67.85%	SIVBQ	-64.17%
252.0	AVGO	-51.04%	AVGO	-50.8%
252.0	AAP	-21.06%	IEP	-17.3%
252.0	IEP	-16.09%	AAP	-15.2%
252.0	AMC	-15.74%	VFC	-8.03%
252.0	VFC	-13.43%	NWL	-6.57%
252.0	NWL	-9.08%	LUMN	-5.84%
252.0	GNRC	-7.31%	INTC	-5.3%
252.0	CTLT	-7.15%	BMY	-3.37%
252.0	CMA	-6.76%	LW	-3.36%
252.0	LUMN	-5.2%	BXP	-2.64%
252.0	ZION	-4.83%	CVS	-2.23%
252.0	AA	-4.52%	GSK	-1.4%
252.0	FIS	-4.49%	CMA	-1.39%
252.0	BXP	-4.14%	TFC	-0.99%
252.0	INTC	-4.09%	VZ	-0.69%
252.0	LNC	-3.84%	LNC	-0.6%
252.0	KEY	-3.32%	FIS	-0.55%
252.0	BIIB	-3.01%	VNO	-0.49%
252.0	BMY	-2.98%	ELAN	-0.48%
252.0	CHTR	-2.81%	ZION	-0.45%
252.0	CVS	-2.55%	KEY	-0.3%
252.0	TFC	-2.02%	CTLT	-0.04%
252.0	NEM	-2.01%	VCSH	0.0%
252.0	GSK	-1.94%	MUB	0.0%
252.0	LW	-1.57%	HYG	0.02%
252.0	GME	-1.39%	LQD	0.02%
252.0	VNO	-1.37%	MOS	0.06%

Top 30 Tickers by Option Sale Profitablity, P30D Model Dates

Calls, 1% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	3.6%	AMC	8.39%
1.0	IEP	3.34%	IEP	1.52%
1.0	NWL	2.99%	GME	1.29%
1.0	MOS	1.75%	CYH	1.28%
1.0	QQQ	1.72%	NWL	1.08%
1.0	VST	1.71%	LUMN	0.87%
1.0	CYH	1.68%	WDC	0.7%
1.0	UAA	1.54%	BHC	0.66%
1.0	FSUGY	1.37%	VFC	0.63%
1.0	LVS	1.24%	UAA	0.62%
1.0	BIIB	1.16%	ELAN	0.54%
1.0	BHC	1.13%	ON	0.53%
1.0	LLY	1.03%	LW	0.41%
1.0	NVDA	0.97%	AAP	0.37%
1.0	PHM	0.96%	LVS	0.37%
1.0	PCG	0.96%	AMAT	0.37%
1.0	AAP	0.91%	CMA	0.37%
1.0	CZR	0.85%	CZR	0.33%
1.0	LW	0.77%	CVS	0.3%
1.0	ZION	0.72%	KALU	0.28%
1.0	BHP	0.69%	CNC	0.27%
1.0	VNO	0.68%	ZION	0.25%
1.0	AMAT	0.68%	CLF	0.25%
1.0	WYNN	0.68%	SBUX	0.25%
1.0	ACGL	0.6%	KEY	0.22%
1.0	CSTM	0.58%	ADBE	0.21%
1.0	LEN	0.56%	NAVI	0.21%
1.0	GT	0.54%	PRGO	0.21%
1.0	ORCL	0.53%	CSTM	0.21%
1.0	TDG	0.52%	FSUGY	0.19%

Calls, 10% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	2.74%	AMC	5.39%
1.0	NWL	1.68%	GME	0.35%
1.0	IEP	1.59%	CYH	0.2%
1.0	CYH	0.82%	IEP	0.13%
1.0	MOS	0.77%	LUMN	0.13%
1.0	UAA	0.63%	NWL	0.05%
1.0	NVDA	0.61%	CLF	0.03%
1.0	VST	0.58%	VST	0.02%
1.0	GT	0.45%	AAP	0.02%
1.0	QQQ	0.42%	UAA	0.02%
1.0	AAP	0.41%	WDC	0.01%
1.0	BHC	0.35%	ON	0.01%
1.0	FSUGY	0.3%	VFC	0.01%
1.0	AMAT	0.26%	CSTM	0.01%
1.0	PCG	0.24%	LW	0.01%
1.0	PHM	0.24%	MU	0.0%
1.0	AMD	0.23%	ELAN	0.0%
1.0	CZR	0.22%	BHC	0.0%
1.0	TEVA	0.22%	CZR	0.0%
1.0	LVS	0.2%	AVGO	0.0%
1.0	BIIB	0.2%	GT	0.0%
1.0	ACGL	0.18%	NVDA	0.0%
1.0	X	0.18%	AMD	0.0%
1.0	CLF	0.16%	AA	0.0%
1.0	LNC	0.15%	GBTC	0.0%
1.0	CSTM	0.15%	TEVA	0.0%
1.0	LW	0.15%	X	0.0%
1.0	LLY	0.12%	AMAT	0.0%
1.0	VNO	0.12%	FSUGY	0.0%
1.0	TDG	0.12%	KALU	0.0%

