

# Micro E-mini Equity Options

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# The Next Step in an Amazing Journey

*On May 6<sup>th</sup> 2019, the Micro E-mini futures launched to an opening day volume of 310,072 contracts. Since then, 600,000,000 more micros have traded and the most often asked question was “when will options launch?”*

*On August 30<sup>th</sup> 2020 (for trade date August 31<sup>st</sup>) CME Group launched options on Micro E-mini S&P 500 and Micro E-mini Nasdaq 100 futures*

*For those new to trading or those with smaller account sizes, the Micro E-mini can provide an inexpensive way to trade options on the key benchmarks—S&P 500 and Nasdaq 100.*

*And in the first six months since launching, volume and open interest have grown significantly*

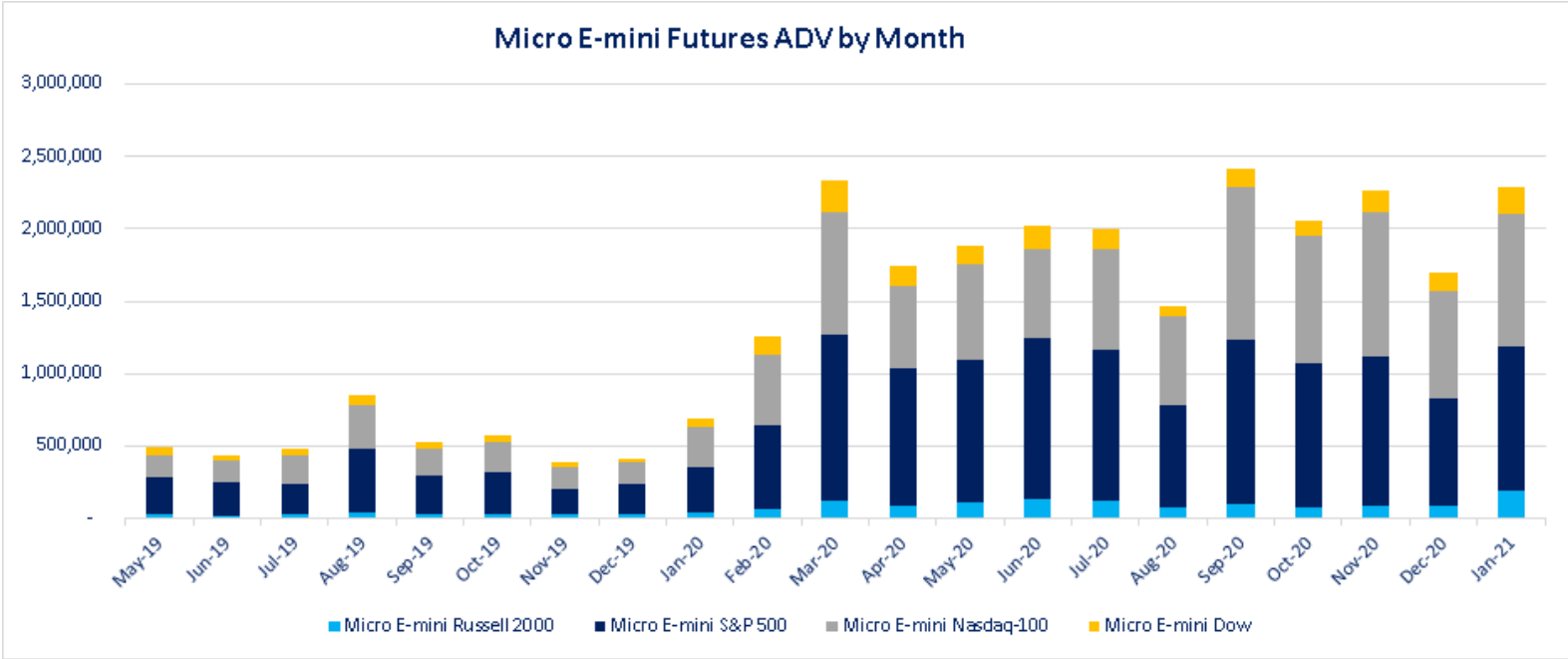
# Why Traders Are Migrating to Micro E-mini Options:

- The Micro E-mini option contracts can benefit newer traders and those with smaller account sizes that desire trading flexibility/precision for scaling in/out of trades
- Micro E-mini options have many advantages when compared with ETF and ETF options
- Micro E-mini options contracts allow newer traders to reduce risk from two viewpoints: margin and dollars at risk.
- Micro E-mini options contracts offer all the great advantages of our larger product suite at 1/10th the size (1/2 the size for mini WTI crude).
- Micros can be used by traders, hedgers, spreaders and smaller institutions
- Micro E-mini options traders enjoy around the clock trading accessibility.

