VecViz Option Fair Value (OFV) Performance Report

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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 zero net profitability at expiration of selling matched calls and puts at OFV levels (as a % of underlying ticker model date price). We refer to this as selling a "strangle".
- 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 $\sim 60,000$ 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 $252 \ (\sim 15.9)$.

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.

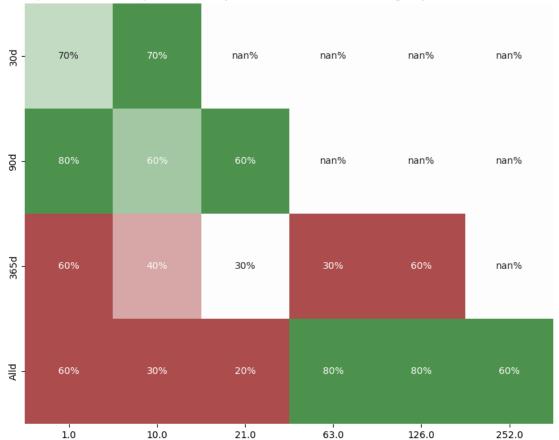
Thus, in summary, all metrics presented in this report are presented and are to be considered on a comparative basis. How do Vector Model OFV estimates tend to differ from SBS's across strikes and terms to expiration, for puts and calls? For what strikes and terms to expiration, if any, is the Vector 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 2025-10-31

% of Option Fair Value Objectives Met By Lookback Window vs. Trading Day Horizon, as of 2025-10-31





OFV Criteria	Average Score(%)
1. Closer RFR Proximity: NTM	50
2. Closer RFR Proximity: DOOTM	56.25
3. Smaller Max Loss By Date: NTM	43.75
4. Smaller Max Loss By Date:: DOOTM	100
5. Avg Excess P&L >Excess Max Loss By Date (if any):NTM	56.25
6. Avg Excess P&L >Excess Max Loss By Date (if any):DOOTM	100
7. Smaller Max Loss By Ticker: NTM	12.5
8. Smaller Max Loss By Ticker: DOOTM	56.25
9. Avg Excess P&L >Excess Max Loss By Ticker (if any):NTM	12.5
10.Avg Excess P&L >Excess Max Loss By Ticker (if any):DOOTM	68.75
Overall Average	55.62

OFV Criteria, Average Across Fwd Horizon	1D	10D	21D	63D	126D	252D
1. Closer RFR Proximity: NTM	0	75	33.33	50	100	100
2. Closer RFR Proximity: DOOTM	50	50	33.33	50	100	100
3. Smaller Max Loss By Date: NTM	100	0	0	0	100	100
4. Smaller Max Loss By Date:: DOOTM	100	100	100	100	100	100
5. Avg Excess P&L >Excess Max Loss By	100	25	0	50	100	100
Date (if any):NTM						
6. Avg Excess P&L >Excess Max Loss By	100	100	100	100	100	100
Date (if any):DOOTM						
7. Smaller Max Loss By Ticker: NTM	0	25	0	50	0	0
8. Smaller Max Loss By Ticker: DOOTM	100	50	33.33	50	50	0
9. Avg Excess P&L >Excess Max Loss By	25	0	0	50	0	0
Ticker (if any):NTM						
10. Avg Excess P&L >Excess Max Loss By	100	75	66.67	50	50	0
Ticker (if any):DOOTM						
Overall Average	67.5	50	36.67	55	70	60

OFV Criteria, Average Across Lookback Windows	30D	90D	365D	ALLD
1. Closer RFR Proximity: NTM	50	66.67	40	50
2. Closer RFR Proximity: DOOTM	100	100	40	33.33
3. Smaller Max Loss By Date: NTM	50	33.33	40	50
4. Smaller Max Loss By Date:: DOOTM	100	100	100	100
5. Avg Excess P&L >Excess Max Loss By Date (if	50	33.33	40	83.33
any):NTM				
6. Avg Excess P&L >Excess Max Loss By Date (if	100	100	100	100
any):DOOTM				



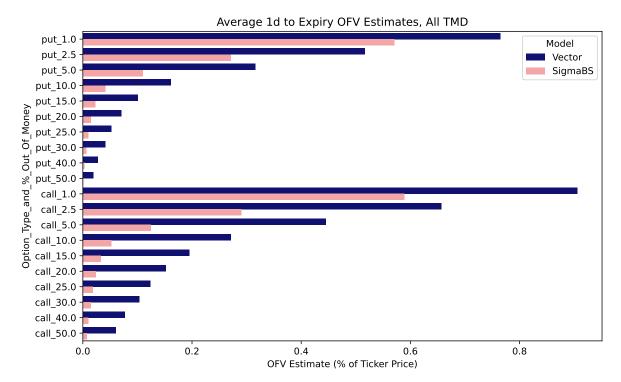
OFV Criteria, Average Across Lookback Windows	30D	90D	365D	ALLD
7. Smaller Max Loss By Ticker: NTM	50	0	0	16.67
8. Smaller Max Loss By Ticker: DOOTM	100	100	20	50
9. Avg Excess P&L >Excess Max Loss By Ticker (if	0	33.33	0	16.67
any):NTM				
$10.\mathrm{Avg}$ Excess P&L >Excess Max Loss By Ticker (if	100	100	60	50
any):DOOTM				
Overall Average	70	66.67	44	55



Average OFV Levels

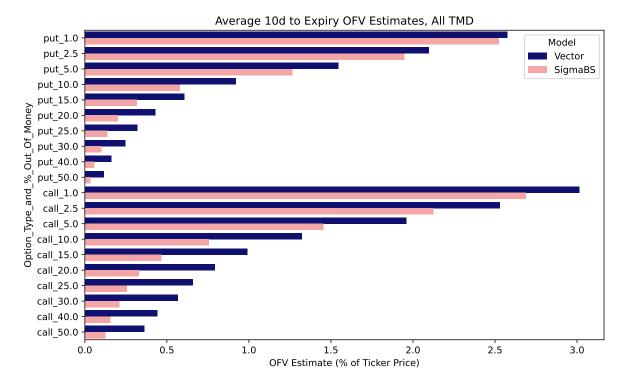
Here we compare Vector Model ("V", dark navy shading) and Sigma based Black Scholes ("BS", light red shading) levels by horizon, on average across all ticker-model dates for the lookback window indicated.

All Out of Sample Model Dates, 1D Horizon



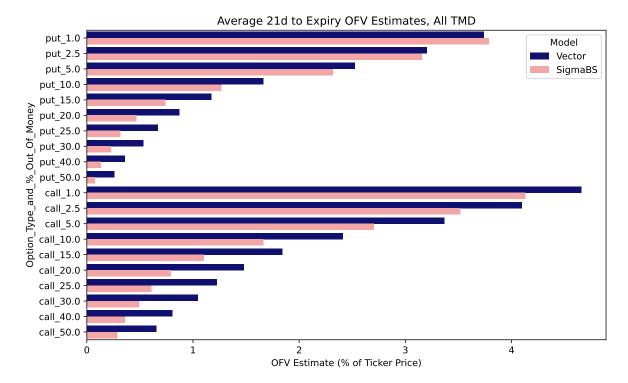


All Out of Sample Model Dates, 10D Horizon



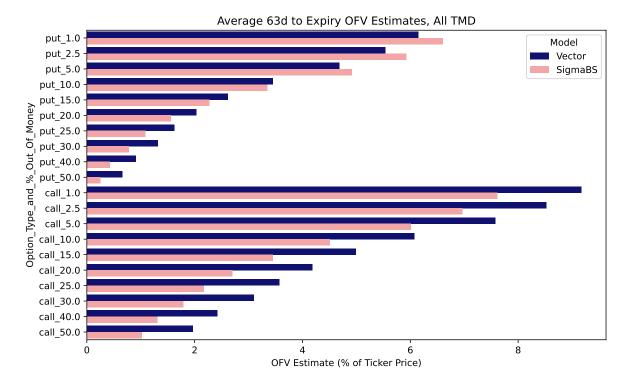


All Out of Sample Model Dates, 21D Horizon



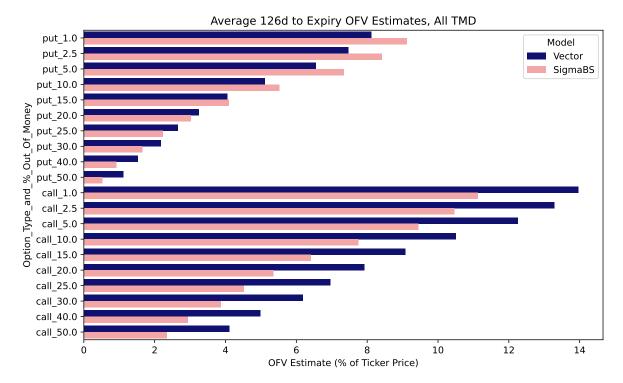


All Out of Sample Model Dates, 63D Horizon



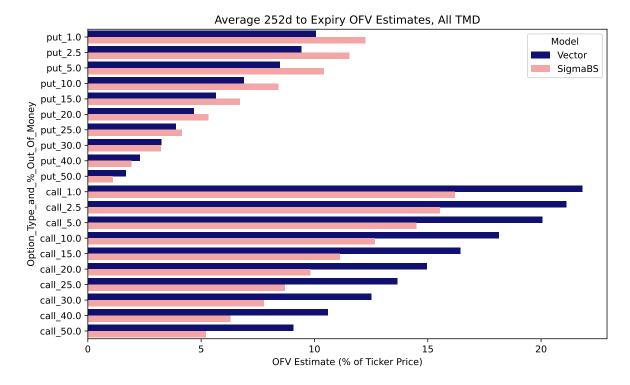


All Out of Sample Model Dates, 126D Horizon



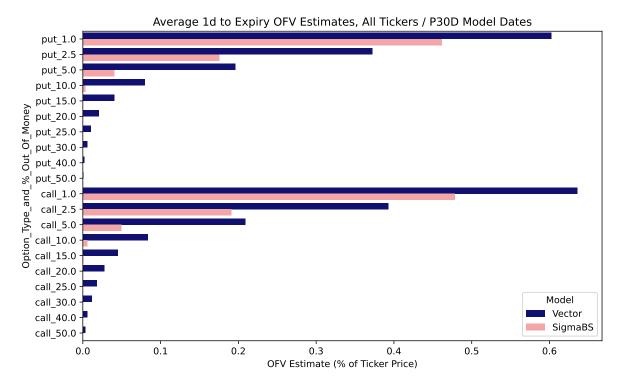


All Out of Sample Model Dates, 252D Horizon



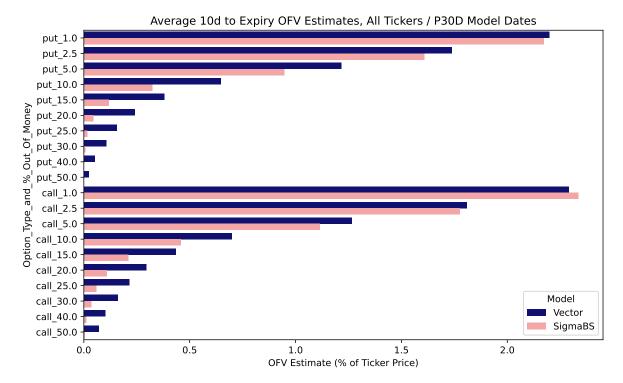


P30D Model Dates, 1D Horizon



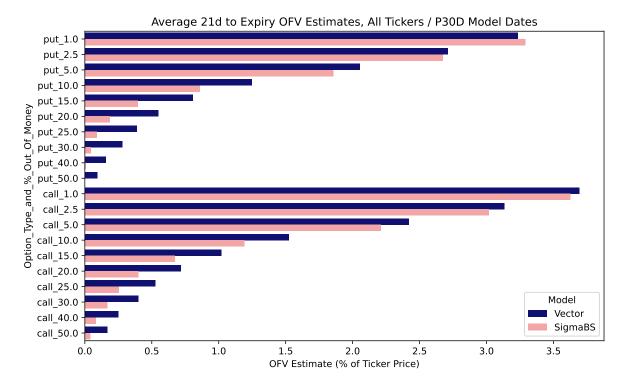


P30D Model Dates, 10D Horizon



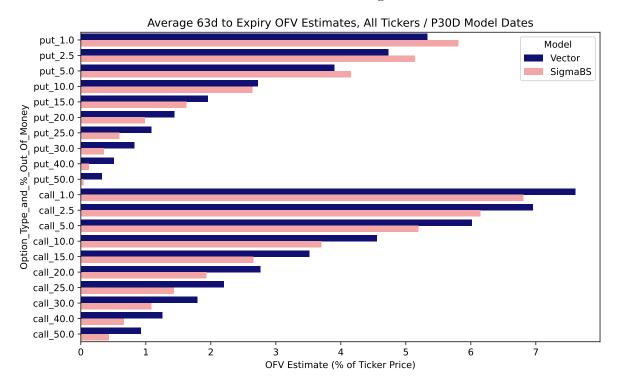


P30D Model Dates, 21D Horizon



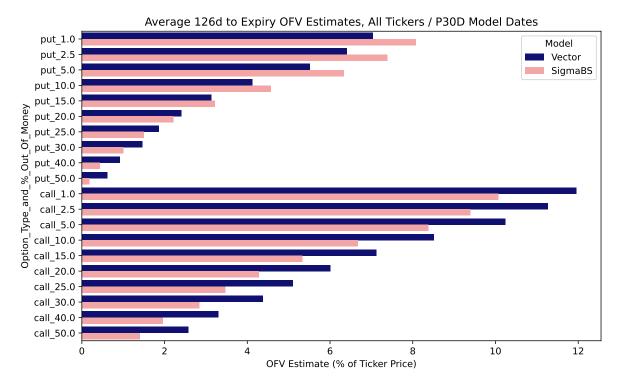


P30D Model Dates, 63D Horizon



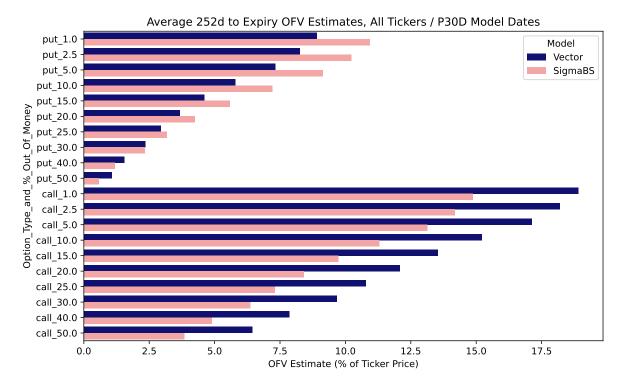


P30D Model Dates, 126D Horizon





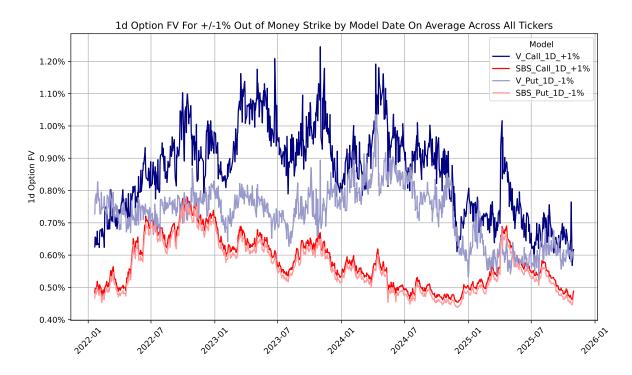
P30D Model Dates, 252D Horizon





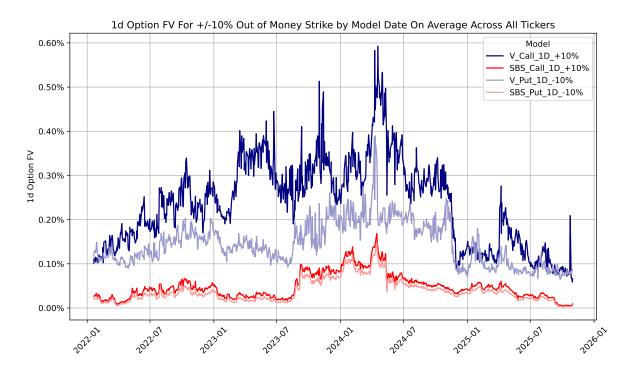
OFV by Model Date Detail

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



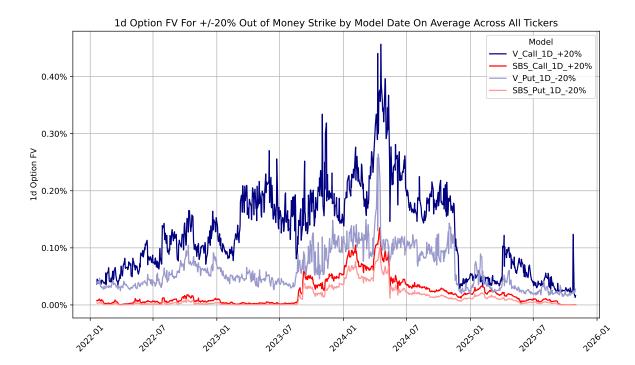


1d Horizon, +/- 10% Out of Money



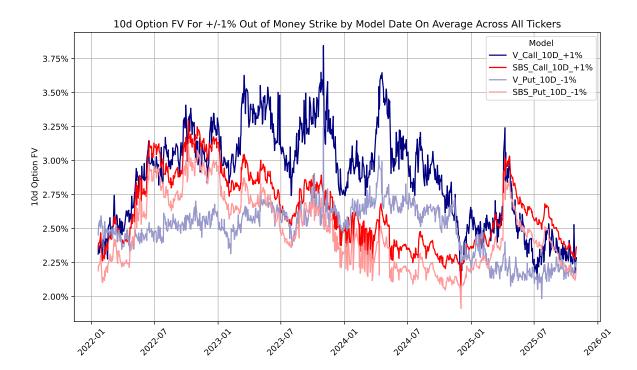


1d Horizon, +/- 20% Out of Money



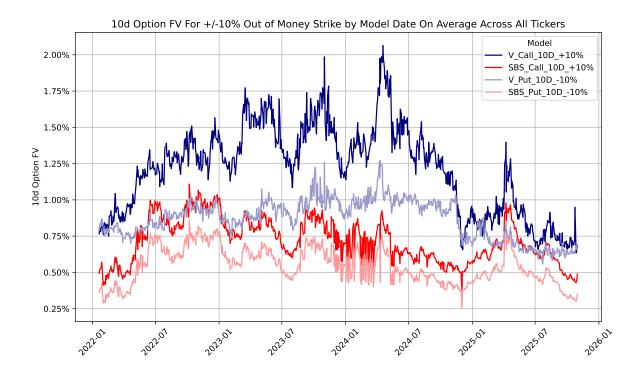


10d Horizon, +/- 1% Out of Money



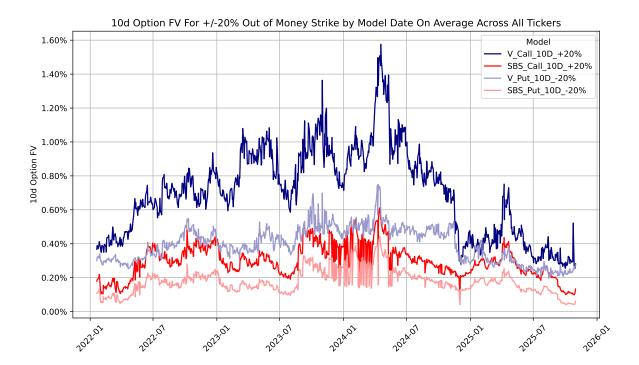


10d Horizon, +/- 10% Out of Money



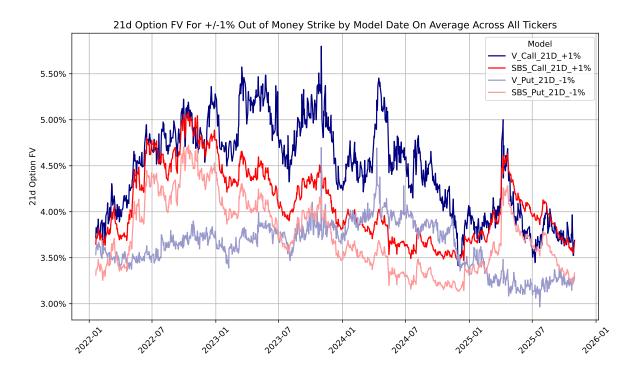


10d Horizon, +/- 20% Out of Money



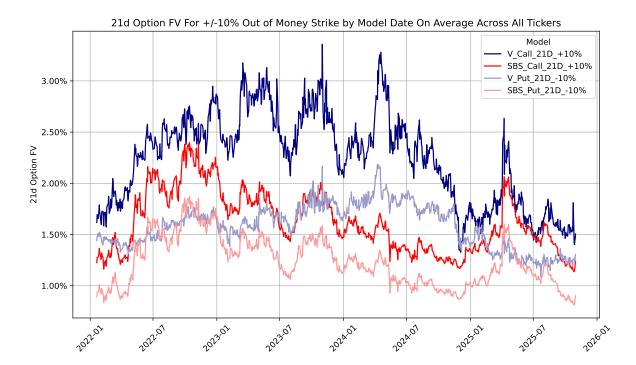


21d Horizon, +/- 1% Out of Money



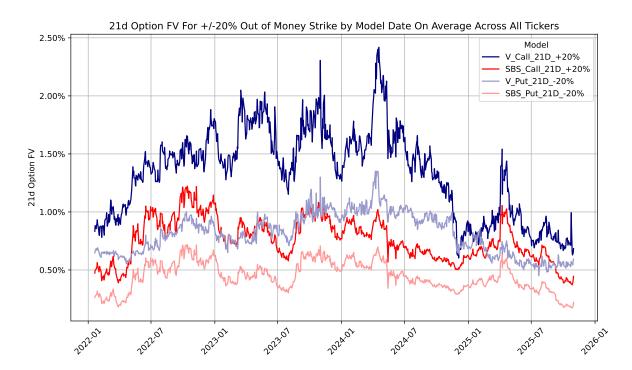


21d Horizon, +/- 10% Out of Money



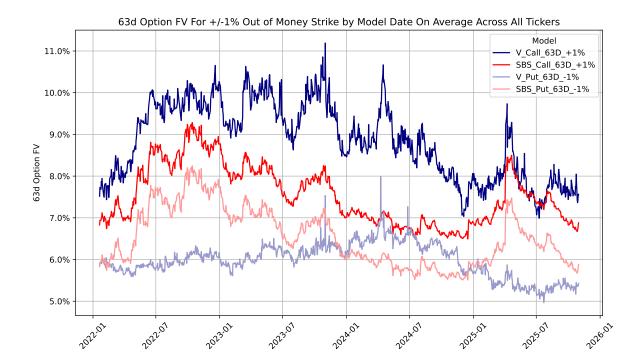


21d Horizon, +/- 20% Out of Money



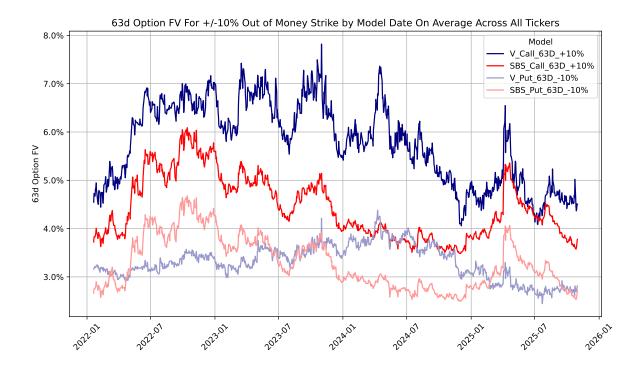


63d Horizon, +/- 1% Out of Money



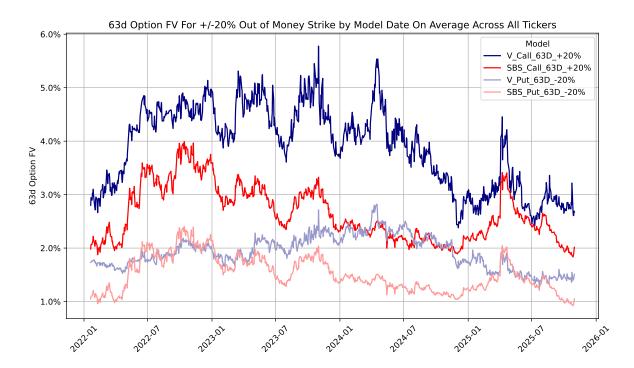


63d Horizon, +/- 10% Out of Money



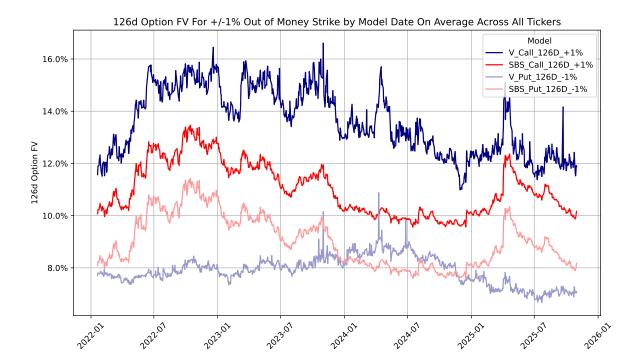


63d Horizon, +/- 20% Out of Money



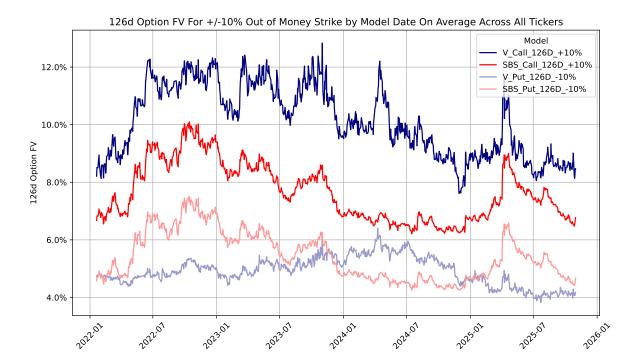


126d Horizon, +/- 1% Out of Money



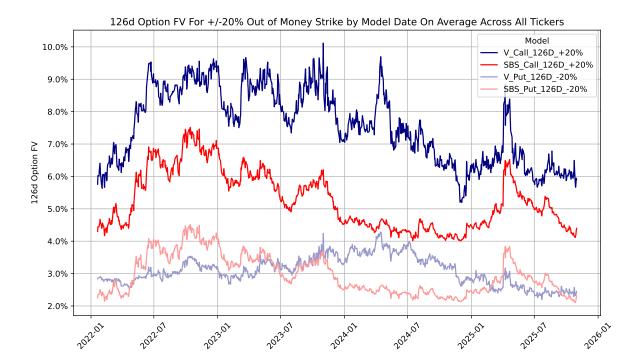


126d Horizon, +/- 10% Out of Money



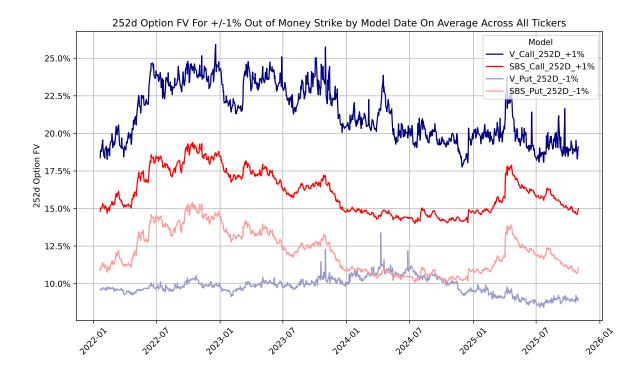


126d Horizon, +/- 20% Out of Money



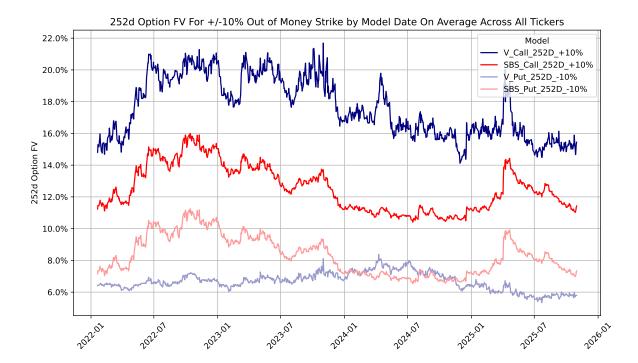


252d Horizon, +/- 1% Out of Money



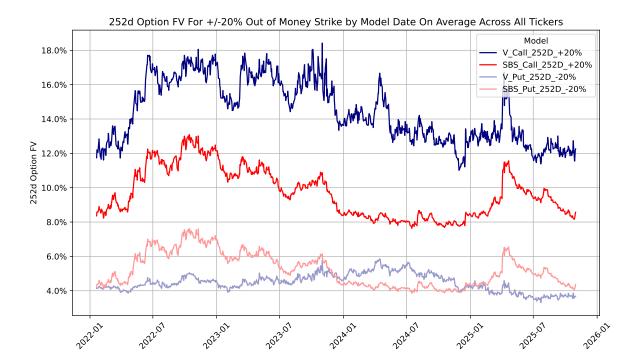


252d Horizon, +/- 10% Out of Money





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





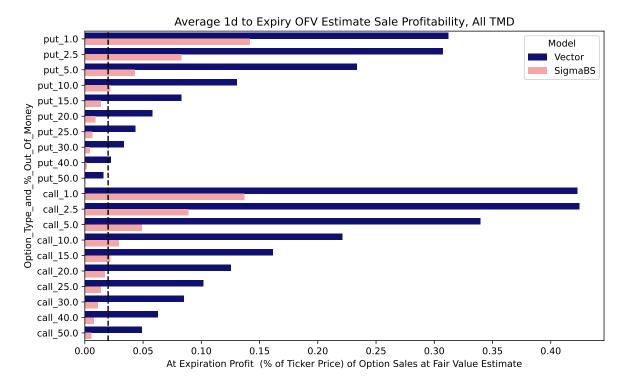
Average OFV Profit at Expiration (% of Ticker Price Basis)

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 zero. We have denoted an approximate risk free rate of 4% (annualized) adjusted for the term to expiration, on the charts that follow with a dashed black line, as an additional reference point.

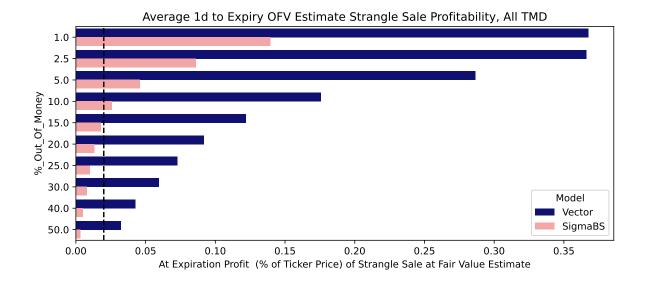
Historic Average Profit Levels

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

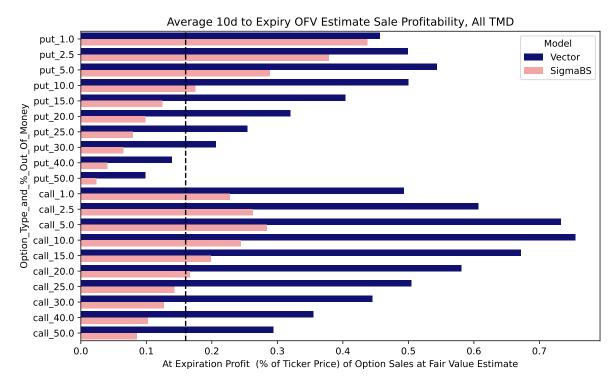


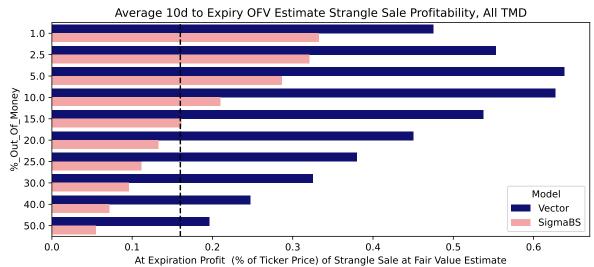






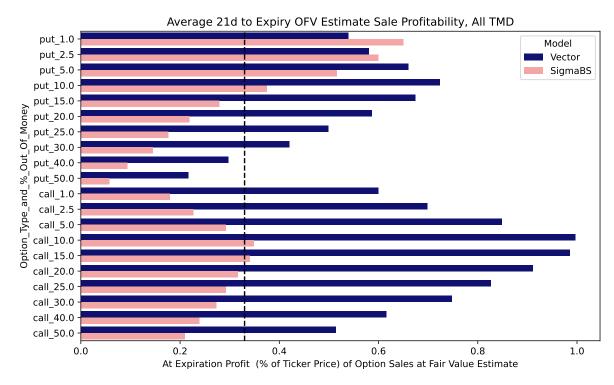
All Out of Sample Model Dates, 10D Horizon

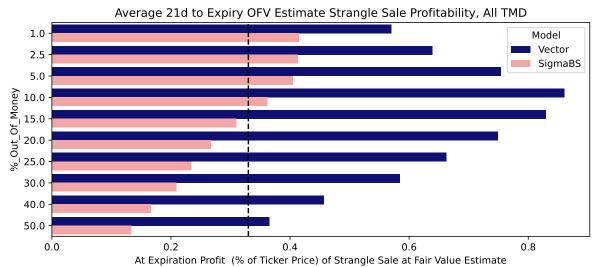






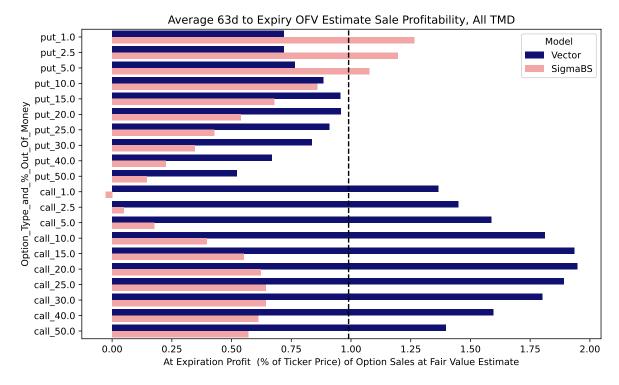
All Out of Sample Model Dates, 21D Horizon

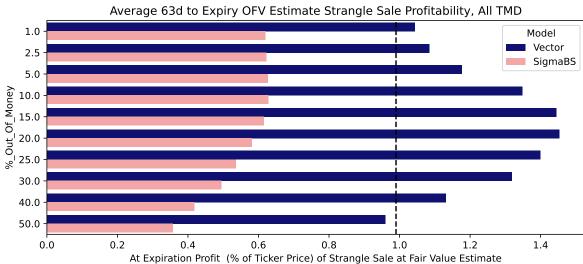






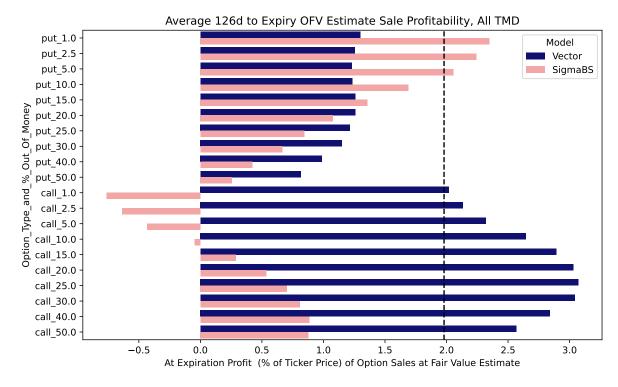
All Out of Sample Model Dates, 63D Horizon

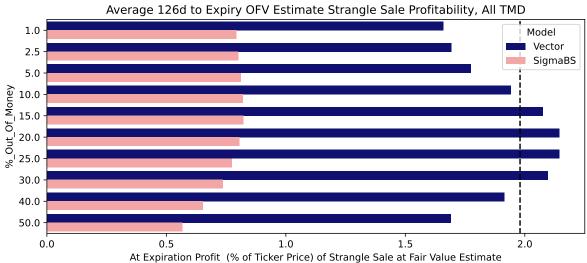






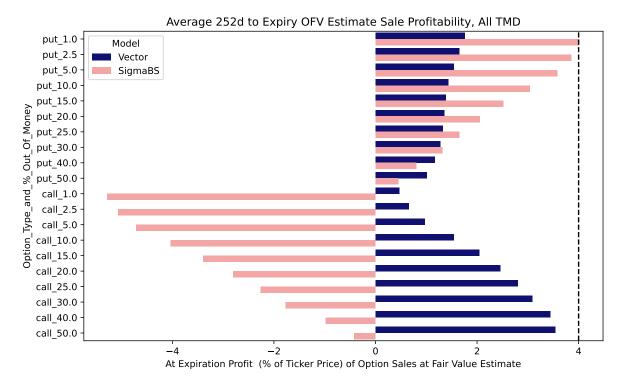
All Out of Sample Model Dates, 126D Horizon

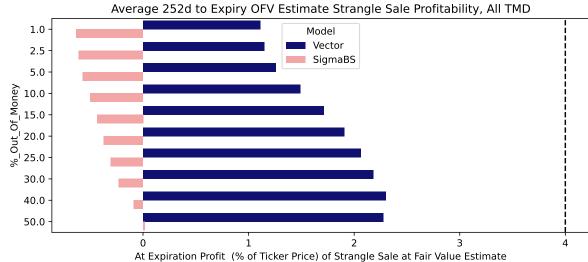






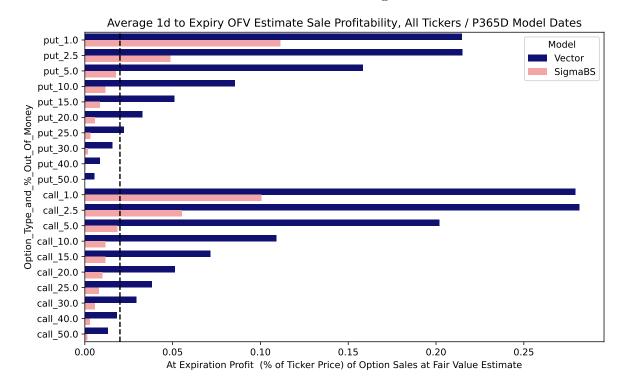
All Out of Sample Model Dates, 252D Horizon

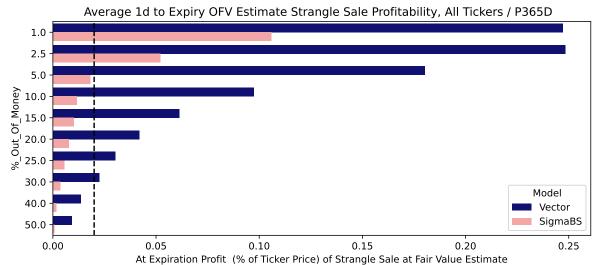






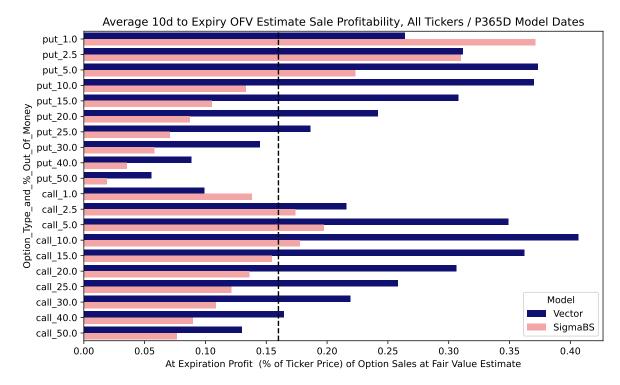
P365D Model Dates, 1D Horizon

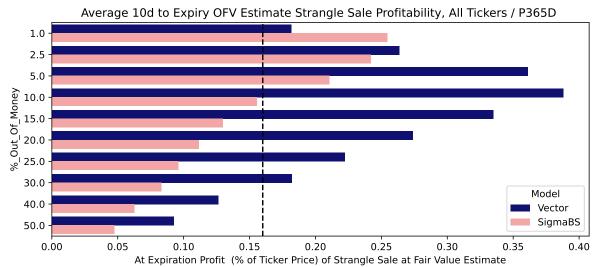






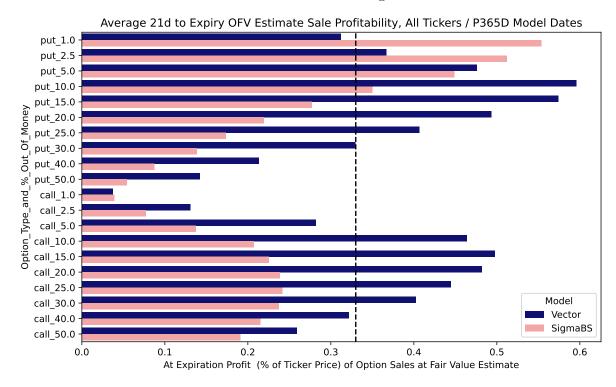
P365D Model Dates, 10D Horizon

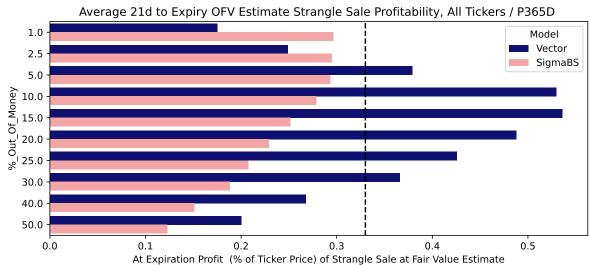






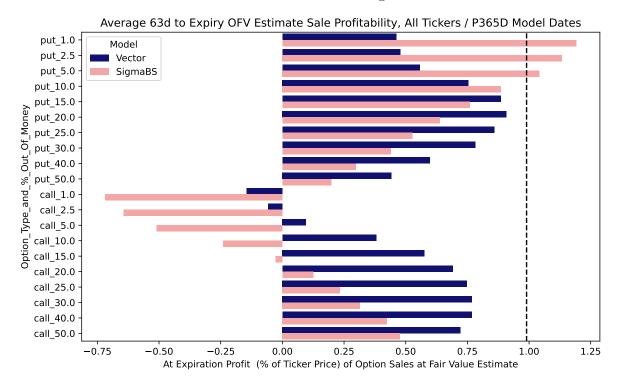
P365D Model Dates, 21D Horizon







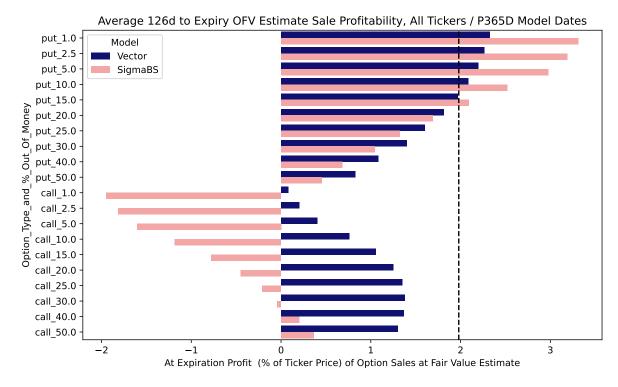
P365D Model Dates, 63D Horizon

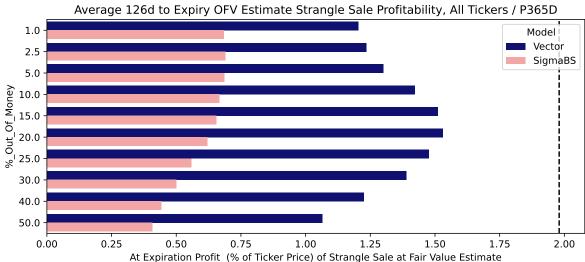






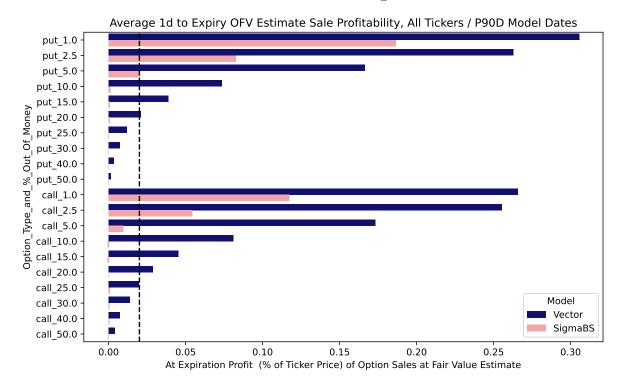
P365D Model Dates, 126D Horizon

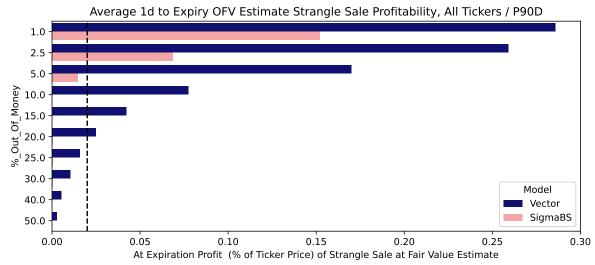






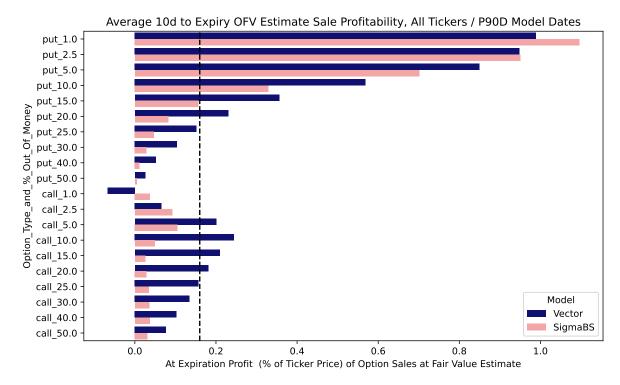
P90D Model Dates, 1D Horizon

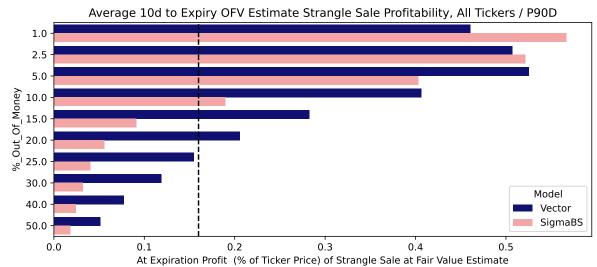






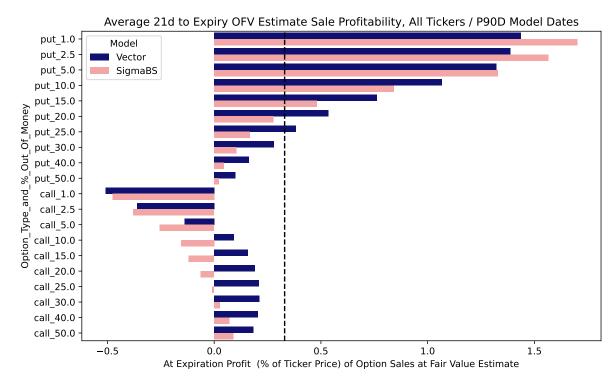
P90D Model Dates, 10D Horizon

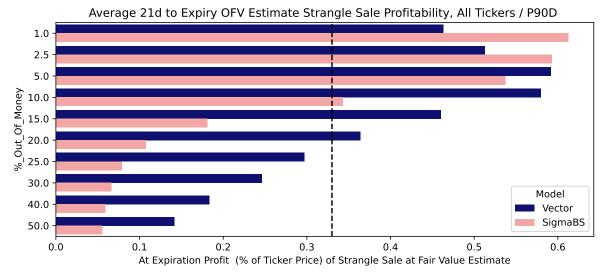






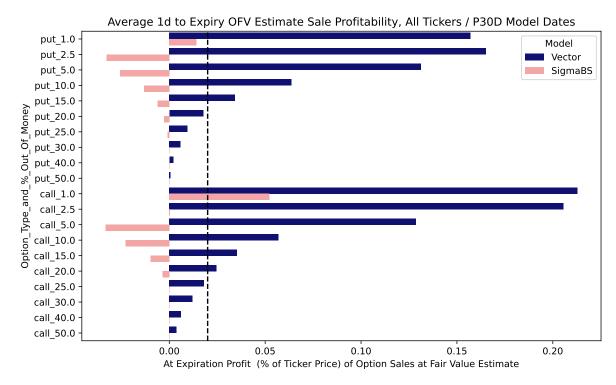
P90D Model Dates, 21D Horizon

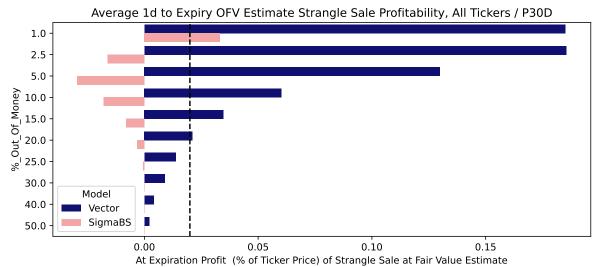






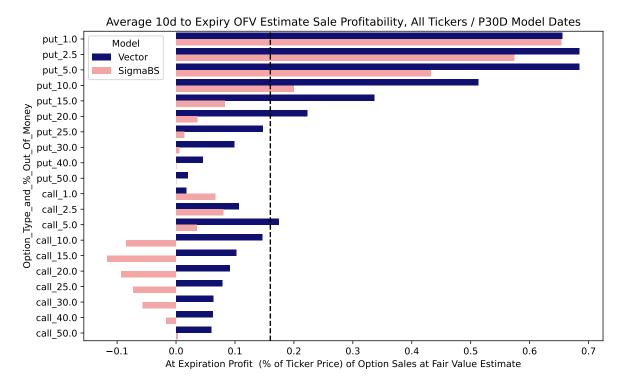
P30D Model Dates, 1D Horizon

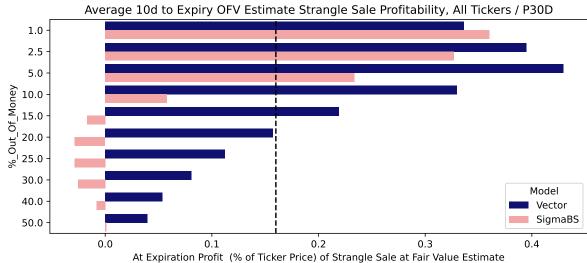






P30D Model Dates, 10D Horizon

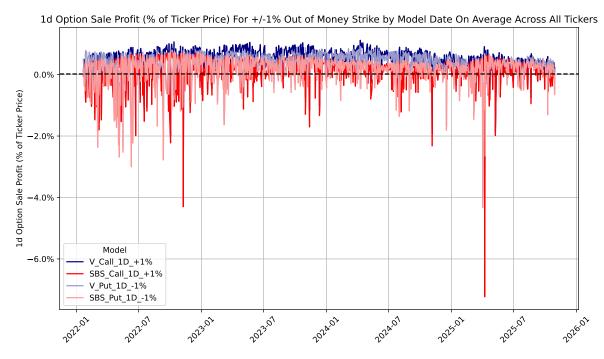


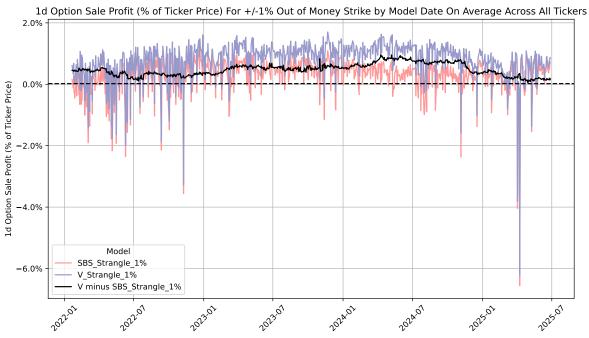




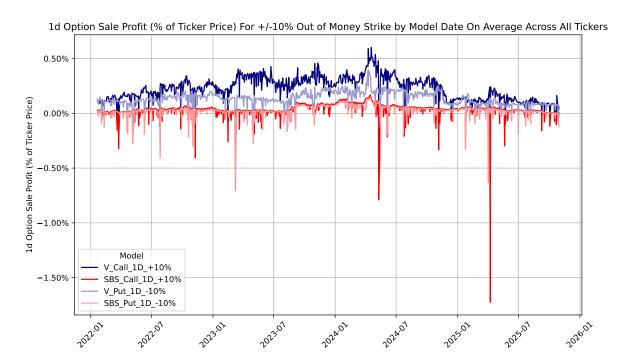
Model Date Detail of Option Sale Profitability