Calls, 20% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
1.0	LUMN	1.6%	AMC	3.03%
1.0	NWL	0.98%	GME	0.03%
1.0	IEP	0.64%	CYH	0.0%
1.0	MOS	0.37%	LUMN	0.0%
1.0	CYH	0.3%	IEP	0.0%
1.0	NVDA	0.22%	MSTR	0.0%
1.0	GT	0.19%	NWL	0.0%
1.0	UAA	0.18%	CLF	0.0%
1.0	AMD	0.13%	VST	0.0%
1.0	VST	0.13%	AAP	0.0%
1.0	QQQ	0.11%	UAA	0.0%
1.0	MSTR	0.09%	TSLA	0.0%
1.0	AMAT	0.09%	WDC	0.0%
1.0	TEVA	0.08%	VFC	0.0%
1.0	BHC	0.07%	ON	0.0%
1.0	PCG	0.06%	INTC	0.0%
1.0	CZR	0.06%	CSTM	0.0%
1.0	QCOM	0.05%	LW	0.0%
1.0	TDG	0.04%	MU	0.0%
1.0	X	0.04%	ELAN	0.0%
1.0	PHM	0.04%	BHC	0.0%
1.0	ZION	0.03%	CZR	0.0%
1.0	AAP	0.03%	AVGO	0.0%
1.0	TSLA	0.03%	GT	0.0%
1.0	ACGL	0.03%	NVDA	0.0%
1.0	CLF	0.02%	AMD	0.0%
1.0	BIIB	0.01%	AA	0.0%
1.0	GWW	0.01%	GBTC	0.0%
1.0	LW	0.01%	X	0.0%
1.0	LVS	0.01%	TEVA	0.0%

Calls, 1% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	NWL	13.14%	AMC	28.41%
10.0	LUMN	11.06%	LUMN	6.23%
10.0	CYH	7.9%	CYH	6.15%
10.0	IEP	6.23%	IEP	5.89%
10.0	UAA	6.04%	NWL	5.17%
10.0	BIIB	5.45%	GME	4.5%
10.0	BHC	5.14%	UAA	4.43%
10.0	PHM	4.88%	CLF	4.22%
10.0	NVDA	4.76%	VFC	4.12%
10.0	QQQ	4.73%	BHC	3.7%
10.0	GT	4.1%	CZR	3.59%
10.0	CZR	4.0%	ON	3.31%
10.0	AMAT	3.9%	ELAN	3.22%
10.0	LEN	3.22%	AVGO	2.77%
10.0	ORCL	3.14%	WDC	2.74%
10.0	WYNN	3.08%	GT	2.52%
10.0	CLF	3.08%	AMAT	2.41%
10.0	FSUGY	3.05%	NAVI	2.33%
10.0	ADBE	3.04%	LEN	2.32%
10.0	LLY	3.01%	LVS	2.29%
10.0	LVS	2.98%	KALU	2.25%
10.0	ELAN	2.76%	WYNN	2.19%
10.0	KALU	2.65%	ADBE	2.14%
10.0	CSTM	2.65%	PRGO	2.03%
10.0	BHP	2.54%	DHI	1.99%
10.0	BALL	2.5%	ORCL	1.83%
10.0	VNO	2.16%	PHM	1.78%
10.0	DHI	2.16%	SBUX	1.77%
10.0	CMG	1.95%	BIIB	1.73%
10.0	COST	1.81%	FSUGY	1.71%

Calls, 10% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	NWL	10.66%	AMC	26.38%
10.0	LUMN	8.67%	CYH	4.52%
10.0	CYH	6.76%	GME	3.82%
10.0	NVDA	5.1%	IEP	3.82%
10.0	IEP	4.46%	LUMN	3.53%
10.0	UAA	3.22%	NWL	2.67%
10.0	GT	2.84%	CLF	2.12%
10.0	BIIB	2.75%	AAP	1.94%
10.0	PHM	2.68%	WDC	1.81%
10.0	BHC	2.64%	UAA	1.75%
10.0	AMAT	2.42%	ON	1.72%
10.0	QQQ	2.41%	LW	1.39%
10.0	MOS	2.32%	VFC	1.38%
10.0	PCG	2.21%	BHC	1.24%
10.0	LW	2.14%	ELAN	1.23%
10.0	LNC	1.89%	AVGO	1.15%
10.0	OXY	1.8%	CZR	1.15%
10.0	CSTM	1.75%	GT	1.12%
10.0	CLF	1.65%	AA	0.95%
10.0	FSUGY	1.63%	TEVA	0.74%
10.0	AA	1.55%	GBTC	0.72%
10.0	VNO	1.42%	NVDA	0.69%
10.0	CZR	1.41%	AMAT	0.68%
10.0	ORCL	1.41%	FSUGY	0.66%
10.0	VST	1.39%	KALU	0.55%
10.0	LLY	1.34%	CSTM	0.45%
10.0	AAP	1.28%	GNRC	0.44%
10.0	ELAN	1.21%	ORCL	0.42%
10.0	ZION	1.1%	ZION	0.39%
10.0	ON	1.04%	CMA	0.35%

Calls, 20% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
10.0	NWL	8.35%	AMC	23.51%
10.0	LUMN	6.29%	GME	2.84%
10.0	CYH	5.24%	CYH	2.32%
10.0	NVDA	3.72%	IEP	1.78%
10.0	IEP	2.65%	LUMN	1.58%
10.0	MOS	2.43%	NWL	0.99%
10.0	GT	1.68%	CLF	0.67%
10.0	UAA	1.56%	AAP	0.66%
10.0	PCG	1.35%	WDC	0.5%
10.0	AMAT	1.24%	UAA	0.47%
10.0	BIIB	1.22%	ON	0.45%
10.0	BHC	1.22%	CSTM	0.37%
10.0	OXY	1.17%	LW	0.34%
10.0	VST	1.15%	VFC	0.32%
10.0	PHM	1.15%	VST	0.28%
10.0	LNC	1.1%	MU	0.25%
10.0	CSTM	0.94%	BHC	0.24%
10.0	LW	0.9%	ELAN	0.24%
10.0	CLF	0.82%	CZR	0.21%
10.0	QQQ	0.74%	AVGO	0.21%
10.0	AA	0.74%	GT	0.2%
10.0	ORCL	0.55%	AMD	0.2%
10.0	AMD	0.55%	NVDA	0.19%
10.0	MS	0.52%	AA	0.17%
10.0	AAP	0.49%	GBTC	0.12%
10.0	VNO	0.48%	X	0.1%
10.0	LLY	0.44%	TEVA	0.09%
10.0	CDNS	0.44%	AMAT	0.07%
10.0	TEVA	0.42%	FSUGY	0.07%
10.0	ELAN	0.4%	KALU	0.05%

