

IBKRWEBINARS.COM



October 6, 2022

## CME Group

# CRASH RESISTANT: Limiting Downside Using S&P 500 and Nasdaq Options

---

### Tariq Dennison

TEP, Wealth Manager  
GFM Asset Management

Exchange and Industry Sponsored Webinars are presented by unaffiliated third parties. Interactive Brokers LLC is not responsible for the content of these presentations. You should review the contents of each presentation and make your own judgment as to whether the content is appropriate for you.

Interactive Brokers LLC does not provide recommendations or advice. This presentation is not an advertisement or solicitation for new customers. It is intended only as an educational presentation.



## Disclosure:

Options involve risk and are not suitable for all investors. For information on the uses and risks of options, you can obtain a copy of the Options Clearing Corporation risk disclosure document titled [Characteristics and Risks of Standardized Options](#) by calling (312) 542-6901.

Futures are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading futures, please read the [CFTC Risk Disclosure](#). For a copy visit [interactivebrokers.com](http://interactivebrokers.com).

There is a substantial risk of loss in foreign exchange trading. The settlement date of foreign exchange trades can vary due to time zone differences and bank holidays. When trading across foreign exchange markets, this may necessitate borrowing funds to settle foreign exchange trades. The interest rate on borrowed funds must be considered when computing the cost of trades across multiple markets.

The Order types available through Interactive Brokers LLC's Trader Workstation are designed to help you limit your loss and/or lock in a profit. Market conditions and other factors may affect execution. In general, orders guarantee a fill or guarantee a price, but not both. In extreme market conditions, an order may either be executed at a different price than anticipated or may not be filled in the marketplace.

There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

- IRS Circular 230 Notice: These statements are provided for information purposes only, are not intended to constitute tax advice which may be relied upon to avoid penalties under any federal, state, local or other tax statutes or regulations, and do not resolve any tax issues in your favor.
- Interactive Brokers LLC is a member of [NYSE](#) [FINRA](#) [SIPC](#)



**GFM**  
ASSET MANAGEMENT

# Opening Your Options

## S&P 500 vs Nasdaq 100 Strategies For Reducing Risk Or Enhancing Returns

by **Tariq Dennison**

© 2022 GFM Asset Management LLC, <https://gfmasset.com>

Image credit: MS Office Stock Photo



# Disclaimer

This presentation is for educational and discussion purposes only. **Nothing in this presentation is to be taken as investment advice**, nor as any recommendation to buy or sell any security or investment property or product. Please consult with GFM or your own investment advisors 1-on-1 before making any investment decisions.

**GFM does NOT provide any tax or legal advice**. Tax strategies in this presentation are based on our experience and believed to be current, but please consult with your own tax advisor for tax advice specific to your situation. GFM Group Limited is an SFC Type 9 Licensed Asset Management firm and is not affiliated with any exchange, brokerage firm, or custodian, including the co-presenters of this seminar. GFM Asset Management LLC, an affiliated company, is a US SEC Registered Investment Advisor.

Investing involves risks, including the risk that you may lose some or all the money you invest.

**GFM is not affiliated with Interactive Brokers LLC, nor with any other broker-dealer or exchange. Viewpoints here are those of Tariq Dennison and not those of any other entity.**



## About Tariq Dennison TEP

- Independent Advisor Managing Accounts on the IBKR platform
  - US Advisor: GFM Asset Management LLC
  - HK Advisor: GFM Group Limited
- In the market since 1998
  - Commerzbank (NY, London, Frankfurt)
  - Bear Stearns (NY)
  - J.P. Morgan (NY)
  - Canadian Imperial Bank of Commerce
  - Societe Generale (HK)
- Masters in Financial Engineering
  - University of California at Berkeley
- Lecturer at ESSEC Singapore
  - Fixed Income
  - Alternative Assets
- “Neither Standard Nor Poor”
- Author “Invest Outside the Box”



## S&P 500 vs Nasdaq 100

- What are they?
- Some key numbers
- Dot-Com Bubble Redux?
- Specs of futures options
- Futures options vs other ways of trading these two benchmarks

## Options Strategies

- Simple puts and calls
- Probability lab
- "The greeks" & how to use them
- Put spreads: 1x1 vs 1x2
- Straddles

# What are they?



## S&P 500

- 500 firms (506 stocks)
- NYSE & NASDAQ
- US-based firms
- 11 sectors

## Nasdaq 100

- 100 firms
- NASDAQ-only
- Mostly, not all, US firms
- Financials clearly excluded

# Top overlapping components

## Overlapping Holdings

Show 10 entries

Search:

Company	Weight in S&P 500	Weight in Nasdaq 100	Overlap
 APPLE INC	7.3%	13.7%	7.3%
 MICROSOFT CORP	5.8%	10.4%	5.8%
 AMAZON.COM INC	3.3%	6.9%	3.3%
 TESLA MOTORS INC	2.1%	4.6%	2.1%
 ALPHABET INC. CLASS A	1.9%	3.4%	1.9%
 ALPHABET INC. CLASS C	1.8%	3.6%	1.8%
 NVIDIA CORP	1.2%	3.0%	1.2%
 META PLATFORMS INC	1.1%	2.9%	1.1%
 PEPSICO INC	0.7%	2.1%	0.7%
 COSTCO WHOLESALE CORP	0.7%	2.0%	0.7%

Source: <https://www.etfrc.com/funds/overlap.php>

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.




# Corn prices in 2022 (front month)

## Position Highlights (Non-Overlapping Exposures)

### S&P 500 overweight vs Nasdaq 100

	BERKSHIRE HATHAWAY INC-CL B	1.5%
	UNITEDHEALTH GROUP INC	1.4%
	JOHNSON & JOHNSON	1.3%
	EXXON MOBIL CORP	1.2%
	PROCTER & GAMBLE CO/THE	1.0%
	JPMORGAN CHASE & CO	1.0%
	VISA INC-CLASS A SHARES	1.0%
	CHEVRON CORP	0.9%
	HOME DEPOT INC	0.9%
	MASTERCARD INC-CLASS A	0.8%

### S&P 500 underweight vs Nasdaq 100

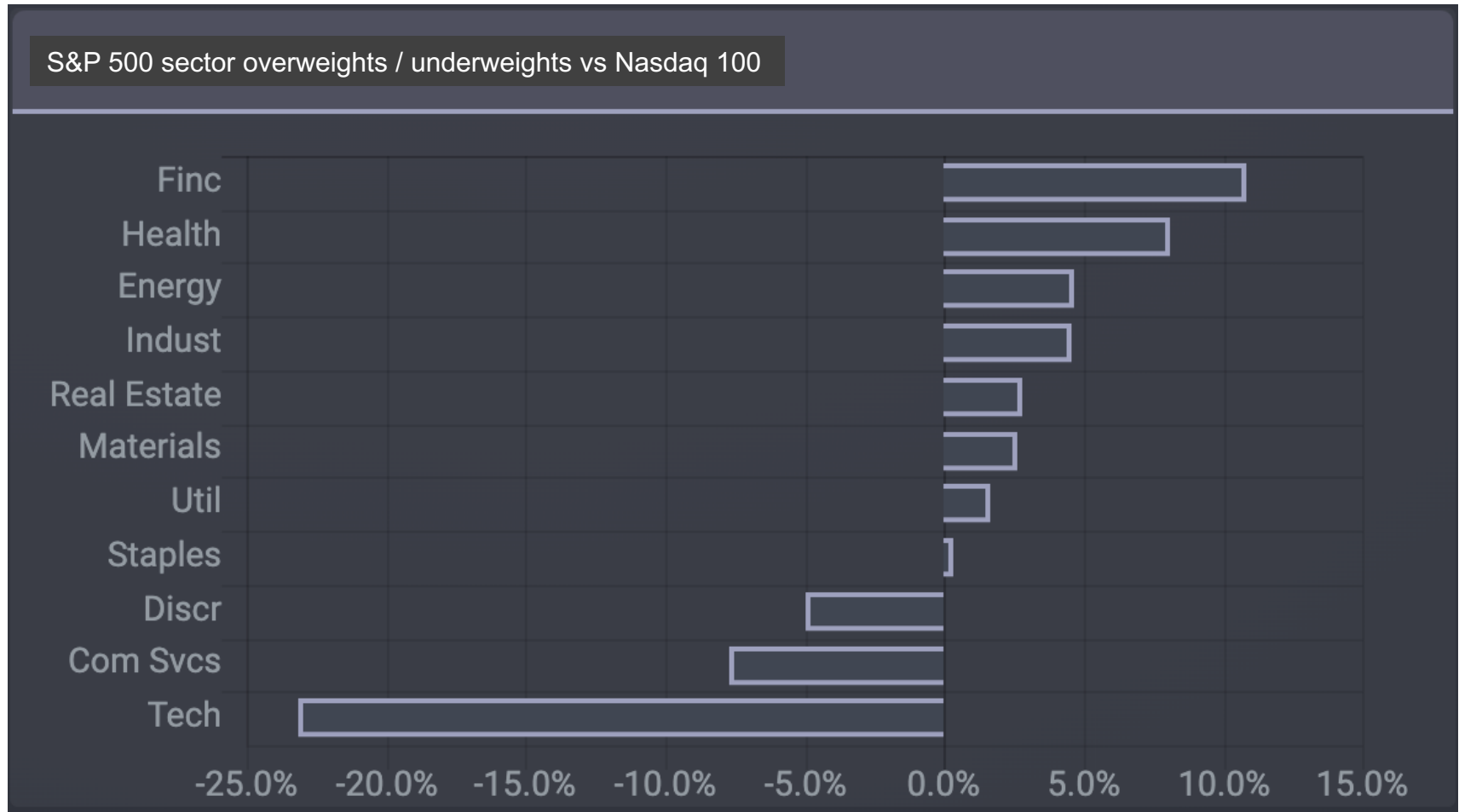
	APPLE INC	-6.4%
	MICROSOFT CORP	-4.6%
	AMAZON.COM INC	-3.6%
	TESLA MOTORS INC	-2.5%
	ALPHABET INC. CLASS C	-1.8%
	META PLATFORMS INC	-1.8%
	NVIDIA CORP	-1.8%
	ALPHABET INC. CLASS A	-1.5%
	PEPSICO INC	-1.4%
	COSTCO WHOLESALE CORP	-1.3%

Source: <https://www.etfrc.com/funds/overlap.php>

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.