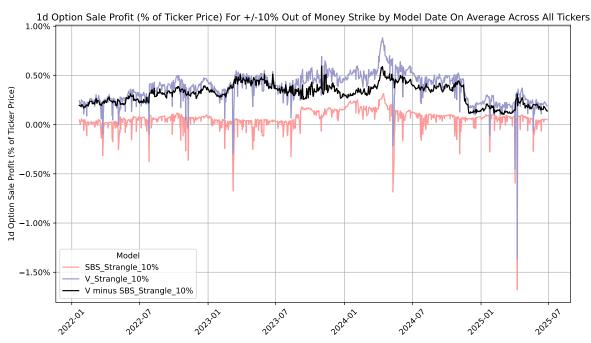
1d Horizon, +/- 1% Out of Money





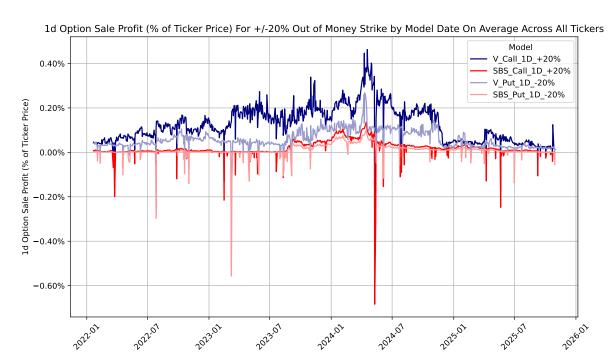
1d Horizon, +/- 10% Out of Money

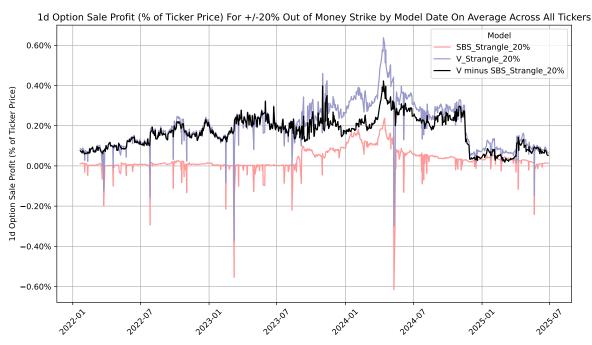






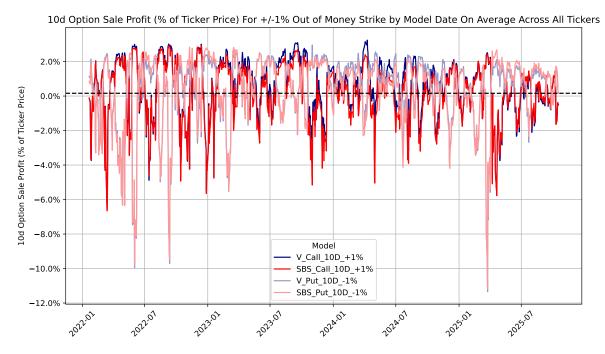
1d Horizon, +/- 20% Out of Money

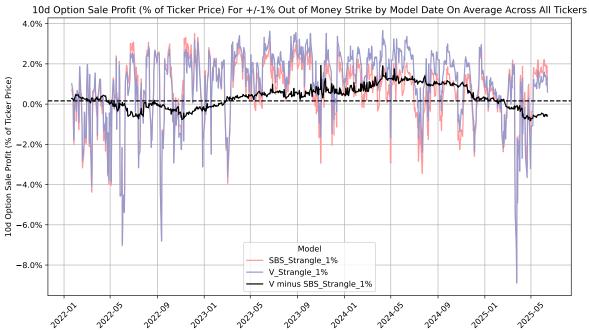






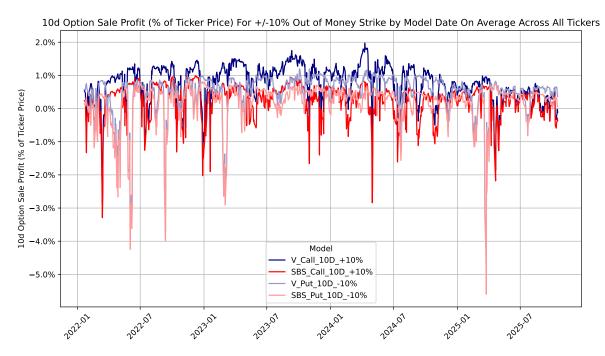
10d Horizon, +/- 1% Out of Money

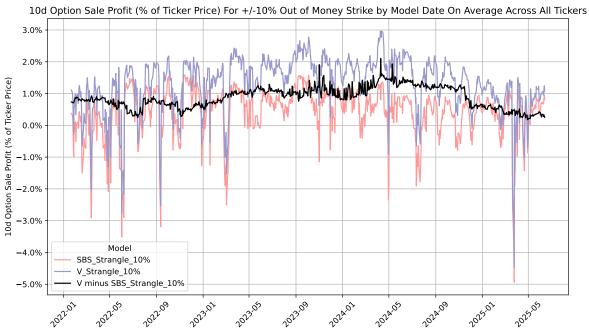






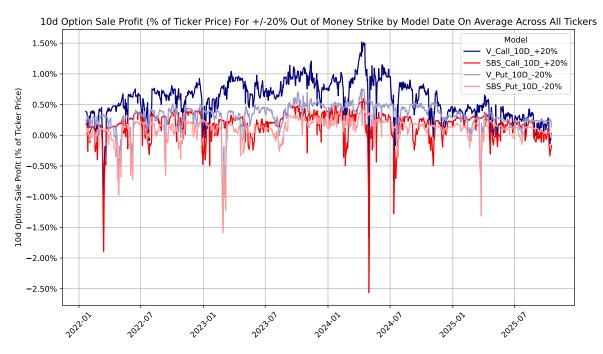
10d Horizon, +/- 10% Out of Money

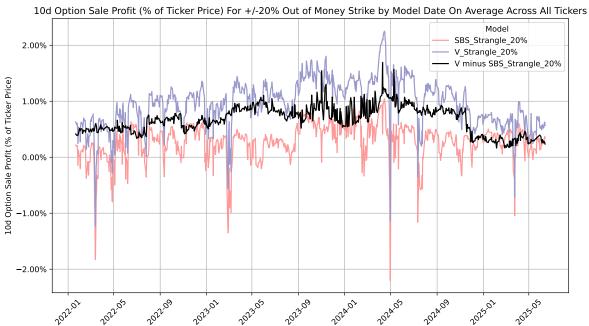






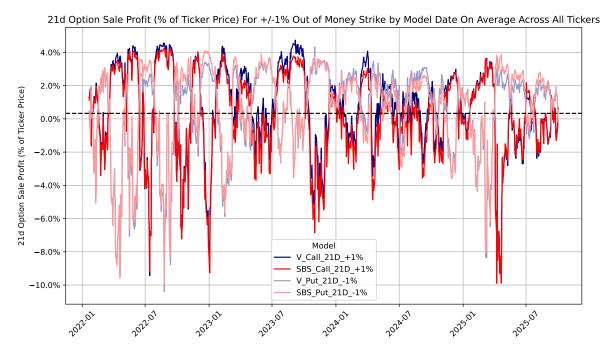
10d Horizon, +/- 20% Out of Money

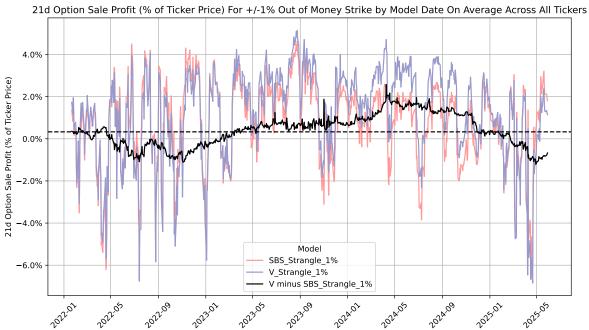






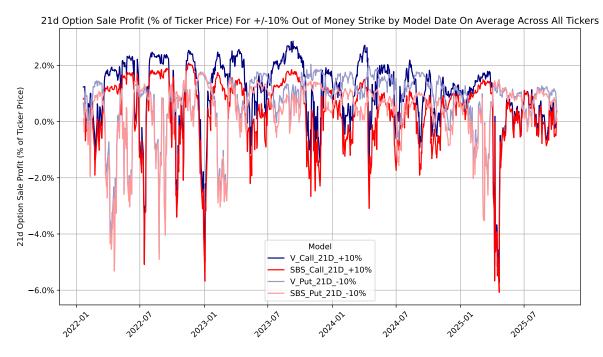
21d Horizon, +/- 1% Out of Money

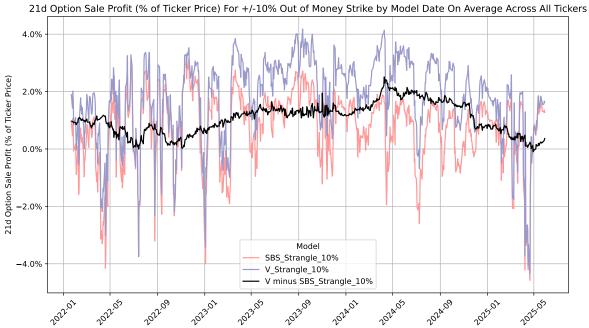






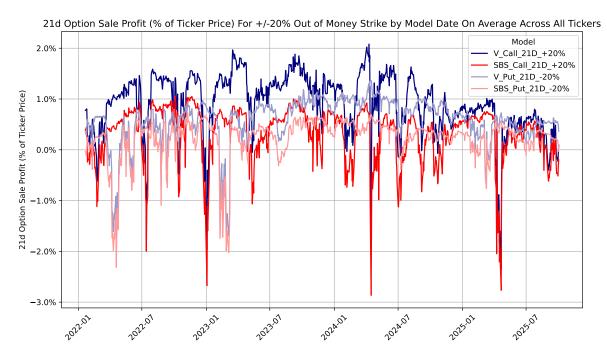
21d Horizon, +/- 10% Out of Money

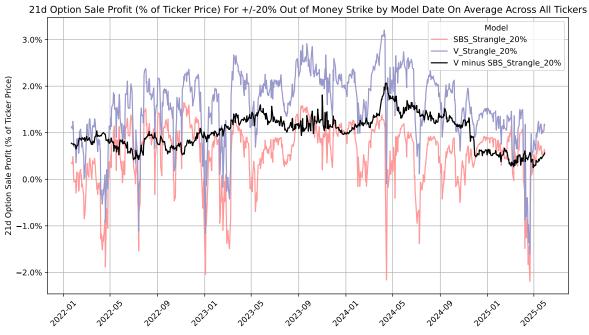






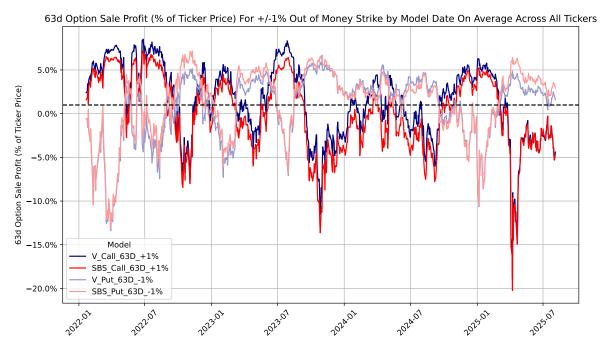
21d Horizon, +/- 20% Out of Money

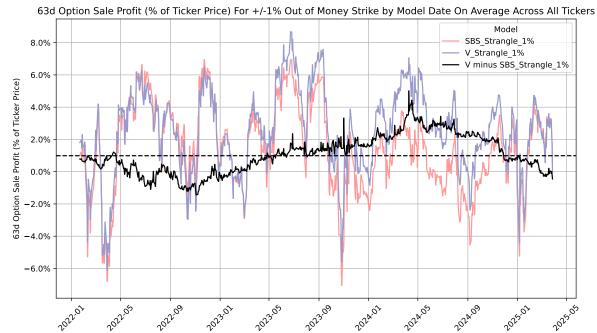






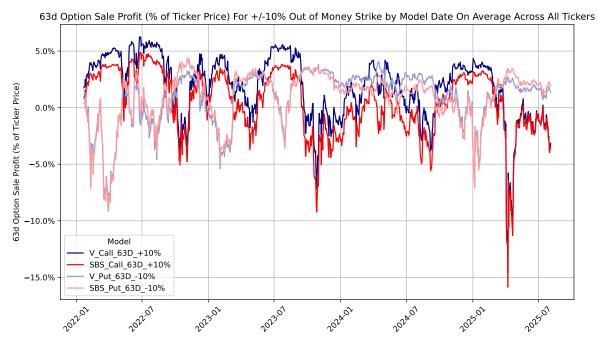
63d Horizon, +/-1% Out of Money

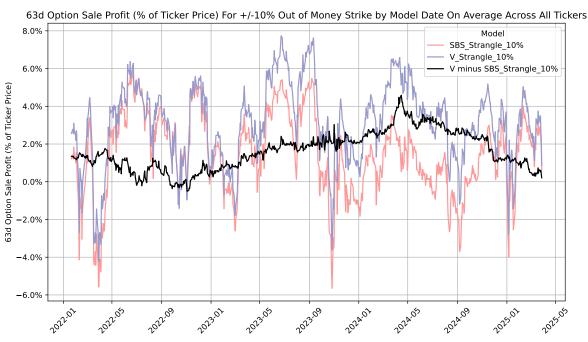






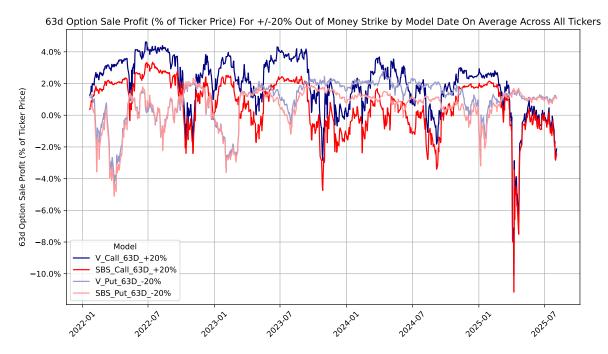
63d Horizon, +/- 10% Out of Money

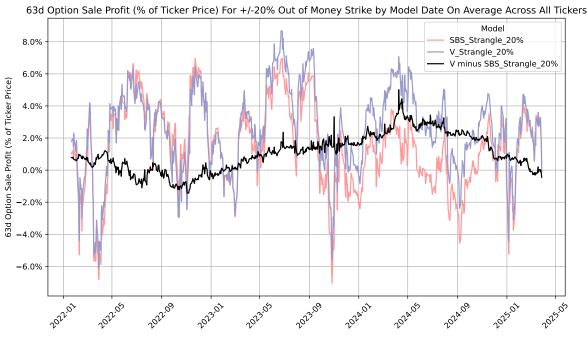






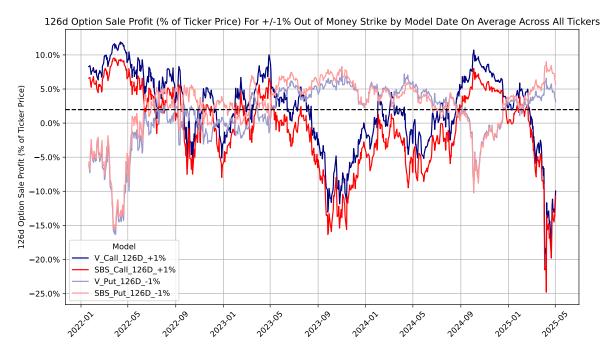
63d Horizon, +/- 20% Out of Money

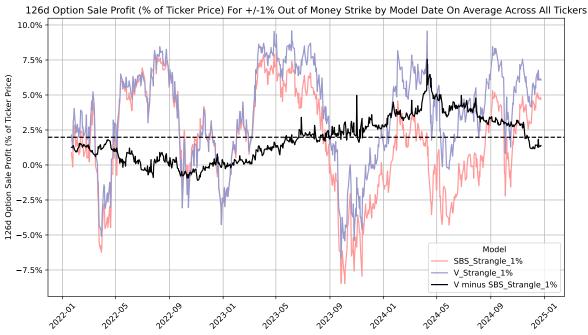






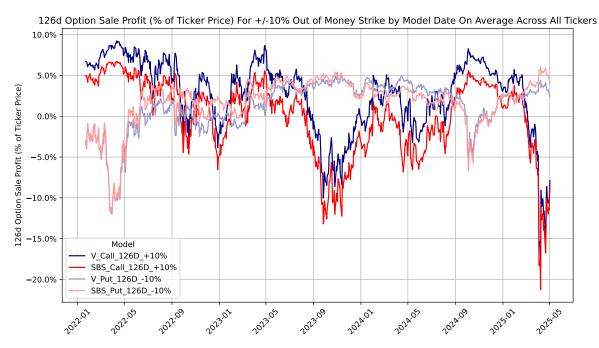
126d Horizon, +/-1% Out of Money

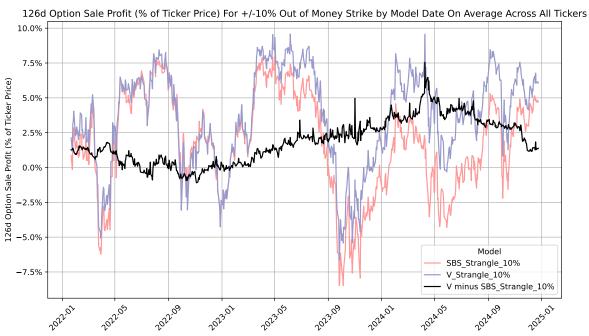






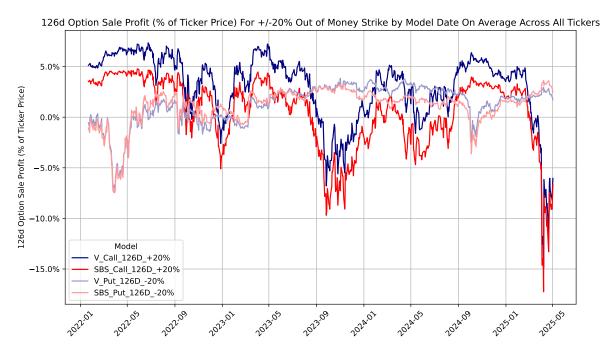
126d Horizon, +/- 10% Out of Money

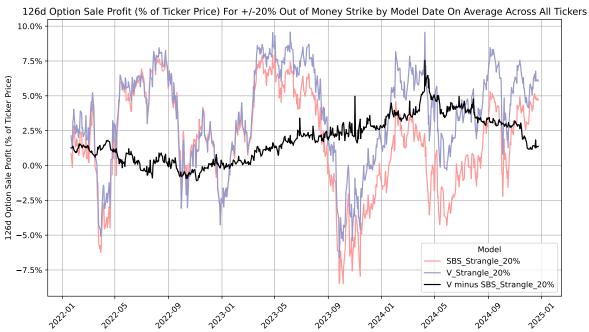






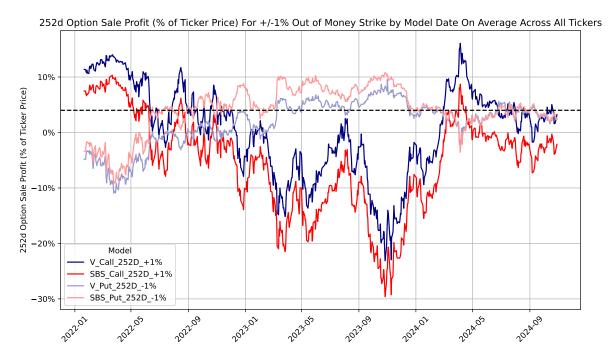
126d Horizon, +/- 20% Out of Money

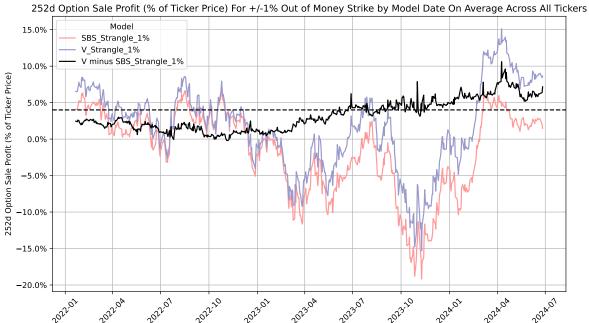






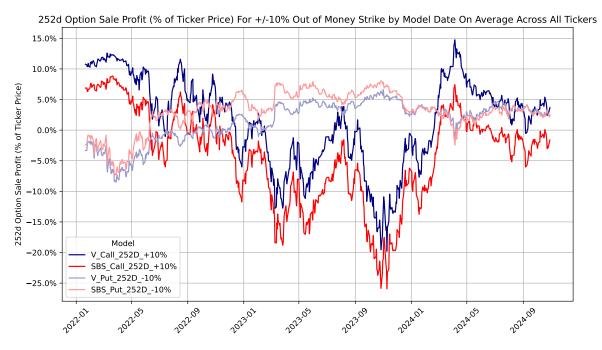
252d Horizon, +/- 1% Out of Money

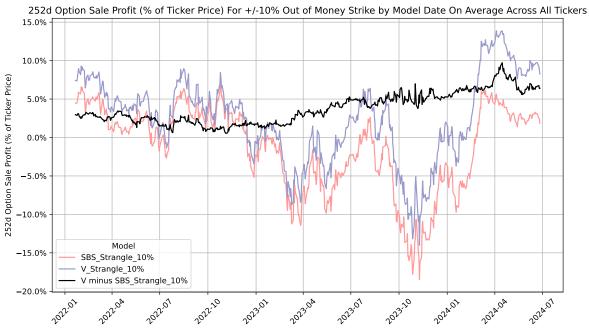






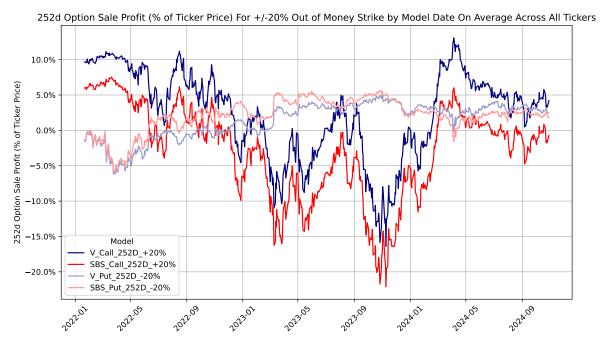
252d Horizon, +/- 10% Out of Money

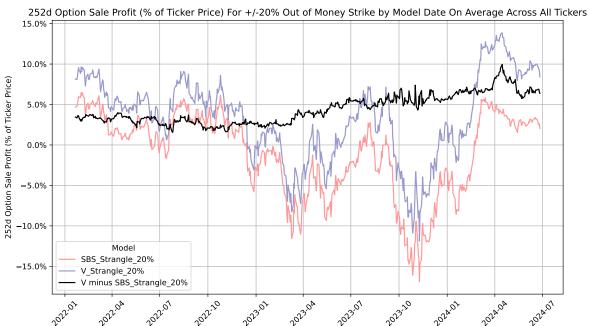






252d Horizon, +/- 20% Out of Money







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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
1.0	AMC	6.59%	AMC	5.85%
1.0	LUMN	5.84%	GME	1.36%
1.0	IEP	5.19%	CYH	1.28%
1.0	ELAN	2.52%	LUMN	1.0%
1.0	CYH	2.15%	IEP	0.77%
1.0	NWL	2.12%	BHC	0.63%
1.0	TSLA	1.72%	UAA	0.53%
1.0	CZR	1.65%	GBTC	0.4%
1.0	BHC	1.61%	NWL	0.39%
1.0	CCL	1.58%	CTLT	0.39%
1.0	VNO	1.35%	GT	0.38%
1.0	Т	1.33%	LNC	0.36%
1.0	GT	1.24%	VFC	0.35%
1.0	MSFT	1.09%	AAP	0.32%
1.0	MOS	0.96%	CZR	0.26%
1.0	GBTC	0.91%	ELAN	0.23%
1.0	UAA	0.89%	GNRC	0.22%
1.0	BXP	0.86%	FIS	0.21%
1.0	Х	0.81%	CCL	0.2%
1.0	AZO	0.79%	BIIB	0.19%
1.0	QQQ	0.79%	LW	0.18%
1.0	GNRC	0.78%	AA	0.18%
1.0	LNC	0.71%	CLF	0.17%
1.0	NVDA	0.68%	PRGO	0.16%
1.0	WRK	0.59%	KEY	0.15%
1.0	ETRN	0.58%	MOS	0.15%
1.0	BIIB	0.54%	ETRN	0.15%
1.0	GE	0.52%	CNC	0.15%
1.0	AMAT	0.49%	CMA	0.15%
1.0	PCG	0.48%	SBNY	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	5.92%	AMC	4.14%
1.0	LUMN	4.45%	СҮН	0.4%
1.0	IEP	3.58%	LUMN	0.3%
1.0	ELAN	1.41%	GME	0.26%
1.0	CYH	1.36%	GBTC	0.19%
1.0	TSLA	1.31%	BHC	0.06%
1.0	NWL	1.17%	CCL	0.04%
1.0	CZR	1.01%	IEP	0.03%
1.0	CCL	0.99%	LNC	0.01%
1.0	BHC	0.91%	CNC	0.01%
1.0	GNRC	0.75%	SBNY	0.01%
1.0	GBTC	0.63%	AA	0.0%
1.0	GT	0.62%	MOS	0.0%
1.0	VNO	0.47%	FIS	0.0%
1.0	NVDA	0.42%	WRK	0.0%
1.0	UAA	0.38%	FITB	0.0%
1.0	Т	0.38%	USB	0.0%
1.0	X	0.36%	T	0.0%
1.0	MOS	0.35%	TRGP	0.0%
1.0	MSFT	0.34%	PCG	0.0%
1.0	LNC	0.33%	HLT	0.0%
1.0	ВХР	0.28%	TDG	0.0%
1.0	ETRN	0.27%	GSK	0.0%
1.0	AZO	0.25%	BAC	0.0%
1.0	ON	0.19%	IRM	0.0%
1.0	AMAT	0.17%	В	0.0%
1.0	MSTR	0.17%	HSBC	0.0%
1.0	WRK	0.16%	BUD	0.0%
1.0	INTC	0.15%	SLV	0.0%
1.0	THC	0.15%	MOX	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	4.99%	AMC	2.66%
1.0	LUMN	3.26%	CYH	0.07%
1.0	IEP	2.51%	LUMN	0.05%
1.0	ELAN	0.77%	GBTC	0.03%
1.0	CYH	0.7%	BHC	0.01%
1.0	TSLA	0.68%	CCL	0.0%
1.0	NWL	0.62%	LNC	0.0%
1.0	CZR	0.59%	SIVBQ	0.0%
1.0	CCL	0.56%	CTLT	0.0%
1.0	GNRC	0.46%	CZR	0.0%
1.0	BHC	0.44%	CNC	0.0%
1.0	GT	0.3%	GNRC	0.0%
1.0	GBTC	0.28%	AA	0.0%
1.0	ETRN	0.17%	NFLX	0.0%
1.0	Х	0.16%	ZION	0.0%
1.0	NVDA	0.15%	KEY	0.0%
1.0	VNO	0.14%	CSTM	0.0%
1.0	MSTR	0.13%	THC	0.0%
1.0	UAA	0.12%	CMA	0.0%
1.0	MOS	0.12%	WDC	0.0%
1.0	LNC	0.11%	VST	0.0%
1.0	MSFT	0.1%	VNO	0.0%
1.0	T	0.09%	SBNY	0.0%
1.0	THC	0.09%	MU	0.0%
1.0	AZO	0.06%	WYNN	0.0%
1.0	TEVA	0.05%	FCX	0.0%
1.0	AMAT	0.05%	EXPE	0.0%
1.0	BXP	0.05%	LVS	0.0%
1.0	FCX	0.04%	FIS	0.0%
1.0	CLF	0.03%	LW	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	18.64%	AMC	16.91%
10.0	LUMN	13.31%	GME	3.47%
10.0	IEP	9.72%	IEP	2.63%
10.0	CYH	6.03%	CYH	2.61%
10.0	NWL	5.95%	LUMN	2.56%
10.0	CZR	5.09%	UAA	2.12%
10.0	ELAN	4.91%	SBNY	1.9%
10.0	CCL	3.15%	NWL	1.57%
10.0	GT	3.14%	VFC	1.56%
10.0	BHC	3.04%	CZR	1.52%
10.0	Т	2.87%	BHC	1.4%
10.0	MSFT	2.49%	GT	1.39%
10.0	TSLA	2.13%	LNC	1.31%
10.0	UAA	2.02%	AAP	1.04%
10.0	MOS	1.99%	CTLT	1.01%
10.0	VNO	1.99%	SIVBQ	0.85%
10.0	QQQ	1.91%	BIIB	0.84%
10.0	GBTC	1.82%	FIS	0.78%
10.0	LNC	1.64%	AA	0.76%
10.0	PCG	1.6%	GBTC	0.67%
10.0	ВХР	1.5%	BALL	0.66%
10.0	AZO	1.19%	CMCSA	0.62%
10.0	EMB	1.17%	FRCB	0.62%
10.0	BIIB	1.17%	CNC	0.6%
10.0	AMAT	0.97%	PRGO	0.58%
10.0	UNH	0.93%	NAVI	0.57%
10.0	X	0.87%	BBY	0.56%
10.0	BBY	0.84%	KEY	0.54%
10.0	CSCO	0.84%	GNRC	0.54%
10.0	ON	0.82%	CMA	0.52%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	18.14%	AMC	16.35%
10.0	LUMN	12.11%	GME	2.81%
10.0	IEP	8.2%	СҮН	2.75%
10.0	CYH	6.16%	LUMN	1.95%
10.0	NWL	5.29%	IEP	1.64%
10.0	CZR	4.61%	UAA	1.39%
10.0	ELAN	4.33%	LNC	1.07%
10.0	CCL	3.5%	GBTC	1.04%
10.0	BHC	2.73%	NWL	1.02%
10.0	TSLA	2.68%	CZR	1.01%
10.0	GT	2.54%	BHC	0.99%
10.0	GBTC	2.21%	VFC	0.98%
10.0	LNC	1.86%	SBNY	0.96%
10.0	MSFT	1.86%	GT	0.82%
10.0	UAA	1.84%	AA	0.66%
10.0	VNO	1.8%	CTLT	0.56%
10.0	Т	1.78%	GNRC	0.46%
10.0	PCG	1.63%	SIVBQ	0.42%
10.0	GNRC	1.6%	AAP	0.41%
10.0	MOS	1.59%	CMA	0.39%
10.0	NVDA	1.44%	KEY	0.38%
10.0	ВХР	1.37%	FIS	0.36%
10.0	AMAT	1.21%	ON	0.36%
10.0	QQQ	1.18%	ZION	0.35%
10.0	AZO	1.03%	CSTM	0.34%
10.0	ON	0.99%	CLF	0.3%
10.0	Х	0.9%	FRCB	0.3%
10.0	CDNS	0.85%	CCL	0.3%
10.0	SIVBQ	0.77%	LW	0.27%
10.0	WRK	0.75%	TFC	0.27%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
10.0	AMC	17.42%	AMC	15.0%
10.0	LUMN	10.61%	СҮН	2.09%
10.0	IEP	6.43%	GME	1.75%
10.0	CYH	5.56%	LUMN	1.23%
10.0	NWL	4.0%	GBTC	0.95%
10.0	CZR	3.52%	IEP	0.76%
10.0	ELAN	3.31%	BHC	0.59%
10.0	CCL	3.15%	UAA	0.58%
10.0	TSLA	2.55%	VFC	0.44%
10.0	BHC	2.16%	CCL	0.4%
10.0	GBTC	1.92%	CZR	0.4%
10.0	GT	1.62%	LNC	0.4%
10.0	GNRC	1.59%	NWL	0.4%
10.0	NVDA	1.31%	GT	0.3%
10.0	UAA	1.21%	AA	0.28%
10.0	PCG	1.17%	SBNY	0.26%
10.0	LNC	1.11%	CTLT	0.23%
10.0	VNO	1.05%	GNRC	0.22%
10.0	MSFT	0.87%	SIVBQ	0.21%
10.0	MOS	0.78%	CLF	0.18%
10.0	CLF	0.78%	ON	0.14%
10.0	Т	0.78%	KEY	0.12%
10.0	SIVBQ	0.76%	CNC	0.12%
10.0	AMAT	0.76%	CMA	0.12%
10.0	Х	0.72%	NFLX	0.1%
10.0	ВХР	0.68%	CSTM	0.1%
10.0	CDNS	0.64%	ZION	0.09%
10.0	AMD	0.63%	LW	0.07%
10.0	ON	0.61%	FCX	0.07%
10.0	INTC	0.42%	FIS	0.06%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	26.3%	AMC	26.77%
21.0	LUMN	17.36%	GME	5.53%
21.0	IEP	13.12%	CYH	4.67%
21.0	NWL	8.18%	IEP	4.35%
21.0	CZR	7.95%	SBNY	4.33%
21.0	CYH	6.6%	LUMN	3.4%
21.0	GT	6.21%	UAA	3.15%
21.0	ELAN	6.0%	VFC	2.88%
21.0	BHC	5.12%	GT	2.64%
21.0	Т	3.75%	BHC	2.55%
21.0	CCL	3.74%	NWL	2.51%
21.0	LNC	3.67%	CZR	2.48%
21.0	UAA	3.45%	SIVBQ	2.42%
21.0	MSFT	3.27%	LNC	2.2%
21.0	MOS	2.79%	AAP	1.44%
21.0	QQQ	2.57%	FRCB	1.34%
21.0	VNO	2.57%	BIIB	1.26%
21.0	TSLA	2.29%	AA	1.2%
21.0	BXP	1.94%	FIS	1.2%
21.0	PCG	1.91%	BALL	1.15%
21.0	EMB	1.86%	PRGO	1.13%
21.0	SIVBQ	1.8%	CTLT	1.11%
21.0	AMAT	1.8%	NAVI	1.05%
21.0	BIIB	1.75%	CMCSA	1.01%
21.0	ON	1.75%	CNC	0.98%
21.0	GBTC	1.75%	ZION	0.88%
21.0	AZO	1.73%	KEY	0.87%
21.0	FSUGY	1.71%	BBY	0.79%
21.0	BBY	1.6%	ON	0.78%
21.0	INTC	1.26%	BHP	0.77%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	25.68%	AMC	26.76%
21.0	LUMN	15.98%	GME	5.34%
21.0	IEP	11.57%	СҮН	5.16%
21.0	NWL	7.37%	IEP	3.37%
21.0	CZR	7.17%	LUMN	2.88%
21.0	CYH	6.94%	SBNY	2.5%
21.0	ELAN	5.75%	UAA	2.45%
21.0	GT	5.33%	BHC	2.39%
21.0	BHC	4.86%	VFC	2.31%
21.0	CCL	4.15%	GT	1.94%
21.0	LNC	3.68%	LNC	1.93%
21.0	UAA	3.15%	NWL	1.86%
21.0	Т	2.94%	CZR	1.82%
21.0	MSFT	2.93%	AA	1.21%
21.0	TSLA	2.69%	SIVBQ	1.0%
21.0	VNO	2.65%	FIS	0.98%
21.0	PCG	2.37%	CTLT	0.93%
21.0	QQQ	2.34%	AAP	0.91%
21.0	GBTC	2.22%	CSTM	0.8%
21.0	MOS	2.21%	GNRC	0.76%
21.0	AMAT	2.01%	CMA	0.74%
21.0	GNRC	2.01%	KEY	0.73%
21.0	ВХР	1.9%	FRCB	0.64%
21.0	AZO	1.89%	ON	0.61%
21.0	ON	1.7%	CNC	0.61%
21.0	FSUGY	1.68%	BALL	0.61%
21.0	INTC	1.33%	WRK	0.61%
21.0	CDNS	1.29%	ZION	0.59%
21.0	BBY	1.28%	LW	0.58%
21.0	AMZN	1.25%	PRGO	0.57%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	24.95%	AMC	25.97%
21.0	LUMN	14.4%	СҮН	5.01%
21.0	IEP	9.49%	GME	4.57%
21.0	CYH	6.96%	IEP	2.21%
21.0	NWL	6.22%	LUMN	2.15%
21.0	CZR	6.01%	BHC	2.08%
21.0	ELAN	5.11%	UAA	1.64%
21.0	BHC	4.42%	VFC	1.4%
21.0	CCL	4.38%	NWL	1.27%
21.0	GT	3.92%	LNC	1.23%
21.0	LNC	2.93%	CZR	1.11%
21.0	TSLA	2.91%	SBNY	1.1%
21.0	UAA	2.65%	GT	1.08%
21.0	GNRC	2.55%	AA	1.0%
21.0	GBTC	2.39%	GNRC	0.82%
21.0	VNO	2.21%	GBTC	0.8%
21.0	PCG	1.84%	CTLT	0.58%
21.0	AMAT	1.68%	KEY	0.43%
21.0	MSFT	1.66%	CMA	0.42%
21.0	Т	1.59%	ON	0.37%
21.0	MOS	1.46%	SIVBQ	0.35%
21.0	ВХР	1.34%	FIS	0.35%
21.0	ON	1.28%	CSTM	0.31%
21.0	Х	1.19%	ZION	0.31%
21.0	FSUGY	1.16%	NFLX	0.29%
21.0	NVDA	1.16%	LW	0.28%
21.0	QQQ	1.07%	CNC	0.28%
21.0	CDNS	1.05%	CLF	0.26%
21.0	AZO	0.99%	WRK	0.23%
21.0	INTC	0.96%	TFC	0.23%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	51.93%	AMC	46.7%
63.0	LUMN	26.93%	GME	12.89%
63.0	IEP	25.08%	IEP	11.56%
63.0	CZR	18.73%	SBNY	10.67%
63.0	NWL	16.42%	CYH	8.1%
63.0	CYH	14.34%	CZR	7.68%
63.0	GT	13.52%	SIVBQ	7.23%
63.0	BHC	11.53%	NWL	6.68%
63.0	MOS	8.92%	UAA	6.23%
63.0	ELAN	8.85%	BHC	6.12%
63.0	UAA	8.42%	GT	5.67%
63.0	SIVBQ	8.39%	VFC	5.67%
63.0	CCL	8.08%	FRCB	4.66%
63.0	LNC	7.52%	LNC	4.6%
63.0	ON	6.84%	AA	4.4%
63.0	Т	5.9%	PRGO	4.27%
63.0	SBNY	5.88%	MOS	4.21%
63.0	BBY	4.94%	LUMN	4.17%
63.0	INTC	4.86%	NAVI	3.55%
63.0	FSUGY	4.82%	CNC	3.45%
63.0	AMAT	4.81%	BHP	2.78%
63.0	BHP	4.68%	BIIB	2.72%
63.0	VNO	4.67%	FIS	2.63%
63.0	TSLA	4.5%	ON	2.61%
63.0	MSFT	4.48%	BALL	2.56%
63.0	UNH	4.38%	OXY	2.55%
63.0	QQQ	4.25%	BBY	2.42%
63.0	PRGO	4.23%	CMCSA	2.4%
63.0	ADBE	4.23%	CLF	2.26%
63.0	CNC	3.84%	ZTS	2.23%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	49.85%	AMC	46.48%
63.0	LUMN	24.85%	GME	13.12%
63.0	IEP	21.99%	IEP	9.12%
63.0	CZR	17.22%	CYH	8.31%
63.0	NWL	15.0%	SBNY	7.36%
63.0	CYH	13.51%	CZR	6.55%
63.0	GT	12.74%	BHC	6.08%
63.0	BHC	10.78%	NWL	5.73%
63.0	ELAN	8.48%	UAA	5.38%
63.0	CCL	8.28%	GT	5.33%
63.0	LNC	7.67%	VFC	4.95%
63.0	UAA	7.39%	SIVBQ	4.92%
63.0	MOS	7.22%	LNC	4.75%
63.0	ON	6.67%	AA	4.02%
63.0	SIVBQ	6.29%	LUMN	3.61%
63.0	Т	6.22%	PRGO	2.98%
63.0	AMAT	5.32%	FRCB	2.81%
63.0	QQQ	5.26%	MOS	2.71%
63.0	TSLA	5.06%	FIS	2.62%
63.0	MSFT	4.88%	ON	2.62%
63.0	BBY	4.76%	NAVI	2.51%
63.0	INTC	4.57%	CNC	2.46%
63.0	PCG	4.42%	BBY	2.42%
63.0	FSUGY	4.27%	KEY	2.22%
63.0	VNO	4.27%	GNRC	2.07%
63.0	ADBE	3.8%	CSTM	2.05%
63.0	UNH	3.79%	CLF	2.01%
63.0	AZO	3.72%	BALL	1.98%
63.0	BHP	3.58%	TFC	1.95%
63.0	MS	3.44%	BIIB	1.84%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	47.7%	AMC	45.64%
63.0	LUMN	23.26%	GME	12.75%
63.0	IEP	18.74%	CYH	8.5%
63.0	CZR	15.26%	IEP	6.98%
63.0	NWL	13.24%	BHC	5.92%
63.0	CYH	13.18%	CZR	5.15%
63.0	GT	11.23%	SBNY	4.72%
63.0	BHC	10.11%	NWL	4.64%
63.0	CCL	8.76%	UAA	4.48%
63.0	ELAN	7.96%	GT	4.44%
63.0	LNC	7.08%	LNC	4.27%
63.0	UAA	6.6%	VFC	4.21%
63.0	ON	5.89%	AA	3.66%
63.0	TSLA	5.76%	SIVBQ	3.39%
63.0	MOS	5.47%	LUMN	3.14%
63.0	AMAT	5.25%	GNRC	2.39%
63.0	SIVBQ	5.2%	ON	2.2%
63.0	Т	5.11%	FIS	1.98%
63.0	MSFT	4.27%	KEY	1.92%
63.0	PCG	4.1%	CLF	1.9%
63.0	VNO	3.99%	CSTM	1.89%
63.0	QQQ	3.99%	BBY	1.66%
63.0	INTC	3.84%	CMA	1.62%
63.0	GNRC	3.71%	FRCB	1.6%
63.0	FSUGY	3.57%	NAVI	1.57%
63.0	BBY	3.54%	PRGO	1.49%
63.0	Х	3.47%	ZION	1.48%
63.0	MS	3.45%	MOS	1.46%
63.0	AMZN	3.4%	WRK	1.43%
63.0	ADBE	3.12%	BALL	1.34%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	89.83%	AMC	62.11%
126.0	LUMN	36.9%	GME	21.73%
126.0	IEP	33.18%	IEP	17.24%
126.0	CZR	29.84%	SIVBQ	15.97%
126.0	NWL	27.02%	SBNY	15.68%
126.0	BHC	25.19%	CYH	15.59%
126.0	CYH	23.38%	BHC	15.16%
126.0	GT	23.29%	CZR	13.98%
126.0	SIVBQ	19.61%	NWL	12.86%
126.0	UAA	16.44%	UAA	11.98%
126.0	MOS	15.46%	GT	11.18%
126.0	ELAN	13.37%	FRCB	10.52%
126.0	CCL	12.59%	AA	10.08%
126.0	LNC	12.57%	CTLT	8.85%
126.0	CLF	12.0%	LNC	8.54%
126.0	ON	10.78%	VFC	8.53%
126.0	BBY	10.34%	PRGO	8.42%
126.0	FSUGY	9.93%	CLF	8.3%
126.0	FRCB	9.76%	MOS	7.92%
126.0	SBNY	9.68%	NAVI	7.63%
126.0	AA	9.54%	AAP	6.69%
126.0	UNH	9.49%	CNC	6.1%
126.0	PRGO	8.93%	OXY	6.05%
126.0	INTC	8.49%	BHP	5.75%
126.0	BHP	8.3%	BALL	5.52%
126.0	VFC	8.29%	KALU	5.4%
126.0	TSLA	8.27%	JAZZ	5.29%
126.0	ADBE	7.74%	GNRC	5.16%
126.0	INTU	7.18%	BBY	4.96%
126.0	VNO	7.1%	ON	4.85%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	87.18%	AMC	62.18%
126.0	LUMN	34.12%	GME	22.76%
126.0	IEP	29.52%	CYH	16.44%
126.0	CZR	27.84%	BHC	15.2%
126.0	NWL	24.18%	IEP	14.28%
126.0	BHC	24.06%	SIVBQ	12.54%
126.0	CYH	22.56%	CZR	12.53%
126.0	GT	22.22%	SBNY	12.24%
126.0	SIVBQ	16.03%	UAA	11.31%
126.0	UAA	15.13%	GT	10.83%
126.0	CCL	13.87%	NWL	10.61%
126.0	MOS	13.64%	AA	9.49%
126.0	LNC	13.0%	LNC	9.22%
126.0	ELAN	12.59%	CTLT	9.02%
126.0	ON	11.29%	CLF	7.82%
126.0	CLF	11.23%	FRCB	7.01%
126.0	BBY	9.89%	VFC	6.9%
126.0	FSUGY	9.59%	NAVI	6.47%
126.0	TSLA	8.7%	MOS	6.39%
126.0	UNH	8.68%	PRGO	6.31%
126.0	AA	8.54%	ON	5.56%
126.0	INTU	8.37%	GNRC	5.48%
126.0	INTC	8.26%	AAP	5.3%
126.0	PCG	7.55%	BBY	4.83%
126.0	QQQ	7.47%	KALU	4.7%
126.0	VNO	7.43%	OXY	4.63%
126.0	BHP	7.07%	CNC	4.62%
126.0	MS	7.06%	CMA	4.6%
126.0	PRGO	7.05%	BHP	4.48%
126.0	T	6.98%	BALL	4.19%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	84.52%	AMC	61.75%
126.0	LUMN	31.98%	GME	23.41%
126.0	IEP	25.77%	CYH	16.82%
126.0	CZR	25.17%	BHC	14.51%
126.0	BHC	22.52%	IEP	11.72%
126.0	CYH	21.84%	CZR	10.48%
126.0	NWL	21.3%	UAA	10.39%
126.0	GT	20.34%	GT	9.73%
126.0	CCL	15.06%	SIVBQ	9.56%
126.0	UAA	13.9%	SBNY	9.25%
126.0	SIVBQ	13.1%	LNC	8.63%
126.0	LNC	12.19%	NWL	8.39%
126.0	ELAN	12.18%	AA	8.36%
126.0	MOS	11.9%	CTLT	8.08%
126.0	ON	11.03%	CLF	6.98%
126.0	CLF	10.11%	GNRC	5.87%
126.0	FSUGY	9.25%	ON	5.65%
126.0	TSLA	8.9%	VFC	5.63%
126.0	INTU	8.87%	MOS	5.11%
126.0	BBY	8.52%	CMA	4.47%
126.0	VNO	7.87%	NAVI	4.47%
126.0	INTC	7.8%	FRCB	4.33%
126.0	PCG	7.69%	ZION	4.33%
126.0	T	7.5%	AAP	4.31%
126.0	QQQ	7.46%	BBY	4.15%
126.0	MS	7.45%	PRGO	3.98%
126.0	MSFT	7.35%	KALU	3.79%
126.0	AA	7.29%	LUMN	3.55%
126.0	AMAT	6.66%	KEY	3.51%
126.0	AMZN	6.62%	TFC	3.33%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	AMC	140.44%	AMC	74.92%
252.0	LUMN	67.55%	CYH	36.74%
252.0	CYH	52.69%	GME	29.71%
252.0	CZR	47.32%	BHC	26.32%
252.0	NWL	45.29%	UAA	24.21%
252.0	BHC	44.71%	SIVBQ	23.11%
252.0	IEP	39.4%	SBNY	22.76%
252.0	GT	37.12%	IEP	22.63%
252.0	UAA	35.15%	CZR	22.34%
252.0	SIVBQ	31.04%	NWL	20.64%
252.0	CLF	30.36%	CLF	19.78%
252.0	ELAN	29.4%	VFC	19.09%
252.0	MOS	27.8%	GT	19.06%
252.0	VFC	25.78%	AAP	17.91%
252.0	FSUGY	21.96%	AA	17.59%
252.0	BBY	20.75%	MOS	15.71%
252.0	AA	19.23%	FRCB	15.52%
252.0	TSLA	18.92%	PRGO	14.6%
252.0	FRCB	18.85%	OXY	12.73%
252.0	UNH	18.6%	BHP	12.59%
252.0	SBNY	18.13%	NAVI	12.08%
252.0	CCL	17.98%	KALU	11.83%
252.0	LNC	17.45%	RIO	11.16%
252.0	AAP	17.22%	GNRC	10.91%
252.0	INTC	16.55%	CNC	10.63%
252.0	BHP	15.61%	JAZZ	10.49%
252.0	PRGO	15.34%	LUMN	10.18%
252.0	ON	15.1%	CTLT	10.12%
252.0	INTU	14.13%	BBY	9.78%
252.0	BA	13.59%	KHC	9.44%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	AMC	136.44%	AMC	73.87%
252.0	LUMN	65.14%	CYH	37.08%
252.0	CYH	50.45%	GME	31.17%
252.0	CZR	44.55%	BHC	26.35%
252.0	BHC	42.87%	UAA	22.35%
252.0	NWL	42.03%	CZR	20.48%
252.0	GT	35.52%	SIVBQ	19.82%
252.0	IEP	35.5%	SBNY	19.46%
252.0	UAA	31.99%	IEP	19.38%
252.0	ELAN	29.51%	GT	18.49%
252.0	CLF	28.48%	CLF	18.48%
252.0	SIVBQ	27.28%	NWL	18.36%
252.0	MOS	25.85%	VFC	17.54%
252.0	VFC	23.65%	AA	16.94%
252.0	FSUGY	21.75%	AAP	15.19%
252.0	CCL	20.35%	MOS	14.21%
252.0	BBY	19.78%	GNRC	12.2%
252.0	TSLA	19.58%	FRCB	11.94%
252.0	LNC	18.57%	KALU	11.57%
252.0	AA	17.88%	PRGO	11.31%
252.0	UNH	17.1%	LUMN	11.22%
252.0	INTU	16.71%	LNC	10.88%
252.0	INTC	15.55%	OXY	10.69%
252.0	FRCB	15.39%	NAVI	10.66%
252.0	PCG	15.08%	BHP	10.56%
252.0	SBNY	14.59%	CTLT	10.42%
252.0	ON	14.49%	RIO	9.63%
252.0	AAP	14.31%	FSUGY	9.35%
252.0	BA	14.04%	BBY	9.22%
252.0	BHP	13.52%	CNC	8.58%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	AMC	132.39%	AMC	72.76%
252.0	LUMN	64.46%	CYH	36.92%
252.0	CYH	48.51%	GME	32.26%
252.0	CZR	41.53%	BHC	25.58%
252.0	BHC	40.8%	UAA	20.22%
252.0	NWL	38.92%	CZR	18.35%
252.0	GT	33.6%	GT	17.46%
252.0	IEP	31.67%	SIVBQ	16.73%
252.0	ELAN	29.34%	CLF	16.63%
252.0	UAA	29.03%	IEP	16.62%
252.0	CLF	26.08%	SBNY	16.35%
252.0	CCL	23.98%	NWL	16.13%
252.0	SIVBQ	23.75%	AA	15.93%
252.0	MOS	23.68%	VFC	15.82%
252.0	VFC	21.51%	GNRC	13.06%
252.0	FSUGY	20.74%	AAP	12.83%
252.0	TSLA	20.27%	MOS	12.62%
252.0	LNC	19.47%	LUMN	12.53%
252.0	INTU	18.58%	LNC	12.32%
252.0	BBY	17.62%	CTLT	11.17%
252.0	AA	16.26%	KALU	10.53%
252.0	PCG	15.68%	FSUGY	8.89%
252.0	INTC	14.53%	FRCB	8.84%
252.0	ON	14.08%	NAVI	8.63%
252.0	UNH	13.99%	CMA	8.28%
252.0	BA	13.95%	PRGO	8.24%
252.0	VNO	13.94%	OXY	8.08%
252.0	FRCB	12.56%	BHP	7.94%
252.0	AAP	11.97%	BBY	7.92%
252.0	GME	11.73%	FCX	7.64%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	4.72%	AMC	5.69%
1.0	LUMN	2.0%	GME	1.53%
1.0	GBTC	1.92%	СҮН	1.27%
1.0	CYH	1.67%	LUMN	1.04%
1.0	AMAT	1.49%	IEP	0.62%
1.0	CZR	1.46%	BHC	0.6%
1.0	CCL	1.23%	GBTC	0.55%
1.0	NVDA	1.21%	UAA	0.43%
1.0	PHM	1.08%	CTLT	0.35%
1.0	VNO	1.05%	GT	0.32%
1.0	GT	0.9%	LNC	0.3%
1.0	PCG	0.87%	NWL	0.29%
1.0	IEP	0.86%	ELAN	0.27%
1.0	MS	0.81%	VFC	0.26%
1.0	MSFT	0.81%	CCL	0.25%
1.0	ELAN	0.8%	MSTR	0.23%
1.0	THC	0.8%	NFLX	0.23%
1.0	PWR	0.76%	AAP	0.21%
1.0	AVGO	0.75%	GNRC	0.2%
1.0	TRGP	0.71%	X	0.2%
1.0	ETRN	0.71%	ETRN	0.19%
1.0	MOS	0.61%	CLF	0.19%
1.0	QQQ	0.61%	BIIB	0.19%
1.0	VST	0.6%	CZR	0.19%
1.0	X	0.59%	AA	0.19%
1.0	LNC	0.59%	META	0.18%
1.0	NWL	0.58%	EXPE	0.16%
1.0	TEVA	0.57%	LW	0.16%
1.0	CPRT	0.53%	FIS	0.15%
1.0	GE	0.52%	KEY	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	4.27%	AMC	3.6%
1.0	LUMN	1.3%	GME	0.33%
1.0	GBTC	1.08%	СҮН	0.27%
1.0	CYH	0.95%	LUMN	0.23%
1.0	CCL	0.79%	GBTC	0.12%
1.0	CZR	0.66%	CCL	0.01%
1.0	NVDA	0.47%	BHC	0.0%
1.0	VNO	0.44%	FSUGY	0.0%
1.0	GT	0.41%	BIIB	0.0%
1.0	PCG	0.39%	QCOM	0.0%
1.0	IEP	0.36%	INTU	0.0%
1.0	NWL	0.34%	PHM	0.0%
1.0	TSLA	0.33%	LEN	0.0%
1.0	AMAT	0.33%	DHI	0.0%
1.0	ELAN	0.28%	BXP	0.0%
1.0	LNC	0.28%	BHP	0.0%
1.0	BHC	0.24%	RIO	0.0%
1.0	MSFT	0.2%	GOOGL	0.0%
1.0	ETRN	0.2%	HLT	0.0%
1.0	VST	0.19%	WFC	0.0%
1.0	AVGO	0.18%	JAZZ	0.0%
1.0	PHM	0.18%	IRM	0.0%
1.0	PWR	0.18%	В	0.0%
1.0	MU	0.18%	AAPL	0.0%
1.0	GNRC	0.15%	HSBC	0.0%
1.0	DHI	0.15%	MSFT	0.0%
1.0	TEVA	0.14%	MS	0.0%
1.0	TRGP	0.14%	SLV	0.0%
1.0	LVS	0.14%	GS	0.0%
1.0	THC	0.13%	BMY	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	3.26%	AMC	1.75%
1.0	LUMN	0.79%	LUMN	0.01%
1.0	CCL	0.51%	GBTC	0.01%
1.0	GBTC	0.44%	CLF	0.0%
1.0	CYH	0.39%	CZR	0.0%
1.0	PCG	0.26%	NVDA	0.0%
1.0	VNO	0.18%	AA	0.0%
1.0	NWL	0.18%	TSLA	0.0%
1.0	GT	0.16%	AMD	0.0%
1.0	IEP	0.16%	X	0.0%
1.0	BHC	0.14%	VNO	0.0%
1.0	CZR	0.14%	ETRN	0.0%
1.0	NVDA	0.12%	MU	0.0%
1.0	TSLA	0.11%	WYNN	0.0%
1.0	LNC	0.11%	FCX	0.0%
1.0	ELAN	0.1%	LVS	0.0%
1.0	MU	0.08%	EXPE	0.0%
1.0	VST	0.07%	MOS	0.0%
1.0	ETRN	0.07%	KALU	0.0%
1.0	LVS	0.07%	AVGO	0.0%
1.0	AMAT	0.06%	FSUGY	0.0%
1.0	CPRT	0.05%	AMAT	0.0%
1.0	DHI	0.05%	TEVA	0.0%
1.0	TEVA	0.05%	TFC	0.0%
1.0	TRGP	0.05%	BIIB	0.0%
1.0	LEN	0.04%	AMZN	0.0%
1.0	PWR	0.04%	BA	0.0%
1.0	GNRC	0.04%	NAVI	0.0%
1.0	MSFT	0.04%	BBY	0.0%
1.0	ADBE	0.04%	BALL	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	6.43%	AMC	15.26%
10.0	GBTC	5.28%	GME	4.95%
10.0	LUMN	4.21%	LUMN	2.7%
10.0	CYH	3.9%	GBTC	2.42%
10.0	PHM	2.79%	CYH	2.27%
10.0	AMAT	2.78%	MSTR	1.51%
10.0	NVDA	2.65%	В	1.11%
10.0	CCL	2.39%	IEP	1.03%
10.0	VNO	2.28%	UAA	1.02%
10.0	PWR	2.23%	BHC	0.88%
10.0	PCG	2.16%	NFLX	0.88%
10.0	TRGP	1.97%	LNC	0.86%
10.0	MSFT	1.94%	NVDA	0.77%
10.0	GT	1.87%	AVGO	0.76%
10.0	THC	1.72%	META	0.73%
10.0	AVGO	1.72%	ETRN	0.69%
10.0	CPRT	1.63%	CTLT	0.69%
10.0	IEP	1.63%	Х	0.66%
10.0	ACGL	1.58%	CCL	0.66%
10.0	CSCO	1.51%	AA	0.66%
10.0	ETRN	1.5%	PWR	0.66%
10.0	MNST	1.48%	VST	0.63%
10.0	Х	1.44%	GE	0.61%
10.0	MS	1.42%	GT	0.6%
10.0	LNC	1.36%	THC	0.6%
10.0	QQQ	1.35%	ON	0.55%
10.0	VST	1.31%	CZR	0.52%
10.0	DHI	1.29%	BIIB	0.52%
10.0	LEN	1.26%	PHM	0.49%
10.0	CZR	1.25%	CSTM	0.47%



