

## Diagonal Spreads: A Lucrative Variant to Writing Covered Calls

In my observations over the last 15 years of being a trainer of stock and option traders, I have found many folks, both novice and experienced, who write covered calls but do not truly understand them. It's no wonder when I introduce a variant, like the diagonal spread, that eyes gloss over as the theory and practical I explain, falls on deaf ears. Often at the end of a conversation I'll hear, "that's something I'm going to have to grow into," or "the math in that is over my head right now."

In my 6% Protocol program, we embrace diagonal spreads as a lucrative variant of writing covered calls.

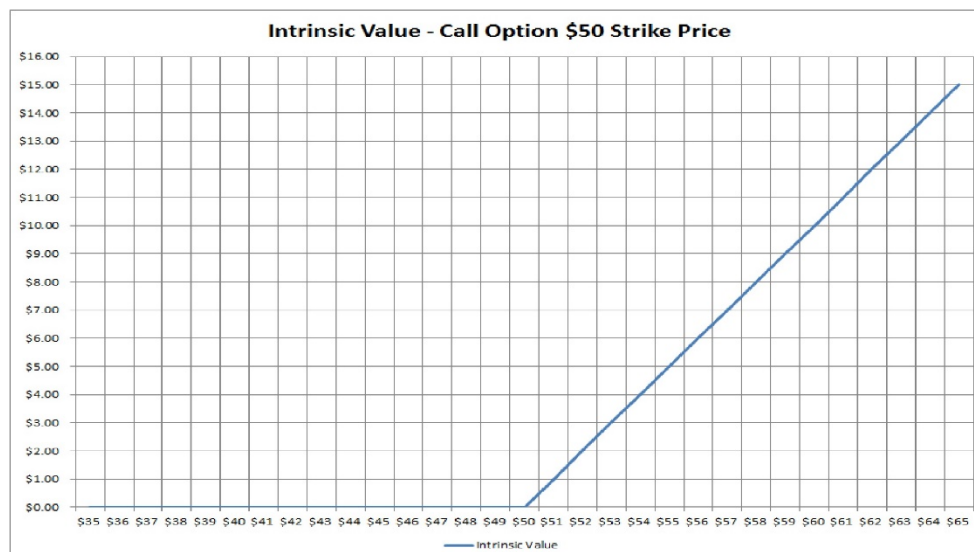
<https://6pp.today/incomefromoptions>

The goal here is to not only clarify covered call theory and practical, but to also explain a variant, diagonal spreads, in a way that can be consumed.

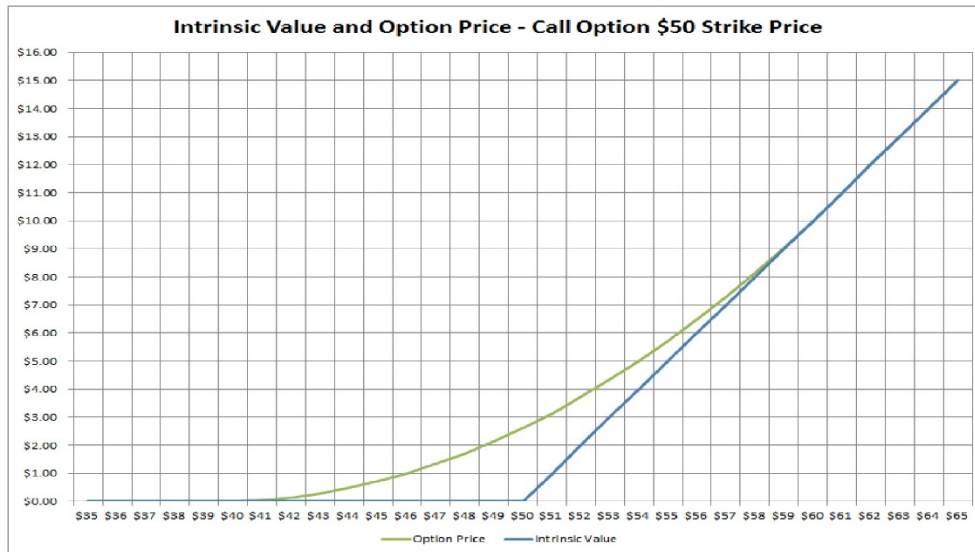
When a trader writes a covered call, usually they are looking to sell theta decay, a component of premium. They often will not consciously understand that, but when quizzed, that is generally their objective. Selling premium can mean many things, but in this writing we mean selling extrinsic value. Extrinsic value is the component of an option price most influenced by time passing by, the underlying symbol price changes, and the buying and selling pressures of the option itself. Intrinsic value, the other component of an option price, is that actual value of the option at expiration; the real tangible value. The intrinsic value is only a function of the underlying symbol price and the option type (call or put). The intrinsic value of an at-the-money or out-of-the-money option is zero.