# Corn prices in 2022 (front month)



Source: <https://www.etfrc.com/funds/overlap.php>

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# S&P 500

Price/Earnings	17.32
Price/Book	3.25
Price/Sales	2.07
Price/Cash Flow	10.77
Dividend Yield %	1.80
Long-Term Earnings %	11.80
Historical Earnings %	24.62
Sales Growth %	8.13
Cash-Flow Growth %	11.90
Book-Value Growth %	8.11

Investment as of Sep 15, 2022 | Category: Large Blend as of .

# Nasdaq 100

Price/Earnings	23.15
Price/Book	5.11
Price/Sales	3.25
Price/Cash Flow	13.61
Dividend Yield %	0.93
Long-Term Earnings %	11.81
Historical Earnings %	27.55
Sales Growth %	15.57
Cash-Flow Growth %	19.86
Book-Value Growth %	14.13

Investment as of Sep 15, 2022 | Category: Large Growth as

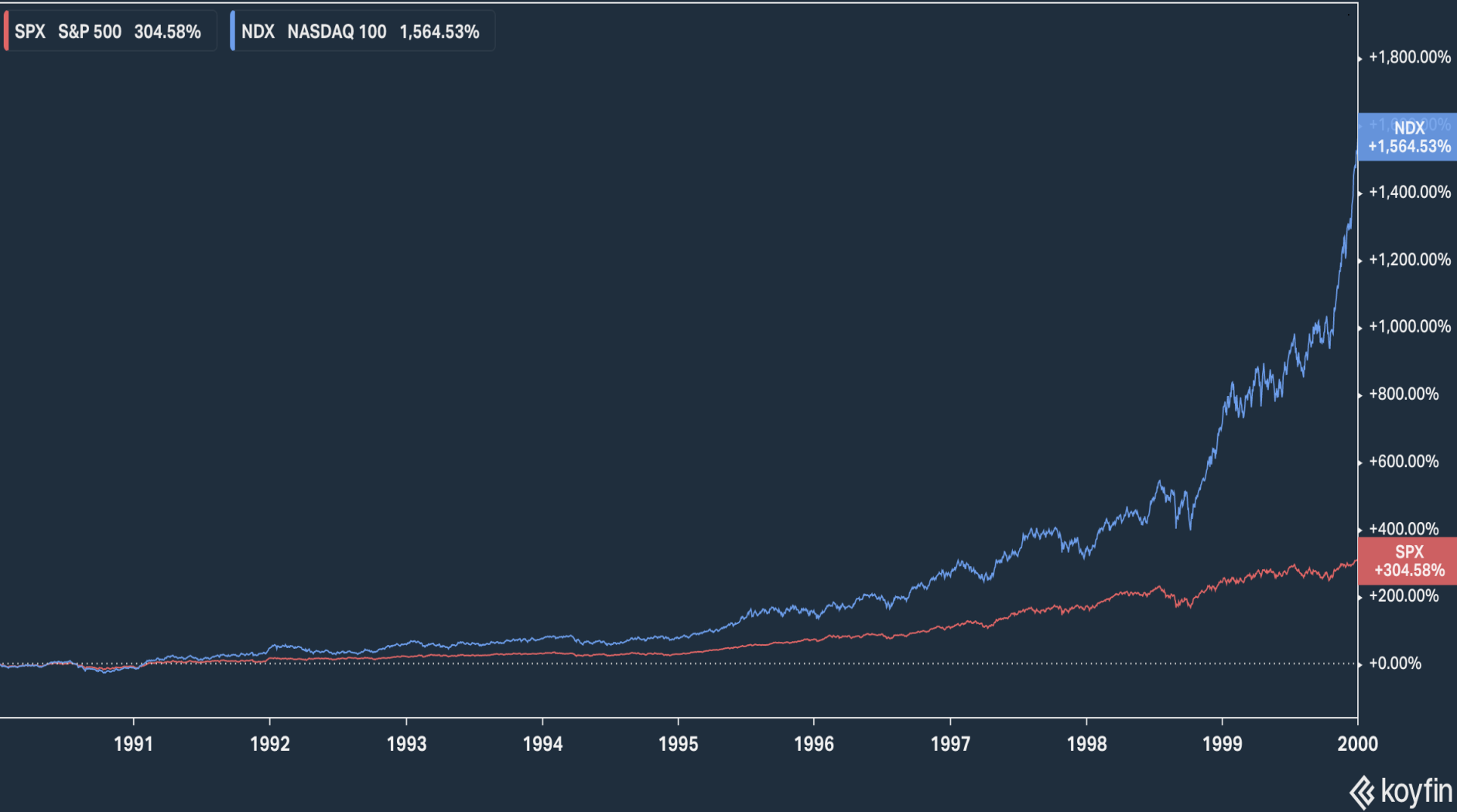
Source: Morningstar, <https://www.morningstar.com/etfs/xnas/qqq/portfolio>

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# Some charts...



# S&P 500 vs Nasdaq 100 in the 1990s, Price Return



Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# S&P 500 vs Nasdaq 100 in the 2000s, Price Return



Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# S&P 500 vs Nasdaq 100 in the 2010s, Price Return



Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.





# S&P 500 vs Nasdaq 100, Jan 2020-Aug 2022, Price Return

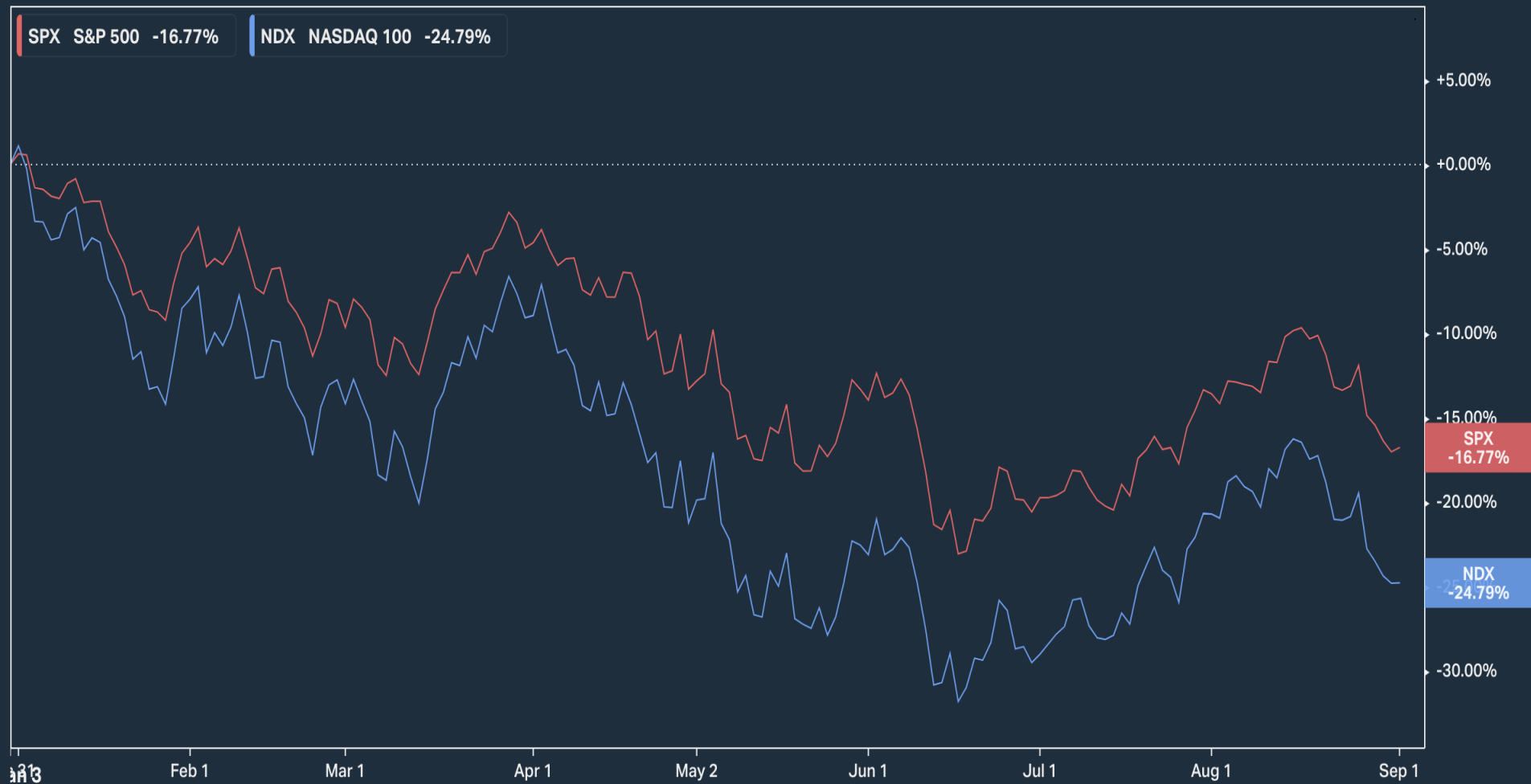


Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.