# Micro Sized Options, Major Equity Benchmarks

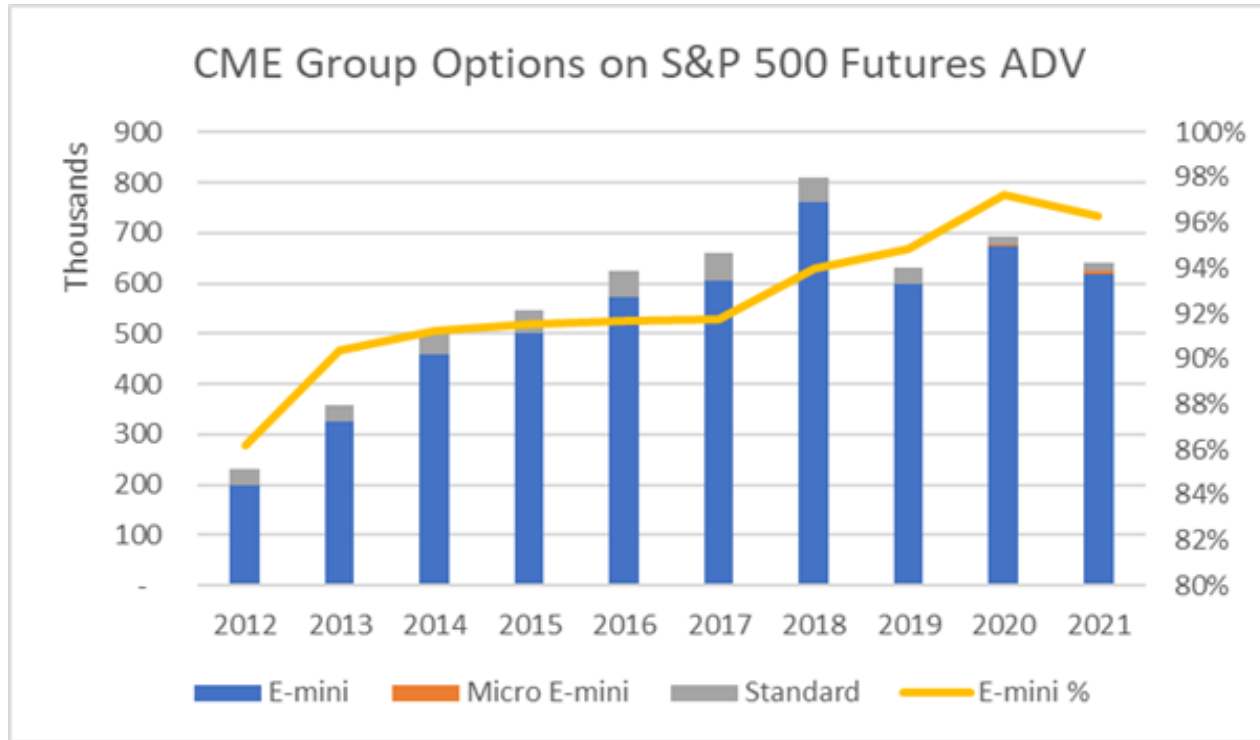


# Growth of Micro E-mini futures Since Launch



Source: CME Group

## The Volume is coming to CME Group...Micro Options Should Contribute to This Trend



(Source: CME Group)

# Advantages of Trading Options on Micro E-mini Futures?

## Precision Trading & Scaling

With an underlying contract that is 1/10<sup>th</sup> the size of the E-mini products, traders can scale S&P 500 and Nasdaq 100 exposure up down with greater precision.

## Add Versatility to Strategies

Trade long or short term views with a choice of weekly, end of month and quarterly expirations. Construct market neutral, directional and/or multi-leg strategies to take advantage of all opportunities

## Access Micro E-mini futures Liquidity

Lower premiums that settle into the liquid Micro E-mini futures which have traded over 300 million contracts since launch and were the most successful product launch in CME history



# Advantages of Trading Options on Micro E-mini Futures

## CME Clearing House and Risk

CME Clearing House serves to mitigate risk at the FCM level and client level by setting and changing margin requirements, collecting variation margins and ensuring the integrity of transactions of buyers and sellers

## Tax Efficiencies\*

Futures options are taxed according to the 60/40 rule (section 1256 of IRS code). The tax saving can be significant for all traders no matter what their tax bracket.

## Micro vs. E-mini offset & Margin offsets

A trader can offset 1 E-mini option with 10 micro E-mini options by instructing his/her FCM to do so. The clearing house will then offset the two transactions resulting in a net position of zero.

Micro E-mini futures and Micro E-mini options allow margin offset improving capital efficiency

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# Advantages of Trading Options on Micro E-mini Futures

## Liquidity\*

The S&P 500 futures complex trades 8.7x the value of the S&P 500 ETFs and 1.6x the value of the underlying cash basket

The Nasdaq 100 futures complex trades 8.1x the value of the Nasdaq 100 ETFs and 1.2x the value of the underlying cash basket

## Around-the-Clock Trading

Futures and options on futures trade nearly 24 hours per day. S&P 500 cash index is constrained by the primary US cash equity markets, and can only be calculated 6.5 hours per day.

## Futures Market Strength

Technical levels are determined in the futures, not the underlying cash.

1 Non-U.S. Trading Hours are 5:00 p.m. – 8:00 a.m. CT. \*Source: CME Group (as of Q2 2020)

# Comparing Options on Stocks vs. Options on Futures

Attribute	Options on Futures	Options on Stocks
Underlying	1 futures contract	100 shares of stock*
Tick values	Varies by product	Generally a penny
Expiration consideration	Upon exercise/assignment, futures have discreet expiration	Upon exercise/assignment, stocks can be held indefinitely
Around the clock trading	Yes	No
Asset class available	Eq, FX, IR, Commodities	Equities
Liquidity	Varies	Varies
Tax efficiencies underlying	Yes	No
Margin/Capital efficiencies	3-10 percent of notional	Borrow 50%, put down 50%
Volatility Issues	Differing skews put vs. calls Depending on product	Skew tends to price puts greater than calls

\* 100 shares of certain stocks like AMZN & TSLA can cost From \$150,000 –\$300,000...well beyond a typical retail investor's reach. The notional value of the micro contracts is substantially less than 100 shares of your typical stock. (Source: CME Group)

# Micro E-mini Options on S&P 500 and Nasdaq 100: Contract Specs\*

	Options on Micro E-mini S&P 500 Futures	Options on Micro E-mini Nasdaq-100 Futures
CONTRACT UNIT	1 MES futures contract	1 MNQ futures contract
MINIMUM PRICE FLUCTUATION	Regular Tick: 0.25 index points = \$1.25 for premium above 5.00 index points   Reduced Tick: 0.05 index points = \$0.25 for premium at or below 5.00 index points	Regular Tick: 0.25 index points = \$0.50 for premium above 5.00 index points   Reduced Tick: 0.05 index points = \$0.10 for premium at or below 5.00 index points
TRADING HOURS	CME Globex: 5:00 p.m. – 4:00 p.m. CT Sunday – Friday	
PRODUCT CODE	Quarterly: MES, EOM: EX, Weekly: EX1-EX4	Quarterly: MNQ, EOM: MQE, Weekly: MQ1-MQ4
LISTING CYCLE	2 Quarterlies, 3 End-of-Months, 5 Fridays (3 Weeks 1, 2 and 4 & 2 Serials)	
OPTIONS STYLE	Quarterly: American Weeklies, EOM: European	

\*Pending regulatory approval and subject to change

## Comparing the Cost of Straddles in S&P 500, E-mini S&P 500 and Micro E-mini S&P 500 (MES at 3900.50)

3900 Straddle	E-mini S&P 500 x \$50	Micro E-mini S&P 500 x \$5
+1 March 2021 Quarterly 3900 call	90.50	90.75
+1 March 2021 Quarterly 3900 put	89.50	89.50
March 2021 Qtr 3900 Straddle	180.00	180.25
Contract multiplier	\$50	\$5
Cost of Straddle in \$	\$9,000	\$901.25

*This illustration shows the substantial difference in cost of a straddle between E-minis and Micro E-minis. For those new to trading or those with smaller account sizes, the micro E-mini can provide an inexpensive way to trade options on the key benchmarks—S&P 500 and Nasdaq 100.*

\*There can be no guarantee that E-mini and Micro E-mini options will trade at identical prices for a given strike and expiration. Supply/Demand differences will sometimes account for the discrepancies.

