TRANSCRIPT Bullish, bearish, or neutral: Strategies for 2023

Presenters: Konstantin Vrandopulo and Ed Modla

Konstantin Vrandopulo: Welcome in, everybody. Thank you so much for joining us for this special event, three-part event, of course. This is part three in the last hour of the trading session. We're talking about bullish and bearish strategies for 2023-- I think a topic that is likely top of mind for the very many who are in this class today.

We are excited to be here. We know that your time is valuable, and we appreciate you spending it with us. I'm Konstantin Vrandopulo with Fidelity's Trading Strategy Desk. With us today, special guest from the Options Clearing Corporation, and Ed Modla, executive director of investor education there at the OCC. And it's great to have you back for session 3 and, of course, for those who are joining this hour for the first hour of the trading day, tell everybody a little bit about yourself. What are you generally up to over there at the OCC, and how much have you done in this business historically speaking?

Ed Modla: Sure. Thanks, Konstantin, and glad to be here for the third and final session today. I've been in the business for 26 years now going back to the late 1990s, right from graduating college to the trading floors in Chicago, and learned from senior market-makers from Hull Trading Company, at the time

the largest options market-making firm in the world, and learned from the best. So I cut my teeth down there on the trading floor, got into the trading pits for several years before that environment evolved into the electronic environment, moved off-floor, traded electronically for a number of years.

I moved into the brokerage side of the business, had clients, worked with them on the markets. That was mostly in commodity futures. But now at OCC for almost nine years, going on nine years this one, this year here, teaching investors and financial advisors and money managers about listed options-exchange-listed options. I've been giving these kinds of classes for the entirety of that time through our website.

OCC is the clearing organization. So when trades are executed, that information comes to the clearing organization, clears the trade, manages risk. The Options Industry Council is actually a department. investor Education is the Department that is also known as the Options Industry Council.

All we do is teach. We don't have anything to sell. We work off of the revenue that OCC generates through clearing fees and teach the public about listed options.

Just a word about our title here, "Bullish and Bearish Strategies for 2023." I was reminded by folks in compliance and legal that this is a session to not recommend any strategies, to not suggest that these are bullish or bearish strategies that make sense for 2023. That's not what we're talking about here. This is just a few choices if you happen to find yourself in a bullish stance or a bearish one and you're using options. Here's a few things, a few strategies, that might be at your disposal.

First are a few disclaimers and trademarks and the outline for this third presentation today. We'll talk a bit about selecting a strategy and what might be involved with that analysis. Then, we'll look at the outright positions of speculating with calls and puts, bullish or bearish, outlooks, and then the four vertical spreads-- again, breaking it down between bullish and bearish and looking at both the call and puts versions.

Everything starts with selecting a strategy, having a forecast, and determining what you're trying to achieve with any investment that you're making. Investing in stocks and using options, of course, is no different. Some things to think about are that options don't trade themselves. First, we need a market outlook, and this can be derived from some type of technical study. We're talking about reading the charts here, looking at moving averages, new highs, new lows, things like this.

Fundamental analysis could also be used. These are fundamental studies such as price-to-earnings ratios, or margins, price-to-book, price-to-sale, price-tosales, things like that-- the combination of those or any other method that investors might be using to form a market outlook. Of course, knowing the underlying that you're trading-- and there, we're talking about options here today, so it'll be magnitude of the move, the timing of the move, and what direction you think that's going to occur in, of course, as we were talking about pillars earlier today, the direction that we're talking about the anticipated move being, the timing of that move, and, as Konstantin elaborated earlier, also, some semblance of volatility and what fluctuation in prices might we anticipate moving forward.

The options have a variety of objectives and motivations for use, underlining directional bias just because that's more or less the focus of the strategies here in this session, not highlighting it because it happens to be anything recommended or most popular. That's just the focus here today. But options can also be used as a form of risk reduction, particularly with long stock positions, income generation, mostly around a stock position, and then, as an alternative to purchasing shares in the open market, you can use options in a few different ways to enter into a stock position and acquire shares.

Let's focus on the directional nature of what we're looking at with this presentation speculating, with long options first. And these are the outright positions of long call, long put. So starting with long call, let's just focus on what we're doing here, and then we'll have some insight and Konstantin will offer some thoughts on the long call strategy.

If you're bullish on a particular underlying share price move, you could buy shares of stock. If that was trading at \$60, and we're talking about 100 shares here, you would be spending potentially \$6,000 to buy 100 shares. Now, just a quick comment since we're talking about options. We are dealing with 100 shares. The standard options contract is written on 100 shares. It calls for the receipt or delivery of 100 shares of stock. So that is why we're comparing the use of options versus stock as being 100 shares, potentially, of buying stock.

An alternative to doing that is to, potentially, buy an options contract. In doing so, this option buyer would pay the option premium, \$3 or \$300, since premiums are quoted on a per-share basis and the contract delivers 100 shares. So paying \$300 now for the right to buy shares of stock at \$60 for the duration or the lifetime of that options contract until it expires.

