thinkMoney®/40

Random musings for traders at TD Ameritrade—SUMMER 2018

TOPPY MARKETS AND HEAVY BOTTOMS

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TD Ameritrade

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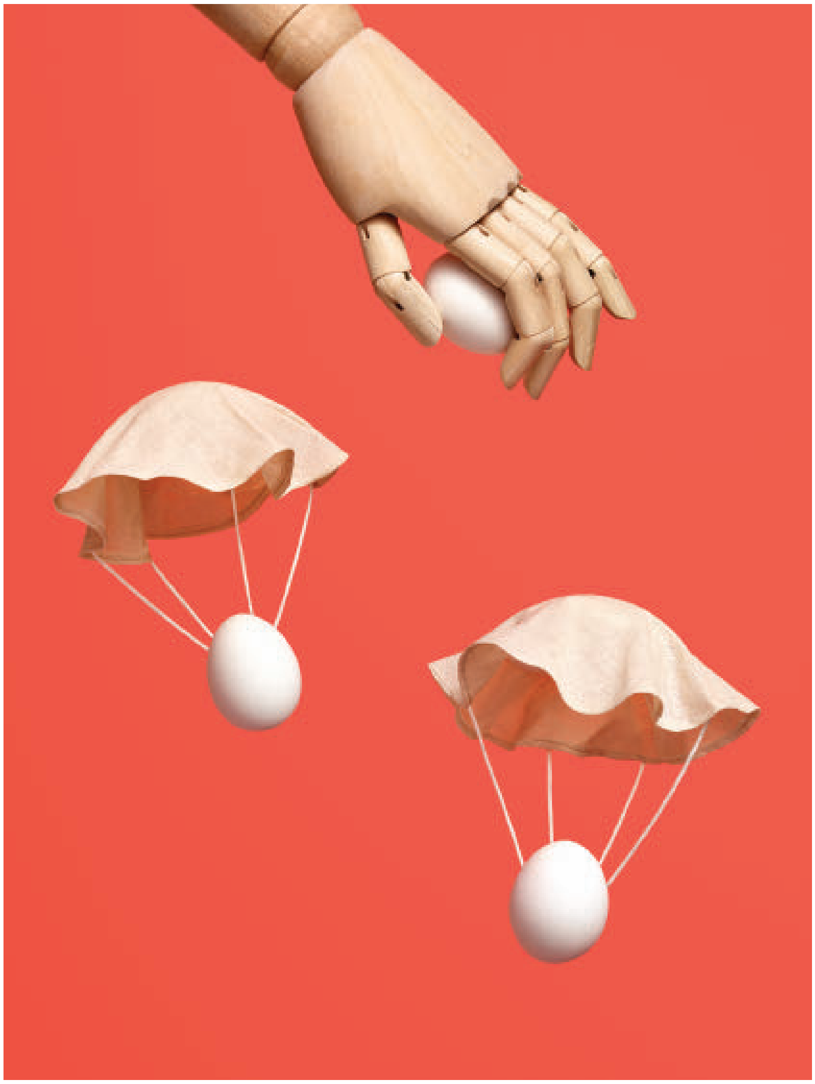

Cover Photograph by
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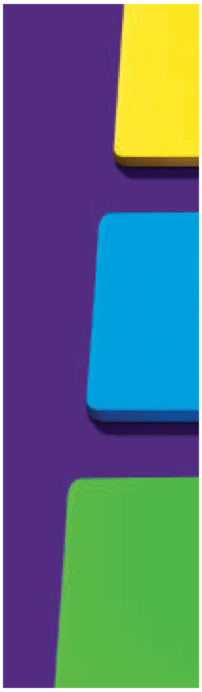

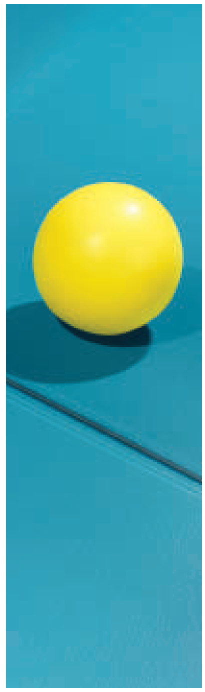

As a qualified trader, you can trade options, stocks, and ETFs, and still hold whatever mutual funds your heart desires in your IRA.

Wanna Trade Your Retirement Account? **Page 24**

MISCELLANEOUS

REGULAR COLUMNS

SKILLS BAROMETER: See a dot. Read or pass. If you've ever been frustrated spending your precious few minutes reading articles that aren't for you, these little color dots at the beginning of each article will help you skip to the stuff that matters most to you.

- EASY
- SEASONED
- PRO

Why Spoil the Party?

• WHEN THE STOCK MARKET blasts higher, nobody wants the fun to end. And the higher it goes, the more exhilarating it becomes. While some pundits will always declare an end is near or here, changing course is a topic of conversation many analysts would rather avoid. But ultimately, no matter how smart we think we are, we don't get to choose what happens next. Fate does.

Whether you're trading stocks, options, futures, or forex, or which direction you choose, your priority is to manage your risks. What matters is you apply strategies that bring you the highest chance of success in any condition—up, down, or sideways.

As an option trader, you have many strategies to choose from. But how do you know which one to use when you're not sure if the markets are too toppy or are ready to bounce back after a slide? In our feature article "Toppy Markets and Heavy Bottoms" on page 16 we look at three strategies you could use that have some upside potential but limit your risks.

Market conditions change and you need new trading ideas. Where do you get them from? The article "Three Steps from Idea to Trade" on page 20 points you to an approach you could incorporate into your daily trading routine. It'll help increase your market awareness, a necessity if you wish to elevate your trader status. A savvy trader isn't going to spoil the party.

Happy trading,
Kevin Lund
Editor-in-Chief, *thinkMoney*

TALK TO US!
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JOIN THE FUN

Send us your best and brightest quips for a chance to get a seat next to the monkey (well, to get your quote in print). **thinkmoney@tdameritrade.com**

Best in Show … (To Our Inbox)

A duck bought a drink at a bar. He said to the bartender, "Put it on my bill." The bartender replied, "You quack me up." **—Ron**

So, I have tinnitus, and when I went to the doctor, I told him that I hear ringing. He said, "Don't answer it." **—Paul**

Sometimes the best trades are the ones I avoid. **—Vic**

The comments from Chat Room Pearls, right, are excerpts from chat rooms, emails, and tweets submitted by TD Ameritrade clients, and are their views and may not reflect those of TD Ameritrade. Testimonials may not be representative of the experience of other clients and are no guarantee of future performance or success. TD Ameritrade reserves the right to modify Love Notes for grammar, consistency, and similar purposes.

Chat Room Pearls …

I want to trade stocks from Mars. Let me complete my dream.
—LEE

CHAT SWIMMER #1
What's a STOP?
CHAT SWIMMER #2
It's a red sign on the road.
CHAT SWIMMER #3
Actually, it's a four-letter word designed to take money from peeps.

Quit crying. You'll wake the baby.
—DAVE

I've gotta get ready for tomorrow's ice storm. Need to bring my camels inside. Camels and ice don't mix.
—STEVE

No electrons were harmed in the sending of this e-mail.
—JAE

CHAT SWIMMER #1
Take a look at the Map of the Market. Very bifurcated.
CHAT SWIMMER #2
I am all for bifurcation. It was on the ballot form.
CHAT SWIMMER #1
Ted Bifurcation for Governor.

I'm (not) from Missouri. You've got to show me.
—BRAN

I have wicked fast reflexes, like a mountain goat on heat.
—ANDREW

CHAT SWIMMER #1
Time to go and glue things together.
CHAT SWIMMER #2
Have fun gluing. I have a hot blue gun that I love.

Sometimes you just have to close your eyes and wait for the next tweet.
—ROBIN

My alert this morning had a car crash sound. That surprised me.
—MAX

The wading pool is starting now for beginners. Click Watch and/or Listen over there.
—JOAN

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Head over to the thinkorswim® Chat Rooms for trading education or to cure boredom. In thinkorswim, at the top left select Support/Chat > Chat Rooms. Then join the party.

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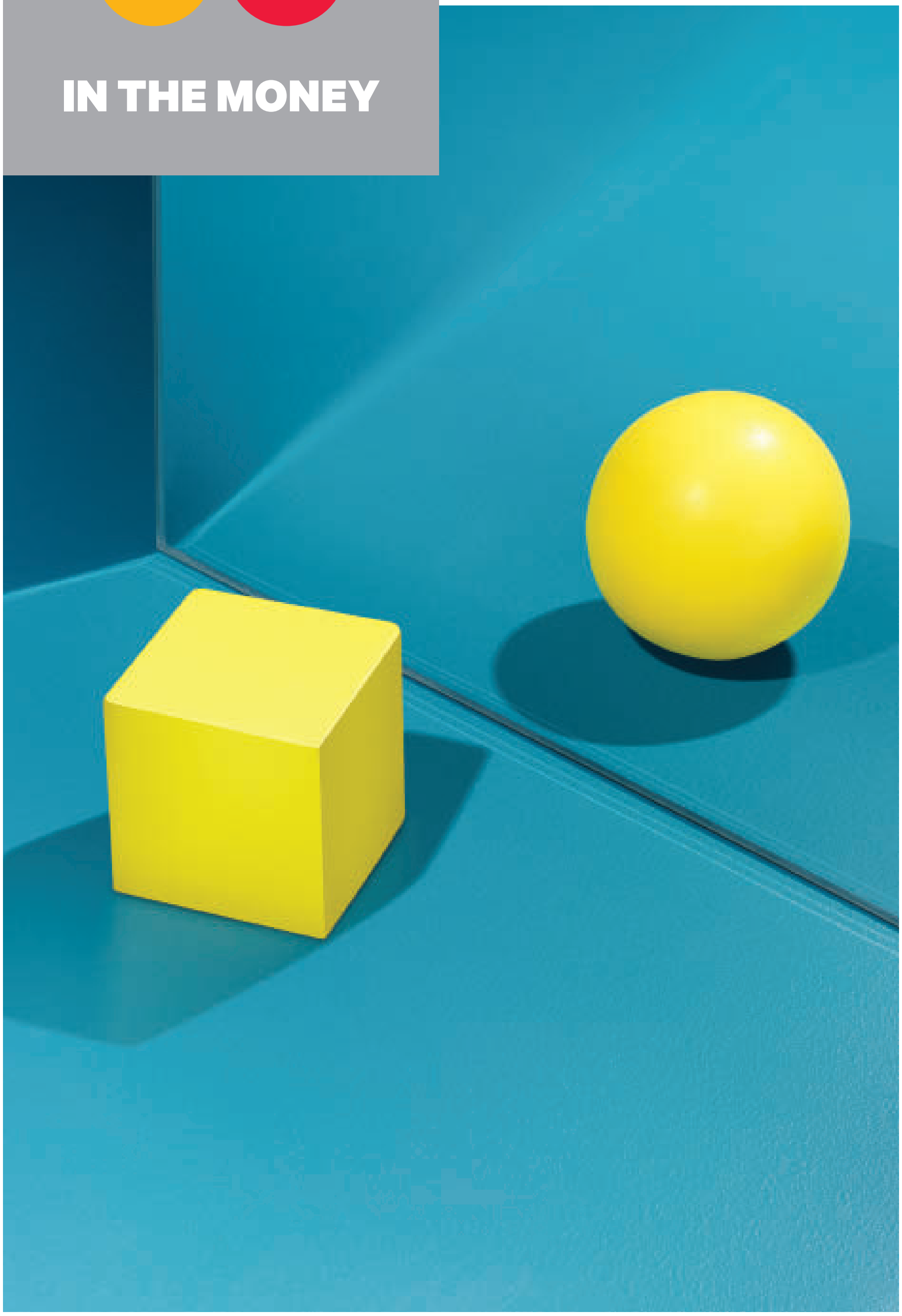


VOL WHISPERER ● PRO

Skew Basics

BIG IDEA: THIS THING CALLED SKEW—WHAT IS IT? WHY DOES IT EXIST? AND HOW CAN YOU INTERPRET IT?