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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	7.36%	AMC	13.97%
10.0	LUMN	4.5%	GME	4.17%
10.0	GBTC	4.28%	LUMN	2.49%
10.0	CYH	3.87%	CYH	1.83%
10.0	CCL	2.45%	GBTC	1.53%
10.0	AMAT	1.96%	MSTR	0.76%
10.0	VNO	1.95%	UAA	0.57%
10.0	GT	1.89%	IEP	0.57%
10.0	NVDA	1.8%	BHC	0.52%
10.0	PHM	1.65%	CCL	0.38%
10.0	IEP	1.62%	VFC	0.3%
10.0	PWR	1.27%	CZR	0.25%
10.0	CZR	1.24%	AA	0.23%
10.0	PCG	1.22%	GT	0.22%
10.0	MSFT	1.18%	LNC	0.2%
10.0	LNC	1.14%	AMD	0.19%
10.0	THC	1.12%	BIIB	0.19%
10.0	ETRN	1.1%	ETRN	0.17%
10.0	CPRT	1.01%	ON	0.17%
10.0	MU	0.99%	NWL	0.16%
10.0	NWL	0.96%	NFLX	0.15%
10.0	AVGO	0.95%	GNRC	0.15%
10.0	Х	0.94%	WYNN	0.14%
10.0	FSUGY	0.92%	ELAN	0.14%
10.0	TRGP	0.9%	MOS	0.13%
10.0	ACGL	0.89%	NVDA	0.12%
10.0	MOS	0.89%	QCOM	0.12%
10.0	DHI	0.84%	AVGO	0.12%
10.0	LEN	0.84%	THC	0.12%
10.0	ELAN	0.82%	CLF	0.11%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	AMC	7.32%	AMC	11.12%
10.0	LUMN	4.01%	GME	2.35%
10.0	CYH	3.43%	LUMN	1.62%
10.0	GBTC	2.64%	CYH	1.08%
10.0	CCL	2.02%	GBTC	0.71%
10.0	GT	1.31%	CCL	0.13%
10.0	IEP	1.24%	UAA	0.12%
10.0	VNO	1.17%	MSTR	0.1%
10.0	NVDA	0.96%	BHC	0.07%
10.0	AMAT	0.93%	NVDA	0.06%
10.0	PCG	0.86%	IEP	0.06%
10.0	NWL	0.86%	CLF	0.05%
10.0	LNC	0.78%	AA	0.04%
10.0	CZR	0.69%	ELAN	0.04%
10.0	PHM	0.62%	CZR	0.03%
10.0	MU	0.58%	AMD	0.02%
10.0	PWR	0.57%	NWL	0.02%
10.0	Х	0.56%	MOS	0.02%
10.0	THC	0.56%	AMAT	0.01%
10.0	ETRN	0.54%	BIIB	0.01%
10.0	TSLA	0.5%	GNRC	0.01%
10.0	CPRT	0.46%	AVGO	0.01%
10.0	VST	0.45%	WYNN	0.01%
10.0	ELAN	0.45%	NAVI	0.0%
10.0	FSUGY	0.45%	FSUGY	0.0%
10.0	MOS	0.43%	QCOM	0.0%
10.0	AMD	0.42%	LEN	0.0%
10.0	ON	0.42%	TSLA	0.0%
10.0	ADBE	0.42%	PHM	0.0%
10.0	UAA	0.39%	INTU	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	9.34%	AMC	22.81%
21.0	GBTC	5.96%	GME	7.69%
21.0	LUMN	4.96%	CYH	3.88%
21.0	CYH	4.72%	GBTC	3.62%
21.0	PHM	4.23%	LUMN	3.61%
21.0	NVDA	4.18%	MSTR	2.62%
21.0	AMAT	3.59%	В	2.34%
21.0	PWR	3.37%	NFLX	1.73%
21.0	MSFT	2.96%	AVGO	1.66%
21.0	TRGP	2.77%	NVDA	1.64%
21.0	CCL	2.61%	VST	1.45%
21.0	AVGO	2.55%	META	1.43%
21.0	PCG	2.53%	LNC	1.27%
21.0	GT	2.41%	PWR	1.19%
21.0	CPRT	2.33%	CDNS	1.14%
21.0	ACGL	2.32%	INTU	1.08%
21.0	VNO	2.3%	BHC	1.07%
21.0	В	2.29%	GE	1.03%
21.0	CSCO	2.21%	LLY	0.99%
21.0	MS	2.12%	GT	0.98%
21.0	VST	2.12%	PHM	0.95%
21.0	MNST	2.11%	IEP	0.92%
21.0	IEP	2.06%	MU	0.92%
21.0	THC	2.05%	ON	0.91%
21.0	LLY	2.05%	ETRN	0.9%
21.0	X	2.02%	AZO	0.9%
21.0	MU	2.0%	UAA	0.89%
21.0	QQQ	1.96%	X	0.87%
21.0	ETRN	1.79%	AMAT	0.85%
21.0	AZO	1.77%	ORLY	0.84%



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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
21.0	AMC	10.44%	AMC	21.37%
21.0	LUMN	5.61%	GME	6.92%
21.0	GBTC	5.22%	LUMN	3.71%
21.0	CYH	5.13%	CYH	3.55%
21.0	PHM	3.08%	GBTC	2.68%
21.0	CCL	2.99%	MSTR	1.96%
21.0	NVDA	2.97%	BHC	0.9%
21.0	AMAT	2.91%	IEP	0.9%
21.0	GT	2.79%	UAA	0.86%
21.0	IEP	2.66%	GT	0.8%
21.0	VNO	2.45%	LNC	0.74%
21.0	PWR	2.18%	WYNN	0.62%
21.0	MSFT	2.1%	CZR	0.61%
21.0	MU	1.91%	AA	0.6%
21.0	CPRT	1.78%	ON	0.6%
21.0	TRGP	1.64%	CCL	0.57%
21.0	ETRN	1.63%	NVDA	0.57%
21.0	DHI	1.63%	BIIB	0.53%
21.0	FSUGY	1.62%	AVGO	0.51%
21.0	LEN	1.61%	ETRN	0.5%
21.0	ACGL	1.59%	QCOM	0.47%
21.0	PCG	1.58%	NFLX	0.44%
21.0	THC	1.58%	AMAT	0.42%
21.0	X	1.56%	OXY	0.42%
21.0	MOS	1.53%	META	0.41%
21.0	AVGO	1.51%	AMD	0.4%
21.0	LNC	1.5%	MOS	0.39%
21.0	ON	1.45%	В	0.39%
21.0	CSCO	1.38%	DHI	0.38%
21.0	MNST	1.37%	PHM	0.37%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	11.03%	AMC	18.48%
21.0	LUMN	5.87%	GME	5.14%
21.0	CYH	5.65%	CYH	3.1%
21.0	GBTC	3.72%	LUMN	3.07%
21.0	CCL	3.02%	GBTC	1.68%
21.0	IEP	2.46%	MSTR	1.12%
21.0	GT	2.24%	UAA	0.51%
21.0	NVDA	1.82%	CCL	0.48%
21.0	VNO	1.8%	BHC	0.41%
21.0	AMAT	1.8%	CZR	0.41%
21.0	PHM	1.57%	IEP	0.39%
21.0	MU	1.39%	CLF	0.29%
21.0	FSUGY	1.36%	GT	0.28%
21.0	ON	1.23%	ON	0.25%
21.0	PWR	1.22%	AA	0.24%
21.0	X	1.2%	ETRN	0.22%
21.0	ETRN	1.2%	LNC	0.21%
21.0	PCG	1.19%	WYNN	0.17%
21.0	CZR	1.19%	NVDA	0.14%
21.0	THC	1.13%	VFC	0.14%
21.0	LNC	1.13%	MOS	0.14%
21.0	CPRT	1.02%	AMD	0.13%
21.0	NWL	1.0%	NWL	0.13%
21.0	MOS	0.99%	THC	0.12%
21.0	ELAN	0.98%	ELAN	0.1%
21.0	MSFT	0.95%	AVGO	0.1%
21.0	LEN	0.89%	AMAT	0.1%
21.0	BBY	0.88%	BIIB	0.09%
21.0	DHI	0.87%	QCOM	0.09%
21.0	CDNS	0.87%	BBY	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	10.43%	AMC	31.68%
63.0	GBTC	8.01%	GME	15.03%
63.0	PHM	7.46%	MSTR	8.59%
63.0	NVDA	6.63%	GBTC	6.58%
63.0	CYH	6.31%	CYH	5.98%
63.0	PWR	6.1%	В	5.3%
63.0	AMAT	5.44%	AVGO	4.13%
63.0	LUMN	5.03%	NFLX	4.0%
63.0	MSFT	4.63%	VST	3.97%
63.0	ACGL	4.59%	NVDA	3.74%
63.0	TRGP	4.59%	LUMN	3.42%
63.0	X	4.41%	META	3.39%
63.0	CPRT	4.41%	CDNS	3.28%
63.0	MU	4.4%	PWR	3.25%
63.0	AVGO	4.31%	AZO	3.15%
63.0	MS	4.23%	GE	3.09%
63.0	ETRN	4.21%	TEVA	2.99%
63.0	AZO	4.21%	CCL	2.88%
63.0	CSCO	4.11%	MU	2.82%
63.0	MNST	4.1%	Х	2.68%
63.0	VST	4.05%	INTU	2.67%
63.0	HLT	3.97%	ETRN	2.59%
63.0	В	3.95%	AMAT	2.57%
63.0	LLY	3.93%	ORLY	2.55%
63.0	CDNS	3.93%	LLY	2.51%
63.0	GT	3.81%	ORCL	2.47%
63.0	GE	3.55%	HLT	2.43%
63.0	ORLY	3.49%	TRGP	2.42%
63.0	JPM	3.38%	ON	2.36%
63.0	CCL	3.33%	TDG	2.36%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	12.88%	AMC	31.13%
63.0	GBTC	7.2%	GME	14.07%
63.0	CYH	7.15%	MSTR	6.72%
63.0	PHM	6.09%	CYH	5.93%
63.0	LUMN	6.04%	GBTC	5.2%
63.0	NVDA	5.09%	LUMN	4.14%
63.0	AMAT	4.73%	NVDA	2.15%
63.0	GT	4.37%	CCL	2.11%
63.0	PWR	4.15%	VST	2.09%
63.0	IEP	4.08%	AVGO	2.07%
63.0	MU	4.01%	В	2.03%
63.0	Х	3.96%	ON	1.92%
63.0	ETRN	3.7%	OXY	1.9%
63.0	MSFT	3.59%	GT	1.89%
63.0	CPRT	3.52%	META	1.85%
63.0	CCL	3.33%	MU	1.84%
63.0	ACGL	3.31%	ETRN	1.82%
63.0	MOS	3.14%	AMAT	1.81%
63.0	CDNS	3.1%	NAVI	1.72%
63.0	ON	3.05%	Х	1.68%
63.0	CSCO	3.0%	AMD	1.67%
63.0	FSUGY	2.98%	MOS	1.66%
63.0	TRGP	2.97%	CDNS	1.63%
63.0	MNST	2.9%	WYNN	1.63%
63.0	MS	2.76%	BHC	1.6%
63.0	TXN	2.69%	TEVA	1.58%
63.0	AVGO	2.61%	NFLX	1.51%
63.0	VST	2.6%	INTU	1.5%
63.0	HLT	2.51%	QCOM	1.46%
63.0	PCG	2.3%	CZR	1.41%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	15.05%	AMC	29.09%
63.0	CYH	8.2%	GME	12.48%
63.0	LUMN	7.89%	СҮН	5.45%
63.0	GBTC	6.02%	LUMN	4.62%
63.0	IEP	5.14%	MSTR	4.61%
63.0	GT	4.39%	GBTC	3.83%
63.0	PHM	4.25%	GT	1.52%
63.0	NVDA	3.68%	AA	1.36%
63.0	AMAT	3.66%	CZR	1.34%
63.0	MU	3.39%	CCL	1.32%
63.0	CCL	3.36%	ETRN	1.26%
63.0	ETRN	3.31%	AMD	1.23%
63.0	X	3.3%	IEP	1.22%
63.0	FSUGY	2.76%	NVDA	1.13%
63.0	PWR	2.69%	BHC	1.11%
63.0	ON	2.69%	UAA	1.0%
63.0	WRK	2.57%	AMAT	0.99%
63.0	MOS	2.44%	ON	0.95%
63.0	CPRT	2.33%	WYNN	0.95%
63.0	CDNS	2.3%	MU	0.94%
63.0	ADBE	2.19%	MOS	0.87%
63.0	MSFT	2.07%	CSTM	0.85%
63.0	LVS	2.06%	QCOM	0.85%
63.0	ACGL	2.02%	META	0.84%
63.0	ELAN	1.99%	LNC	0.84%
63.0	CSCO	1.98%	CLF	0.82%
63.0	BBY	1.94%	NAVI	0.78%
63.0	VNO	1.89%	OXY	0.78%
63.0	PCG	1.88%	VST	0.78%
63.0	DHI	1.82%	LVS	0.77%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	CYH	12.14%	AMC	33.11%
126.0	AMC	11.43%	GME	22.56%
126.0	GBTC	11.41%	MSTR	18.21%
126.0	PWR	10.46%	CYH	13.66%
126.0	NVDA	10.16%	GBTC	12.0%
126.0	PHM	9.88%	CCL	9.09%
126.0	CCL	9.61%	NFLX	8.9%
126.0	ETRN	8.8%	В	7.65%
126.0	X	8.44%	NVDA	7.61%
126.0	MS	7.65%	VST	7.23%
126.0	AMAT	7.2%	AVGO	6.93%
126.0	CDNS	7.15%	PWR	6.67%
126.0	VST	7.01%	ETRN	6.65%
126.0	CPRT	6.77%	INTU	6.41%
126.0	HLT	6.76%	BHC	6.32%
126.0	ACGL	6.65%	CDNS	6.32%
126.0	MSFT	6.6%	X	6.24%
126.0	GT	6.56%	META	6.11%
126.0	TRGP	6.49%	TEVA	5.94%
126.0	JPM	6.46%	GT	5.61%
126.0	CSCO	6.34%	GE	5.37%
126.0	AVGO	6.3%	TDG	5.32%
126.0	MNST	5.89%	AZO	5.09%
126.0	MU	5.87%	ORLY	4.92%
126.0	GE	5.86%	HLT	4.73%
126.0	CMG	5.71%	EXPE	4.69%
126.0	TXN	5.7%	ORCL	4.65%
126.0	ORLY	5.65%	GWW	4.52%
126.0	AZO	5.64%	GS	4.46%
126.0	В	5.6%	CAH	4.43%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	14.05%	AMC	32.47%
126.0	CYH	12.12%	GME	21.29%
126.0	GBTC	9.6%	MSTR	14.94%
126.0	CCL	8.4%	CYH	12.52%
126.0	PHM	8.08%	GBTC	9.32%
126.0	NVDA	7.75%	CCL	6.88%
126.0	X	7.67%	BHC	5.67%
126.0	GT	7.33%	GT	5.51%
126.0	PWR	7.29%	NFLX	5.46%
126.0	ETRN	6.72%	NVDA	5.0%
126.0	AMAT	6.17%	X	4.78%
126.0	MS	5.64%	VST	4.46%
126.0	CDNS	5.51%	INTU	4.3%
126.0	MU	5.27%	ETRN	4.22%
126.0	CPRT	5.23%	TEVA	4.21%
126.0	MSFT	5.19%	AVGO	4.1%
126.0	CSCO	5.05%	В	3.99%
126.0	LUMN	5.05%	CDNS	3.82%
126.0	ACGL	4.98%	KALU	3.78%
126.0	TXN	4.85%	META	3.62%
126.0	CMG	4.7%	NAVI	3.59%
126.0	TRGP	4.66%	PWR	3.52%
126.0	VST	4.66%	WYNN	3.49%
126.0	HLT	4.61%	TSLA	3.48%
126.0	TEVA	4.35%	QCOM	3.47%
126.0	MNST	4.28%	MU	3.16%
126.0	MOS	4.27%	EXPE	3.15%
126.0	JPM	4.18%	CZR	3.09%
126.0	AVGO	3.94%	ON	2.94%
126.0	THC	3.94%	AMAT	2.94%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	AMC	17.1%	AMC	31.01%
126.0	CYH	12.56%	GME	19.24%
126.0	GBTC	7.87%	MSTR	11.32%
126.0	GT	7.37%	CYH	10.88%
126.0	LUMN	7.31%	GBTC	6.85%
126.0	CCL	7.13%	GT	4.59%
126.0	Х	6.58%	CCL	4.37%
126.0	PHM	6.13%	BHC	4.24%
126.0	NVDA	5.45%	KALU	3.15%
126.0	ETRN	5.26%	TSLA	3.15%
126.0	AMAT	5.18%	X	2.99%
126.0	MOS	5.12%	CZR	2.93%
126.0	MU	4.78%	NFLX	2.88%
126.0	PWR	4.59%	NVDA	2.84%
126.0	CDNS	3.95%	MOS	2.81%
126.0	CPRT	3.88%	UAA	2.78%
126.0	FSUGY	3.64%	WYNN	2.57%
126.0	LVS	3.58%	TEVA	2.54%
126.0	CSCO	3.54%	LUMN	2.44%
126.0	CMG	3.43%	AMD	2.43%
126.0	TEVA	3.41%	ETRN	2.34%
126.0	MS	3.39%	QCOM	2.3%
126.0	ON	3.37%	ON	2.13%
126.0	WRK	3.37%	MU	2.1%
126.0	ADBE	3.27%	VST	2.09%
126.0	THC	3.24%	LVS	2.05%
126.0	TXN	3.22%	AA	2.05%
126.0	ACGL	3.22%	INTU	2.02%
126.0	MSFT	3.21%	NAVI	1.94%
126.0	TRGP	3.07%	AVGO	1.93%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	CYH	21.15%	GME	32.4%
252.0	GBTC	19.28%	MSTR	28.76%
252.0	NVDA	18.45%	СҮН	25.28%
252.0	CCL	16.15%	GBTC	24.04%
252.0	PHM	14.86%	CCL	17.83%
252.0	PWR	14.1%	AMC	16.83%
252.0	Х	13.64%	NFLX	16.15%
252.0	ETRN	13.61%	NVDA	15.89%
252.0	AMAT	11.88%	META	14.92%
252.0	MS	11.79%	BHC	13.55%
252.0	THC	11.38%	ETRN	12.68%
252.0	MU	11.08%	TSLA	12.67%
252.0	CPRT	10.73%	Х	12.36%
252.0	CDNS	10.61%	THC	12.14%
252.0	TRGP	10.57%	TEVA	11.9%
252.0	MSFT	10.22%	AVGO	10.73%
252.0	CSCO	10.2%	EXPE	10.69%
252.0	TXN	10.08%	INTU	10.05%
252.0	AVGO	10.02%	GE	9.66%
252.0	GE	9.69%	VST	9.57%
252.0	JPM	9.66%	HCA	9.54%
252.0	HLT	9.56%	AMD	9.51%
252.0	TEVA	9.43%	PWR	9.45%
252.0	HCA	9.16%	WYNN	9.42%
252.0	VST	8.55%	ISRG	9.38%
252.0	MSTR	8.34%	CDNS	9.09%
252.0	ACGL	8.24%	ORCL	9.02%
252.0	CMG	7.54%	MU	8.92%
252.0	NFLX	7.48%	AMZN	8.82%
252.0	AZO	7.41%	TRGP	8.79%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	CYH	21.85%	GME	30.5%
252.0	GBTC	16.58%	СҮН	24.51%
252.0	NVDA	14.81%	MSTR	24.18%
252.0	CCL	13.99%	GBTC	20.04%
252.0	PHM	12.57%	AMC	18.25%
252.0	Х	11.96%	CCL	14.34%
252.0	ETRN	11.53%	BHC	12.84%
252.0	PWR	10.47%	NFLX	12.34%
252.0	AMAT	10.39%	NVDA	11.79%
252.0	MU	9.67%	TSLA	11.17%
252.0	MS	9.33%	META	11.05%
252.0	TXN	8.69%	ETRN	10.02%
252.0	CSCO	8.57%	X	9.83%
252.0	THC	8.56%	THC	8.74%
252.0	CPRT	8.55%	TEVA	8.62%
252.0	CDNS	8.14%	WYNN	8.27%
252.0	MSFT	7.66%	GT	8.1%
252.0	GT	7.52%	UAA	8.08%
252.0	TRGP	7.39%	FCX	7.81%
252.0	TEVA	6.92%	AMD	7.64%
252.0	JPM	6.88%	EXPE	7.58%
252.0	HLT	6.68%	INTU	7.34%
252.0	AVGO	6.55%	AMAT	6.87%
252.0	DHI	6.33%	MU	6.83%
252.0	ACGL	6.3%	AVGO	6.82%
252.0	CMG	6.23%	ISRG	6.53%
252.0	GE	6.22%	PHM	6.31%
252.0	FCX	6.09%	VST	6.08%
252.0	MNST	6.05%	GE	5.94%
252.0	HCA	6.03%	HCA	5.92%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	CYH	22.76%	GME	27.94%
252.0	GBTC	14.07%	CYH	22.81%
252.0	CCL	12.29%	AMC	19.64%
252.0	NVDA	11.22%	MSTR	19.47%
252.0	X	10.52%	GBTC	16.14%
252.0	ETRN	9.76%	BHC	11.34%
252.0	PHM	9.5%	CCL	10.86%
252.0	AMAT	8.73%	TSLA	8.78%
252.0	GT	8.7%	NFLX	8.47%
252.0	MU	8.17%	UAA	7.97%
252.0	PWR	7.21%	NVDA	7.91%
252.0	AMC	7.15%	GT	7.77%
252.0	MS	6.48%	ETRN	7.35%
252.0	THC	6.3%	META	7.35%
252.0	TXN	6.15%	X	7.34%
252.0	CSCO	6.14%	WYNN	6.1%
252.0	CDNS	6.05%	CZR	5.99%
252.0	CPRT	6.03%	THC	5.84%
252.0	BBY	5.59%	AMD	5.77%
252.0	CMG	5.06%	FCX	5.59%
252.0	LVS	5.05%	TEVA	5.33%
252.0	MSFT	4.88%	AMAT	5.02%
252.0	FCX	4.84%	KALU	4.89%
252.0	LUMN	4.84%	EXPE	4.86%
252.0	DHI	4.82%	MU	4.75%
252.0	TEVA	4.75%	LVS	4.55%
252.0	TRGP	4.61%	QCOM	4.43%
252.0	JPM	4.59%	INTU	4.38%
252.0	ACGL	4.31%	BBY	4.29%
252.0	HLT	4.27%	AA	3.92%