# Comparing the Cost of Vertical Spreads in S&P 500, E-mini S&P 500 and Micro E-mini S&P 500

3270/3370 Vertical Spread	Standard S&P 500 x \$250	E-mini S&P 500 x \$50	Micro E-mini S&P 500 x \$5
+1 August EOM 3270 call	64.10pts	64.00pts	64.00pts
-1 August EOM 3370 call	21,80pts	21.75pts	21.75pts
Cost of 3270/3370 call vertical pts	42.30pts	42.25pts	42.25pts
Contract multiplier	\$250	\$50	\$5
Cost of 3270/3370 call vertical \$	\$10,575	\$2,112.50	\$211.25

*This illustration shows the substantial difference in cost of a vertical spread. For those new to trading or those with smaller account sizes, the micro E-mini can provide an inexpensive way to trade options on the key benchmarks—S&P 500 and Nasdaq 100.*

\*There can be no guarantee that E-mini and micro E-mini options will trade at identical prices for a given strike and expiration.

# Practicalities: Expiry Style

## Quarterly options are American style.

Option may be exercised prior to expiry by the long option holder.

At expiry – third Friday of the contract month

- Trading in options and underlying futures terminates simultaneously.
- Out-of-the-money options expire unexercised (but may be exercised via contrary instruction).
- In-the-money options auto-exercise into underlying futures (but may be abandoned via contrary instruction).
- Underlying futures immediately expire by cash-settlement with reference to equity index Special Opening Quotation (SOQ).

## End-of-month and Friday Weekly options are European style.

Option is exercisable only at expiry.

At expiry – 4 p.m. ET on Fridays (EX1-EX4, MQ1-MQ4) and on the last trading day of the contract month (EX, MQE)

- Out-of-the-money options expire unexercised, no contrary instructions allowed.
- In-the-money options auto-exercise into underlying futures, no abandonment allowed.
- Whether the option is OTM or ITM is determined by reference to the Special Fixing price equal to VWAP of the associated E-mini futures contracts 3:59:30-4:00:00 pm NY time. (S&P 500 options: ESF, Nasdaq-100 options: NQF)

## Exercise Procedures for Micro E-mini Options (see link below for full micro FAQ)

	WEEKLY	END-OF-MONTH	QUARTERLY
American			✓
European	✓	✓	

**American:** An option can be exercised until 5:30pm CT on any business day that the option is traded. Option exercise results in a position in the underlying cash-settled futures contract. Please contact your broker/FCM as they may have an earlier deadline for same-day exercise.

In-the-money options, in the absence of contrarian instructions delivered to the CME Clearing by 5:30 p.m. CT on the day of expiration, are automatically exercised into expiring cash-settled futures, which settle to the SOQ calculated the morning of the third Friday of the contract month.

**European:** Exercisable only on expiration day.

Options which are in-the-money on the last day of trading are automatically exercised. A 3 p.m. CT price fixing based on the weighted average traded price fixing (symbol ESF & NQF) of the E-mini S&P 500 futures and E-mini Nasdaq-100 futures in the last 30 seconds of trading on expiration day (2:59:30 p.m.-3:00:00 p.m. CT) will be used to determine which options are in-the-money

<https://www.cmegroup.com/education/articles-and-reports/faq-options-on-micro-e-mini-s-p-500-and-nasdaq-100-futures.html>



# Micro E-mini Options vs. E-mini Options and Precision Scaling

- As with micro futures, a smaller size options contract allows traders to more precisely scale in or out of positions.
- All traders have been in the position where they buy a one lot and watch the market rocket higher after they offset the one contract.
- With micro E-mini Options, the smaller size allows you to trade a 10 lot. 10 MES options would be equivalent to 1 ES option.
- If the market goes in your favor, you can scale out of a few contracts, and still be in the market as it continues its advance and gradually reduce the position
- It's a technique often employed by professional traders

## Illustration: Micro E-mini Options and Precision Scaling

- A trader buys 10 3200 MES call options with the underlying at 3190
- His trading system is based on relative strength index (RSI). Any move below 30 generates a buy. Any move above 75 or so generates a sell or reduction in position size.
- See chart on next page for illustration how an active trader can scale in or out of a position

# Illustration: Micro E-mini Options and Precision Scaling



Caveat: This is an illustration for educational purposes only

## Micro E-mini Options and Precision Scaling

Date	Futures Settle	MES July EOM 3200 call settle*	Net change	Delta
Jul 16	3194.50	56.20	-16.80	.49
Jul 17	3213.90	59.40	+3.20	.55
Jul 20	3245.20	73.80	+14.40	.66
Jul 21	3251.30	78.70	+4.90	.67

\*This illustration uses E-mini option premiums, which should approximate the premiums of the Micro E-mini Options. There can be no guarantee that E-mini and micro E-mini options will trade at similar prices for a given strike, expiration and underlying.