Puts, 1% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	VST	2.53%	AMC	8.15%
1.0	PHM	2.01%	IEP	1.16%
1.0	NWL	1.52%	NWL	1.09%
1.0	PCG	1.48%	GME	1.02%
1.0	MOS	1.34%	CYH	0.98%
1.0	GT	1.29%	AAP	0.82%
1.0	LUMN	1.26%	LW	0.69%
1.0	TRGP	1.12%	UAA	0.53%
1.0	GLD	1.09%	MOS	0.47%
1.0	CAH	1.06%	CNC	0.38%
1.0	IEP	0.96%	NEM	0.34%
1.0	NVDA	0.93%	CVS	0.34%
1.0	AMC	0.72%	X	0.33%
1.0	SPY	0.65%	BHC	0.3%
1.0	AAP	0.6%	ON	0.27%
1.0	LW	0.6%	WDC	0.26%
1.0	X	0.57%	CDNS	0.24%
1.0	THC	0.51%	AMAT	0.24%
1.0	MSI	0.5%	UNH	0.24%
1.0	QQQ	0.43%	THC	0.22%
1.0	LNC	0.4%	SLV	0.2%
1.0	LVS	0.39%	LUMN	0.18%
1.0	SLV	0.38%	GOLD	0.17%
1.0	CNC	0.37%	QCOM	0.16%
1.0	CPRT	0.37%	AMD	0.16%
1.0	BXP	0.35%	PCG	0.16%
1.0	AZO	0.32%	MNST	0.15%
1.0	BIIB	0.32%	TEVA	0.15%
1.0	UAA	0.3%	BHP	0.15%
1.0	AMAT	0.29%	ACGL	0.13%

Puts, 10% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	VST	1.45%	AMC	4.55%
1.0	LUMN	0.91%	CYH	0.12%
1.0	NWL	0.73%	LUMN	0.08%
1.0	NVDA	0.61%	IEP	0.08%
1.0	GT	0.57%	NWL	0.02%
1.0	IEP	0.42%	VST	0.01%
1.0	GBTC	0.37%	AAP	0.01%
1.0	TRGP	0.35%	UAA	0.01%
1.0	PCG	0.34%	WDC	0.01%
1.0	MOS	0.29%	ON	0.0%
1.0	BIIB	0.26%	INTC	0.0%
1.0	CLF	0.26%	CSTM	0.0%
1.0	AMD	0.26%	LW	0.0%
1.0	LVS	0.25%	MU	0.0%
1.0	CYH	0.24%	ELAN	0.0%
1.0	AAP	0.22%	BHC	0.0%
1.0	PHM	0.21%	CZR	0.0%
1.0	WDC	0.21%	AVGO	0.0%
1.0	UAA	0.19%	GT	0.0%
1.0	CAH	0.19%	NVDA	0.0%
1.0	INTU	0.19%	AMD	0.0%
1.0	INTC	0.18%	AA	0.0%
1.0	LLY	0.15%	GBTC	0.0%
1.0	LNC	0.14%	TEVA	0.0%
1.0	AMZN	0.13%	X	0.0%
1.0	CDNS	0.12%	AMAT	0.0%
1.0	ZION	0.11%	FSUGY	0.0%
1.0	MSI	0.11%	KALU	0.0%
1.0	DHI	0.1%	CCL	0.0%
1.0	AMC	0.1%	MOS	0.0%

Puts, 20% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
1.0	VST	0.5%	AMC	1.79%
1.0	LUMN	0.32%	CYH	0.0%
1.0	NWL	0.27%	LUMN	0.0%
1.0	IEP	0.23%	IEP	0.0%
1.0	PCG	0.19%	MSTR	0.0%
1.0	GT	0.17%	NWL	0.0%
1.0	AMD	0.17%	CLF	0.0%
1.0	TRGP	0.16%	VST	0.0%
1.0	GBTC	0.15%	AAP	0.0%
1.0	LVS	0.14%	UAA	0.0%
1.0	WDC	0.12%	TSLA	0.0%
1.0	NVDA	0.11%	WDC	0.0%
1.0	BIIB	0.1%	VFC	0.0%
1.0	CAH	0.1%	INTC	0.0%
1.0	AAP	0.1%	ON	0.0%
1.0	TSLA	0.1%	CSTM	0.0%
1.0	MOS	0.09%	LW	0.0%
1.0	INTC	0.08%	MU	0.0%
1.0	CLF	0.07%	ELAN	0.0%
1.0	CYH	0.06%	BHC	0.0%
1.0	DHI	0.06%	CZR	0.0%
1.0	CDNS	0.05%	AVGO	0.0%
1.0	ZION	0.05%	GT	0.0%
1.0	AMZN	0.04%	NVDA	0.0%
1.0	MSTR	0.04%	AMD	0.0%
1.0	VFC	0.04%	AA	0.0%
1.0	UAA	0.02%	GBTC	0.0%
1.0	INTU	0.02%	X	0.0%
1.0	ISRG	0.02%	TEVA	0.0%
1.0	MU	0.02%	AMAT	0.0%