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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
1.0	GME	-0.92%	В	-0.26%
1.0	MSTR	-0.58%	VST	-0.2%
1.0	SBNY	-0.41%	NVDA	-0.14%
1.0	FRCB	-0.27%	AVGO	-0.13%
1.0	VST	-0.14%	MSTR	-0.13%
1.0	VFC	-0.12%	MU	-0.07%
1.0	CMA	-0.11%	ORCL	-0.05%
1.0	KALU	-0.11%	PWR	-0.04%
1.0	AA	-0.11%	CAH	-0.04%
1.0	CHTR	-0.09%	PHM	-0.03%
1.0	META	-0.09%	GLD	-0.03%
1.0	TRGP	-0.09%	SLV	-0.03%
1.0	SLV	-0.07%	ACGL	-0.02%
1.0	NAVI	-0.05%	CDNS	-0.02%
1.0	HCA	-0.05%	LLY	-0.02%
1.0	В	-0.04%	GILD	-0.02%
1.0	GILD	-0.04%	TRGP	-0.02%
1.0	SNY	-0.04%	AMD	-0.01%
1.0	SIVBQ	-0.03%	POST	-0.01%
1.0	CLF	-0.03%	DHI	-0.01%
1.0	BALL	-0.02%	GOOGL	-0.01%
1.0	NEM	-0.01%	IRM	-0.01%
1.0	INTU	-0.01%	NVS	-0.01%
1.0	TXN	-0.01%	HYG	-0.0%
1.0	OXY	-0.0%	EMB	-0.0%
1.0	WFC	0.0%	PEP	-0.0%
1.0	ZTS	0.0%	MUB	-0.0%
1.0	SBUX	0.01%	VCSH	-0.0%
1.0	EXPE	0.02%	LQD	0.0%
1.0	MOX	0.02%	MOX	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	GME	-0.34%	MSTR	-0.08%
1.0	SBUX	-0.01%	Х	-0.07%
1.0	META	-0.01%	ELAN	-0.05%
1.0	FRCB	-0.01%	TEVA	-0.04%
1.0	VFC	-0.01%	ORCL	-0.04%
1.0	GILD	-0.0%	META	-0.04%
1.0	TMUS	-0.0%	ETRN	-0.04%
1.0	VCSH	0.0%	CLF	-0.04%
1.0	MUB	0.0%	AAP	-0.04%
1.0	FRA	0.0%	VFC	-0.04%
1.0	HYG	0.0%	AMD	-0.04%
1.0	POST	0.0%	NWL	-0.03%
1.0	ISRG	0.0%	NVDA	-0.03%
1.0	CMA	0.0%	TSLA	-0.03%
1.0	NAVI	0.0%	BIIB	-0.03%
1.0	NVS	0.0%	AVGO	-0.03%
1.0	LQD	0.0%	INTC	-0.03%
1.0	TXN	0.0%	EXPE	-0.03%
1.0	SNY	0.0%	VST	-0.02%
1.0	GLD	0.0%	VNO	-0.02%
1.0	ABBV	0.0%	MU	-0.02%
1.0	ORLY	0.0%	ON	-0.02%
1.0	HON	0.0%	SBUX	-0.02%
1.0	AZN	0.0%	CSTM	-0.02%
1.0	AMGN	0.0%	SIVBQ	-0.02%
1.0	HD	0.0%	GT	-0.01%
1.0	PEP	0.0%	KALU	-0.01%
1.0	HLT	0.0%	BBY	-0.01%
1.0	ZTS	0.0%	GNRC	-0.01%
1.0	MSI	0.0%	ZION	-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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	GME	-0.18%	GME	-0.08%
1.0	AAP	-0.03%	AAP	-0.04%
1.0	VFC	-0.01%	Х	-0.03%
1.0	SBUX	-0.0%	ETRN	-0.02%
1.0	ZTS	0.0%	NWL	-0.02%
1.0	NVS	0.0%	BIIB	-0.02%
1.0	MUB	0.0%	ORCL	-0.02%
1.0	LQD	0.0%	TEVA	-0.02%
1.0	HYG	0.0%	VFC	-0.02%
1.0	HON	0.0%	MSTR	-0.01%
1.0	HCA	0.0%	ELAN	-0.01%
1.0	CDNS	0.0%	AMD	-0.01%
1.0	GLD	0.0%	UAA	-0.01%
1.0	GILD	0.0%	IEP	-0.01%
1.0	FRCB	0.0%	TSLA	-0.0%
1.0	HLT	0.0%	CLF	-0.0%
1.0	ORLY	0.0%	SBUX	-0.0%
1.0	POST	0.0%	AVGO	-0.0%
1.0	FRA	0.0%	NVDA	-0.0%
1.0	В	0.0%	META	-0.0%
1.0	SLV	0.0%	INTC	-0.0%
1.0	AZN	0.0%	ON	-0.0%
1.0	AMGN	0.0%	GT	-0.0%
1.0	TMUS	0.0%	PRGO	-0.0%
1.0	TXN	0.0%	VCSH	0.0%
1.0	VCSH	0.0%	MUB	0.0%
1.0	VICI	0.0%	LQD	0.0%
1.0	ABBV	0.0%	HYG	0.0%
1.0	PEP	0.0%	EMB	0.0%
1.0	SNY	0.0%	FRA	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GME	-3.83%	В	-2.98%
10.0	MSTR	-3.75%	MSTR	-2.27%
10.0	В	-2.73%	VST	-1.75%
10.0	VST	-2.22%	NVDA	-1.63%
10.0	META	-1.71%	AVGO	-1.19%
10.0	WDC	-1.63%	ORCL	-1.04%
10.0	TEVA	-1.59%	MU	-0.98%
10.0	AVGO	-1.32%	TEVA	-0.91%
10.0	KALU	-1.31%	LLY	-0.87%
10.0	ORCL	-1.2%	WDC	-0.86%
10.0	SLV	-1.14%	TSLA	-0.8%
10.0	TRGP	-1.1%	AMD	-0.8%
10.0	HCA	-1.02%	Х	-0.71%
10.0	NEM	-0.98%	CAH	-0.68%
10.0	IRM	-0.96%	GE	-0.66%
10.0	GILD	-0.9%	PWR	-0.65%
10.0	CHTR	-0.9%	IRM	-0.56%
10.0	MU	-0.88%	SLV	-0.55%
10.0	EXPE	-0.87%	GS	-0.54%
10.0	WFC	-0.84%	THC	-0.52%
10.0	CMA	-0.81%	MS	-0.45%
10.0	VFC	-0.73%	TRGP	-0.44%
10.0	FRCB	-0.72%	GLD	-0.42%
10.0	ISRG	-0.72%	WFC	-0.4%
10.0	NFLX	-0.68%	ABBV	-0.37%
10.0	GS	-0.64%	JPM	-0.36%
10.0	FCX	-0.64%	CDNS	-0.36%
10.0	GWW	-0.62%	GILD	-0.34%
10.0	PWR	-0.57%	NVS	-0.33%
10.0	NVS	-0.54%	NFLX	-0.32%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GME	-3.14%	MSTR	-1.65%
10.0	MSTR	-2.34%	VST	-0.81%
10.0	VST	-0.72%	В	-0.66%
10.0	TEVA	-0.45%	Х	-0.6%
10.0	WDC	-0.37%	TEVA	-0.58%
10.0	KALU	-0.31%	TSLA	-0.57%
10.0	META	-0.29%	AVGO	-0.55%
10.0	В	-0.25%	NVDA	-0.55%
10.0	AVGO	-0.23%	ORCL	-0.53%
10.0	ORCL	-0.22%	MU	-0.41%
10.0	EXPE	-0.21%	ETRN	-0.41%
10.0	ETRN	-0.2%	AMD	-0.38%
10.0	AAP	-0.16%	LLY	-0.23%
10.0	VFC	-0.15%	WDC	-0.18%
10.0	CHTR	-0.15%	WYNN	-0.16%
10.0	ISRG	-0.15%	GWW	-0.16%
10.0	CTLT	-0.13%	ISRG	-0.13%
10.0	MU	-0.11%	CAH	-0.1%
10.0	TRGP	-0.09%	PWR	-0.09%
10.0	GWW	-0.08%	GILD	-0.09%
10.0	HCA	-0.08%	DHI	-0.09%
10.0	GILD	-0.08%	IRM	-0.08%
10.0	SBUX	-0.07%	TMUS	-0.07%
10.0	CMA	-0.04%	CDNS	-0.07%
10.0	NAVI	-0.02%	GE	-0.06%
10.0	SLV	-0.02%	OXY	-0.06%
10.0	BUD	-0.01%	INTC	-0.05%
10.0	IRM	-0.01%	CMG	-0.05%
10.0	NVS	-0.01%	SBUX	-0.05%
10.0	POST	-0.0%	LVS	-0.05%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GME	-2.27%	MSTR	-1.02%
10.0	MSTR	-0.87%	ETRN	-0.51%
10.0	ETRN	-0.22%	X	-0.33%
10.0	AAP	-0.21%	TSLA	-0.33%
10.0	VST	-0.16%	VST	-0.3%
10.0	AVGO	-0.06%	TEVA	-0.28%
10.0	ISRG	-0.06%	AVGO	-0.23%
10.0	TEVA	-0.03%	ORCL	-0.16%
10.0	META	-0.03%	OXY	-0.14%
10.0	SBUX	-0.02%	AMD	-0.1%
10.0	CTLT	-0.01%	MU	-0.1%
10.0	KALU	-0.0%	ELAN	-0.1%
10.0	HCA	-0.0%	ISRG	-0.08%
10.0	TMUS	-0.0%	AAP	-0.07%
10.0	LQD	0.0%	BIIB	-0.07%
10.0	MUB	0.0%	NVDA	-0.05%
10.0	FRA	0.0%	INTC	-0.04%
10.0	VCSH	0.0%	SBUX	-0.04%
10.0	POST	0.0%	WYNN	-0.03%
10.0	NVS	0.0%	DHI	-0.03%
10.0	GILD	0.0%	FSUGY	-0.03%
10.0	SNY	0.0%	THC	-0.02%
10.0	HON	0.0%	В	-0.01%
10.0	MSI	0.0%	UNH	-0.01%
10.0	FRCB	0.0%	BMY	-0.01%
10.0	ORCL	0.0%	CAH	-0.01%
10.0	BUD	0.01%	LLY	-0.01%
10.0	PEP	0.01%	GWW	-0.01%
10.0	GLD	0.01%	HCA	-0.01%
10.0	TLT	0.01%	TMUS	-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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	В	-8.18%	В	-8.54%
21.0	MSTR	-7.71%	MSTR	-6.07%
21.0	GME	-4.95%	VST	-3.94%
21.0	VST	-4.59%	NVDA	-3.63%
21.0	META	-3.21%	ORCL	-2.5%
21.0	TEVA	-2.96%	AVGO	-2.48%
21.0	AVGO	-2.85%	TSLA	-2.1%
21.0	WDC	-2.84%	GE	-1.98%
21.0	ORCL	-2.74%	TEVA	-1.97%
21.0	NEM	-1.96%	Х	-1.96%
21.0	TRGP	-1.92%	WDC	-1.96%
21.0	HCA	-1.86%	ETRN	-1.88%
21.0	IRM	-1.85%	AMD	-1.87%
21.0	KALU	-1.79%	PWR	-1.86%
21.0	THC	-1.66%	THC	-1.81%
21.0	SLV	-1.64%	LLY	-1.64%
21.0	ETRN	-1.62%	MU	-1.57%
21.0	PWR	-1.61%	CAH	-1.57%
21.0	GILD	-1.44%	IRM	-1.34%
21.0	GS	-1.29%	GS	-1.17%
21.0	GWW	-1.29%	TRGP	-1.15%
21.0	EXPE	-1.28%	CCL	-1.15%
21.0	CMA	-1.26%	META	-1.11%
21.0	ISRG	-1.26%	NFLX	-1.03%
21.0	CHTR	-1.23%	PHM	-1.02%
21.0	NFLX	-1.18%	NEM	-0.99%
21.0	WFC	-1.18%	GWW	-0.94%
21.0	CAH	-1.13%	GLD	-0.87%
21.0	BUD	-1.07%	SLV	-0.81%
21.0	NVS	-0.97%	ISRG	-0.79%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	MSTR	-6.61%	MSTR	-5.38%
21.0	GME	-4.44%	В	-4.82%
21.0	В	-4.22%	VST	-2.36%
21.0	VST	-2.46%	NVDA	-2.22%
21.0	TEVA	-1.41%	TSLA	-1.89%
21.0	WDC	-1.41%	ETRN	-1.66%
21.0	META	-1.3%	Х	-1.42%
21.0	ETRN	-1.13%	AMD	-1.35%
21.0	AVGO	-1.07%	ORCL	-1.33%
21.0	ORCL	-0.99%	TEVA	-1.3%
21.0	KALU	-0.94%	AVGO	-1.24%
21.0	CHTR	-0.63%	MU	-0.95%
21.0	CTLT	-0.5%	WDC	-0.91%
21.0	NEM	-0.49%	GE	-0.87%
21.0	EXPE	-0.47%	THC	-0.65%
21.0	GILD	-0.45%	LLY	-0.57%
21.0	AAP	-0.42%	CCL	-0.53%
21.0	TRGP	-0.41%	PWR	-0.5%
21.0	BUD	-0.36%	CAH	-0.45%
21.0	THC	-0.36%	GWW	-0.44%
21.0	CMA	-0.36%	GS	-0.41%
21.0	GWW	-0.35%	GILD	-0.36%
21.0	SLV	-0.32%	ВА	-0.34%
21.0	HCA	-0.3%	DHI	-0.31%
21.0	ISRG	-0.29%	WYNN	-0.31%
21.0	WFC	-0.24%	ISRG	-0.29%
21.0	GS	-0.23%	ELAN	-0.24%
21.0	IRM	-0.22%	IRM	-0.24%
21.0	MU	-0.21%	TRGP	-0.22%
21.0	FRCB	-0.2%	CMG	-0.22%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	MSTR	-4.83%	MSTR	-4.47%
21.0	GME	-3.51%	ETRN	-1.67%
21.0	VST	-1.4%	VST	-1.52%
21.0	В	-1.02%	TSLA	-1.49%
21.0	ETRN	-0.85%	В	-1.45%
21.0	WDC	-0.54%	NVDA	-0.97%
21.0	AVGO	-0.41%	X	-0.89%
21.0	TEVA	-0.36%	TEVA	-0.66%
21.0	AAP	-0.35%	AVGO	-0.61%
21.0	META	-0.28%	AMD	-0.58%
21.0	KALU	-0.25%	MU	-0.55%
21.0	CTLT	-0.19%	ORCL	-0.41%
21.0	EXPE	-0.13%	WDC	-0.39%
21.0	ORCL	-0.11%	OXY	-0.22%
21.0	GILD	-0.08%	WYNN	-0.2%
21.0	CHTR	-0.05%	GE	-0.19%
21.0	MU	-0.04%	ELAN	-0.14%
21.0	BUD	-0.0%	THC	-0.12%
21.0	SBUX	-0.0%	BA	-0.11%
21.0	VCSH	0.0%	PWR	-0.1%
21.0	LQD	0.0%	GILD	-0.09%
21.0	MUB	0.0%	ISRG	-0.08%
21.0	FRA	0.0%	MOS	-0.05%
21.0	HON	0.0%	GWW	-0.05%
21.0	NVS	0.0%	DHI	-0.05%
21.0	POST	0.01%	CAH	-0.03%
21.0	CMA	0.01%	SBUX	-0.03%
21.0	HCA	0.01%	ACGL	-0.03%
21.0	GLD	0.01%	GS	-0.02%
21.0	SNY	0.02%	BUD	-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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	В	-34.18%	В	-35.89%
63.0	MSTR	-20.25%	MSTR	-17.27%
63.0	VST	-15.51%	VST	-14.78%
63.0	META	-9.95%	NVDA	-14.56%
63.0	AVGO	-9.91%	AVGO	-9.11%
63.0	NVDA	-8.58%	META	-7.06%
63.0	WDC	-7.59%	ORCL	-6.99%
63.0	ETRN	-6.87%	GE	-6.79%
63.0	ORCL	-6.46%	GBTC	-6.72%
63.0	THC	-5.3%	THC	-6.33%
63.0	PWR	-4.37%	WDC	-6.3%
63.0	CAH	-4.12%	ETRN	-6.24%
63.0	TRGP	-4.11%	NFLX	-5.93%
63.0	GE	-4.02%	PWR	-5.49%
63.0	NFLX	-3.9%	PHM	-5.31%
63.0	NEM	-3.82%	LLY	-4.71%
63.0	TEVA	-3.81%	CAH	-4.56%
63.0	IRM	-3.66%	AMD	-4.33%
63.0	GILD	-3.61%	DHI	-4.08%
63.0	HCA	-3.56%	CCL	-3.79%
63.0	EXPE	-3.27%	TSLA	-3.78%
63.0	GME	-3.13%	TRGP	-3.56%
63.0	LLY	-3.08%	MU	-3.23%
63.0	GS	-2.99%	GS	-3.15%
63.0	PHM	-2.9%	TEVA	-3.02%
63.0	GLD	-2.56%	IRM	-2.92%
63.0	GWW	-2.52%	CMG	-2.92%
63.0	SLV	-2.4%	JPM	-2.76%
63.0	KALU	-2.4%	GOOGL	-2.74%
63.0	GBTC	-2.1%	GLD	-2.67%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	В	-28.4%	В	-30.13%
63.0	MSTR	-18.39%	MSTR	-15.22%
63.0	VST	-12.78%	VST	-12.34%
63.0	META	-7.72%	NVDA	-12.17%
63.0	AVGO	-6.92%	AVGO	-6.5%
63.0	NVDA	-6.3%	META	-5.28%
63.0	WDC	-6.19%	ORCL	-5.16%
63.0	ETRN	-5.66%	GBTC	-5.07%
63.0	ORCL	-4.33%	ETRN	-5.05%
63.0	THC	-3.77%	WDC	-4.97%
63.0	GME	-3.17%	THC	-4.64%
63.0	NEM	-2.97%	GE	-3.96%
63.0	EXPE	-2.43%	AMD	-3.73%
63.0	TRGP	-2.24%	PHM	-3.56%
63.0	GILD	-2.15%	NFLX	-3.15%
63.0	KALU	-1.98%	TSLA	-3.08%
63.0	CAH	-1.81%	CCL	-2.96%
63.0	IRM	-1.72%	PWR	-2.81%
63.0	TEVA	-1.64%	LLY	-2.7%
63.0	AAP	-1.54%	DHI	-2.65%
63.0	HCA	-1.47%	MU	-2.41%
63.0	GE	-1.39%	CAH	-2.24%
63.0	CTLT	-1.37%	TRGP	-2.01%
63.0	PWR	-1.22%	NEM	-1.98%
63.0	SLV	-1.18%	Х	-1.92%
63.0	PHM	-1.14%	CMG	-1.89%
63.0	NFLX	-1.14%	GILD	-1.76%
63.0	GS	-1.1%	VNO	-1.73%
63.0	GBTC	-0.99%	GOOGL	-1.56%
63.0	CHTR	-0.95%	WYNN	-1.53%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	В	-20.84%	В	-22.61%
63.0	MSTR	-15.8%	MSTR	-13.03%
63.0	VST	-9.58%	VST	-9.53%
63.0	META	-5.38%	NVDA	-9.21%
63.0	WDC	-4.84%	ETRN	-3.89%
63.0	ETRN	-4.07%	WDC	-3.85%
63.0	AVGO	-3.87%	META	-3.78%
63.0	NVDA	-3.86%	AVGO	-3.73%
63.0	GME	-3.01%	ORCL	-3.37%
63.0	ORCL	-2.5%	GBTC	-3.07%
63.0	THC	-1.79%	AMD	-2.79%
63.0	CTLT	-1.29%	THC	-2.49%
63.0	NEM	-1.28%	TSLA	-2.17%
63.0	EXPE	-1.15%	CCL	-1.92%
63.0	KALU	-1.14%	MU	-1.64%
63.0	AAP	-1.04%	GE	-1.6%
63.0	GILD	-0.78%	VNO	-1.59%
63.0	TRGP	-0.5%	PHM	-1.54%
63.0	IRM	-0.41%	DHI	-1.31%
63.0	SLV	-0.21%	X	-1.17%
63.0	CHTR	-0.18%	LLY	-0.93%
63.0	HCA	-0.13%	WYNN	-0.86%
63.0	CAH	-0.13%	PWR	-0.84%
63.0	WFC	-0.09%	GILD	-0.8%
63.0	HSBC	-0.03%	ELAN	-0.78%
63.0	VCSH	-0.0%	NEM	-0.77%
63.0	BUD	0.0%	NFLX	-0.69%
63.0	MUB	0.0%	TRGP	-0.56%
63.0	POST	0.0%	LVS	-0.55%
63.0	CMA	0.01%	ISRG	-0.51%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	В	-61.01%	В	-61.09%
126.0	MSTR	-51.64%	MSTR	-45.73%
126.0	VST	-34.32%	NVDA	-38.46%
126.0	NVDA	-28.82%	VST	-33.94%
126.0	META	-22.43%	GBTC	-23.49%
126.0	AVGO	-21.42%	AVGO	-21.59%
126.0	GBTC	-15.74%	META	-19.53%
126.0	GE	-15.05%	GE	-18.86%
126.0	ORCL	-12.32%	NFLX	-17.44%
126.0	THC	-12.23%	THC	-15.1%
126.0	NFLX	-11.47%	ORCL	-14.43%
126.0	WDC	-10.81%	PHM	-12.43%
126.0	TRGP	-10.72%	LLY	-11.62%
126.0	ETRN	-10.47%	PWR	-11.38%
126.0	CAH	-10.35%	CAH	-10.74%
126.0	PWR	-9.73%	TRGP	-10.31%
126.0	LLY	-9.25%	WDC	-9.78%
126.0	IRM	-9.03%	AMD	-9.02%
126.0	TEVA	-8.41%	ETRN	-8.89%
126.0	PHM	-8.04%	MU	-8.22%
126.0	GILD	-7.7%	IRM	-7.76%
126.0	GLD	-6.72%	JPM	-7.15%
126.0	HCA	-6.54%	DHI	-7.14%
126.0	GS	-6.19%	TDG	-6.98%
126.0	GWW	-5.81%	GS	-6.88%
126.0	MSI	-5.39%	ACGL	-6.88%
126.0	TDG	-5.38%	TEVA	-6.85%
126.0	ACGL	-5.29%	GILD	-6.73%
126.0	TMUS	-4.9%	GLD	-6.64%
126.0	HLT	-4.78%	ISRG	-6.14%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	В	-55.52%	В	-55.6%
126.0	MSTR	-48.88%	MSTR	-42.33%
126.0	VST	-30.71%	NVDA	-35.13%
126.0	NVDA	-25.73%	VST	-30.44%
126.0	META	-18.77%	GBTC	-20.08%
126.0	AVGO	-17.21%	AVGO	-17.47%
126.0	GBTC	-13.18%	META	-16.07%
126.0	GE	-11.07%	GE	-14.68%
126.0	THC	-10.89%	THC	-13.51%
126.0	WDC	-10.24%	NFLX	-12.75%
126.0	ORCL	-9.07%	ORCL	-11.3%
126.0	ETRN	-8.36%	PHM	-9.76%
126.0	TRGP	-8.0%	WDC	-9.09%
126.0	NFLX	-7.13%	LLY	-8.93%
126.0	TEVA	-6.48%	AMD	-7.97%
126.0	IRM	-6.43%	TRGP	-7.84%
126.0	LLY	-6.26%	PWR	-7.62%
126.0	CAH	-6.16%	MU	-6.65%
126.0	GILD	-5.74%	CAH	-6.61%
126.0	PWR	-5.58%	ETRN	-6.53%
126.0	PHM	-5.38%	IRM	-5.37%
126.0	NEM	-4.48%	GILD	-5.24%
126.0	HCA	-4.08%	TEVA	-5.23%
126.0	GS	-3.69%	ACGL	-5.04%
126.0	GLD	-3.44%	DHI	-4.56%
126.0	ACGL	-3.29%	GS	-4.41%
126.0	GWW	-3.23%	TSLA	-4.37%
126.0	MSI	-2.53%	VNO	-4.21%
126.0	EXPE	-2.48%	TDG	-4.16%
126.0	TDG	-2.48%	ISRG	-3.9%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	В	-47.87%	В	-48.2%
126.0	MSTR	-45.38%	MSTR	-38.74%
126.0	VST	-26.37%	NVDA	-31.25%
126.0	NVDA	-22.41%	VST	-26.39%
126.0	META	-14.63%	GBTC	-16.24%
126.0	AVGO	-12.2%	META	-12.56%
126.0	GBTC	-10.21%	AVGO	-12.48%
126.0	WDC	-9.46%	THC	-11.22%
126.0	THC	-8.92%	GE	-10.24%
126.0	GE	-6.98%	WDC	-8.23%
126.0	ETRN	-6.05%	ORCL	-8.0%
126.0	ORCL	-5.9%	NFLX	-7.58%
126.0	TRGP	-5.35%	AMD	-6.51%
126.0	TEVA	-4.03%	PHM	-6.42%
126.0	NEM	-4.01%	LLY	-5.75%
126.0	IRM	-3.86%	TRGP	-5.41%
126.0	GILD	-3.08%	MU	-5.28%
126.0	LLY	-3.08%	ETRN	-4.44%
126.0	NFLX	-2.55%	PWR	-3.98%
126.0	PHM	-2.34%	TSLA	-3.62%
126.0	CAH	-2.2%	VNO	-3.34%
126.0	PWR	-1.89%	TEVA	-3.33%
126.0	EXPE	-1.39%	IRM	-3.21%
126.0	HCA	-1.22%	GILD	-3.09%
126.0	GS	-1.15%	NEM	-3.02%
126.0	ACGL	-1.15%	WYNN	-2.82%
126.0	GWW	-1.05%	ACGL	-2.67%
126.0	LW	-0.54%	CAH	-2.58%
126.0	SLV	-0.45%	CMG	-2.44%
126.0	GLD	-0.45%	GS	-1.84%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	MSTR	-185.46%	MSTR	-179.28%
252.0	VST	-111.26%	NVDA	-112.11%
252.0	NVDA	-97.35%	VST	-109.97%
252.0	GBTC	-69.84%	GBTC	-84.61%
252.0	META	-57.89%	AVGO	-59.59%
252.0	AVGO	-56.57%	META	-55.09%
252.0	GE	-38.42%	NFLX	-48.02%
252.0	NFLX	-34.05%	GE	-46.35%
252.0	LLY	-32.09%	LLY	-35.3%
252.0	TRGP	-31.16%	PHM	-35.11%
252.0	PHM	-28.34%	TRGP	-32.04%
252.0	THC	-24.87%	THC	-30.62%
252.0	ORCL	-24.83%	PWR	-28.35%
252.0	PWR	-24.38%	ORCL	-28.34%
252.0	IRM	-22.83%	CAH	-23.07%
252.0	CAH	-22.67%	TDG	-22.83%
252.0	TDG	-21.28%	JPM	-20.57%
252.0	TEVA	-20.61%	ISRG	-20.53%
252.0	GWW	-18.54%	IRM	-20.29%
252.0	ETRN	-18.38%	ACGL	-19.6%
252.0	JPM	-16.94%	GWW	-18.31%
252.0	ACGL	-15.7%	TEVA	-17.98%
252.0	HLT	-15.51%	DHI	-17.71%
252.0	GLD	-15.38%	ETRN	-17.65%
252.0	MSI	-15.32%	COST	-17.56%
252.0	GS	-15.12%	GS	-17.42%
252.0	TMUS	-14.65%	CCL	-17.18%
252.0	ISRG	-13.73%	CMG	-16.61%
252.0	WDC	-13.08%	MSI	-15.87%
252.0	GILD	-12.29%	ORLY	-15.59%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	MSTR	-181.46%	MSTR	-174.04%
252.0	VST	-106.8%	NVDA	-107.09%
252.0	NVDA	-92.78%	VST	-105.53%
252.0	GBTC	-66.37%	GBTC	-79.85%
252.0	META	-53.3%	AVGO	-54.76%
252.0	AVGO	-51.85%	META	-50.41%
252.0	GE	-33.33%	NFLX	-43.17%
252.0	NFLX	-29.75%	GE	-41.06%
252.0	LLY	-28.48%	PHM	-32.13%
252.0	TRGP	-26.69%	LLY	-31.81%
252.0	PHM	-25.36%	TRGP	-27.76%
252.0	THC	-20.92%	THC	-26.28%
252.0	ORCL	-19.58%	PWR	-23.29%
252.0	IRM	-19.21%	ORCL	-23.14%
252.0	PWR	-19.06%	TDG	-18.29%
252.0	TEVA	-17.87%	CAH	-18.05%
252.0	CAH	-17.57%	IRM	-16.83%
252.0	TDG	-16.56%	ISRG	-16.69%
252.0	ETRN	-16.19%	ACGL	-16.54%
252.0	GWW	-14.39%	JPM	-16.08%
252.0	JPM	-12.44%	TEVA	-15.28%
252.0	ACGL	-12.38%	DHI	-15.2%
252.0	GS	-12.06%	ETRN	-14.85%
252.0	WDC	-11.23%	GS	-14.36%
252.0	HLT	-11.2%	GWW	-14.31%
252.0	GLD	-10.83%	COST	-14.03%
252.0	TMUS	-10.72%	CMG	-13.88%
252.0	MSI	-10.45%	CCL	-13.17%
252.0	ISRG	-10.12%	LEN	-12.69%
252.0	GILD	-9.6%	MU	-12.4%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	MSTR	-176.33%	MSTR	-167.99%
252.0	VST	-101.37%	NVDA	-101.09%
252.0	NVDA	-87.46%	VST	-100.22%
252.0	GBTC	-62.12%	GBTC	-74.33%
252.0	META	-47.46%	AVGO	-49.02%
252.0	AVGO	-46.37%	META	-44.78%
252.0	GE	-27.23%	NFLX	-37.13%
252.0	NFLX	-24.53%	GE	-34.48%
252.0	LLY	-24.06%	PHM	-28.65%
252.0	PHM	-22.05%	LLY	-27.21%
252.0	TRGP	-21.47%	TRGP	-22.76%
252.0	THC	-16.68%	THC	-21.52%
252.0	TEVA	-15.31%	ORCL	-17.32%
252.0	IRM	-15.31%	PWR	-16.99%
252.0	ORCL	-13.92%	TDG	-13.68%
252.0	ETRN	-13.75%	TEVA	-13.05%
252.0	PWR	-12.75%	IRM	-13.03%
252.0	TDG	-11.85%	ACGL	-12.25%
252.0	CAH	-11.76%	ETRN	-12.23%
252.0	GWW	-9.73%	CAH	-12.06%
252.0	GS	-9.12%	ISRG	-11.97%
252.0	WDC	-8.9%	DHI	-11.93%
252.0	ACGL	-8.33%	GS	-11.24%
252.0	JPM	-7.45%	COST	-10.59%
252.0	TMUS	-7.28%	CMG	-10.59%
252.0	GLD	-6.55%	JPM	-10.57%
252.0	HLT	-6.47%	GWW	-9.61%
252.0	GILD	-6.24%	MU	-9.59%
252.0	LEN	-6.08%	LEN	-9.45%
252.0	ISRG	-5.9%	WDC	-9.22%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	SIVBQ	-1.16%	SIVBQ	-0.67%
1.0	SBNY	-1.0%	SBNY	-0.24%
1.0	MSTR	-0.7%	FRCB	-0.15%
1.0	GME	-0.59%	В	-0.04%
1.0	FRCB	-0.27%	PEP	-0.02%
1.0	CHTR	-0.26%	VST	-0.02%
1.0	AAP	-0.2%	NVS	-0.02%
1.0	QCOM	-0.14%	ACGL	-0.02%
1.0	META	-0.13%	GLD	-0.01%
1.0	AMZN	-0.11%	TRGP	-0.01%
1.0	KALU	-0.11%	FRA	-0.01%
1.0	OXY	-0.1%	UNH	-0.01%
1.0	VFC	-0.07%	VZ	-0.01%
1.0	JAZZ	-0.06%	HSBC	-0.01%
1.0	EXPE	-0.06%	IRM	-0.01%
1.0	CDNS	-0.06%	EMB	-0.01%
1.0	BUD	-0.05%	SPY	-0.0%
1.0	ZTS	-0.05%	HYG	-0.0%
1.0	CMA	-0.03%	LQD	-0.0%
1.0	CVS	-0.03%	TXN	-0.0%
1.0	SLV	-0.03%	MUB	-0.0%
1.0	BALL	-0.02%	AZN	-0.0%
1.0	SNY	-0.01%	ABBV	-0.0%
1.0	NEM	-0.01%	VCSH	0.0%
1.0	PRGO	-0.01%	HON	0.0%
1.0	BHP	-0.01%	KHC	0.0%
1.0	GSK	-0.0%	PCG	0.0%
1.0	VCSH	0.0%	QQQ	0.0%
1.0	В	0.0%	BMY	0.0%
1.0	GILD	0.0%	TLT	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	SIVBQ	-0.54%	SIVBQ	-0.56%
1.0	GME	-0.1%	SBNY	-0.07%
1.0	SBNY	-0.05%	FRCB	-0.06%
1.0	MSTR	-0.05%	CTLT	-0.06%
1.0	FRCB	-0.03%	MSTR	-0.05%
1.0	UNH	-0.01%	GT	-0.04%
1.0	CHTR	-0.01%	AAP	-0.04%
1.0	SNY	-0.01%	NWL	-0.04%
1.0	CTLT	-0.01%	LW	-0.04%
1.0	META	-0.0%	META	-0.03%
1.0	LW	-0.0%	VST	-0.03%
1.0	GSK	-0.0%	WDC	-0.03%
1.0	BUD	-0.0%	THC	-0.03%
1.0	OXY	-0.0%	VFC	-0.03%
1.0	VCSH	0.0%	CNC	-0.03%
1.0	FRA	0.0%	ZION	-0.03%
1.0	MUB	0.0%	FIS	-0.03%
1.0	HYG	0.0%	EXPE	-0.03%
1.0	LQD	0.0%	CSTM	-0.02%
1.0	TLT	0.0%	NFLX	-0.02%
1.0	CVS	0.0%	GNRC	-0.02%
1.0	BMY	0.0%	CMA	-0.02%
1.0	BHP	0.0%	CHTR	-0.02%
1.0	POST	0.0%	UNH	-0.02%
1.0	JAZZ	0.0%	ON	-0.02%
1.0	FITB	0.0%	UAA	-0.02%
1.0	EXPE	0.01%	IEP	-0.02%
1.0	NVS	0.01%	ADBE	-0.02%
1.0	EMB	0.01%	TSLA	-0.02%
1.0	ZTS	0.01%	KEY	-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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	SIVBQ	-0.43%	SIVBQ	-0.44%
1.0	GME	-0.03%	BHC	-0.03%
1.0	CTLT	-0.02%	CTLT	-0.02%
1.0	CNC	-0.02%	CNC	-0.02%
1.0	MSTR	-0.01%	MSTR	-0.02%
1.0	META	-0.01%	NFLX	-0.02%
1.0	SBNY	-0.01%	AAP	-0.02%
1.0	CSTM	-0.0%	NWL	-0.02%
1.0	LW	-0.0%	LNC	-0.01%
1.0	KEY	-0.0%	СҮН	-0.01%
1.0	UNH	-0.0%	THC	-0.01%
1.0	FIS	-0.0%	META	-0.01%
1.0	MUB	0.0%	GNRC	-0.01%
1.0	PEP	0.0%	SBNY	-0.01%
1.0	VCSH	0.0%	VFC	-0.01%
1.0	EMB	0.0%	WDC	-0.01%
1.0	FRA	0.0%	LW	-0.01%
1.0	MSI	0.0%	VST	-0.01%
1.0	GLD	0.0%	CSTM	-0.01%
1.0	TLT	0.0%	FIS	-0.01%
1.0	HSBC	0.0%	CMA	-0.01%
1.0	HYG	0.0%	GT	-0.01%
1.0	NVS	0.0%	KEY	-0.01%
1.0	SNY	0.0%	INTC	-0.01%
1.0	LQD	0.0%	ZION	-0.01%
1.0	OXY	0.0%	UAA	-0.0%
1.0	ZTS	0.0%	IEP	-0.0%
1.0	GILD	0.0%	CCL	-0.0%
1.0	В	0.0%	UNH	-0.0%
1.0	BHP	0.0%	GE	-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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	SIVBQ	-4.79%	SIVBQ	-2.72%
10.0	SBNY	-4.68%	SBNY	-1.8%
10.0	FRCB	-2.3%	FRCB	-1.5%
10.0	AAP	-1.86%	CHTR	-0.34%
10.0	MSTR	-1.85%	UNH	-0.31%
10.0	GME	-1.79%	CVS	-0.25%
10.0	CHTR	-1.67%	GSK	-0.17%
10.0	KALU	-1.05%	BAC	-0.14%
10.0	GNRC	-1.0%	BMY	-0.11%
10.0	VFC	-0.99%	PEP	-0.1%
10.0	TSLA	-0.85%	CNC	-0.1%
10.0	CVS	-0.82%	VZ	-0.09%
10.0	META	-0.81%	KHC	-0.08%
10.0	PRGO	-0.7%	TLT	-0.08%
10.0	NEM	-0.68%	MUB	-0.07%
10.0	ZTS	-0.68%	LQD	-0.07%
10.0	UAA	-0.68%	FRA	-0.07%
10.0	OXY	-0.66%	EMB	-0.05%
10.0	KEY	-0.63%	MS	-0.03%
10.0	BHC	-0.62%	NVS	-0.02%
10.0	BUD	-0.6%	VCSH	-0.01%
10.0	CTLT	-0.59%	AZN	-0.0%
10.0	BALL	-0.52%	HYG	-0.0%
10.0	BHP	-0.51%	AAP	-0.0%
10.0	GSK	-0.51%	MRK	0.0%
10.0	SNY	-0.49%	WFC	0.0%
10.0	AMZN	-0.49%	CMG	0.02%
10.0	CMA	-0.46%	ABBV	0.02%
10.0	JAZZ	-0.46%	ZTS	0.02%
10.0	AA	-0.42%	ADBE	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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	SIVBQ	-2.51%	SIVBQ	-2.0%
10.0	SBNY	-1.59%	FRCB	-0.95%
10.0	MSTR	-1.08%	SBNY	-0.84%
10.0	FRCB	-0.88%	CHTR	-0.36%
10.0	CTLT	-0.64%	UNH	-0.29%
10.0	GME	-0.56%	CTLT	-0.26%
10.0	AAP	-0.56%	LW	-0.2%
10.0	CHTR	-0.47%	WDC	-0.18%
10.0	KALU	-0.32%	CVS	-0.16%
10.0	META	-0.29%	CNC	-0.15%
10.0	GNRC	-0.15%	PCG	-0.15%
10.0	CVS	-0.12%	KALU	-0.13%
10.0	OXY	-0.08%	TRGP	-0.12%
10.0	UNH	-0.06%	GSK	-0.12%
10.0	GSK	-0.05%	BAC	-0.11%
10.0	NEM	-0.05%	ADBE	-0.11%
10.0	AMZN	-0.04%	AAP	-0.1%
10.0	SNY	-0.03%	WFC	-0.1%
10.0	EXPE	-0.03%	FITB	-0.09%
10.0	BUD	-0.02%	BA	-0.09%
10.0	JAZZ	-0.01%	EXPE	-0.09%
10.0	FITB	-0.0%	FCX	-0.09%
10.0	VCSH	0.0%	FIS	-0.09%
10.0	MUB	0.0%	USB	-0.08%
10.0	LQD	0.0%	ABBV	-0.08%
10.0	AA	0.01%	JAZZ	-0.08%
10.0	BHP	0.01%	TFC	-0.08%
10.0	FRA	0.02%	CMG	-0.08%
10.0	CMA	0.02%	NEM	-0.07%
10.0	VFC	0.03%	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	SIVBQ	-1.56%	SIVBQ	-1.59%
10.0	FRCB	-0.63%	FRCB	-0.66%
10.0	MSTR	-0.45%	CTLT	-0.32%
10.0	CTLT	-0.33%	SBNY	-0.29%
10.0	SBNY	-0.31%	AAP	-0.19%
10.0	CHTR	-0.12%	CNC	-0.17%
10.0	META	-0.09%	NFLX	-0.16%
10.0	AAP	-0.06%	ZION	-0.16%
10.0	UNH	-0.04%	WDC	-0.15%
10.0	GME	-0.03%	CHTR	-0.14%
10.0	OXY	-0.02%	CMA	-0.13%
10.0	NFLX	-0.02%	INTC	-0.11%
10.0	KEY	-0.02%	UNH	-0.1%
10.0	FITB	-0.02%	LW	-0.1%
10.0	MUB	0.0%	META	-0.1%
10.0	VCSH	0.0%	KEY	-0.09%
10.0	FRA	0.0%	KALU	-0.08%
10.0	LQD	0.0%	TFC	-0.08%
10.0	EMB	0.0%	EXPE	-0.08%
10.0	TLT	0.0%	LNC	-0.06%
10.0	BUD	0.0%	CSTM	-0.06%
10.0	HYG	0.01%	FITB	-0.05%
10.0	SNY	0.01%	FCX	-0.04%
10.0	ZTS	0.01%	AMZN	-0.04%
10.0	AMZN	0.01%	ADBE	-0.04%
10.0	CVS	0.01%	MU	-0.03%
10.0	CMA	0.01%	USB	-0.03%
10.0	TMUS	0.01%	VFC	-0.03%
10.0	CNC	0.02%	VST	-0.02%
10.0	GSK	0.02%	OXY	-0.02%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	SBNY	-10.39%	SIVBQ	-6.57%
21.0	SIVBQ	-9.39%	SBNY	-6.23%
21.0	FRCB	-5.88%	FRCB	-4.64%
21.0	AAP	-3.49%	CHTR	-0.8%
21.0	CHTR	-2.91%	AAP	-0.73%
21.0	GNRC	-2.31%	GSK	-0.49%
21.0	MSTR	-2.24%	UNH	-0.47%
21.0	GME	-2.23%	CNC	-0.45%
21.0	VFC	-1.89%	CVS	-0.43%
21.0	UAA	-1.69%	BMY	-0.38%
21.0	KALU	-1.62%	KHC	-0.34%
21.0	TSLA	-1.59%	TLT	-0.3%
21.0	CTLT	-1.47%	VZ	-0.25%
21.0	AA	-1.42%	LQD	-0.23%
21.0	CVS	-1.36%	PEP	-0.2%
21.0	NEM	-1.28%	BALL	-0.2%
21.0	BHC	-1.21%	MUB	-0.19%
21.0	BUD	-1.13%	EMB	-0.19%
21.0	GSK	-1.11%	NWL	-0.18%
21.0	ZTS	-1.11%	CMCSA	-0.17%
21.0	PRGO	-1.07%	FRA	-0.17%
21.0	BALL	-1.01%	BAC	-0.16%
21.0	META	-1.0%	ADBE	-0.15%
21.0	CMA	-0.92%	BUD	-0.12%
21.0	KEY	-0.89%	BXP	-0.11%
21.0	SNY	-0.8%	NEM	-0.09%
21.0	CNC	-0.75%	USB	-0.09%
21.0	ВХР	-0.72%	VCSH	-0.05%
21.0	TLT	-0.72%	PRGO	-0.02%
21.0	ZION	-0.68%	ZTS	-0.02%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	SIVBQ	-6.4%	SIVBQ	-5.28%
21.0	SBNY	-5.81%	SBNY	-3.95%
21.0	FRCB	-3.79%	FRCB	-3.65%
21.0	AAP	-1.58%	CHTR	-0.62%
21.0	MSTR	-1.44%	UNH	-0.58%
21.0	CTLT	-1.41%	CNC	-0.45%
21.0	CHTR	-1.2%	GSK	-0.38%
21.0	GME	-0.99%	AAP	-0.34%
21.0	GNRC	-0.99%	CVS	-0.28%
21.0	KALU	-0.75%	CTLT	-0.28%
21.0	VFC	-0.66%	NEM	-0.23%
21.0	AA	-0.57%	LW	-0.23%
21.0	META	-0.52%	PCG	-0.22%
21.0	NEM	-0.5%	WDC	-0.21%
21.0	GSK	-0.36%	CMG	-0.14%
21.0	CVS	-0.33%	BAC	-0.13%
21.0	TSLA	-0.25%	COST	-0.12%
21.0	BHC	-0.24%	BMY	-0.1%
21.0	WDC	-0.23%	AZN	-0.1%
21.0	UAA	-0.23%	SNY	-0.09%
21.0	CNC	-0.16%	ABBV	-0.05%
21.0	CMA	-0.16%	FIS	-0.05%
21.0	SNY	-0.12%	CPRT	-0.04%
21.0	AMZN	-0.08%	ADBE	-0.03%
21.0	BUD	-0.06%	AMZN	-0.03%
21.0	BHP	-0.04%	MRK	-0.02%
21.0	OXY	-0.03%	USB	-0.02%
21.0	VCSH	0.0%	TFC	-0.02%
21.0	KEY	0.0%	ВА	-0.01%
21.0	MUB	0.0%	FRA	-0.01%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	SIVBQ	-4.44%	SIVBQ	-4.38%
21.0	SBNY	-3.28%	FRCB	-2.94%
21.0	FRCB	-2.89%	SBNY	-2.91%
21.0	CTLT	-0.74%	CNC	-0.42%
21.0	MSTR	-0.53%	CTLT	-0.4%
21.0	AAP	-0.4%	CHTR	-0.31%
21.0	CHTR	-0.3%	UNH	-0.27%
21.0	GNRC	-0.23%	NFLX	-0.26%
21.0	META	-0.12%	AAP	-0.24%
21.0	CNC	-0.12%	ZION	-0.22%
21.0	NFLX	-0.08%	WDC	-0.22%
21.0	GSK	-0.05%	CMA	-0.18%
21.0	NEM	-0.04%	TFC	-0.14%
21.0	KEY	-0.03%	ADBE	-0.11%
21.0	KALU	-0.01%	FITB	-0.11%
21.0	GME	-0.01%	GSK	-0.11%
21.0	ZION	-0.01%	AMZN	-0.09%
21.0	MUB	0.0%	NEM	-0.09%
21.0	VCSH	0.0%	INTC	-0.09%
21.0	AA	0.0%	KEY	-0.08%
21.0	FRA	0.0%	USB	-0.08%
21.0	EMB	0.0%	ВА	-0.07%
21.0	LQD	0.0%	LW	-0.07%
21.0	CMA	0.01%	EXPE	-0.07%
21.0	TLT	0.01%	FCX	-0.06%
21.0	ZTS	0.01%	JAZZ	-0.06%
21.0	CVS	0.02%	CVS	-0.06%
21.0	BUD	0.02%	CMG	-0.04%
21.0	HYG	0.02%	COST	-0.04%
21.0	OXY	0.02%	BXP	-0.03%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	SBNY	-33.9%	SBNY	-26.65%
63.0	SIVBQ	-30.88%	SIVBQ	-26.29%
63.0	FRCB	-21.89%	FRCB	-19.52%
63.0	AAP	-8.88%	AAP	-3.92%
63.0	CHTR	-6.6%	CHTR	-2.81%
63.0	VFC	-6.53%	CNC	-2.3%
63.0	UAA	-5.15%	BMY	-1.93%
63.0	AA	-4.33%	VFC	-1.86%
63.0	CTLT	-4.29%	BXP	-1.85%
63.0	GNRC	-4.14%	NWL	-1.51%
63.0	ВХР	-3.29%	UNH	-1.33%
63.0	BHC	-3.13%	BALL	-1.31%
63.0	NEM	-3.13%	TLT	-1.07%
63.0	CNC	-3.07%	GSK	-0.84%
63.0	NWL	-3.01%	CVS	-0.77%
63.0	BALL	-2.84%	KHC	-0.7%
63.0	KALU	-2.81%	ELAN	-0.69%
63.0	CLF	-2.64%	NEM	-0.66%
63.0	CVS	-2.43%	CMCSA	-0.6%
63.0	BMY	-2.31%	BUD	-0.53%
63.0	BIIB	-2.22%	MUB	-0.51%
63.0	BUD	-2.21%	LQD	-0.47%
63.0	TSLA	-2.15%	INTC	-0.41%
63.0	CMA	-2.05%	MRK	-0.4%
63.0	GSK	-1.97%	CMG	-0.39%
63.0	GME	-1.95%	ADBE	-0.34%
63.0	FIS	-1.86%	VZ	-0.29%
63.0	TLT	-1.72%	CLF	-0.26%
63.0	ZTS	-1.68%	LW	-0.25%
63.0	ZION	-1.6%	VNO	-0.22%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	SBNY	-27.28%	SIVBQ	-22.92%
63.0	SIVBQ	-25.86%	SBNY	-22.36%
63.0	FRCB	-18.26%	FRCB	-17.06%
63.0	AAP	-5.73%	AAP	-2.28%
63.0	CTLT	-4.15%	CHTR	-1.99%
63.0	CHTR	-4.12%	CNC	-1.95%
63.0	VFC	-4.05%	UNH	-1.53%
63.0	GNRC	-3.3%	GSK	-1.44%
63.0	UAA	-2.84%	BXP	-0.9%
63.0	AA	-2.45%	CTLT	-0.83%
63.0	BHC	-2.06%	VFC	-0.68%
63.0	NEM	-2.05%	NEM	-0.64%
63.0	CNC	-1.96%	BMY	-0.57%
63.0	GSK	-1.73%	NWL	-0.45%
63.0	KALU	-1.72%	LW	-0.42%
63.0	ВХР	-1.38%	BALL	-0.41%
63.0	ZION	-1.27%	CVS	-0.32%
63.0	CMA	-1.22%	TLT	-0.28%
63.0	CLF	-1.18%	ELAN	-0.21%
63.0	TSLA	-1.14%	INTC	-0.19%
63.0	CVS	-1.0%	VNO	-0.17%
63.0	BALL	-1.0%	SNY	-0.1%
63.0	NWL	-0.95%	EMB	-0.08%
63.0	META	-0.94%	USB	-0.07%
63.0	KEY	-0.93%	FRA	-0.06%
63.0	AMZN	-0.86%	TFC	-0.05%
63.0	GME	-0.82%	CMG	-0.05%
63.0	BUD	-0.64%	VZ	-0.04%
63.0	WDC	-0.62%	LQD	-0.03%
63.0	FIS	-0.6%	BAC	-0.03%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	SIVBQ	-20.12%	SIVBQ	-18.95%
63.0	SBNY	-19.6%	SBNY	-17.28%
63.0	FRCB	-14.91%	FRCB	-14.62%
63.0	CTLT	-3.17%	CNC	-1.65%
63.0	AAP	-2.52%	UNH	-1.23%
63.0	GNRC	-2.15%	CTLT	-1.22%
63.0	CHTR	-1.67%	GSK	-1.1%
63.0	VFC	-1.34%	CHTR	-1.09%
63.0	CNC	-1.23%	AAP	-0.88%
63.0	GSK	-0.96%	NEM	-0.57%
63.0	NEM	-0.92%	ZION	-0.25%
63.0	BHC	-0.82%	AMZN	-0.2%
63.0	NFLX	-0.74%	BXP	-0.19%
63.0	ZION	-0.69%	VNO	-0.17%
63.0	AA	-0.63%	USB	-0.17%
63.0	UAA	-0.6%	NFLX	-0.17%
63.0	KEY	-0.49%	GNRC	-0.15%
63.0	CMA	-0.41%	TFC	-0.14%
63.0	META	-0.36%	HCA	-0.1%
63.0	MSTR	-0.36%	KEY	-0.08%
63.0	KALU	-0.28%	CVS	-0.06%
63.0	AMZN	-0.2%	VZ	-0.05%
63.0	TSLA	-0.15%	LW	-0.01%
63.0	CVS	-0.08%	SNY	-0.0%
63.0	WDC	-0.07%	VCSH	0.0%
63.0	BUD	-0.0%	MUB	0.0%
63.0	VCSH	0.0%	LQD	0.0%
63.0	MUB	0.0%	HYG	0.0%
63.0	UNH	0.02%	EMB	0.0%
63.0	BHP	0.02%	FRA	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	SBNY	-59.67%	SBNY	-49.69%
126.0	SIVBQ	-56.65%	SIVBQ	-49.53%
126.0	FRCB	-44.09%	FRCB	-40.67%
126.0	AAP	-14.46%	AAP	-7.67%
126.0	VFC	-13.88%	VFC	-7.01%
126.0	CHTR	-8.24%	IEP	-5.19%
126.0	NWL	-8.11%	NWL	-4.95%
126.0	GNRC	-6.6%	CNC	-4.79%
126.0	UAA	-5.87%	BMY	-4.45%
126.0	CTLT	-5.74%	UNH	-3.55%
126.0	AA	-5.71%	INTC	-3.04%
126.0	CNC	-5.46%	CHTR	-2.86%
126.0	BIIB	-5.07%	GSK	-2.34%
126.0	ВХР	-4.79%	BXP	-2.26%
126.0	BMY	-4.78%	MRK	-2.09%
126.0	CLF	-4.64%	KHC	-1.97%
126.0	NEM	-4.4%	CVS	-1.83%
126.0	INTC	-4.09%	TLT	-1.58%
126.0	CVS	-4.08%	ELAN	-1.54%
126.0	GSK	-3.92%	BIIB	-1.36%
126.0	FIS	-3.31%	LW	-1.03%
126.0	BALL	-3.12%	CMCSA	-0.96%
126.0	CMA	-3.11%	VZ	-0.96%
126.0	IEP	-2.61%	PEP	-0.87%
126.0	ELAN	-2.38%	CLF	-0.81%
126.0	TLT	-2.37%	NEM	-0.8%
126.0	ZION	-2.18%	BALL	-0.65%
126.0	GME	-1.97%	MUB	-0.64%
126.0	CSTM	-1.91%	LQD	-0.4%
126.0	KEY	-1.9%	ADBE	-0.38%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	SBNY	-52.89%	SBNY	-45.06%
126.0	SIVBQ	-50.38%	SIVBQ	-44.91%
126.0	FRCB	-38.21%	FRCB	-35.99%
126.0	AAP	-10.86%	AAP	-5.51%
126.0	VFC	-10.19%	VFC	-4.72%
126.0	CHTR	-6.1%	IEP	-3.5%
126.0	GNRC	-5.75%	CNC	-3.35%
126.0	CTLT	-5.16%	UNH	-2.91%
126.0	NWL	-4.66%	INTC	-2.71%
126.0	AA	-3.92%	NWL	-2.69%
126.0	UAA	-3.66%	GSK	-2.45%
126.0	CNC	-3.34%	CHTR	-2.33%
126.0	CLF	-3.18%	BMY	-1.99%
126.0	ВХР	-3.13%	ВХР	-1.58%
126.0	GSK	-3.07%	MRK	-1.41%
126.0	INTC	-2.99%	CVS	-1.02%
126.0	NEM	-2.92%	ELAN	-0.85%
126.0	BIIB	-2.74%	VZ	-0.66%
126.0	CVS	-2.35%	LW	-0.47%
126.0	CMA	-2.04%	NEM	-0.37%
126.0	BMY	-1.96%	VNO	-0.29%
126.0	ZION	-1.76%	CLF	-0.27%
126.0	BALL	-1.73%	TLT	-0.26%
126.0	FIS	-1.69%	BALL	-0.26%
126.0	CSTM	-1.63%	CSTM	-0.23%
126.0	KEY	-1.57%	EMB	-0.2%
126.0	ELAN	-0.95%	PEP	-0.19%
126.0	META	-0.88%	BIIB	-0.11%
126.0	GME	-0.85%	KHC	-0.07%
126.0	UNH	-0.71%	LQD	-0.04%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
126.0	SBNY	-43.68%	SBNY	-38.83%
126.0	SIVBQ	-42.06%	SIVBQ	-38.73%
126.0	FRCB	-32.32%	FRCB	-31.39%
126.0	AAP	-6.84%	AAP	-3.49%
126.0	VFC	-5.5%	UNH	-2.55%
126.0	GNRC	-4.39%	CNC	-2.18%
126.0	CTLT	-3.77%	VFC	-2.11%
126.0	CHTR	-2.9%	GSK	-2.01%
126.0	GSK	-1.81%	IEP	-1.85%
126.0	AA	-1.76%	INTC	-1.67%
126.0	CNC	-1.68%	CHTR	-1.17%
126.0	NEM	-1.39%	BXP	-0.81%
126.0	CLF	-1.37%	NWL	-0.52%
126.0	ВХР	-1.16%	ELAN	-0.36%
126.0	NWL	-1.07%	VNO	-0.35%
126.0	ZION	-1.04%	CSTM	-0.26%
126.0	UAA	-1.03%	MRK	-0.23%
126.0	INTC	-1.01%	NEM	-0.21%
126.0	BIIB	-0.94%	VZ	-0.13%
126.0	CMA	-0.89%	BALL	-0.12%
126.0	KEY	-0.88%	LW	-0.1%
126.0	META	-0.79%	LEN	-0.08%
126.0	UNH	-0.46%	CVS	-0.02%
126.0	CSTM	-0.44%	VCSH	0.0%
126.0	BALL	-0.43%	MUB	0.0%
126.0	CVS	-0.36%	HYG	0.0%
126.0	FIS	-0.2%	LQD	0.0%
126.0	BHC	-0.0%	EMB	0.01%
126.0	MUB	0.0%	FRA	0.02%
126.0	VCSH	0.0%	BMY	0.02%



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.