# S&P 500 vs Nasdaq 100, 2022 YTD, Price Return



Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.



# Options Basics

# Small size, extended hours: Why I use MES & MNQ

Stock Description	
<b>Micro E-Mini S&amp;P 500 Stock Price Index</b>	
Product	<b>MES</b>
Security Type	<b>FOP</b>
Underlying	<a href="#">MESZ2 DEC 16 '22 FUT</a>
Contract Month	<b>DEC22</b>
Expiration Date	<b>DEC 16 '22</b>
Last Trading Date	<b>DEC 16 '22 08:30 CST</b>
Strike	<b>4000</b>
Right	<b>Call</b>
Currency	<b>USD</b>
Multiplier	<b>5</b>
Exchange	<b>GLOBEX</b>
Symbol	<b>MESZ2 C4000</b>
Trading Class	<b>MES</b>
Product Type	<b>Equity Index</b>
Settlement Method	<b>Physical Delivery</b>
Exercise Style	<b>American</b>
<b>Trading Schedule:</b> September 2, 2022 <a href="#">Calendar</a>	
Regular Trading Session	08:30 - 16:00 (21:30 - 05:00 your time)
Total Available Hours	<i>17:00*</i> - 16:00 (06:00 - 05:00 your time)
Exchange Time Zone	US/Central
<small>* Times in italics are on the calendar date preceding trade date</small>	

Stock Description	
<b>Micro E-Mini Nasdaq-100 Index</b>	
Product	<b>MNQ</b>
Security Type	<b>FOP</b>
Underlying	<a href="#">MNQZ2 DEC 16 '22 FUT</a>
Contract Month	<b>DEC22</b>
Expiration Date	<b>DEC 16 '22</b>
Last Trading Date	<b>DEC 16 '22 08:30 CST</b>
Strike	<b>12500</b>
Right	<b>Call</b>
Currency	<b>USD</b>
Multiplier	<b>2</b>
Exchange	<b>GLOBEX</b>
Symbol	<b>MNQZ2 C1250</b>
Trading Class	<b>MNQ</b>
Product Type	<b>Equity Index</b>
Settlement Method	<b>Physical Delivery</b>
Exercise Style	<b>American</b>
<b>Trading Schedule:</b> September 2, 2022 <a href="#">Calendar</a>	
Regular Trading Session	08:30 - 16:00 (21:30 - 05:00 your time)
Total Available Hours	<i>17:00*</i> - 16:00 (06:00 - 05:00 your time)
Exchange Time Zone	US/Central
<small>* Times in italics are on the calendar date preceding trade date</small>	

Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# How to find these option (chains) on TWS

	LAST	VLM	CHANGE	
MES ∞ Dec16'22 @GLOBEX	3859.00	359K	-60.25	-1.54%
MNQ ∞ Dec16'22 @GLOBEX	11794.75	464K	-212.75	-1.77%

**MITSUBISHI ESTATE CO LTD - FWB2**

- Stock (SMART)
- Combinations ▶

**Micro E-Mini S&P 500 Stock Price Index - GLOBEX**

- Index
- Futures**
- Futures Options ▶
- Combinations ▶

**Search by company name**

mes

[View Popular Products](#)

**MES@GLOBEX** 1 pt = \$5.00

MES <b>SEP</b>	Sep16'22	3860.75
MES <b>DEC</b>	Dec16'22	3872.00
MES <b>MAR</b>	Mar17'23	3888.00
MES ∞ <b>DEC</b>	Continuous (Dec)	3872.00

**More/Multiple Futures Spreads**

Source: TWS

New Window IBot FYI 19 Advisor Setup

Search

**For You**

- Option Chain
- Probability Lab
- OptionTrader

**General Tools**

- Order Entry
- Portfolio
- Watchlist
- Quote Details
- Trade History
- Alerts
- Market Depth (Level II)
- BookTrader
- Toolbox
- Chart ▶
- Order Management ▶
- Time & Sales ▶
- Scanners ▶
- Forex ▶

**Information System**

- Fundamentals Explorer
- Impact Dashboard
- Calendar ▶
- Daily Lineup
- News ▶
- Analyst Research and Market Commentary ▶
- Templates ▶

**Option Tools**

- Option Chain**
- OptionTrader
- Option Analysis ▶
- Advanced Option Tools ▶

**Education**

- Video Tutorials
- FAQs
- News@IBKR

**Other Tools**

- IBot - type to trade
- Templates ▶
- Portfolio Tools ▶
- More Advanced Tools ▶

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.



# Micro S&P 500 Option Chain (MES)

MES Dec16'22 @GLOBEX PUT/CALLS (Side by Side) 3871.25 -48.00 (-1.22%) ?

OCT EX / DEC EX 5 45 DAYS NOV EX3 / DEC EX3 5 63 DAYS NOV EX / DEC EX 5 75 DAYS DEC / DEC MES 5 91 DAYS MORE

TABBED VIEW PUT/CALL STRIKES GLOBEX TRADING CLASS 5 IV: 24.6%

CALLS							PUTS								
OPTN O...	VOLUME	BID	ASK	DELTA	IMPLD	ASK	STRIKE	OPTN O...	VOLUME	BID	ASK	DELTA	IMPLD	ASK	STRIKE
		156	336.75 x 340.25	0.698		156	3640	3		281	107.75 x 110.25	-0.302		281	
2		158	329.50 x 333.00	0.692		158	3650	53	2	277	110.50 x 112.50	-0.309		277	
		159	322.75 x 326.00	0.685		159	3660	3		272	113.25 x 115.25	-0.315		272	
		160	315.75 x 319.25	0.679		160	3670	350	4	265	116.25 x 118.75	-0.322		265	
		163	308.75 x 312.00	0.672		163	3680	3		260	119.25 x 121.75	-0.329		260	
		165	301.75 x 305.00	0.665		165	3690	28		257	122.00 x 124.25	-0.336		257	
13	6	167	295.00 x 298.25	0.658		167	3700	111	12	252	125.00 x 127.25	-0.343		252	
5		169	288.25 x 291.25	0.651	26.4%	169	3710	3		247	128.00 x 130.50	-0.350	26.5%	247	
7		171	281.50 x 284.50	0.643	26.3%	171	3720	2		242	131.50 x 133.75	-0.357	26.4%	242	
		174	274.75 x 278.00	0.636	26.3%	174	3730	3		238	134.50 x 137.00	-0.365	26.3%	238	
		176	268.25 x 271.25	0.629	26.1%	176	3740	8		234	138.00 x 140.50	-0.372	26.2%	234	
		179	261.75 x 264.75	0.621	26%	179	3750	32	4	229	141.50 x 143.75	-0.380	26.1%	229	
		181	255.50 x 258.25	0.614	26%	181	3760	4		225	145.00 x 147.25	-0.387	26.1%	225	
2		184	249.00 x 252.00	0.606	25.9%	184	3770	14		221	148.50 x 151.00	-0.395	26%	221	
		186	242.75 x 245.50	0.599	25.8%	186	3780	2		218	152.00 x 154.50	-0.402	25.8%	218	
		189	236.50 x 239.50	0.591	25.6%	189	3790	1		214	155.50 x 158.25	-0.410	25.7%	214	
20	1	192	230.25 x 233.25	0.583	25.5%	192	3800	187	19	210	159.50 x 162.00	-0.418	24.8%	210	
		195	224.25 x 227.25	0.575	25.3%	195	3810	2		207	163.25 x 165.75	-0.426	25.4%	207	
1		198	218.25 x 221.00	0.567	25.2%	198	3820	23		203	167.25 x 169.75	-0.434	25.3%	203	
5		203	212.25 x 214.75	0.559	25.1%	203	3830	17	3	200	171.25 x 173.75	-0.443	25.2%	200	
2		205	206.50 x 209.00	0.550	25%	205	3840	2		197	175.25 x 178.00	-0.451	25.1%	197	
11		209	200.75 x 203.25	0.542	24.9%	209	3850	18		193	179.25 x 182.00	-0.459	25%	193	
		212	195.00 x 197.50	0.534	24.8%	212	3860	5		190	183.50 x 186.25	-0.467	24.9%	190	
1		215	189.25 x 191.50	0.525	24.8%	215	3870	9	1	187	187.75 x 190.50	-0.476	24.8%	187	
97		221	183.50 x 186.00	0.517	24.6%	221	3880	108	4	185	192.00 x 195.00	-0.484	24.7%	185	
1		224	178.25 x 180.50	0.508	24.4%	224	3890	1	2	182	196.50 x 199.25	-0.493	24.5%	182	
7	7	228	172.75 x 175.25	0.500	24.3%	228	3900	132	41	179	201.00 x 203.75	-0.502	24.3%	179	
		233	167.50 x 169.75	0.491	24.2%	233	3910	5		177	205.50 x 208.50	-0.510	24.2%	177	
7		237	162.25 x 164.50	0.482	24%	237	3920	9		173	210.25 x 213.25	-0.519	24.1%	173	
10		242	157.00 x 159.25	0.473	23.9%	242	3930	6	1	172	214.75 x 218.00	-0.528	24%	172	
51		247	151.75 x 154.25	0.465	23.8%	247	3940	50	1	169	219.75 x 222.75	-0.537	23.9%	169	
13		254	146.75 x 149.00	0.456	23.8%	254	3950	58	2	167	224.50 x 227.75	-0.546	23.8%	167	
52		259	142.00 x 144.00	0.447	23.7%	259	3960	4		164	229.50 x 232.75	-0.555	23.8%	164	
5		265	137.00 x 139.00	0.438	23.6%	265	3970	13		162	234.50 x 237.75	-0.564	23.6%	162	
		270	132.00 x 134.25	0.429	23.4%	270	3980	4		160	240.00 x 243.00	-0.573	23.5%	160	
3		275	127.75 x 129.75	0.420	23.2%	275	3990	6		158	245.25 x 248.25	-0.582	23.3%	158	
215	2	282	123.00 x 125.00	0.411	22.8%	282	4000	265	11	156	250.25 x 253.50	-0.591	17.4%	156	
15	6	315	101.75 x 103.50	0.365	22.6%	315	4050	18	4	146	278.25 x 282.00	-0.637	22.7%	146	