## Diverse Menu of Expirations: Weekly, EOM and Quarterly

CONTRACT	HOW MANY ARE LISTED?
Weekly	At any given time, three nearest weeks of EX1 <MQ1>, EX2 <MQ2>, and EX4 <MQ4> (Weeks 1, 2 & 4) and two nearest weeks of EX3 <MQ3> (Week 3) will be listed for trading
EOM	Monthly contracts listed for three consecutive months for expiration on the last business day of the month.
Quarterly	Two months in the March Quarterly Cycle (Mar, Jun, Sep, Dec) that will expire on the third Friday of the quarterly month

# Expiration Nuances: Micro E-mini Options vs. E-mini Options

Product	Monday Weekly	Wednesday Weekly	Friday Weekly	End of month EOM	Quarterly
ES	Yes	Yes	Yes	Yes	Yes
MES	No	No	Yes	Yes	Yes
NQ	No	No	Yes	Yes	Yes
MNQ	No	No	Yes	Yes	Yes

Key	American Style Expiry
	European Style Expiry

# Short-term Micro E-mini Equity Index Options

## Maximum precision and flexibility

Short-term options deliver more opportunities around high impact economic events, and increased precision and flexibility in managing existing options positions.

CME Group offers weekly options on Micro E-mini S&P 500, Micro E-mini NASDAQ-100

### Key features include:

- European style with no pin risk; no contrarian assignment or abandonment
- Weekly options can be used to:
  - Hedge long-term positions
  - Manage gamma and theta risk
  - Initiate new positions to anticipate movement of the underlying equity market for the next 1 to 7 days.

### Event-driven trading

- Equity Index options provide a deep pool of liquidity for investors to express views on market-moving economic reports.
- On Employment report days, trading in the nearest two weekly options often exceeds ADV by 100%.
- Earnings announcements on Nasdaq 100 and S&P component companies can sometimes move markets and create trade opportunities

# Short Term Micro E-mini Options—A Micro E-mini S&P 500 Illustration

Options (Calls/Puts) Grid x Quick Options Grid x Options (Calls/Puts) Grid x Futures Grid x New Tab x

Ags x FX x Int Rates (CBOT) x Int Rates (CME) x Metals x Crude x Refined x Nat Gas x Quick Options Grid x Strategies Grid x Qu

Future MES: Micro E-mini Expiry 3 Months Category All Greeks QuikStrike Vol Live View

Open...	Volu...	Last	MIV	Vol	θ	v	Γ	Δ	QS	+	C...	C Bid	Theo	C Ofr	C...	Strike	P...	P Bid	Theo	P Ofr	P...
- 12 Feb 2021 (3.91 DTE) Micro E-Mini S&P 500 Weekly Option Wk2, F: 3,910.00																ATM	3910.00 ▼ ▲		10 strikes - +		
Micro E-mini S&P 500 Future Mar21																	8	3,909.75		3,910.00	5
12			14.7...	14.8...	-2.888	1.524	0.006	0.63	QS	+	869	24.50	35.11	45.50	823	3890.00	1	11.75	15.23	20.00	824
6			12.7...	14.5...	-2.910	1.561	0.007	0.60	QS	+	869	21.75	31.67	36.00	1	3895.00	870	11.00	16.80	22.25	822
102			12.9...	14.3...	-2.914	1.589	0.007	0.57	QS	+	869	19.50	28.39	33.00	1	3900.00	869	12.25	18.52	24.50	820
6	1	26....	14.0...	14.1...	-2.903	1.607	0.007	0.54	QS	+	869	17.25	25.30	33.00	820	3905.00	869	13.50	20.43	27.00	820
3	5	22....	13.7...	13.9...	-2.870	1.614	0.007	0.50	QS		869	15.00	22.38	29.25	820	3910.00	869	14.75	22.50	29.75	820
18			13.6...	13.6...	-2.816	1.608	0.007	0.47	QS	+	869	13.00	19.65	26.00	821	3915.00	869	16.25	24.77	33.00	821
12			13.4...	13.4...	-2.739	1.589	0.007	0.43	QS		869	11.25	17.10	22.75	823	3920.00	869	18.00	27.22	36.50	823
10			13.3...	13.2...	-2.643	1.555	0.007	0.39	QS	+	870	9.75	14.77	20.00	826	3925.00	869	20.25	29.90	39.75	825
26			12.6...	13.1...	-2.526	1.507	0.007	0.36	QS	+	935	8.25	12.66	15.75	1	3930.00	1	31.00	32.78	44.00	828
14			13.1...	12.9...	-2.393	1.445	0.007	0.32	QS		992	6.75	10.76	15.25	949	3935.00	869	24.50	35.89	48.00	831



# Short Term Micro E-mini Options—A Micro E-mini S&P 500 Illustration

CME Group | CME Direct

Excel

Chat

Menu

Options (Calls/Puts) Grid

Quick Options Grid

Options (Calls/Puts) Grid

Futures Grid

Ags

FX

Int Rates (CBOT)

Int Rates (CME)