252.0 SBNY -88.83% FRCB -77.4 252.0 SIVBQ -85.18% SBNY -75.2 252.0 FRCB -82.49% SIVBQ -74.2 252.0 AAP -29.03% IEP -24.2	26% 21% 26% 32% 71%
252.0 SIVBQ -85.18% SBNY -75.2 252.0 FRCB -82.49% SIVBQ -74.2 252.0 AAP -29.03% IEP -24.2	26% 21% 26% 32% 71%
252.0 AAP -29.03% IEP -24.2	26% 32% 71% L5%
	32% 71% 15%
	71% L5%
252.0 IEP -23.01% AAP -19.3	L5%
252.0 VFC -17.0% NWL -10.7	
252.0 NWL -16.57% CNC -8.1	1%
252.0 BIIB -14.13% VFC -8.	- , ,
252.0 CTLT -10.94% BIIB -7.6	32%
252.0 CVS -10.15% CVS -7.3	34%
252.0 CHTR -9.35% BMY -7.3	34%
252.0 AA -8.88% LW -6.4	14%
252.0 CNC -8.53% INTC -6.3	39%
252.0 INTC -7.69% MOS -3.8	39%
252.0 BMY -7.63% MRK -3.3	37%
252.0 CMA -7.35% KHC -3.3	35%
252.0 UAA -6.8% TLT -3.3	31%
252.0 CLF -6.65% PEP -2.2	28%
252.0 GNRC -6.56% UNH -2.	. 2%
252.0 FIS -6.54% CHTR -1.7	77%
252.0 OXY -6.03% PRGO -1.2	23%
252.0 LW -5.69% GSK -1.1	1%
252.0 BXP -5.34% BXP -0.6	38%
252.0 PRGO -5.13% VZ -0.5	58%
252.0 ZION -4.7% FIS -0.5	58%
252.0 TLT -4.62% CTLT -0.5	6%
252.0 MOS -4.52% MUB -0.4	13%
252.0 NEM -4.0% TFC -0.	4%
252.0 KEY -3.96% VCSH -0.1	19%
252.0 BALL -3.75% WRK -0.1	18%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	SBNY	-82.42%	FRCB	-72.45%
252.0	SIVBQ	-79.09%	SBNY	-70.9%
252.0	FRCB	-76.23%	SIVBQ	-69.87%
252.0	AAP	-24.12%	IEP	-20.34%
252.0	IEP	-18.07%	AAP	-15.84%
252.0	VFC	-13.45%	NWL	-7.62%
252.0	NWL	-12.19%	VFC	-6.09%
252.0	BIIB	-10.51%	CNC	-5.57%
252.0	CTLT	-9.39%	INTC	-5.4%
252.0	CMA	-6.7%	BIIB	-5.16%
252.0	AA	-6.49%	LW	-5.14%
252.0	GNRC	-6.25%	BMY	-4.85%
252.0	CHTR	-6.16%	CVS	-4.04%
252.0	CVS	-6.02%	MRK	-3.41%
252.0	INTC	-5.94%	UNH	-2.54%
252.0	CNC	-5.5%	MOS	-1.42%
252.0	FIS	-5.16%	BXP	-1.08%
252.0	BMY	-4.87%	GSK	-0.86%
252.0	CLF	-4.72%	VZ	-0.85%
252.0	ВХР	-4.68%	TFC	-0.68%
252.0	ZION	-4.35%	KHC	-0.53%
252.0	LW	-4.06%	FIS	-0.44%
252.0	UAA	-3.55%	PEP	-0.36%
252.0	OXY	-3.53%	CTLT	-0.35%
252.0	KEY	-3.38%	WRK	-0.3%
252.0	NEM	-2.79%	CHTR	-0.15%
252.0	TFC	-2.59%	VCSH	0.0%
252.0	LNC	-2.57%	MUB	0.0%
252.0	GSK	-2.46%	TLT	0.03%
252.0	MRK	-2.12%	LQD	0.14%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
252.0	SBNY	-73.67%	FRCB	-65.87%
252.0	SIVBQ	-71.07%	SBNY	-65.3%
252.0	FRCB	-68.11%	SIVBQ	-64.3%
252.0	AAP	-17.76%	IEP	-15.21%
252.0	IEP	-11.51%	AAP	-11.68%
252.0	VFC	-8.96%	NWL	-4.29%
252.0	NWL	-7.17%	INTC	-4.01%
252.0	CTLT	-7.12%	VFC	-3.99%
252.0	BIIB	-5.52%	LW	-3.27%
252.0	GNRC	-5.34%	CNC	-2.97%
252.0	CMA	-4.7%	UNH	-2.72%
252.0	AA	-3.71%	BMY	-2.29%
252.0	INTC	-3.61%	MRK	-2.29%
252.0	ВХР	-3.14%	BIIB	-2.08%
252.0	FIS	-3.08%	BXP	-1.17%
252.0	CLF	-2.93%	CVS	-1.01%
252.0	ZION	-2.9%	GSK	-0.9%
252.0	CNC	-2.6%	VZ	-0.33%
252.0	CHTR	-2.27%	TFC	-0.2%
252.0	BMY	-2.06%	FIS	-0.12%
252.0	LW	-1.93%	VCSH	0.0%
252.0	LNC	-1.9%	MUB	0.0%
252.0	KEY	-1.87%	HYG	0.01%
252.0	CVS	-1.84%	CTLT	0.01%
252.0	NEM	-1.31%	LQD	0.02%
252.0	GSK	-1.25%	EMB	0.06%
252.0	OXY	-1.1%	PEP	0.08%
252.0	MRK	-1.1%	FRA	0.14%
252.0	TFC	-0.84%	CMA	0.14%
252.0	UAA	-0.83%	GLD	0.15%



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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
1.0	IEP	3.32%	AMC	1.89%
1.0	GT	3.02%	GME	1.82%
1.0	AVGO	2.46%	NWL	1.44%
1.0	UAA	1.85%	UAA	1.4%
1.0	UNH	1.45%	GT	1.01%
1.0	ORCL	1.39%	IEP	0.91%
1.0	AMC	1.28%	MSTR	0.84%
1.0	MOS	1.22%	UNH	0.66%
1.0	ACGL	1.15%	CNC	0.63%
1.0	MSTR	1.1%	LW	0.61%
1.0	VNO	0.98%	VFC	0.48%
1.0	BIIB	0.97%	PRGO	0.46%
1.0	BMY	0.94%	CZR	0.44%
1.0	QQQ	0.8%	CHTR	0.44%
1.0	BA	0.7%	TXN	0.38%
1.0	BHP	0.7%	AAP	0.38%
1.0	CNC	0.67%	MOS	0.37%
1.0	MRK	0.67%	TEVA	0.31%
1.0	TEVA	0.66%	OXY	0.31%
1.0	CHTR	0.64%	BALL	0.29%
1.0	SPY	0.63%	META	0.28%
1.0	LW	0.63%	ZTS	0.28%
1.0	OXY	0.62%	CDNS	0.28%
1.0	KHC	0.59%	BXP	0.28%
1.0	JPM	0.58%	SBUX	0.27%
1.0	PHM	0.58%	PHM	0.27%
1.0	ADBE	0.57%	LLY	0.26%
1.0	AMAT	0.56%	DHI	0.26%
1.0	VICI	0.56%	JAZZ	0.26%
1.0	CPRT	0.53%	NAVI	0.26%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	IEP	1.65%	AMC	0.24%
1.0	GT	1.55%	GME	0.18%
1.0	AVGO	0.92%	NWL	0.08%
1.0	ORCL	0.86%	UAA	0.06%
1.0	UAA	0.66%	MSTR	0.05%
1.0	LUMN	0.57%	VFC	0.02%
1.0	MSTR	0.39%	GT	0.02%
1.0	ACGL	0.34%	AAP	0.01%
1.0	BMY	0.31%	CZR	0.01%
1.0	AMC	0.26%	TSLA	0.01%
1.0	AMAT	0.18%	ON	0.0%
1.0	CSCO	0.16%	IEP	0.0%
1.0	VNO	0.15%	VST	0.0%
1.0	CZR	0.15%	UNH	0.0%
1.0	BHP	0.14%	ORCL	0.0%
1.0	NVDA	0.12%	FCX	0.0%
1.0	CHTR	0.12%	CHTR	0.0%
1.0	UNH	0.11%	LW	0.0%
1.0	CNC	0.11%	AVGO	0.0%
1.0	MOS	0.1%	CSTM	0.0%
1.0	DHI	0.1%	INTC	0.0%
1.0	LVS	0.1%	MU	0.0%
1.0	VST	0.09%	CMG	0.0%
1.0	BIIB	0.09%	AMAT	0.0%
1.0	LLY	0.08%	PRGO	0.0%
1.0	TEVA	0.08%	LLY	0.0%
1.0	ZION	0.07%	NVDA	0.0%
1.0	PRGO	0.07%	GNRC	0.0%
1.0	FITB	0.06%	BBY	0.0%
1.0	NWL	0.06%	GBTC	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	IEP	0.96%	AMC	0.01%
1.0	GT	0.8%	GME	0.0%
1.0	LUMN	0.44%	NWL	0.0%
1.0	ORCL	0.39%	UAA	0.0%
1.0	AVGO	0.35%	MSTR	0.0%
1.0	UAA	0.18%	CNC	0.0%
1.0	ACGL	0.1%	VFC	0.0%
1.0	CSCO	0.1%	GT	0.0%
1.0	MSTR	0.08%	CZR	0.0%
1.0	CZR	0.06%	AAP	0.0%
1.0	AMC	0.05%	TSLA	0.0%
1.0	BMY	0.05%	BHC	0.0%
1.0	LVS	0.05%	ON	0.0%
1.0	QCOM	0.04%	LUMN	0.0%
1.0	PRGO	0.03%	IEP	0.0%
1.0	VST	0.02%	VST	0.0%
1.0	AMAT	0.02%	UNH	0.0%
1.0	CSTM	0.02%	ORCL	0.0%
1.0	BHC	0.02%	CMG	0.0%
1.0	CNC	0.02%	FCX	0.0%
1.0	LLY	0.01%	AA	0.0%
1.0	KEY	0.01%	LW	0.0%
1.0	CAH	0.01%	CHTR	0.0%
1.0	RIO	0.01%	CSTM	0.0%
1.0	BIIB	0.01%	AVGO	0.0%
1.0	NVDA	0.01%	INTC	0.0%
1.0	BA	0.01%	MU	0.0%
1.0	ZION	0.01%	AMAT	0.0%
1.0	NWL	0.01%	PRGO	0.0%
1.0	MOS	0.01%	LLY	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	10.05%	AMC	7.78%
10.0	MSTR	8.05%	GME	7.38%
10.0	ORCL	6.44%	UAA	5.9%
10.0	IEP	5.05%	MSTR	5.8%
10.0	UAA	4.89%	NWL	5.53%
10.0	UNH	4.75%	CNC	5.29%
10.0	AVGO	4.57%	CZR	4.1%
10.0	MOS	4.07%	IEP	4.05%
10.0	VNO	4.01%	GT	3.64%
10.0	CZR	3.79%	VST	3.49%
10.0	CNC	3.55%	UNH	3.3%
10.0	AMAT	3.53%	CHTR	3.14%
10.0	AMC	3.51%	ORCL	2.76%
10.0	ACGL	3.27%	PRGO	2.63%
10.0	PHM	3.09%	TXN	2.54%
10.0	BMY	3.02%	GBTC	2.46%
10.0	GME	2.88%	MOS	2.45%
10.0	OXY	2.81%	OXY	2.44%
10.0	CHTR	2.76%	PHM	2.25%
10.0	GBTC	2.57%	VNO	2.21%
10.0	CPRT	2.55%	LLY	2.12%
10.0	BA	2.5%	FCX	2.09%
10.0	NWL	2.49%	TSLA	2.03%
10.0	LLY	2.44%	TEVA	2.02%
10.0	TSLA	2.41%	BHC	2.0%
10.0	BIIB	2.4%	CMCSA	1.99%
10.0	BHP	2.35%	CMG	1.95%
10.0	VST	2.3%	FIS	1.9%
10.0	CMG	2.22%	AAP	1.88%
10.0	TEVA	2.17%	TRGP	1.87%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	7.65%	AMC	4.58%
10.0	MSTR	4.97%	GME	4.15%
10.0	AVGO	4.8%	NWL	3.23%
10.0	ORCL	4.6%	UAA	2.83%
10.0	AMAT	3.57%	MSTR	2.72%
10.0	IEP	2.59%	CNC	2.52%
10.0	UAA	2.45%	GT	2.12%
10.0	TSLA	2.07%	AAP	1.6%
10.0	VNO	2.01%	TSLA	1.48%
10.0	NWL	1.7%	CZR	1.47%
10.0	UNH	1.7%	IEP	1.3%
10.0	CZR	1.69%	VST	1.14%
10.0	BHC	1.57%	UNH	1.01%
10.0	AMC	1.56%	ON	0.98%
10.0	BIIB	1.47%	BHC	0.9%
10.0	BMY	1.23%	ORCL	0.88%
10.0	MOS	1.21%	FCX	0.75%
10.0	CNC	1.21%	LW	0.72%
10.0	LLY	1.2%	AVGO	0.69%
10.0	BA	1.08%	CHTR	0.69%
10.0	ACGL	1.01%	AMAT	0.56%
10.0	TEVA	0.99%	PRGO	0.52%
10.0	BHP	0.92%	LLY	0.51%
10.0	PHM	0.92%	CMG	0.46%
10.0	CDNS	0.9%	TXN	0.42%
10.0	GME	0.87%	GBTC	0.41%
10.0	VST	0.8%	TEVA	0.41%
10.0	OXY	0.78%	NAVI	0.4%
10.0	AAP	0.76%	CDNS	0.38%
10.0	CHTR	0.74%	EXPE	0.36%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
10.0	GT	5.35%	AMC	2.37%
10.0	MSTR	2.93%	GME	2.03%
10.0	ORCL	2.87%	NWL	1.36%
10.0	AVGO	2.76%	UAA	1.09%
10.0	AMAT	1.84%	MSTR	1.02%
10.0	IEP	1.26%	CNC	0.9%
10.0	VNO	1.24%	GT	0.66%
10.0	NWL	1.13%	VFC	0.54%
10.0	BHC	1.13%	AAP	0.41%
10.0	TSLA	1.09%	CZR	0.34%
10.0	UAA	0.95%	TSLA	0.34%
10.0	AMC	0.78%	ON	0.32%
10.0	CZR	0.66%	BHC	0.31%
10.0	BIIB	0.54%	IEP	0.27%
10.0	NVDA	0.53%	VST	0.21%
10.0	LLY	0.43%	UNH	0.16%
10.0	BHP	0.41%	ORCL	0.12%
10.0	CNC	0.36%	FCX	0.09%
10.0	BA	0.32%	AA	0.08%
10.0	CDNS	0.32%	LW	0.08%
10.0	TEVA	0.32%	AVGO	0.07%
10.0	MU	0.31%	CSTM	0.07%
10.0	ON	0.3%	CHTR	0.07%
10.0	CSTM	0.3%	INTC	0.07%
10.0	BMY	0.29%	AMAT	0.05%
10.0	INTC	0.28%	PRGO	0.04%
10.0	OXY	0.28%	LLY	0.04%
10.0	MOS	0.27%	NVDA	0.04%
10.0	ACGL	0.25%	BBY	0.04%
10.0	UNH	0.24%	GNRC	0.03%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	IEP	1.93%	AMC	1.22%
1.0	GS	1.84%	GME	1.2%
1.0	UAA	1.83%	UAA	1.12%
1.0	LUMN	1.62%	IEP	0.9%
1.0	SPY	1.59%	GT	0.74%
1.0	TEVA	1.54%	CNC	0.58%
1.0	GT	1.52%	CYH	0.51%
1.0	MS	1.37%	LW	0.46%
1.0	AVGO	1.3%	UNH	0.45%
1.0	GBTC	1.22%	TEVA	0.41%
1.0	AMAT	1.18%	LLY	0.41%
1.0	TRGP	1.03%	FCX	0.35%
1.0	PWR	0.91%	ELAN	0.34%
1.0	ELAN	0.9%	BMY	0.32%
1.0	THC	0.74%	PRGO	0.31%
1.0	JPM	0.73%	BHC	0.31%
1.0	PHM	0.72%	TSLA	0.28%
1.0	BIIB	0.67%	JAZZ	0.26%
1.0	QQQ	0.63%	MRK	0.23%
1.0	NVDA	0.6%	FSUGY	0.22%
1.0	BA	0.54%	ISRG	0.2%
1.0	UNH	0.53%	SNY	0.19%
1.0	INTU	0.49%	AMGN	0.19%
1.0	GOOGL	0.47%	ZTS	0.18%
1.0	CAH	0.47%	AZN	0.17%
1.0	WYNN	0.46%	BIIB	0.17%
1.0	GME	0.44%	NVDA	0.16%
1.0	ACGL	0.43%	BBY	0.16%
1.0	RIO	0.4%	INTC	0.16%
1.0	CYH	0.38%	BUD	0.16%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	0.99%	AMC	0.15%
1.0	IEP	0.74%	GME	0.11%
1.0	GBTC	0.73%	UAA	0.03%
1.0	UAA	0.6%	MSTR	0.03%
1.0	AMAT	0.5%	CNC	0.02%
1.0	GT	0.48%	CYH	0.02%
1.0	GS	0.41%	GT	0.01%
1.0	AVGO	0.37%	AAP	0.0%
1.0	VST	0.35%	TSLA	0.0%
1.0	TRGP	0.31%	BHC	0.0%
1.0	DHI	0.31%	ON	0.0%
1.0	BIIB	0.27%	LUMN	0.0%
1.0	PHM	0.23%	IEP	0.0%
1.0	INTU	0.23%	VST	0.0%
1.0	CYH	0.21%	UNH	0.0%
1.0	WYNN	0.19%	ORCL	0.0%
1.0	TSLA	0.19%	AMD	0.0%
1.0	ORCL	0.18%	FCX	0.0%
1.0	TEVA	0.18%	AA	0.0%
1.0	MS	0.14%	CHTR	0.0%
1.0	GOOGL	0.14%	LW	0.0%
1.0	NAVI	0.13%	AVGO	0.0%
1.0	GME	0.13%	CSTM	0.0%
1.0	BA	0.13%	INTC	0.0%
1.0	ACGL	0.12%	MU	0.0%
1.0	EXPE	0.11%	AMAT	0.0%
1.0	NEM	0.11%	PRGO	0.0%
1.0	BHC	0.1%	LLY	0.0%
1.0	MOS	0.1%	NVDA	0.0%
1.0	AMD	0.09%	GNRC	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	0.38%	AMC	0.0%
1.0	IEP	0.35%	GME	0.0%
1.0	GBTC	0.23%	UAA	0.0%
1.0	VST	0.2%	MSTR	0.0%
1.0	DHI	0.19%	CYH	0.0%
1.0	TRGP	0.13%	CNC	0.0%
1.0	GT	0.12%	VFC	0.0%
1.0	BIIB	0.11%	GT	0.0%
1.0	UAA	0.11%	CZR	0.0%
1.0	AMAT	0.09%	AAP	0.0%
1.0	GS	0.09%	CLF	0.0%
1.0	PHM	0.07%	TSLA	0.0%
1.0	BA	0.05%	BHC	0.0%
1.0	CYH	0.05%	ON	0.0%
1.0	WYNN	0.05%	LUMN	0.0%
1.0	GE	0.05%	IEP	0.0%
1.0	AVGO	0.05%	VST	0.0%
1.0	AMD	0.04%	UNH	0.0%
1.0	NEM	0.04%	ORCL	0.0%
1.0	MS	0.04%	CMG	0.0%
1.0	TSLA	0.04%	FCX	0.0%
1.0	NAVI	0.03%	AMD	0.0%
1.0	MOS	0.03%	AA	0.0%
1.0	TEVA	0.03%	LW	0.0%
1.0	ZION	0.03%	CSTM	0.0%
1.0	INTU	0.03%	CHTR	0.0%
1.0	BHC	0.03%	AVGO	0.0%
1.0	CSTM	0.03%	INTC	0.0%
1.0	CHTR	0.03%	MU	0.0%
1.0	QCOM	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	7.3%	СҮН	5.64%
10.0	AMAT	5.06%	VFC	4.06%
10.0	IEP	4.83%	TSLA	4.01%
10.0	CYH	4.44%	LUMN	3.94%
10.0	AVGO	4.4%	ON	3.45%
10.0	GT	4.34%	GME	3.43%
10.0	SPY	4.01%	IEP	3.42%
10.0	AMD	4.0%	UAA	3.37%
10.0	MS	3.88%	AMD	3.0%
10.0	ELAN	3.77%	CSTM	2.97%
10.0	TSLA	3.57%	AVGO	2.93%
10.0	THC	3.56%	INTC	2.89%
10.0	INTC	3.44%	MU	2.87%
10.0	PWR	3.33%	AA	2.78%
10.0	GS	2.95%	UNH	2.75%
10.0	FSUGY	2.91%	AMAT	2.74%
10.0	TEVA	2.9%	BBY	2.61%
10.0	BA	2.81%	GT	2.41%
10.0	QQQ	2.72%	LW	2.38%
10.0	UAA	2.61%	AMC	2.27%
10.0	MU	2.45%	BHC	2.22%
10.0	GOOGL	2.4%	THC	2.2%
10.0	NVDA	2.31%	ELAN	2.19%
10.0	CSTM	2.31%	KALU	2.11%
10.0	CSCO	2.27%	FCX	2.11%
10.0	BBY	2.27%	EXPE	2.06%
10.0	AA	2.24%	FSUGY	2.02%
10.0	UNH	2.22%	QCOM	1.98%
10.0	VFC	2.16%	ISRG	1.88%
10.0	ON	2.15%	CCL	1.77%



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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	4.72%	AMC	3.49%
10.0	GT	3.97%	GME	2.9%
10.0	GBTC	2.89%	UAA	2.23%
10.0	IEP	2.68%	CYH	2.2%
10.0	UAA	2.36%	CNC	1.97%
10.0	AMAT	2.31%	VFC	1.78%
10.0	AMD	2.0%	GT	1.53%
10.0	CYH	1.96%	TSLA	1.09%
10.0	PHM	1.96%	ON	1.04%
10.0	CNC	1.9%	BHC	1.03%
10.0	TEVA	1.81%	LUMN	1.0%
10.0	GME	1.73%	IEP	0.95%
10.0	VST	1.67%	NWL	0.91%
10.0	GS	1.67%	VST	0.82%
10.0	AVGO	1.47%	CLF	0.73%
10.0	BA	1.43%	UNH	0.71%
10.0	THC	1.43%	AMD	0.53%
10.0	TRGP	1.42%	FCX	0.51%
10.0	TSLA	1.34%	AAP	0.5%
10.0	DHI	1.32%	AA	0.49%
10.0	ELAN	1.27%	LW	0.49%
10.0	VFC	1.25%	AVGO	0.47%
10.0	INTC	1.11%	CSTM	0.46%
10.0	MS	1.09%	INTC	0.45%
10.0	NWL	1.09%	MU	0.42%
10.0	NVDA	1.07%	AMAT	0.37%
10.0	PWR	1.06%	PRGO	0.34%
10.0	SPY	1.02%	LLY	0.33%
10.0	FSUGY	0.96%	NVDA	0.32%
10.0	LVS	0.88%	CHTR	0.32%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	2.86%	AMC	1.29%
10.0	GT	2.3%	GME	1.07%
10.0	GBTC	1.67%	UAA	0.5%
10.0	IEP	1.47%	СҮН	0.48%
10.0	AMD	1.1%	MSTR	0.46%
10.0	DHI	0.95%	CNC	0.39%
10.0	CYH	0.92%	VFC	0.32%
10.0	UAA	0.92%	GT	0.26%
10.0	VST	0.91%	AAP	0.14%
10.0	AMAT	0.83%	TSLA	0.11%
10.0	PHM	0.83%	ON	0.1%
10.0	CNC	0.82%	BHC	0.1%
10.0	NWL	0.79%	LUMN	0.09%
10.0	GME	0.71%	IEP	0.08%
10.0	ELAN	0.65%	VST	0.06%
10.0	BIIB	0.62%	CLF	0.04%
10.0	VFC	0.59%	UNH	0.04%
10.0	GS	0.55%	ORCL	0.03%
10.0	MOS	0.54%	AMD	0.02%
10.0	TEVA	0.5%	FCX	0.02%
10.0	BA	0.5%	AA	0.02%
10.0	TRGP	0.46%	LW	0.02%
10.0	THC	0.44%	AVGO	0.01%
10.0	FSUGY	0.41%	CSTM	0.01%
10.0	LVS	0.37%	CHTR	0.01%
10.0	MS	0.32%	INTC	0.01%
10.0	ACGL	0.3%	MU	0.01%
10.0	LW	0.3%	AMAT	0.01%
10.0	AVGO	0.29%	PRGO	0.01%
10.0	AAP	0.28%	LLY	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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
1.0	AMD	-1.81%	LUMN	-2.07%
1.0	WDC	-1.49%	AMD	-2.0%
1.0	CLF	-1.25%	WDC	-1.22%
1.0	KALU	-1.08%	KALU	-0.95%
1.0	AA	-1.07%	CLF	-0.93%
1.0	MU	-0.88%	AA	-0.77%
1.0	ISRG	-0.78%	MU	-0.7%
1.0	LUMN	-0.75%	LVS	-0.66%
1.0	AMZN	-0.52%	СҮН	-0.66%
1.0	ON	-0.48%	ISRG	-0.65%
1.0	CMA	-0.46%	CAH	-0.58%
1.0	NEM	-0.46%	NEM	-0.56%
1.0	GNRC	-0.45%	CMA	-0.46%
1.0	SLV	-0.41%	SLV	-0.4%
1.0	GLD	-0.37%	В	-0.34%
1.0	VFC	-0.34%	QCOM	-0.32%
1.0	WFC	-0.34%	GLD	-0.3%
1.0	GOOGL	-0.27%	GOOGL	-0.28%
1.0	GILD	-0.24%	WFC	-0.27%
1.0	QCOM	-0.23%	AMZN	-0.25%
1.0	BBY	-0.21%	AVGO	-0.23%
1.0	EXPE	-0.2%	ON	-0.23%
1.0	HON	-0.2%	PWR	-0.22%
1.0	PWR	-0.2%	GNRC	-0.21%
1.0	CYH	-0.19%	ZION	-0.2%
1.0	TSLA	-0.18%	HON	-0.19%
1.0	THC	-0.18%	AMAT	-0.17%
1.0	В	-0.17%	PEP	-0.13%
1.0	HCA	-0.16%	MS	-0.13%
1.0	BAC	-0.14%	RIO	-0.13%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMD	-0.63%	AMD	-0.72%
1.0	CLF	-0.51%	CYH	-0.71%
1.0	KALU	-0.45%	CLF	-0.54%
1.0	CYH	-0.29%	KALU	-0.45%
1.0	ISRG	-0.18%	LUMN	-0.3%
1.0	CAH	-0.18%	CAH	-0.26%
1.0	CMA	-0.18%	ISRG	-0.19%
1.0	WDC	-0.15%	CMA	-0.18%
1.0	AA	-0.12%	WDC	-0.15%
1.0	QCOM	-0.0%	AA	-0.12%
1.0	JAZZ	0.0%	LVS	-0.11%
1.0	HYG	0.0%	BHC	-0.09%
1.0	HCA	0.0%	CNC	-0.07%
1.0	HD	0.0%	QCOM	-0.05%
1.0	GWW	0.0%	VCSH	0.0%
1.0	GSK	0.0%	MUB	0.0%
1.0	GLD	0.0%	HYG	0.0%
1.0	GILD	0.0%	LQD	0.0%
1.0	GE	0.0%	EMB	0.0%
1.0	FRA	0.0%	TLT	0.0%
1.0	HLT	0.0%	FRA	0.0%
1.0	KHC	0.0%	GLD	0.0%
1.0	MNST	0.0%	SPY	0.0%
1.0	FCX	0.0%	VICI	0.0%
1.0	WFC	0.0%	ORLY	0.0%
1.0	VCSH	0.0%	NVS	0.0%
1.0	USB	0.0%	POST	0.0%
1.0	TXN	0.0%	CSCO	0.0%
1.0	TMUS	0.0%	COST	0.0%
1.0	TLT	0.0%	MNST	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.

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
1.0	AMD	-0.17%	CYH	-0.27%
1.0	CYH	-0.16%	AMD	-0.18%
1.0	CLF	-0.07%	CLF	-0.07%
1.0	AA	0.0%	EMB	0.0%
1.0	ORLY	0.0%	LQD	0.0%
1.0	ON	0.0%	HYG	0.0%
1.0	NVS	0.0%	VCSH	0.0%
1.0	NFLX	0.0%	MUB	0.0%
1.0	NEM	0.0%	TLT	0.0%
1.0	NAVI	0.0%	FRA	0.0%
1.0	MUB	0.0%	GLD	0.0%
1.0	MU	0.0%	SPY	0.0%
1.0	MSI	0.0%	VICI	0.0%
1.0	MSFT	0.0%	ORLY	0.0%
1.0	MS	0.0%	NVS	0.0%
1.0	MNST	0.0%	POST	0.0%
1.0	META	0.0%	COST	0.0%
1.0	LW	0.0%	CSCO	0.0%
1.0	LQD	0.0%	MNST	0.0%
1.0	LNC	0.0%	HSBC	0.0%
1.0	LEN	0.0%	MSI	0.0%
1.0	KHC	0.0%	AZO	0.0%
1.0	KALU	0.0%	HD	0.0%
1.0	JPM	0.0%	PEP	0.0%
1.0	JAZZ	0.0%	QQQ	0.0%
1.0	ISRG	0.0%	T	0.0%
1.0	INTU	0.0%	VZ	0.0%
1.0	INTC	0.0%	MSFT	0.0%
1.0	HYG	0.0%	MOX	0.0%
1.0	HSBC	0.0%	JPM	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	-15.51%	LUMN	-19.05%
10.0	ISRG	-14.39%	CYH	-13.39%
10.0	CYH	-13.73%	ISRG	-13.06%
10.0	AMD	-11.29%	AMD	-12.19%
10.0	KALU	-8.65%	LVS	-8.59%
10.0	MU	-7.63%	KALU	-7.41%
10.0	LVS	-7.06%	MU	-7.31%
10.0	GNRC	-6.12%	GNRC	-5.26%
10.0	WDC	-5.01%	ELAN	-3.83%
10.0	HCA	-4.69%	GOOGL	-3.79%
10.0	GOOGL	-4.36%	CAH	-3.75%
10.0	BBY	-4.29%	HCA	-3.72%
10.0	ELAN	-3.84%	WDC	-3.65%
10.0	VFC	-3.54%	BBY	-3.59%
10.0	AA	-3.43%	QCOM	-2.74%
10.0	QCOM	-3.07%	AA	-2.73%
10.0	AAPL	-2.78%	PEP	-2.39%
10.0	THC	-2.75%	WFC	-2.38%
10.0	CAH	-2.63%	FSUGY	-2.29%
10.0	GLD	-2.58%	CSTM	-2.17%
10.0	CSTM	-2.55%	RIO	-2.1%
10.0	WFC	-2.5%	AAPL	-2.03%
10.0	FSUGY	-2.5%	GLD	-1.92%
10.0	PEP	-2.31%	CVS	-1.65%
10.0	GILD	-2.26%	INTC	-1.47%
10.0	SBUX	-2.15%	BAC	-1.47%
10.0	CVS	-2.11%	SLV	-1.18%
10.0	AMZN	-2.06%	GILD	-1.14%
10.0	INTC	-1.91%	NVDA	-1.05%
10.0	SLV	-1.67%	CSCO	-1.04%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	-11.54%	LUMN	-15.24%
10.0	CYH	-11.4%	CYH	-11.32%
10.0	ISRG	-8.73%	ISRG	-8.6%
10.0	AMD	-6.41%	AMD	-7.32%
10.0	KALU	-4.26%	LVS	-5.36%
10.0	LVS	-4.24%	KALU	-3.91%
10.0	MU	-2.01%	CAH	-2.12%
10.0	GNRC	-1.79%	MU	-2.11%
10.0	VFC	-1.73%	GNRC	-1.66%
10.0	CAH	-1.62%	WDC	-1.24%
10.0	WDC	-1.47%	HCA	-0.61%
10.0	HCA	-0.65%	CLF	-0.47%
10.0	CLF	-0.55%	SLV	-0.45%
10.0	SLV	-0.45%	QCOM	-0.37%
10.0	AMZN	-0.39%	NVDA	-0.24%
10.0	THC	-0.38%	NEM	-0.21%
10.0	QCOM	-0.38%	GLD	-0.2%
10.0	AA	-0.37%	CSTM	-0.2%
10.0	BBY	-0.25%	BBY	-0.19%
10.0	GLD	-0.2%	AMZN	-0.19%
10.0	CSTM	-0.17%	GOOGL	-0.17%
10.0	NEM	-0.15%	WFC	-0.04%
10.0	GOOGL	-0.11%	THC	-0.04%
10.0	LQD	0.0%	VCSH	0.0%
10.0	VCSH	0.0%	MUB	0.0%
10.0	MUB	0.0%	HYG	0.0%
10.0	ZTS	0.0%	EMB	0.0%
10.0	HD	0.0%	LQD	0.0%
10.0	AZN	0.0%	FRA	0.0%
10.0	FRA	0.0%	TLT	0.0%



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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
10.0	LUMN	-7.8%	LUMN	-11.0%
10.0	CYH	-7.64%	CYH	-8.04%
10.0	AMD	-2.55%	AMD	-3.22%
10.0	ISRG	-2.36%	ISRG	-2.35%
10.0	LVS	-0.43%	LVS	-0.94%
10.0	KALU	-0.41%	CLF	-0.5%
10.0	CAH	-0.38%	CAH	-0.49%
10.0	CLF	-0.25%	KALU	-0.39%
10.0	VFC	-0.14%	VCSH	0.0%
10.0	ZTS	0.0%	MUB	0.0%
10.0	MNST	0.0%	HYG	0.0%
10.0	META	0.0%	EMB	0.0%
10.0	CMA	0.0%	LQD	0.0%
10.0	CMCSA	0.0%	TLT	0.0%
10.0	JAZZ	0.0%	FRA	0.0%
10.0	HON	0.0%	GLD	0.0%
10.0	HD	0.0%	SPY	0.0%
10.0	HCA	0.0%	VICI	0.0%
10.0	GSK	0.0%	ORLY	0.0%
10.0	GLD	0.0%	NVS	0.0%
10.0	GILD	0.0%	POST	0.0%
10.0	LQD	0.0%	SLV	0.0%
10.0	FRA	0.0%	CSCO	0.0%
10.0	ВХР	0.0%	COST	0.0%
10.0	MSI	0.0%	MNST	0.0%
10.0	VZ	0.0%	HSBC	0.0%
10.0	AAPL	0.0%	MSI	0.0%
10.0	ABBV	0.0%	T	0.0%
10.0	VCSH	0.0%	AZO	0.0%
10.0	TMUS	0.0%	QQQ	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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	MSTR	-1.33%	NEM	-1.02%
1.0	CLF	-1.27%	CLF	-0.95%
1.0	AAP	-1.07%	CZR	-0.73%
1.0	CZR	-1.04%	AAP	-0.56%
1.0	CMG	-0.84%	В	-0.56%
1.0	META	-0.67%	CMG	-0.56%
1.0	AMC	-0.65%	ZION	-0.5%
1.0	TXN	-0.61%	SLV	-0.48%
1.0	NWL	-0.56%	LVS	-0.45%
1.0	NEM	-0.51%	WDC	-0.42%
1.0	LVS	-0.36%	WYNN	-0.42%
1.0	NAVI	-0.36%	MOS	-0.4%
1.0	GLD	-0.32%	MSTR	-0.36%
1.0	MSI	-0.31%	VZ	-0.33%
1.0	VFC	-0.3%	META	-0.33%
1.0	SBUX	-0.3%	GLD	-0.32%
1.0	NFLX	-0.3%	AA	-0.3%
1.0	HON	-0.28%	HON	-0.29%
1.0	AA	-0.28%	MSI	-0.29%
1.0	ON	-0.26%	GBTC	-0.29%
1.0	CMCSA	-0.25%	GNRC	-0.28%
1.0	KHC	-0.23%	T	-0.26%
1.0	AMZN	-0.23%	DHI	-0.26%
1.0	QCOM	-0.22%	NAVI	-0.26%
1.0	KEY	-0.2%	ВА	-0.23%
1.0	VZ	-0.2%	FITB	-0.22%
1.0	CDNS	-0.19%	ORCL	-0.18%
1.0	WDC	-0.17%	VST	-0.17%
1.0	CHTR	-0.17%	AZO	-0.16%
1.0	POST	-0.17%	TFC	-0.15%



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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	NWL	-0.68%	NWL	-0.81%
1.0	CLF	-0.47%	CLF	-0.49%
1.0	CMG	-0.36%	CMG	-0.39%
1.0	CZR	-0.24%	CZR	-0.25%
1.0	META	-0.06%	ZION	-0.15%
1.0	ZION	-0.03%	VFC	-0.09%
1.0	NFLX	-0.0%	META	-0.06%
1.0	HSBC	0.0%	NFLX	-0.0%
1.0	HLT	0.0%	VCSH	0.0%
1.0	HCA	0.0%	MUB	0.0%
1.0	GWW	0.0%	HYG	0.0%
1.0	IRM	0.0%	LQD	0.0%
1.0	GLD	0.0%	EMB	0.0%
1.0	FRA	0.0%	TLT	0.0%
1.0	EMB	0.0%	FRA	0.0%
1.0	CVS	0.0%	GLD	0.0%
1.0	CPRT	0.0%	SPY	0.0%
1.0	HYG	0.0%	VICI	0.0%
1.0	GSK	0.0%	ORLY	0.0%
1.0	JAZZ	0.0%	NVS	0.0%
1.0	KHC	0.0%	POST	0.0%
1.0	LQD	0.0%	CSCO	0.0%
1.0	MSI	0.0%	COST	0.0%
1.0	MUB	0.0%	MNST	0.0%
1.0	NVS	0.0%	HSBC	0.0%
1.0	OXY	0.0%	MSI	0.0%
1.0	SNY	0.0%	AZO	0.0%
1.0	T	0.0%	QQQ	0.0%
1.0	TLT	0.0%	HD	0.0%
1.0	TXN	0.0%	PEP	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.

${\tt Horizon}$	${\tt Ticker_V}$	pl_Put-0.2	${\tt Ticker_SBS}$	pl_bsPut-0.2
1.0	NWL	-0.37%	NWL	-0.38%
1.0	AA	0.0%	MUB	0.0%
1.0	MU	0.0%	VCSH	0.0%
1.0	MSI	0.0%	EMB	0.0%
1.0	MSFT	0.0%	HYG	0.0%
1.0	MRK	0.0%	LQD	0.0%
1.0	MNST	0.0%	TLT	0.0%
1.0	META	0.0%	FRA	0.0%
1.0	LW	0.0%	GLD	0.0%
1.0	LVS	0.0%	SPY	0.0%
1.0	LQD	0.0%	VICI	0.0%
1.0	LNC	0.0%	ORLY	0.0%
1.0	LLY	0.0%	NVS	0.0%
1.0	KHC	0.0%	COST	0.0%
1.0	KALU	0.0%	POST	0.0%
1.0	JPM	0.0%	CSCO	0.0%
1.0	JAZZ	0.0%	MNST	0.0%
1.0	ISRG	0.0%	HSBC	0.0%
1.0	HYG	0.0%	MSI	0.0%
1.0	HSBC	0.0%	AZO	0.0%
1.0	HON	0.0%	HD	0.0%
1.0	HLT	0.0%	PEP	0.0%
1.0	HD	0.0%	QQQ	0.0%
1.0	HCA	0.0%	T	0.0%
1.0	GWW	0.0%	VZ	0.0%
1.0	KEY	0.0%	MSFT	0.0%
1.0	MUB	0.0%	MOX	0.0%
1.0	NFLX	0.0%	JPM	0.0%
1.0	NVS	0.0%	BAC	0.0%
1.0	MOX	0.0%	RIO	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.

Horizon	Ticker V	PnL% V	Ticker_SBS	PnL% SBS
10.0	-	-7.56%	MOS	-6.23%
10.0		-5.33%	MSTR	-4.26%
10.0		-5.27%	CHTR	-4.1%
10.0		-5.11%	CZR	-4.01%
10.0		-4.14%	NEM	-3.61%
10.0	NFLX	-4.07%	NFLX	-3.38%
10.0	AZO	-3.07%	AZO	-3.25%
10.0	CMG	-2.81%	ZION	-3.17%
10.0	TXN	-2.69%	GBTC	-2.91%
10.0	NEM	-2.33%	SLV	-2.55%
10.0	ZION	-2.2%	ORLY	-2.28%
10.0	OXY	-2.02%	ACGL	-2.22%
10.0	ORCL	-1.96%	ORCL	-2.11%
10.0	CMCSA	-1.79%	CMG	-1.75%
10.0	AAP	-1.74%	PHM	-1.62%
10.0	ACGL	-1.62%	HSBC	-1.6%
10.0	VZ	-1.32%	OXY	-1.48%
10.0	FITB	-1.29%	В	-1.35%
10.0	ORLY	-1.04%	VZ	-1.27%
10.0	GLD	-1.01%	TRGP	-1.1%
10.0	KEY	-1.01%	FRA	-1.02%
10.0	MSI	-0.94%	FITB	-1.01%
10.0	HSBC	-0.94%	VICI	-1.01%
10.0	VICI	-0.92%	DHI	-0.94%
10.0	T	-0.92%	T	-0.91%
10.0	FRA	-0.91%	GLD	-0.9%
10.0	VST	-0.88%	MSI	-0.9%
10.0	LLY	-0.81%	TXN	-0.89%
10.0	CDNS	-0.77%	KEY	-0.85%
10.0	NVS	-0.7%	VST	-0.81%



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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	CZR	-2.68%	MOS	-2.33%
10.0	MSTR	-2.04%	CZR	-2.04%
10.0	CMG	-1.78%	CMG	-1.91%
10.0	MOS	-1.35%	NEM	-1.31%
10.0	NEM	-0.82%	ZION	-0.64%
10.0	AMC	-0.09%	GBTC	-0.45%
10.0	AAP	-0.08%	MSTR	-0.45%
10.0	KHC	0.0%	GNRC	-0.17%
10.0	EMB	0.0%	WYNN	-0.1%
10.0	VCSH	0.0%	DHI	-0.08%
10.0	MUB	0.0%	SLV	-0.06%
10.0	LQD	0.0%	ORCL	-0.05%
10.0	MSI	0.0%	VCSH	0.0%
10.0	BUD	0.0%	MUB	0.0%
10.0	TLT	0.01%	HYG	0.0%
10.0	GWW	0.01%	EMB	0.0%
10.0	CMCSA	0.01%	LQD	0.0%
10.0	ISRG	0.01%	FRA	0.0%
10.0	NVS	0.01%	TLT	0.0%
10.0	GLD	0.02%	GLD	0.0%
10.0	FRA	0.02%	SPY	0.0%
10.0	CVS	0.02%	VICI	0.0%
10.0	ZTS	0.02%	ORLY	0.0%
10.0	SNY	0.02%	NVS	0.0%
10.0	ВХР	0.03%	POST	0.0%
10.0	ABBV	0.05%	CSCO	0.01%
10.0	LLY	0.05%	COST	0.01%
10.0	PRGO	0.06%	MNST	0.01%
10.0	GILD	0.06%	HSBC	0.01%
10.0	POST	0.06%	MSI	0.01%



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.