• "HAPPY BIRTHDAY TO SKEW!"—you gifted songwriters can fill in the rest. You have till October, but if you want to start planning now to celebrate the birth of one of our favorite trading concepts, know that the crash of 1987 introduced implied volatility (IV) skew.

Before that, it was assumed options could be priced with a single volatility (vol). So if the SPX was at $300, the theoretical value of the $280 put used the same vol input, say 35%, as the $320 call. On Black Monday, the market dropped more than anyone imagined it might. From that point on, the market valued puts (protection) as being worth a lot more than before.

NO LONGER SINGLE

On October 20, the market was pushing up the prices of out-of-the-money (OTM) puts because people were either hedging against, or speculating on, another big drop. That drove the IVs of those puts higher than equidistant OTM calls. Remember that IV is the volatility input for a theoretical option pricing model that makes the theoretical option value equal to the option's market price. In practice, when the option's market price goes up, all things being equal, the option's IV goes up. When the market price of an option drops, so does its IV.

TRADER GLOSSARY
TURN TO PAGE 36

With vol skew, the IV of that $280 put might be 40%. And the IV of the $320 call might be 30%. The phenomenon of different IVs at different strike prices creates skew. For stocks and equity indices, skew is usually steeper toward the puts, whose IVs are higher than calls because the equity market typically fears a big drop more than it expects a big rally. For physical commodities, the skew can be steeper toward the calls, whose IV is higher than puts because the market fears a big price increase if there's a shortage in that physical commodity.

You can explore volatility skew in two places on the thinkorswim® platform from TD Ameritrade. On the **Trade** page, go to the Option Chain to load up the "Impl Vol" column for the actual IV numbers. Or find the **Product Depth** and set "Value" to "Impl Vol" to get the skew's graphic representation. Notice the shape of the skew looks like a smile.

THE SMILE SAYS IT ALL

Vol skew doesn't predict where a stock or

PHOTOGRAPH: DAN SAELINGER

index might go. Just because the puts have a higher IV, and traders seem worried about a big selloff, doesn't mean the market will drop. But the skew's shape can be more or less steep at different times. And that might tell you if traders are more or less concerned about the magnitude of potential price changes. Are traders anticipating some future news event that could drive prices lower? If so, the skew on puts might get steeper, with consecutively OTM puts having much higher IVs. Or are traders looking for smooth sailing ahead? Then the skew on the puts might get flatter, with consecutively OTM puts having only slightly higher IVs.

In this way, IV can be used to judge overall market sentiment. You may not know what's spooking the market. But if skew steepens, it often means the market fears greater downside risk. When a stock has an upcoming earnings announcement, the IVs of OTM puts and calls can both be higher—making both the call and put skew steep. That suggests the market sees the potential of a big up-or-down move if earnings are better or worse than expected. It's not a perfect system, but you can let the skew tell you what the market may be thinking.

For retail traders, skew modeling may not be the best way to spend your time. You may want to use skew to help select a trading strategy for your market opinion. For example, are you bullish, and the put skew is steep? Then a short OTM put could potentially take advantage of that skew. Are you bullish, but the put skew is flat? Then a long call vertical might take advantage of the skew.

It's never simple. And there's much more to strategy selection than a "skew chat." But this kind of analysis can give you an idea of how to approach IV skew. Now all you have to worry about is finding the perfect group of trader pals to sing the birthday ditty, and what kind of cake skew will most enjoy.

—Words by THOMAS PRESTON

Thomas Preston is not a representative of TD Ameritrade, Inc. The material, views, and opinions expressed in this article are solely those of the author and may not be reflective of those held by TD Ameritrade, Inc.

For more on the risks of trading and trading options, see page 37, #1–2.

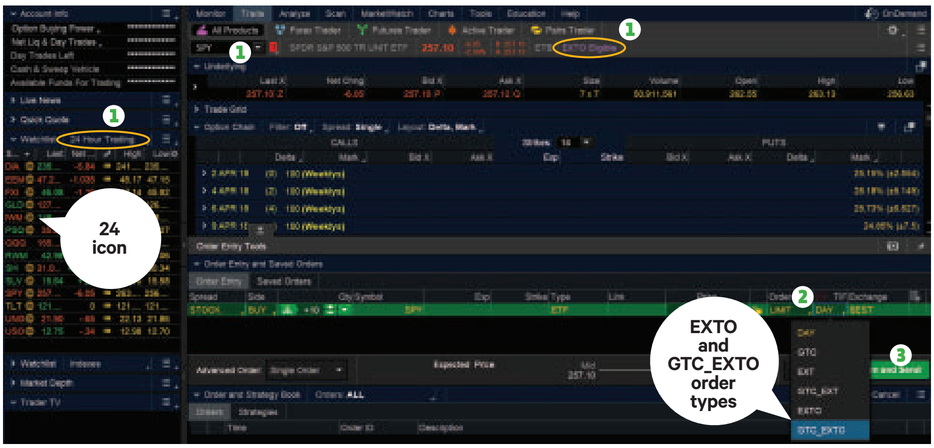
GEAR HEAD EASY

Did You Hear? There's a New Order Type

BIG IDEA: WHO SAID 24-HOUR TRADING IS JUST FOR DERIVATIVES TRADERS? THERE'S A NEW TIME FRAME IN FORCE ON YOUR THINKORSWIM® PLATFORM: 24/5 TRADING.

COOL TOOLS
For the latest release notes check out **tlc.thinkorswim.com.**

• Market-moving news can hit after the markets close and might leave you stumped. What if you're not able to make a trade when the markets open? Good news: you may not need to wait till the open to place your trades. From thinkorswim desktop, thinkorswim Mobile, or Mobile Trader, you could get a head start by trading some exchange-traded funds (ETFs) during overnight hours using limit orders. There are a dozen ETFs to choose from. Over time, even more ETFs will become available for 24/5 trading (Sunday 8 p.m. ET to Friday 8 p.m. ET, excluding market holidays). When placing an extended-hours overnight trade, you may only place unconditional limit orders to buy or sell. Additionally, you may only take the long side of the trade (no short selling). There may be greater liquidity risk for orders placed during this time period as outlined in the **Extended-Hours Trading Session Rules** at https://www.tdameritrade.com/retail-en_us/resources/pdf/AMTD183.pdf



Source: thinkorswim® by TD Ameritrade. For illustrative purposes only.

WHICH ETFS CAN YOU TRADE, AND WHAT ORDER TYPE DO YOU USE?

1 – When you load a symbol on the Trade tab, if the ETF is eligible for 24/5 trading, a purple "EXTO Eligible" appears next to the symbol. There's also a prebuilt 24 Hour Trading watchlist that you'll find under Public watchlist (% - F) that displays all eligible symbols. You'll see a 24 icon next to the symbols.

2 – Once you've decided what you may want to trade, open the order menu. You'll see two options on the dropdown list: extended trading overnight (EXTO) and good 'til canceled EXTO (GTC_EXTO).

3 – Review, confirm, and send your order as you would with any other symbol.

Ask the Geek

BIG IDEA: A LITTLE Q&A WITH **JOHN HART,** START-UP STUDIO HEAD, TD AMERITRADE

• Hey there! Noticed the new color scheme on thinkorswim®. What's the thinking behind that?
To look at a variety of colors instead of the same color scheme all the time may be a relief for the eyes. Plus, having a unique color scheme on your screen grabs may catch the attention of your social media followers. Almost any color on your thinkorswim platform can be customized. Here's how you do it. On your platform, click on Setup, in the top-right hand corner, then Application Settings, then Look and feel, and finally, Color scheme. You then either select any of the standard schemes or customize one based on one of the schemes to create something unique. You can create schemes to match the seasons, your favorite sports teams, or your favorite color. And if you're color blind, you can tweak the colors on the quotes to see them better. And our Chinese users should be happy since they have the option to select red for upticks and green for downticks. Have some fun exploring all the different things you can do with the way your screen looks.

> **"Have some fun exploring all the different things you can do with the way your screen looks."**
> —JOHN HART
> @JOHNHART_TDA

Any other cool tools you've added to thinkorswim?
Yes, we've added alerts on analyst reports. With this feature you can be alerted to any change in an analyst's report on a company you're following. From the Analyze tab, select Fundamentals and then enter a symbol. Click on the bell icon that's next to a report. That'll bring up a window where you can set your alerts. You can choose which companies or watchlists you'd like the alert for and also select the rating provider. You can also choose how often you want to be notified.

Is it true that we can access the thinkorswim learning center from the thinkorswim platform?
Yes, just head over to the Education tab on your platform and get access to all our learning tools and resources. There are videos, reference materials, release notes, and FAQs.

TOYS FOR TRADERS
FROM THINKORSWIM®

INTRADAY IMPLIED VOLATILITY
Implied volatility data is now available on intraday charts for optionable symbols. Add the "ImpVolatility" study to your chart and it'll work by default on all intraday aggregations. And if you've created chart studies with thinkScript using the "imp_volatility()" function, it'll automatically be applied to intraday charts.