We'll see some charts today, some P&L risk-loss diagrams. They are all drawn as if we have already reached expiration. The elements of time-value that exists within options is an uncertainty when there is time remaining. But once we've reached expiration, there's no time left, there's no time value left, we can precisely calculate what the option value is given a certain stock price if there's no time remaining. And that's why these charts are all drawn as if we reached expiration. Prior to expiration was a bit of uncertainty of what the option value might be.

So looking at this at expiration, we would need the stock to increase or pay us back the \$3 that we spent upfront in order to break even, above which we start to profit in a similar fashion that we would have with long stock. And this brings us back to long options-- and, in this case, buying calls-- requiring the investor to get it right when it comes to the direction of the move-- in this case, higher-- the magnitude of that move, and the timing, since options expire.

Buying stock is going to cost a whole lot more and have more risk of loss to the downside. The option, a lot less capital requirement. However, it does expire, and the break-even point is going to be less favorable versus long stock, which has a nice clean break even at our entry point, which is where stock is trading today. Options are not going to be as comfortable with respect to break-even point.

Konstantin, we're talking about call buying and what investors might be doing here and trying to achieve. And what thoughts and commentary come to mind with this strategy for you?

Konstantin Vrandopulo: Yeah, Ed, you mentioned something very important earlier. The compliance folks both at the OAC, OCC, and, of course, here at Fidelity want to make sure that we are not suggesting that this strategy is appropriate for the current environment. There are things that we're needing to evaluate.

So we talked about the three pillars. I'll repeat them, what we talked to here on the strategy desk. Before you click the trade button, if you're deciding to buy a call, what do you need to make a determination on before you place the trade? Directionally, you have to be bullishly biased. You think the security is going higher. The higher it's going up, the more momentous the move, the better likely it is for you.

You not only want that move to be up directionally and with a lot of gusto, with a lot of momentum. You also want it to happen as soon as possible. So the faster in time terms, the better it is for you.

You also, of course, have to have a volatility outlook. You're buying extrinsic value when you're a buyer of an option. That extrinsic value is part time value-how many weeks, months, weeks, days, hours, minutes are left until that option expires. That's the extrinsic value piece part of time value. And, of course, the market participants' anticipation of future movement in the underlying security-- that is implied volatility.

We talked about it at length in the second session. Of course, we on the Strategy Desk here discuss this topic every single day. You can find additional information on it by going to Fidelity.com/coaching and I assure you, it's a bottomless pit, effectively. The more you dive into it, the more interesting it becomes, the more complex it becomes. But you are not just talking about theoretics at that point. You're actually looking at the marketplace and saying to yourself, now I'm ready to evaluate that piece of information that generally newer option traders are ignoring completely, and I try to take advantage of it.

So and how do we know? And I often get asked this question, both coaching sessions, one-on-one individual appointments with clients of all different capital size under their disposal, but live events, hey, Konstantin, come on! You've been doing this a long time. What's the best strategy right now? Which one is going to make me money? Don't you know?

And the answer always is-- and it falls back onto those three pillars-- is that, listen, if you knew exactly not only where something is going to be between now and expiration, where is it going, how much time it's going to take to get there, but also, effectively, how it's going to get there-- with a lot of volatility, in a straightforward direction, in a stair-step fashion, so forth, and so on? Or, does it come down before it breaks even, and then it starts going higher? Unless you could answer all of those three things exactly, there's no way to say what the best strategy is.

So I always fall back on, let's not oversimplify things here. Before we placed the trade, we need to come up with an outlook-- direction, , time and volatility. Where it starts with for me personally, Ed, is always if I have made a decision of-- I've come up with some answers to those three questions. If I'm picking a strategy, and I'm using Fidelity tools to evaluate that strategy, if I am right, do I get paid?

The worst feeling in the world-- and I've been there before, Ed-- you're right on, maybe, one parameter or two parameters out of the three, but you completely misinterpreted one or two of them, and you end up losing even though you were partially right. So the question always is, if I am right, given these parameters, do I get paid? If the answer is Yes, then you start gauging your position size for that.

And then, of course, going back to saying, what if I'm wrong? Not being a pessimist, but eliminating as much ego out of your process as possible, saying, I'm going to be confident, but if I'm wrong, what am I going to do if I'm wrong? So in this case, if you're a call buyer, you know that the worst-case scenario if you're wrong, you can only lose \$3 of premium, which is an equivalent to \$300 per contract. So from the onset, you know that your risk is capped.

But we're not gambling when we're trading. You don't want to be paying \$3 in premium and then being wrong directionally. The underlying actually goes down, time passes by, and implied volatility comes down, and you're sitting there hoping that it's going to come back. Each and every day that passes, the options contract's sort of perspective on its probabilities of outcomes is changing.

It's a constantly changing dynamic. It's a constantly changing beast. And you're having to keep an eye on it. It requires a lot of hand-holding.

So this is the way I think about it. If I am right, do I get paid with the strategy that I picked for my outlook? If I am wrong, how wrong am I willing to be, and can I withstand being wrong? That usually hip checks you about your position size that's appropriate for your account. Ed, back over to you.

Ed Modla: Sure, yeah, all of that is wonderful and very insightful stuff. And bringing you back to that pillar discussion, it rings true on. So many levels. In addition to doing that analysis on those different levels, you're also incorporating your confidence level in that outlook, your risk tolerance sometimes, depending on circumstances you might be willing to risk more than at other times.