Horizon	Ticker_V	pl_Put-0.2	Ticker_SBS	pl_bsPut-0.2
10.0	CMG	-0.29%	CMG	-0.53%
10.0	CZR	-0.08%	NWL	-0.17%
10.0	ZTS	0.0%	VCSH	0.0%
10.0	BUD	0.0%	MUB	0.0%
10.0	CMCSA	0.0%	HYG	0.0%
10.0	COST	0.0%	EMB	0.0%
10.0	MUB	0.0%	LQD	0.0%
10.0	SNY	0.0%	TLT	0.0%
10.0	MSI	0.0%	FRA	0.0%
10.0	CVS	0.0%	GLD	0.0%
10.0	TLT	0.0%	SPY	0.0%
10.0	LQD	0.0%	VICI	0.0%
10.0	EMB	0.0%	ORLY	0.0%
10.0	LLY	0.0%	NVS	0.0%
10.0	KHC	0.0%	POST	0.0%
10.0	AMGN	0.0%	SLV	0.0%
10.0	FRA	0.0%	CSCO	0.0%
10.0	JAZZ	0.0%	COST	0.0%
10.0	VCSH	0.0%	MNST	0.0%
10.0	ISRG	0.0%	HSBC	0.0%
10.0	GILD	0.0%	MSI	0.0%
10.0	HSBC	0.0%	T	0.0%
10.0	HD	0.0%	AZO	0.0%
10.0	ВХР	0.0%	QQQ	0.0%
10.0	PRGO	0.0%	VZ	0.0%
10.0	GLD	0.0%	HD	0.0%
10.0	NVS	0.0%	PEP	0.0%
10.0	VZ	0.0%	CAH	0.0%
10.0	RIO	0.0%	MSFT	0.0%
10.0	GWW	0.0%	MOX	0.0%



Top 30 Tickers by Option Sale Profitablity, P90D Model Dates

Calls, 1% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

${\tt Horizon}$	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
1.0	GT	2.77%	AMC	3.38%
1.0	IEP	2.38%	GME	1.64%
1.0	AVGO	2.01%	UAA	1.3%
1.0	UAA	1.89%	NWL	1.02%
1.0	CYH	1.74%	IEP	0.98%
1.0	LUMN	1.52%	GT	0.92%
1.0	MSTR	1.25%	CNC	0.77%
1.0	BMY	1.08%	MSTR	0.75%
1.0	VNO	1.04%	VFC	0.59%
1.0	BIIB	0.95%	CYH	0.51%
1.0	MOS	0.94%	CHTR	0.48%
1.0	LW	0.88%	TXN	0.35%
1.0	CNC	0.85%	META	0.34%
1.0	BHP	0.82%	CMG	0.33%
1.0	ACGL	0.82%	ON	0.31%
1.0	AMC	0.81%	PRGO	0.31%
1.0	KHC	0.76%	LW	0.3%
1.0	NVDA	0.73%	NAVI	0.29%
1.0	QQQ	0.73%	SBUX	0.29%
1.0	SPY	0.73%	AAP	0.28%
1.0	JPM	0.66%	CZR	0.28%
1.0	CHTR	0.65%	INTU	0.28%
1.0	AMAT	0.62%	TRGP	0.26%
1.0	CZR	0.62%	UNH	0.24%
1.0	LLY	0.61%	ZTS	0.23%
1.0	VICI	0.56%	CMCSA	0.23%
1.0	CPRT	0.54%	VST	0.23%
1.0	LNC	0.53%	NVDA	0.23%
1.0	COST	0.53%	ВА	0.23%
1.0	PHM	0.51%	OXY	0.22%



Calls, 10% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	1.8%	AMC	1.43%
1.0	GT	1.3%	GME	0.19%
1.0	IEP	1.0%	NWL	0.08%
1.0	CYH	0.88%	UAA	0.06%
1.0	AVGO	0.69%	MSTR	0.06%
1.0	UAA	0.68%	CNC	0.05%
1.0	MSTR	0.52%	VFC	0.05%
1.0	CZR	0.35%	GT	0.01%
1.0	NWL	0.34%	TSLA	0.01%
1.0	AMC	0.34%	IEP	0.01%
1.0	BMY	0.3%	AAP	0.01%
1.0	CNC	0.28%	ON	0.01%
1.0	AMAT	0.21%	CZR	0.01%
1.0	BHP	0.19%	VST	0.0%
1.0	VNO	0.18%	LW	0.0%
1.0	LW	0.17%	MU	0.0%
1.0	ACGL	0.17%	CSTM	0.0%
1.0	LLY	0.16%	CHTR	0.0%
1.0	BIIB	0.15%	AVGO	0.0%
1.0	NVDA	0.15%	FCX	0.0%
1.0	CHTR	0.14%	AMAT	0.0%
1.0	KHC	0.14%	BBY	0.0%
1.0	MRK	0.13%	NVDA	0.0%
1.0	LNC	0.11%	PRGO	0.0%
1.0	PWR	0.11%	TEVA	0.0%
1.0	PRGO	0.11%	CMG	0.0%
1.0	CSCO	0.1%	LLY	0.0%
1.0	KEY	0.08%	GNRC	0.0%
1.0	FSUGY	0.08%	GBTC	0.0%
1.0	VST	0.08%	EXPE	0.0%



Calls, 20% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	1.12%	AMC	0.48%
1.0	GT	0.67%	GME	0.0%
1.0	IEP	0.54%	LUMN	0.0%
1.0	CYH	0.37%	CNC	0.0%
1.0	AVGO	0.19%	NWL	0.0%
1.0	CZR	0.17%	VFC	0.0%
1.0	UAA	0.15%	UAA	0.0%
1.0	NWL	0.14%	MSTR	0.0%
1.0	MSTR	0.13%	GT	0.0%
1.0	AMC	0.13%	IEP	0.0%
1.0	MRK	0.07%	TSLA	0.0%
1.0	CSCO	0.06%	CZR	0.0%
1.0	CNC	0.05%	AAP	0.0%
1.0	LW	0.05%	ON	0.0%
1.0	ACGL	0.05%	BHC	0.0%
1.0	PRGO	0.05%	VST	0.0%
1.0	BHC	0.04%	UNH	0.0%
1.0	CAH	0.04%	AA	0.0%
1.0	AMAT	0.03%	LW	0.0%
1.0	BMY	0.03%	MU	0.0%
1.0	KHC	0.03%	FCX	0.0%
1.0	LVS	0.03%	CSTM	0.0%
1.0	PWR	0.02%	WDC	0.0%
1.0	LLY	0.02%	CHTR	0.0%
1.0	VST	0.02%	AVGO	0.0%
1.0	KEY	0.02%	CMG	0.0%
1.0	NVDA	0.01%	AMAT	0.0%
1.0	QCOM	0.01%	BBY	0.0%
1.0	CSTM	0.01%	TEVA	0.0%
1.0	CHTR	0.01%	NVDA	0.0%



Calls, 1% Out of the Money, 10D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	8.9%	AMC	13.23%
10.0	MSTR	7.46%	UAA	5.51%
10.0	IEP	5.16%	MSTR	5.49%
10.0	AMC	4.98%	GME	4.69%
10.0	UAA	4.47%	IEP	4.26%
10.0	CZR	3.25%	GT	4.13%
10.0	KHC	3.09%	CZR	2.51%
10.0	BMY	2.93%	AAP	2.48%
10.0	MOS	2.51%	NWL	2.4%
10.0	BA	2.45%	CHTR	2.24%
10.0	COST	2.18%	ON	2.08%
10.0	BALL	2.17%	PRGO	1.92%
10.0	LNC	2.04%	VST	1.87%
10.0	ACGL	1.98%	CMG	1.83%
10.0	CPRT	1.95%	BA	1.78%
10.0	BHP	1.91%	TRGP	1.74%
10.0	VNO	1.85%	META	1.73%
10.0	CHTR	1.81%	CDNS	1.65%
10.0	BIIB	1.76%	KHC	1.58%
10.0	CDNS	1.5%	SBUX	1.54%
10.0	AVGO	1.5%	FIS	1.4%
10.0	CMG	1.47%	TXN	1.37%
10.0	NVDA	1.47%	BALL	1.36%
10.0	OXY	1.44%	BMY	1.36%
10.0	VICI	1.41%	CPRT	1.34%
10.0	JPM	1.39%	NFLX	1.33%
10.0	GBTC	1.37%	TDG	1.3%
10.0	TFC	1.34%	CMCSA	1.27%
10.0	FIS	1.31%	GBTC	1.26%
10.0	PHM	1.31%	OXY	1.2%



Calls, 10% Out of the Money, 10D Time Horizon, All Tickers / P90D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	5.94%	AMC	11.05%
10.0	MSTR	4.74%	GME	3.77%
10.0	AMC	2.83%	MSTR	2.83%
10.0	IEP	2.72%	UAA	2.82%
10.0	UAA	2.34%	NWL	1.94%
10.0	CZR	2.28%	GT	1.76%
10.0	BIIB	2.18%	CNC	1.73%
10.0	AMAT	2.09%	IEP	1.61%
10.0	NWL	1.8%	AAP	1.48%
10.0	LNC	1.65%	ON	1.42%
10.0	AVGO	1.51%	CZR	1.28%
10.0	VNO	1.4%	VFC	1.13%
10.0	NVDA	1.23%	VST	0.93%
10.0	BHP	1.22%	CHTR	0.73%
10.0	BMY	1.14%	CLF	0.67%
10.0	MOS	1.01%	PRGO	0.56%
10.0	KHC	1.01%	CMG	0.5%
10.0	BA	0.94%	AA	0.47%
10.0	PWR	0.9%	BBY	0.44%
10.0	CYH	0.87%	CSTM	0.43%
10.0	ON	0.85%	NVDA	0.42%
10.0	PHM	0.83%	GBTC	0.4%
10.0	CHTR	0.83%	NAVI	0.4%
10.0	TEVA	0.81%	TXN	0.39%
10.0	COST	0.8%	CDNS	0.37%
10.0	FSUGY	0.77%	SBUX	0.36%
10.0	ACGL	0.75%	META	0.34%
10.0	LLY	0.72%	ADBE	0.33%
10.0	OXY	0.71%	LNC	0.32%
10.0	CNC	0.71%	TRGP	0.31%



Calls, 20% Out of the Money, 10D Time Horizon, All Tickers / P90D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GT	3.99%	AMC	8.36%
10.0	MSTR	2.66%	GME	2.18%
10.0	LUMN	2.31%	CNC	1.36%
10.0	AMAT	2.23%	NWL	1.2%
10.0	NWL	2.02%	UAA	1.1%
10.0	AMC	2.0%	MSTR	1.1%
10.0	IEP	1.43%	VFC	0.95%
10.0	AVGO	1.12%	GT	0.48%
10.0	BIIB	1.01%	IEP	0.41%
10.0	CNC	1.01%	ON	0.36%
10.0	CZR	0.97%	AAP	0.35%
10.0	LNC	0.84%	CZR	0.28%
10.0	UAA	0.84%	CLF	0.26%
10.0	VNO	0.72%	VST	0.24%
10.0	BHP	0.59%	AA	0.15%
10.0	LLY	0.56%	CSTM	0.09%
10.0	NVDA	0.55%	LW	0.09%
10.0	CYH	0.49%	CHTR	0.08%
10.0	AA	0.44%	BBY	0.06%
10.0	TEVA	0.44%	NVDA	0.05%
10.0	CLF	0.43%	PRGO	0.05%
10.0	LW	0.33%	LLY	0.04%
10.0	CSTM	0.32%	TEVA	0.04%
10.0	ON	0.31%	CMG	0.04%
10.0	VST	0.3%	GNRC	0.03%
10.0	PWR	0.27%	GBTC	0.03%
10.0	CHTR	0.26%	TXN	0.03%
10.0	OXY	0.26%	EXPE	0.03%
10.0	BA	0.26%	QCOM	0.02%
10.0	CMG	0.26%	THC	0.02%



Calls, 1% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	GT	15.54%	AMC	21.68%
21.0	MSTR	13.66%	UAA	8.8%
21.0	IEP	7.93%	MSTR	8.4%
21.0	UAA	7.74%	IEP	6.86%
21.0	LNC	7.58%	GT	6.61%
21.0	CZR	6.91%	CZR	4.97%
21.0	AMC	6.88%	GME	4.95%
21.0	BMY	4.93%	ON	4.91%
21.0	KHC	4.55%	AAP	4.43%
21.0	BA	4.5%	NWL	4.23%
21.0	BALL	4.22%	PRGO	4.22%
21.0	ON	4.12%	CHTR	4.04%
21.0	CPRT	3.93%	TXN	3.98%
21.0	COST	3.91%	SBUX	3.75%
21.0	TFC	3.56%	META	3.65%
21.0	ADBE	3.49%	VST	3.52%
21.0	ACGL	3.49%	BA	3.35%
21.0	CHTR	3.42%	ADBE	3.31%
21.0	PRGO	3.27%	CDNS	3.22%
21.0	BHC	3.27%	TRGP	2.99%
21.0	MOS	3.0%	BMY	2.92%
21.0	BHP	2.97%	CMG	2.9%
21.0	CDNS	2.87%	NAVI	2.86%
21.0	LVS	2.81%	INTU	2.77%
21.0	FIS	2.7%	BALL	2.74%
21.0	BIIB	2.69%	KHC	2.7%
21.0	TMUS	2.66%	NFLX	2.63%
21.0	DHI	2.5%	TDG	2.61%
21.0	NFLX	2.5%	BHC	2.57%
21.0	KEY	2.38%	GBTC	2.55%



Calls, 10% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	GT	11.91%	AMC	19.89%
21.0	MSTR	10.31%	GME	5.75%
21.0	LNC	5.97%	MSTR	5.56%
21.0	UAA	4.85%	UAA	5.48%
21.0	CZR	4.8%	IEP	3.65%
21.0	IEP	4.69%	GT	3.62%
21.0	AMC	4.03%	ON	3.4%
21.0	BIIB	4.0%	AAP	3.11%
21.0	ON	2.96%	CZR	2.96%
21.0	BA	2.19%	NWL	2.9%
21.0	BHP	2.17%	VST	2.77%
21.0	MOS	2.13%	VFC	2.34%
21.0	BHC	2.12%	CHTR	1.96%
21.0	VNO	2.09%	CSTM	1.76%
21.0	NVDA	2.09%	PRGO	1.62%
21.0	VST	2.05%	NVDA	1.59%
21.0	BMY	2.05%	CMG	1.49%
21.0	CAH	1.97%	TXN	1.34%
21.0	FSUGY	1.94%	GBTC	1.28%
21.0	CSTM	1.81%	QCOM	1.27%
21.0	CHTR	1.8%	NAVI	1.23%
21.0	TFC	1.79%	CDNS	1.2%
21.0	KHC	1.73%	SBUX	1.19%
21.0	CPRT	1.73%	СҮН	1.18%
21.0	CCL	1.69%	META	1.16%
21.0	NWL	1.67%	ADBE	1.13%
21.0	LVS	1.67%	TRGP	1.07%
21.0	MRK	1.61%	OXY	1.02%
21.0	NFLX	1.59%	CCL	1.02%
21.0	ACGL	1.58%	ВА	0.99%



Calls, 20% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	GT	8.83%	AMC	17.19%
21.0	MSTR	7.37%	GME	5.17%
21.0	LNC	4.51%	MSTR	3.15%
21.0	AMC	3.12%	UAA	3.1%
21.0	UAA	2.97%	CYH	2.33%
21.0	IEP	2.66%	NWL	2.23%
21.0	CYH	2.5%	CNC	2.22%
21.0	BIIB	2.43%	VFC	2.14%
21.0	CZR	2.42%	IEP	1.66%
21.0	NWL	2.25%	GT	1.63%
21.0	BHC	1.85%	ON	1.47%
21.0	AMAT	1.69%	AAP	1.35%
21.0	CNC	1.68%	CZR	1.17%
21.0	ON	1.53%	VST	1.11%
21.0	TEVA	1.53%	CLF	0.84%
21.0	AVGO	1.44%	CSTM	0.62%
21.0	LLY	1.41%	LW	0.61%
21.0	VNO	1.39%	CHTR	0.57%
21.0	GME	1.24%	AVGO	0.53%
21.0	CAH	1.01%	AA	0.51%
21.0	BHP	1.01%	BBY	0.47%
21.0	IRM	1.0%	FCX	0.46%
21.0	BA	0.99%	NVDA	0.43%
21.0	LEN	0.94%	PRGO	0.4%
21.0	NFLX	0.94%	LLY	0.35%
21.0	CCL	0.87%	TEVA	0.35%
21.0	CSTM	0.84%	BHC	0.35%
21.0	FSUGY	0.82%	CMG	0.34%
21.0	NVDA	0.82%	GBTC	0.3%
21.0	AA	0.81%	GNRC	0.29%



Puts, 1% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	2.27%	AMC	3.34%
1.0	AVGO	1.98%	GME	1.62%
1.0	GS	1.81%	CNC	1.16%
1.0	GBTC	1.6%	CYH	1.14%
1.0	TRGP	1.37%	UAA	0.85%
1.0	CYH	1.24%	IEP	0.84%
1.0	IEP	1.21%	VFC	0.77%
1.0	SPY	1.21%	NWL	0.64%
1.0	THC	1.19%	UNH	0.63%
1.0	TEVA	1.19%	TSLA	0.6%
1.0	UAA	1.18%	LUMN	0.57%
1.0	MS	1.1%	ON	0.57%
1.0	GT	0.94%	GT	0.54%
1.0	AMAT	0.92%	LW	0.49%
1.0	JPM	0.9%	MSTR	0.36%
1.0	GME	0.82%	INTC	0.36%
1.0	NVDA	0.81%	CHTR	0.34%
1.0	ELAN	0.75%	BBY	0.34%
1.0	PWR	0.74%	TEVA	0.33%
1.0	WYNN	0.69%	ELAN	0.32%
1.0	CNC	0.68%	MU	0.3%
1.0	BA	0.65%	QCOM	0.3%
1.0	PHM	0.64%	BHC	0.3%
1.0	QQQ	0.64%	NVDA	0.29%
1.0	BIIB	0.63%	AVGO	0.28%
1.0	CAH	0.56%	THC	0.25%
1.0	LW	0.56%	EXPE	0.23%
1.0	LNC	0.52%	GOOGL	0.23%
1.0	HSBC	0.51%	AAPL	0.22%
1.0	SLV	0.49%	GS	0.22%



Puts, 10% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	1.26%	AMC	1.13%
1.0	GBTC	0.77%	GME	0.12%
1.0	AVGO	0.55%	СҮН	0.05%
1.0	CYH	0.48%	CNC	0.05%
1.0	TRGP	0.41%	LUMN	0.03%
1.0	IEP	0.4%	MSTR	0.03%
1.0	VST	0.36%	TSLA	0.0%
1.0	GS	0.34%	IEP	0.0%
1.0	UAA	0.33%	AAP	0.0%
1.0	BIIB	0.28%	ON	0.0%
1.0	GT	0.24%	INTC	0.0%
1.0	AMD	0.23%	BHC	0.0%
1.0	AMAT	0.22%	VST	0.0%
1.0	INTU	0.19%	UNH	0.0%
1.0	ORCL	0.19%	AA	0.0%
1.0	AMC	0.19%	MU	0.0%
1.0	EXPE	0.16%	LW	0.0%
1.0	BHC	0.16%	ORCL	0.0%
1.0	TEVA	0.15%	CSTM	0.0%
1.0	CNC	0.15%	AMD	0.0%
1.0	MSTR	0.15%	CHTR	0.0%
1.0	DHI	0.15%	AVGO	0.0%
1.0	GME	0.14%	WDC	0.0%
1.0	VFC	0.14%	BBY	0.0%
1.0	NEM	0.13%	NVDA	0.0%
1.0	NAVI	0.13%	TEVA	0.0%
1.0	THC	0.13%	GBTC	0.0%
1.0	WYNN	0.13%	KALU	0.0%
1.0	PHM	0.12%	EXPE	0.0%
1.0	TSLA	0.11%	ELAN	0.0%



Puts, 20% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	LUMN	0.54%	AMC	0.22%
1.0	GBTC	0.25%	GME	0.0%
1.0	VST	0.21%	СҮН	0.0%
1.0	IEP	0.17%	LUMN	0.0%
1.0	CYH	0.17%	CNC	0.0%
1.0	TRGP	0.16%	VFC	0.0%
1.0	AMD	0.14%	UAA	0.0%
1.0	BIIB	0.11%	MSTR	0.0%
1.0	AMC	0.09%	CLF	0.0%
1.0	GT	0.08%	GT	0.0%
1.0	BHC	0.08%	INTC	0.0%
1.0	DHI	0.08%	IEP	0.0%
1.0	GS	0.07%	CZR	0.0%
1.0	AVGO	0.06%	TSLA	0.0%
1.0	EXPE	0.06%	AAP	0.0%
1.0	UAA	0.06%	ON	0.0%
1.0	AMAT	0.04%	BHC	0.0%
1.0	NEM	0.04%	VST	0.0%
1.0	WYNN	0.04%	UNH	0.0%
1.0	INTU	0.03%	AA	0.0%
1.0	MU	0.03%	LW	0.0%
1.0	TEVA	0.03%	MU	0.0%
1.0	NAVI	0.03%	FCX	0.0%
1.0	PHM	0.03%	ORCL	0.0%
1.0	CNC	0.03%	CSTM	0.0%
1.0	THC	0.03%	CMG	0.0%
1.0	ZION	0.03%	AMD	0.0%
1.0	GE	0.03%	WDC	0.0%
1.0	MOS	0.03%	CHTR	0.0%
1.0	VFC	0.03%	AVGO	0.0%



Puts, 1% Out of the Money, 10D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	8.92%	AMC	11.67%
10.0	CYH	5.66%	СҮН	5.82%
10.0	CNC	4.56%	CNC	5.14%
10.0	GBTC	4.49%	LUMN	5.11%
10.0	AVGO	3.91%	GME	5.02%
10.0	THC	3.62%	VFC	4.46%
10.0	TEVA	3.56%	TSLA	4.07%
10.0	GS	3.53%	CLF	3.7%
10.0	ELAN	3.32%	INTC	3.56%
10.0	SPY	3.05%	UNH	3.34%
10.0	MS	3.03%	AA	3.2%
10.0	INTC	2.77%	ON	3.02%
10.0	AMD	2.74%	MU	2.79%
10.0	GME	2.73%	LW	2.72%
10.0	PWR	2.67%	CSTM	2.69%
10.0	VFC	2.58%	UAA	2.49%
10.0	CLF	2.57%	ELAN	2.39%
10.0	TRGP	2.54%	IEP	2.29%
10.0	AA	2.49%	WDC	2.25%
10.0	CSTM	2.4%	BBY	2.25%
10.0	IEP	2.36%	THC	2.12%
10.0	NVDA	2.31%	KALU	2.11%
10.0	AMAT	2.29%	QCOM	2.06%
10.0	BA	2.27%	EXPE	2.03%
10.0	MU	2.22%	JAZZ	1.95%
10.0	QQQ	2.2%	PWR	1.87%
10.0	TSLA	2.12%	AVGO	1.86%
10.0	FSUGY	2.11%	NVDA	1.83%
10.0	JPM	2.08%	TEVA	1.79%
10.0	MNST	2.05%	LLY	1.78%



Puts, 10% Out of the Money, 10D Time Horizon, All Tickers / P90D

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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	6.06%	AMC	9.48%
10.0	GBTC	3.5%	GME	3.15%
10.0	CYH	3.18%	CYH	2.68%
10.0	CNC	2.62%	CNC	2.6%
10.0	GT	2.2%	VFC	2.1%
10.0	AMD	2.18%	LUMN	1.96%
10.0	IEP	2.03%	NWL	1.59%
10.0	AVGO	1.99%	MSTR	1.36%
10.0	VST	1.78%	TSLA	1.25%
10.0	GME	1.78%	UAA	1.2%
10.0	TRGP	1.65%	IEP	1.2%
10.0	THC	1.46%	CLF	1.18%
10.0	TEVA	1.45%	ON	1.12%
10.0	VFC	1.42%	VST	0.88%
10.0	GS	1.42%	INTC	0.88%
10.0	AMAT	1.38%	BHC	0.79%
10.0	BA	1.27%	UNH	0.76%
10.0	NWL	1.22%	AA	0.68%
10.0	PHM	1.21%	LW	0.62%
10.0	CLF	1.15%	MU	0.6%
10.0	UAA	1.14%	GT	0.56%
10.0	ORCL	1.03%	CSTM	0.52%
10.0	ELAN	1.02%	AMD	0.52%
10.0	CSTM	0.96%	AVGO	0.49%
10.0	INTC	0.96%	CHTR	0.46%
10.0	BHC	0.95%	AAP	0.44%
10.0	ACGL	0.88%	BBY	0.4%
10.0	NVDA	0.88%	NVDA	0.38%
10.0	BIIB	0.82%	LLY	0.33%
10.0	MU	0.8%	WDC	0.33%



Puts, 20% Out of the Money, 10D Time Horizon, All Tickers / P90D $\,$

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	3.94%	AMC	5.77%
10.0	CYH	1.77%	GME	1.17%
10.0	GBTC	1.73%	CYH	0.72%
10.0	GT	1.54%	CNC	0.68%
10.0	AMD	1.29%	MSTR	0.5%
10.0	CNC	1.26%	VFC	0.45%
10.0	IEP	1.06%	LUMN	0.45%
10.0	NWL	1.0%	NWL	0.39%
10.0	VST	0.97%	UAA	0.22%
10.0	GME	0.69%	GT	0.18%
10.0	VFC	0.63%	TSLA	0.15%
10.0	TRGP	0.57%	CLF	0.15%
10.0	BIIB	0.55%	IEP	0.14%
10.0	AMAT	0.55%	ON	0.12%
10.0	UAA	0.54%	AAP	0.11%
10.0	MOS	0.51%	INTC	0.08%
10.0	BHC	0.47%	BHC	0.07%
10.0	CLF	0.46%	VST	0.07%
10.0	PHM	0.45%	UNH	0.05%
10.0	GS	0.45%	CZR	0.05%
10.0	AVGO	0.42%	AA	0.04%
10.0	ELAN	0.4%	LW	0.03%
10.0	BA	0.4%	MU	0.03%
10.0	THC	0.37%	CSTM	0.02%
10.0	AMC	0.36%	AMD	0.02%
10.0	FSUGY	0.35%	CHTR	0.02%
10.0	TEVA	0.35%	AVGO	0.02%
10.0	DHI	0.35%	ORCL	0.01%
10.0	BBY	0.34%	AMAT	0.01%
10.0	INTC	0.32%	BBY	0.01%



Puts, 1% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	LUMN	14.11%	AMC	19.71%
21.0	CYH	9.74%	CYH	9.39%
21.0	CNC	8.03%	CNC	9.09%
21.0	GBTC	6.94%	LUMN	8.31%
21.0	AVGO	6.54%	GME	6.76%
21.0	CLF	6.03%	VFC	6.69%
21.0	THC	5.98%	CLF	6.48%
21.0	TEVA	5.78%	TSLA	6.45%
21.0	ELAN	5.01%	INTC	5.8%
21.0	GS	4.55%	ON	5.58%
21.0	VFC	4.5%	UNH	5.26%
21.0	MS	4.44%	AA	5.16%
21.0	MU	4.28%	MU	4.97%
21.0	INTC	4.26%	LW	4.68%
21.0	NVDA	4.11%	CSTM	4.47%
21.0	GLD	3.91%	UAA	4.08%
21.0	AA	3.89%	AVGO	4.05%
21.0	SPY	3.84%	WDC	4.05%
21.0	MNST	3.79%	BBY	3.98%
21.0	PWR	3.78%	TEVA	3.95%
21.0	AMD	3.66%	LLY	3.81%
21.0	FSUGY	3.66%	IEP	3.73%
21.0	CSTM	3.64%	ELAN	3.7%
21.0	VST	3.63%	THC	3.7%
21.0	SLV	3.24%	QCOM	3.6%
21.0	UAA	3.23%	VST	3.41%
21.0	LW	3.21%	KALU	3.39%
21.0	ON	3.18%	EXPE	3.36%
21.0	NEM	3.15%	NVDA	3.27%
21.0	BIIB	3.07%	JAZZ	3.2%



Puts, 10% Out of the Money, 21D Time Horizon, All Tickers / P90D

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, $21\mathrm{d}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	LUMN	10.58%	AMC	17.23%
21.0	CYH	5.99%	GME	5.61%
21.0	GBTC	5.32%	CYH	5.35%
21.0	CNC	4.91%	CNC	5.3%
21.0	AMD	3.73%	LUMN	4.4%
21.0	CLF	3.54%	VFC	4.27%
21.0	AVGO	3.47%	UAA	3.2%
21.0	VFC	3.12%	TSLA	2.89%
21.0	UAA	3.1%	CLF	2.89%
21.0	VST	3.08%	ON	2.63%
21.0	THC	2.9%	IEP	2.63%
21.0	GME	2.72%	INTC	2.34%
21.0	BA	2.61%	VST	2.03%
21.0	TEVA	2.58%	UNH	1.96%
21.0	IEP	2.52%	MSTR	1.93%
21.0	TRGP	2.5%	AA	1.87%
21.0	GS	2.26%	LW	1.73%
21.0	ELAN	2.25%	MU	1.71%
21.0	ORCL	2.2%	NWL	1.55%
21.0	NVDA	1.99%	CSTM	1.5%
21.0	MU	1.97%	AVGO	1.42%
21.0	PHM	1.95%	AMD	1.27%
21.0	INTC	1.83%	BBY	1.25%
21.0	ACGL	1.63%	NVDA	1.2%
21.0	FSUGY	1.63%	AAP	1.19%
21.0	AMAT	1.63%	CHTR	1.15%
21.0	AMC	1.61%	WDC	1.1%
21.0	MS	1.6%	LLY	1.06%
21.0	CMG	1.59%	TEVA	1.05%
21.0	CSTM	1.51%	AMAT	1.04%



Puts, 20% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	LUMN	7.9%	AMC	12.55%
21.0	CYH	3.8%	GME	3.23%
21.0	GBTC	3.0%	CYH	2.36%
21.0	CNC	2.86%	CNC	2.31%
21.0	AMD	2.59%	LUMN	1.76%
21.0	GT	2.47%	VFC	1.7%
21.0	CLF	2.04%	MSTR	1.58%
21.0	VST	2.0%	NWL	1.49%
21.0	UAA	1.96%	UAA	1.43%
21.0	NWL	1.56%	CLF	0.83%
21.0	VFC	1.48%	TSLA	0.82%
21.0	IEP	1.42%	IEP	0.8%
21.0	GME	1.38%	GT	0.69%
21.0	MOS	1.21%	ON	0.69%
21.0	BHC	1.13%	INTC	0.57%
21.0	CMG	1.13%	AAP	0.51%
21.0	AVGO	1.11%	VST	0.48%
21.0	PHM	1.1%	BHC	0.43%
21.0	AMC	1.08%	UNH	0.39%
21.0	BA	1.07%	AA	0.36%
21.0	THC	1.02%	LW	0.3%
21.0	ORCL	1.0%	MU	0.3%
21.0	MU	0.96%	CSTM	0.23%
21.0	ELAN	0.94%	AMD	0.21%
21.0	TRGP	0.9%	CHTR	0.2%
21.0	NVDA	0.87%	AVGO	0.2%
21.0	FSUGY	0.84%	AMAT	0.18%
21.0	INTC	0.81%	BBY	0.16%
21.0	TEVA	0.75%	FCX	0.15%
21.0	FCX	0.74%	NVDA	0.14%



Bottom 30 Tickers by Option Sale Profitabilty, P90D Model Dates

Calls, 1% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
1.0	WDC	-1.03%	LUMN	-1.03%
1.0	INTC	-0.97%	WDC	-0.74%
1.0	CLF	-0.71%	INTC	-0.69%
1.0	MU	-0.57%	MU	-0.6%
1.0	TSLA	-0.39%	В	-0.52%
1.0	VFC	-0.34%	AMD	-0.5%
1.0	AA	-0.33%	ORCL	-0.4%
1.0	KALU	-0.28%	ELAN	-0.26%
1.0	CSTM	-0.26%	CAH	-0.25%
1.0	AMZN	-0.25%	NEM	-0.23%
1.0	В	-0.25%	KALU	-0.23%
1.0	EXPE	-0.25%	SLV	-0.21%
1.0	GOOGL	-0.24%	GOOGL	-0.16%
1.0	ELAN	-0.22%	AA	-0.15%
1.0	GILD	-0.21%	CLF	-0.15%
1.0	ISRG	-0.21%	WYNN	-0.15%
1.0	SLV	-0.2%	CSTM	-0.14%
1.0	WYNN	-0.17%	BIIB	-0.14%
1.0	AAPL	-0.16%	GSK	-0.13%
1.0	GNRC	-0.15%	BHC	-0.12%
1.0	THC	-0.11%	LVS	-0.1%
1.0	CMA	-0.11%	GLD	-0.09%
1.0	ВХР	-0.1%	AMAT	-0.08%
1.0	HCA	-0.09%	POST	-0.07%
1.0	NEM	-0.09%	AZN	-0.07%
1.0	SNY	-0.08%	AAPL	-0.06%
1.0	WFC	-0.08%	MNST	-0.04%
1.0	BBY	-0.07%	CMA	-0.04%
1.0	NVS	-0.07%	ISRG	-0.03%
1.0	ABBV	-0.07%	AVGO	-0.03%



Calls, 10% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	${\tt Ticker_V}$	${\tt PnL} \%_{\tt V}$	${\tt Ticker_SBS}$	PnL%_SBS
1.0	INTC	-0.16%	ORCL	-0.41%
1.0	KALU	-0.15%	AMD	-0.24%
1.0	CLF	-0.14%	INTC	-0.2%
1.0	ELAN	-0.11%	CLF	-0.17%
1.0	ISRG	-0.06%	CYH	-0.16%
1.0	AMD	-0.06%	KALU	-0.15%
1.0	CMA	-0.06%	BHC	-0.14%
1.0	WDC	-0.05%	ELAN	-0.13%
1.0	ORCL	-0.02%	LUMN	-0.09%
1.0	AA	-0.02%	CAH	-0.09%
1.0	QCOM	-0.0%	ISRG	-0.06%
1.0	Т	0.0%	CMA	-0.06%
1.0	EXPE	0.0%	WDC	-0.05%
1.0	FRA	0.0%	AA	-0.04%
1.0	GILD	0.0%	LVS	-0.04%
1.0	GSK	0.0%	UNH	-0.03%
1.0	WFC	0.0%	QCOM	-0.02%
1.0	VCSH	0.0%	BIIB	-0.0%
1.0	GWW	0.0%	VCSH	0.0%
1.0	HD	0.0%	MUB	0.0%
1.0	HLT	0.0%	HYG	0.0%
1.0	HYG	0.0%	LQD	0.0%
1.0	USB	0.0%	EMB	0.0%
1.0	TXN	0.0%	FRA	0.0%
1.0	TLT	0.0%	TLT	0.0%
1.0	LQD	0.0%	GLD	0.0%
1.0	MNST	0.0%	VICI	0.0%
1.0	MSFT	0.0%	ORLY	0.0%
1.0	EMB	0.0%	SPY	0.0%
1.0	NVS	0.0%	NVS	0.0%



Calls, 20% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

${\tt Horizon}$	${\tt Ticker_V}$	pl_Call0.2	${\tt Ticker_SBS}$	pl_bsCall0.2
1.0	ORCL	-0.11%	ORCL	-0.25%
1.0	INTC	-0.04%	CYH	-0.09%
1.0	AMD	-0.03%	AMD	-0.06%
1.0	CLF	-0.02%	INTC	-0.04%
1.0	ZTS	0.0%	CLF	-0.02%
1.0	SLV	0.0%	EMB	0.0%
1.0	HYG	0.0%	VCSH	0.0%
1.0	HSBC	0.0%	LQD	0.0%
1.0	HON	0.0%	MUB	0.0%
1.0	HLT	0.0%	HYG	0.0%
1.0	HD	0.0%	FRA	0.0%
1.0	HCA	0.0%	TLT	0.0%
1.0	GWW	0.0%	GLD	0.0%
1.0	GSK	0.0%	VICI	0.0%
1.0	GS	0.0%	ORLY	0.0%
1.0	GOOGL	0.0%	SPY	0.0%
1.0	GNRC	0.0%	NVS	0.0%
1.0	GME	0.0%	POST	0.0%
1.0	GLD	0.0%	CSCO	0.0%
1.0	GILD	0.0%	COST	0.0%
1.0	GE	0.0%	AZO	0.0%
1.0	GBTC	0.0%	PEP	0.0%
1.0	SNY	0.0%	T	0.0%
1.0	INTU	0.0%	MSI	0.0%
1.0	SBUX	0.0%	HD	0.0%
1.0	ISRG	0.0%	VZ	0.0%
1.0	NEM	0.0%	MNST	0.0%
1.0	MSI	0.0%	HSBC	0.0%
1.0	MSFT	0.0%	QQQ	0.0%
1.0	MS	0.0%	MSFT	0.0%



Calls, 1% Out of the Money, 10D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	INTC	-9.85%	LUMN	-10.3%
10.0	WDC	-9.17%	MU	-8.66%
10.0	MU	-8.96%	INTC	-8.25%
10.0	LUMN	-5.19%	WDC	-7.79%
10.0	В	-4.7%	AMD	-6.02%
10.0	AMD	-4.47%	В	-5.37%
10.0	GOOGL	-4.19%	SLV	-3.5%
10.0	SLV	-3.89%	ORCL	-3.49%
10.0	ELAN	-3.27%	GOOGL	-3.32%
10.0	CLF	-3.1%	AMAT	-3.23%
10.0	VFC	-2.92%	NEM	-2.69%
10.0	THC	-2.86%	ELAN	-2.56%
10.0	NEM	-2.75%	GLD	-2.48%
10.0	ORCL	-2.69%	UNH	-2.37%
10.0	TSLA	-2.6%	AZN	-1.6%
10.0	GLD	-2.58%	CVS	-1.56%
10.0	ISRG	-2.46%	HCA	-1.55%
10.0	HCA	-2.45%	CLF	-1.49%
10.0	UNH	-2.31%	THC	-1.47%
10.0	CVS	-2.28%	TSLA	-1.46%
10.0	AAPL	-2.17%	LLY	-1.32%
10.0	BXP	-2.12%	ISRG	-1.29%
10.0	AZN	-1.82%	AAPL	-1.26%
10.0	KALU	-1.72%	LVS	-1.25%
10.0	NVS	-1.69%	AVGO	-1.25%
10.0	JAZZ	-1.4%	CYH	-1.17%
10.0	CNC	-1.39%	WYNN	-1.12%
10.0	ABBV	-1.34%	BXP	-1.05%
10.0	GSK	-1.34%	GSK	-1.04%
10.0	CMA	-1.29%	TEVA	-1.03%



Calls, 10% Out of the Money, 10D Time Horizon, All Tickers / P90D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	INTC	-6.05%	LUMN	-5.93%
10.0	MU	-4.6%	INTC	-5.41%
10.0	WDC	-4.11%	AMD	-5.08%
10.0	AMD	-3.77%	MU	-4.66%
10.0	ORCL	-2.44%	WDC	-3.78%
10.0	ISRG	-1.81%	ORCL	-3.63%
10.0	VFC	-1.09%	ISRG	-1.73%
10.0	TSLA	-1.04%	AMAT	-1.64%
10.0	GOOGL	-1.04%	В	-1.48%
10.0	В	-0.97%	LVS	-1.05%
10.0	KALU	-0.9%	GOOGL	-1.04%
10.0	LUMN	-0.87%	UNH	-1.01%
10.0	UNH	-0.8%	BHC	-0.98%
10.0	ELAN	-0.59%	AVGO	-0.72%
10.0	CMA	-0.55%	TSLA	-0.71%
10.0	LVS	-0.42%	ELAN	-0.55%
10.0	AZN	-0.41%	KALU	-0.53%
10.0	GNRC	-0.36%	CMA	-0.53%
10.0	SLV	-0.26%	CAH	-0.45%
10.0	FCX	-0.19%	AZN	-0.4%
10.0	HCA	-0.16%	SLV	-0.28%
10.0	ВХР	-0.13%	LLY	-0.2%
10.0	THC	-0.09%	HCA	-0.13%
10.0	AMZN	-0.08%	GNRC	-0.1%
10.0	EXPE	-0.07%	WYNN	-0.1%
10.0	AAPL	-0.04%	ВХР	-0.04%
10.0	NVS	-0.04%	GLD	-0.04%
10.0	GSK	-0.01%	NVS	-0.03%
10.0	MUB	0.0%	AAPL	-0.03%
10.0	VCSH	0.0%	NEM	-0.01%



Calls, 20% Out of the Money, 10D Time Horizon, All Tickers / P90D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker V	PnL% V	Ticker_SBS	PnL% SBS
10.0	-	-2.55%	AMD	-3.22%
10.0	AMD	-2.33%	INTC	-2.42%
10.0	MU	-1.46%	ORCL	-2.34%
10.0	ORCL	-1.43%	LUMN	-2.21%
10.0	WDC	-0.63%	MU	-1.57%
10.0	ISRG	-0.5%	BHC	-0.91%
10.0	ELAN	-0.23%	WDC	-0.61%
10.0	TSLA	-0.09%	CYH	-0.57%
10.0	KALU	-0.09%	ISRG	-0.52%
10.0	UNH	-0.06%	TSLA	-0.28%
10.0	ZTS	0.0%	ELAN	-0.24%
10.0	TMUS	0.0%	LVS	-0.21%
10.0	TLT	0.0%	AMAT	-0.18%
10.0	FRA	0.0%	UNH	-0.16%
10.0	GSK	0.0%	CAH	-0.11%
10.0	HON	0.0%	KALU	-0.06%
10.0	LQD	0.0%	AVGO	-0.05%
10.0	META	0.0%	В	-0.04%
10.0	MNST	0.0%	VCSH	0.0%
10.0	MSI	0.0%	MUB	0.0%
10.0	SBUX	0.0%	HYG	0.0%
10.0	MUB	0.0%	LQD	0.0%
10.0	NAVI	0.0%	EMB	0.0%
10.0	NVS	0.0%	FRA	0.0%
10.0	POST	0.0%	TLT	0.0%
10.0	SNY	0.0%	GLD	0.0%
10.0	VCSH	0.0%	VICI	0.0%
10.0	GILD	0.0%	ORLY	0.0%
10.0	ABBV	0.0%	SPY	0.0%
10.0	VZ	0.0%	NVS	0.0%



Calls, 1% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	INTC	-24.4%	MU	-24.21%
21.0	WDC	-23.79%	LUMN	-23.78%
21.0	MU	-23.61%	WDC	-22.12%
21.0	LUMN	-16.26%	INTC	-22.03%
21.0	AMD	-14.25%	AMD	-17.11%
21.0	В	-13.25%	В	-14.17%
21.0	SLV	-10.95%	AMAT	-12.03%
21.0	GOOGL	-9.62%	SLV	-10.38%
21.0	CLF	-9.38%	GOOGL	-8.37%
21.0	TSLA	-8.38%	NEM	-8.19%
21.0	NEM	-8.32%	ORCL	-7.73%
21.0	ORCL	-7.72%	TSLA	-7.62%
21.0	ELAN	-7.19%	GLD	-6.96%
21.0	GLD	-6.88%	CLF	-6.96%
21.0	UNH	-6.04%	UNH	-6.58%
21.0	CNC	-5.14%	ELAN	-6.07%
21.0	THC	-4.99%	CNC	-3.94%
21.0	CVS	-4.37%	LLY	-3.66%
21.0	AAPL	-4.1%	CVS	-3.6%
21.0	VFC	-4.03%	AA	-3.38%
21.0	ВХР	-4.01%	AVGO	-3.03%
21.0	AMAT	-3.74%	THC	-2.95%
21.0	ABBV	-3.52%	JAZZ	-2.91%
21.0	JAZZ	-3.45%	GSK	-2.9%
21.0	CMA	-3.39%	LW	-2.81%
21.0	HCA	-3.2%	AAPL	-2.76%
21.0	AA	-3.13%	IRM	-2.75%
21.0	GSK	-3.1%	CMA	-2.67%
21.0	LW	-2.71%	BXP	-2.6%
21.0	CYH	-2.4%	ABBV	-2.6%



Calls, 10% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	INTC	-18.2%	MU	-18.24%
21.0	MU	-17.53%	LUMN	-18.13%
21.0	WDC	-17.0%	INTC	-16.69%
21.0	AMD	-13.21%	WDC	-16.19%
21.0	LUMN	-10.86%	AMD	-15.79%
21.0	В	-8.56%	В	-9.42%
21.0	ORCL	-5.66%	AMAT	-8.15%
21.0	GOOGL	-4.96%	ORCL	-6.02%
21.0	TSLA	-4.88%	GOOGL	-4.71%
21.0	SLV	-4.64%	SLV	-4.57%
21.0	CLF	-3.24%	TSLA	-4.51%
21.0	NEM	-3.06%	NEM	-3.42%
21.0	UNH	-2.22%	UNH	-2.99%
21.0	VFC	-1.9%	CLF	-1.78%
21.0	ELAN	-1.76%	ELAN	-1.5%
21.0	BXP	-1.68%	ISRG	-1.4%
21.0	ISRG	-1.51%	BXP	-1.31%
21.0	KALU	-1.35%	GLD	-0.97%
21.0	THC	-0.95%	CMA	-0.52%
21.0	CNC	-0.95%	AVGO	-0.41%
21.0	GLD	-0.77%	KALU	-0.37%
21.0	CMA	-0.75%	CAH	-0.27%
21.0	AMAT	-0.71%	LLY	-0.18%
21.0	EXPE	-0.36%	WYNN	-0.16%
21.0	AAPL	-0.31%	LW	-0.12%
21.0	JAZZ	-0.25%	TEVA	-0.1%
21.0	HCA	-0.2%	THC	-0.03%
21.0	PCG	-0.15%	CVS	-0.03%
21.0	LW	-0.11%	AAPL	-0.01%
21.0	NVS	-0.1%	PWR	-0.0%



Calls, 20% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	INTC	-11.14%	AMD	-12.55%
21.0	AMD	-10.57%	LUMN	-11.51%
21.0	MU	-10.2%	MU	-10.62%
21.0	WDC	-9.48%	INTC	-10.41%
21.0	LUMN	-4.79%	WDC	-9.28%
21.0	В	-2.78%	AMAT	-3.81%
21.0	ORCL	-1.97%	В	-3.2%
21.0	TSLA	-1.75%	ORCL	-2.41%
21.0	UNH	-0.7%	TSLA	-1.89%
21.0	GOOGL	-0.64%	UNH	-1.38%
21.0	SLV	-0.6%	GOOGL	-0.68%
21.0	KALU	-0.41%	SLV	-0.6%
21.0	VFC	-0.39%	ISRG	-0.35%
21.0	ISRG	-0.18%	ELAN	-0.17%
21.0	ELAN	-0.14%	KALU	-0.12%
21.0	THC	-0.06%	NEM	-0.05%
21.0	VCSH	0.0%	CAH	-0.01%
21.0	META	0.0%	VCSH	0.0%
21.0	HSBC	0.0%	MUB	0.0%
21.0	FRA	0.0%	HYG	0.0%
21.0	LQD	0.0%	LQD	0.0%
21.0	ZTS	0.0%	EMB	0.0%
21.0	MNST	0.0%	FRA	0.0%
21.0	NVS	0.0%	TLT	0.0%
21.0	MUB	0.0%	GLD	0.0%
21.0	AMZN	0.0%	VICI	0.0%
21.0	GILD	0.0%	ORLY	0.0%
21.0	PCG	0.0%	SPY	0.0%
21.0	ABBV	0.0%	NVS	0.0%
21.0	HYG	0.0%	POST	0.0%



Puts, 1% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	CZR	-0.34%	ORCL	-0.22%
1.0	TDG	-0.3%	MOS	-0.19%
1.0	PRGO	-0.3%	В	-0.14%
1.0	META	-0.29%	NEM	-0.14%
1.0	MSTR	-0.27%	TDG	-0.13%
1.0	TXN	-0.25%	FIS	-0.09%
1.0	LLY	-0.22%	SLV	-0.09%
1.0	AAP	-0.2%	T	-0.08%
1.0	CDNS	-0.17%	GNRC	-0.08%
1.0	ISRG	-0.17%	MSI	-0.07%
1.0	NFLX	-0.12%	POST	-0.06%
1.0	AMZN	-0.12%	CAH	-0.06%
1.0	CMCSA	-0.11%	GLD	-0.05%
1.0	CMG	-0.09%	LVS	-0.05%
1.0	GWW	-0.08%	GBTC	-0.03%
1.0	SBUX	-0.08%	VZ	-0.03%
1.0	POST	-0.08%	BALL	-0.01%
1.0	ZTS	-0.07%	KHC	-0.01%
1.0	AMGN	-0.06%	CSCO	-0.0%
1.0	CVS	-0.06%	MNST	-0.0%
1.0	VZ	-0.04%	NVS	-0.0%
1.0	FCX	-0.03%	VCSH	0.0%
1.0	ADBE	-0.01%	MUB	0.0%
1.0	GNRC	-0.0%	HYG	0.0%
1.0	VCSH	0.0%	EMB	0.0%
1.0	NWL	0.0%	LQD	0.0%
1.0	QCOM	0.0%	WYNN	0.01%
1.0	PCG	0.01%	ZION	0.01%
1.0	MUB	0.02%	VICI	0.01%
1.0	LQD	0.02%	HON	0.02%



Puts, 10% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	NWL	-0.12%	NWL	-0.24%
1.0	FCX	-0.1%	CLF	-0.16%
1.0	CZR	-0.08%	CMG	-0.13%
1.0	CMG	-0.08%	GT	-0.13%
1.0	LLY	-0.05%	FCX	-0.11%
1.0	CLF	-0.03%	UAA	-0.1%
1.0	META	-0.02%	CZR	-0.08%
1.0	TDG	-0.01%	LLY	-0.07%
1.0	PRGO	-0.01%	AMAT	-0.06%
1.0	NFLX	-0.0%	MOS	-0.05%
1.0	MUB	0.0%	ZION	-0.05%
1.0	CMCSA	0.0%	TDG	-0.03%
1.0	HYG	0.0%	META	-0.02%
1.0	HSBC	0.0%	PRGO	-0.02%
1.0	HLT	0.0%	VFC	-0.01%
1.0	LQD	0.0%	GNRC	-0.0%
1.0	CVS	0.0%	NFLX	-0.0%
1.0	BXP	0.0%	VCSH	0.0%
1.0	GWW	0.0%	MUB	0.0%
1.0	EMB	0.0%	HYG	0.0%
1.0	ISRG	0.0%	LQD	0.0%
1.0	ZTS	0.0%	EMB	0.0%
1.0	BUD	0.0%	FRA	0.0%
1.0	FRA	0.0%	TLT	0.0%
1.0	VCSH	0.0%	GLD	0.0%
1.0	TXN	0.0%	VICI	0.0%
1.0	TLT	0.0%	ORLY	0.0%
1.0	SNY	0.0%	SPY	0.0%
1.0	T	0.0%	NVS	0.0%
1.0	AMZN	0.0%	POST	0.0%



