TRANSCRIPT

Index Options vs. ETF Options

Jermal Chandler: Thanks, Jonathan. Appreciate that intro as usual. Always fantastic. I am Jermal Chandler. As Jonathan said, I am an instructor with the Cboe Global Markets and I'm part of the Options Institute which is the educational arm of our company dedicated to investor education. And today's webinar topic will center around index options versus ETF options. So not necessarily counting any one over the other, but just sort of introducing the nuances between the two, and from there help you to sort of understand which one may work for your portfolio. Again, they're both a little bit different, so we're going to discuss some of the differences today. As we navigate through our disclaimers slide, as usual, options involve risk that are not suitable for all investors, and in it is strategies that we discussed today, which I don't think we discussed many, but they will be for educational purposes fully.

So our topics here. We'll start off with a quick brief primer as to a reminder of why we like to use Options in general. From there, we'll give an overview of index options and ETF options, and then with each successive slide, we'll start to break down the differences between the two. So European exercise, the American exercise, give an explanation of what those are, and then cash settle versus delivery of shares. AM settlement versus PM settlement, which is the different ways the options could settle at expiration. Then going on to the tax consequences, a little bit of difference between the two, not too much detail there. I'm definitely not a tax advisor, but still I think there's some things that should be mentioned. And then finally giving a real-life example of index versus ETF and explaining the XSP, which is a mini SPX contract index option versus very well-known, familiar by ETF options. So again, in a world without options, well, we have basically three choices, right? We have long stock, short stock, and either out of the market or a bond-type thing, and so once again, a reminder of why we like options, we can leverage capital in so many different ways and use a ton of different strategies. Sure, most of you already know this, so some of those who are new to options are seeing this. Now you have a ton of different strategies in which you can express opinion about either the market and/or an individual stock.

So, getting straight to it, with index options versus ETF options, we're going to talk about index options first. So an index option, or, I should say, index, is a measure or calculation of a group of securities. So you have, like, the Dow Jones Industrial Average, NASDAQ, and the S&P 500 are indexes that we're aware of. With that, you'll have the DJX, or the NASDAQ, which is the NDX index option component, or the SPX index option. So DJX, NDX, and SPX are index options that trade based off of those indexes that we mentioned earlier. And the listing of options on various market indexes was created to allow for trading broad segments of the market in any single transaction, right? So you can't trade, for example, an S&P 500 is 500 different stocks. Instead of trading all of them, you can just trade that amalgamation of that index using SPX options, and then that allows you to speculate on a price direction of the underlying index, or you can hedge a portfolio that might closely correlate to a particular index, right? So say, for example, you do have a bunch of Dow Jones stocks. Say you have all 30 of the Dow Jones stocks that you'd like to trade, but every now and again you get a little nervous about the skittishness of the market. Well, then you can trade some DJX options and sort of hedge your portfolio in that way. It's a nice advantage to have. For index options, one contract equals 100 dollars, or like 100 multiplier. I should say 100 times the index level. So what that means is the S&P 500, say that index is trading 3,000. If you have one index option on that, it's equivalent to a notional of 300,000 dollars. Index options typically will settle to cash based on the value of the index at expiration, so that dollar difference between the index settlement value and the strike price times 100 is usually what your cash payout will be. So say you have a 3,100 strike call and the index is trading 3,200, well, then the difference between that is 100 dollars, so that would be the value of the call, and then times 100. In this case, that would be 10,000 dollars cash that you would have paid out to you minus whatever you paid for that option originally. So sort of similar in that way to equity options, which we'll talk about. And then, most index options are European-style exercise, and we'll cover that in a little bit. The one exception to that is the OEX index, which is -- the OEX index is the S&P 100 index. So that's the one index option that will settle American style. And again, we'll get into the difference between European and American, but the biggest thing you should understand is that most index options are European-style exercise, and we'll cover that more. Cboe Global Markets, where I work, offers listed options on 50 domestic-, foreign-, sector-, and volatility-based indexes. So we're kind of a go-to place when it comes to trading index options, which is why I feel like I have a little bit of knowledge of this sector. I see them every day. (laughs) Oh, and one last thing, most notably. No trading happens in the index itself. So the indexes are calculated numbers that sort of give you a value of an index. The trading happens in these index option products. So one example of that is -- well, just a simple example is the S&P 500 index, you can't trade that index, but you trade options on that index. For those of you who are familiar with the volatility index, the VIX, the VIX index does not trade. People trade either futures or options on that index. SO just a nuance that should be understood when you're trading on those. Now, ETF options, I think a lot of viewers who've been trading for awhile, whether you've traded options or not, you trade stock, you're familiar with ETF. And ETF is an exchange traded fund, for those who don't know. It's a collection of securities that tracks an underlying index. So the DIA, a lot of people call that the diamonds, that's the ETF that tracks the Dow. The Qs, QQQ, is an ETF that tracks the NASDAQ, and then SPY, which is well-known, is an ETF that tracks the S&P 500. ETF share prices fluctuate all day as the ETF is bought and sold, unlike mutual funds. Those typically trade at the end of the day on the close. That's when inflows and outflows come into those. So mutual funds don't trade all day long, ETFs are the other example. And those are comparable, in a way, because they are a collection or a basket of security, but ETFs trade like stocks throughout the day. ETFs, they hold multiple underlying securities rather than just one stock, which is a reason why they're often a popular choice of diversification. So if you're not already doing it yourself, you will hear a lot of people talk about the fact that they use SPY to hedge their portfolio, or just trade the index and speculate on where the market's going to go. ETFs contain many types of investments, such as either stocks, bonds, or makeshift commodities. So some funds will focus on US offerings and have a global outlet, or you could have like bond ETFs, or commodity ETFs, or currency ETFs, different sector industry ETFs, or like the inverse ETFs, which maybe some of you have heard as well. You'll have an inverse financial ETF. So those are interesting different ways to trade all kinds of things that you might be interested in. So just some simple examples of that where maybe you've heard of, the SPY, of course, we just talked about. That seeks to provide the results corresponding to the performance of the S&P 500 index. GLD, that's the one that people often talk about, Gold ETF. GLD seeks to represent the performance of the price of gold bullion. XLF is a very popular sector ETF that seeks to represent the whole financial -- it seeks to represent the financial sector of the S&P 500, and it has a basket of financial stocks that a lot of people will trade. And as a quick note, people should understand that ETFs are different from ETN, which exchange traded notes. There's a little different nuance with those. Usually it's something that serves you well to look at prospectuses. When you're looking at it, sometimes you'll find different ETNs. I guess the one example that, this pops into my head off the top, again, if you're familiar with the VIX, there's an ETN that everybody's really familiar with, VXX. That's an exchange traded note, and it's not an ETF and it's not secure tied the same way. So it's just a quick note that people should understand. ETFs are different than ETNs.