Don't forget, we're also managing money. I also remind investors, you're managing your positions against your market outlook in all of its forms. Sometimes, you're also managing money, and sometimes you need to take winning trades or put yourself on the right side of that. Konstantin, you hit it pretty well, outlining and forecasting a key difference between option buyers and option sellers. Option buyers need to be right. They to be right on that direction magnitude and timing for that to pay off for them and pay them back for the time that they've paid for. Option sellers, on the other hand, get a cushion. And we'll see that in the future strategies we're going to get up to in a little bit.

Option sellers have the opposite. They get a cushion, often, and a greater likelihood of success. The trade-off between those two is the amount of potential reward versus risk is also opposite for those two.

I want to tie-in session two just a bit here with-- we're looking at call buying. We talked about Greeks earlier. Active Trader Pro showcased it very well visually, as Konstantin said, showing you from the buyer's perspective what is the Greek position across the board with various strategies. So call buying, as a reminder, if you're buying calls, you're buying a long delta option. So

It's a long delta option. It has negative theta associated with being along the option. It will suffer from that time decay with each passing day. And it's long Vega, or long the volatility Greek. If there are increases in volatility levels, the call buyer or option holder will benefit. If there are decreases in implied volatility levels, option owners or long option holders will suffer from that. Moving to the next directional long outright position is put buying. So we'll define this and similarly walk through a couple of insightful details. This would be consistent with a short market outlook perspective-- again, bring back that delta conversation. Puts being short deltas as an investment entity and an investment tool. If you are buying puts you are buying that element of short deltas to capitalize on a downside move in the market.

Short stock might be an alternative, that having that bearish outlook, many investors don't take on short stock positions. Some do, but many don't. So in that bearish environment, you do have a number of investors that just sit in cash and wait for an environment to go long the market.

Buying a put offers an alternative to shorting stock, and in this case, if shares were trading \$36 and there was a bearish outlook, the investor who did not want to take on a short stock position could buy a put option, we'll say here at a strike price of \$35, pay \$225 for that option, and as Konstantin said before, this is drawn at expiration where your break-even point is \$32.75. But as Konstantin said, what you really want to happen is this stock to move lower from 36 right away and move as quickly and as fast as it can.

This stock could move down to 35, 34, 33. And if it happens soon enough, , You might be in a position to sell this put option for a gain-- hopefully, more than \$225-- and close the position out for a profit just with the stock moving down a dollar, or two, or three rather quickly. So here you have a little bit different dynamic from calls. It's the opposite perspective. Whichever way you look at it, put options will either be expiring worthless or likely closed out. If you are avoiding short stock.

Just keep in mind one thing the option-holders always need to remember is the exercise by exception rules that exist in our industry, also known as autoexercise, if this option at expiration is one penny or more in the money, then it is highly likely, if you do not communicate instructions to Fidelity, that it will be exercised on your behalf. That could happen and leave you with a short stock position that you don't want to have.

So keep in mind, that could occur even if you don't communicate those instructions. What the industry does, the default process that the industry implements if the investor who holds an option, does not communicate instructions, and the option is one penny or more in the money based on the last traded price on a national exchange during regular trading hours, then the option is subject to this auto-exercise feature if no instructions are provided. So just keep that keep that in mind with all long options positions. Konstantin, what comes to mind for you when it comes to put buying in this short delta position?

Konstantin Vrandopulo: Yeah, for sure. I mean the little picture of a bear and a bull underneath. The bear comes to mind. Naturally, You Have to be directionally biased. I mean, if we're thinking about speculating on the downside, you want

the underlying security of interest to be going down in price. Otherwise you, wouldn't be doing this.

That's number 1 number two to elaborate a little more on the question that was asked in session one, is, is it true that the vast majority of options expire worthless? And I think the answer that you gave is, 70%-plus of options historically have been closed out. And so we're discussing speculating here.

So if you are involved in speculating in either on the upside trajectory or the downside trajectory of a stock, you don't probably want to push your luck and hold this thing all the way until expiration. Again, it requires hand-holding. The vast majority of options are traded out of.

So if you own something long-- if you bought a Put it to open open, or you bought a call to open, you're likely looking to close that thing out, sell it to close, before the expiration date-- unless, as Ed mentioned, you wanted to take possession of short stock over the weekend if you were long some puts. So have that understanding that you can always close out of your trade so long as the market is liquid and, of course, the regular market hours-- we're trading during the regular market hours.

And a couple of additional things. So bears versus bulls, and I think I probably ought to bring back our screen share here in Active Trader Pro. Ladies, and gentlemen those of you who are joining this session for the first time, I just wanted to elaborate, we've been looking at Spider, ticker symbol SPY, the proxy for the S&P 500 by State Street Corporation. Just because it is trading a substantial amount in volume.

Now, this company has many competitors out there, half a dozen to a dozen off the top of your head. Some are more efficient in expense ratio terms, so forth, and so on. The reason why we're looking at SPY here as a proxy and options on it, just purely from the liquidity standpoint of view, I mean, it is the fifth most traded security by volume today.

And just sort of elaborate here, Ed if Tesla is trading at \$200 a share, they traded 146 million shares, that's a lot, but SPY is trading at \$400 a share. So notionally, the amount of volume that it traded is substantially higher. So I just wanted to bring that up.