BREAKOUT SIGNALS
Some traders live by breakout signals. From the Customization window of your study, you can now enable breakout signals for the following studies: MovAvgExponential, SimpleMovingAvg, CCI, Momentum, MACD, MACD Histogram, RSI, StochRSI, Stochastic Slow, Stochastic Fast, and Stochastic Full. Plus, there are two new studies that use the same concept: StochasticFullDiff and MomentumPercentDiff.

FUNDAMENTAL SCANNING
Fundamental filters are now available for the Stock and Options Hacker scanning tools. From the Scan tab, choose either Stock Hacker or Options Hacker. Then click on the "Add fundamental filter" button. Start with the first dropdown menu and select the filter you'd like to use, then move on to the second dropdown, and so on. Once you've selected all your fundamental filters, click on the Scan button and view the results.

CAPICHE? ● SEASONED

Open Interest, Max-Pain Theory, and Pinning

BIG IDEA: YOU MAY HAVE HEARD THESE THREE PHRASES. BUT WHAT DO THEY HAVE TO DO WITH EACH OTHER? LET'S TAKE A CLOSER LOOK.

COOL TOOLS: To display open interest on your charts, head to **https://bit.ly/2LWBZqE**

• ON THE TRADING FLOOR, you didn't need to think much about an option's open interest. Market makers are ready to buy when you want to sell, and sell when you want to buy. And while that was going on, somebody at the exchange was busy calculating the open interest.

WHAT INTEREST?

Open interest represents the total number of open option contracts traders have in their accounts. For example, if you buy one XYZ $50 call, and a market maker sells you that call, the open interest in that call is one (assuming no one else has yet traded the call). If you buy another XYZ $50 call, and the market maker sells it to you, the open interest on that call rises to two. If you sell one of those XYZ $50 calls back to the market maker, the open interest on the call drops to one. And should you sell the other XYZ $50 call, its open interest drops to zero. But with thousands of options traded, open interest gets a bit harder to calculate. That's why the exchanges do it, not veteran floor traders.

PRICE PINNING

Market makers noticed that sometimes on expiration Friday, a stock's price gets pulled toward the option strike with the highest open interest. Drawn like a magnet. It could even "pin" there—the term used when a stock price settles at, or very close to, a strike price at expiration. Of course, a stock can also pin at a strike price by random chance. With so many stocks' options having one-point strike intervals, it's not unusual to see a stock's price pin. But when you see the same stock do it expiration after expiration, you begin to wonder what might be behind it.

OH, THE PAIN ...

Enter "max pain theory," which states that a stock price will move toward an option's strike price with the highest open interest at expiration. Why max pain? Most retail investors buy options. If the stock price closes exactly at an option's strike price at expiration, the option will be worthless. Max pain assumes the option with the highest open interest has the highest number of investors who are long that option, and who will lose the most amount of money (experience the max amount of pain) if the stock settles at that strike price at expiration.

Remember, max pain is a theory that stems from the idea that many professional traders are short the options that retail investors are long.

Stocks may show this pinning/max pain action for a while, then stop. It's not consistent, so it's hard to base a trading strategy around it.

Open interest can be best used as a proxy for liquidity, or for analyzing how efficient it is to execute trades. Combined with high volume, high open interest means a lot of people are trading that option. And that means you may try to enter a limit order in between the posted bid and ask price to try to get a better fill. Over time, getting better fill prices can mean lower execution costs, which is a good thing in any stock or option.

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For more on the risks of trading and trading options, see page 37, #1–2. Past performance of a security, strategy, or index is no guarantee of future results or investment success.

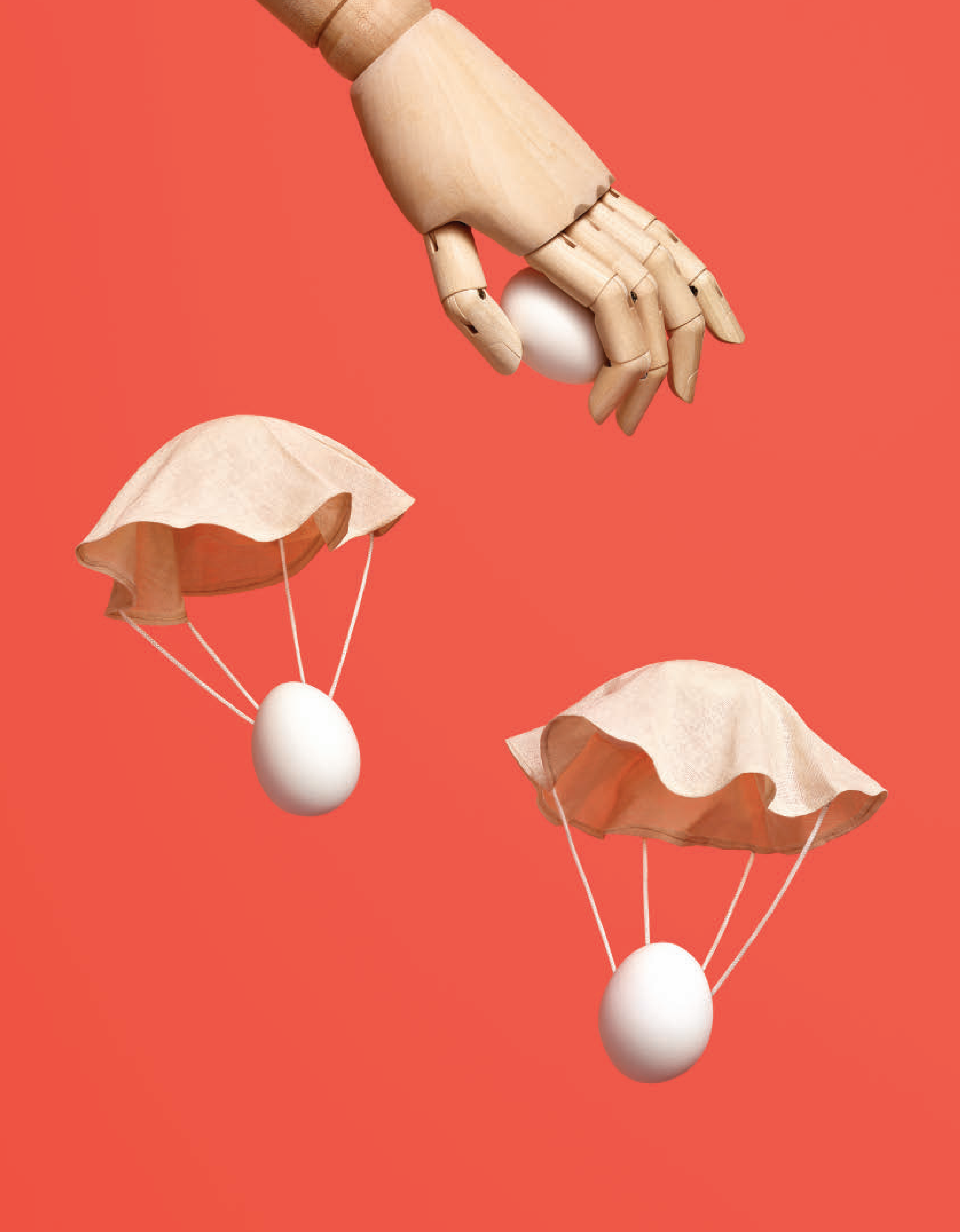
TOPPY MARKETS AND HEAVY BOTTOMS

SEASONED/ **TAKE AWAY:** *These strategies provide upside with limited risk.*

THREE BULLISH STRATEGIES FOR UNDER $1,000

BIG IDEA: THERE'S NO NEED TO BREAK THE BANK BY BUYING STOCKS AT ANY PRICE. CONSIDER THESE CHOICES WHEN YOU'RE FACING A TOPPY MARKET OR WHEN MARKETS ARE SCARED.

WORDS BY **KEVIN LUND**
PHOTOGRAPHS BY DAN SAELINGER



CALLS Delta	Mark	Bid	Ask	Exp	Strike
16 FEB 18 (35) 100					
.93	32.350	32.10	32.60	16 FEB 18	145
.92	27.475	27.25	27.70	16 FEB 18	150
.91	22.625	22.45	22.80	16 FEB 18	155
.87	17.925	17.75	18.10	16 FEB 18	160
.81	13.525	13.35	13.70	16 FEB 18	165
.71	9.400	9.3	9.50	16 FEB 18	170
.57	6.12	6.0	6.20	16 FEB 18	175
.42	3.650	3.60	3.70	16 FEB 18	180
.27	2.040	2.01	2.07	16 FEB 18	185
.17	1.090	1.07	1.11	16 FEB 18	190
.10	.590	.57	.61	16 FEB 18	195
.06	.340	.33	.35	16 FEB 18	200
.04	.210	.20	.22	16 FEB 18	205

FIGURE 1: Long call vertical spread. From the Trade tab on thinkorswim, enter a symbol and look at the option chain. *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

Rising markets tend to keep rising—until they don't. It can be tough and stressful, riding a rally that seems like it's floating on air. Extended rallies can also feel like you've climbed to the highest branches of a tree—there's a thrill factor baked in, but psychologically, it feels safer when you're closer to the ground and there are a few thick branches around to break a fall. But lacking "safe" ways to trade isn't the only problem with toppy market bulls.

Timing a falling market can make contrarians salivate for a bounce. Instead of indiscriminately buying stocks at any price, consider smarter strategies that might offer some upside potential for less than $1,000.

TRADER GLOSSARY
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Let's look at a few bullish choices for a toppy market, or for jumping in and buying when markets are scared. In general, these strategies feature defined risk and relatively low capital requirements:

- Long call vertical spread
- Short put vertical spread
- Call ratio backspread

1 Long Call Vertical Spread

The long call vertical spread might work for you if you're moderately bullish. You can create this spread by buying a call option and simultaneously selling another call with a higher strike price, using options in the same expiration period. For example, say the underlying is trading at $177. If you bought the $185 call for $2.07 (Figure 1), and sold the $190 call for $1.07, you'd have a long $185–$190 call spread for a debit of $1, plus transaction costs.

Because call option prices typically go up in value when the underlying security goes up, at first it might sound counterintuitive to be selling the $190 call as part of your strategy. But the lower-strike call has a larger delta than the higher-strike call. So overall, the long call spread nets out with positive deltas. So if the underlying security moves higher, the net value of the spread increases, too, all things being equal.

Selling the higher-strike call also limits the maximum potential value of the spread to the difference between the strikes. In order for the spread to max out, both strikes have to be in the money (ITM) at expiration. In our example, buying a $5-wide spread for $1 leaves a maximum potential profit of $4. Yet, note that even if the spread doesn't move ITM, there's still opportunity for the trade to profit as long as the underlying continues to move higher. If the spread moves to $2, for instance, you've potentially doubled your money.

