



Audio Script: Know Your Options, Understanding Calls

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Audio Script:

Options can provide investors with the flexibility to capitalize on any market outlook. And from our previous session, you should now have a foundational understanding of options pricing. In today's session, we will expand on the understanding of options and explore the difference between buying and selling a call option contract. Our goal is to help investors understand the motivations behind buying versus selling and when they might be considered.

Before we get started, please take a moment to read through and be aware of all of the information contained in these disclosures. Options involve risk and are not for everyone and require a separate application and approval. It is important to read the options disclosure document titled characteristics and risks of standardized options. You can find a link to this document in the disclosure section at the bottom of the page. You can contact us if you have any questions on this information, or anything else that we covered today.

To help investors understand buying and selling call options, we will start with the review of a call option contract and the difference between a call and put contract. We will then take a deep dive into an example where we compare the two sides of a call contract as the stock moves higher and lower. And lastly, reviewing the potential outcomes of a call option is critical to understanding the risk and rewards of each side of the trade. Let's get started.

Let's start by taking a quick review of an option contract, a topic that we covered during our introduction to options pricing video, which you can review. While we will not cover put options in today's video, I will provide a brief introduction to help investors understand option contracts. And we will cover puts in our next video. An option is issued as a call or a put, which informs us if the option contains the right to buy or sell. A call option represents the right to buy. If this example was a call, the contract would represent the right to buy 100 shares of XYZ at any time, up until March 24th.

For a put option, it is just the opposite. A put option represents the right to sell. If this example was a put, the contract would represent the right to sell 100 shares of XYZ at any time, up until March 24. An option contract can be executed upon, meaning the call holder who has a right to buy can take ownership of the shares purchasing the underlying security at the strike price. And the put holder who has the right to sell can sell the underlying security at the strike price. This process is called exercising. An option contract can expire worthless, which happens when it no longer holds any value. We will review an example of this during the potential outcome section. It is important for investors to understand that each option contract is standardized, which is what allows it to be readily bought and sold on an exchange or traded if a market exists. The price at which the option is traded is called the premium which is represented on a per share basis.

Options settle in American or European style. The style determines when the contracts can be exercised. American style contracts can be exercised at any time, and European only an expiration. We will cover this in detail in a later video explaining index options. For now. We will focus on equity options which settles with shares of the underlying security and can be exercised at any time up until expiration. From here on forward. We're going to take a deeper dive into understanding the buyer and seller of a call option.

In order to better understand the outcomes of a call option for both the buyer and seller, we're going to use various scenarios to analyze the trade. We will start with stock XYZ that is currently trading for \$100 per share. We will then analyze an option on stock XYZ with a strike price of \$100 per share that expires in 30 days with a premium of \$4 per share. The call buyer in this example has the right to buy 100 shares of XYZ at \$100 per share any time during the next 30 days. A call buyer enters into this contract with a bullish view on XYZ and has paid the seller \$4 per share for this right or a \$400 debit per contract. On the other side, a call seller has the obligation to sell 100 shares of XYZ at \$100 per share.

If and when the buyer chooses to exercise their right over the next 30 days. A call seller enters this contract with a neutral or bearish view on XYZ and collects \$4 per share for this obligation, or \$400 credit per contract.

Before we move into the risk and rewards, let's focus on the call seller for a moment. For the duration of the contract, a called purchaser owns the right to buy the shares at the strike price at any time. When they choose to execute upon the terms of the contract, a short call holder of the same contract will need to fulfill the obligation. This is called exercise and assignment. In order for the seller to meet the obligation, they will need to either have the shares to sell or own an offsetting long position, which could be a long call or a long stock. Normally, the option is only exercised if the underlying stock has increased in value. This is how a short call holder can potentially face unlimited risk, they may have to purchase the shares at an infinitely high price, while selling it to the buyer of the call at the pre-determined strike price. This risk can be offset by a long position such as in a covered call. A short call that is covered by stock is called a covered call. This has limited loss potential as the seller would own the shares as collateral and is considered a beginner strategy. We will dive much deeper into this strategy in a later video. A short call that is not covered by an offsetting long position is called a naked or uncovered call. This has unlimited loss exposure as a seller would have to purchase shares at an unknown price to meet the obligation and is considered an advanced strategy. Additionally, this strategy will require margin due to the increased risk. We will dive deeper into option strategies in later webinars in the series. We want you to focus on conceptually understanding call options from the buyers and sellers perspective in this webinar. To understand the outcomes after buying and selling a call option, let's look at the visuals of both strategies and possible outcomes.