$$price_{option} = value_{Intrinsic} + value_{extrinsic}$$

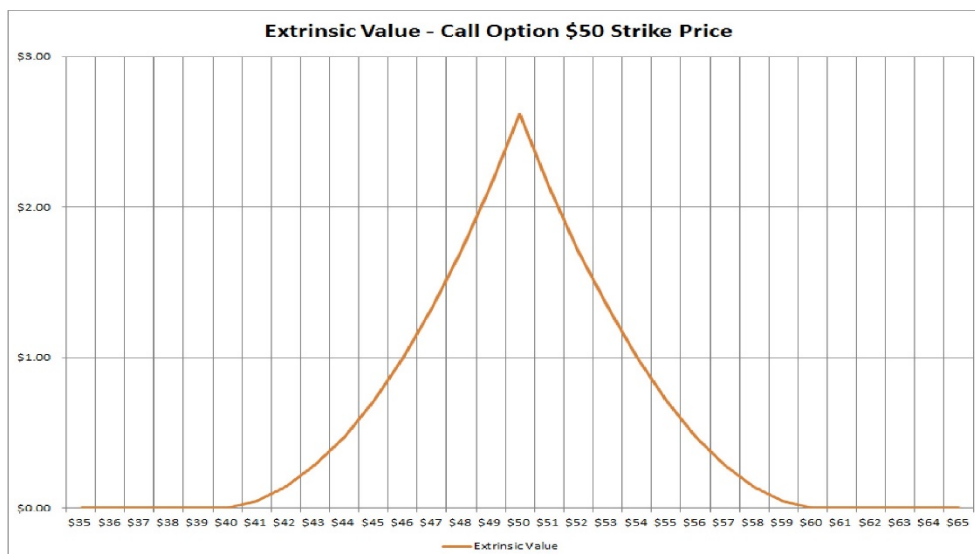
Here is a graph of the intrinsic value of an option with a \$50 strike price call versus its underlying symbol price. Notice that it is irrelevant when this call option expires because the intrinsic value is only a function of underlying symbol price. That means a call option with the same strike price as a second, both against the same symbol, but with different expiration dates, will have the same intrinsic value; any variation in option price is due to the difference in extrinsic value. Let that sit for a moment.