Metals

Crude

Refined

Nat Gas

Quick Options Grid

Strategies Grid

Quick

Future

MES: Micro E-mi

Expiry3 Months

CategoryAll

GreeksQuikStrike Vol

Live

View

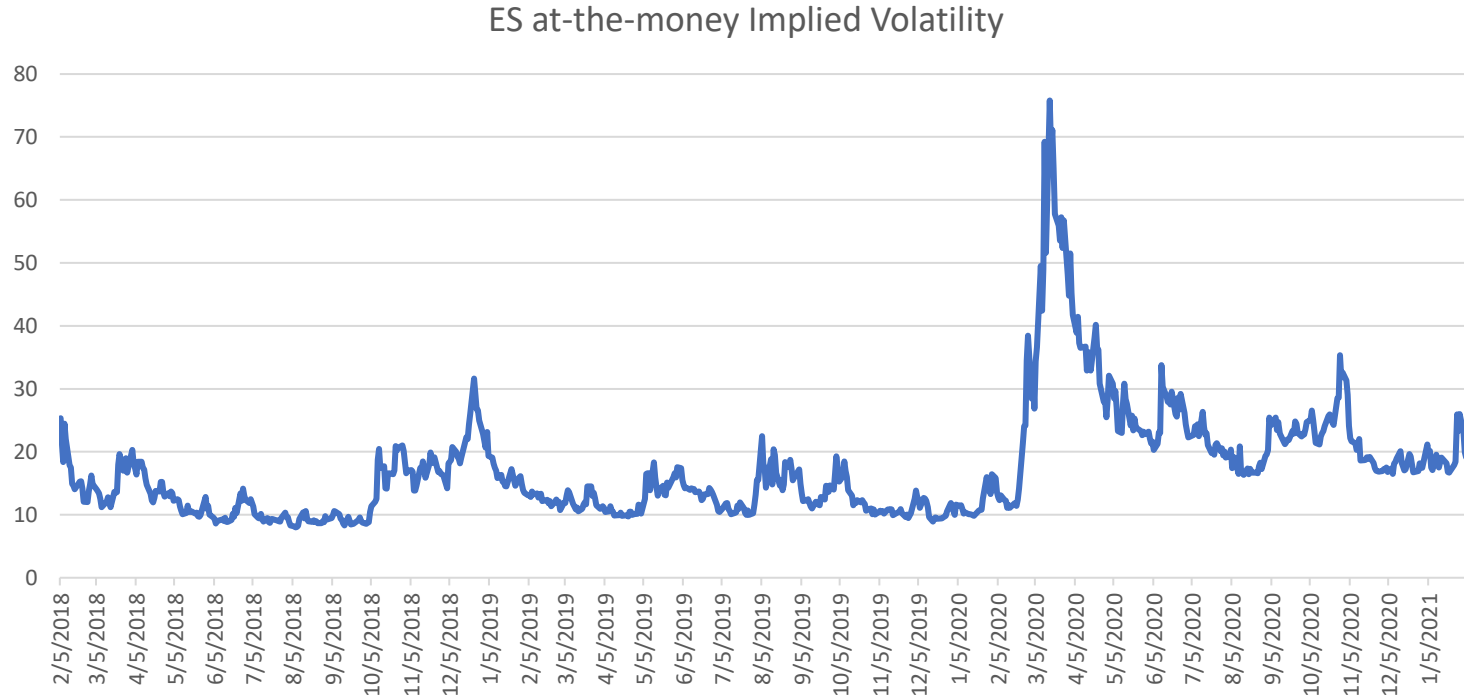
Open...	Volu...	Last	MIV	Vol	θ	v	Γ	Δ	QS	+	C...	C Bid	Theo	C Ofc	C...	Strike	P...	P Bid	Theo	P Ofc	P...	+
- 12 Feb 2021 (4.23 DTE) Micro E-Mini S&P 500 Weekly Option Wk2, F: 3,899.75																ATM	3900.00 ▼ ▲			1 strikes - +		
Micro E-mini S&P 500 Future Mar21																	35	3,899.75		3,900.00	51	+
102	85	↑ 24....	14.1...	14.0...	-2.774	1.676	0.007	0.50	QS	+	45	23.50	23.43	23.75	45	3900.00	45	23.50	23.56	24.00	45	+
- 19 Feb 2021 (11.23 DTE) Micro E-Mini S&P 500 Weekly Option Wk3, F: 3,899.75																ATM	3900.00 ▼ ▲			1 strikes - +		
Micro E-mini S&P 500 Future Mar21																	35	3,899.75		3,900.00	51	+
25	16	↑ 40....	14.2...	14.2...	-1.731	2.729	0.004	0.50	QS	+	45	38.50	38.83	39.00	45	3900.00	45	38.75	38.96	39.25	45	+
- 26 Feb 2021 (18.23 DTE) Micro E-Mini S&P 500 EOM Option, F: 3,899.75																ATM	3900.00 ▼ ▲			1 strikes - +		
Micro E-mini S&P 500 Future Mar21																	35	3,899.75		3,900.00	51	+
9	1	55....	15.4...	15.4...	-1.475	3.477	0.003	0.51	QS	+	45	53.50	53.76	54.00	45	3900.00	45	53.50	53.89	54.00	45	+
- 5 Mar 2021 (25.23 DTE) Micro E-Mini S&P 500 Weekly Option Wk1, F: 3,899.75																ATM	3900.00 ▼ ▲			1 strikes - +		
Micro E-mini S&P 500 Future Mar21																	35	3,899.75		3,900.00	51	+
6	1	67....	16.3...	16.3...	-1.327	4.089	0.002	0.51	QS	+	52	66.50	66.93	67.25	52	3900.00	52	66.75	67.06	67.25	52	+
- 12 Mar 2021 (32.23 DTE) Micro E-Mini S&P 500 Weekly Option Wk2, F: 3,899.75																ATM	3900.00 ▼ ▲			1 strikes - +		
Micro E-mini S&P 500 Future Mar21																	35	3,899.75		3,900.00	51	+
			17.1...	17.1...	-1.228	4.621	0.002	0.51	QS		52	78.75	79.12	79.25	52	3900.00	52	78.75	79.24	79.50	52	
- 19 Mar 2021 (38.92 DTE) Micro E-Mini S&P 500 Option, F: 3,899.75																ATM	3900.00 ▼ ▲			1 strikes - +		
Micro E-mini S&P 500 Future Mar21																	35	3,899.75		3,900.00	51	+
196	3	85....	17.7...	17.7...	-1.160	5.078	0.002	0.51	QS	+	45	89.75	90.29	90.25	45	3900.00	45	90.00	90.42	90.25	45	+

# Short Term Micro E-mini Options—A Micro E-mini S&P 500 Illustration

Micro E-mini S&P 500 Expiration	Strike	Call Premium (pts)	Premium (USD) Micro E-mini options (x5)
Feb 2021 week 2	3900	23.75	\$118.75
Feb 2021 week 3	3900	39.00	\$195.00
Feb 2021 EOM	3900	54.00	\$270.00
Mar 2021 week 1	3900	67.25	\$336.25
Mar 2021 week 2	3900	79.25	\$396.25
Mar 2021 Quarterly	3900	90.25	\$451.25

Source: CME Group/CME Direct

# ES Implied Volatility\*: 3 Years Ending 2/4/21



Source: QuikStrike \* ES volatility should be similar to MES volatility but no guarantees can be made

# ES Implied Volatility Percentile Rankings Past 3 Years

## The Impact of Volatility on Premiums

	ATM Implied Vol	ATM straddle pts	ATM straddle in \$ ES X50	ATM straddle in \$ MES X5
High	75.77	659.00	\$32,950	\$3,295
90 <sup>th</sup> percentile	26.12	226.25	\$11,312	\$1,131
75 <sup>th</sup> percentile	20.14	174.05	\$8,703	\$870
50 <sup>th</sup> percentile	14.88	128.10	\$6,405	\$641
25 <sup>th</sup> percentile	11.30	96.85	\$4,843	\$484
10 <sup>th</sup> percentile	9.71	82.95	\$4,148	\$415
Low	8.01	68.10	\$3,405	\$341

Source: QuikStrike

30 days to expiration

Underlying at 3,818

ATM straddle = 3,820

# Micro E-mini Options: Using the QuikStrike Analytics Tool

Futures are two dimensional. Options are four dimensional and thus require more upfront homework if you want to maximize success.