Understanding the difference between buying and selling an option may feel complicated at first. So I've assembled a quick visual to help provide some context around the specific example that we will explore today. On the left, we have the visual of a payoff graph for a long call option. This is what the call buyer should expect based on the change in the price of XYZ stock. The important aspect to understand is that buying a call option is a bullish strategy that has limited risk, but it requires a significant rally in stock XYZ to overcome the break even cost of the option in order to profit. On the right we have the visual of a payoff graph for an uncovered short call option what the call seller should expect based on the change in the price of XYZ stock. The key thing to understand what's selling a call option is that it's a neutral to bearish strategy with limited reward and unlimited risk potential if stock XYZ is the rally substantially. To understand how these payoff graphs are created, let's take a deeper dive into the various outcomes for a call options trade.

In order to assess the motivations of buying or selling a call option, let's fast forward a call option to the expiration date for three different outcomes and see how each side performs. In our example, a call option is traded between a buyer and seller on stock XYZ, when it was trading at \$100 per share. One contract of a call option with a strike price of \$100 per share expiring in 30 days is traded for \$4 per share.

In this example, the buyer pays \$4 per share for the call option to the seller. As we fast forward to the expiration date of the option, in our first example, we will assume that stock XYZ does not move higher or lower and simply settles at exactly \$100 per share 30 days later at expiration, and expiration, the value of an option is equal to the intrinsic value of the option. In this case, if XYZ is at \$100, the call option is worthless with an intrinsic value of \$0. This is because a call option that provides the buyer the right to purchase the stock XYZ at \$100 per share. When the investor can buy the stock on the open market for the same price does not have any value for the call buyer. When the option expires worthless, the \$4 Premium that was paid to enter the contract is lost, and the trade results in a \$400 per contract loss.

On the other side of the transaction, the \$4 Premium that was collected by the seller is capped and the trade results in a \$400 profit per contract. It is important to understand that when a call option settles below the strike price at expiration, it will always have an intrinsic value of \$0. That is why these results will be identical for both parties if XYZ settles at \$100 or lower at expiration. As a reminder, on expiration, the long call holder does not have to exercise their contracts.

If a market exists for the option they can sell to close the option at the market. A short call holder can also buy to close their option if a market exists to end their obligation at any time during the duration of the contract. Now with the same trade, we can now build a more complete picture for understanding the motivations for buying and selling a call option by exploring a couple of more outcomes.

In our next scenario, we have the same trade. And we're reviewing the outcome of the call option if stock XYZ increases to \$104 per share at the expiration of the call contract. As an example before, the value of an option is equal to the intrinsic value of the option at expiration. With XYZ stock trading at \$104 per share a \$100 call option that provides the buyer with the right to purchase the stock at \$100 per share has an intrinsic value of \$4. This is because a call option that provides the buyer with the right to purchase the stock XYZ at \$100 per share. When the investor can buy the stock on the open market for \$104 per share has an intrinsic value of \$4 per share. For the call buyer when the option has \$4 of intrinsic value at expiration, but the buyer paid a \$4 premium to enter the call contract. The net gain on the trade is \$0. The buyer can either exercise the call option and instantly make \$4 per share in profits on XYZ to offset the \$4 Premium paid or sell the option for \$4 at expiration to offset the \$4 paid for the contract. On the other side of the transaction, when the call seller has the obligation to sell 100 shares of XYZ at \$100 per share, but they must buy it on the open market for \$104, that would result in a \$4 per share loss to the call seller. However, with the \$4 Premium that was collected to enter the call contract, offsets the \$4 per share loss on the call contract, resulting in a \$0 net gain for the call seller. Keep in mind that the seller could hold a call option to expiration and have the call option assigned or for market exist simply buy back the call option to close at expiration and clear the obligation to sell XYZ stock at \$100 per share. Lastly, let's explore XYZ stock moving substantially higher after the call option is traded and review the outcomes.