Puts, 20% Out of the Money, 1D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	NWL	-0.07%	NWL	-0.13%
1.0	AA	0.0%	MUB	0.0%
1.0	MRK	0.0%	EMB	0.0%
1.0	MNST	0.0%	VCSH	0.0%
1.0	META	0.0%	HYG	0.0%
1.0	LW	0.0%	LQD	0.0%
1.0	LQD	0.0%	FRA	0.0%
1.0	LLY	0.0%	TLT	0.0%
1.0	KHC	0.0%	GLD	0.0%
1.0	KEY	0.0%	VICI	0.0%
1.0	KALU	0.0%	ORLY	0.0%
1.0	MSFT	0.0%	SPY	0.0%
1.0	JPM	0.0%	NVS	0.0%
1.0	ISRG	0.0%	POST	0.0%
1.0	HYG	0.0%	CSCO	0.0%
1.0	HSBC	0.0%	COST	0.0%
1.0	HON	0.0%	AZO	0.0%
1.0	HLT	0.0%	PEP	0.0%
1.0	HD	0.0%	MSI	0.0%
1.0	HCA	0.0%	T	0.0%
1.0	GWW	0.0%	HD	0.0%
1.0	GSK	0.0%	VZ	0.0%
1.0	GNRC	0.0%	MNST	0.0%
1.0	JAZZ	0.0%	HSBC	0.0%
1.0	MSI	0.0%	QQQ	0.0%
1.0	MUB	0.0%	MSFT	0.0%
1.0	NFLX	0.0%	SLV	0.0%
1.0	WFC	0.0%	AZN	0.0%
1.0	WDC	0.0%	HON	0.0%
1.0	VNO	0.0%	GWW	0.0%



Puts, 1% Out of the Money, 10D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	MSTR	-2.4%	T	-1.09%
10.0	TXN	-1.73%	MOS	-1.01%
10.0	CMCSA	-1.56%	GNRC	-0.72%
10.0	CZR	-1.47%	ORCL	-0.67%
10.0	PRGO	-1.41%	INTU	-0.52%
10.0	GNRC	-1.2%	TMUS	-0.43%
10.0	META	-1.15%	VICI	-0.42%
10.0	SBUX	-0.96%	AZO	-0.4%
10.0	Т	-0.95%	CMCSA	-0.36%
10.0	VZ	-0.79%	TXN	-0.34%
10.0	ZTS	-0.71%	VZ	-0.32%
10.0	TDG	-0.68%	ORLY	-0.21%
10.0	FCX	-0.67%	BALL	-0.18%
10.0	INTU	-0.63%	POST	-0.17%
10.0	NFLX	-0.57%	DHI	-0.15%
10.0	OXY	-0.5%	LVS	-0.13%
10.0	ISRG	-0.47%	MSI	-0.11%
10.0	SNY	-0.45%	FCX	-0.08%
10.0	TMUS	-0.44%	GT	-0.05%
10.0	AMZN	-0.43%	HD	-0.05%
10.0	CMG	-0.38%	CZR	-0.03%
10.0	GWW	-0.37%	VCSH	0.0%
10.0	CDNS	-0.36%	COST	0.03%
10.0	VICI	-0.33%	MUB	0.05%
10.0	BUD	-0.19%	TDG	0.05%
10.0	NWL	-0.19%	PHM	0.05%
10.0	POST	-0.17%	FRA	0.06%
10.0	AAP	-0.1%	HYG	0.09%
10.0	HD	-0.1%	AZN	0.12%
10.0	MOS	-0.09%	FIS	0.12%



Puts, 10% Out of the Money, 10D Time Horizon, All Tickers / P90D

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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	CZR	-0.99%	MOS	-0.59%
10.0	FCX	-0.4%	FCX	-0.51%
10.0	MSTR	-0.0%	CZR	-0.35%
10.0	EMB	0.0%	NEM	-0.23%
10.0	VCSH	0.0%	CMG	-0.17%
10.0	LQD	0.0%	LVS	-0.04%
10.0	MUB	0.0%	ZION	-0.03%
10.0	GWW	0.0%	WYNN	-0.02%
10.0	BUD	0.0%	T	-0.01%
10.0	TLT	0.0%	SLV	-0.0%
10.0	ISRG	0.01%	VCSH	0.0%
10.0	ZTS	0.01%	MUB	0.0%
10.0	CMCSA	0.01%	HYG	0.0%
10.0	SNY	0.01%	LQD	0.0%
10.0	FRA	0.02%	EMB	0.0%
10.0	AAP	0.02%	FRA	0.0%
10.0	AMGN	0.03%	TLT	0.0%
10.0	ВХР	0.04%	GLD	0.0%
10.0	CVS	0.04%	VICI	0.0%
10.0	NVS	0.04%	ORLY	0.0%
10.0	VZ	0.05%	SPY	0.0%
10.0	CMG	0.06%	NVS	0.0%
10.0	GILD	0.06%	TDG	0.0%
10.0	PRGO	0.06%	POST	0.0%
10.0	POST	0.07%	CSCO	0.01%
10.0	QCOM	0.07%	VZ	0.01%
10.0	WFC	0.07%	COST	0.01%
10.0	META	0.08%	MSI	0.01%
10.0	OXY	0.09%	PEP	0.01%
10.0	HLT	0.1%	AZO	0.01%



Puts, 20% Out of the Money, 10D Time Horizon, All Tickers / P90D $\,$

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	ZTS	0.0%	CMG	-0.11%
10.0	LQD	0.0%	FCX	-0.04%
10.0	CMCSA	0.0%	VCSH	0.0%
10.0	ВХР	0.0%	MUB	0.0%
10.0	BUD	0.0%	HYG	0.0%
10.0	FRA	0.0%	LQD	0.0%
10.0	MUB	0.0%	EMB	0.0%
10.0	HSBC	0.0%	FRA	0.0%
10.0	SNY	0.0%	TLT	0.0%
10.0	CVS	0.0%	GLD	0.0%
10.0	ISRG	0.0%	VICI	0.0%
10.0	TLT	0.0%	ORLY	0.0%
10.0	EMB	0.0%	SPY	0.0%
10.0	GILD	0.0%	NVS	0.0%
10.0	VCSH	0.0%	POST	0.0%
10.0	AMGN	0.0%	T	0.0%
10.0	GWW	0.0%	CSCO	0.0%
10.0	JAZZ	0.0%	VZ	0.0%
10.0	VZ	0.0%	COST	0.0%
10.0	META	0.0%	MSI	0.0%
10.0	CZR	0.0%	PEP	0.0%
10.0	MSI	0.01%	AZO	0.0%
10.0	HD	0.01%	HD	0.0%
10.0	WFC	0.01%	MNST	0.0%
10.0	NVS	0.01%	HSBC	0.0%
10.0	ADBE	0.01%	CAH	0.0%
10.0	UNH	0.01%	QQQ	0.0%
10.0	HYG	0.01%	MSFT	0.0%
10.0	Т	0.01%	SLV	0.0%
10.0	CMA	0.01%	AZN	0.0%



Puts, 1% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	${\tt Ticker_V}$	${\tt PnL} \verb"L"_{\tt V}$	${\tt Ticker_SBS}$	${\tt PnL\%_SBS}$
21.0	MSTR	-4.47%	T	-3.48%
21.0	CMCSA	-4.37%	GT	-2.67%
21.0	Т	-3.37%	CMCSA	-2.61%
21.0	CZR	-3.14%	TMUS	-2.35%
21.0	NWL	-3.14%	MOS	-2.0%
21.0	TXN	-2.87%	VZ	-1.78%
21.0	TMUS	-2.53%	BHC	-1.78%
21.0	VZ	-2.35%	BALL	-1.4%
21.0	BHC	-2.3%	TXN	-1.25%
21.0	GT	-2.04%	VICI	-1.01%
21.0	TDG	-2.01%	TDG	-1.0%
21.0	PRGO	-1.96%	HD	-0.95%
21.0	ZTS	-1.95%	GNRC	-0.9%
21.0	GNRC	-1.86%	CZR	-0.89%
21.0	META	-1.57%	KHC	-0.77%
21.0	ISRG	-1.49%	DHI	-0.72%
21.0	SBUX	-1.3%	AZO	-0.72%
21.0	FCX	-1.1%	CPRT	-0.7%
21.0	BALL	-1.05%	FCX	-0.54%
21.0	GWW	-1.05%	ORLY	-0.53%
21.0	OXY	-1.04%	MSI	-0.53%
21.0	KHC	-1.01%	OXY	-0.52%
21.0	BMY	-0.97%	FRA	-0.45%
21.0	LEN	-0.92%	FITB	-0.45%
21.0	AMZN	-0.83%	PHM	-0.35%
21.0	DHI	-0.8%	LEN	-0.29%
21.0	SNY	-0.76%	FIS	-0.28%
21.0	VICI	-0.73%	CCL	-0.28%
21.0	HD	-0.68%	POST	-0.12%
21.0	AAP	-0.59%	ZTS	-0.07%



Puts, 10% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	CZR	-1.78%	MOS	-1.0%
21.0	MSTR	-0.98%	T	-0.42%
21.0	T	-0.13%	CZR	-0.42%
21.0	NWL	-0.08%	AZO	-0.15%
21.0	CMCSA	-0.08%	GT	-0.09%
21.0	LQD	0.0%	ORLY	-0.02%
21.0	MUB	0.0%	VCSH	0.0%
21.0	VCSH	0.0%	MUB	0.0%
21.0	EMB	0.01%	HYG	0.0%
21.0	BUD	0.02%	LQD	0.0%
21.0	TLT	0.03%	EMB	0.0%
21.0	SNY	0.03%	FRA	0.0%
21.0	ZTS	0.04%	TLT	0.0%
21.0	OXY	0.04%	GLD	0.02%
21.0	AMGN	0.06%	VZ	0.03%
21.0	ISRG	0.07%	VICI	0.03%
21.0	CVS	0.09%	DHI	0.04%
21.0	GWW	0.09%	SPY	0.05%
21.0	BXP	0.1%	FCX	0.05%
21.0	VZ	0.12%	NVS	0.06%
21.0	META	0.12%	POST	0.06%
21.0	LEN	0.13%	HD	0.07%
21.0	NVS	0.14%	OXY	0.08%
21.0	AMZN	0.18%	CSCO	0.08%
21.0	FRA	0.18%	COST	0.09%
21.0	HYG	0.2%	MSI	0.09%
21.0	PCG	0.21%	PEP	0.1%
21.0	PRGO	0.24%	CAH	0.1%
21.0	QCOM	0.27%	HSBC	0.1%
21.0	GILD	0.27%	TDG	0.1%



Puts, 20% Out of the Money, 21D Time Horizon, All Tickers / P90D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	CZR	-0.41%	CZR	-0.06%
21.0	MUB	0.0%	TDG	-0.0%
21.0	CMCSA	0.0%	VCSH	0.0%
21.0	SNY	0.0%	MUB	0.0%
21.0	ISRG	0.0%	HYG	0.0%
21.0	VCSH	0.0%	LQD	0.0%
21.0	EMB	0.0%	EMB	0.0%
21.0	LQD	0.0%	FRA	0.0%
21.0	TLT	0.0%	TLT	0.0%
21.0	AMGN	0.0%	GLD	0.0%
21.0	VZ	0.0%	VICI	0.0%
21.0	BUD	0.0%	ORLY	0.0%
21.0	FRA	0.01%	SPY	0.0%
21.0	ZTS	0.01%	NVS	0.0%
21.0	CVS	0.01%	POST	0.0%
21.0	BXP	0.01%	T	0.0%
21.0	QCOM	0.02%	CSCO	0.0%
21.0	NVS	0.02%	VZ	0.0%
21.0	UNH	0.03%	COST	0.0%
21.0	JAZZ	0.03%	MSI	0.0%
21.0	HLT	0.03%	PEP	0.0%
21.0	MSI	0.03%	AZO	0.0%
21.0	GWW	0.04%	CAH	0.0%
21.0	META	0.04%	HSBC	0.0%
21.0	GILD	0.04%	HD	0.0%
21.0	HYG	0.05%	MNST	0.0%
21.0	T	0.05%	QQQ	0.0%
21.0	OXY	0.06%	SLV	0.0%
21.0	AMZN	0.06%	MSFT	0.0%
21.0	PCG	0.06%	AZN	0.0%



Top 30 Tickers by Option Sale Profitablity, P365D Model Dates

Calls, 1% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	${\tt PnL\%_SBS}$
1.0	IEP	4.48%	AMC	6.08%
1.0	LUMN	3.07%	GME	1.46%
1.0	NWL	2.39%	IEP	1.28%
1.0	MOS	1.48%	СҮН	0.72%
1.0	AMC	1.34%	NWL	0.69%
1.0	CYH	1.26%	UAA	0.54%
1.0	GT	1.16%	VFC	0.43%
1.0	UAA	1.12%	LW	0.41%
1.0	BIIB	1.11%	CNC	0.38%
1.0	VNO	1.06%	LUMN	0.33%
1.0	NVDA	0.97%	CTLT	0.26%
1.0	LW	0.91%	ON	0.25%
1.0	CTLT	0.89%	CZR	0.25%
1.0	FSUGY	0.86%	ADBE	0.24%
1.0	CZR	0.8%	BHC	0.24%
1.0	LLY	0.78%	CHTR	0.21%
1.0	AMAT	0.75%	GT	0.2%
1.0	QQQ	0.74%	SBUX	0.15%
1.0	BHC	0.71%	QCOM	0.15%
1.0	LVS	0.66%	PRGO	0.15%
1.0	BHP	0.65%	CMCSA	0.15%
1.0	SPY	0.65%	UNH	0.14%
1.0	KHC	0.64%	CSTM	0.14%
1.0	ACGL	0.63%	FSUGY	0.12%
1.0	CNC	0.6%	CMG	0.1%
1.0	PHM	0.59%	NAVI	0.1%
1.0	PCG	0.57%	KEY	0.1%
1.0	BMY	0.51%	ZTS	0.1%
1.0	COST	0.46%	BXP	0.09%
1.0	TEVA	0.46%	AAP	0.09%



Calls, 10% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	IEP	2.65%	AMC	3.71%
1.0	LUMN	2.33%	GME	0.3%
1.0	NWL	1.48%	IEP	0.1%
1.0	AMC	0.96%	LUMN	0.04%
1.0	CYH	0.67%	NWL	0.03%
1.0	GT	0.55%	CNC	0.02%
1.0	MOS	0.52%	FSUGY	0.0%
1.0	MSTR	0.5%	MOS	0.0%
1.0	NVDA	0.48%	ADBE	0.0%
1.0	CZR	0.35%	NEM	0.0%
1.0	UAA	0.33%	LEN	0.0%
1.0	TEVA	0.28%	TRGP	0.0%
1.0	AMAT	0.28%	JAZZ	0.0%
1.0	BHC	0.27%	BXP	0.0%
1.0	BIIB	0.2%	IRM	0.0%
1.0	VNO	0.2%	PCG	0.0%
1.0	FSUGY	0.19%	NFLX	0.0%
1.0	LLY	0.19%	В	0.0%
1.0	VST	0.18%	CTLT	0.0%
1.0	LW	0.16%	USB	0.0%
1.0	PCG	0.16%	GOOGL	0.0%
1.0	LVS	0.16%	CMCSA	0.0%
1.0	Х	0.15%	FITB	0.0%
1.0	QQQ	0.15%	MRK	0.0%
1.0	CNC	0.15%	FIS	0.0%
1.0	ACGL	0.14%	BALL	0.0%
1.0	AVGO	0.14%	TDG	0.0%
1.0	KHC	0.13%	BAC	0.0%
1.0	BHP	0.13%	SNY	0.0%
1.0	BMY	0.13%	SLV	0.0%



Calls, 20% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	IEP	1.65%	AMC	1.91%
1.0	LUMN	1.44%	GME	0.02%
1.0	NWL	0.83%	LUMN	0.0%
1.0	AMC	0.73%	IEP	0.0%
1.0	GT	0.28%	NWL	0.0%
1.0	CYH	0.27%	CNC	0.0%
1.0	MOS	0.25%	BHC	0.0%
1.0	MSTR	0.25%	CSTM	0.0%
1.0	TEVA	0.22%	WDC	0.0%
1.0	CZR	0.18%	VST	0.0%
1.0	NVDA	0.16%	MU	0.0%
1.0	Х	0.15%	GT	0.0%
1.0	AMAT	0.1%	AA	0.0%
1.0	BHC	0.08%	CZR	0.0%
1.0	UAA	0.07%	LW	0.0%
1.0	CLF	0.07%	NVDA	0.0%
1.0	VST	0.06%	UNH	0.0%
1.0	QCOM	0.06%	CCL	0.0%
1.0	BIIB	0.05%	GBTC	0.0%
1.0	VNO	0.05%	FCX	0.0%
1.0	MRK	0.05%	KALU	0.0%
1.0	PCG	0.04%	AMAT	0.0%
1.0	LW	0.04%	BBY	0.0%
1.0	WDC	0.04%	FSUGY	0.0%
1.0	LVS	0.03%	CHTR	0.0%
1.0	AVGO	0.03%	CMG	0.0%
1.0	LLY	0.03%	EXPE	0.0%
1.0	ACGL	0.03%	GNRC	0.0%
1.0	PHM	0.02%	LVS	0.0%
1.0	TDG	0.02%	ZION	0.0%



Calls, 1% Out of the Money, 10D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	IEP	9.12%	AMC	19.58%
10.0	NWL	6.26%	IEP	4.9%
10.0	LUMN	6.12%	GME	4.89%
10.0	AMC	4.71%	UAA	3.06%
10.0	GT	3.24%	NWL	2.39%
10.0	BIIB	3.02%	CZR	1.75%
10.0	UAA	2.95%	LW	1.67%
10.0	MOS	2.73%	CNC	1.37%
10.0	NVDA	2.51%	CYH	1.33%
10.0	CYH	2.49%	VFC	1.26%
10.0	CZR	2.49%	ON	1.2%
10.0	PHM	2.11%	GT	1.2%
10.0	KHC	1.96%	CMCSA	1.19%
10.0	VNO	1.94%	ADBE	1.04%
10.0	CTLT	1.79%	LUMN	0.98%
10.0	PCG	1.77%	PRGO	0.97%
10.0	ACGL	1.76%	CHTR	0.91%
10.0	BHP	1.74%	CMG	0.9%
10.0	LW	1.65%	ACGL	0.88%
10.0	AMAT	1.55%	LEN	0.84%
10.0	QQQ	1.49%	AA	0.84%
10.0	OXY	1.45%	QCOM	0.79%
10.0	COST	1.41%	CTLT	0.78%
10.0	LLY	1.25%	ZTS	0.75%
10.0	LEN	1.21%	BMY	0.75%
10.0	BMY	1.17%	KHC	0.74%
10.0	CNC	1.16%	SBUX	0.64%
10.0	FSUGY	1.15%	BALL	0.61%
10.0	MSTR	1.09%	FIS	0.56%
10.0	FIS	1.07%	BBY	0.56%



Calls, 10% Out of the Money, 10D Time Horizon, All Tickers / P365D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	IEP	7.28%	AMC	18.39%
10.0	LUMN	6.03%	GME	4.16%
10.0	NWL	5.92%	IEP	3.11%
10.0	AMC	4.18%	NWL	1.86%
10.0	NVDA	2.91%	UAA	1.66%
10.0	CYH	2.88%	VFC	1.18%
10.0	GT	2.7%	CYH	1.09%
10.0	MOS	2.21%	CZR	1.01%
10.0	BIIB	2.07%	CNC	0.89%
10.0	UAA	1.92%	LUMN	0.88%
10.0	CZR	1.87%	ON	0.79%
10.0	AMAT	1.77%	LW	0.72%
10.0	PCG	1.66%	AA	0.71%
10.0	PHM	1.58%	GT	0.55%
10.0	VNO	1.44%	CLF	0.39%
10.0	OXY	1.26%	BBY	0.39%
10.0	LNC	1.25%	QCOM	0.38%
10.0	LLY	1.23%	FSUGY	0.35%
10.0	MSTR	1.15%	ADBE	0.35%
10.0	CSTM	1.12%	NVDA	0.25%
10.0	FSUGY	1.12%	VNO	0.24%
10.0	BHP	0.94%	CMG	0.24%
10.0	CTLT	0.9%	PRGO	0.2%
10.0	QQQ	0.9%	CHTR	0.2%
10.0	LW	0.87%	ZION	0.2%
10.0	COST	0.85%	OXY	0.19%
10.0	AA	0.81%	LEN	0.19%
10.0	CNC	0.79%	PHM	0.16%
10.0	KHC	0.71%	NAVI	0.16%
10.0	LEN	0.7%	LNC	0.15%



Calls, 20% Out of the Money, 10D Time Horizon, All Tickers / P365D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	5.53%	AMC	16.23%
10.0	IEP	5.28%	GME	2.76%
10.0	NWL	4.76%	IEP	1.4%
10.0	AMC	3.81%	NWL	1.01%
10.0	CYH	2.45%	VFC	0.79%
10.0	NVDA	1.99%	LUMN	0.72%
10.0	GT	1.96%	UAA	0.59%
10.0	MOS	1.34%	CNC	0.46%
10.0	AMAT	1.29%	CLF	0.35%
10.0	PCG	1.13%	ON	0.29%
10.0	BIIB	0.97%	CZR	0.22%
10.0	CLF	0.97%	LW	0.21%
10.0	MSTR	0.96%	GT	0.21%
10.0	UAA	0.9%	AA	0.2%
10.0	OXY	0.81%	CYH	0.13%
10.0	CZR	0.8%	VST	0.12%
10.0	LNC	0.79%	NVDA	0.1%
10.0	CSTM	0.71%	CSTM	0.05%
10.0	LLY	0.7%	BBY	0.05%
10.0	VNO	0.63%	FSUGY	0.04%
10.0	PHM	0.61%	FCX	0.03%
10.0	AA	0.51%	QCOM	0.03%
10.0	CNC	0.47%	CHTR	0.02%
10.0	BHP	0.41%	LNC	0.02%
10.0	CDNS	0.41%	VNO	0.02%
10.0	LW	0.39%	ZION	0.02%
10.0	ON	0.38%	WDC	0.02%
10.0	PRGO	0.32%	NAVI	0.02%
10.0	CTLT	0.32%	ADBE	0.02%
10.0	VST	0.31%	AMAT	0.02%



Calls, 1% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	IEP	13.44%	AMC	30.81%
21.0	NWL	8.93%	GME	7.54%
21.0	LUMN	8.52%	IEP	7.53%
21.0	AMC	6.86%	UAA	4.65%
21.0	GT	6.7%	NWL	4.04%
21.0	BIIB	4.63%	CZR	2.82%
21.0	CZR	4.35%	LW	2.77%
21.0	MSTR	4.34%	GT	2.58%
21.0	UAA	4.25%	CMCSA	2.18%
21.0	MOS	3.64%	MSTR	2.18%
21.0	PHM	3.1%	ADBE	1.89%
21.0	LNC	2.97%	BMY	1.87%
21.0	VNO	2.94%	CHTR	1.86%
21.0	BHP	2.7%	VFC	1.83%
21.0	ACGL	2.66%	ON	1.75%
21.0	KHC	2.62%	PRGO	1.74%
21.0	NVDA	2.55%	CMG	1.65%
21.0	PCG	2.53%	ACGL	1.65%
21.0	OXY	2.53%	AA	1.64%
21.0	LEN	2.38%	KHC	1.42%
21.0	BMY	2.37%	CNC	1.4%
21.0	LW	2.36%	ZTS	1.4%
21.0	MRK	2.19%	QCOM	1.39%
21.0	LLY	2.19%	LEN	1.36%
21.0	CMCSA	2.1%	VNO	1.33%
21.0	FIS	2.06%	OXY	1.27%
21.0	ADBE	1.86%	FIS	1.21%
21.0	AMAT	1.84%	CYH	1.17%
21.0	CMG	1.73%	BBY	1.17%
21.0	FSUGY	1.71%	BALL	1.15%



Calls, 10% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	IEP	11.5%	AMC	29.59%
21.0	LUMN	8.61%	GME	7.46%
21.0	NWL	8.21%	IEP	5.86%
21.0	GT	5.96%	NWL	3.26%
21.0	AMC	5.48%	UAA	3.16%
21.0	MSTR	4.11%	VFC	2.21%
21.0	BIIB	3.72%	LW	2.14%
21.0	LNC	3.42%	CZR	1.9%
21.0	CZR	3.32%	GT	1.82%
21.0	NVDA	3.26%	MSTR	1.67%
21.0	MOS	3.22%	AA	1.64%
21.0	UAA	3.06%	СҮН	1.42%
21.0	PHM	2.73%	CNC	1.28%
21.0	PCG	2.55%	LUMN	1.23%
21.0	AMAT	2.42%	QCOM	1.19%
21.0	LLY	2.25%	ON	1.14%
21.0	VNO	2.24%	PRGO	0.85%
21.0	CYH	2.15%	BBY	0.79%
21.0	OXY	2.0%	ADBE	0.76%
21.0	LW	1.83%	CMG	0.72%
21.0	BHP	1.72%	FCX	0.69%
21.0	FSUGY	1.71%	CTLT	0.68%
21.0	LEN	1.5%	VNO	0.66%
21.0	QQQ	1.49%	OXY	0.63%
21.0	AA	1.49%	FSUGY	0.61%
21.0	CTLT	1.44%	CHTR	0.61%
21.0	ACGL	1.26%	BMY	0.56%
21.0	GME	1.22%	CMCSA	0.56%
21.0	ON	1.2%	ZION	0.55%
21.0	COST	1.19%	CLF	0.55%



Calls, 20% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	IEP	9.07%	AMC	27.75%
21.0	LUMN	8.24%	GME	6.19%
21.0	NWL	7.13%	IEP	3.76%
21.0	AMC	4.93%	NWL	2.41%
21.0	GT	4.45%	UAA	1.86%
21.0	MSTR	3.65%	VFC	1.72%
21.0	LNC	3.26%	LUMN	1.29%
21.0	NVDA	2.88%	MSTR	1.05%
21.0	MOS	2.55%	LW	1.0%
21.0	AMAT	2.51%	CZR	0.96%
21.0	CYH	2.39%	CYH	0.96%
21.0	BIIB	2.17%	CNC	0.91%
21.0	UAA	2.1%	GT	0.86%
21.0	CZR	1.97%	AA	0.85%
21.0	PCG	1.88%	ON	0.75%
21.0	PHM	1.63%	CLF	0.71%
21.0	LLY	1.37%	QCOM	0.29%
21.0	VNO	1.31%	BBY	0.29%
21.0	OXY	1.23%	EXPE	0.28%
21.0	ON	1.11%	FCX	0.27%
21.0	GME	1.09%	FSUGY	0.24%
21.0	CLF	1.06%	PRGO	0.23%
21.0	AA	0.97%	NVDA	0.22%
21.0	CNC	0.92%	ZION	0.22%
21.0	LW	0.86%	ADBE	0.2%
21.0	LEN	0.86%	VNO	0.2%
21.0	FSUGY	0.8%	LLY	0.18%
21.0	BHP	0.79%	CMA	0.16%
21.0	ZION	0.68%	KEY	0.15%
21.0	QQQ	0.6%	SBUX	0.15%



Calls, 1% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	IEP	28.59%	AMC	55.44%
63.0	NWL	21.52%	GME	18.53%
63.0	AMC	18.27%	IEP	16.85%
63.0	LUMN	12.18%	NWL	11.81%
63.0	GT	11.12%	UAA	8.78%
63.0	CZR	10.7%	CZR	8.41%
63.0	OXY	9.86%	CYH	7.74%
63.0	GME	9.61%	ADBE	6.88%
63.0	CYH	9.53%	LW	6.82%
63.0	UAA	9.25%	CMCSA	5.32%
63.0	BIIB	8.42%	VFC	5.28%
63.0	ADBE	8.26%	PRGO	5.01%
63.0	AMAT	8.2%	BMY	4.92%
63.0	LLY	8.12%	ZTS	4.91%
63.0	MSTR	7.32%	CNC	4.86%
63.0	ACGL	7.13%	MSTR	4.84%
63.0	TRGP	7.02%	VNO	4.73%
63.0	VNO	6.84%	CMG	4.69%
63.0	BHP	6.38%	ACGL	4.38%
63.0	CMG	6.3%	KHC	4.28%
63.0	MOS	5.72%	QCOM	4.21%
63.0	PCG	5.6%	TRGP	4.07%
63.0	CMCSA	5.6%	NAVI	4.05%
63.0	ON	5.48%	BBY	3.76%
63.0	BMY	5.42%	CHTR	3.62%
63.0	LW	5.24%	CPRT	3.6%
63.0	LNC	5.16%	ВХР	3.56%
63.0	COST	5.13%	LLY	3.45%
63.0	PRGO	5.04%	ISRG	3.43%
63.0	MRK	4.95%	MRK	3.32%



Calls, 10% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	IEP	25.56%	AMC	55.68%
63.0	NWL	19.34%	GME	17.72%
63.0	AMC	16.55%	IEP	14.49%
63.0	LUMN	11.95%	NWL	10.17%
63.0	GT	11.32%	CYH	7.1%
63.0	OXY	8.84%	UAA	6.88%
63.0	CYH	8.67%	CZR	6.04%
63.0	AMAT	8.43%	VFC	5.98%
63.0	GME	8.25%	LW	5.93%
63.0	CZR	8.1%	MSTR	4.9%
63.0	BIIB	7.97%	ADBE	3.98%
63.0	MSTR	7.52%	QCOM	3.72%
63.0	UAA	7.2%	PRGO	3.66%
63.0	LLY	7.17%	GT	3.61%
63.0	LNC	7.08%	AA	3.41%
63.0	BHP	6.18%	VNO	3.4%
63.0	MOS	5.8%	CNC	3.09%
63.0	VNO	5.41%	CHTR	3.07%
63.0	PCG	5.28%	BBY	2.95%
63.0	ADBE	5.23%	BXP	2.83%
63.0	TRGP	4.86%	SBUX	2.74%
63.0	TEVA	4.81%	LLY	2.72%
63.0	ON	4.66%	CMG	2.68%
63.0	ACGL	4.44%	TEVA	2.53%
63.0	LW	4.27%	CMCSA	2.43%
63.0	LEN	4.17%	BMY	2.4%
63.0	CMG	4.17%	OXY	2.34%
63.0	PRGO	4.06%	ISRG	2.31%
63.0	COST	3.64%	TRGP	2.21%
63.0	ZION	3.53%	ZTS	2.06%



Calls, 20% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	IEP	22.0%	AMC	54.46%
63.0	NWL	16.57%	GME	15.81%
63.0	AMC	14.89%	IEP	11.62%
63.0	LUMN	12.24%	NWL	8.25%
63.0	GT	10.53%	CYH	6.76%
63.0	CYH	8.79%	VFC	6.33%
63.0	AMAT	8.09%	UAA	5.25%
63.0	MSTR	8.01%	MSTR	5.12%
63.0	LNC	7.55%	LW	4.22%
63.0	OXY	6.78%	CZR	4.09%
63.0	GME	6.25%	AA	3.41%
63.0	MOS	5.97%	GT	3.29%
63.0	CZR	5.81%	LUMN	2.32%
63.0	UAA	5.79%	TEVA	2.3%
63.0	BIIB	5.67%	QCOM	2.08%
63.0	LLY	5.19%	CNC	2.03%
63.0	TEVA	5.06%	CHTR	2.0%
63.0	PCG	4.52%	ADBE	1.86%
63.0	BHP	4.24%	BBY	1.82%
63.0	FSUGY	3.96%	VNO	1.76%
63.0	ON	3.94%	PRGO	1.73%
63.0	VNO	3.59%	SBUX	1.56%
63.0	LEN	3.55%	FSUGY	1.54%
63.0	ZION	3.47%	LLY	1.39%
63.0	PHM	3.44%	BXP	1.28%
63.0	ADBE	2.87%	CMG	1.12%
63.0	TRGP	2.82%	OXY	1.1%
63.0	LW	2.73%	ZION	1.07%
63.0	PRGO	2.61%	LNC	1.06%
63.0	IRM	2.48%	AMAT	1.04%



Puts, 1% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	1.97%	AMC	5.95%
1.0	LUMN	1.75%	GME	1.5%
1.0	IEP	1.45%	IEP	1.16%
1.0	GBTC	1.45%	СҮН	0.74%
1.0	PHM	1.38%	LUMN	0.65%
1.0	CYH	1.27%	NWL	0.44%
1.0	GT	1.24%	UAA	0.42%
1.0	TRGP	1.16%	LW	0.38%
1.0	AVGO	1.15%	VFC	0.36%
1.0	NVDA	0.94%	CSTM	0.35%
1.0	NWL	0.85%	INTC	0.32%
1.0	GS	0.8%	CTLT	0.32%
1.0	SPY	0.8%	ELAN	0.3%
1.0	THC	0.79%	AAP	0.27%
1.0	CTLT	0.79%	GT	0.26%
1.0	MS	0.79%	ON	0.2%
1.0	PCG	0.73%	BHC	0.19%
1.0	CAH	0.73%	CNC	0.19%
1.0	GLD	0.68%	WDC	0.16%
1.0	MOS	0.66%	AVGO	0.16%
1.0	TEVA	0.64%	KALU	0.15%
1.0	VST	0.6%	AMD	0.15%
1.0	QQQ	0.58%	MSTR	0.15%
1.0	AMAT	0.54%	PRGO	0.15%
1.0	ELAN	0.53%	AMAT	0.14%
1.0	BIIB	0.48%	QCOM	0.14%
1.0	HSBC	0.41%	GE	0.13%
1.0	JPM	0.4%	FSUGY	0.12%
1.0	CPRT	0.38%	CZR	0.12%
1.0	WYNN	0.37%	EXPE	0.12%



Puts, 10% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	1.53%	AMC	3.13%
1.0	LUMN	1.03%	GME	0.1%
1.0	GBTC	0.71%	IEP	0.06%
1.0	CYH	0.6%	LUMN	0.03%
1.0	IEP	0.6%	ELAN	0.0%
1.0	GT	0.5%	AMD	0.0%
1.0	VST	0.45%	Х	0.0%
1.0	NWL	0.44%	GBTC	0.0%
1.0	TRGP	0.36%	FSUGY	0.0%
1.0	NVDA	0.33%	EXPE	0.0%
1.0	BIIB	0.3%	QCOM	0.0%
1.0	AVGO	0.29%	INTC	0.0%
1.0	PCG	0.21%	LVS	0.0%
1.0	PHM	0.21%	NAVI	0.0%
1.0	AMAT	0.18%	CVS	0.0%
1.0	CLF	0.17%	NEM	0.0%
1.0	LVS	0.16%	LEN	0.0%
1.0	MOS	0.16%	DHI	0.0%
1.0	UAA	0.15%	JAZZ	0.0%
1.0	AMD	0.14%	PHM	0.0%
1.0	INTU	0.13%	BXP	0.0%
1.0	LNC	0.12%	IRM	0.0%
1.0	BHC	0.12%	ISRG	0.0%
1.0	TEVA	0.11%	В	0.0%
1.0	GS	0.1%	AMZN	0.0%
1.0	LEN	0.1%	INTU	0.0%
1.0	Х	0.1%	MS	0.0%
1.0	DHI	0.09%	CTLT	0.0%
1.0	INTC	0.09%	GS	0.0%
1.0	MSTR	0.09%	USB	0.0%



Puts, 20% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AMC	1.07%	AMC	1.09%
1.0	LUMN	0.48%	LUMN	0.0%
1.0	GBTC	0.28%	IEP	0.0%
1.0	IEP	0.27%	CLF	0.0%
1.0	VST	0.23%	MSTR	0.0%
1.0	NWL	0.22%	UAA	0.0%
1.0	CYH	0.2%	BHC	0.0%
1.0	GT	0.17%	CSTM	0.0%
1.0	TRGP	0.15%	AAP	0.0%
1.0	BIIB	0.13%	ON	0.0%
1.0	PCG	0.13%	INTC	0.0%
1.0	LVS	0.08%	TSLA	0.0%
1.0	NVDA	0.08%	MU	0.0%
1.0	MU	0.08%	GT	0.0%
1.0	CLF	0.07%	ELAN	0.0%
1.0	AMD	0.07%	AA	0.0%
1.0	BHC	0.07%	CZR	0.0%
1.0	AMAT	0.06%	AMD	0.0%
1.0	MOS	0.05%	AVGO	0.0%
1.0	DHI	0.05%	NVDA	0.0%
1.0	AAP	0.05%	TEVA	0.0%
1.0	LEN	0.05%	X	0.0%
1.0	INTC	0.04%	CCL	0.0%
1.0	TEVA	0.04%	GBTC	0.0%
1.0	CCL	0.04%	FCX	0.0%
1.0	AVGO	0.03%	KALU	0.0%
1.0	CAH	0.03%	ORCL	0.0%
1.0	UAA	0.03%	AMAT	0.0%
1.0	RIO	0.03%	BBY	0.0%
1.0	ZION	0.03%	FSUGY	0.0%



Puts, 1% Out of the Money, 10D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	GBTC	4.63%	AMC	17.86%
10.0	GT	4.17%	GME	4.89%
10.0	IEP	3.69%	IEP	3.33%
10.0	LUMN	3.61%	LUMN	1.84%
10.0	CTLT	2.66%	CTLT	1.75%
10.0	PHM	2.4%	MSTR	1.61%
10.0	GLD	2.37%	СҮН	1.6%
10.0	AVGO	2.34%	CSTM	1.38%
10.0	TRGP	2.24%	ELAN	1.36%
10.0	NVDA	2.05%	INTC	1.3%
10.0	CYH	1.81%	AAP	1.27%
10.0	AMC	1.79%	NVDA	1.15%
10.0	SPY	1.69%	AVGO	1.14%
10.0	MNST	1.66%	В	1.11%
10.0	MS	1.61%	GBTC	1.08%
10.0	CSCO	1.49%	LW	1.02%
10.0	CAH	1.44%	AMD	1.01%
10.0	AMAT	1.34%	Х	0.92%
10.0	VST	1.33%	TSLA	0.91%
10.0	TEVA	1.3%	GE	0.9%
10.0	QQQ	1.29%	QCOM	0.89%
10.0	GS	1.25%	VST	0.83%
10.0	THC	1.23%	NEM	0.8%
10.0	LNC	1.22%	CLF	0.67%
10.0	X	1.21%	EXPE	0.66%
10.0	MOS	1.17%	SLV	0.65%
10.0	HSBC	1.15%	UAA	0.61%
10.0	В	1.13%	VFC	0.58%
10.0	BA	1.06%	AMAT	0.58%
10.0	ELAN	1.03%	MU	0.52%



Puts, 10% Out of the Money, 10D Time Horizon, All Tickers / P365D

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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	3.89%	AMC	16.14%
10.0	GT	3.88%	GME	3.48%
10.0	GBTC	3.32%	IEP	2.26%
10.0	IEP	3.32%	LUMN	1.46%
10.0	AMC	3.19%	MSTR	1.21%
10.0	CYH	1.78%	СҮН	0.95%
10.0	TRGP	1.59%	INTC	0.55%
10.0	VST	1.47%	LW	0.42%
10.0	PHM	1.46%	AAP	0.39%
10.0	AVGO	1.35%	ELAN	0.35%
10.0	AMAT	1.32%	CSTM	0.32%
10.0	NVDA	1.23%	GBTC	0.3%
10.0	MOS	1.14%	AMD	0.29%
10.0	NWL	1.1%	TSLA	0.28%
10.0	AMD	0.89%	AMAT	0.24%
10.0	GME	0.85%	AVGO	0.22%
10.0	THC	0.84%	GT	0.18%
10.0	LEN	0.81%	UAA	0.16%
10.0	CTLT	0.74%	CLF	0.15%
10.0	MNST	0.71%	VST	0.14%
10.0	LNC	0.71%	THC	0.14%
10.0	BIIB	0.7%	NVDA	0.14%
10.0	UAA	0.7%	ON	0.13%
10.0	TEVA	0.68%	QCOM	0.11%
10.0	ACGL	0.63%	NWL	0.1%
10.0	ISRG	0.62%	NEM	0.09%
10.0	LVS	0.62%	В	0.08%
10.0	DHI	0.61%	CTLT	0.08%
10.0	X	0.59%	VNO	0.07%
10.0	PCG	0.59%	NFLX	0.06%



Puts, 20% Out of the Money, 10D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	LUMN	3.15%	AMC	12.05%
10.0	AMC	3.0%	GME	1.52%
10.0	GT	2.67%	IEP	0.71%
10.0	IEP	2.16%	LUMN	0.7%
10.0	GBTC	1.83%	MSTR	0.36%
10.0	CYH	1.37%	СҮН	0.2%
10.0	VST	1.15%	CLF	0.16%
10.0	NWL	1.05%	INTC	0.15%
10.0	CLF	0.79%	AAP	0.09%
10.0	MOS	0.76%	LW	0.06%
10.0	UAA	0.75%	GT	0.05%
10.0	TRGP	0.71%	ON	0.03%
10.0	AMAT	0.66%	NVDA	0.03%
10.0	INTC	0.62%	UAA	0.02%
10.0	BIIB	0.62%	ELAN	0.02%
10.0	NVDA	0.59%	AVGO	0.02%
10.0	AMD	0.52%	AMAT	0.01%
10.0	PCG	0.49%	GBTC	0.01%
10.0	LVS	0.49%	CZR	0.01%
10.0	PHM	0.45%	TSLA	0.01%
10.0	AVGO	0.44%	X	0.01%
10.0	TEVA	0.41%	FSUGY	0.01%
10.0	LEN	0.41%	ORCL	0.01%
10.0	GME	0.41%	THC	0.0%
10.0	ISRG	0.38%	VNO	0.0%
10.0	DHI	0.37%	ZION	0.0%
10.0	CPRT	0.33%	PWR	0.0%
10.0	FSUGY	0.32%	MOS	0.0%
10.0	AAP	0.32%	CDNS	0.0%
10.0	Х	0.3%	NAVI	0.0%



Puts, 1% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	GBTC	6.1%	AMC	26.84%
21.0	GT	5.61%	GME	6.92%
21.0	CTLT	4.86%	IEP	4.48%
21.0	IEP	4.14%	INTC	3.03%
21.0	LUMN	4.09%	CTLT	2.81%
21.0	AVGO	3.64%	MSTR	2.5%
21.0	GLD	3.64%	В	2.34%
21.0	NVDA	3.4%	LUMN	2.31%
21.0	AMC	3.0%	AVGO	2.26%
21.0	PHM	2.97%	GBTC	2.19%
21.0	TRGP	2.71%	CSTM	2.14%
21.0	VST	2.62%	AAP	2.04%
21.0	BA	2.53%	NEM	2.04%
21.0	MOS	2.47%	NVDA	1.98%
21.0	MNST	2.47%	VST	1.95%
21.0	HSBC	2.38%	GE	1.81%
21.0	В	2.29%	MU	1.8%
21.0	CSCO	2.24%	ELAN	1.78%
21.0	MS	2.18%	TSLA	1.77%
21.0	Х	2.17%	X	1.77%
21.0	CAH	2.0%	ВА	1.77%
21.0	SPY	1.94%	SLV	1.69%
21.0	QQQ	1.91%	CLF	1.68%
21.0	THC	1.9%	QCOM	1.57%
21.0	CYH	1.82%	CYH	1.49%
21.0	GE	1.59%	EXPE	1.28%
21.0	RIO	1.55%	LW	1.25%
21.0	AMAT	1.53%	FSUGY	1.24%
21.0	VNO	1.51%	NFLX	1.16%
21.0	NFLX	1.5%	BHP	1.13%



Puts, 10% Out of the Money, 21D Time Horizon, All Tickers / P365D

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, $21\mathrm{d}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	GT	5.67%	AMC	25.32%
21.0	AMC	4.87%	GME	5.84%
21.0	GBTC	4.65%	IEP	4.01%
21.0	IEP	4.57%	MSTR	2.5%
21.0	LUMN	4.45%	LUMN	1.89%
21.0	NVDA	2.62%	INTC	1.85%
21.0	TRGP	2.56%	СҮН	1.55%
21.0	VST	2.43%	AAP	1.27%
21.0	CYH	2.43%	ELAN	1.13%
21.0	MOS	2.38%	AMD	1.1%
21.0	AVGO	2.37%	NVDA	1.09%
21.0	PHM	2.36%	CLF	0.99%
21.0	CTLT	2.05%	LW	0.92%
21.0	AMAT	2.03%	AVGO	0.9%
21.0	AMD	1.73%	GBTC	0.9%
21.0	CLF	1.69%	CSTM	0.88%
21.0	MNST	1.5%	VST	0.86%
21.0	BA	1.41%	MU	0.82%
21.0	GME	1.38%	TSLA	0.7%
21.0	THC	1.29%	QCOM	0.7%
21.0	Х	1.28%	AMAT	0.64%
21.0	RIO	1.25%	NEM	0.58%
21.0	ACGL	1.22%	ВА	0.52%
21.0	VNO	1.2%	VNO	0.47%
21.0	LEN	1.19%	FSUGY	0.47%
21.0	NFLX	1.17%	GE	0.47%
21.0	LNC	1.11%	X	0.44%
21.0	QQQ	1.11%	CTLT	0.42%
21.0	GLD	1.08%	В	0.39%
21.0	MS	1.05%	BXP	0.38%



Puts, 20% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AMC	5.34%	AMC	21.19%
21.0	GT	4.74%	GME	3.84%
21.0	LUMN	4.35%	IEP	2.19%
21.0	IEP	3.6%	MSTR	1.56%
21.0	GBTC	3.03%	СҮН	1.39%
21.0	CYH	2.93%	LUMN	1.25%
21.0	CLF	2.08%	INTC	0.8%
21.0	VST	2.01%	CLF	0.71%
21.0	UAA	1.53%	AAP	0.58%
21.0	AMAT	1.52%	ON	0.58%
21.0	MOS	1.45%	LW	0.34%
21.0	NVDA	1.44%	AMD	0.34%
21.0	AMD	1.33%	AVGO	0.31%
21.0	TRGP	1.27%	ELAN	0.29%
21.0	GME	1.2%	NVDA	0.28%
21.0	AVGO	1.2%	GT	0.23%
21.0	PHM	1.17%	UAA	0.2%
21.0	LEN	1.09%	AMAT	0.18%
21.0	INTC	1.0%	GBTC	0.17%
21.0	Х	0.98%	Х	0.16%
21.0	ISRG	0.91%	CSTM	0.14%
21.0	MSTR	0.87%	VST	0.13%
21.0	RIO	0.84%	FCX	0.11%
21.0	NWL	0.78%	FSUGY	0.11%
21.0	TEVA	0.77%	QCOM	0.08%
21.0	DHI	0.77%	GNRC	0.08%
21.0	FCX	0.75%	ORCL	0.08%
21.0	CMG	0.73%	THC	0.07%
21.0	PCG	0.73%	PRGO	0.06%
21.0	BIIB	0.72%	LNC	0.06%