Now, from here we'll talk about European exercise versus American-style exercise. So usually something -- you'll hear people say "European style exercise" or "American style exercise." But this speaks to how the option at expiration, what happens when either at expiration or possibly before. Now, in this case, the European style exercise, they can be only exercised at expiration, and I'm going to skip to my note down here at the bottom of the screen. Don't confuse buying and selling an option with exercising an option. Very different things. Exercising an option occurs -- for European-style options they occur only at expiration. So only at expiration will you be able to exercise the European option. And most index options are European, so largely here we're talking about index options. Now, index option, this is a little precursor to one of the slides we're going to talk about later as far as cash settle. They cash settle and so no shares will exchange hand, which is kind of nice, because if you think about it, if you have the S&P 500 index and you had an option and an expiration, you exercise that option, and it turns into shares of 500 different stocks, that would be pretty crazy and a lot to keep track of. So typically they just cash settle European-style options or index options, usually cash settle to the value of the index as we kind of alluded to earlier. Typically the last day to trade is the Thursday before the third Friday. Now, this has changed over times because we also have weekly options. And so nonstandard weekly options, those usually trade until 3 p.m. central or 4 p.m. eastern. So like, SPXW is the weekly denotation for the S&P 500 index option of the SPX. So you'll have SPXW options that expire -- for example, there's an SPXW option that expires this Friday the 13th, and that will expire at -- those options cease trading at 3 p.m. However, next Friday, we have the big SPX expiration that will expire on the Fiday, on the 20th, and the last day to trade those options will be on the 19th, and then the morning of, those will settle and then people will exercise those options at the close of the day. So that's pretty much how that works, and so the settlement value will be determined for the SPX options that expire on the 20th. The settlement value will be determined when the index opens on Friday morning. So on the opening print, that will be the settlement value for any options that expire on the 20th. So kind of a weird way of looking at it, but that's how this works.