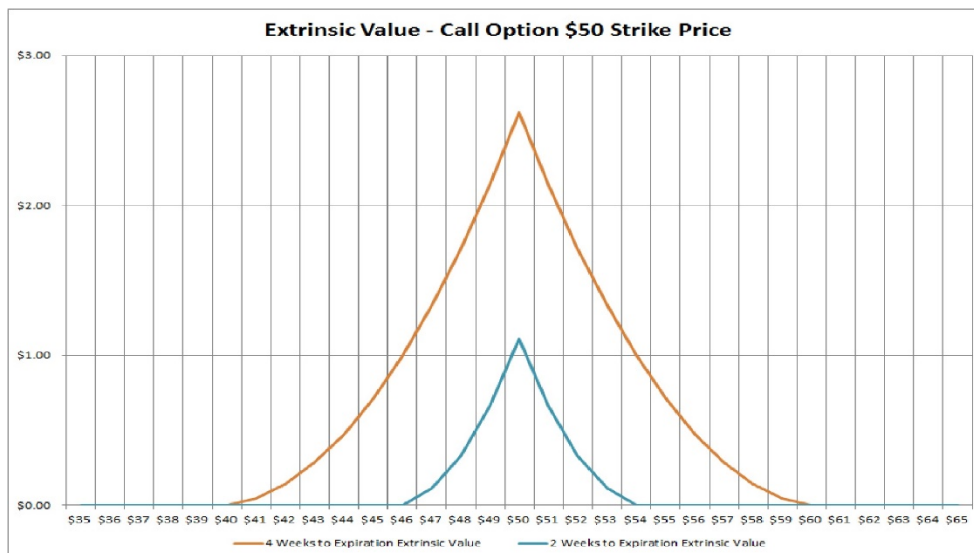
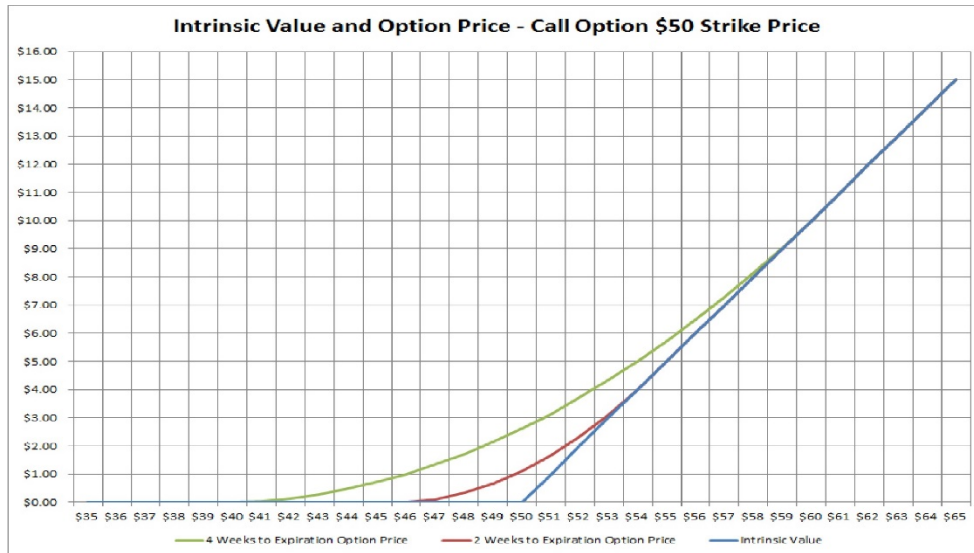
Here is a graph of option price of a typical call option with a \$50 strike price versus its underlying symbol price. In this graph, you will see the intrinsic value plotted for reference. The area difference between the option price and the intrinsic value, is the extrinsic value.



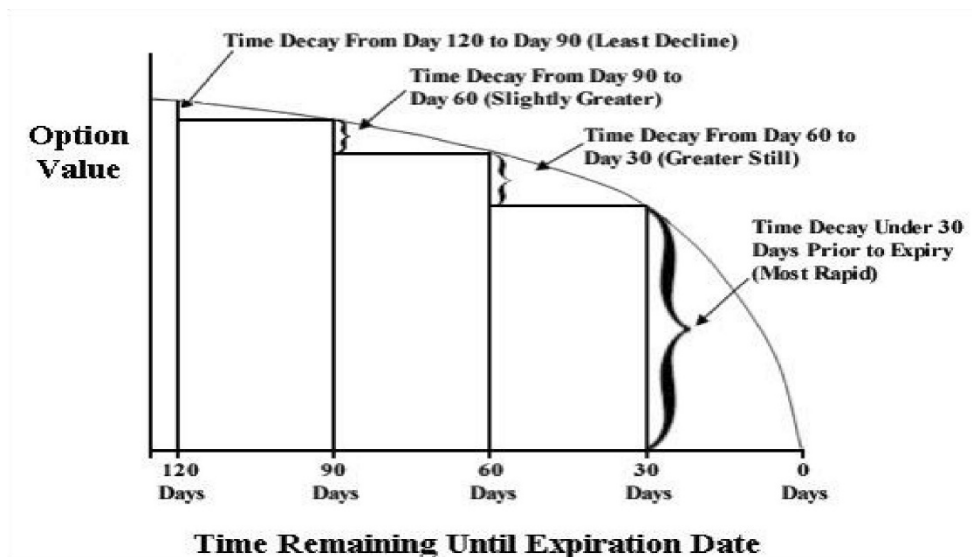
Here is a graph of the extrinsic value, from the prior graph, separated out, versus its underlying symbol price. Notice it is greatest when the option is at-the-money and tapers off equally on either side. Remember, the extrinsic value is little influenced by the option type (call or put). That means extrinsic value of a call option with the same strike price, expiration date, and against the same underlying symbol as a put option, will be similar. Let that sit for a moment.