If the market doesn't move higher, the value of the spread will drop thanks to daily time decay. Eventually, if the spread remains out of the money (OTM) through expiration, it becomes completely worthless. But with defined-risk trades such as this, the most you'd lose would be the amount you invested, including the transaction costs. And don't forget, you can always seek to close the trade before expiration to stave off the possibility of a full loss.

2 Short Put Vertical Spread

Trades placed as OTM strategies offer a higher probability of success than long call vertical spreads, and you don't necessarily have to be all-out bullish. This trade could work if the market goes up, if it muddles sideways, and potentially if it drops, depending on how far OTM the trade is placed. But unlike the first strategy, this vertical spread risks more than what can be made.

The short put vertical spread consists of a short put along with a long put that's further OTM—again, with both options being in the same expiration period. Because the option you're selling is closer to the money, and therefore more expensive than the option you're buying, you collect a credit. And this credit is the maximum potential reward you'd keep if the spread remains OTM through expiration.

Using the same option chain as in Figure 1, you could sell the $165 put for $1.41 and buy the $160 put for $0.86 (Figure 2). You'd then be short the $165–$160 put vertical spread for a credit of $0.55, less transaction costs. As long as the stock stays higher than your short strike at $165 through expiration, you're good to go. Both the options would expire OTM and worthless, and you'd keep the $0.55 credit as profit.

On the other hand, if the stock drops below $165 prior to or at expiration, then the trade could start to gain value. The trade would hit its breakeven price with the stock at $164.45 ($0.55 below the $165 strike), and your spread would hit the maximum loss if the stock drops to $160 or below. At that point the vertical spread you sold for $0.55 would now be worth its maximum value of $5, handing you a loss of $4.45. While this outcome may be unlikely, be prepared. Of course, you can always attempt to close your trade prior to expiration if the market isn't moving as you expected.

PUTS

Strike	Bid	Ask	Delta	Mark
				25.86% (±11.397)
145	.19	.21	-.03	.200
150	.30	.32	-.04	.310
155	.48	.50	-.07	.490
160	.82	.86	-.11	.840
165	1.41	1.49	-.18	1.450
170	2.50	2.58	-.29	2.540
175	4.25	4.35	-.43	4.300
180	6.85	7.00	-.58	6.925
185	10.25	10.50	-.72	10.375
190	14.30	14.60	-.82	14.450
195	18.80	19.20	-.87	19.000
200	23.40	24.05	-.91	23.725
205	28.25	29.05	-.93	28.650
210	33.20	33.90	-.94	33.550

FIGURE 2: Short put vertical spread. **From the Trade tab, enter a symbol and view the option chain of the puts.** *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

Call Ratio Backspread

B Experiment with this strategy if you think the market is moving significantly higher or pulling back considerably—none of this "in-between" stuff, because a move that's only moderately higher could be a problem closer to expiration. That's why many traders engage the call ratio backspread strategy with options further out in time, say, 90 days or longer.

This approach consists of a short OTM call that's closer to the money and has twice as many long calls at a higher strike. The idea is to create a trade whose entry price is preferably a credit. But the trade can also be placed for "even money" or a small debit. In short, if the market drops, there's no harm, because all the options expire worthless. And if the market rips higher, the profit from the two long calls outpaces the loss of the short call.

As an example (Figure 3), say the underlying is trading at $179. You could sell the $185 call for $4.50 and buy two 195 calls for $2.19 each, or $4.38. With these prices, the net cost comes to a credit of $0.12 ($4.50–$5.05), plus transaction costs. But the risk of the trade is the difference between the strikes, less the entry credit (or, plus the entry debit). In this case, it'd be $9.88.

Where's the risk? If the stock runs through the short strike of $185, but stops at the long strike of $195, the short $185 call loses $10 without the $195 calls pitching in any help. Knocking off the entry credit of $0.12 leaves you with the maximum loss of $9.88 if the stock sits at $195 at expiration. When trading this strategy, some opt to look at options further out in time and close the trade perhaps 30 days before expiration if the stock is anywhere near either strike.

Option Chain Filter: Off Spread: Single Layout: Delta, Mark

CALLS — Strikes: 14

20 APR 18 (94) 100

Delta	Mark	Bid	Ask	Exp	Strike
.93	32.250	32.00	32.50	20 APR 18	145
.90	27.625	27.40	27.85	20 APR 18	150
.86	23.200	23.00	23.40	20 APR 18	155
.81	[illegible]	18.75	19.20	20 APR 18	160
.73	[illegible]	15.05	15.35	[illegible]	165
.65	[illegible]	11.65	11.90	[illegible]	170
.55	[illegible]	8.75	8.95	[illegible]	175
.46	[illegible]	6.40	6.50	[illegible]	180
.36	4.550	4.50	4.60	[illegible]	185
.27	3.125	3.05	3.20	[illegible]	190
.20	2.125	2.06	2.19	20 APR 18	195
.15	1.415	1.38	1.45	20 APR 18	200
.11	.975	.93	1.02	20 APR 18	205
.08	.675	.64	.71	20 APR 18	210

FIGURE 3: Call ratio backspread. **From the option chain on your thinkorswim platform, consider calls that are further out in expiration.** *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

With plenty of time left until expiration, if the stock moves high enough, the profits from the two long options can start to outpace the losses from the one short option. So, even though the $195 call will have a smaller delta compared to the $185 call, because there are two of them, the trade's net delta could be positive. From another angle, the losses from the $185 call are offset by the $195 call, except for the $10 difference between the two. That leaves the second $195 call free to profit without a cap.

Likewise, if the underlying stock moves lower, and the spread moves further OTM, then all the option prices move toward zero. Because you initiated the trade for a credit, if the options expire worthless, you'd actually make a little profit, less transaction costs, despite being wrong on the direction of the stock.

EACH OF THESE UNIQUE STRATEGIES has defined risk and relatively small capital requirements. But they also offer a chance for profit and greater flexibility depending on your perception of a rally or a bounce. Keep your head when markets can't make up their minds—or when the tantalizing branches at the tops of majestic sequoias call to you.

Kevin Lund is not a representative of TD Ameritrade, Inc. The material, views, and opinions expressed in this article are solely those of the author and may not be reflective of those held by TD Ameritrade, Inc. For more on the risks of trading and trading options, see page 37, #1–2.

EASY / **TAKE AWAY:** *Develop and follow a routine to discover new trading ideas. Then, convert those ideas into real trades.*

THREE STEPS FROM IDEA TO TRADE

PHOTOGRAPHS BY DAN SAELINGER

WORDS BY **JAYANTHI GOPALAKRISHNAN**

BIG IDEA: EACH DAY THE MARKETS OFFER A NEW AND UNIQUE RHYTHM ALL THEIR OWN. HOW DO YOU NAVIGATE THROUGH THE UPS AND DOWNS, SIGNALS AND NOISE? YOUR TRADING PLATFORM HAS THE TOOLS YOU NEED TO FIND, ANALYZE, AND PLACE TRADES. ARE YOU USING THEM?


1
3

IT might be scary or glorious, but technology seems to have no limits. It won't be long before your voice-activated personal assistants become part of the family. Some morning you may hear a cheery voice awaken you with: "Good morning! Your entry parameters have been met. Would you like to place a butterfly on the /ES?"

But for now, the only voice in the room is yours. And as a self-directed trader, trading days can feel a tad lonely and long. Fortunately, technology also brings lots of choices if you're on the hunt for fresh ideas and like-minded traders. For example, the chat rooms on your thinkorswim® platform from TD Ameritrade offer Swim Lessons, Trader Lounge, and thinkScript Lounge. They're all great places to hang out and brainstorm on platform tools. And have you seen the Trader TV gadget? Besides an array of CNBC channels (CNBC U.S., CNBC Europe, CNBC Asia, Futures Now), Trader TV lets you access TD Ameritrade Network—a streaming video content platform with a little something for everyone, plus a particular focus on options.

FIGURE 1: Streaming content. From the Trader TV gadget on your thinkorswim platform, select your network. *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

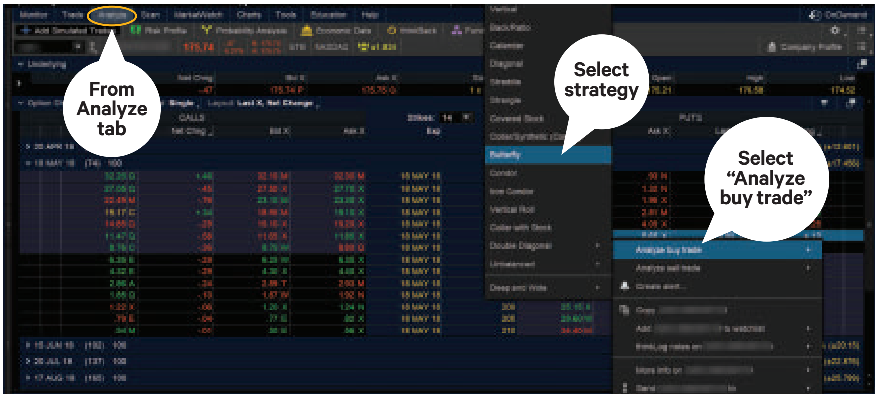

FIGURE 2: Analyze your trades. From the Analyze tab on your thinkorswim platform, select the strikes, then select the type of trade you'd like to analyze. *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

MARKET WATCHIN'

You encounter vast amounts of data every trading day. So what lives and what dies? What's useful and what's noise? Traders often plan the coming week on Sunday night, and you can, too, making technology a friend. Check out the calendar in the **MarketWatch** tab on your thinkorswim platform to scan for important upcoming events. Maybe it's the middle of earnings season, four of the biggest market movers are releasing numbers, the Fed is about to release jobs numbers, and you're concerned the U.S. dollar will continue to slide. Can this chaos be structured? Sure. First, consider the total weekly picture. Then focus on each trading day. Let's do it together.

1 MAKE A PLAN

The night before the markets open, fire up your thinkorswim platform. Tune in to the Asian and European CNBC news channels for a glimpse of overseas market action before the U.S. markets open. Usually this'll be a continued narrative from U.S. markets the previous trading day, but there may have been a major news event after the close. Expect to get first clues from the futures market, which starts the night before and grows more active about an hour before the U.S. market opens.