So, next, when we talk about European-style exercise, if you are familiar with any exercise process and you haven't dealt with index options, you're probably pretty familiar with American-style exercise. Maybe if you've heard it called that before, but most people, when you're talking about exercise, the typical thought is of how either equity names or ETF exercise. So all optional equity stocks and ETFs exercised by the European-style exercise mode. And so, in that, a holder has a right to exercise at any time prior to expiration, and that right there is really the big difference. Like we said, European-style options, they only can be exercised at expiration. American-style options can be exercised anytime prior to expiration. Now, why would people do that? Well, every now and again, like we have over here, what is the ex-dividend date? Usually dividends are the reasons why people will exercise American-style options ahead of time. But it's important to note. Any in the money that ITM -- in the money option -- that is, an option that is in the money by a penny is typically subject to auto exercise, and that usually happens at expiration. So when we talk about, say, a call option that you're long and if the stock is trading 30 dollars, then I have expiration on Friday. That call option is worth a penny. Or, let's just say the stock is trading 30 dollars and one cent, and you're long, the 30 strike calls, and say the market is a penny, or it's probably no bit out of penny. You will be subject to automatic exercise because that option is a penny; that is a rule that changed quite a few years ago. So, if it's a penny in the money, it can be subject to auto exercise. But that's at expiration. Now, when we're talking about other options, a long option holder has the right to exercise or an option which will lead to either buying and selling the option. In short, option holders -- and again, this gets to the essence of options. If you're a short options older, you have an obligation to that option owner to have an obligation to deliver shares to them. Now, as far as when we're talking about dividends and reasons why potentially you would have to exercise or be assigned early, American call options are often exercised before an ex-dividend date. Depends on how much time value you have in that option, but this is typically when you'll see an option early-exercise based on an ex-dividend date that's approaching, and this will allow investors to either own shares and capture the dividend payments. So, that's a big nuance between European-style exercise and American exercise, is the ability -- with American exercise, you have the ability to early exercise an option surrounding a dividend payment. But once again, pay attention to the idea of -- we're talking about exercise. We're not talking about buying and selling an option. Very different things. So it should be known, again, the biggest difference is the ex-dividend and how that effects American option, versus European-style exercise options do not have to worry about that type of thing.