Puts, 1% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	GBTC	9.51%	AMC	44.4%
63.0	X	8.94%	GME	13.27%
63.0	IEP	8.41%	IEP	9.92%
63.0	GT	7.05%	INTC	9.02%
63.0	MOS	6.39%	CSTM	7.86%
63.0	MNST	5.72%	Х	7.48%
63.0	AVGO	5.53%	NEM	5.99%
63.0	RIO	5.23%	MU	5.74%
63.0	GLD	5.18%	GE	5.47%
63.0	HSBC	5.09%	CYH	5.38%
63.0	CSTM	4.94%	В	5.3%
63.0	WYNN	4.82%	MSTR	5.26%
63.0	CSCO	4.66%	CVS	5.16%
63.0	NFLX	4.63%	AVGO	5.02%
63.0	INTC	4.6%	BA	4.63%
63.0	NVDA	4.55%	NFLX	4.38%
63.0	GE	4.52%	SLV	4.29%
63.0	Т	4.5%	GBTC	4.28%
63.0	BA	4.42%	VST	4.27%
63.0	LNC	4.42%	THC	4.0%
63.0	CYH	4.31%	LNC	3.99%
63.0	AMC	4.31%	WYNN	3.93%
63.0	THC	4.29%	GSK	3.74%
63.0	PHM	4.24%	AAP	3.74%
63.0	LUMN	4.15%	QCOM	3.67%
63.0	В	3.95%	HCA	3.62%
63.0	ORLY	3.93%	NVDA	3.55%
63.0	AMAT	3.68%	ELAN	3.49%
63.0	VST	3.55%	LUMN	3.43%
63.0	JPM	3.54%	AMAT	3.36%



Puts, 10% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	IEP	9.85%	AMC	42.84%
63.0	GBTC	8.34%	GME	12.43%
63.0	GT	7.13%	IEP	10.3%
63.0	AMC	6.76%	INTC	6.79%
63.0	Х	6.54%	CYH	6.25%
63.0	CYH	5.9%	CSTM	5.42%
63.0	MOS	5.62%	MSTR	5.18%
63.0	LUMN	5.25%	Х	4.46%
63.0	RIO	4.24%	MU	3.94%
63.0	INTC	3.9%	LUMN	3.55%
63.0	NVDA	3.7%	VST	3.08%
63.0	CSTM	3.68%	GBTC	3.07%
63.0	PHM	3.68%	AAP	2.91%
63.0	AVGO	3.67%	AVGO	2.8%
63.0	AMAT	3.64%	CVS	2.74%
63.0	WYNN	3.48%	CLF	2.6%
63.0	GME	3.46%	NEM	2.57%
63.0	LNC	3.46%	LNC	2.56%
63.0	VST	3.45%	AMAT	2.53%
63.0	MNST	3.38%	NVDA	2.51%
63.0	TRGP	3.26%	ELAN	2.45%
63.0	THC	2.77%	WYNN	2.35%
63.0	COST	2.68%	THC	2.34%
63.0	NFLX	2.64%	BA	2.32%
63.0	FSUGY	2.6%	QCOM	2.26%
63.0	T	2.57%	GE	2.17%
63.0	MOX	2.57%	В	2.03%
63.0	ISRG	2.53%	NFLX	1.93%
63.0	CSCO	2.52%	MOS	1.93%
63.0	BA	2.51%	FCX	1.86%



Puts, 20% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	AMC	9.21%	AMC	39.71%
63.0	IEP	8.63%	GME	10.52%
63.0	GT	7.0%	IEP	7.65%
63.0	CYH	6.64%	СҮН	5.73%
63.0	LUMN	6.29%	MSTR	4.22%
63.0	GBTC	6.29%	INTC	4.02%
63.0	X	4.36%	LUMN	3.46%
63.0	GME	4.02%	CSTM	3.24%
63.0	MOS	3.8%	CLF	2.55%
63.0	CLF	3.58%	AAP	2.17%
63.0	VST	3.19%	MU	1.98%
63.0	INTC	3.14%	VST	1.84%
63.0	RIO	3.07%	ELAN	1.82%
63.0	AMAT	2.98%	Х	1.79%
63.0	ISRG	2.81%	GBTC	1.46%
63.0	CSTM	2.81%	NVDA	1.4%
63.0	TRGP	2.75%	AVGO	1.31%
63.0	NVDA	2.59%	AMAT	1.24%
63.0	PHM	2.54%	FSUGY	1.09%
63.0	LVS	2.35%	FCX	1.05%
63.0	FSUGY	2.25%	AMD	1.02%
63.0	AVGO	2.18%	QCOM	0.96%
63.0	AMD	1.94%	KALU	0.9%
63.0	MNST	1.88%	THC	0.87%
63.0	LNC	1.87%	EXPE	0.84%
63.0	WYNN	1.8%	CZR	0.83%
63.0	MU	1.74%	LNC	0.81%
63.0	CDNS	1.71%	CVS	0.78%
63.0	MOX	1.66%	MOS	0.73%
63.0	PCG	1.63%	WYNN	0.71%



Bottom 30 Tickers by Option Sale Profitabilty, P365D Model Dates

Calls, 1% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	${\tt PnL\%_SBS}$
1.0	TSLA	-0.57%	В	-0.26%
1.0	INTC	-0.41%	ORCL	-0.26%
1.0	MU	-0.33%	X	-0.21%
1.0	VFC	-0.32%	TSLA	-0.2%
1.0	GILD	-0.25%	MU	-0.2%
1.0	CLF	-0.24%	VST	-0.15%
1.0	META	-0.18%	NEM	-0.13%
1.0	EXPE	-0.17%	AVGO	-0.1%
1.0	NEM	-0.15%	GILD	-0.1%
1.0	TXN	-0.15%	GOOGL	-0.1%
1.0	AMZN	-0.14%	CCL	-0.1%
1.0	WFC	-0.14%	CAH	-0.09%
1.0	KALU	-0.13%	WYNN	-0.09%
1.0	GNRC	-0.13%	GBTC	-0.09%
1.0	AA	-0.13%	AMD	-0.09%
1.0	SLV	-0.1%	WDC	-0.08%
1.0	CMA	-0.1%	GLD	-0.08%
1.0	HON	-0.09%	MSTR	-0.07%
1.0	AAP	-0.08%	LVS	-0.06%
1.0	NAVI	-0.07%	ORLY	-0.06%
1.0	WDC	-0.07%	HLT	-0.06%
1.0	THC	-0.07%	GSK	-0.05%
1.0	ORLY	-0.06%	AMZN	-0.05%
1.0	ZTS	-0.06%	POST	-0.05%
1.0	VST	-0.06%	GS	-0.05%
1.0	FCX	-0.05%	WFC	-0.04%
1.0	BBY	-0.05%	AZN	-0.04%
1.0	В	-0.04%	SLV	-0.04%
1.0	ON	-0.04%	HON	-0.04%
1.0	SNY	-0.04%	NVS	-0.03%



Calls, 10% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	AAP	-0.05%	AAP	-0.18%
1.0	INTC	-0.05%	CLF	-0.16%
1.0	VFC	-0.05%	MSTR	-0.13%
1.0	EXPE	-0.04%	ORCL	-0.13%
1.0	GNRC	-0.03%	ELAN	-0.12%
1.0	KALU	-0.03%	INTC	-0.12%
1.0	ISRG	-0.03%	AMD	-0.11%
1.0	META	-0.02%	Х	-0.11%
1.0	TXN	-0.02%	AVGO	-0.1%
1.0	ON	-0.02%	UAA	-0.07%
1.0	INTU	-0.02%	GT	-0.07%
1.0	CMA	-0.02%	TSLA	-0.07%
1.0	AAPL	-0.02%	TEVA	-0.07%
1.0	GS	-0.01%	EXPE	-0.06%
1.0	BBY	-0.01%	GNRC	-0.05%
1.0	WFC	-0.01%	ON	-0.05%
1.0	FCX	-0.01%	PRGO	-0.04%
1.0	ELAN	-0.01%	KALU	-0.04%
1.0	TSLA	-0.01%	BHC	-0.04%
1.0	BA	-0.01%	NVDA	-0.03%
1.0	NAVI	-0.01%	MU	-0.03%
1.0	SBUX	-0.0%	ISRG	-0.03%
1.0	AMZN	-0.0%	LNC	-0.03%
1.0	THC	-0.0%	CCL	-0.03%
1.0	TFC	-0.0%	DHI	-0.03%
1.0	AA	-0.0%	WDC	-0.03%
1.0	CDNS	-0.0%	VST	-0.03%
1.0	LQD	0.0%	CSTM	-0.03%
1.0	FRA	0.0%	CZR	-0.03%
1.0	EMB	0.0%	AA	-0.03%



Calls, 20% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
1.0	AAP	-0.13%	AAP	-0.15%
1.0	ORCL	-0.03%	ORCL	-0.06%
1.0	VFC	-0.03%	MSTR	-0.04%
1.0	ELAN	-0.02%	AMD	-0.03%
1.0	ON	-0.01%	VFC	-0.03%
1.0	AMD	-0.0%	UAA	-0.03%
1.0	INTC	-0.0%	TEVA	-0.03%
1.0	ZTS	0.0%	ELAN	-0.03%
1.0	MUB	0.0%	CYH	-0.02%
1.0	GBTC	0.0%	CLF	-0.02%
1.0	NAVI	0.0%	AVGO	-0.02%
1.0	FRA	0.0%	INTC	-0.01%
1.0	NVS	0.0%	ON	-0.01%
1.0	FIS	0.0%	TSLA	-0.01%
1.0	GILD	0.0%	Х	-0.01%
1.0	EMB	0.0%	PRGO	-0.0%
1.0	ORLY	0.0%	HYG	0.0%
1.0	FITB	0.0%	VCSH	0.0%
1.0	GLD	0.0%	MUB	0.0%
1.0	MSFT	0.0%	LQD	0.0%
1.0	GNRC	0.0%	EMB	0.0%
1.0	PEP	0.0%	FRA	0.0%
1.0	GS	0.0%	TLT	0.0%
1.0	GSK	0.0%	GLD	0.0%
1.0	META	0.0%	SPY	0.0%
1.0	LQD	0.0%	VICI	0.0%
1.0	HCA	0.0%	NVS	0.0%
1.0	LNC	0.0%	POST	0.0%
1.0	HLT	0.0%	ORLY	0.0%
1.0	HON	0.0%	AZO	0.0%



Calls, 1% Out of the Money, 10D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	WDC	-4.13%	WDC	-3.14%
10.0	MU	-3.85%	В	-2.98%
10.0	INTC	-3.19%	MU	-2.9%
10.0	TSLA	-3.04%	ORCL	-2.11%
10.0	AAP	-2.8%	AVGO	-1.97%
10.0	В	-2.73%	AMD	-1.67%
10.0	AVGO	-2.71%	NEM	-1.67%
10.0	NEM	-2.35%	Х	-1.38%
10.0	VFC	-1.87%	WYNN	-1.37%
10.0	VST	-1.84%	TSLA	-1.31%
10.0	ORCL	-1.76%	BA	-1.18%
10.0	META	-1.73%	INTC	-1.1%
10.0	CVS	-1.67%	VST	-1.09%
10.0	KALU	-1.64%	LVS	-1.06%
10.0	GILD	-1.46%	NFLX	-1.03%
10.0	GNRC	-1.42%	GE	-1.02%
10.0	SLV	-1.4%	GOOGL	-0.97%
10.0	EXPE	-1.36%	CVS	-0.97%
10.0	GE	-1.35%	HSBC	-0.95%
10.0	ELAN	-1.27%	CCL	-0.92%
10.0	GOOGL	-1.25%	GLD	-0.89%
10.0	CCL	-1.24%	ELAN	-0.84%
10.0	THC	-1.22%	GS	-0.8%
10.0	TXN	-1.19%	SLV	-0.77%
10.0	HCA	-1.19%	THC	-0.76%
10.0	NFLX	-1.19%	WFC	-0.7%
10.0	WFC	-1.18%	AAP	-0.69%
10.0	ABBV	-1.18%	PWR	-0.67%
10.0	GS	-1.13%	CAH	-0.66%
10.0	WYNN	-1.11%	ABBV	-0.65%



Calls, 10% Out of the Money, 10D Time Horizon, All Tickers / P365D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	${\tt PnL}\%_{\tt V}$	Ticker_SBS	PnL%_SBS
10.0	INTC	-1.84%	MU	-1.41%
10.0	AAP	-1.73%	ORCL	-1.37%
10.0	MU	-1.7%	AMD	-1.11%
10.0	TSLA	-1.46%	AVGO	-0.97%
10.0	WDC	-1.22%	Х	-0.94%
10.0	AVGO	-0.87%	WDC	-0.9%
10.0	GNRC	-0.77%	INTC	-0.77%
10.0	ORCL	-0.76%	TSLA	-0.76%
10.0	ELAN	-0.73%	AAP	-0.75%
10.0	KALU	-0.6%	ELAN	-0.69%
10.0	VFC	-0.57%	В	-0.66%
10.0	ISRG	-0.4%	GNRC	-0.66%
10.0	EXPE	-0.38%	TEVA	-0.63%
10.0	WYNN	-0.34%	WYNN	-0.61%
10.0	Х	-0.32%	BHC	-0.61%
10.0	VST	-0.3%	LVS	-0.53%
10.0	META	-0.3%	NFLX	-0.45%
10.0	CVS	-0.25%	CCL	-0.42%
10.0	В	-0.25%	ISRG	-0.36%
10.0	CCL	-0.24%	ВА	-0.29%
10.0	AMD	-0.2%	CVS	-0.29%
10.0	NFLX	-0.18%	VST	-0.27%
10.0	BUD	-0.17%	MOS	-0.27%
10.0	TXN	-0.16%	THC	-0.26%
10.0	THC	-0.14%	GOOGL	-0.24%
10.0	UNH	-0.11%	BUD	-0.2%
10.0	SBUX	-0.11%	MSFT	-0.2%
10.0	MSFT	-0.1%	KALU	-0.19%
10.0	GILD	-0.09%	GBTC	-0.17%
10.0	GOOGL	-0.08%	LLY	-0.16%



Calls, 20% Out of the Money, 10D Time Horizon, All Tickers / P365D

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, $10\mathrm{D}$ to expiration Call options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker V	PnL% V	Ticker_SBS	PnL% SBS
10.0	AAP	-1.31%	AAP	-1.08%
10.0	INTC	-0.78%	ORCL	-0.64%
10.0	ELAN	-0.49%	AMD	-0.6%
10.0	AVGO	-0.31%	ELAN	-0.58%
10.0	TSLA	-0.29%	AVGO	-0.52%
10.0	ORCL	-0.26%	MSTR	-0.49%
10.0	GNRC	-0.26%	INTC	-0.45%
10.0	MU	-0.25%	Х	-0.44%
10.0	ISRG	-0.11%	BHC	-0.43%
10.0	KALU	-0.09%	GNRC	-0.3%
10.0	GBTC	-0.06%	TEVA	-0.29%
10.0	THC	-0.02%	MU	-0.26%
10.0	META	-0.01%	TSLA	-0.23%
10.0	UNH	-0.0%	GBTC	-0.2%
10.0	VCSH	0.0%	THC	-0.15%
10.0	NVS	0.0%	ISRG	-0.11%
10.0	LQD	0.0%	CCL	-0.1%
10.0	MUB	0.0%	KALU	-0.06%
10.0	POST	0.0%	WYNN	-0.04%
10.0	FRA	0.0%	LVS	-0.03%
10.0	VZ	0.0%	UNH	-0.03%
10.0	TMUS	0.0%	CAH	-0.02%
10.0	HON	0.0%	PWR	-0.02%
10.0	GILD	0.0%	NEM	-0.02%
10.0	TLT	0.0%	В	-0.01%
10.0	SBUX	0.0%	ВА	-0.01%
10.0	SNY	0.0%	NFLX	-0.01%
10.0	EXPE	0.0%	MSFT	-0.01%
10.0	HSBC	0.0%	META	-0.0%
10.0	MSFT	0.0%	VCSH	0.0%



Calls, 1% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	WDC	-8.69%	В	-8.54%
21.0	В	-8.18%	WDC	-7.52%
21.0	AVGO	-7.1%	MU	-5.81%
21.0	MU	-6.7%	AVGO	-5.03%
21.0	AAP	-5.55%	ORCL	-5.02%
21.0	NEM	-5.15%	AMD	-4.93%
21.0	ORCL	-4.86%	NEM	-4.2%
21.0	TSLA	-4.69%	ELAN	-3.16%
21.0	INTC	-4.43%	GE	-2.8%
21.0	ELAN	-3.67%	CVS	-2.65%
21.0	CVS	-3.52%	GOOGL	-2.56%
21.0	SLV	-3.09%	X	-2.51%
21.0	META	-3.07%	TSLA	-2.39%
21.0	GE	-3.05%	CCL	-2.37%
21.0	GOOGL	-2.77%	WYNN	-2.27%
21.0	AMD	-2.73%	GLD	-2.22%
21.0	VST	-2.71%	HSBC	-2.08%
21.0	KALU	-2.58%	SLV	-2.07%
21.0	CCL	-2.55%	AAP	-2.03%
21.0	VFC	-2.51%	GS	-1.95%
21.0	PWR	-2.51%	INTC	-1.9%
21.0	GNRC	-2.48%	THC	-1.85%
21.0	GS	-2.46%	NFLX	-1.81%
21.0	GILD	-2.44%	PWR	-1.77%
21.0	BUD	-2.33%	AMAT	-1.76%
21.0	THC	-2.24%	VST	-1.73%
21.0	Х	-2.2%	ВА	-1.65%
21.0	HSBC	-2.11%	TEVA	-1.64%
21.0	WYNN	-2.03%	GNRC	-1.6%
21.0	EXPE	-1.83%	LVS	-1.59%



Calls, 10% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	WDC	-5.66%	WDC	-4.9%
21.0	MU	-5.02%	В	-4.82%
21.0	В	-4.22%	MU	-4.52%
21.0	AAP	-4.04%	AMD	-4.21%
21.0	AVGO	-4.02%	ORCL	-3.61%
21.0	TSLA	-3.18%	AVGO	-3.01%
21.0	ORCL	-3.11%	ELAN	-2.23%
21.0	INTC	-2.79%	TSLA	-1.73%
21.0	ELAN	-2.38%	CCL	-1.59%
21.0	AMD	-2.12%	AAP	-1.58%
21.0	NEM	-1.66%	NEM	-1.46%
21.0	GNRC	-1.65%	WYNN	-1.41%
21.0	KALU	-1.62%	TEVA	-1.4%
21.0	VST	-1.32%	GNRC	-1.36%
21.0	CVS	-1.29%	GE	-1.34%
21.0	CCL	-1.21%	Х	-1.27%
21.0	META	-1.2%	CVS	-1.22%
21.0	GE	-1.17%	BA	-1.12%
21.0	WYNN	-1.12%	NFLX	-1.07%
21.0	THC	-0.94%	AMAT	-1.05%
21.0	BUD	-0.93%	THC	-1.04%
21.0	VFC	-0.91%	INTC	-1.01%
21.0	Х	-0.87%	MOS	-0.96%
21.0	TXN	-0.82%	BUD	-0.87%
21.0	SLV	-0.77%	GOOGL	-0.86%
21.0	GILD	-0.76%	VST	-0.84%
21.0	PWR	-0.6%	LVS	-0.81%
21.0	GS	-0.59%	PWR	-0.63%
21.0	GOOGL	-0.59%	GS	-0.6%
21.0	NFLX	-0.54%	KALU	-0.6%



Calls, 20% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	AAP	-2.86%	MU	-2.61%
21.0	MU	-2.82%	AMD	-2.48%
21.0	WDC	-2.59%	WDC	-2.31%
21.0	AVGO	-2.07%	AVGO	-1.74%
21.0	TSLA	-1.57%	ELAN	-1.66%
21.0	ELAN	-1.54%	AAP	-1.63%
21.0	INTC	-1.5%	ORCL	-1.56%
21.0	ORCL	-1.12%	В	-1.45%
21.0	В	-1.02%	TSLA	-1.04%
21.0	AMD	-0.79%	THC	-0.6%
21.0	KALU	-0.6%	TEVA	-0.6%
21.0	GNRC	-0.54%	INTC	-0.58%
21.0	VST	-0.45%	GNRC	-0.58%
21.0	THC	-0.37%	WYNN	-0.57%
21.0	WYNN	-0.35%	MOS	-0.48%
21.0	META	-0.17%	BHC	-0.48%
21.0	BUD	-0.15%	CCL	-0.48%
21.0	VFC	-0.15%	ВА	-0.45%
21.0	TXN	-0.14%	KALU	-0.35%
21.0	PWR	-0.1%	AMAT	-0.32%
21.0	SLV	-0.1%	Х	-0.32%
21.0	CHTR	-0.08%	VST	-0.31%
21.0	MSFT	-0.05%	PWR	-0.31%
21.0	CCL	-0.02%	CSTM	-0.28%
21.0	HLT	-0.01%	NFLX	-0.28%
21.0	MUB	0.0%	LVS	-0.28%
21.0	LQD	0.0%	GE	-0.22%
21.0	VCSH	0.0%	CVS	-0.22%
21.0	HSBC	0.0%	BUD	-0.19%
21.0	FRA	0.0%	GBTC	-0.12%



Calls, 1% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	В	-34.18%	В	-35.89%
63.0	WDC	-29.68%	WDC	-28.3%
63.0	AVGO	-20.65%	ORCL	-18.1%
63.0	NEM	-18.91%	NEM	-17.46%
63.0	ORCL	-17.2%	AVGO	-14.99%
63.0	AAP	-17.08%	AMD	-14.67%
63.0	ELAN	-14.44%	ELAN	-14.46%
63.0	MU	-13.57%	MU	-13.76%
63.0	GE	-11.07%	AAP	-10.8%
63.0	GNRC	-9.29%	GE	-10.62%
63.0	CCL	-9.2%	CCL	-9.24%
63.0	PWR	-9.14%	GNRC	-8.68%
63.0	VST	-9.1%	GOOGL	-8.5%
63.0	CVS	-8.1%	VST	-8.2%
63.0	SLV	-8.05%	NVDA	-8.09%
63.0	GOOGL	-7.94%	Х	-7.89%
63.0	AMD	-7.86%	GLD	-7.88%
63.0	BUD	-7.84%	PWR	-7.59%
63.0	GS	-7.54%	WYNN	-7.39%
63.0	WYNN	-7.39%	CVS	-7.02%
63.0	GLD	-6.81%	GS	-6.97%
63.0	X	-6.51%	HSBC	-6.93%
63.0	HSBC	-6.18%	SLV	-6.68%
63.0	EXPE	-6.03%	THC	-6.62%
63.0	TSLA	-5.96%	BUD	-6.47%
63.0	META	-5.83%	LVS	-5.92%
63.0	GILD	-5.78%	ВА	-5.76%
63.0	INTC	-5.56%	NFLX	-5.68%
63.0	ABBV	-5.21%	CAH	-5.31%
63.0	MSFT	-5.19%	MSFT	-5.12%



Calls, 10% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	В	-28.4%	В	-30.13%
63.0	WDC	-27.67%	WDC	-26.21%
63.0	AVGO	-16.18%	ORCL	-16.39%
63.0	ORCL	-15.37%	NEM	-12.72%
63.0	AAP	-14.78%	AMD	-12.71%
63.0	NEM	-13.8%	ELAN	-12.03%
63.0	ELAN	-12.19%	MU	-11.8%
63.0	MU	-11.77%	AVGO	-11.68%
63.0	GNRC	-8.24%	AAP	-9.06%
63.0	CCL	-7.99%	CCL	-8.3%
63.0	VST	-7.37%	GNRC	-7.89%
63.0	GE	-6.25%	GOOGL	-6.78%
63.0	AMD	-6.24%	VST	-6.53%
63.0	GOOGL	-6.21%	NVDA	-6.41%
63.0	PWR	-6.17%	GE	-5.94%
63.0	WYNN	-6.12%	WYNN	-5.88%
63.0	CVS	-5.18%	PWR	-5.47%
63.0	GS	-5.07%	LVS	-5.37%
63.0	BUD	-5.01%	Х	-4.99%
63.0	INTC	-4.27%	GS	-4.68%
63.0	TSLA	-4.06%	MOS	-4.54%
63.0	META	-4.0%	CVS	-4.53%
63.0	EXPE	-3.95%	BUD	-4.53%
63.0	SLV	-3.93%	THC	-4.05%
63.0	CLF	-3.77%	NFLX	-3.8%
63.0	Х	-3.73%	BA	-3.57%
63.0	KALU	-3.71%	MSFT	-3.46%
63.0	LVS	-3.65%	DHI	-3.38%
63.0	MSFT	-3.1%	CLF	-3.31%
63.0	INTU	-2.75%	GLD	-3.24%



Calls, 20% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	pl_Call0.2	Ticker_SBS	pl_bsCall0.2
63.0	WDC	-24.24%	WDC	-22.99%
63.0	В	-20.84%	В	-22.61%
63.0	ORCL	-12.48%	ORCL	-13.39%
63.0	AAP	-11.31%	AMD	-9.89%
63.0	AVGO	-10.45%	MU	-9.01%
63.0	MU	-9.1%	ELAN	-8.49%
63.0	ELAN	-8.67%	AVGO	-7.36%
63.0	NEM	-7.66%	NEM	-7.11%
63.0	GNRC	-6.2%	AAP	-6.86%
63.0	CCL	-5.85%	CCL	-6.37%
63.0	VST	-5.49%	GNRC	-6.15%
63.0	WYNN	-4.5%	VST	-4.77%
63.0	AMD	-4.12%	NVDA	-4.22%
63.0	PWR	-3.95%	WYNN	-4.19%
63.0	GOOGL	-3.51%	PWR	-4.02%
63.0	INTC	-3.07%	GOOGL	-4.01%
63.0	KALU	-3.01%	LVS	-3.83%
63.0	CLF	-2.68%	MOS	-3.28%
63.0	GS	-2.54%	X	-2.58%
63.0	LVS	-2.44%	CVS	-2.42%
63.0	CVS	-2.35%	GS	-2.32%
63.0	BUD	-2.05%	DHI	-2.22%
63.0	GE	-1.94%	NFLX	-2.09%
63.0	META	-1.73%	GE	-2.06%
63.0	TSLA	-1.73%	BUD	-2.06%
63.0	Х	-1.4%	THC	-2.01%
63.0	MSFT	-1.36%	CLF	-1.98%
63.0	SLV	-1.22%	BA	-1.86%
63.0	EXPE	-1.13%	MSFT	-1.73%
63.0	TXN	-1.11%	KALU	-1.3%



Puts, 1% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	TSLA	-0.48%	TRGP	-0.12%
1.0	MSTR	-0.31%	ORCL	-0.1%
1.0	UNH	-0.29%	IRM	-0.08%
1.0	TXN	-0.27%	PCG	-0.08%
1.0	MU	-0.26%	TMUS	-0.07%
1.0	ON	-0.23%	UNH	-0.07%
1.0	META	-0.21%	FIS	-0.06%
1.0	CDNS	-0.21%	T	-0.06%
1.0	ZTS	-0.2%	MSI	-0.06%
1.0	AAP	-0.2%	KHC	-0.06%
1.0	QCOM	-0.2%	PEP	-0.05%
1.0	CZR	-0.18%	GLD	-0.05%
1.0	CHTR	-0.18%	GILD	-0.04%
1.0	AMGN	-0.17%	LEN	-0.04%
1.0	INTC	-0.17%	LVS	-0.04%
1.0	AMZN	-0.16%	HSBC	-0.04%
1.0	SBUX	-0.14%	CMG	-0.04%
1.0	CMCSA	-0.13%	POST	-0.04%
1.0	CVS	-0.13%	NVS	-0.04%
1.0	TDG	-0.12%	LLY	-0.04%
1.0	BMY	-0.1%	В	-0.04%
1.0	NAVI	-0.1%	HON	-0.04%
1.0	GNRC	-0.08%	HLT	-0.04%
1.0	GWW	-0.08%	OXY	-0.03%
1.0	PRGO	-0.07%	AMGN	-0.03%
1.0	BUD	-0.06%	TXN	-0.03%
1.0	CNC	-0.06%	CAH	-0.03%
1.0	ABBV	-0.03%	GSK	-0.03%
1.0	ISRG	-0.02%	AZN	-0.03%
1.0	AA	-0.02%	SNY	-0.03%



Puts, 10% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	UNH	-0.07%	NWL	-0.13%
1.0	CNC	-0.06%	WDC	-0.11%
1.0	WDC	-0.06%	CNC	-0.1%
1.0	FCX	-0.02%	VST	-0.1%
1.0	CZR	-0.02%	VFC	-0.1%
1.0	BUD	-0.01%	UNH	-0.08%
1.0	PWR	-0.01%	CLF	-0.08%
1.0	CHTR	-0.01%	UAA	-0.07%
1.0	ABBV	-0.01%	MU	-0.07%
1.0	LW	-0.0%	FCX	-0.05%
1.0	TDG	-0.0%	CMG	-0.05%
1.0	GWW	-0.0%	BBY	-0.04%
1.0	ON	-0.0%	LW	-0.04%
1.0	OXY	-0.0%	MSTR	-0.04%
1.0	LQD	0.0%	TSLA	-0.04%
1.0	HYG	0.0%	CHTR	-0.03%
1.0	VCSH	0.0%	ON	-0.03%
1.0	MUB	0.0%	PWR	-0.03%
1.0	FRA	0.0%	GT	-0.03%
1.0	EMB	0.0%	AVGO	-0.03%
1.0	ZTS	0.0%	ADBE	-0.03%
1.0	GSK	0.0%	NVDA	-0.03%
1.0	SNY	0.0%	AAP	-0.03%
1.0	POST	0.0%	ZION	-0.03%
1.0	TLT	0.0%	LLY	-0.02%
1.0	AMGN	0.0%	CZR	-0.02%
1.0	NVS	0.0%	AMAT	-0.02%
1.0	GNRC	0.0%	CCL	-0.02%
1.0	WFC	0.0%	TEVA	-0.02%
1.0	BMY	0.0%	ORCL	-0.02%



Puts, 20% Out of the Money, 1D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
1.0	CNC	-0.07%	CNC	-0.08%
1.0	WDC	-0.02%	NWL	-0.06%
1.0	UNH	-0.01%	VFC	-0.04%
1.0	GME	-0.01%	WDC	-0.03%
1.0	GNRC	0.0%	VST	-0.03%
1.0	GLD	0.0%	СҮН	-0.02%
1.0	GILD	0.0%	GME	-0.02%
1.0	PEP	0.0%	UNH	-0.01%
1.0	POST	0.0%	LW	-0.0%
1.0	FRA	0.0%	EMB	0.0%
1.0	PRGO	0.0%	LQD	0.0%
1.0	EMB	0.0%	MUB	0.0%
1.0	META	0.0%	HYG	0.0%
1.0	CVS	0.0%	VCSH	0.0%
1.0	CTLT	0.0%	TLT	0.0%
1.0	FIS	0.0%	FRA	0.0%
1.0	OXY	0.0%	GLD	0.0%
1.0	ZTS	0.0%	SPY	0.0%
1.0	SBUX	0.0%	VICI	0.0%
1.0	GWW	0.0%	NVS	0.0%
1.0	HCA	0.0%	ORLY	0.0%
1.0	HLT	0.0%	POST	0.0%
1.0	HON	0.0%	AZO	0.0%
1.0	HSBC	0.0%	T	0.0%
1.0	HYG	0.0%	COST	0.0%
1.0	NVS	0.0%	PEP	0.0%
1.0	MUB	0.0%	CSCO	0.0%
1.0	JPM	0.0%	HD	0.0%
1.0	MSI	0.0%	VZ	0.0%
1.0	KEY	0.0%	MSI	0.0%



Puts, 1% Out of the Money, 10D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	UNH	-2.88%	UNH	-1.66%
10.0	CHTR	-1.86%	PCG	-0.7%
10.0	CZR	-1.73%	TXN	-0.7%
10.0	BHC	-1.67%	CHTR	-0.66%
10.0	TXN	-1.61%	CMG	-0.63%
10.0	TSLA	-1.5%	CPRT	-0.61%
10.0	CMCSA	-1.19%	TRGP	-0.6%
10.0	ON	-1.19%	BHC	-0.59%
10.0	ZTS	-1.1%	CZR	-0.5%
10.0	GNRC	-1.09%	LVS	-0.46%
10.0	SBUX	-0.99%	CNC	-0.45%
10.0	NAVI	-0.93%	FIS	-0.45%
10.0	VFC	-0.92%	OXY	-0.42%
10.0	META	-0.9%	MRK	-0.35%
10.0	BUD	-0.87%	CMCSA	-0.35%
10.0	WDC	-0.85%	ADBE	-0.33%
10.0	CVS	-0.83%	GWW	-0.32%
10.0	CNC	-0.8%	TMUS	-0.32%
10.0	AMGN	-0.77%	IRM	-0.3%
10.0	OXY	-0.76%	LEN	-0.28%
10.0	MSTR	-0.76%	MOS	-0.28%
10.0	AAP	-0.74%	PEP	-0.26%
10.0	GWW	-0.7%	BALL	-0.25%
10.0	PRGO	-0.69%	GNRC	-0.25%
10.0	BMY	-0.68%	FITB	-0.24%
10.0	SNY	-0.66%	FCX	-0.24%
10.0	AMZN	-0.62%	BUD	-0.21%
10.0	ADBE	-0.6%	BIIB	-0.21%
10.0	MU	-0.59%	LLY	-0.19%
10.0	KEY	-0.56%	NAVI	-0.19%



Puts, 10% Out of the Money, 10D Time Horizon, All Tickers / P365D

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, $10\mathrm{D}$ to expiration Put options across all model dates for which actual results for the stated horizon are known.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	UNH	-1.36%	UNH	-1.18%
10.0	WDC	-0.92%	WDC	-0.78%
10.0	CZR	-0.72%	CHTR	-0.6%
10.0	CHTR	-0.69%	CNC	-0.6%
10.0	VFC	-0.64%	PCG	-0.44%
10.0	ON	-0.37%	OXY	-0.36%
10.0	CVS	-0.36%	LVS	-0.34%
10.0	CNC	-0.31%	CZR	-0.33%
10.0	BHC	-0.29%	CMG	-0.33%
10.0	TSLA	-0.28%	JAZZ	-0.33%
10.0	KALU	-0.26%	KALU	-0.3%
10.0	JAZZ	-0.24%	BBY	-0.3%
10.0	OXY	-0.23%	CPRT	-0.29%
10.0	TXN	-0.22%	FCX	-0.29%
10.0	AA	-0.19%	TXN	-0.28%
10.0	AAP	-0.17%	CVS	-0.26%
10.0	BUD	-0.11%	ABBV	-0.26%
10.0	EXPE	-0.08%	CCL	-0.24%
10.0	SBUX	-0.08%	BHC	-0.23%
10.0	ABBV	-0.07%	TRGP	-0.22%
10.0	GNRC	-0.07%	FIS	-0.22%
10.0	QCOM	-0.07%	LLY	-0.2%
10.0	CMA	-0.02%	MOS	-0.18%
10.0	WFC	-0.01%	TEVA	-0.17%
10.0	MU	-0.0%	GS	-0.16%
10.0	ZTS	-0.0%	BAC	-0.16%
10.0	LQD	0.0%	HSBC	-0.15%
10.0	VCSH	0.0%	MS	-0.15%
10.0	MUB	0.0%	SBUX	-0.13%
10.0	EMB	0.0%	VFC	-0.12%



Puts, 20% Out of the Money, 10D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
10.0	WDC	-0.45%	CNC	-0.65%
10.0	UNH	-0.39%	WDC	-0.56%
10.0	CHTR	-0.34%	VFC	-0.47%
10.0	CNC	-0.33%	UNH	-0.39%
10.0	VFC	-0.32%	CHTR	-0.37%
10.0	OXY	-0.08%	BHC	-0.22%
10.0	CVS	-0.05%	NWL	-0.19%
10.0	JAZZ	-0.01%	MU	-0.12%
10.0	MUB	0.0%	FCX	-0.12%
10.0	EMB	0.0%	OXY	-0.1%
10.0	LQD	0.0%	AA	-0.09%
10.0	FRA	0.0%	VST	-0.07%
10.0	BUD	0.0%	KALU	-0.06%
10.0	ZTS	0.0%	CVS	-0.05%
10.0	VCSH	0.0%	ВА	-0.04%
10.0	GWW	0.0%	TEVA	-0.04%
10.0	TLT	0.0%	JAZZ	-0.04%
10.0	SNY	0.0%	AMD	-0.03%
10.0	AMGN	0.0%	LVS	-0.03%
10.0	ВХР	0.0%	CSTM	-0.03%
10.0	VZ	0.0%	CMG	-0.03%
10.0	HSBC	0.0%	BBY	-0.02%
10.0	AZO	0.01%	LLY	-0.02%
10.0	QCOM	0.01%	CCL	-0.02%
10.0	NVS	0.01%	GNRC	-0.02%
10.0	HYG	0.01%	EXPE	-0.01%
10.0	GILD	0.01%	AAPL	-0.01%
10.0	META	0.01%	WYNN	-0.01%
10.0	CZR	0.01%	LNC	-0.01%
10.0	VICI	0.01%	TRGP	-0.01%



Puts, 1% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	UNH	-5.76%	UNH	-3.79%
21.0	CHTR	-3.22%	CPRT	-1.77%
21.0	CZR	-3.15%	CNC	-1.75%
21.0	ON	-2.93%	PCG	-1.65%
21.0	GNRC	-2.54%	CMG	-1.53%
21.0	BHC	-2.53%	CZR	-1.47%
21.0	CNC	-2.49%	CHTR	-1.27%
21.0	CMCSA	-2.37%	TXN	-1.17%
21.0	TXN	-2.33%	ADBE	-1.15%
21.0	SBUX	-2.16%	CMCSA	-1.14%
21.0	ZTS	-1.91%	LEN	-1.13%
21.0	TSLA	-1.9%	FIS	-1.1%
21.0	ADBE	-1.78%	GNRC	-1.08%
21.0	VFC	-1.75%	BHC	-1.04%
21.0	BUD	-1.64%	IRM	-0.86%
21.0	NAVI	-1.57%	FITB	-0.85%
21.0	WDC	-1.56%	LVS	-0.83%
21.0	META	-1.37%	BALL	-0.81%
21.0	NWL	-1.34%	GWW	-0.8%
21.0	CVS	-1.33%	SBUX	-0.72%
21.0	AMGN	-1.29%	TMUS	-0.69%
21.0	BMY	-1.24%	TRGP	-0.68%
21.0	GWW	-1.21%	UAA	-0.64%
21.0	AA	-1.17%	BUD	-0.63%
21.0	PRGO	-1.16%	HD	-0.52%
21.0	KALU	-1.04%	PEP	-0.51%
21.0	FITB	-1.03%	KHC	-0.48%
21.0	KEY	-1.0%	ISRG	-0.46%
21.0	AAP	-0.98%	HLT	-0.39%
21.0	BALL	-0.93%	NAVI	-0.39%



Puts, 10% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	UNH	-3.31%	UNH	-2.71%
21.0	VFC	-1.8%	CNC	-1.82%
21.0	CHTR	-1.76%	CHTR	-1.24%
21.0	WDC	-1.69%	PCG	-1.19%
21.0	CNC	-1.65%	WDC	-1.1%
21.0	CZR	-1.4%	LVS	-0.81%
21.0	ON	-1.16%	CMG	-0.75%
21.0	TSLA	-0.92%	VFC	-0.68%
21.0	CVS	-0.73%	CPRT	-0.63%
21.0	AA	-0.73%	CZR	-0.62%
21.0	KALU	-0.57%	JAZZ	-0.52%
21.0	BHC	-0.56%	CCL	-0.39%
21.0	JAZZ	-0.44%	LEN	-0.35%
21.0	SBUX	-0.41%	ADBE	-0.31%
21.0	META	-0.4%	OXY	-0.3%
21.0	GNRC	-0.37%	BMY	-0.29%
21.0	NAVI	-0.27%	FIS	-0.27%
21.0	BMY	-0.25%	KALU	-0.26%
21.0	ADBE	-0.18%	IRM	-0.26%
21.0	LW	-0.16%	HLT	-0.25%
21.0	AAP	-0.14%	MRK	-0.25%
21.0	BUD	-0.12%	TEVA	-0.24%
21.0	OXY	-0.11%	ABBV	-0.22%
21.0	NWL	-0.1%	SBUX	-0.2%
21.0	AMGN	-0.1%	CVS	-0.19%
21.0	TXN	-0.08%	BIIB	-0.14%
21.0	CMCSA	-0.05%	NWL	-0.14%
21.0	SNY	-0.05%	BHC	-0.13%
21.0	ABBV	-0.02%	COST	-0.11%
21.0	ZTS	-0.01%	TXN	-0.11%



Puts, 20% Out of the Money, 21D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
21.0	CNC	-1.24%	CNC	-1.75%
21.0	UNH	-1.17%	UNH	-1.11%
21.0	VFC	-1.14%	CHTR	-1.0%
21.0	CHTR	-0.92%	VFC	-0.91%
21.0	WDC	-0.78%	WDC	-0.8%
21.0	TSLA	-0.29%	JAZZ	-0.27%
21.0	CVS	-0.16%	LVS	-0.27%
21.0	JAZZ	-0.11%	CMG	-0.16%
21.0	AA	-0.07%	PCG	-0.13%
21.0	CZR	-0.03%	CVS	-0.13%
21.0	VCSH	0.0%	CCL	-0.12%
21.0	MUB	0.0%	TSLA	-0.11%
21.0	LQD	0.0%	CPRT	-0.08%
21.0	EMB	0.0%	ADBE	-0.07%
21.0	ZTS	0.0%	PWR	-0.05%
21.0	FRA	0.0%	NWL	-0.05%
21.0	AMGN	0.01%	AAPL	-0.03%
21.0	SNY	0.01%	TEVA	-0.03%
21.0	BUD	0.01%	LEN	-0.02%
21.0	BXP	0.01%	AA	-0.02%
21.0	VZ	0.02%	CZR	-0.02%
21.0	TLT	0.02%	BIIB	-0.01%
21.0	OXY	0.02%	KALU	-0.01%
21.0	NVS	0.03%	VCSH	0.0%
21.0	AZN	0.05%	MUB	0.0%
21.0	GSK	0.05%	HYG	0.0%
21.0	HYG	0.05%	LQD	0.0%
21.0	META	0.05%	EMB	0.0%
21.0	BHP	0.06%	FRA	0.0%
21.0	KALU	0.06%	TLT	0.0%



Puts, 1% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	UNH	-14.31%	UNH	-11.32%
63.0	CNC	-12.69%	CNC	-10.62%
63.0	CHTR	-9.41%	UAA	-7.51%
63.0	VFC	-9.11%	CMG	-7.08%
63.0	ON	-8.25%	CHTR	-5.93%
63.0	UAA	-8.14%	PCG	-5.19%
63.0	NWL	-7.47%	NWL	-4.56%
63.0	WDC	-5.77%	FIS	-4.53%
63.0	GNRC	-5.42%	VFC	-4.16%
63.0	CMG	-5.36%	CPRT	-3.9%
63.0	CZR	-5.32%	LEN	-3.52%
63.0	BHC	-5.15%	CZR	-3.08%
63.0	AA	-4.89%	ON	-3.05%
63.0	TSLA	-4.42%	BMY	-2.61%
63.0	BMY	-4.19%	ADBE	-2.59%
63.0	ADBE	-3.88%	GNRC	-2.52%
63.0	CMCSA	-3.86%	WDC	-2.52%
63.0	SBUX	-3.64%	IRM	-2.47%
63.0	BALL	-2.96%	MRK	-2.43%
63.0	LW	-2.79%	GWW	-2.42%
63.0	GWW	-2.77%	BALL	-2.21%
63.0	FIS	-2.76%	CMCSA	-1.94%
63.0	IRM	-2.7%	BHC	-1.9%
63.0	TXN	-2.62%	ISRG	-1.9%
63.0	BBY	-2.49%	TRGP	-1.72%
63.0	MRK	-2.46%	AA	-1.68%
63.0	BUD	-2.33%	PEP	-1.54%
63.0	ZTS	-2.28%	LVS	-1.38%
63.0	AAP	-2.22%	BIIB	-1.21%
63.0	PCG	-2.11%	FRA	-1.15%



Puts, 10% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	UNH	-10.87%	CNC	-9.61%
63.0	CNC	-10.55%	UNH	-9.4%
63.0	VFC	-7.88%	UAA	-5.03%
63.0	CHTR	-6.85%	CHTR	-4.87%
63.0	WDC	-5.78%	VFC	-4.03%
63.0	ON	-5.69%	CMG	-3.71%
63.0	UAA	-4.65%	WDC	-3.38%
63.0	NWL	-4.56%	PCG	-2.93%
63.0	GNRC	-3.81%	NWL	-2.77%
63.0	TSLA	-3.7%	LEN	-2.34%
63.0	AA	-3.25%	GNRC	-1.97%
63.0	BHC	-3.11%	FIS	-1.97%
63.0	CZR	-2.26%	ON	-1.94%
63.0	LW	-1.83%	CPRT	-1.82%
63.0	CMG	-1.76%	IRM	-1.59%
63.0	IRM	-1.51%	BHC	-1.1%
63.0	SBUX	-1.49%	BMY	-0.99%
63.0	BMY	-1.48%	LVS	-0.94%
63.0	BBY	-1.21%	AA	-0.92%
63.0	AAP	-1.2%	CCL	-0.91%
63.0	CMCSA	-0.99%	CZR	-0.87%
63.0	JAZZ	-0.89%	GT	-0.74%
63.0	PWR	-0.71%	MRK	-0.69%
63.0	BUD	-0.59%	JAZZ	-0.61%
63.0	BALL	-0.52%	BALL	-0.54%
63.0	TXN	-0.4%	FITB	-0.43%
63.0	PRGO	-0.34%	BBY	-0.42%
63.0	MRK	-0.26%	TRGP	-0.41%
63.0	FIS	-0.23%	USB	-0.3%
63.0	AMZN	-0.22%	GOOGL	-0.28%



Puts, 20% Out of the Money, 63D Time Horizon, All Tickers / P365D

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.

Horizon	Ticker_V	PnL%_V	Ticker_SBS	PnL%_SBS
63.0	CNC	-8.32%	CNC	-8.3%
63.0	UNH	-6.42%	UNH	-6.08%
63.0	VFC	-5.45%	CHTR	-3.44%
63.0	WDC	-3.99%	VFC	-3.17%
63.0	CHTR	-3.97%	WDC	-2.82%
63.0	ON	-2.81%	UAA	-1.78%
63.0	TSLA	-2.07%	NWL	-1.21%
63.0	NWL	-1.74%	ON	-1.03%
63.0	GNRC	-1.31%	LEN	-0.81%
63.0	AA	-0.97%	CMG	-0.79%
63.0	BHC	-0.96%	GNRC	-0.78%
63.0	LW	-0.89%	BHC	-0.61%
63.0	SBUX	-0.25%	TEVA	-0.54%
63.0	UAA	-0.2%	CCL	-0.5%
63.0	IRM	-0.01%	CPRT	-0.46%
63.0	LQD	0.0%	TSLA	-0.42%
63.0	MUB	0.0%	IRM	-0.41%
63.0	VCSH	0.0%	PCG	-0.36%
63.0	EMB	0.01%	LVS	-0.31%
63.0	AMGN	0.08%	GT	-0.21%
63.0	CVS	0.11%	VCSH	0.0%
63.0	TLT	0.11%	MUB	0.0%
63.0	FRA	0.11%	HYG	0.0%
63.0	META	0.14%	LQD	0.0%
63.0	SNY	0.15%	EMB	0.0%
63.0	ZTS	0.16%	FRA	0.0%
63.0	NVS	0.16%	TLT	0.0%
63.0	HYG	0.16%	GLD	0.0%
63.0	AZN	0.16%	SBUX	0.0%
63.0	VZ	0.17%	SPY	0.01%



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)