OFF Strategy Builder

Source: TWS

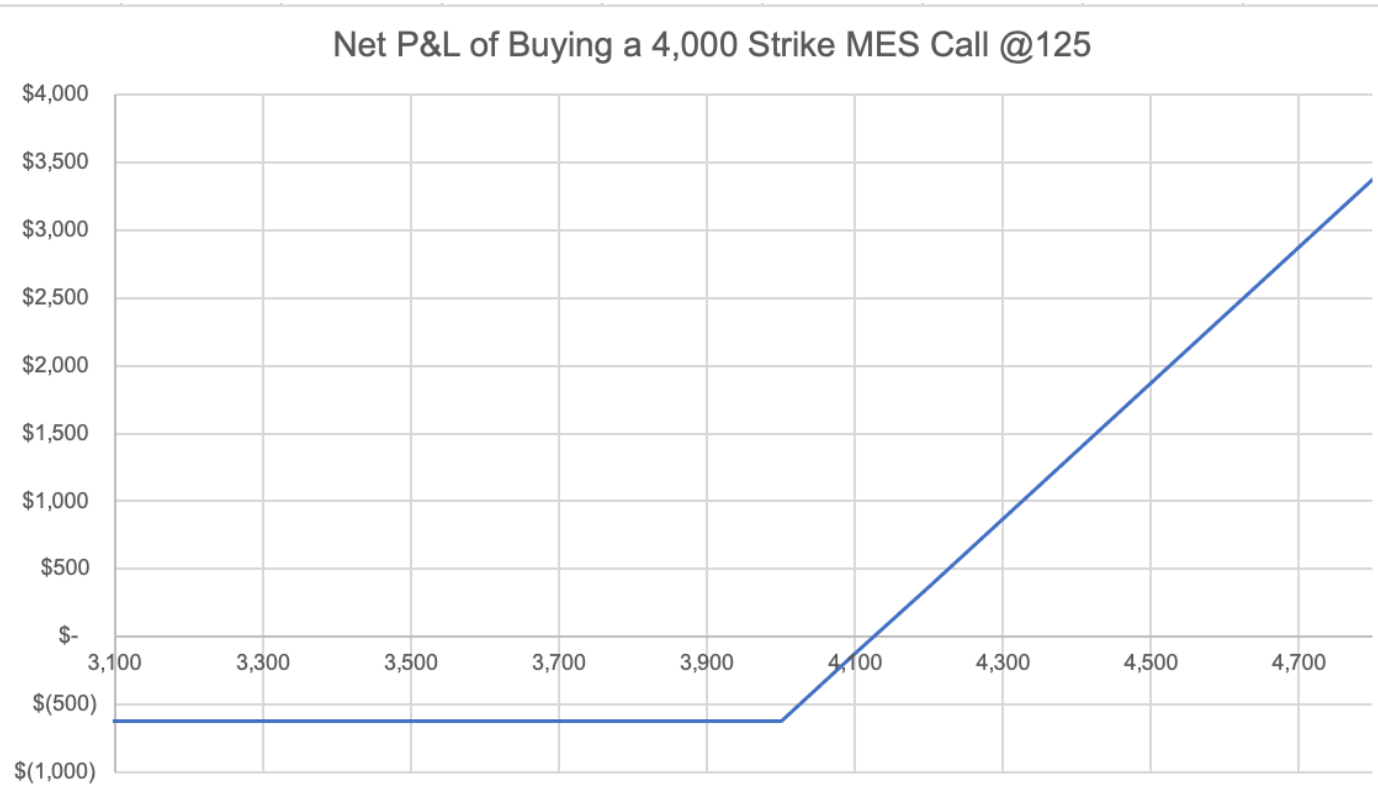
Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.





# Sample payoff diagram: Buying a call

Final Index Level	P&L
4,800	\$ 3,375
4,700	\$ 2,875
4,600	\$ 2,375
4,500	\$ 1,875
4,400	\$ 1,375
4,300	\$ 875
4,200	\$ 375
4,100	\$ (125)
4,000	\$ (625)
3,900	\$ (625)
3,800	\$ (625)
3,700	\$ (625)
3,600	\$ (625)
3,500	\$ (625)
3,400	\$ (625)
3,300	\$ (625)
3,200	\$ (625)
3,100	\$ (625)
3,000	\$ (625)

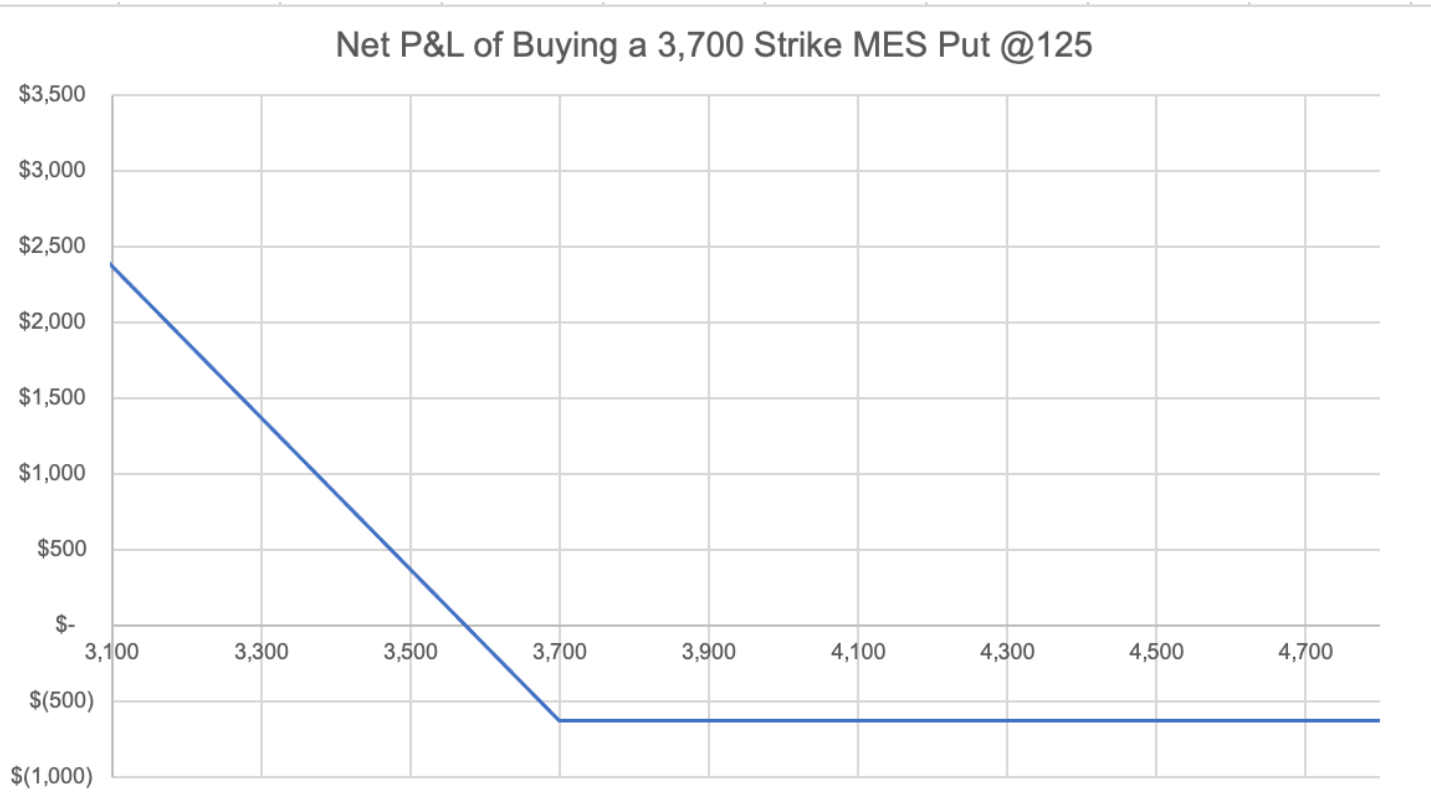


Source: Author's calculation

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# Sample payoff diagram: Buying a put

Final Index Level	P&L
4,800	\$ (625)
4,700	\$ (625)
4,600	\$ (625)
4,500	\$ (625)
4,400	\$ (625)
4,300	\$ (625)
4,200	\$ (625)
4,100	\$ (625)
4,000	\$ (625)
3,900	\$ (625)
3,800	\$ (625)
3,700	\$ (625)
3,600	\$ (125)
3,500	\$ 375
3,400	\$ 875
3,300	\$ 1,375
3,200	\$ 1,875
3,100	\$ 2,375
3,000	\$ 2,875



Source: Author's calculation

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# Micro Nasdaq 100 Option Chain (MNQ)

MNQ Dec16'22 @GLOBEX PUT/CALLS (Side by Side)

11850.25 -157.25 (-1.31%)

OCT MQE / DEC MQE 2 45 DAYS    NOV MQ3 / DEC MQ3 2 63 DAYS    NOV MQE / DEC MQE 2 75 DAYS    DEC / DEC MNQ 2 91 DAYS    MORE