All traders should know:

- Upside breakeven
- Downside risk
- How sensitive option is to movement in underlying futures
- How volatility impacts premium
- How the passage of time impacts premium
- And much more....

QuikStrike is a tool that CME offers that will calculate these items quickly  
And easily

# Long Call assuming Market Advances to New All Time Highs

- A trader believes that the market (S&P 500) will advance to new highs before the 19th expiration. March Micro E-mini futures @ 3906.75
- Given large market swings, he decides to use options on micro E-mini S&P futures
- He goes long the Micro E-mini March 3910 call option at 86.35 (\$431.75)

As most smart traders would do....he calculates the following

What is maximum risk?

What is maximum reward?

What is upside breakeven point?

How sensitive is the option relative to the underlying micro futures?

If volatility drops from 21% to 20%...how will this impact premium?

How does time decay impact this option each day that passes?

# QuikStrike Analytics: Long Mar MES 3910 Call

The “Greeks” quantify the four-dimensional nature of options

Source: QuikStrike

MICRO S&P 500 (MES)

▼

★ Spread Builder - MESH1 3910 Call

MESH1

▼

+

Classic

≡

Analyze

≡

History

≡

Risk

≡

Simulate

≡

Tools

Matrix

≡

ER Decay

≡

Position

+/- Option

▼

+/- Future

▼

Summary

Paid

86.352

Premium

86.352

Future

0.000

Total P/L

0.000

Future:

3906.75

0.00

DTE:

37.84

0.00

ATM:

17.52

0.00

MESH1 Options

✕

QTY

STRIKE

TYPE

VOLATILITY

PREMIUM

TOTAL(UNIT \* QTY)

1

3910

Call

CURRENT ⇄

THEO

SETTLE

UNIT PRICE

PREM

THEO

SETTLE

17.52

17.52

17.34

86.352

86.352

86.352

87.000

Greeks

QTY

STRIKE

TYPE

GREEKS

1

3910

Call

DELTA

GAMMA

VEGA

THETA

51

0.181

501.727

-1.161

# Long Call assuming Market Advances to New All Time Highs

What is maximum risk? ***Premium paid or 86.35 pts***

What is maximum reward? ***Theoretically unlimited***

What is upside breakeven point? ***Strike + premium (3910 + 86.35 = 3,996.35)***

How sensitive is the options relative to the underlying? ***QuikStrike calculates Delta and this tells you how sensitive the options is to movements in the underlying. This was an at the money options and had a delta of 51% or about half as sensitive as the underlying futures***

If volatility drops from 17.52% to 16.52%...how will this impact premium? ***With QuikStrike, you can find use Vega to measure impact. Vega = 5.02 pts X\$5/pt = \$25.10 drop in premium due to the decline in implied volatility 86.35-5.02 = 81.33***

How does time decay impact this option each day that passes? ***QuikStrike Indicates the Theta (a measure of time decay per day). Theta = 1.16 pts x\$5/pt = 5.8 pts per day will be lost due to time decay (long options =negative time decay)***



## Long Call assuming MESH21 Advances to 4000.00

As an illustration, let's see how this position will behave over time should the trader prove correct in his forecast of new highs and slightly decreasing volatility

Date	S&P500 Level	ATM Implied Volatility	Days to Expiry	MES Options Premium in pts	MES Premium in dollars x5
Feb 9	3906.75	17,52	38	86.35	431.75
Feb 12	3920.50	17.00	35	87.50	437.50
Feb 26	3950.00	16.00	21	82.25	411.25
Mar 12	4000.00	16.10	7	97.06	485.30

\*Theoretical values calculated using QuikStrike

# Using QuikStrike for Options Analysis

## Key points:

- Options require 4-dimensional thinking (as opposed to futures in which only two dimensions matter...up or down)
- With options, you need to monitor the up / down of the underlying and pay attention to time decay each day and the impact of Implied volatility on your position
- Using Options analytics can help harness the multidimensional nature of options

## Using QuikStrike for CL Options Analysis

Before you execute ANY trade with options. You should identify all of the following:

- Maximum loss
- Maximum potential gain
- Implied Volatility of option in terms of high, low, average
- Impact of 1% change in Implied volatility
- Impact of time decay
- Sensitivity of options to underlying future

***Knowing these before you initiate a trade can lead to more optimal results.  
QuikStrike can help determine these variables***

# Using QuikStrike for Micro E-mini Options Analysis—Delta & Gamma

Source: QuikStrike

MICRO S&P 500 (MES)

Spread Builder - MESH1 3900 Call

MESH1

Classic Analyze History Risk Simulate Tools Matrix ER Decay

Position

+/- Option +/- Future

Summary

Paid	Premium	Future	Total P/L	Future:	
85.359	85.359	0.000	0.000	3900.00	-8.50
				DTE:	38.00 -0.66
				ATM:	17.00 -0.38

MESH1 Options

	QTY	STRIKE	TYPE	VOLATILITY			PREMIUM		TOTAL(UNIT * QTY)		
				CURRENT	THEO	SETTLE	UNIT PRICE	PREM	THEO	SETTLE	
	1	3900	Call	17.00	17.61	17.15	85.359	85.359	93.581	80.250	

Greeks

	QTY	STRIKE	TYPE	GREEKS					
				DELTA	GAMMA	VEGA	THETA		
	1	3900	Call	51	0.186	501.741	-1.122		

Theoretical Value (Ticks)

DAYS FORWARD	09 FEB (38.00)	18 FEB (29.00)	28 FEB (19.00)	09 MAR (10.00)
Options	85.359	74.575	60.369	43.800