Puts, 1% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	8.65%	AMC	28.42%
10.0	VST	7.26%	GME	7.32%
10.0	PCG	4.87%	MSTR	6.21%
10.0	PHM	4.73%	IEP	5.4%
10.0	NWL	4.65%	AAP	4.88%
10.0	TRGP	4.43%	NWL	4.34%
10.0	IEP	4.37%	LW	4.08%
10.0	MOS	4.21%	VST	3.98%
10.0	GBTC	4.05%	AMD	3.54%
10.0	AAP	3.75%	CYH	3.36%
10.0	MSTR	3.63%	X	3.15%
10.0	LNC	3.34%	INTC	2.98%
10.0	X	3.17%	ELAN	2.76%
10.0	LW	3.01%	GT	2.72%
10.0	NVDA	2.87%	WDC	2.68%
10.0	GLD	2.81%	MOS	2.66%
10.0	FIS	2.67%	ON	2.44%
10.0	AMC	2.49%	CDNS	2.41%
10.0	FCX	2.44%	THC	2.36%
10.0	MNST	2.4%	NEM	2.32%
10.0	CDNS	2.18%	CVS	2.31%
10.0	AMD	2.12%	FCX	2.3%
10.0	THC	2.11%	BHC	2.09%
10.0	CNC	2.08%	CNC	2.07%
10.0	CAH	2.05%	PWR	2.05%
10.0	XOM	1.98%	GE	2.03%
10.0	INTC	1.93%	BXP	1.94%
10.0	BXP	1.81%	GOLD	1.86%
10.0	VNO	1.81%	QCOM	1.83%
10.0	MSI	1.77%	GNRC	1.82%

Puts, 10% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	6.14%	AMC	23.3%
10.0	VST	4.7%	GME	5.13%
10.0	NWL	3.54%	CYH	3.56%
10.0	GBTC	3.09%	IEP	3.09%
10.0	IEP	2.89%	MSTR	2.84%
10.0	LUMN	2.28%	NWL	2.1%
10.0	NVDA	2.17%	VST	1.65%
10.0	CYH	2.13%	AAP	1.62%
10.0	PCG	1.91%	WDC	1.37%
10.0	UAA	1.9%	ON	1.29%
10.0	PHM	1.8%	INTC	1.12%
10.0	TRGP	1.75%	LW	1.08%
10.0	MSTR	1.66%	BHC	0.89%
10.0	MOS	1.63%	ELAN	0.89%
10.0	INTC	1.37%	UAA	0.81%
10.0	AAP	1.35%	AMD	0.8%
10.0	LEN	1.29%	GT	0.8%
10.0	LNC	1.28%	NVDA	0.78%
10.0	LVS	1.26%	CZR	0.63%
10.0	GME	1.05%	GBTC	0.61%
10.0	CDNS	0.94%	X	0.56%
10.0	X	0.9%	AA	0.53%
10.0	USB	0.84%	TEVA	0.52%
10.0	CCL	0.83%	AMAT	0.46%
10.0	FCX	0.81%	FSUGY	0.44%
10.0	FIS	0.81%	MOS	0.33%
10.0	MNST	0.8%	FCX	0.31%
10.0	WDC	0.8%	CCL	0.3%
10.0	AMAT	0.8%	THC	0.3%
10.0	ORCL	0.8%	PWR	0.29%

Puts, 20% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
10.0	GT	3.77%	AMC	17.67%
10.0	LUMN	2.6%	GME	2.18%
10.0	VST	2.19%	CYH	1.26%
10.0	NWL	2.08%	IEP	0.91%
10.0	GBTC	1.73%	MSTR	0.79%
10.0	IEP	1.59%	LUMN	0.54%
10.0	UAA	1.42%	NWL	0.44%
10.0	CYH	1.16%	VST	0.27%
10.0	INTC	1.04%	CLF	0.27%
10.0	CLF	0.89%	AAP	0.26%
10.0	AAP	0.86%	WDC	0.18%
10.0	TSLA	0.86%	TSLA	0.17%
10.0	PCG	0.85%	UAA	0.17%
10.0	LVS	0.82%	ON	0.16%
10.0	NVDA	0.68%	INTC	0.16%
10.0	MSTR	0.66%	CSTM	0.13%
10.0	TRGP	0.62%	LW	0.11%
10.0	MOS	0.61%	MU	0.08%
10.0	LEN	0.59%	BHC	0.07%
10.0	CDNS	0.58%	ELAN	0.07%
10.0	WDC	0.57%	CZR	0.06%
10.0	BIIB	0.54%	AVGO	0.06%
10.0	ISRG	0.44%	GT	0.05%
10.0	XOM	0.43%	AMD	0.05%
10.0	MNST	0.42%	NVDA	0.05%
10.0	AMD	0.4%	AA	0.05%
10.0	AVGO	0.39%	GBTC	0.03%
10.0	PHM	0.39%	X	0.02%
10.0	ABBV	0.38%	TEVA	0.02%
10.0	LNC	0.37%	AMAT	0.01%