So, now we're talking about also whether relates to expiration when you exercise options. We're talking about two different ways that that occurs, right? So on the left here we have cash settle that occurs with European-style options, or typically with index options. Index options will cash out into the value of the index. So what that means is there is no physical delivery of underlying asset or security required. So when you exercise an SPX option, which is an S&P 500 index option. If you exercise that, which you can only do at expiration, at that point you will receive cash value for your option. There won't be a stock that you receive. There won't be 500 different stocks you receive. You'll receive a cash value for that, difference between whatever your option, you pay for the option, and what it's currently worth. And your account is credited or debited in the money value of the options. And then that amount of payment is the difference between, like I said, the underlying settlement value at expiration of your option -- I'm sorry, the underlying settlement value on expiration of the index, and then the strike price of the option. And so, some people are interested in this type of situations, because again, there's no disruption to the portfolio structure upon assignment. So what does that mean? Well, say you have a certain way that you have your portfolio structured, and this could mean a varying bunch of different things. But say you have a certain way you have your portfolio structured, and if, for example, this S&P 500 option did settle into 500 different stocks, well all of the sudden your ratios would be off in different sectors or something like that, right, like compared to what you have. So when we say there's not disruption of portfolio structure, some people structure their portfolio in such a way that introducing new shares into it would throw their different sector values off, and so they don't want that. So that's why we often say, "There's not disruption of the portfolio structure upon assignment with cash settle options." Cash settle also can reduce or eliminate cost associated with the transportation of insurance or financing. Now that's more related to commodity. So, when we talk about different indexes that might be a commodity-related index or something like that, a lot of times what they'll have is transportation costs that are associated with different commodities, and so that's something that you don't have to deal with as far as when we're talking about settling these options as cash. And then finally, something we already discussed a couple of times, cash settlement options, that's pretty much synonymous with European-style exercise, which is basically index options. So that's kind of the index options side. Now, on the right side here, we have delivery of shares, and that's something I think a lot of us who have been trading options are a little more familiar with. Shares of underlying are delivered upon expiration at the expiration date of the end-of-money option contract. Those shares are typically transferred from the seller to the buyer, so the four different ways, we'll have a call option holder who exercises his option to buy shares or his or her option to buy shares. That call seller must then sell stock to the buyer at strike price. Put option holder exercises their option to sell shares, and the put seller then must buy stock from the seller at that price because they have the obligation. So the option sellers have obligations to deliver shares to the buyers. And then options that deliver shares often use that American-style exercise, and again, that consists of all equity options and ETFs. So you've got your different ways that expiration is handled by the different style of options that we're talking about here. The other ways that they're a little bit different as we look at our two pictures here, we're talking about AM settlements. So AM settlement, we kind of touched on that earlier, when we're talking about the standard index options, not the weekly. So let's just keep it at SPX options. Standard SPX options, the ones that are monthly, that will be expiring for this month on September 20th, those options expire on the morning after the last trading today. As we talked about earlier, the last trading day, in this case, for September, for standard September options for SPX will be the 19th. That's the last day to trade them. So you can trade them up until the close on Thursday. They will not trade on Friday morning, but they will be valued on Friday morning, and by that, they'll be valued based on the settlement that is calculated from the Friday morning opening prices of the SPX index. That will determine the value of the option. And then from there, that's when, later in the day, for whatever reason, still the end of the day that these transaction takes place, then you could be able to exercise your option or what have you. But the value is determined from the Friday morning opening prices. So an example of that, like we talked about earlier, some of them, SPX, S&P 500 index, the DJX, which is the Dow Jones index, and then the Russell 2000 index options. Those settle on the morning, Friday mornings. PM settlement is something that most of us are familiar with already. Most American-style options, equity options, ETF options have PM settlement, and that's when, at the end of the day, Friday or the expiration, or even mostly weekly, they will settle based on the closing price. So the options that expired the close of the market on the last trading day, which is typically Friday. That last trading day is typically on a Friday. And then settlement is calculated from Friday closing prices. So examples of that, like we said, equity stocks, ETF, SPXW, which is the weekly notation of the S&P 500 index options, and then OEX, which is also a little bit different character here. The S&P 100 index is an American-style index option which is unique and it also settles on PM because of the way that it's structured. And another one to sort of throw out here -- I kind of mentioned it a couple times, but those who are familiar with the VIX index. Again, the index doesn't trade. We trade options on that index. VIX options are also AM settled. VIX options typically settle on Wednesday. So on that Wednesday, the futures and the options that are expiring will typically settle, and it's AM settlements. So the last day to trade VIX options whenever their expiration is arising usually is the Tuesday prior to the Wednesday AM settlement. So the value of the option is determined on Wednesday AM. I know, that's a little weird. I mean, I'll admit those are a little bit weird. But it's important to understand how it works, and then it doesn't seem weird.

So again, now this area's a little bit out of my element, but I want to make sure you guys understand some of the differences with these two types of options. So index options, they are likely to receive a section 1256 tax treatment, and so what that means is that the profit and losses on some index options -- and actually, oddly enough, on some futures too, is a 60 percent long-term and 40 percent short-term gain. So you can have your gains looked at a little bit differently regardless of the term, regardless of how quickly you traded them. It could be something that you traded for a week, but they could be subject to either 60 percent long-term and 40 percent short-term gain. But again, this is something you should definitely consult a tax advisor on, but it's important to know that index options have a different treatment than equity and ETF options. And again, this applies to whether your long or short the options – same, it's applicable, and then positions are marked to market at end-of-year and taxes close. So what that means is that those positions are marked based on their position based on their value mid-market at some point in time at the end of the year, and then there will be taxes if there's a closed position. And then ETF options are treated similar to equities and equity options for tax purposes. So they're basically treated like if you've traded equity options, they're treated the same way. ETF options are exactly the same. They get the same type of treatment tax-wise. It all depends on if you have a long-term hold or a short-term gain whether it's over a year. It's my understanding long-term have been held for over a year and short-term have been held for less than a year, so it's pretty straight up and straight forward as far as that goes, but again, I am an instructor of options. I am not a tax advisor. Please consult your tax advisor for more information on that.