MICRO S&P 500 (MES)

Spread Builder - MESH1 3900 Call

MESH1

Classic Analyze History Risk Simulate Tools Matrix ER Decay

Position

+/- Option +/- Future

Summary

Paid	Premium	Future	Total P/L	Future:	
90.528	90.528	0.000	0.000	3910.00	1.25
				DTE:	38.00 -0.66
				ATM:	17.00 -0.39

MESH1 Options

	QTY	STRIKE	TYPE	VOLATILITY			PREMIUM		TOTAL(UNIT * QTY)		
				CURRENT	THEO	SETTLE	UNIT PRICE	PREM	THEO	SETTLE	
	1	3900	Call	17.00	17.63	17.15	90.528	90.528	93.835	80.250	

Greeks

	QTY	STRIKE	TYPE	GREEKS					
				DELTA	GAMMA	VEGA	THETA		
	1	3900	Call	53	0.185	501.837	-1.122		

Theoretical Value (Ticks)

DAYS FORWARD	09 FEB (38.00)	18 FEB (29.00)	28 FEB (19.00)	09 MAR (10.00)
Options	90.528	79.744	65.546	49.009





# Using QuikStrike for Micro E-mini Options Analysis—What if Scenarios

Source: QuikStrike

MICRO S&P 500 (MES) ▼

Spread Builder - MESH1 3900 Call

MESH1 ▼ +

Classic Analyze History Risk Simulate Tools Matrix ER Decay

Position

+/- Option ▼ +/- Future ▼

Summary

Paid 90.542	Premium 90.542	Future 0.000	Total P/L 0.000	Future: 3910.00 -1.00 ▼ DTE: 38.00 -0.64 ▼ ATM: 17.00 -0.47 ▼
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MESH1 Options

QTY	STRIKE	TYPE	VOLATILITY			PREMIUM		TOTAL(UNIT * QTY)		
			CURRENT	THEO	SETTLE	UNIT PRICE	PREM	THEO	SETTLE	
✗ 1	3900	Call	17.00	17.72	17.15	90.542	90.542	95.446	80.250	

Greeks

QTY	STRIKE	TYPE	GREEKS			
			DELTA	GAMMA	VEGA	THETA
1	3900	Call	53	0.185	501.837	-1.123

Theoretical Value (Ticks)

MICRO S&P 500 (MES) ▼

Spread Builder - MESH1 3900 Call

MESH1 ▼ +

Classic Analyze History Risk Simulate Tools Matrix ER Decay

Position

+/- Option ▼ +/- Future ▼

Summary

Paid 49.018	Premium 49.018	Future 0.000	Total P/L 0.000	Future: 3825.00 86.00 ▼ DTE: 28.00 10.64 ▼ ATM: 19.00 1.53 ▲
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MESH1 Options

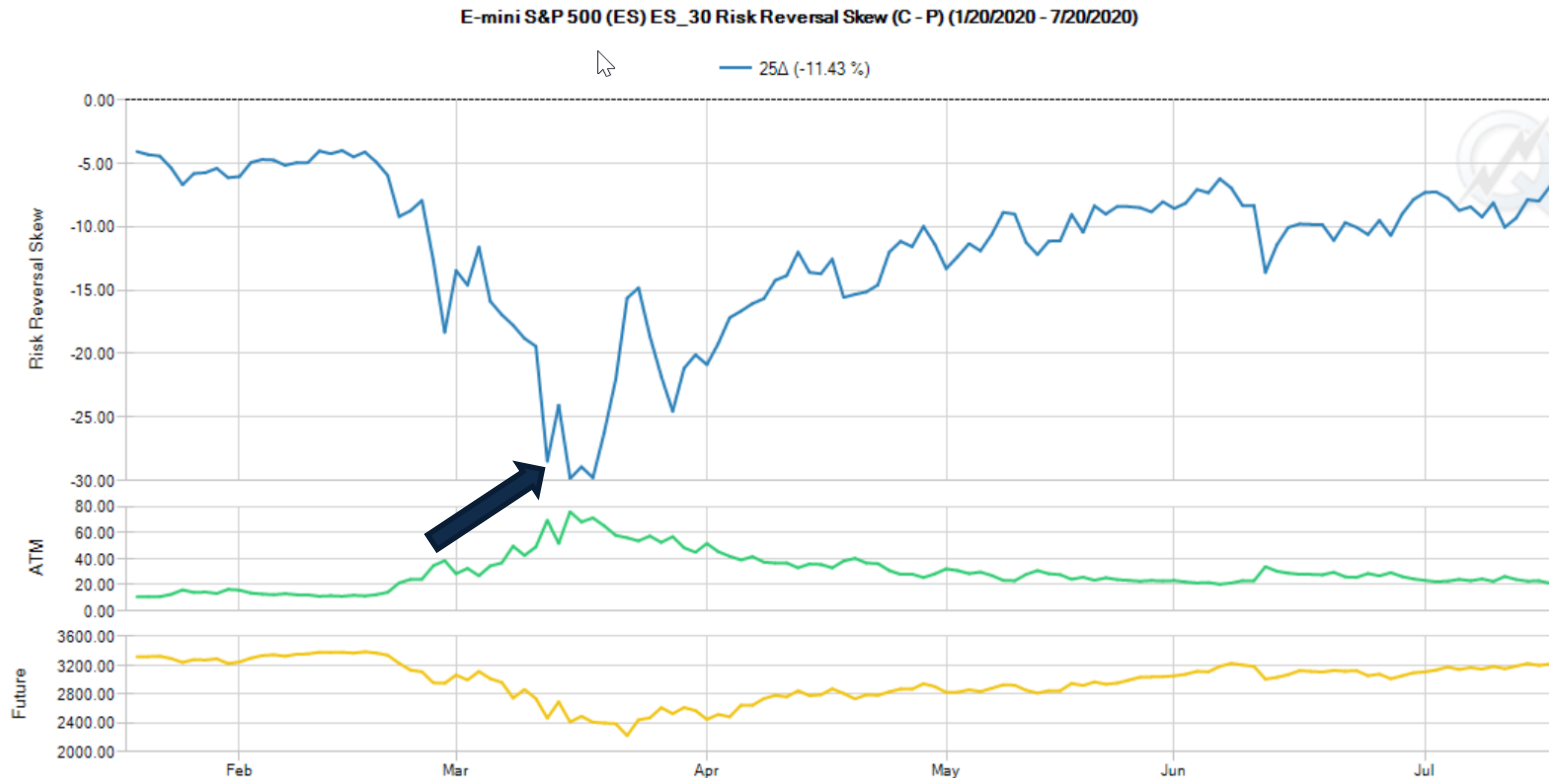
QTY	STRIKE	TYPE	VOLATILITY			PREMIUM		TOTAL(UNIT * QTY)		
			CURRENT	THEO	SETTLE	UNIT PRICE	PREM	THEO	SETTLE	
✗ 1	3900	Call	19.00	17.72	17.15	49.018	49.018	95.441	80.250	