Bottom 30 Tickers by Option Sale Profitabilty, P30D Model Dates

Calls, 1% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	MSTR	-1.67%	MSTR	-1.04%
1.0	TSLA	-0.72%	TSLA	-0.59%
1.0	FCX	-0.52%	FCX	-0.55%
1.0	INTC	-0.49%	TRGP	-0.37%
1.0	GME	-0.34%	BA	-0.36%
1.0	AVGO	-0.32%	NFLX	-0.29%
1.0	GBTC	-0.3%	VNO	-0.27%
1.0	GNRC	-0.29%	VZ	-0.26%
1.0	MU	-0.29%	ORLY	-0.22%
1.0	CHTR	-0.27%	AZO	-0.21%
1.0	ORLY	-0.27%	GT	-0.2%
1.0	WFC	-0.22%	X	-0.17%
1.0	THC	-0.22%	GBTC	-0.16%
1.0	PWR	-0.22%	XOM	-0.15%
1.0	CCL	-0.2%	MOS	-0.14%
1.0	VZ	-0.18%	HLT	-0.13%
1.0	META	-0.17%	PWR	-0.13%
1.0	MS	-0.15%	CCL	-0.11%
1.0	TRGP	-0.14%	INTC	-0.1%
1.0	IRM	-0.14%	MU	-0.1%
1.0	EXPE	-0.1%	LNC	-0.09%
1.0	VFC	-0.09%	T	-0.09%
1.0	GS	-0.09%	NVS	-0.08%
1.0	ON	-0.08%	THC	-0.08%
1.0	AA	-0.08%	MS	-0.08%
1.0	BMY	-0.07%	SLV	-0.08%
1.0	HD	-0.07%	WFC	-0.07%
1.0	ZTS	-0.06%	POST	-0.07%
1.0	XOM	-0.06%	HCA	-0.07%
1.0	ISRG	-0.05%	META	-0.07%

Calls, 10% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	INTC	-0.14%	INTC	-0.22%
1.0	MSTR	-0.04%	MSTR	-0.17%
1.0	GME	-0.04%	TSLA	-0.08%
1.0	ZTS	0.0%	VCSH	0.0%
1.0	MUB	0.0%	MUB	0.0%
1.0	CAH	0.0%	HYG	0.0%
1.0	CHTR	0.0%	EMB	0.0%
1.0	LQD	0.0%	LQD	0.0%
1.0	CMA	0.0%	FRA	0.0%
1.0	HYG	0.0%	SPY	0.0%
1.0	HSBC	0.0%	GLD	0.0%
1.0	CPRT	0.0%	TLT	0.0%
1.0	CSCO	0.0%	CSCO	0.0%
1.0	HON	0.0%	NVS	0.0%
1.0	HLT	0.0%	POST	0.0%
1.0	HD	0.0%	VICI	0.0%
1.0	GLD	0.0%	QQQ	0.0%
1.0	GILD	0.0%	HSBC	0.0%
1.0	EMB	0.0%	PEP	0.0%
1.0	GBTC	0.0%	ORLY	0.0%
1.0	BMY	0.0%	T	0.0%
1.0	BUD	0.0%	HON	0.0%
1.0	NVS	0.0%	MSI	0.0%
1.0	XOM	0.0%	CAH	0.0%
1.0	WFC	0.0%	TMUS	0.0%
1.0	ABBV	0.0%	AZO	0.0%
1.0	VCSH	0.0%	COST	0.0%
1.0	USB	0.0%	AZN	0.0%
1.0	TXN	0.0%	HLT	0.0%
1.0	TMUS	0.0%	GILD	0.0%

Calls, 20% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
1.0	AA	0.0%	HYG	0.0%
1.0	MUB	0.0%	VCSH	0.0%
1.0	MSI	0.0%	MUB	0.0%
1.0	MSFT	0.0%	LQD	0.0%
1.0	MS	0.0%	EMB	0.0%
1.0	MRK	0.0%	FRA	0.0%
1.0	MNST	0.0%	SPY	0.0%
1.0	META	0.0%	GLD	0.0%
1.0	LQD	0.0%	TLT	0.0%
1.0	LNC	0.0%	CSCO	0.0%
1.0	LLY	0.0%	NVS	0.0%
1.0	LEN	0.0%	POST	0.0%
1.0	NAVI	0.0%	VICI	0.0%
1.0	KHC	0.0%	QQQ	0.0%
1.0	KALU	0.0%	HSBC	0.0%
1.0	JPM	0.0%	PEP	0.0%
1.0	IRM	0.0%	ORLY	0.0%
1.0	INTU	0.0%	T	0.0%
1.0	HYG	0.0%	MSI	0.0%
1.0	HSBC	0.0%	HON	0.0%
1.0	HON	0.0%	CAH	0.0%
1.0	HLT	0.0%	TMUS	0.0%
1.0	HD	0.0%	AZO	0.0%
1.0	HCA	0.0%	COST	0.0%
1.0	GSK	0.0%	AZN	0.0%
1.0	KEY	0.0%	HLT	0.0%
1.0	NEM	0.0%	GILD	0.0%
1.0	NFLX	0.0%	BUD	0.0%
1.0	NVS	0.0%	XOM	0.0%
1.0	XOM	0.0%	HD	0.0%