So now we're going to go into a couple of real-life examples here that make things probably a little more understandable. And again, we're going to use two comparable products here. I think it helps. You know, we could talk about SPX, but one product that is very similar to SPY is -- I mean, they trade pretty much the same way, but it's an index option. So introducing SP, which is the many S&P 500 index options. XSP is an index option that's similar SPX, in fact it tracks SPX, the big difference being here is it's one tenth the size of SPX. So SPX is trading 3,000, and that's the contract value, like we said earlier, for every option it's 100 times the value of the index. So for an SPX option, the notional value that it could protect or trade against would be 300,000 dollars. Well in this, for XSP, it's one tenth the size. So if SPX is trading 3,000, XSP will be trading 300. And the contract value, notionally, will have a value of 30,000 dollars. So as we look at our two sizes of meat here, I mean that's SPX and that's a 60-ounce porterhouse versus XSP is a 6-ounce filet. Personally, I prefer the filet. I know the fat is good in the porterhouse, but I like straight meat. That's just me. The smaller side allows for more flexibility for traders that are new to index options, and it's a little less daunting, I think, sometimes for people to trade XSP, which is a 300-dollar index versus SPX, which is 3,000. People have different and varying opinions. Some people want the larger values of the options, and so it's the same thing as far as option size. So let's just say an XSP October 300 call, say it's trading two dollars. That same equivalent option in the SPX October 3,000 call will be trading 20 dollars. So that 10 times value works in the same way. And again, XSP is an index option. That means it's European-style exercise and cash settlement. And some people argue that those are advantages that they'd rather have. Some people don't want to have deliver your shares. They don't want to take a stock position, and they want to know that they can keep their trade on throughout the duration of expiration and not have to worry about being assigned or having to exercise because of the dividend or something like that.

Now, the one familiar ETF that we're all pretty relatively familiar with is the SPDR, the SPY, the S&P 500 ETF trust. So that was launched in January of 1993, and it was the first exchange traded fund that's in the US. SPY is designed the track before expenses performance of S&P 500 index. Similar, the XSP and SPY, like I said, they're similar. Value of the cash index is worth one tenth the size of the S&P 500 index, as you all have seen over time. A little bit different, so XSP again, it's an index option just like SPX, and so that exactly tracks the value. SPY, a little bit different sometimes, but again, SPY has a dividend, so that's why you'll see the value of it is not exactly always one tenth, but it's close enough. But because of the dividend, things are a little bit different. The Black–Scholes model for our options is unique in how that it can price the value of the ETF and/or the options surrounding that. Average daily volume of SPY is 71.2 million shares. Average daily volume of the options is about 1.8 million, so this thing trades very heavily as we know. And the ratio is usually about 1.0 to 1.6 call for every put. Shouldn't be too shocking, because

I think largely people are using SPY to hedge their portfolio, so it's a great way to hedge portfolios because it tracks the value of the S&P 500 index, which is a pretty broad-based index. SPY does pay a quarterly dividend. That may affect the in-the-money call options that need to be exercised to collect it. Now again, this is a different vehicle. Some people may want the ability to take stock and delivery in shares in SPY. Say somebody decides, "I'm going to sell a downside put in SPY, and if it gets to that level, I would love to own SPY." Selling it downside put potentially gives you the obligation to buy shares at some point in time, at expiration. So some people may want that ability. Again, this is not one over the other. This is just counting the different ways that people would like to trade these different options. And again, because SPY is an American-style option, you could be assigned or you could have to exercise prior to expiration. So some people may enjoy that.