In our last scenario, we have the same trade and we're reviewing the outcome of the call option if stock XYZ increases to \$110 per share at the expiration of the call contract. As in our example before the value of an option is equal to the intrinsic value of the option at expiration. With XYZ stock trading at \$110 per share, a \$100 call option that provides the buyer with the right to purchase the stock at \$100 per share has an intrinsic value of \$10. This is because a call option that provides the buyer the right to purchase the stock XYZ at \$100 per share, when the investor can buy the stock on the open market for \$110 per share as an intrinsic value of \$10 per share. For the call option buyer when the option has \$10 of intrinsic value and expiration, but the buyer paid a \$4 premium to enter the call contract. The net gain on the trade is \$6 per share, or \$600 per contract. The buyer can either exercise the call option and instantly make \$10 per share in profits on XYZ to offset the \$4 Premium paid or sell the option for \$10 at expiration to offset the \$4 paid for the contract. On the other side of the transaction, when the call seller has the obligation to sell 100 shares of XYZ at \$100 per share, but they must buy it on the open market for \$110 that would result in a \$10 per share loss to the call seller. However, with the \$4 Premium that was collected to enter the call contract offsets the \$10 per share loss on the call contract resulting in \$6 per share lost or \$600 per contract for the call option seller. Once again, the seller could hold a call option to expiration and have the call option assigned or if a market exists simply buy back the call option to close at or before expiration and clear the obligation to sell XYZ stock at \$100 per share. Now that we have reviewed the outcomes of stock XYZ when a call option that has been traded between a buyer and a seller, let's summarize the risks and rewards of both parties and discuss the motivations behind buying and selling a call option.

I've rearranged the various outcomes of stock XYZ in a table to better understand and summarize the scenarios that we explored in the previous few slides. We are analyzing a call option on stock XYZ when it was trading at \$100 per share, and a call option is purchased with a \$100 strike price expiring in 30 days for \$4 per share or \$400 a contract. This trade is a bullish trade and requires the stock XYZ to move higher for the call buyer. If stock XYZ either stays at \$100 or moves any lower, even if it were to decline to zero, the only risk that the call buyer experiences is a loss of \$4 per share or \$400 a contract. That is the limited risk factor that a call option buyer can achieve if stock XYZ does not move in the direction that they expect.

However, if stock XYZ rallies to \$104, the strategy only breaks even, and the call buyer experiences no net gain or loss. Only if stock XYZ rallies above \$104 at expiration, does the call buyer experience a profit. And if stock XYZ continues to move higher and higher, the profit potential for the call buyer is unlimited. This asymmetrical risk reward where the losses are limited to just \$4 per share, but the upside is unlimited is the attractiveness that options provide for many investors. However, it's important to understand that buying a call option has a lower probability of success. Only if the stock makes a large directional move in the direction that the call buyer expected, will it result in a profit. Otherwise, even a mildly bullish move may result in a small loss.

On the other side, a call option is sold with a \$100 strike price expiring in 30 days for \$4 a share or \$400 a contract. This trade is neutral to bearish and requires the stock XYZ to either stay at \$100 per share or move lower at expiration. For the call seller, if stock XYZ either stays at \$100 or moves any lower, even if it were to decline to zero, the only net gain is \$4 a share or \$400 a contract. Since option selling strategies have limited gains equal to the premium collected. This is the limited reward factor that a call option seller can achieve if stock XYZ moves in the direction that is expected. However, even if the directional view on stock XYZ is incorrect, and it rallies up to \$104, the strategy only breaks even and the call seller experiences no net gain or loss. Only if stock XYZ rallies above \$104 at expiration, does the call seller experience a net loss on the trade, and if stock XYZ continues to move higher and higher, the risk potential for the call seller is unlimited. This asymmetrical risk reward where the gains are limited to just \$4 per share, but the downside is unlimited is sometimes seen as a negative for option selling. However, only if the stock makes a large directional move against the call seller's direction will result in a loss. Otherwise, even a mildly bullish move may still result in a small net gain. As you can see from this example, buying and selling a call option have very different potential outcomes with either limited risk and unlimited reward or limited reward with unlimited risk. While selling an uncovered call does take on unlimited risk, if stock XYZ rallies there are some options strategies that you will learn which involves selling call options that hedge this unlimited risk, such as covered calls or a credit spread.