TABBED VIEW PUT/CALL All STRIKES GLOBEX TRADING CLASS 2

IV: 32.0%

CALLS										PUTS												
OPTN O...	VOLUME	BID	ASK	SIZE	BID x ASK	DELTA	IMPLD	...	ASK	SIZE	STRIKE	OPTN O...	VOLUME	BID	ASK	SIZE	BID x ASK	DELTA	IMPLD	...	ASK	SIZE
		115	2373.25	2402.75	0.878				115	9600	3	3	150	144.75	153.75			-0.122			150	
		117	2285.75	2315.00	0.869				117	9700	9		150	156.75	170.50			-0.131			150	
		118	2199.00	2229.25	0.859				118	9800	2		150	169.75	184.25			-0.141			150	
		120	2113.25	2143.75	0.849				120	9900	7		150	183.50	195.75			-0.152			150	
		122	2029.00	2059.25	0.838				122	10000	130	209	150	198.25	207.25			-0.162	35.5%		150	
		124	1945.50	1976.00	0.827				124	10100	4		150	214.50	227.25			-0.174			150	
		126	1863.00	1888.50	0.815				126	10200	5		150	231.50	244.50			-0.186			150	
		127	1781.50	1807.00	0.802				128	10300	11		150	247.00	262.75			-0.199			150	
		126	1696.75	1727.75	0.789				130	10400	24	1	150	268.00	278.25			-0.212			150	
		125	1618.50	1649.25	0.774				129	10500	24	5	150	288.75	299.00			-0.226	38.5%		150	
		124	1541.00	1572.25	0.760				128	10600	19		150	310.50	321.00			-0.240			150	
		124	1466.50	1497.50	0.745				127	10700	20		150	333.75	344.25			-0.256			150	
		123	1389.75	1421.25	0.729				126	10800	23		150	358.00	370.75			-0.272			150	
		123	1321.50	1350.75	0.712				126	10900	12		150	384.00	397.00			-0.288			150	
		123	1243.50	1279.00	0.695				125	11000	69	2	150	411.75	424.50			-0.306	34.5%		150	
		122	1176.50	1207.75	0.677				125	11100	11	1	150	439.75	452.75			-0.324			150	
		122	1111.50	1140.50	0.659				125	11200	20		150	472.25	485.25			-0.342			150	
		122	1044.50	1074.00	0.639				124	11300	16	2	150	505.00	518.00			-0.361			150	
		150	985.25	997.00	0.620				150	11400	2		150	537.00	551.00			-0.381			150	
3		150	920.75	938.00	0.600				150	11500	42	4	150	575.50	589.00			-0.401			150	
1		150	860.00	876.75	0.579				150	11600	5		150	612.00	625.75			-0.422			150	
1		150	802.00	816.25	0.557				150	11700	8	1	150	653.75	667.25			-0.444			150	
	1	150	745.00	758.75	0.535				150	11800	35	3	150	695.50	709.25			-0.466			150	
	2	150	689.75	703.50	0.513				150	11900	5	7	150	739.25	753.00			-0.488			150	
7		150	635.50	652.00	0.491				150	12000	65	7	150	783.25	800.00			-0.511			150	
2		150	585.00	601.25	0.467				150	12100	39	2	150	834.25	848.25			-0.534			150	
7	3	150	536.25	552.75	0.445				150	12200	4		150	883.75	898.25			-0.557			150	
2		150	490.00	506.50	0.421				150	12300	6		150	935.25	952.75			-0.581			150	
2		150	446.25	462.75	0.397				150	12400	3		115	984.50	1018.75			-0.605			116	
9	1	150	404.00	420.75	0.374				150	12500	35		113	1045.00	1079.25			-0.628			114	
3		150	366.00	380.25	0.351				150	12600	12		111	1101.50	1136.00			-0.651			113	
10	6	150	329.50	343.75	0.327				150	12700	7	1	110	1167.50	1203.00			-0.675			111	
3		150	295.50	310.00	0.304				150	12800	3		110	1233.25	1268.75			-0.699			111	
1		150	265.25	279.25	0.283				150	12900	6		110	1301.00	1336.50			-0.720			111	
32	4	150	234.75	248.75	0.262	37.4%			150	13000	21	3	111	1371.25	1406.50			-0.742			112	
6		1	215.00	222.50	0.242				150	13100	1		113	1444.25	1479.25			-0.762			114	
9	1	150	184.50	198.00	0.220				150	13200	6		116	1521.00	1549.00			-0.785			117	
8		150	162.75	175.50	0.202				150	13300	21		120	1598.50	1631.25			-0.803			121	

OFF Strategy Builder

Source: Koyfin

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

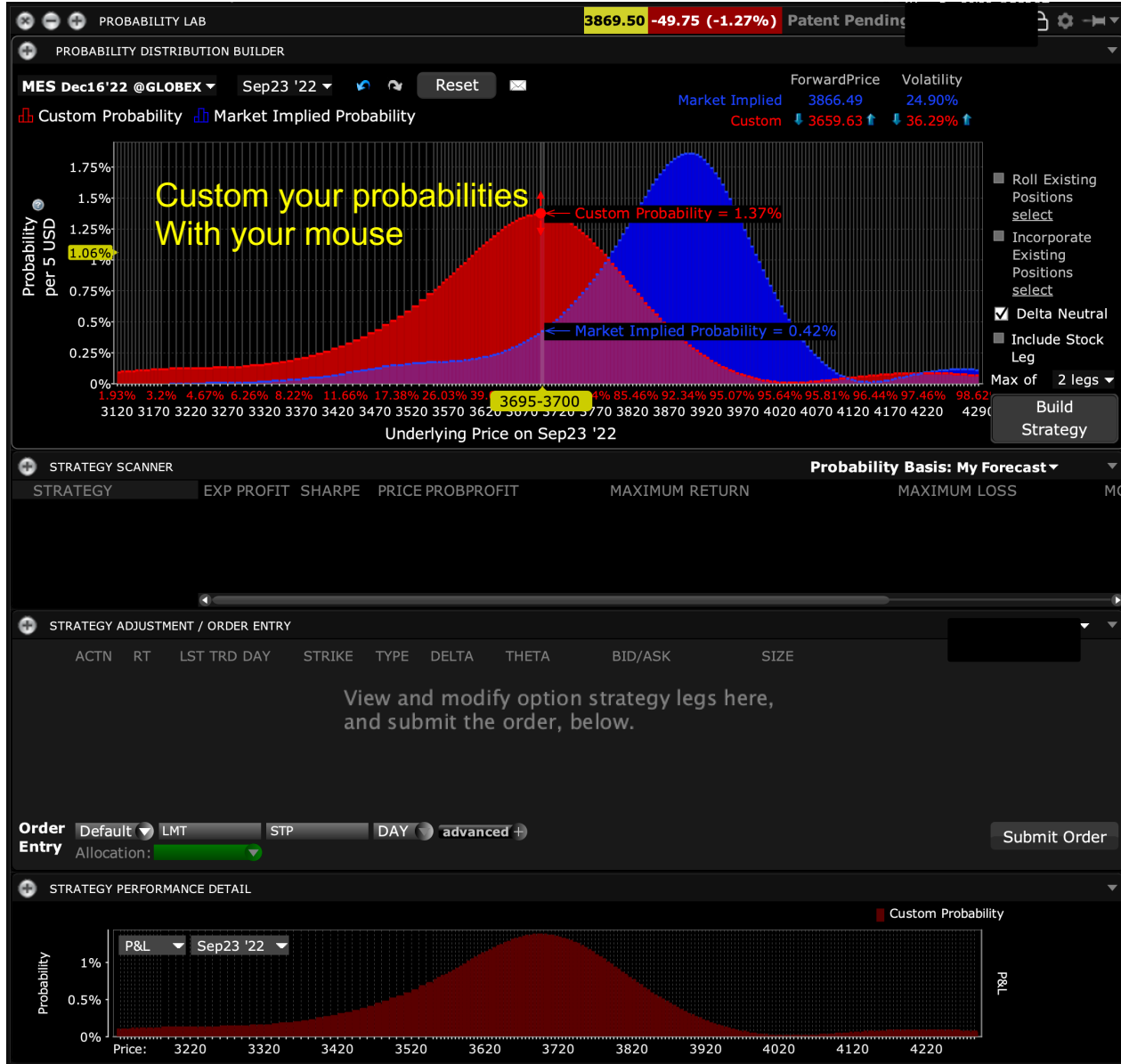


# Probability Lab



Source: TWS

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. The projections or other information generated by Probability Lab tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Please note that results may vary with use of the tool over time.



Source: TWS

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. The projections or other information generated by Probability Lab tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Please note that results may vary with use of the tool over time.