Calls, 1% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	INTC	-9.37%	INTC	-7.49%
10.0	MSTR	-8.0%	MOS	-7.06%
10.0	X	-7.1%	X	-6.99%
10.0	FCX	-6.9%	BA	-6.85%
10.0	BA	-5.86%	FCX	-6.22%
10.0	NEM	-4.93%	MSTR	-5.94%
10.0	UNH	-4.59%	NEM	-4.78%
10.0	TSLA	-4.31%	TRGP	-4.55%
10.0	TRGP	-4.28%	XOM	-4.18%
10.0	XOM	-4.0%	CDNS	-3.99%
10.0	PWR	-4.0%	PWR	-3.44%
10.0	AMD	-3.61%	UNH	-3.17%
10.0	CAH	-3.2%	CAH	-3.15%
10.0	MU	-2.85%	AMD	-3.02%
10.0	CDNS	-2.84%	TSLA	-2.78%
10.0	HCA	-2.48%	FIS	-2.68%
10.0	JPM	-2.32%	HCA	-2.18%
10.0	CHTR	-2.12%	JPM	-2.17%
10.0	MOS	-2.11%	NFLX	-2.15%
10.0	BAC	-1.96%	PCG	-2.1%
10.0	WFC	-1.68%	GLD	-1.97%
10.0	FIS	-1.66%	MNST	-1.73%
10.0	CCL	-1.63%	OXY	-1.68%
10.0	GE	-1.62%	T	-1.54%
10.0	THC	-1.62%	MU	-1.54%
10.0	NFLX	-1.54%	GOLD	-1.53%
10.0	ORLY	-1.45%	ORLY	-1.43%
10.0	AZO	-1.41%	BAC	-1.33%
10.0	MNST	-1.32%	AZO	-1.27%
10.0	GLD	-1.24%	GE	-1.23%

Calls, 10% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	MSTR	-5.46%	MSTR	-4.41%
10.0	INTC	-4.73%	INTC	-3.81%
10.0	FCX	-2.2%	BA	-2.57%
10.0	TSLA	-2.16%	FCX	-2.12%
10.0	BA	-2.1%	MOS	-1.67%
10.0	X	-1.36%	X	-1.54%
10.0	GME	-0.84%	TSLA	-1.31%
10.0	PWR	-0.48%	TRGP	-0.69%
10.0	TRGP	-0.42%	PWR	-0.67%
10.0	MU	-0.4%	VST	-0.5%
10.0	AMD	-0.32%	CDNS	-0.45%
10.0	WFC	-0.05%	AMD	-0.38%
10.0	CHTR	-0.04%	MS	-0.16%
10.0	NEM	-0.01%	NFLX	-0.15%
10.0	VCSH	0.0%	NEM	-0.12%
10.0	LQD	0.0%	WFC	-0.05%
10.0	FRA	0.0%	ORLY	-0.03%
10.0	MUB	0.0%	VCSH	0.0%
10.0	EMB	0.0%	MUB	0.0%
10.0	ZTS	0.0%	HYG	0.0%
10.0	HON	0.0%	EMB	0.0%
10.0	GILD	0.0%	LQD	0.0%
10.0	SNY	0.0%	FRA	0.0%
10.0	HD	0.0%	SPY	0.0%
10.0	CCL	0.01%	GLD	0.0%
10.0	TMUS	0.01%	TLT	0.0%
10.0	ABBV	0.01%	CSCO	0.0%
10.0	TLT	0.02%	NVS	0.0%
10.0	BMY	0.02%	POST	0.0%
10.0	AZO	0.02%	VICI	0.01%

Calls, 20% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Call options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
10.0	MSTR	-2.05%	MSTR	-2.07%
10.0	TSLA	-0.67%	TSLA	-0.46%
10.0	GME	-0.4%	BA	-0.18%
10.0	INTC	-0.3%	INTC	-0.04%
10.0	FCX	-0.03%	FCX	-0.02%
10.0	BA	-0.03%	VCSH	0.0%
10.0	BUD	0.0%	MUB	0.0%
10.0	HON	0.0%	HYG	0.0%
10.0	CAH	0.0%	EMB	0.0%
10.0	HD	0.0%	LQD	0.0%
10.0	GSK	0.0%	FRA	0.0%
10.0	LQD	0.0%	SPY	0.0%
10.0	GLD	0.0%	GLD	0.0%
10.0	GILD	0.0%	TLT	0.0%
10.0	FRA	0.0%	CSCO	0.0%
10.0	CPRT	0.0%	NVS	0.0%
10.0	CHTR	0.0%	POST	0.0%
10.0	MNST	0.0%	VICI	0.0%
10.0	ZTS	0.0%	QQQ	0.0%
10.0	MUB	0.0%	PEP	0.0%
10.0	XOM	0.0%	HSBC	0.0%
10.0	VZ	0.0%	ORLY	0.0%
10.0	ABBV	0.0%	T	0.0%
10.0	VCSH	0.0%	HON	0.0%
10.0	TMUS	0.0%	MSI	0.0%
10.0	TLT	0.0%	CAH	0.0%
10.0	SNY	0.0%	HLT	0.0%
10.0	AMGN	0.0%	COST	0.0%
10.0	SBUX	0.0%	TMUS	0.0%
10.0	POST	0.0%	GILD	0.0%

Puts, 1% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	VFC	-1.21%	VFC	-1.15%
1.0	TSLA	-1.07%	TSLA	-0.87%
1.0	MSTR	-1.0%	CCL	-0.7%
1.0	GME	-0.85%	BBY	-0.69%
1.0	BBY	-0.85%	ISRG	-0.69%
1.0	MU	-0.82%	MS	-0.63%
1.0	META	-0.75%	META	-0.62%
1.0	ISRG	-0.7%	HLT	-0.57%
1.0	EXPE	-0.58%	NFLX	-0.54%
1.0	ADBE	-0.55%	ORCL	-0.54%
1.0	NFLX	-0.54%	GS	-0.52%
1.0	CCL	-0.5%	VNO	-0.5%
1.0	CLF	-0.49%	COST	-0.46%
1.0	SBUX	-0.47%	EXPE	-0.43%
1.0	ORCL	-0.46%	ADBE	-0.41%
1.0	GOOGL	-0.43%	CLF	-0.41%
1.0	WFC	-0.43%	JAZZ	-0.4%
1.0	AVGO	-0.43%	BA	-0.39%
1.0	CSTM	-0.38%	SBUX	-0.38%
1.0	TXN	-0.37%	WFC	-0.36%
1.0	NAVI	-0.37%	BAC	-0.35%
1.0	GNRC	-0.36%	GOOGL	-0.34%
1.0	CZR	-0.36%	AAPL	-0.33%
1.0	ELAN	-0.35%	CZR	-0.31%
1.0	FITB	-0.34%	QQQ	-0.31%
1.0	PWR	-0.33%	LLY	-0.3%
1.0	BA	-0.32%	T	-0.29%
1.0	VZ	-0.3%	HSBC	-0.28%
1.0	INTC	-0.29%	JPM	-0.27%
1.0	IRM	-0.26%	FCX	-0.27%