Let's look again at our goals and objectives. And what we learned today, you should now understand the components of an option contract and the difference between a call and a put the basic rights and obligations of a buyer and seller of a call option. And finally, we reviewed the outcomes of buying and selling a call option to understand the risks and rewards of each counterparty. I hope that this provided insights into when an investor may want to buy or sell a call option and the tradeoffs that you're making between the two strategies.

As we discuss uncovered calls, it is important to know that margin is required due to the increased risk. Here is important information related to margin that you should be aware of.

On Screen Margin Disclosures:

When you purchase securities, you may pay for the securities in full, or if your account has been established as a margin account with the margin lending program, you may borrow part of the purchase price from Merrill. If you choose to borrow funds for your purchase, Merrill's collateral for the loan will be the securities purchased, other assets in your margin account, and your assets in any other accounts at Merrill. If the securities in your margin account decline in value, so does the value of the collateral supporting your loan, and, as a result, we can take action, such as to issue a margin call and/or sell securities in any of your accounts held with us, in order to maintain the required equity in your account. If your account has a Visa® card and/or checks, you may also create a margin debit if your withdrawals (by Visa card, checks, preauthorized debits, FTS or other transfers) exceed the sum of any available free credit balances plus available money account balances (such as bank deposit balances or money market funds). Please refer to your account documents for more information.

Before opening a margin account, you should carefully review the terms governing margin loans. For Individual Investor Accounts, these terms are contained in the Margin Lending Program Client Agreement. For all other accounts, the terms are in your account agreement and disclosures. It is important that you fully understand the risks involved in using margin. These risks include the following:

You can lose more funds than you deposit in the margin account. A decline in the value of securities that are bought on margin may require you to provide additional funds to us to avoid the forced sale of those securities or other securities in your account(s).

We can force the sale of securities in your account(s). If the equity in your account falls below the maintenance margin requirements or Merrill's higher "house" requirements, we can sell the securities in any of your accounts held by us to cover the margin deficiency. You also will be responsible for any shortfall in the account after such as sale.

We can sell your securities without contacting you. Some investors mistakenly believe that they must be contacted for a margin call to be valid, and that securities in their accounts cannot be liquidated to meet the call unless they are contacted first. This is not the case. We will attempt to notify you of margin calls, but we are not required to do so. Even if we have contacted you and provided a specific date by which you can meet a margin call, we can still take necessary steps to protect our financial interests, including immediately selling the securities without notice to you.

You are not entitled to choose which securities in your account(s) are liquidated or sold to meet a margin call. Because the securities are collateral for the margin loan, we have the right to decide which security to sell in order to protect our interests.

We can increase our "house" maintenance margin requirements at any time and are not required to provide you advance written notice. These changes in our policy may take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause us to liquidate or sell securities in your account(s).

You are not entitled to an extension of time on a margin call. While an extension of time to meet margin requirements may be available to you under certain conditions, you don't have a right to the extension.

If you have any questions or concerns about margin and the margin lending program, please contact the Merrill Investment Center.

Audio Script Continued:

Options can be complex, and we thank you for taking the time to expand your knowledge of the options universe. We encourage you to continue the series and join us as we dive deeper into the other side of the options chain and explain buying Selling putts. Please feel free to give us a call with any questions or concerns at 877-653-4732. Also, we would love to hear from you. We welcome any feedback or questions in regards to today's presentation, as well as suggestions for future webcasts. Click on the send questions button at the bottom of this page. On behalf of the Merrill and OptionsPlay team, thank you