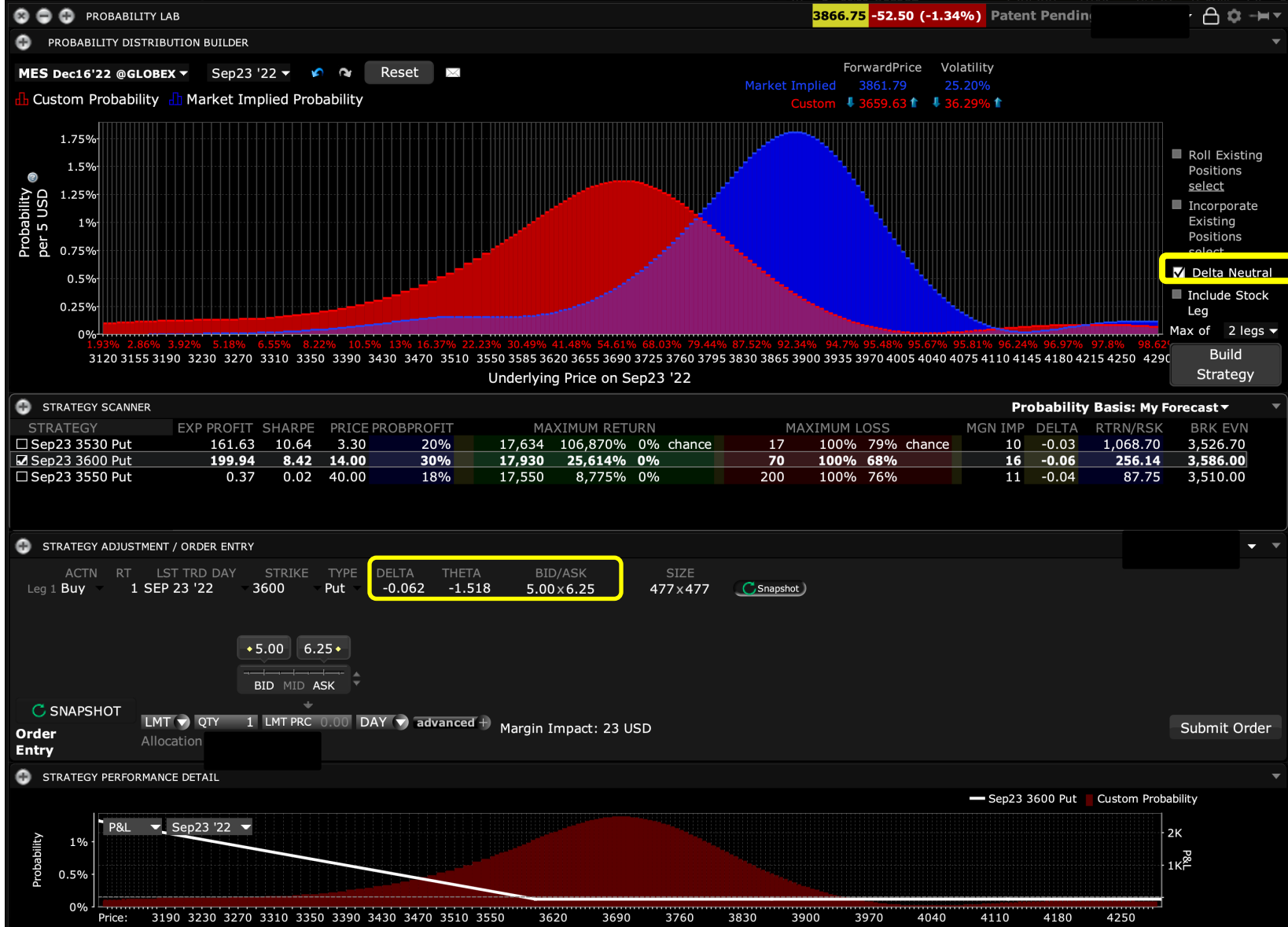




Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. The projections or other information generated by Probability Lab tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Please note that results may vary with use of the tool over time.



Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. The projections or other information generated by Probability Lab tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Please note that results may vary with use of the tool over time.



Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. The projections or other information generated by Probability Lab tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Please note that results may vary with use of the tool over time.

## About those “greeks”

\* **Delta** = Change in option price vs change in index

\* **Theta** = “Time Decay” = Change in option price vs passage of time

Not a greek, but “implied volatility” is a key variable in option pricing, and “volatility skew” is the reason the probability curves above are not symmetrical.

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# Spread / Multi-leg Option Strategies

# Sample MNQ put spread

MNQ Dec16'22 @GLOBEX PUT/CALLS (Side by Side) 11846.50 -161.00 (-1.34%)

OCT MQE / DEC MQE 2 45 DAYS NOV MQ3 / DEC MQ3 2 63 DAYS NOV MQE / DEC MQE 2 75 DAYS DEC / DEC MNQ 2 91 DAYS MORE

TABBED VIEW PUT/CALL All STRIKES GLOBEX TRADING CLASS 2

CALLS						PUTS												
OPTN O...	VOLUME	BID	SIZE	BID x ASK	DELTA	IMPLD	...ASK	SIZE	STRIKE	OPTN O...	VOLUME	BID	SIZE	BID x ASK	DELTA	IMPLD	...ASK	SIZE
	115	2370.25	2394.75	0.879	115	9600				3	3	150	150	144.75 x 153.75	-0.122			150
	117	2285.75	2315.00	0.870	117	9700				9	150	150	150	156.75 x 170.50	-0.131			150
	118	2199.00	2229.25	0.860	118	9800				2	150	150	150	169.75 x 184.25	-0.140			150
	120	2113.25	2143.75	0.850	120	9900				7	150	150	150	183.50 x 195.75	-0.151			150
	122	2029.00	2059.25	0.839	122	10000	130	209	150	130	209	150	150	200.75 x 207.50	-0.162	35.5%		150
	124	1945.50	1976.00	0.827	124	10100				4	150	150	150	214.50 x 227.25	-0.173			150
	126	1858.00	1888.50	0.816	126	10200				5	150	150	150	231.50 x 244.50	-0.185			150
	127	1776.50	1807.00	0.803	128	10300				11	150	150	150	247.00 x 262.75	-0.197			150
	126	1696.75	1727.75	0.790	130	10400	24	1	150	24	1	150	150	268.00 x 280.50	-0.211			150
	125	1618.50	1649.25	0.776	129	10500	24	5	150	24	5	150	150	288.75 x 301.00	-0.225	38.5%		150
	124	1541.00	1572.25	0.761	128	10600	19		150	19		150	150	310.50 x 323.00	-0.239			150
	124	1466.50	1497.50	0.746	127	10700	20		150	20		150	150	333.75 x 346.25	-0.255			150
	123	1389.75	1421.25	0.730	126	10800	23		150	23		150	150	358.00 x 370.75	-0.270			150
	123	1317.00	1343.00	0.714	126	10900	12		150	12		150	150	384.00 x 397.00	-0.287			150
	123	1243.50	1279.00	0.696	125	11000	69	2	150	69	2	150	150	411.75 x 424.50	-0.304	34.5%		150
	122	1176.50	1207.75	0.679	125	11100	11	1	150	11	1	150	150	439.75 x 452.75	-0.322			150
	122	1111.50	1140.50	0.660	125	11200	20		150	20		150	150	472.25 x 485.25	-0.341			150
	122	1044.50	1074.00	0.641	124	11300	16	2	150	16	2	150	150	505.00 x 518.00	-0.360			150
	150	983.50	997.75	0.621	150	11400	2		150	2		150	150	542.25 x 553.25	-0.379			150
3	150	920.75	938.00	0.601	150	11500	42	4	150	42	4	150	150	575.50 x 589.00	-0.400			150

Strategy Builder ON Strategies

ACTN	RT	LST TRD DAY	STRIKE	TYPE	DELTA	THETA	BID/ASK	SIZE
Leg 1 Buy	1	DEC 16 '22	11000	Put	-0.304	-3.807	411.75 x 424.50	150 x 150
Leg 2 Sell	1	DEC 16 '22	10000	Put	-0.162	-2.948	200.75 x 207.50	150 x 150
Dec16 11000/10000 Bear Put								Delayed

Clear All Legs + PROFILE + Add to Watchlists

Order Entry LMT QTY 1 LMT PRC 0.00 DAY advanced Margin Impact: 370 USD Submit Order

Source: TWS

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.



# Sample payoff diagram: Lower Delta and Theta than outright put

Final Index Level	P&L
12,000	\$ (440)
11,750	\$ (440)
11,500	\$ (440)
11,250	\$ (440)
11,000	\$ (440)
10,750	\$ 60
10,500	\$ 560
10,250	\$ 1,060
10,000	\$ 1,560
9,750	\$ 1,560
9,500	\$ 1,560
9,250	\$ 1,560
9,000	\$ 1,560
8,750	\$ 1,560
8,500	\$ 1,560
8,250	\$ 1,560
8,000	\$ 1,560
7,750	\$ 1,560
7,500	\$ 1,560



Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.

Source: Author's calculation



# Sample "1x2" costless / credit put spread

MES Dec16'22 @GLOBEX PUT/CALLS (Side by Side) 3866.00 -53.25 (-1.36%) ?