Now, to your point, can we use Fidelity tools and resources? Listen, always evaluate your bias. Do I buy a put? Do I buy a call? How do I know what is an appropriate time to buy a put or a call?

Remember, if you are buying premium, and you're not trading a multi-legged strategy-- which we'll discuss next-- do you want the move to happen as fast as possible in the direction that you desire, up or down, with a lot of momentum, with a lot of gusto, and in the fastest amount of time. Now, what you also would like to see happen-- and we talked at length about implied volatility, and we host a substantial amount of coaching sessions on the Trading Strategy Desk about this topic-- you have to have an implied volatility outlook. Am I buying an option that is, over the past 52 weeks, relative to itself, expensive at these levels? Or am I buying an option, a call or a put, at relatively cheap implied volatility levels-- again, "cheap" relative to itself.

This is very important. Being an option buyer you're taking on a long volatility position. You want volatility to preferably expand. You certainly don't want it to contract substantially.

So it could be a tailwind, especially if you're thinking about broad-based indices like something that's a proxy for the S&P, or something that's a proxy for the NASDAQ 100, NASDAQ composite, the Russell 2000. What generally tends to happen, as markets start to misbehave-- meaning the vast majority of the world is long stock-- as markets start to head south, 80% of the time, there is an inverse correlation to price and volatility.

So price down in broader indices, implied volatility expansion, generally speaking. Conversely, price up, especially if it's substantially higher with a lot of momentum, implied volatility contracts. So at this point, Ed about the current environment, I mean, what are we seeing here? The implied volatility is starting to rise off of a pretty low level relative to the past 52 weeks, but it's not a straight shot higher. So the question is, if you're a put buyer, and you're speculating on the fact that SPDRs are going to be going down, this potentially could be a benefit to you if your directionally correct. In other words, if the stock is down, and it's down a lot of momentum, you'll likely anticipate that implied volatility is going to expand, which is going to be a tailwind for your long put value because it is creating additional extrinsic value in that put.

Conversely, the opposite is going to be true for calls. If you're a buyer of a call, and implied volatility comes down, it is a headwind. So those are considerations. You don't know exactly how something is going to play out, but you can make some pretty good educated judgment calls.

And so that opens up the conversation, Ed, to, what else should we be considering? If we're speculating buying calls and puts, we probably should be thinking about exit strategies right away, not being greedy. Markets is gyrating with a lot of volatility back and forth, so putting in limit orders to sell at a profit, thinking about your exit strategies as well, making sure that those long premium strategies don't go to 0 on you, that's important.

But hey, what if what if I am in a higher implied volatility environment? How can I position, myself, maybe with a multi-leg option strategy? What does that add, what does it subtract out of my bias, if I do so? **Ed Modla:** Yeah, all options strategies, as we're pointing out here, have some element of potential gain and risks to them, and you've eloquently walked through those for calls and puts. Spreads are ways to mitigate risks and, again, to extract further benefits while giving something up in return. And as is often the case when I get asked questions to compare one strategy to another, or, can I do this instead of that?

The answer inevitably comes down to, in comparison, those two different possibilities. One will have an advantage and a disadvantage. And if you don't see both sides of that coin, keep looking because you probably will discover that there is often not a clear cut-advantage across the board, one strategy versus the other.

So we talked about outright long calls and long puts. Now we're going to add a piece and talk vertical spreads, first from the bullish stance, and then the bearish stance. The term "vertical," now, a lot of options strategies have names that mean something or can be interpreted in some way so that they can be remembered. We talked covered calls earlier today. You can easily remember covered calls. The obligation to deliver shares associated with the short call is covered by the long stock owned. That name means something, and it has some ability to trigger your memory so you understand it a little bit better. Vertical spreads similarly have that name attached to it-- vertical. We're going to be buying one option and selling another, and the vertical elements to this is using the same expiration date, and looking up and down our choices of strike prices, and vertically selecting one to buy and one to sell. And through the next four strategies, we're going to look both at the credit and debit versions, meaning it's a credit or debit based on, what are you doing, buying or selling, to the more expensive option? And we'll look at both of those.

So first the two bullish verticals starting with the call vertical, which is the debit spread, with the stalk at 90, starts the same way as the long call outright that we talked through a few minutes back, buying a 90-call for 205, and enjoying the upside participation associated with that along with the downside calculated or fixed loss potential. But in this this, case, we're adding a piece -- a second component to the strategy-- selling of a 95 strike call-- in this case, bringing in \$0.70 and now paying a net debit of \$1.35. Instead of risking \$2.05, this spread now reduces the cost and reduces the risk down to the net difference between the two options of \$1.35.

The reason why you would sell this 95 strike call is coming back to your analysis, your market outlook. This investor is bullish from 90 but, up until the expiration date of these options, does not have a high degree of confidence that the stock is going to rally past 95. So rather than pay for all of the potential upside potential, this investor decides to reduce their cost and accept the fact that they cannot further participate in upside beyond 95.