Breaking down the differences, again, we look at XSP on the left. We look at SPY on the right. Notional value at SPX if SPX is 3,000, notional value to both of them is around the same, you know, 30,000. One tenth of the index. Again, if you pull up both XSP index options or SPY, you pull that up in your Active Trader Pro, you'll probably see they're not exactly the same value, and again, that's because the SPY has the dividend. So that is in place in that. Settlement, both of them are PM settlement. XSP used to be AM settlement, but that changed a little more recently, so they're both PM settle, meaning that the value of the index is determined at the end of the day, expiration on Friday. Similar expirations, you'll have a Monday expiration, you'll have a Wednesday, a Friday, end-of-month, and end-of-quarter, so you'll have a lot of different ways that you can trade. And the way that this market is working nowadays, we're getting a lot of news pushed back that we're aware of. For example, October, we know that the trade war that will be meeting again. Our US trade representatives as well as Chinese representatives will be speaking again at some point in October, and so some people may look at that and say, "Well this is how I want to look at the end of the quarter. I want to trade the end of the quarter September, this way. But beginning the next quarter, I want to trade a different way, and I want to trade October a different way." Or say you find a way that the talks end up happening on October 11th. That's a Friday and that's a weekly option. So you could end up trading a Friday weekly option, whether it's SPY or XSP. I think it's nice that they offer different ways for you to trade. The settlement type for XSP index options, cash settle. Again, SPY, physical share, so you'll get delivery of shares at expiration. Depending on what option you have you'll be either obligated or you'll have the right. But it's a different settle. And European-style exercise for XSP, again, that's an index option, and SPY is American. GTH over there, GTH available, that means global trading hours. Global trading hours are not available. That means it's trading them around the clock. It's not available for either one of them, however, it's interesting to know that XSP does have early tradability, so -- and I'm sorry. I didn't put the denotation there, but early tradability, that's 7:30 a.m. central time, so 8:30 a.m. eastern time. So 8:30 a.m. eastern time to 9:15 a.m. eastern time, that's a little bit prior to the market. So what's interesting about that is that we usually do get a lot of data at that 8:30 eastern, 7:30 central timeframe, right? So what's interesting that those early trading hours means accessibility until the market moves prior to the open, and maybe the ability to capture moves that occur and release certain economic data, like nonfarm payroll numbers, things like that. So XSP does allow you that kind of availability. SPY does not. SPY trades starting right at the open. So a little bit different there. Options, I'm saying. Excuse me. Make sure we understand this. So the options don't trade until -- you can trade XSP options as early as 8:30 central -- 8:30 American -- I'm sorry. I'm all over the place -- 8:30 eastern and 7:30 central. You can't trade SPY options until the open. Now, SPY stock can trade prior to the open. So that's a little bit different nuance there.

So, breaking down these advantages, different advantages of the two. XSP, you have one type of size. There's cash settle, no early assignment, possible 1256 tax treatment. Again, consult your tax advisor, and a lot of times people will say you can hedge XSP with SPY. It's a weird thing, but people have been known to do it. Advantages of SPY, again, same thing. One tenth the size of SPX. Very, very liquid SPY is with narrow bid-asks. It -- wow, that's a wrong sentence there. Sorry, didn't mean to say -- not settle to the cash, but settles into shares. I'm sorry. Settles into shares is what that's supposed to say. So SPY will settle into shares for those who want stocks, though some people may want to take stock and SPY, and you have the ability to settle into shares. And it also pays a dividend. Some people may be really interested in having a stock and/or ETF that pays a dividend. A lot of people want to capture dividends, so you have that ability with SPY. And then SPY typically will have much more retail flow. For portfolio managers that's a big deal. A lot of times they will want to see retail option flow that they can trade off with their other positions in their portfolio.

So, why options. Options provide you flexibility, and provide you leverage with your capital that you have. Index options versus ETF options. We talked about the differences. Examples are DJX and SPX. Those are examples of index options, diamonds and SPY are ETF options. European-style exercise and American-style exercise, the biggest difference there is one, you can only exercise at expiration, one, you do have the ability to early exercise, and that's usually surrounding an ex-dividend or dividend within a stock or ETF. In this case, we're talking ETF. Cash settle versus delivery of shares. Your option will settle to the cash value of the index minus whatever you paid or collected, and for delivery of shares, that turns into a stock position, and that depends on whether you have an option in your long and you have the right to exercise, or if you're short, you have the obligation to deliver shares. AM settlement and PM settlement. Different settlements, they are determined based on either the opening prices with AM settlement and the option ceases to trade the day before, or closing prices, which right up until the close you can trade that option, and PM settlement is determined by the closing prices of that option -- of that index or whatever it's tracking. Tax consequences, consult a tax advisor, but as we talked about, ETF options are very similar to equity options, and the way that they are depends on whether you have a long-term hold or a short-term hold. With index options, you have a possible 60/40 tax treatment. But again, consult a tax advisor. And finally, we've touched on the differences in real time in looking at two different styles. We looked at the index options that are XSP and SPY. Both have similar type values but inherent differences, and we've touched on those, and I'm sure you are well aware of them at this point.

As we always do at this point with our webinars that John and I have done, we sort of, we like to mention that expert option analysis that occurs on the

Fidelity site. Here at Cboe, we have a commitment to investor education and we will typically do an option writeup where we talk about some of the concepts that we may have discussed here. Sometimes we have done writeups where we talk about excess fee and the different ways that people will look at trading and index option. Looking at equity options, but trying to introduce and help people understand the different ways that you can see these things. So this is on the "news and research" tab under "options" under "trade ideas" and "expert option analysis." We will typically do a writeup on either an equity name or sometimes and index option or an ETF, and discuss the things that are going on with that name and an option trade that may make sense. And with that, I will turn it over to John.