To get a sense of the futures market, on your live trading account, add the **Trader TV gadget** on the left sidebar, then select TD Ameritrade Network (Figure 1). (Hint: You can also access the show from www.tdameritradenetwork.com.) You'll find a morning Futures show in which Chicago-based expert Ben Lichtenstein covers premarket news and commentary. It's a show "for traders by traders," and you'll find a mix of live interviews, industry professionals, and a snapshot of the overall market pulse. Hear something you like? Jot it down.

Let's say GVRC, a big market mover, is announcing earnings after the close. Although the street expects positive numbers, the Futures show suggests a more bearish market sentiment. Typically, a stock's implied volatility (IV) may rise due to uncertainty before earnings are released.

In this case, what trading strategies could you apply to GVRC ahead of earnings? You'll likely hear about GVRC in the Futures show, and in the show that follows, Morning Trade Live. Maybe you'll pick up a strategy you could apply to GVRC, like butterfly spreads. Just remember the shows do not provide individualized trading advice, so you'll want

TRADER TV

What do you get?

CNBC streaming content
Choose from CNBC U.S., CNBC Europe, CNBC Asia, or Futures Now. Covers international business news and updates from the global financial market.

TD Ameritrade Network
Streaming video platform with trading-oriented content aired from 8 a.m. to 5 p.m. Eastern time. A one-stop course for news, education, and commentary.

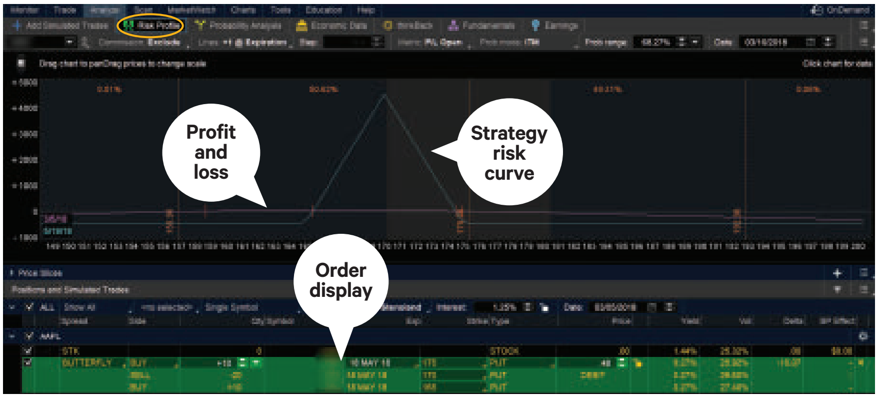

FIGURE 3: How does the risk profile look? **The risk curve of a butterfly resembles a witch's hat with the peak of the hat at max profit. But probability of that happening isn't high.** *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

FIGURE 4: Order confirmation. **Still like what you see? Are you comfortable with the risk-reward ratio? If not, you can go back to square one and analyze different strategies.** *Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.*

to be sure butterfly spreads are the right choice for you before placing any trades.

2 ANALYZE TRADES

Continuing our pretend TV watching, since GVRC is announcing earnings after the close, perhaps you'll decide to watch Swim Lessons. The hosts may walk you through examples of different butterfly strategies you could apply to GVRC: bullish, bearish, or neutral. (Feel free to do further butterfly research through the show's archives.) You can also follow along with the hosts by trying out new strategies using your paperMoney® account.

TRADER GLOSSARY
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Head over to the **Analyze** tab on the thinkorswim platform, choose the strike you want to trade, right-click, select "Analyze buy trade," then select "Butterfly" from the dropdown menu (Figure 2). The order will be displayed in the Positions and Simulated Trades window. Next, check out the trade's risk profile. You'll see a risk curve that looks like a witch's hat (Figure 3). The purple line is your profit and loss, and the cyan line is your strategy's risk curve. Consider the probability of a price hitting a certain level, the max profit potential, max loss, break-even point, time decay, assignment risk, and expiration risk. Each strategy delivers different data. In the case of a butterfly, the cost is lower, but so is the probability of profit. But at least the risk is defined.

And don't overlook the greeks, especially theta, as options get closer to expiration. Remember that in a butterfly, all four positions have the same expiration. So you may not see profits until a trade is close to expiration.

3 MAKE A TRADE?

Let's assume you've moved beyond the paper phase because you're prepared to take on the risks of the strategy. You like your chances on the GVRC butterfly. You've crunched the numbers to identify the trade's cost, determined your max profit potential, and analyzed the risk.

Now you can place the trade directly from the **Analyze** tab or the **Trade** tab. Select the strikes, then hit the Confirm and Send button. You'll see an Order Confirmation Dialog window (Figure 4) that gives you one more chance to study the trade before sending the order. You'll see breakeven price levels, max profit, max loss, cost of trade (including commissions), and your buying power effect. Still look good? Hit "Send" and wait for the order to be filled. If you have a change of heart, go back to the drawing board. You might want to play around with different strikes or different strategies like straddles, iron condors, or something a bit less complex like vertical spreads—assuming you have studied the risks associated with each and are prepared for them.

Hungry for even more? You can always keep one ear on the TD Ameritrade Network, which broadcasts beyond the market's close. Tune into Swim Lessons, or Market on Close, which offers insight on announcements past the bell.

PERSONAL TRADING ASSISTANTS ARE still a thing of the future. In the meantime, the digital age brings you real human voices—veteran analysts who are passionate about trading and can help make the journey stimulating and fun.

Jayanthi Gopalakrishnan is not a representative of TD Ameritrade, Inc. The material, views, and opinions expressed in this article are solely those of the author and may not be reflective of those held by TD Ameritrade, Inc.

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SEASONED / **TAKE AWAY:** *Yes, you may be able to trade stocks, options, and ETFs in your IRA.*

WANNA TRADE YOUR RETIREMENT ACCOUNT?

BIG IDEA: YOU'VE TOSSED A FEW THOUSAND BUCKS INTO YOUR IRA. NOW WHAT? YOU DON'T HAVE TO BE STUCK WITH MUTUAL FUNDS, AND NEITHER DO YOU HAVE TO FOLLOW THE "SIT AND WATCH" APPROACH. SURE, THERE ARE SOME LIMITATIONS, BUT HERE ARE THREE WAYS TO TRADE YOUR RETIREMENT ACCOUNT.

WORDS BY **THOMAS PRESTON**
PHOTOGRAPHS BY **DAN SAELINGER**

YOU'RE CHILLIN'

in the heat of summer, "Julying" by the beach, or maybe just cranking the AC and taking a nap. You'd think an individual retirement account—your good old IRA—is the investing analogy to your dog days. Kind of slow. Kind of lazy. But just like getting off the beach blanket and sticking your toe into a relatively cold ocean, a qualified trader can perk up her retirement investing inside a TD Ameritrade retirement account. Taking the plunge has a few limitations. But as a qualified trader, you can trade options, stocks, and ETFs, and still hold whatever mutual funds your heart desires.

WHY DO THIS?

Flexibility. Long mutual funds usually found in IRAs are typically 100% long stock or bonds. You're in or you're out. But if you want to broaden your portfolio with different strategies to potentially increase returns and/or reduce risk in an IRA, read on.

TRADER GLOSSARY
TURN TO PAGE 36

For starters, the ground rules. Retirement accounts have certain restrictions. Let's look at a few things you can't trade.

First, unlike in a margin account (where you can buy more stock than you have cash), you can't borrow money in an IRA to buy stock. With a margin account, when you buy more stock than you have cash for, your cash balance goes negative and you're borrowing on margin. In an IRA, this is verboten because you can't use IRA assets as collateral for a loan.

Second, you can't be short stock in an IRA for basically the same reason. When you short stock, you are technically borrowing the stock you don't actually own and then selling it. But you can't use an IRA as collateral against borrowed stock.

Third, in an IRA you can't be naked short calls, because a short call has potentially unlimited risk. What qualifies as a naked short call? Any short call that doesn't have 100 shares of long stock against it, or another long option in the same, or further, expiration. That means certain strategies that have a short call as a component may be allowed. For example, you can sell a call against 100 shares of long stock as a covered call. That reduces the stock's breakeven and its potential profit, just as a covered call does in a margin account.

Don't get hung up on the restrictions. There are still lots of strategies you can explore in an IRA. And the nice thing about trading in your TD Ameritrade IRA is that the risk management software will reject any trade that would violate the rules. That means you can stay focused on what's possible.

YOU HAVE CHOICES

Let's look at three IRA scenarios for trading options. It's not an exhaustive list, but if you're a qualified trader, the following ideas can get you thinking about how to use options to express your market bias while still following the rules.

1. Stock replacement with a covered call

Covered calls can be considered a standby strategy for long-term bulls in an IRA who want to reduce the breakeven point of their long stock (Figure 1). You buy the stock for cash and sell a call against it. Simple. But what if the cost of 100 shares is more than the cash in your account? You can't sell a call against less than 100 shares. Do you have to abandon the stock? Not with options.

Instead of buying stock shares, you could buy an in-the-money (ITM) long-term equity anticipation securities (LEAPS) call. LEAPS have expirations up to three years in the future. Now, long stock never expires. But a year out in the future, for example, may be enough time for the LEAPS strategy to work. A long ITM LEAPS call that has a delta close to 100 will approximate the risk profile of long stock but may have a smaller price.

For example, if a stock's price is $150, buying 100 shares would cost $15,000. Maybe that's too much for your IRA. But let's say a LEAPS call at the $120 strike is $35. That would only cost $3,500. So the LEAPS option also has a lower max risk than the long stock. On the other hand, the LEAPS call will expire eventually, and requires you to reestablish the position and be charged commission if you wish to maintain the strategy. An options position also requires more active monitoring than stock.

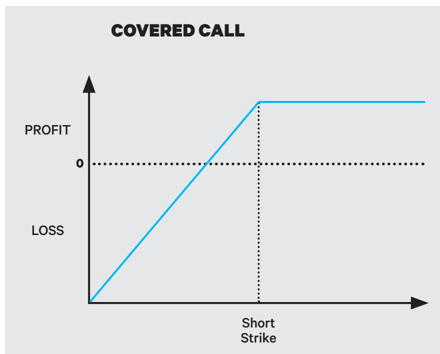

FIGURE 1: Covered call. *For illustrative purposes only.*

Just like selling a call against long stock, you can sell a call in a closer expiration against that long LEAPS call and have it "covered," just as if you bought stock. Just like the covered call with stock, the covered call with the LEAPS reduces the breakeven point of the LEAPS and can generate profit if the stock price rallies. Guess what? You can do all this in an IRA.