OCT EX / DEC EX 5 45 DAYS NOV EX3 / DEC EX3 5 63 DAYS NOV EX / DEC EX 5 75 DAYS DEC / DEC MES 5 91 DAYS MORE

TABBED VIEW PUT/CALL STRIKES GLOBEX TRADING CLASS 5 IV: 24.1%

CALLS										PUTS									
OPTN O...	VOLUME	BID	ASK	DELTA	IMPLD	...	ASK	SIZE	STRIKE	OPTN O...	VOLUME	BID	ASK	DELTA	IMPLD	...	ASK	SIZE	STRIKE
1	143	400.25	404.25	0.751				143	3550	28	332	86.50	88.50	-0.249				332	3550
		392.50	396.50	0.745				144	3560	7	327	88.75	90.75	-0.255				327	3560
		384.75	388.75	0.740				146	3570	6	320	91.25	93.25	-0.261				320	3570
		377.25	381.25	0.734				147	3580	17	314	93.50	95.50	-0.267				314	3580
		369.75	373.75	0.728				149	3590	5	307	96.00	98.00	-0.273				307	3590
10	150	362.50	366.25	0.722				150	3600	85	2	301	98.50	100.50	-0.279			301	3600
		355.25	359.00	0.715				152	3610	7	295	101.00	103.25	-0.285				295	3610
		348.00	351.75	0.709				154	3620	6	289	103.75	105.75	-0.291				289	3620
		340.75	344.50	0.703				155	3630	14	284	106.50	108.50	-0.298				284	3630
		333.50	337.25	0.696				157	3640	3	278	109.25	111.25	-0.304				278	3640
2	159	326.25	330.00	0.690				159	3650	53	3	273	112.00	114.25	-0.311	25.3%		273	3650
		319.25	323.00	0.683				161	3660	3	267	115.00	117.00	-0.317				267	3660
		312.50	316.25	0.676				162	3670	350	4	263	117.75	120.25	-0.324			263	3670
		305.50	309.25	0.670				164	3680	3	258	120.75	123.25	-0.331				258	3680
		298.50	302.00	0.663				167	3690	28	253	124.00	126.00	-0.338				253	3690
13	6	292.00	295.25	0.656				168	3700	111	12	248	126.75	129.25	-0.345			248	3700
5	171	285.25	288.50	0.649	26.4%			171	3710	3	243	130.00	132.50	-0.352	26.5%			243	3710
7	173	278.50	281.75	0.641	26.3%			173	3720	2	239	133.25	135.75	-0.359	26.4%			239	3720
		272.00	275.25	0.634	26.3%			176	3730	3	234	136.75	139.25	-0.367	26.3%			234	3730
		265.50	268.75	0.626	26.1%			178	3740	8	230	140.00	142.50	-0.374	26.2%			230	3740
		259.00	262.00	0.619	26%			181	3750	32	4	226	143.50	146.00	-0.382	26.1%		226	3750
		252.75	255.75	0.611	26%			183	3760	4	222	147.00	149.50	-0.389	26.1%			222	3760
2	185	246.25	249.25	0.604	25.9%			185	3770	14	218	150.50	153.25	-0.397	26%			218	3770
		240.00	243.00	0.596	25.8%			188	3780	2	215	154.25	156.75	-0.405	25.8%			215	3780
		233.75	236.75	0.588	25.6%			191	3790	1	211	158.00	160.75	-0.413	25.7%			211	3790
20	1	227.75	230.50	0.581	25.5%			194	3800	187	19	208	161.75	164.50	-0.420	24.4%		208	3800
		221.75	224.50	0.572	25.3%			198	3810	2	204	165.50	168.25	-0.429	25.4%			204	3810
1	201	215.75	218.50	0.564	25.2%			201	3820	23	201	169.50	172.25	-0.437	25.3%			201	3820

**Strategy Builder**

ACTN	RT	LST TRD DAY	STRIKE	TYPE	DELTA	THETA	BID/ASK	SIZE	
Buy	1	DEC 16 '22	3800	Put	-0.420	-1.037	161.75 x 164.50	208 x 208	Snapshot
Sell	2	DEC 16 '22	3550	Put	-0.249	-0.946	86.50 x 88.50	332 x 332	Snapshot
Total					0.078	0.856	-15.25 x -8.50	166 x 166	Delayed

Clear All Legs + PROFILE + Add to Watchlists

BID MID ASK

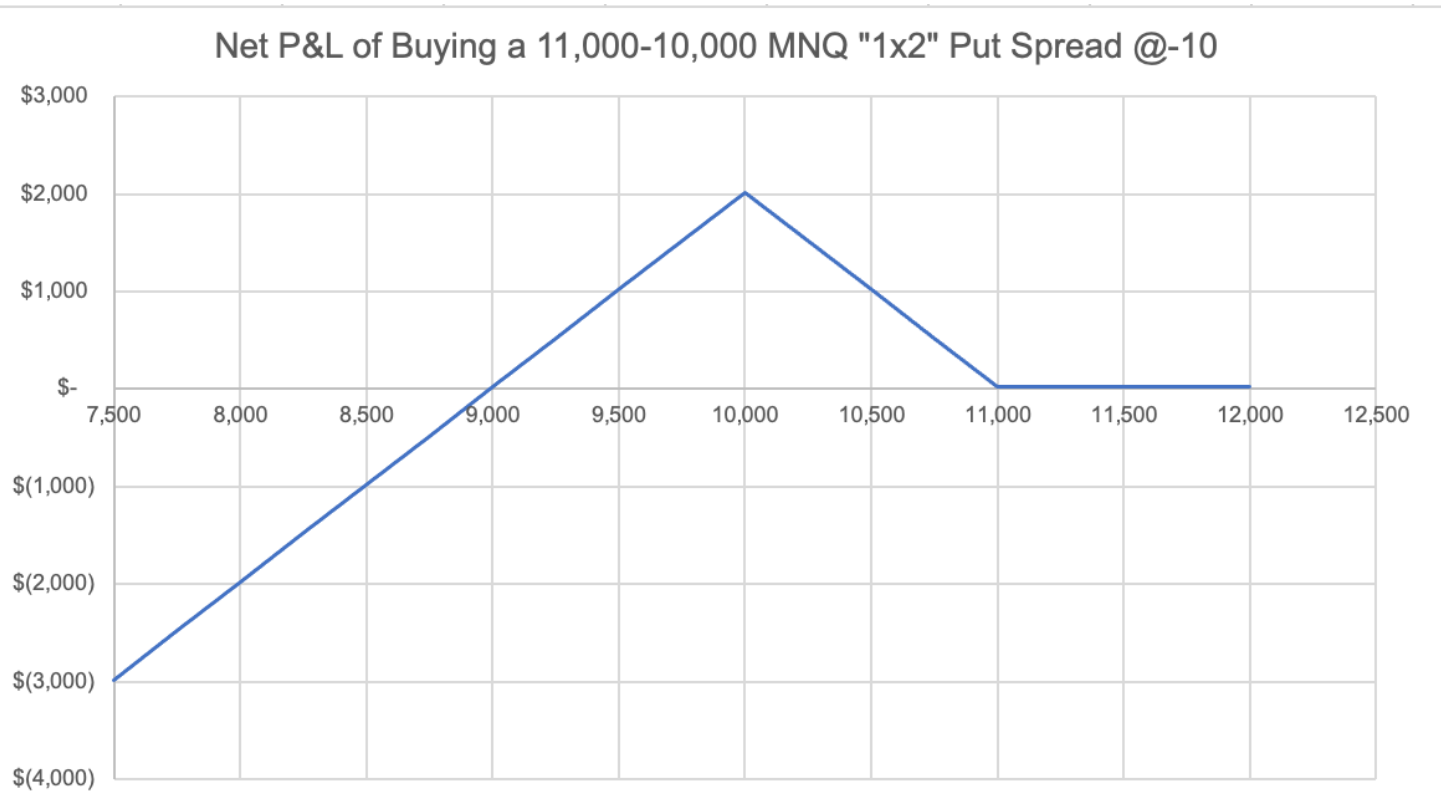
Order Entry LMT QTY 1 LMT PRC 0.00 DAY advanced Submit Order

Source: TWS

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.

# Sample payoff diagram: Delta and theta initially positive, can flip negative

Final Index Level	P&L
12,000	\$ 20
11,750	\$ 20
11,500	\$ 20
11,250	\$ 20
11,000	\$ 20
10,750	\$ 520
10,500	\$ 1,020
10,250	\$ 1,520
10,000	\$ 2,020
9,750	\$ 1,520
9,500	\$ 1,020
9,250	\$ 520
9,000	\$ 20
8,750	\$ (480)
8,500	\$ (980)
8,250	\$ (1,480)
8,000	\$ (1,980)
7,750	\$ (2,480)
7,500	\$ (2,980)



Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.