So selecting 95 is the short strike, reducing cost, still having upside exposure, downside calculated, and this upside that cannot be achieved or realized is something the investor gives up in return for those two other features. Also, break-even point is going to be better as compared to the long call because of the reduced cost. And similarly, as it comes to expiration now, we also have to consider exercise and the potential for assignment, depending on where this stock sits at expiration.

Of course, it is below 90. Both options expiring out of the money and worthless, losing the \$1.35. If both options expire in the money with the stock up above 95. We would fully expect to exercise the 90 calls, to be assigned on the 95s, effectively buying stock at 90, selling it at 95, taking \$5 out of the market, minus our initial cost for our maximum gain of 365.

And if the stock is in-between this is where we have a decision to make. Some investors might look at this and decide, if the stock's trading at 92, 93, well, maybe they'll go ahead and exercise and go long the stock and hold it. Maybe their outlook has changed a bit. But many other investors will decide to close the spread out rather than dealing with stock. Many options users are using the options products so they don't have to deal with long or short stock positions. With stock in between the strikes, the action of closing the entire position is likely, necessary even if that 95 strike call is only worth a few pennies. Most investors here would be looking to close the entire spread rather than sell the 90 call for its value and have an exposed uncovered short 95 call attached to it.

That's the outline of the debit bull call spread. Konstantin, what comes to your mind with this strategy and how investors use it?

Konstantin Vrandopulo: Yeah, so I'm going to grab this screen share here and try to sort of, again, replicate the thought process of in what environment the strategy would make sense. So again, a bull call spread. But in bull spread scenarios and bullish spreads-- and Ed is going to talk about that in just a moment-- you're always right buying the lower strike and selling the higher one.

We'll reiterate that in a few slides over here. But for what sort of a scenario a bull call spread would make sense? Well, you're clearly not thinking. Let's say that you are using a scenario where you're trading at the money bull call spreads. In that case, stock is at 90 bucks, you're buying the 90 strike call, selling at 95. Now, let's elaborate that or extrapolate it towards the SPDR situation. If you thought that the stock was going lower, is buying a call or buying a bull call spread a strategy of your choice? The answer is no, right? Regardless of the circumstance, if the stock is going lower underneath the strike of your choosing, even if it's just going to get there and tread water, you're likely looking at a losing strategy.

So you are thinking about the stock higher, faster -- the faster the better. Now, taking a call, and buying a call option, and overriding it by selling one, effectively-- to Ed's earlier point-- caps crops your upside potential. What is the type of a circumstance where you would want to cap your upside? Well, you're saying, I don't think the security is going, let's say, higher than 415 or 420, between now and the choice of expiration selection that I'm using.

So you're effectively saying, I know exactly how much at a maximum I'm going to get paid if I'm right. No matter how much higher the security goes, I am comfortable by committing the amount of capital that I am committing right now and with the return on capital that I'm going to get if I'm correct. So you're always evaluating the situation based on your original assumption--directional bias, up, down, sideways, up a lot, down a lot, sideways in a very volatile, chopping type of a range or no-- in a tight range. So that's a part of your decision-making tree. And again, Ed, I will reiterate for everybody, don't be overwhelmed by using the tools. Go to the Profit and Loss Calculator. You don't have to place the actual strategies. You can evaluate them first before you place them. In fact, I would encourage you to do that.

I'm going to hop over into my spreadsheet tool here. This is Options, Profit and Loss Calculator, add simulated position. So Ed, how about we build out a three-week-out, at the money, bull call spread here very quickly. How would I go about doing that?

Well, the stock was at around \$400, so we'll go slightly in the money here. Buying a call, selling one-- let's use that most recent high of around-- let's call it \$420. So 20 points wide, and I am able to do that-- well, at the least, at the 4:15 Eastern Standard Time close-- for let's call it \$7.21.

So I'm paying a debit for the strategy. My maximum loss potential is \$721. That's the amount that I paid for it. My maximum gain potential is the difference between the strikes that I'm long and short, less the debit that I originally paid. The computer is calculating it out for us. The maximum I can make is around \$1,280.

Between now and expiration-- and this is to Ed's point-- you can look at this light blue line here, and that is very simply, at expiration, where am I going to be? The darker blue line is telling you about the path of getting there. The vertical line on this chart is your break-even point. I know that I'm paying \$721 for this 20-point-wide spread. I need for the stock to be at least \$407.21 at expiration or higher in order for me to break even or smell some profit. If it's underneath, I know that I'm likely going to be looking at a loser.

And then, you play around with the tool. Hey, what if it's at 405, and it happens by the end of next week, and implied volatility likely declines by 10% from here? What sort of a profit am I going to be looking at?

OK, if these things happen between now and the end of next week, and implied volatility came down by my assumption, I'm looking at a value of my spread at \$7.98. That's a \$76 profit.

So again, use the tools. Evaluate them. Make sure that if you're choosing a strategy and you're going to be correct on your assumptions, you get paid.

But never forget about the risk side of the equation. Manage the position size accordingly, and make sure that it matches the outlook. Ed, back over to you, sir.

Ed Modla: Yeah, that tool, It really is invaluable-- looking at what you're able to do there, changing the days, changing the stock price, looking at the P&L. It helps you analyze and evaluate a trade. And also, as an educational tool, I'll just use it to learn what can happen to this position given changes in parameters and dynamics.