2. Bearish strategy with verticals

You think a stock's going down? Shorting the stock—selling the stock without owning it first—is a traditional bearish strategy that can indeed be profitable if the stock drops. But remember, you can't short stock in an IRA. What's an alternative bearish strategy?

A short call vertical composed of a short out-of-the-money (OTM) call and a long further OTM call is also a bearish trade and allowed in an IRA. For example, if you were bearish on the NDX at $6,800, a short call vertical could be short a 6900 call, and long a 6910 call. Let's say you take in a $5 credit for doing that trade. That short call vertical has a max potential profit of $500 if the NDX is below $6,900 at expiration, has a breakeven point of $6,905, and a max loss of $500, if NDX is above $6,910 at expiration (not including commissions).

The downside to a short call vertical? It has limited profit potential (Figure 2). Even if the price of the stock goes to zero, the max possible profit is limited to the credit you get for selling the vertical. Now, that's less than what you might make on short stock, but the short call vertical has defined, maximum risk no matter how high the stock or index rallies. That's why the short call vertical is allowed in an IRA, while short stock, or short naked calls, are not.

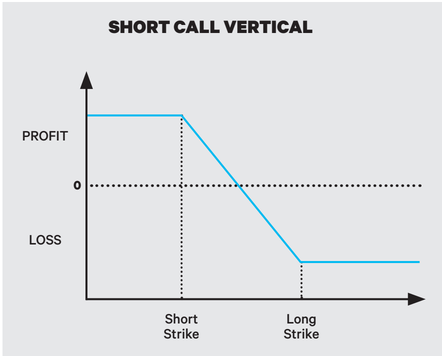

FIGURE 2: Short call vertical. *For illustrative purposes only.*

3. Hedging your IRA long equity portfolio

IRAs tend to have longer-term strategies such as long index funds, or portfolios of stocks. And although you may have a long-term bullish market outlook, there are times when you might be concerned about a potential selloff that could hurt your IRA. You don't necessarily want to liquidate your long positions. But if you'd like to hedge them, consider a long index put vertical. Yes, you could potentially sell OTM call verticals in an index. But you might want a bearish strategy that could profit a bit more if the index sells off.

For example, with the NDX at $6,800, a long put vertical that might hedge a long portfolio would be long a $6,820 put, and short a $6,770 put. If that vertical had a $21 debit, the cost per vertical would be $2,100. That's the long put vertical's max risk, too, if the NDX was above $6,820 at expiration.

But if the market crashed and the NDX dropped sharply, the max potential profit on that long put vertical is the difference between the strikes ($50), minus the debit ($21), or $29, if the NDX is below $6,770 at expiration. That would be $2,900 of potential profit to offset the loss on your long portfolio (not including commissions). So, this long put vertical potentially has more "hedging power" than a short call vertical.

But how many put verticals would you buy? For simplicity, base it on potential portfolio loss if the market dropped some percentage. For example, if your IRA had a value of $50,000, and you thought the market might drop 10%, that could create a $5,000 loss. If the NDX dropped 10%, the max profit on that long put vertical is $2,900. One NDX put vertical would offset more than half of the portfolio loss. Using one single index vertical will have lower commissions and execution costs than alternative hedges, such as buying many verticals on each of the IRA components or lower-priced index ETFs, or even multiple short index call verticals.

See? There's a lot you can do in an IRA. As long as you manage your risk, watch out for commissions, and keep the long term in mind, options might be able to help you jump-start your retirement savings.

If you like the sound of options, but your retirement assets are in a 401(k) that doesn't allow any options trades, consider rolling that 401(k) into a TD Ameritrade IRA and keep it tax-deferred. Then you can take advantage of all the tools and know-how TD Ameritrade provides. Just keep in mind that not all traders qualify for options trading.

INFORMATION

To get more information about trading in your IRA, visit https://www.tdameritrade.com/retirement-planning/ira-guide/401k-rollover-to-ira.page

Thomas Preston is not a representative of TD Ameritrade Inc. The material, views, and opinions expressed in this article are solely those of the author and may not be reflective of those held by TD Ameritrade, Inc.

For more on the risks of trading and trading options, see page 37, #1–2.

PRO / **TAKE AWAY:** *Managing a position's gamma with options.*

UNPACKING GAMMA—DELTA'S EVIL ENABLER

WORDS BY **MARK AMBROSE**

PHOTOGRAPHS BY DAN SAELINGER

BIG IDEA: EVEN IF YOU START WITH A LOW DELTA, LOSSES CAN CREEP UP ON YOU QUICKLY. BUT DELTA IS NOT THE ONLY PLAYER. GAMMA HAS A ROLE TOO. SO, HERE'S WHY YOU NEED TO KEEP EYE ON BOTH.

POOR OLD DELTA ALWAYS GETS THE BLAME WHEN A STOCK GOES AGAINST AN OPTION POSITION. IF YOU SHORT A PUT AND THE STOCK DROPS, THE PUT'S LONG DELTA IS CAUSING THE PAIN. IF YOU SHORT A CALL VERTICAL AND THE STOCK RALLIES, THE VERTICAL'S SHORT DELTA IS COSTING YOU EVERY POINT THE STOCK GOES UP.

THERE'S A HELPER LURKING

But delta has an accomplice. An evil enabler that should, in a fair world, get its share of blame for the "l" half of "p/l." Gamma, we're looking at you.

First, the textbook definition of gamma: It's the second derivative of the option's price with respect to the stock's price. It's how much an option's delta changes when the stock price changes $1. Some traders leave it at that—potentially, to their peril.

Let's say you're bullish on a $100 stock, and you short a $95 put for a $1 credit with 45 days to expiration. The put has a delta of 0.23, giving it risk equivalent to about 23 shares of long stock. You're cool with that. Two weeks pass, the stock is still at $100, and your short put's price has dropped to $0.65—time decay in action! The put's delta has dropped to 0.19, which means you now have less delta risk than you did two weeks ago. What's not to love?

TRADER GLOSSARY
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You're still bullish as the stock moves up and down a little for the next 28 days, but with three days to expiration, the stock has dropped to $97. The put's now worth about $0.13—still profitable—and its delta is only about 0.14. You figure you can handle the risk of 14 shares of stock. So, you keep the short put on until expiration, confident the stock won't drop below $95 in the next three days.

But it does. Ouch.

While you were watching the stock's price and the put's delta, the gamma of that short put went from a tame -4 when it had 45 days to expiration and the stock was at $100, to a wild -12 with three days to expiration and the stock at $97. So for every point the stock moved down, the short put would be manufacturing three times as many long deltas as when you first put the trade on. Your delta risk now fluctuates much more as the stock price changes.

With one day to expiration, the stock is at $95, the put's delta is 0.50 (which may be more risk than you're comfortable with), and the put's gamma has grown to -0.38. As the stock drops from $95 to $94, the put's delta grows to 0.83. As the stock moves back to $96, the put's delta drops to 0.16. Your risk is fluctuating dramatically with every point the stock changes. Yes, your p/l is being driven by the put's delta. But it's really the put's short gamma that's making the trade's risk tough to manage.

Negative gamma manufactures negative deltas when the stock rises, and positive deltas when the stock drops. Positive gamma manufactures positive deltas when the stock rises, and negative deltas when the stock drops.

Gamma is what makes your delta go from mild to ferocious, from small to large. If you trade options, you'll have gamma. If gamma didn't exist and the option's delta stayed constant, an option would act a lot more like shares of stock (which have delta, but no gamma). Then you'd only have to worry about the price of the stock going up or down. But an option's delta doesn't stay constant. And the instability of that delta depends on the option's gamma.

Likewise, gamma itself isn't constant. All things being equal, gamma is highest for the at-the-money (ATM) options and is lower the further an option is out of the money (OTM). Gamma is also higher the closer an option is to expiration. In other words, the ATM option at expiration has the highest gamma.

This is often why traders get excited about expirations. Expirations are busy times—rolling positions, adjusting hedges, getting ready to exercise or be assigned on in-the-money (ITM) positions. Those activities become more urgent around expiration, partly because deltas can fluctuate from big to small with relatively minor price changes for stocks and indices. And that's caused by large gamma.

If gamma's so important, where can you find it? On the thinkorswim® platform from TD Ameritrade, you can see each option's gamma on the Option Chain on the **Trade** page. Load gamma as one of the columns to see that gamma is higher for ATM options, for example, and how gamma changes from one expiration to another.

You can see the gamma of your positions on the Position Statement section of the **Monitor** page (Figure 1).

Here you see how much gamma you have relative to your deltas. The position can also be beta-weighted to show how much beta-weighted gamma could affect beta-weighted deltas.

Say the beta-weighted gamma is -1.34, and the beta-weighted SPX delta is -77. If the SPX moves up a point, your delta would theoretically go from -77 to -78.34, and if the SPX moves down a point, the delta would theoretically go from -77 to -75.66.

Yet, as time passes, that gamma could grow, even if the deltas don't. Which is why you need to monitor your portfolio's gamma as much as its delta.

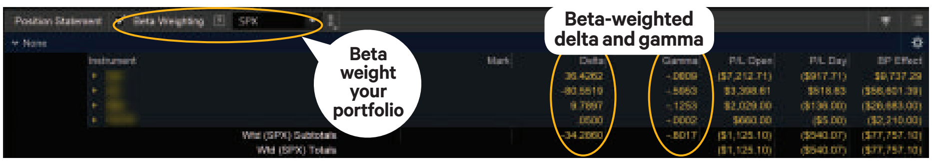
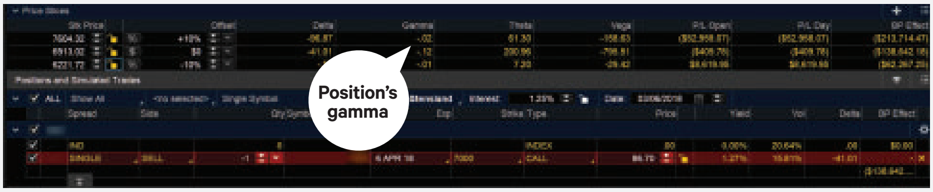


FIGURE 1: Delta vs. gamma. On the Monitor page of thinkorswim, bring up the position statement and beta-weight an entire portfolio to an index to see gamma relative to deltas.
Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.