Puts, 10% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	GME	-0.51%	MSTR	-0.32%
1.0	MSTR	-0.24%	GME	-0.31%
1.0	ADBE	-0.16%	TSLA	-0.27%
1.0	BBY	-0.15%	ADBE	-0.19%
1.0	ZTS	0.0%	BBY	-0.17%
1.0	POST	0.0%	VFC	-0.11%
1.0	ORLY	0.0%	CLF	-0.03%
1.0	JPM	0.0%	MUB	0.0%
1.0	BUD	0.0%	VCSH	0.0%
1.0	BMY	0.0%	HYG	0.0%
1.0	SNY	0.0%	EMB	0.0%
1.0	BHP	0.0%	LQD	0.0%
1.0	MUB	0.0%	FRA	0.0%
1.0	EMB	0.0%	SPY	0.0%
1.0	EXPE	0.0%	GLD	0.0%
1.0	TLT	0.0%	TLT	0.0%
1.0	FITB	0.0%	CSCO	0.0%
1.0	FRA	0.0%	NVS	0.0%
1.0	VCSH	0.0%	POST	0.0%
1.0	AMGN	0.0%	VICI	0.0%
1.0	GNRC	0.0%	QQQ	0.0%
1.0	LQD	0.0%	HSBC	0.0%
1.0	GSK	0.0%	PEP	0.0%
1.0	GWW	0.0%	ORLY	0.0%
1.0	HD	0.0%	T	0.0%
1.0	HYG	0.0%	HON	0.0%
1.0	CMCSA	0.0%	MSI	0.0%
1.0	OXY	0.0%	CAH	0.0%
1.0	NAVI	0.0%	TMUS	0.0%
1.0	IRM	0.0%	AZO	0.0%

Puts, 20% Out of the Money, 1D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 1d to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
1.0	GME	-0.11%	GME	-0.1%
1.0	AA	0.0%	HYG	0.0%
1.0	NFLX	0.0%	LQD	0.0%
1.0	NEM	0.0%	VCSH	0.0%
1.0	NAVI	0.0%	EMB	0.0%
1.0	MUB	0.0%	MUB	0.0%
1.0	MSI	0.0%	FRA	0.0%
1.0	MS	0.0%	SPY	0.0%
1.0	MNST	0.0%	GLD	0.0%
1.0	META	0.0%	TLT	0.0%
1.0	LW	0.0%	CSCO	0.0%
1.0	LQD	0.0%	NVS	0.0%
1.0	LEN	0.0%	POST	0.0%
1.0	KHC	0.0%	VICI	0.0%
1.0	KEY	0.0%	QQQ	0.0%
1.0	KALU	0.0%	PEP	0.0%
1.0	JPM	0.0%	HSBC	0.0%
1.0	IRM	0.0%	ORLY	0.0%
1.0	HYG	0.0%	T	0.0%
1.0	HSBC	0.0%	MSI	0.0%
1.0	HON	0.0%	HON	0.0%
1.0	HLT	0.0%	CAH	0.0%
1.0	HD	0.0%	TMUS	0.0%
1.0	HCA	0.0%	AZO	0.0%
1.0	GWW	0.0%	COST	0.0%
1.0	NVS	0.0%	AZN	0.0%
1.0	ON	0.0%	HLT	0.0%
1.0	ORCL	0.0%	GILD	0.0%
1.0	ORLY	0.0%	BUD	0.0%
1.0	WYNN	0.0%	XOM	0.0%

Puts, 1% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 1% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	VFC	-9.53%	VFC	-8.65%
10.0	ADBE	-5.29%	ADBE	-5.29%
10.0	SBUX	-3.77%	LVS	-4.0%
10.0	GILD	-3.1%	COST	-3.78%
10.0	HLT	-2.84%	HLT	-3.33%
10.0	META	-2.72%	SBUX	-3.16%
10.0	COST	-2.69%	GILD	-2.86%
10.0	EXPE	-2.59%	ISRG	-2.85%
10.0	AAPL	-2.43%	AAPL	-2.69%
10.0	LVS	-2.29%	HD	-2.29%
10.0	CSTM	-2.21%	UAA	-2.1%
10.0	UAA	-2.2%	META	-2.02%
10.0	TSLA	-2.07%	KHC	-1.65%
10.0	ISRG	-2.01%	EXPE	-1.6%
10.0	HD	-1.82%	LLY	-1.57%
10.0	KHC	-1.67%	SNY	-1.48%
10.0	TXN	-1.51%	PEP	-1.28%
10.0	SNY	-1.41%	MRK	-1.25%
10.0	GOOGL	-1.35%	LUMN	-1.2%
10.0	CZR	-1.25%	JAZZ	-1.04%
10.0	KALU	-1.21%	GOOGL	-1.0%
10.0	LLY	-1.15%	TSLA	-0.98%
10.0	MRK	-1.08%	CSCO	-0.91%
10.0	MU	-1.06%	CMG	-0.9%
10.0	PEP	-1.04%	TXN	-0.78%
10.0	CHTR	-0.99%	AZN	-0.76%
10.0	ZTS	-0.96%	CSTM	-0.73%
10.0	JAZZ	-0.92%	BBY	-0.67%
10.0	AZN	-0.87%	JPM	-0.53%
10.0	CMG	-0.84%	ABBV	-0.38%