Again, reflecting back on session 2 for those of you who were with us then. Looking at Greeks here. When you have a purchase of one option and a sale of another, as we do here, really, what you're doing is just mitigating the Greek exposure or your exposure to changes in particular variables.

But ultimately the Greek exposure will still be consistent with what you did to the option where the Greek is the greatest. So in this case, we are buying the '90 strike call, selling the 95 with stock at 90. We know the delta is greater for the 90 strike call. So the mitigating effect is adding some short deltas here, but net, still long delta.

And that makes sense. We want long deltas because long deltas are consistent with a bullish outlook and a bullish stance on the market, And. That's what we have here-- a bull call spread. Same thing for a theta and vega that we've talked about a few times here today. Theta is going to be greater for your atthe-money option.

So you will suffer from time decay. We bought this spread. We paid a new debit. We'd expect to suffer from that loss of time value from one day to the next. and vega, greater for your at the money option. Increases and spikes in implied volatility will benefit the strategy. But again, the Vega is mitigated with the short option on the other side of that.

The other bullish vertical, buying one selling another, is going to be the put spread. And in this case, it's going to be a credit. Konstantin said, when you're doing bullish verticals, you're selling the higher strike. And that is what we're doing with the bullish vertical spread. And that's why it results in a credit-- the higher strike put is going to be the more expensive of the two, and then, buying the lower strike put is going to create that bullish net long delta position.

Selling the higher delta put option, getting long deltas from that piece, buying the lower strike put, getting short deltas from there, but mitigating the effects to still having a long delta net position consistent with the bullish outlook, with Stock at \$115 here, in this example, selling the at the money put for \$2 and buying the \$110 put for protection, down for \$0.70, for a net credit of \$1.30.

The dynamics here, this investor now has a cushion. I mentioned this earlier. With this example, using at the money and out of the money options, if the stock stays at 115, this seller profits their maximum gain. If the stock rallies, they also reach their maximum gain. And this investor has a cushion.

If they're wrong and the stock moves lower-- remember, we're bullish-- the semester is completely wrong on that direction, and the stock sells off down to

one 113.70 at expiration, they're just broke even. They haven't lost anything until the stock breaks down below that. A more room here to be profitable.

In exchange for that-- there's always two sides of the coin-- in exchange for that higher likelihood of success, this investor is accepting a maximum loss, in this case, almost three times greater than the potential gain. That's the opposite that we saw with the bull call spread. Konstantin, comparing these two, the credit spread here versus the debit spread, puts versus calls, what thoughts come to mind for you on these?

Konstanin Vrandopulo: Yeah, Ed, very good. Bull spreads are bull spreads, bear spreads are bear spreads let's keep harping on that, right? Because we talk about synthetics in coaching sessions quite a bit. And so I prepared something that I think would be useful for Folks

So listen we talked about that 420 bull call spread a little bit earlier. Positive delta exposure, positive gamma exposure from the onset. Negative theta, time passing bias against us, positive Vega. I want volatility to Expand. That is a benefit to me.

Now, if I was to do the bull spread version with puts instead, remember what we said-- you are buying the lower strike, selling the higher strike. So if I was to take the same exact strikes and flip them and do puts, sold the \$420 put and bought the \$400 put, I am creating the same exact strategy. Instead of paying a debit of \$7.21, I'm receiving a credit of \$12.79.

Remember, here, we're looking to make a maximum of \$12.79. Now, get ready. Quick back over to calls, my maximum gain \$12.79. So these are synthetically equivalent trades. There is no difference between the two. The outlook, the implied volatility outlook, the direction outlook as well, as the timing outlook, is going to be the exact same.

Now to Ed's point generally. How do people think about those things? So let's go back to our chart, if we think that maybe the security has a way of gyrating between now at some point in the future in this type of fashion between, let's call it, I don't, 400 and 420, or some notional value above the 400 level that I'm choosing to short, I just want the underlying to be sideways to higher instead of sideways to lower.

So if my condition for a bull put spread where I'm selling the higher strike and buying the lower strike is that I think the underlying security is going lower, that is not the appropriate strategy for that outlook. So let's hop over into the general sense of what generally happens. Well, maybe will would create a spread that is going to be at the money, but where you're buying the lower strike. That is further out of the money at the moment. So I'm going to go to spreads, and I'm going to do a one by one. And again, I'm going out to March 17 expiration, similarly here. I am going to be buying, let's say, a lower strike at 380. And I'm going to be selling the closer to at the money strike, the higher one, the 400.

So I'm thinking the stock is going to be above 400 between now and then. I prefer that it doesn't go lower. But if it goes lower, I bring in a credit that creates a cushion. So my break even point is lower.

But I just don't want the stock to collapse, effectively, right? I want it to be sideways to higher. If I've created a 20 points wide-- so I have approximately \$14.70 worth of risk, and I'm bringing in a credit of \$5.31-- more than one way to win. The security doesn't have to explode higher.

Let's see if I can bring back my Active Trader Pro, which just dropped dead on me there for a second. But the point is, I don't want the security to collapse. That's the point. I want it to stay sideways to higher. If it explodes, that's great. I'll get to keep \$5.30 in my pocket. No big deal. That's how I maximize the profit on that strategy of my choosing.