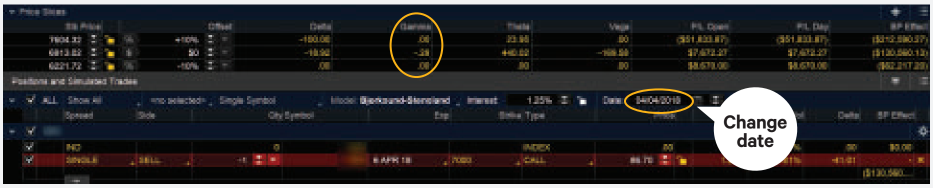
WATCH GAMMA MOVE

To see how much your position's gamma might increase or decrease as a stock price or time changes, use the Analyze page on thinkorswim. The Price Slices area, below the Risk Profile, shows a position's gamma. Here, at the index's prevailing price, it's -0.12. And if the index rises 10%, it would likely go to -0.02. If the index drops 10%, it would likely go to -0.01.



On the Analyze page of your platform, look at the Price Slices area to see a position's gamma.
Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.

Change the simulation date on the right-hand side to check gamma closer to expiration.



To see what gamma is likely to be, change the simulation date closer to expiration.
Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.

Two days before expiration, all things being equal, the position's gamma likely increases, and if the index drops or rises 10%, the gamma likely drops to zero. Using the full functionality of the **Analyze** page lets you see how gamma (and delta) change when the stock price changes, time passes, and volatility goes higher or lower.

SCALP GAMMA?

Yup, gamma's important enough to get its own trading strategy. Gamma scalping hedges the deltas manufactured by gamma as the price of the stock moves up and down. Traditionally, gamma scalping is done with a long straddle, which has relatively low deltas, because the ATM call and put have deltas close to 0.50. So the +0.50 delta from the call offsets the -0.50 delta from the put. But the straddle has a lot of gamma and negative theta.

If you think a stock might make a big move in a certain direction, gamma scalping can help offset that negative theta. Imagine a straddle that has zero delta and, say, 50 gamma. That means that as the stock moves up $1, the straddle's delta rises to 0.50. If the stock drops $1, the straddle delta moves back to zero. Then if the stock drops $1, the straddle's delta goes to -0.50. Gamma scalping hedges the straddle's delta with stock when it reaches some amount.

Or, imagine the stock rises $1. The straddle delta is now 0.50, and you sell 50 shares of stock. That gets the delta of the whole position (straddle plus stock) close to zero. Now if the stock drops down $1, the delta of the straddle plus stock is -0.50, and you can buy those 50 short shares back to get the position delta back to zero. You just scalped 50 shares for $1 and made $50 to help offset the negative theta.

Gamma scalping can also be done from the short straddle side, but the stock hedges lose money against the short straddle's positive theta. Either way, gamma scalping is commission and capital intensive, and it isn't a strategy that many retail traders use.

GAMMA MANAGER

Rather than gamma scalp a position's deltas, you could consider simply managing a position's gamma. And that has to be done with options, because stock has zero gamma.

For example, going back to our short $95 put: as gamma grew, the ratio of gamma to delta also grew. The put's delta was becoming more sensitive to changes in the stock price and could fluctuate. One way to reduce the position's gamma is to roll that $95 put to a further expiration. Rolling to the same strike price will maintain roughly the same delta but can reduce gamma exposure.

Another possible way is to buy a lower-strike put to turn that short $95 put into a short put vertical. If you bought the $94 put, for example, its gamma would be fairly close to the gamma of the $95 put. The long gamma of the $94 put will offset some of the short gamma of the short $95 put, also reducing your gamma and delta exposure.

In both cases, rolling to a further expiration and turning the short option into a vertical also reduces the positive theta of the original short put, and incurs commissions.

But don't be down on gamma. It's just an option greek—a metric used to gauge the level of risk for a position or portfolio. Delta may be the greek that determines the p/l of an option trade. But gamma shines a light on delta.

Maybe gamma isn't the evil enabler, but rather delta's best friend that, like all best friends, can sometimes help and sometimes hurt.

Probability analysis results are theoretical in nature, not guaranteed, and do not reflect any degree of certainty of an event occurring.

SEASONED
TAKE AWAY: *When trading indices, consider limit orders.*

HOW SAVY TRADERS APPROACH INDEX TRADES

WORDS BY **THOMAS PRESTON**

BIG IDEA: INDICES OFTEN HAVE WIDER BID/ASK SPREADS. SO YOU'LL HAVE TO THINK ABOUT TRADING THEM DIFFERENTLY. HERE'S HOW TO USE PRICE DISCOVERY TO FIND WHERE TRADERS ARE TRADING AN INDEX. THEN USE THAT INFO TO PLACE YOUR ORDERS.

Index options on the SPX, RUT, and NDX are the granddaddies of the option world. They're high-priced, actively traded, and attract some of the biggest professional traders. You trade these options, and you're playing in the big leagues. And they're also a place where you can learn valuable lessons about trading mechanics and reducing slippage—knowledge that applies to anything you trade. Trading index options can be unforgiving. You learn from mistakes fast. The key to avoiding these mistakes is to think about index option trades like a savvy trader.

FIGURE 1: Wide bid/ask spreads. **Index options are big, powerful, and have wide spreads. Look at the bid and ask prices on the Option Chain from the Trade page of your thinkorswim platform.**
Source: thinkorswim® from TD Ameritrade. For illustrative purposes only.

YOU'VE GOT THE DATA

In addition to being big and popular, index options can have a downside: wide bid/ask spreads. For example, take a look at the NDX options on the Option Chain of the Trade page on the thinkorswim® platform from TD Ameritrade (your base camp for trading options). By default, the Option Chain always shows the option's bid and ask prices. The bid is the price at which the market maker is ready to buy, and the ask is the price at which the market maker is ready to sell. But check out the 6700 calls in Figure 1. The bid is $235.60, and the ask is $240.60. That's $5 wide, meaning that if you sold that 6700 call on the bid, and bought it on the ask, you'd lose $500. Not so good.

So, why are bid/ask prices of these options relatively wide? Two reasons. First, the volatility of the NASDAQ futures. NDX-option market makers hedge their options with /NQ futures, and the options' bid and ask prices are "wrapped around" a fair theoretical value based on the /NQ price. Because the price of the /NQ futures can change quickly, a market maker who buys on the bid price or sells on the ask price may miss trading the /NQ future at a price that determined an option's theoretical value. The market maker factors this possibility into the bid/ask, giving herself more "room" (buy on a lower bid, sell on a higher ask) in case she doesn't get her futures executed at her target price.

Second, the NASDAQ options are big in dollar terms because the price of the NDX index itself is a big number. The average of the bid/ask price of that 6700 call is $238.10. With a $100 contract multiplier, that option is worth $23,810. Compared to that number, the $500 in between the bid/ask is about 2%, which is about the same as some of the most liquid equity or ETF options. So, yes—the bid/ask spread of the NDX options is wide in dollar terms, but not necessarily very wide in percentage terms.

CAREFUL, THERE'S SLIPPAGE

When you're trading anything, you want to keep your slippage low. Slippage is the difference between your execution price and an option's fair value. Let's say the fair value of that 6700 call is $238.10 (the average of the bid/ask spread, or "mark," is an estimate of fair value). If you sold that call at $235.35, you'd pay $275 in slippage. The savvy index trader tries to reduce that slippage by using limit orders, price discovery, and almost never using market orders.

Avoiding a market order is pretty clear, because a market order isn't held to time or price. A market order can get filled at any price. And a market maker seeing a market order come in can take full advantage. The answer is to consider using limit orders when trading index options with wide bid/ask spreads. Just remember there is no guarantee your limit order will be filled, especially in fast-moving markets. But what limit price? This is where price discovery comes in.

WHAT'S IN A PRICE?

If bid and ask prices are where the market maker wants to trade, but those prices have too much slippage for you, price discovery is where you find the price at which you and the market maker can execute a trade. This minimizes your slippage, while still giving the market maker an incentive to trade.

To start, look at the bid/ask size of the option, also on the Option Chain. For that 6700 call, it's 52 x 57, meaning there are traders willing to buy 52 calls for $235.60 and sell 57 calls at $240.60. If you want to sell five of those calls, for example, you can begin your price discovery by routing a limit order to sell one at just above fair value, maybe $238.15. If you sell it there, great. You just traded close to fair value and may want to offer the other four at $238.10 as well, because that seems to be the call price at which traders are willing to trade.

But say you offer that call at $238.10 and it's not filled. The other 57 that were offered at $240.60 now join you on the offer, such that the bid is now $235.60 for 52, and the ask is now $238.10 for 58. Perhaps you're getting closer to those traders' preferred price. On the other hand, if no trader joins you at $238.10, you're still on your own. In either case, you could consider canceling the first order, and maybe sending a new limit order to sell one at $238. Now: do you get filled at that price? Are other traders joining?

THIS IS THE PRICE DISCOVERY PROCESS. You take your order to sell one call down $0.05, or $0.10, at a time, until you're filled—hopefully above the bid price. At that point, you've discovered what the trading price is, and you can route your other four at that price with a good chance of getting filled.

This approach to price discovery give you a chance to reduce slippage when you trade high-priced options. Plus, you're learning how traders think, and building incomparable trading muscle in one of the biggest arenas there is. And that can make you a savvy index trader.

Thomas Preston is not a representative of TD Ameritrade, Inc. The material, views, and opinions expressed in this article are solely those of the author and may not be reflective of those held by TD Ameritrade, Inc. For more on the risks of trading and trading options, see page 37, #1–2.

Keep 'Em Happy

PATRICK SMITH IS ALL ABOUT WORKING HARD TO KEEP HIS CLIENTS SATISFIED. AND HE'LL GO TO GREAT LENGTHS TO MAKE THAT HAPPEN.

Illustration by Joe Morse

• WITH HIS BACKGROUND in financial planning, it's no surprise that Patrick Smith, Senior Manager, Trader & Education Marketing at TD Ameritrade, takes an interest in making sure his clients' investing and trading objectives are in line with their personal goals. He's willing to roll up his sleeves and work with people of all experience levels to make sure everyone is taken care of.

1

Describe your focus for us.

I currently work on the strategy and planning team for marketing, which helps lay out the year's strategy for business growth. But it's not just about the numbers. Over the last two years, TD Ameritrade has made a deliberate shift toward becoming more client-centric. We work closely with our Trader Group to help engage clients and give them what they need.

2

What do you mean by "client-centric"?

We did research to understand why clients choose TD Ameritrade and how we can improve their experience. It all came down to four main ideas. First is innovation. For example, we just created an overnight stock market for trading 12 exchange-traded funds (ETFs) on a 24/5 time frame. The second theme is education. We've converted our educational offerings to the broker/dealer side and made education available at no cost. Third is support. Our support team members have worked on the floor as clerks, traders, or specialists. So, traders can speak to our futures or options specialists directly and easily. Fourth is flexibility. We offer portfolio margin, allow qualified investors to leverage futures and options in their retirement accounts to manage risk, and give clients the opportunity to trade products like futures options.