John Deyeso: Thank you, sir. Appreciate that, Jermal. Very nice presentation. Folks, my name's John Deyeso. I'm a regional brokerage consultant here at Fidelity. The men and women in my role are positioned across the country in our investor centers. We partner with self-directed investors like yourself, really going through the products, tools, resources, and research available to you on Fidelity's platform to execute your strategy. One of those products, options. We certainly have plenty of tools and resources in that category. I'm glad we have a resource like Jermal, a partnership with the Cboe to go through and learn about a very important topic, index and ETF options. I talk to a lot of clients in the field, and they want to know, "Well, I have broad-based views on maybe the economy, or a sector, or I'm nervous about certain exposure of my portfolio." And so I want to be able to very easily be bullish a segment of the market, or bearish, or protect. One of the great tools that Fidelity offers you is our GPS tool, our analysis tool. So if you logged into Fidelity.com, you can actually click on "analysis," and what it's going to do for you at a high level, just as we scroll down and introduce the landing page for this tool is tell you, "Gow much domestic stock, foreign stock, bonds, and short-term would be cash or anything maturing in under a year. And so, what I like to say to clients is, "Does your allocation match your view and the way you want to express your portfolio based upon your view of the current market?" It sounds simple, but sometimes what happens is we focus on the individual components, and then we don't take the 10,000-foot overview and see how it all comes together. What this tool allows you to do even further is we could poke around in any one of these buckets. So, below analysis, we could go to something like stock analysis and take a look at stock style. Jermal was talking about a lot of different ETFs or indexes attract the broader equity markets. Well, it's important to note that you might pick an index, but is that index how your portfolio is allocated? We want to make sure we get as close to the correlation as possible if we're thinking about a hedging strategy, or, what this might identify is "Where are areas that I might be a little underrepresented that

I have a positive view on or a negative view on what have you, I can plug gas in portfolio." Outside of "style," I can also go to "sector." So this tab is going through and piercing through every mutual fund, exchange traded fund, and categorizing every stock that you have right down to the dollar. How much exposure do I have across the board in each one of these sectors? The exposure translates to risk. All right, so where am I taking on risk in the portfolio? And the blue bars represent what the portfolio holds. This line in each one of the columns represents the weight of that sector in the total market index as measured by the Dow Jones. And so if the blue bar exceeds the line, I am overweight the sector, or if the blue bar does not reach the line, I'm underweight. And some of these come right up to the line. And they're said to be market weight. In almost any portfolio, you're going to overweight and underweight in certain segments of the market. Maybe you're expressing what your sector backdrop view is, or maybe you're shifting because of your macroeconomic view. That's fine. I'm not here to tell you not to do that. But the extent to which we're overweight and underweight matters, and if we take a look at a portfolio, and we see, "Well, you know what? I didn't know that my technology exposure got to 38 percent of my portfolio. That's really where I see a lot of the risk here." Maybe that leads to a hedging conversation where I'm thinking about protecting that segment, or if I'm looking at it, I'm saying, "You know, when I look in my portfolio and I'm pretty closely correlated to the

S&P 500. I want to protect this portfolio. Maybe I'm looking at SPX options, or SPY options, or any other type that's tracking that index." So again, this tool can help you to understand how am I allocated currently, your exposure translates to the risk that you're carrying in the portfolio, and then that allows you to identify "Are there areas that I want to edge or are there areas where I'm a little light on that I actually have a positive view on and maybe I could plug the gaps there using options and go look for indexes to do so." But this tool I thought would be a good one to show, tail flipped off the hood on your own portfolio.

Now transitioning, well how could I go find options that trade on certain segments of the market using Fidelity's tools? Well, one way to do it would be sort of like reverse engineering it here, but going to an ETF screener. Because we have ETFs that track certain segments of the market, and an ETF, unlike a mutual fund, can be optionable, and so we could use this ETF that tracks a certain segment of the market to express our view through the option contracts that trade as a derivative of the ETF. Under "news and research," if you come down to "ETFs," you'll be dropped on our ETF landing page. And there's lots of great tools in here. I hate to scroll by them without using them a little. So something like searching for ETFs by a particular stock, so I could put in a symbol here, up to five, actually, and this tool actually tell me what ETF holds the most percentage in that one particular stock. And so there's a lot of neat tools in here on your ETF searches, but I want to continue down on the page to the ETF screener, the main reason we're here.