Greeks

QTY	STRIKE	TYPE	GREEKS			
			DELTA	GAMMA	VEGA	THETA
1	3900	Call	37	0.187	398.490	-1.352

Theoretical Value (Ticks)

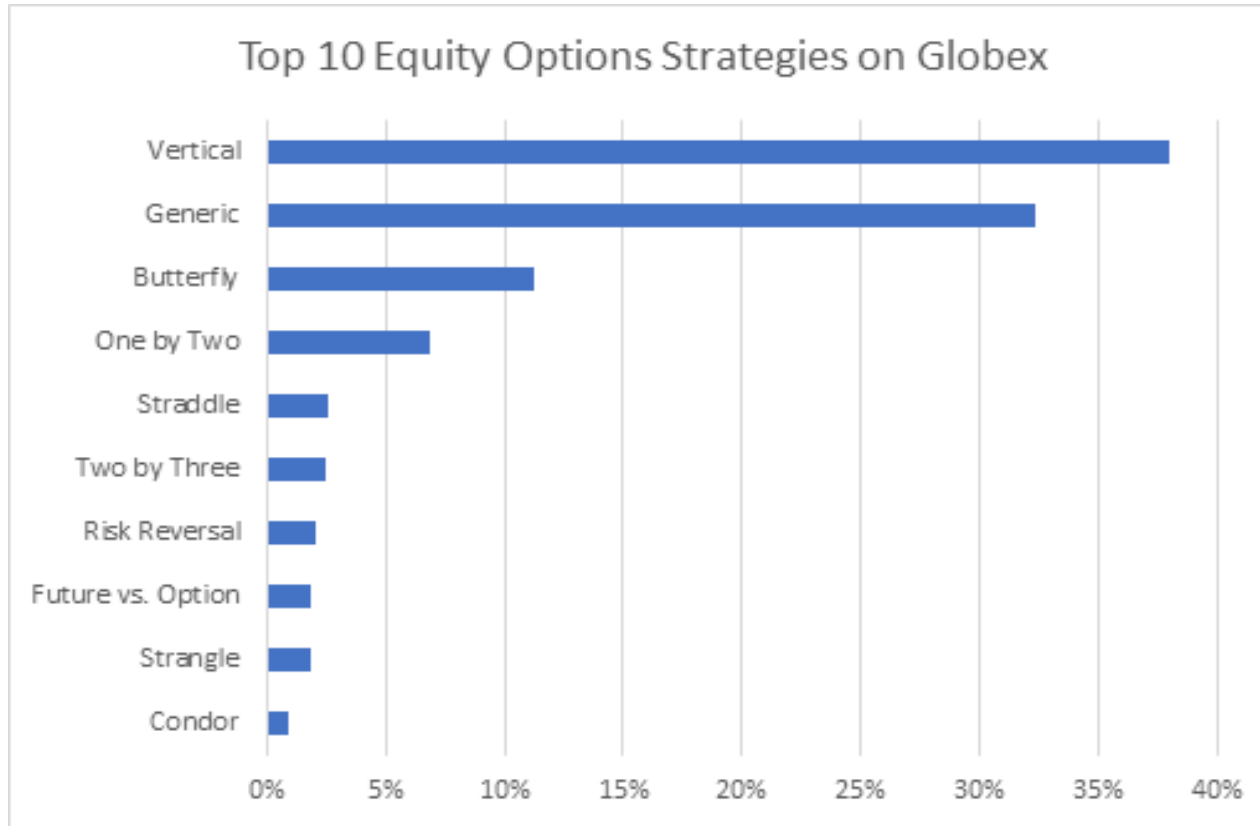
# Volatility Skew YTD ES futures 25 Delta Risk Reversal



Source: QuikStrike



# Top Equity Options Strategies Utilized by Traders



## For Further Information on Micro E-mini Options and Options in General

Options Reading List:

Options as a Strategic Investment by Lawrence McMillian

Options Volatility by Sheldon Natenberg

And visit our website at:

<https://www.cmegroup.com/activetrader/microemini-options/>

# For those new to futures and options on futures:

- Micro E-mini futures and options contracts must be traded from a futures account
- Opening a futures account is not complicated. Many online trading firms allow futures/options trading but doing so requires a separate futures account
- There may be minimum account thresholds and other requirements to trade options on futures and these vary from broker to broker
- Margin with futures is different than margin with stocks/ETFs
- Any strategy that can be done with E-mini options can be done with micro E-mini options...this includes straddles, strangles, verticals...etc.
- Given the “4-dimensional” nature of options, it is imperative that you do your homework

# Equity options on futures resources

Visit [cmegroup.com/equityoptions](https://cmegroup.com/equityoptions) to learn more about our product offering and access free tools and reports

## QuikStrike Options Tools

Identify trends and trade opportunities faster and more decisively, with our suite of powerful analytics, which include:

- Volatility Term Structure
- Open Interest Heat map
- Most Active Strikes
- Weekly Options Snapshot

## • Daily Options Reports

- Get a more granular view of the Equity Index options on futures marketplaces with two reports delivered straight to your inbox each day.
- Daily Trading Recap: view volume, OI, put/call breakdown and more for standard and E-mini S&P 500 options.
- Daily Spread Activity: monitor the volume and diversity of E-mini S&P 500 options spreads.

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## Final Thought...

Source:  
Options-trading-mastery.com