If it goes down in value, I have a little bit of a cushion, but that cushion is not large enough to withstand the 3 to 1 risk-reward. So neutral bullish with a bullish put spread at the money. Neutral bullish, most definitely, with an at the money bull call spread. But in that case, you don't want the security to go lower at all. You want to go higher-- the higher, the faster, the better.

All right, very good, Ed. Back over to you while I'm figuring out what I can do here with Active Trader Pro.

Ed Modla: Yeah, sure, that was wonderful. And that strike selection, changing the dynamics there, yeah, when you're selecting the same strike between these bullish verticals, and the same would apply for bearish verticals as well, same strikes really are synthetic traits. And you'll notice when you head out on Active Trader Pro, those P&L graphs look the same. Where you make money, where you break even, where you lose, all of that is going to be the same when choosing the same strikes.

Things do change a bit when you're using at the money and out of the money options for your call and put choices. And then, to reiterate that classic difference between buyers and sellers, buyers need the movement in the direction they're forecasting. It has to occur of a certain magnitude by a certain length or within a certain time frame. And if so, they get paid for that. Their maximum gain is likely going to be larger.

Sellers are paid premium. They get that cushion on their side. The stock can consolidate, it can move the way they expect it, or even move in the opposite direction as they expected, and they still have profit potential. Wider range of profitability, and in exchange for that, they usually have less to gain and more to, potentially, lose.

Let's go now to the verticals that are the bearish. And this is the same conversation, same looking spreads, now just flipping them to be short delta-short delta consistent with that bearish outlook. Hopefully, if during session 2, you followed us. Reiterating this concept throughout session 3 here today.

If we're going to be using calls, and we want to be bearish, what would we be doing to the call option, or the net difference between the call option is going to be selling the more expensive, in this case, lower strike call and then covering that risk. You're buying the cheaper option to cover risk. You're buying the higher strike call to cover any potential that you're wrong, the stock takes off higher in a significant fashion, and you would suffer losses to the upside.

So you're selling options. You're selling for the credit. That's why you're doing this trade in the first place. You're selling a 50 call because you want to bring in \$1.65, and that is what you're trying to capture.

The buying, the buy strike, is covering the risk. So you're looking up to see, what strike price can I buy to cover that risk from the 50 call? How much do I have to pay for it? You might look up and down at different strike prices and choose the sweet spot. Here selling the 50s, buying the 52.5s, gives us with a max profit potential of that net credit of \$1. That's what we're hoping to capture if the stock stays here at 50, drops down, or even rallies a little bit. We have profit potential. Our maximum loss is going to be greater, a little bit greater here at \$1.50, if it goes to the upside.

Now, your choice of strike price is going to determine what this max loss could be. The wider you go , the deeper it goes. But you've got this cushion here, you've got this to the upside if the stock were to move against you.

In between strikes on the bearish side, a little more to consider when we are looking at the bullish verticals. In between strikes could potentially lead to a decision to go ahead and take shares and go long stock. With the bearish verticals, it's a bit different now. In between the strike prices at expiration means that the assignment in this case-- or exercise, as we'll see what the puts-- could result in a short stock position that that's something you didn't want to have.

Position management, then comes into play-- going ahead and being proactive to avoid a stock position that you don't intend to have. Konstantin, looking at the bearish side now. Puts are on deck, looking at the calls.

Konstantin Vrandopulo: Yeah, let's not discriminate against the bears, you know? And nothing wrong with taking the other side of the coin if you have a bearish sentiment. I mean, we were in a bear market the vast majority of 2022 with massive sell-offs and massive rallies in between. But net net, of course, ended up lower on the year.

We had a very nice rally here to start off the year, but last couple of days, we're seeing some tremors. We're seeing, maybe, a little bit of a pullback, a little bit of a giveback of the preceding rally. And our question is, does the weakness continue, or do we bounce here?

So these are all ideas, again, appropriate for the current environment. I mean, do you want to be an option buyer? Do you want to be an option seller? Is volatility high? Is it low?

So Ed, I got-- and I'm thinking that technology probably got a little bit tired. I mean, we're going on three hours here-- two hours and 53 minutes, to be exact. It does make sense to me.

Listen, how about the bearish side of the equation. I'm going to make one fine point here. Maybe I will illustrate it, hmm, by looking at the options chain and looking at those scenarios. Hey, if I'm selling a bear call spread on SPY, versus if I want to be and end up being neutral bearish versus being, let's say, neutral bullish, is there a difference? Is there sort of an inherent current market bias of the way options are priced? So in a bullish version, if I'm selling a put spread, I don't want the underlying security to be going lower. In a bearish version, I don't mind it going lower. I just don't want it to be going higher. So what I'm going to display here-- and by the way, those of you who are going to be trading multi-legs probably ought to be using this technology in the following fashion-- if I open up the options chain, I click on Trade In, Chain it's going to allow me to build out these strategies-- especially complex ones-- with just a few clicks.

But then, focusing on March 17 expiration, that's exactly what I'm going to do. So you know what, Ed? I want to be neutral bearish. I am thinking the security--SPY, in this case-- is going to be lower between now and expiration. I am thinking that I want to be a premium seller I want to be bringing in a credit up front and getting paid for waiting for, potentially, these legs to be expiring worthless.