And we're broken up into categories. You can look at Fidelity's ETFs, where we have a partnership with BlackRock for their iShares product suite, so a lot of their products are trading commission-free on our platform, and I encourage a lot of you folks to check out certainly a very liquid, robust list that I think is something that brings a very quality partnership to the table. As we go across the board, though, we wanted to make sure that you could look at these from categories. So what if we were looking at market cap, and when I come in here, maybe I wanted to see, "All right, I think small caps may do well." So I could click on the "small caps" segment here. Fourteen ETFs come back; here's the list. They were all ETF name, market price, what have you. On the left-hand side, we have searchable criteria to narrow down this list, and one of them is the ETF optionable. And look at this, of the 14, seven are optionable. So that means I could buy our sell options on these seven ETFs that track small cap US stocks. Was I a little underrepresented? I'm positive on small cap. Maybe I'm thinking about purchasing calls. Or am I overexposed in small cap? I'm nervous about it. Maybe I'm hedging with some puts. Whatever the strategy might be, what I'm trying to narrow down is finding products that are tracking the segment of the market I'm interested in. Let's go back and do it one more time. So we'll go back to the previous page, go back to the screener. So I land on the ETF page and I'm on the screener. What if it was a sector focus? So I click on "sector," and up pops the available sectors. The portfolio that we looked at was maybe a little overweight in technology for the investor's comfort. So I'll click on "technology," because I want this tool to isolate only ETFs that track the technology sector. Here they are again. We cut the deck of thousands of available ETFs down to 64. OK, and of those 64, again, searching over here, narrowing with the criteria, there are 27 that are optionable. Here are the 27. Some of them are industry-focused, within, let's say, semiconductors or software. Some of the entire sector focus in the entire technology sector. Whatever the exposure is that you have in your portfolio, you can find an instrument that's tracking them. So again, just going through, taken all the way back here. We're on the ETF screener. I'm going to click on "sector," and then maybe this time, let's say that I have a positive outlook on real estate, and so I want to come up with the real estate ETFs, screener comes back. Here's your list of ETFs that track real estate. I want to see which ones are optionable. Fifteen, in fact, do trade options. Here we go. OK. So how do I get from here to looking at an option chain? Well, very simple. So, I'll just pick one here. iShares, US, real estate, ETF. I follow to the left. You can see the criteria added. Optionable, yes. Just clicking on "option chain," and I'm launched right into the option chain for IYR. And so that's how I can very easily take a specific strategy in a view on the market, narrow it down, cut the deck, and find instruments to trade.

Lastly, I think it's pretty important. You know, Jermal's going through, did a nice job of talking about AM and PM settlements. I'm showing Active Trader Pro; this is Fidelity's downloadable streaming trading software. If anybody has any questions about it, please contact us. We want to tell you more about the software. If I jump into "options" and "option chain," and I'm just going to put in "well-known index" here. So we'll go up here and say "SPX." That's for the S&P 500, and hit "enter." Now, when this comes through and loads, what's going to happen here is -- and I've shown this in previous webinars so I'm skipping over a few things, some inherent knowledge, but we certainly always can reference previous webinars to go through all the clicks on the option chain. But here you see how you have your dates? Well, look at this. We have weeklies, we have quarterlies, and I can shut this off to then come in and look at, "OK. Now I'm shutting off weeklies, but they still have September 20th AM and September 20th with no lettering next to it, PM settled." And so I wanted everybody to see what that looks like when it's showing side-by-side. Where we have AM clearly listed, those are the ones that are going to price out based upon the AM pricing on the S&P 500 or the PM calculations when there's no

AM right next to it. So you can see those very clearly next to each other. Didn't want anybody to get confused if they went to trade one of these and looking at the option chain. So again, the GPS tool, the analysis tool, I think a great way to take a look at your current exposure, plug gaps, or understand where you're exposed to. The ETF screener could be a nice way to reverse engineer, finding instruments that are tracking segments of the market that you want to express a view on, and then find ones that are optionable. And then finally, the option chain, just looking at it with index options. It's going to look a little bit different with the expirations. Again, always call our option specialist if we have any questions. But looking at this, we wanted to understand the difference of when I say "AM" versus when I don't.

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