Puts, 10% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 10% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	VFC	-6.05%	VFC	-6.02%
10.0	COST	-0.6%	COST	-1.12%
10.0	EXPE	-0.5%	ADBE	-0.93%
10.0	SBUX	-0.45%	ISRG	-0.9%
10.0	ADBE	-0.41%	SBUX	-0.62%
10.0	MU	-0.35%	TSLA	-0.44%
10.0	CSTM	-0.31%	EXPE	-0.39%
10.0	KALU	-0.28%	HLT	-0.34%
10.0	HLT	-0.11%	BBY	-0.27%
10.0	LQD	0.0%	JAZZ	-0.18%
10.0	TLT	0.0%	KALU	-0.15%
10.0	MUB	0.0%	LVS	-0.15%
10.0	EMB	0.0%	CSTM	-0.07%
10.0	VCSH	0.0%	LLY	-0.04%
10.0	BUD	0.0%	META	-0.01%
10.0	ZTS	0.01%	JPM	-0.01%
10.0	GNRC	0.01%	VCSH	0.0%
10.0	CMCSA	0.01%	MUB	0.0%
10.0	NVS	0.03%	HYG	0.0%
10.0	TSLA	0.03%	EMB	0.0%
10.0	AZN	0.03%	LQD	0.0%
10.0	AMGN	0.03%	FRA	0.0%
10.0	FRA	0.04%	SPY	0.0%
10.0	GWW	0.04%	GLD	0.0%
10.0	GILD	0.05%	TLT	0.0%
10.0	CHTR	0.05%	CSCO	0.0%
10.0	ISRG	0.05%	NVS	0.0%
10.0	BBY	0.06%	POST	0.0%
10.0	QCOM	0.06%	VICI	0.0%
10.0	FITB	0.06%	QQQ	0.0%

Puts, 20% Out of the Money, 10D Time Horizon, All Tickers / P30D

Results reflect ticker level average profit or loss (PNL), as a % of underlying ticker model date price, on the sale of 20% out of the money, 10D to expiration Put options across all model dates for which actual results for the stated horizon are known.

Period examined: All model dates from 2025-03-03 through 2025-03-31

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
10.0	VFC	-2.52%	VFC	-2.89%
10.0	ZTS	0.0%	VCSH	0.0%
10.0	LQD	0.0%	MUB	0.0%
10.0	JPM	0.0%	HYG	0.0%
10.0	HSBC	0.0%	EMB	0.0%
10.0	GNRC	0.0%	LQD	0.0%
10.0	GILD	0.0%	FRA	0.0%
10.0	GE	0.0%	SPY	0.0%
10.0	FRA	0.0%	GLD	0.0%
10.0	EMB	0.0%	TLT	0.0%
10.0	CMCSA	0.0%	CSCO	0.0%
10.0	CHTR	0.0%	NVS	0.0%
10.0	TLT	0.0%	POST	0.0%
10.0	BUD	0.0%	VICI	0.0%
10.0	BHP	0.0%	QQQ	0.0%
10.0	MUB	0.0%	PEP	0.0%
10.0	AMGN	0.0%	HSBC	0.0%
10.0	VCSH	0.0%	ORLY	0.0%
10.0	FITB	0.0%	T	0.0%
10.0	GOLD	0.0%	HON	0.0%
10.0	SLV	0.0%	MSI	0.0%
10.0	AZN	0.0%	CAH	0.0%
10.0	OXY	0.01%	HLT	0.0%
10.0	HON	0.01%	COST	0.0%
10.0	VZ	0.01%	TMUS	0.0%
10.0	BXP	0.01%	GILD	0.0%
10.0	GWW	0.01%	AZO	0.0%
10.0	VICI	0.01%	AZN	0.0%
10.0	CVS	0.01%	HD	0.0%
10.0	NVS	0.01%	BUD	0.0%

Appendix: Black Scholes Python

import pandas as pd import numpy as np from scipy.stats import norm

def black_scholes_call(S, K, T, r, sigma): d1 = (np.log(S / K) + (r + 0.5 * sigma**2) * T) / (sigma * np.sqrt(T)) d2 = d1 - sigma * np.sqrt(T) call_price = S * norm.cdf(d1) - K * np.exp(-r * T) * norm.cdf(d2) return call_price

df['bs_ofv'] = df.apply(lambda row: black_scholes_call(S, row['Strike'], row['Horizon'] / 252, row['RFR'], row['Vol'])/S , axis=1)

def black_scholes_put(S, K, T, r, sigma): d1 = (np.log(S / K) + (r + 0.5 * sigma**2) * T) / (sigma * np.sqrt(T)) d2 = d1 - sigma * np.sqrt(T) put_price = K * np.exp(-r * T) * norm.cdf(-d2) - S * norm.cdf(-d1) return put_price

df['bs_ofv'] = df.apply(lambda row: black_scholes_put(S, row['Strike'], row['Horizon'] / 252, row['RFR'], row['Vol']) / S, axis=1)