So let's say that I am thinking about giving myself a little bit of a cushion. I'll sell the 405, and I'll buy 410. So it's 5 points wide, I'm going slightly out of the money-- 5 points out of the money to the upside-- and I'm capping my risk by buying the 410, \$10 out of the money, approximately.

Now, I'm able to do this five-point-wide bear call spread for \$2.10 midpoint. Now, Ed, here is the kicker. Imagine the circumstance that I wanted to do the same thing but be equidistant to the other side. I want to be bullish neutral. So going back to our earlier point, stock is at \$4.66, and I'm going to be looking at I want to incorporate the 390 in there for a moment.

So \$2 for five-point-wide. \$3 of risk, \$2 of return, approximately, if I'm right. How about similar bias, but neutral bullish instead? So I'm going to be selling the 400 put option and buying 10 points out of the money 390, OK? Or, excuse me, 395, right?

So selling the 400. Buying the 395 to cap my downside risk. Can I bring in, for an equidistant spread, \$5 out of the money, 405, 410, versus-- let me rebuild this thing-- 395 buy 390? Equidistant put spread, selling the 395, buying the 390.

What happened? Ed, all of a sudden, I'm not looking at 210. It's equidistant to the call side, but I'm only able to bring in \$1.46. Now, this is a concept that is known in the industry as skew. Downside put options are more expensive in volatility terms than upside call options. And we elaborate on this point quite substantially in our follow-up courses, but this is something that you need to be cognizant of. There is an inherent sort of bias due to the demand of options being bought and sold, puts versus calls.

Ed, back over to you. We've got a few minutes to go. We've got one more to hit, and then maybe a question or two.

Ed Modla: Sure, yeah, let's do it. But that was a great look there at the four options that you outlined, just peaking at the implied vol levels. The puts you're buying across those four is the greatest, implied vol certainly higher than the implied vol of the call you were buying in your comparison.

So let's close it up with the final vertical of 4 of 4 here, which is the bearish put spread. If we're bearish, we want short deltas. Buying puts will give us short deltas. If we're buying one and selling the other, we want to buy the put option that has greater deltas or be a higher strike put option.

Buy the higher strike put, capitalize on a bearish outlook, pay the put premium. But if we don't think there's a collapse coming in the share price--we don't see 80 or 75 or something beneath that happening-- then maybe we don't need to pay the full premium of that 90 put for all of the downside exposure, in theory, all the way down to 0. Instead, we can select a strike price that we think might serve as support for the share prices. Here, the 85 put for \$1.80 might be based on our market outlook, what we're looking at, paying the net debit of \$1.70.

And that becomes our maximum loss mitigating our cost, having the potential for downside exposure, being able to capture or bring out \$5 from the market if both options finish in the money, exercising the \$90 put would be selling shares at \$90, being assigned at \$85 would be paying \$85 That's extracting \$5, minus our net debit up front, for the maximum gain of the \$330.

Similar to what Konstantin outlined on Active Trade Pro with the bullish verticals. If you look at the structure of this P&L graph at expiration, loss above the high strike, max gain below the low strike, connecting the dots in between, if I flip back to the bearish call spread that we just talked about, same thing-the maximum loss above the highest strike, maximum gain below the lower strike. Connect the dots in between. If using the same strikes here, similar to the bull verticals. These are synthetic equivalent spreads.

That wraps up the four, Konstantin. What thoughts would you have on these as we put a finishing touch on this presentation?

Konstantin Vrandopulo: Ed, I mean, the finishing touch, I guess, is just a couple of questions that we want to hit very quickly. So one theme across the board through three hours, we very much appreciate everybody showing up. Hopefully, we've given you enough to arm you to go out there and at least simulate, emulate a few strategy ideas and see how they play out by the way those simulated trades stay in your account until you either delete them or they expire. So it could be a fun exercise at the very least.

The main question was-- and this is for me directly-- can you trade options in an IRA here at Fidelity? And the answer is, yes, you may. All the strategies that we've discussed in the last three hours can be traded in an IRA. You have to apply for options trading. Our compliance team will approve or deny you. And, of course, upon approval, you would have to, on an IRA, individual retirement account, you would have to apply for a spread agreement, so to do things that are more than multi-legs.

You can do covered calls. You can buy calls, buy puts, with the initial base level of application. But if you want to do spreads-- that's something that we discussed, of course-- whether it's a stock repair strategy, or it's a bull spread or a bear spread, or a synthetic equivalent of such, you would need to have spreads approved on your account as well. And that is doable by filling out an application.

Active Trader Pro is available to all of you in the audience. You can download it by going to Fidelity.com/ATP. That's alpha tango papa. And as always, Fidelity.com/coaching.

Ed, it has been a pleasure. It's been a blast. Time really did fly by. I appreciate your expertise and your knowledge. We will see you again soon, I hope. Take care, everybody. Options trading entails significant risk and is not appropriate for all investors. Certain complex options strategies carry additional risk. Before trading options, please read <u>Characteristics and Risks</u> of <u>Standardized Options</u>. Supporting documentation for any claims, if applicable, will be furnished upon request.

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