We want our clients to have a written plan and understand the importance of education. People know how to get into a trade, but managing the trade is another thing.

3

You're an active investor. Can you share a few golden rules?

I'm a top-down guy. I like to see the big picture, break it down into sectors, and if I want to go deeper, I might pick stocks within those sectors. My three rules would be to have a plan, have a philosophy on how you're going to achieve that plan, and know that what happens today could be completely different next year. Nothing is guaranteed. Everything has a risk.

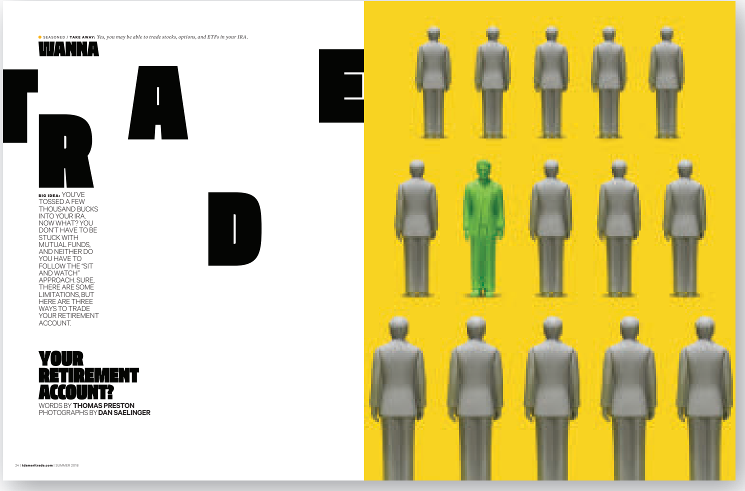
4

Where can people find you outside of work?

I devote a lot of my time to family. I do love a good bourbon; I invest in some more expensive types. I also love outdoor music—all types, especially country music. Music helps me stay focused. It gets the blood flowing.

Start with a good whiff, then a tiny sip, then maybe another one or two. Every good bourbon has a story.

TRADER JARGON GLOSSARY



Out of the money (OTM)

•An option whose premium is not only all "time" value, but the strike is away from the underlying equity. For calls, it's any strike higher than the underlying. For puts, it's any strike that's lower.

Call ratio backspread — A bullish strategy that involves buying and selling options to create a spread with limited loss potential and mixed profit potential.

Call vertical — The simultaneous purchase of one call option and sale of another call option at a different strike price, in the same underlying, in the same expiration month.

Covered call — A limited-reward strategy constructed of long stock and a short call. Ideally, you want the stock to finish at or above the call strike at expiration, in which case, you'd have your stock "called away" at the short call strike. In this case, you would keep your original credit from the sale of the call as well as any gain in the stock up to the strike. Breakeven on the trade is the stock price you paid minus the credit from the call.

Delta — A measure of an option's sensitivity to a $1 change in the underlying asset. All else being equal, an option with a 0.50 delta (for example) would gain 50 cents per $1 move up in the underlying. Long calls and short puts have positive (+) deltas, meaning they gain as the underlying gains in value. Long puts and short calls have negative (–) deltas, meaning they gain as the underlying drops in value.

In the money (ITM) — An option whose premium contains "real" value, i.e., not just time value. For calls, it's any strike lower than the price of the underlying equity. For puts, it's any strike that's higher.

At the money (ATM) — An option whose strike is "at" the price of the underlying equity. Like out-of-the-money options, the premium of an at-the-money option is all "time" value.

Iron condor — A defined-risk, short spread strategy, constructed of a short put vertical and a short call vertical. You assume the underlying will stay within a certain range (between the strikes of the short options). The goal: as time passes and/or volatility drops, the spreads can be bought back for less than the credit taken in or expire worthless, resulting in a profit. The risk is typically limited to the largest difference between the adjacent and long strikes minus the total credit received.

Long call vertical spread — A defined-risk, bullish spread strategy composed of a long and short option of the same type (i.e., calls). Long verticals are purchased for a debit at the onset of the trade. The risk of a long vertical is typically limited to the debit of the trade.

Long put vertical — The simultaneous purchase of one put option and sale of another put option at a different strike price, in the same underlying, in the same expiration month.

Straddle (long and short) — A trading position involving puts and calls on a one-to-one basis in which the puts and calls have the same strike price, expiration, and underlying asset. When both options are owned, it's a long straddle. When both options are written, it's a short straddle.

Theta — A measure of an option's sensitivity to time passing one calendar day. For example, if a long put has a theta of -0.02, the option premium will decrease by $2.

Vertical spreads — A defined-risk, directional spread strategy, composed of a long and a short option of the same type (i.e., calls or puts). Long verticals are purchased for a debit, while short verticals are sold for a credit at the onset of the trade. Long call and short put verticals are bullish, whereas long put and short call verticals are bearish. The risk of a long vertical is typically limited to the debit of the trade, while the risk in the short vertical is typically limited to the difference between the short and long strikes, less the credit.

Short put vertical (spread) — A defined-risk, directional spread strategy, composed of an equal number of short (sold) and long (bought) puts in which the credit from the short strike is greater than the debit of the long strike, resulting in a net credit taken into the trader's account at the onset. Short put verticals are bullish. The risk in this strategy is typically limited to the difference between the strikes less the received credit. The trade is profitable when it can be closed at a debit for less than the credit received. Breakeven is calculated by subtracting the credit received from the higher (short) put strike.

Short stock — To short is to sell stock that you don't own in order to collect a premium. The idea is that if you believe the price of the stock will decline, you can "borrow" the stock from your broker at a certain price and buy back ("cover") to close the position at a lower price later. Your potential profit would be the difference between the higher price you shorted at and the lower price you covered.

DISCLAIMERS

IMPORTANT INFORMATION YOU NEED TO KNOW

1

GENERAL DISCLAIMER

The information contained in this article is not intended to be investment advice and is for illustrative purposes only. Be sure to understand all risks involved with each strategy, including commission costs, before attempting to place any trade. Clients must consider all relevant risk factors, including their own personal financial situations, before trading. Past performance of a security or strategy does not guarantee future results or success.

Transaction costs (commissions and other fees) are important factors and should be considered when evaluating any options trade. Options are not suitable for all investors as the special risks inherent to options trading may expose investors to potentially rapid and substantial losses. Options trading subject to TD Ameritrade review and approval. Please read Characteristics and Risks of Standardized Options (http://www.optionsclearing.com/about/publications/character-risks.jsp) before investing in options.

It is not possible to invest directly in an index.

2

OPTION STRATEGIES

Trading options involves unique risks and is not suitable for all investors.

Spreads, condors, butterflies, straddles, and other complex, multiple-leg option strategies can entail substantial transaction costs, including multiple commissions, which may impact any potential return. These are advanced option strategies and often involve greater risk, and more complex risk, than basic options trades. Be aware that assignment on short option strategies discussed in this article could lead to unwanted long or short positions on the underlying security.

Maximum potential reward for a long put is limited by the amount that the underlying stock can fall. Should the long put position expire worthless, the entire cost of the put position would be lost.

When trading short option strategies, there is a risk in getting assigned early on the options sold, even if they go in the money by $0.01, obligating you to deliver shares you don't own (in the case of a short call) or purchase shares (in the case of a short put).

The risk of loss on an uncovered short call option position is potentially unlimited since there is no limit to the price increase of the underlying security. Option writing as an investment strategy is absolutely inappropriate for anyone who does not fully understand the nature and extent of the risks involved.

Short naked put and cash-secured put strategies include a high risk of purchasing the corresponding stock at the strike price when the market price of the stock will likely be lower.

Short naked option strategies involve the highest amount of risk and are only appropriate for traders with the highest risk tolerance.

A covered call strategy can limit the upside potential of the underlying stock position, as the stock would likely be called away in the event of a substantial stock price increase. Additionally, any downside protection provided to the related stock position is limited to the premium received. (Short options can be assigned at any time up to expiration regardless of the in-the-money amount.)

3

FUTURES

Futures trading is not suitable for all investors as the risk of loss in trading futures is substantial. Futures accounts are not protected by the Securities Investor Protection Corporation (SIPC). Futures and futures options trading services provided by TD Ameritrade Futures & Forex LLC. Trading privileges subject to review and approval. Not all clients will qualify.

Futures and futures options trading is speculative, and is not suitable for all investors. Please read the Risk Disclosure for Futures and Options prior to trading futures products (https://www.tdameritrade.com/retail-en_us/resources/pdf/TDA631.pdf).

Five Life Hacks to Fund Your Trading Account

• You're ready to trade. Your excitement is palpable. Trouble is, you need more money. If your rich aunt, who you've been leaching off of, remains as tightfisted as a prize fighter, consider these budget-cutting strategies to build some capital. You'll be fine. Real traders can live without, well, everything.

Illustrations by Joe Morse

1 Cable TV

• Let's face it: breaking news is for people who live five minutes in the past. That's not you. You're a trader. And you'll know when something big is happening way before cable news does. Plus, the perfect coiffures and perpetual tans of talking heads aren't good for the typical trader's body image. Pull the plug with panache.

2 Gourmet Food

• Good food costs money and is one step further from a funded account. Scientists work hard to make food taste better, last longer, and cheaper with chemical enhancements. So, take advantage of their brains and save serious dough by switching from kale salad to boxed soup or good ol' lard-laden foods. Smart eating choices will save you money and chewing time.

3 Clothes

• A trader about town you're not. Accept this fact. No need to dress to impress. The blessed anonymity of trading means no one can tell if you're wearing a tuxedo or a towel. As you know, from all those must-have sneakers you bought when you were 13, clothing costs add up. Give up the velvet dinner jackets and get to a funded account sooner than you can clip on a tie.

4 Hobbies

• Who has time for knitting, gardening or filming cute cat videos when trading is the most fascinating thing in the world? It's okay to pity the poor souls who have not yet discovered the joys of third-order greeks and overnight currency rolls. And to be honest, without a green thumb, gardening can be stressful. Traders keep the best trading heads when they do nothing but, well, trade. Think of the countless dollars you just saved not buying the latest basket-weaving book.

5 Cars

• Hey: you're all about the numbers. Tens of thousands of dollars sit idle in the driveway and you can't even sell calls against it. That, dear trader, is the baseline definition of "car." Who needs to go from point A to point B, anyway, when a click of the mouse will summon anything to you at point A? Plus, everyone knows nothing good ever happens after the market closes and before the opening bell. Should life intervene, and you have to venture into the world, your ride share awaits.

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