Source: Author's calculation

# Sample "Straddle"

PUT/CALLS (Side by Side) ▾
3874.50
-44.75 (-1.14%)
?
⚙️
↶
↷

NOV EX /  
DEC EX  
5  
45 DAYS

NOV EX3 /  
DEC EX3  
5  
63 DAYS

NOV EX /  
DEC EX  
5  
75 DAYS

DEC / DEC  
MES  
5  
91 DAYS

MORE ▾

TABBED VIEW ▾ PUT/CALL ▾ STRIKES ▾ GLOBEX ▾ TRADING CLASS ▾ 5

CALLS										PUTS									
OPTN O...	VOLUME	BID	SIZE	BID x ASK	DELTA	IMPLD ...	ASK	SIZE	STRIKE	OPTN O...	VOLUME	BID	SIZE	BID x ASK	DELTA	IMPLD ...	ASK	SIZE	STRIKE
7		164		♦ 283.25 x 289.25 ♦	0.651	26.5%	164		3720	2		259		♦ 130.25 x 134.25 ♦	-0.349	26.5%	259		3720
		166		♦ 276.25 x 282.50 ♦	0.644	26.4%	166		3730	3		255		♦ 133.50 x 137.50 ♦	-0.357	26.3%	255		3730
		168		♦ 269.75 x 275.75 ♦	0.637	26.3%	168		3740	8		250		♦ 136.75 x 140.75 ♦	-0.364	26.3%	250		3740
		170		♦ 263.25 x 269.25 ♦	0.629	26.1%	170		3750	32	4	245		♦ 140.00 x 144.25 ♦	-0.371	26.1%	245		3750
		172		♦ 257.00 x 262.75 ♦	0.622	26%	172		3760	4		241		♦ 143.50 x 147.50 ♦	-0.379	26.1%	241		3760
2		175		♦ 250.50 x 256.25 ♦	0.614	25.9%	175		3770	14		236		♦ 147.00 x 151.00 ♦	-0.386	26%	236		3770
		176		♦ 244.25 x 249.75 ♦	0.607	25.9%	176		3780	2		232		♦ 150.50 x 154.75 ♦	-0.394	25.9%	232		3780
		179		♦ 238.25 x 243.50 ♦	0.599	25.8%	179		3790	1		228		♦ 154.25 x 158.50 ♦	-0.402	25.8%	228		3790
20	2	182		♦ 231.75 x 237.25 ♦	0.592	25.6%	182		3800	187	24	224		♦ 158.00 x 162.25 ♦	-0.409	25.6%	224		3800
		185		♦ 225.75 x 231.00 ♦	0.584	25.5%	185		3810	2		220		♦ 161.75 x 166.00 ♦	-0.417	25.5%	220		3810
1		187		♦ 219.50 x 225.00 ♦	0.576	25.3%	187		3820	23		216		♦ 165.50 x 170.25 ♦	-0.425	25.3%	216		3820
5		190		♦ 213.75 x 218.75 ♦	0.567	25.2%	190		3830	17	3	213		♦ 169.25 x 173.75 ♦	-0.434	25.2%	213		3830
2		193		♦ 207.75 x 213.00 ♦	0.559	25.1%	193		3840	2	1	209		♦ 173.25 x 178.25 ♦	-0.442	25.1%	209		3840
11	1	196		♦ 202.25 x 207.00 ♦	0.551	25%	196		3850	18	1	205		♦ 177.50 x 182.50 ♦	-0.450	25%	205		3850
		200		♦ 196.50 x 201.25 ♦	0.543	24.9%	200		3860	5	1	202		♦ 181.50 x 186.25 ♦	-0.458	24.9%	202		3860
		203		♦ 190.75 x 195.25 ♦	0.534	24.8%	203		3870	9	1	198		♦ 185.75 x 191.00 ♦	-0.467	24.8%	198		3870
97		206		♦ 185.00 x 189.75 ♦	0.526	24.7%	206		3880	108	4	196		♦ 190.00 x 195.00 ♦	-0.475	24.7%	196		3880
1		210		♦ 179.00 x 184.00 ♦	0.517	24.6%	210		3890	1	2	192		♦ 194.25 x 199.25 ♦	-0.484	24.6%	192		3890

Strategy Builder
Strategies ▾

ACTN	RT	LST TRD DAY	STRIKE	TYPE	DELTA	THETA	BID/ASK	SIZE	
× Leg 1 Buy	1	DEC 16 '22	3900	Put	-0.492	-1.013	198.75 x 204.00	189 x 189	<span style="color: green;">Snapshot</span>
× Leg 2 Buy	1	DEC 16 '22	3900	Call	0.509	-1.010	174.00 x 178.50	214 x 214	<span style="color: green;">Snapshot</span>
Dec16 3900 Straddle					0.016	-2.023	372.75 x 382.50	189 x 189	Delayed

Clear All Legs
+ PROFILE
+ Add to Watchlists

♦ 372.75
382.50 ♦

BID
MID
ASK

Order Entry
LMT ▾ QTY 1 LMT PRC 0.00 DAY ▾ advanced +

Margin Impact: 494 USD

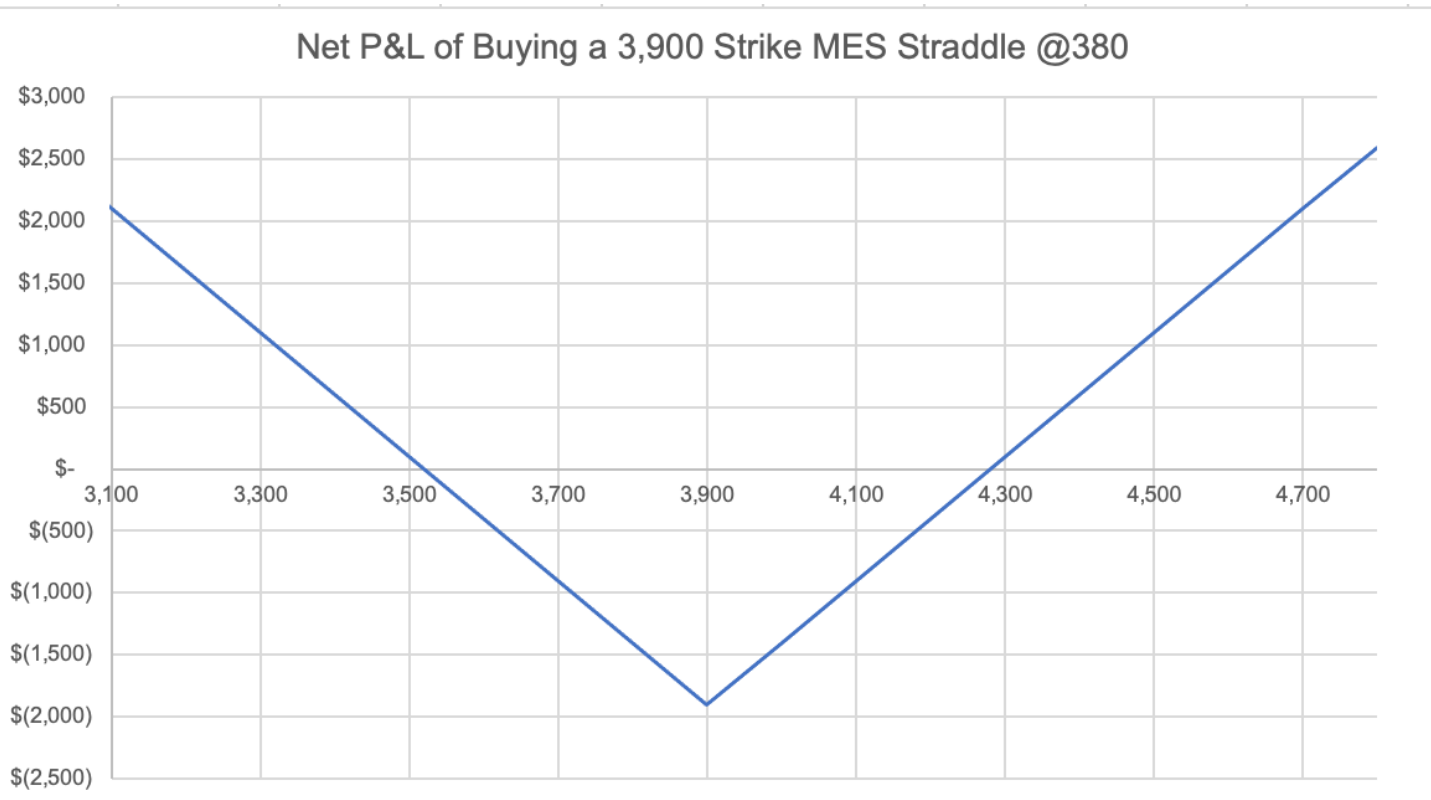
Submit Order

Source: TWS

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.

# Sample payoff diagram: Near-zero initial delta, high theta

Final Index Level	P&L
4,800	\$ 2,600
4,700	\$ 2,100
4,600	\$ 1,600
4,500	\$ 1,100
4,400	\$ 600
4,300	\$ 100
4,200	\$ (400)
4,100	\$ (900)
4,000	\$ (1,400)
3,900	\$ (1,900)
3,800	\$ (1,400)
3,700	\$ (900)
3,600	\$ (400)
3,500	\$ 100
3,400	\$ 600
3,300	\$ 1,100
3,200	\$ 1,600
3,100	\$ 2,100
3,000	\$ 2,600



Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.

Source: Author's calculation

# Sample spread: Buy 10,800 MNQ Put + Sell 3,700 MES Put, @~Zero

<b>S500 \ N100</b>	9,550	9,800	10,050	10,300	10,550	10,800	11,050	11,300	11,550
4,800	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,700	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,600	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,500	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,400	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,300	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,200	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,100	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
4,000	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
3,900	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
3,800	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
3,700	\$ 2,500	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ -	\$ -	\$ -
3,600	\$ 2,000	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ (500)	\$ (500)	\$ (500)	\$ (500)
3,500	\$ 1,500	\$ 1,000	\$ 500	\$ -	\$ (500)	\$ (1,000)	\$ (1,000)	\$ (1,000)	\$ (1,000)
3,400	\$ 1,000	\$ 500	\$ -	\$ (500)	\$ (1,000)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)
3,300	\$ 500	\$ -	\$ (500)	\$ (1,000)	\$ (1,500)	\$ (2,000)	\$ (2,000)	\$ (2,000)	\$ (2,000)
3,200	\$ -	\$ (500)	\$ (1,000)	\$ (1,500)	\$ (2,000)	\$ (2,500)	\$ (2,500)	\$ (2,500)	\$ (2,500)
3,100	\$ (500)	\$ (1,000)	\$ (1,500)	\$ (2,000)	\$ (2,500)	\$ (3,000)	\$ (3,000)	\$ (3,000)	\$ (3,000)
3,000	\$ (1,000)	\$ (1,500)	\$ (2,000)	\$ (2,500)	\$ (3,000)	\$ (3,500)	\$ (3,500)	\$ (3,500)	\$ (3,500)

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results. Multiple leg strategies, including spreads, will incur multiple transaction costs.

Source: Author's calculation

# Forming your Index Option Strategy

- Start by comparing your expected “probability distribution” for the index vs where options imply.
- Options opportunities are where you think moves are likely and the market doesn’t, or vice versa
- Outright puts can look expensive, because the market tends to have an aggregate demand for insurance against crashes.

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations. There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

# Questions?

GFM Contact

Tariq Dennison

<https://gfmasset.com>

[TDennison@gfmgrp.com](mailto:TDennison@gfmgrp.com)

Twitter: [@QuantOfAsia](https://twitter.com/QuantOfAsia)

Seeking Alpha: TARIQ DENNISON