The conventional intention with covered call writing is to sell the extrinsic value, the premium, for as high a price as possible, and then to have it decay with time passing by. Here are graphs that show what happens to the option price and extrinsic value as time passes by.



Near term premium is what is most often sold. Here is a graph showing how the value of premium is not linear with time. An option will lose much less value over a day passing, when it is 60 days from expiring than when it is five days. The risk with covered call writing is that the underlying symbol will appreciate, causing the buyer of the option to exercise it, or worse, depreciate, leaving the seller with a premium against a devalued underlying symbol. Selling near term premium optimizes the highest selling price with the least amount of time to wait for that price to decay. Our intention is to buy our call option back at a much lower price or let it expire worthless.



Successful covered call writers know to look for underlying symbols that trade sideways in clear horizontal channels. Researching the underlying symbols is paramount. I often describe to my students that an intimacy needs to be formed with the underlying symbol such that you have confidence in its reaction to stimulus. The intention is to sell multiple cycles of premium against the underlying symbol. One reason is the amount of research and familiarity that goes into picking an underlying symbol is long and arduous. It is not something a trader wants to spend their time doing often. Once you find an underlying symbol to write premium against, you would like to stick with it for a while. Another reason is simply the calculation of return on invested capital.

$$ROIC = \frac{\textit{profit}}{\textit{investment}}$$

Every cycle you sell premium against an underlying, and it expires worthless, lowers your investment. The profit of the previous cycle is subtracted from your investment. The profit of the current cycle over the lowered investment, exponentially increases your return on invested capital. Each subsequent cycle, you have profit on a lowered investment. It is not linear. Let that sit for a moment.

I sell monthly premium. There's ample liquidity in the monthly options. On average, I am in a covered call for four to five months, four to five cycles. My record is 14 months, 14 cycles. On that trade, my initial investment was reduced to zero.

Successful covered call writers look to sell premium at strike prices that are just out-of-the-money from resistance of their underlying symbol's horizontal channel, to have the least probability of being exercised. They will pay close attention to whether their underlying symbol issues dividends. Many buyers of options will factor in dividends and will often exercise an out-of-the-money call option if the expected dividend makes the economics work for them. Remember, when you sell an American call option, you have the obligation to deliver the underlying symbol whenever the buyer of the option decides to give you strike price value.

Our investment price, also referred to as cost basis or, even more descriptive, break-even price, is the difference of our initial investment in the underlying symbol and the premiums we collect over time. Our profit zone is therefore between our cost basis and our sold call option's strike price.

Successful covered call writers look to get their cost basis below the support of their underlying symbol's horizontal channel to have the least probability of the trade going against them.

In a buy-write, where you simultaneously purchase an underlying symbol and sell a call option, it is almost impossible to get both the call strike price selected above the underlying symbol's channel resistance and the cost basis of the trade below underlying symbol's channel support. I teach to use a buy-write paper trade as a scenario analysis method for managing risk and position sizing. I teach to select a day where the underlying symbol's closing price is mid channel, roughly between support and resistance. We use the end-of-day prices on this target, verified horizontally channeling underlying symbol, and its respective option chain, to run through the buy-write paper trade scenario analysis.

The difference between the underlying symbol price and the call option price that has its strike just outside of resistance is our costs basis, our break-even price.

$$\text{cost basis} = \text{price}_{\text{underlying symbol}} - \text{price}_{\text{call option}}$$

We calculate max profit by subtracting our cost basis from the call option's strike price.

$$\text{max profit} = \text{price}_{\text{call option strike}} - \text{cost basis}$$

More importantly, we calculate max risk by subtracting our bail-out price from our cost basis. Our bail-out price is selected below the underlying symbol's channel support. It's the price where, if the underlying symbol drops to, it will be so out of the ordinary, that we know it is time to bail-out of the trade. Successful traders use a combination of stop loss orders and protective put strategies on the underlying symbol along with contingent buy-to-close orders on the sold call, to unwind a trade should a bail-out be needed.

$$\text{max risk} = \text{cost basis} - \text{price}_{\text{bail-out}}$$

From the max risk, we can look at the max tolerated risk to our portfolio for any one trade gone sour, and calculate position size.

$$\text{position size} = \frac{\text{max risk}_{\text{portfolio}}}{\text{max risk}_{\text{trade}}}$$

From our buy-write scenario analysis using the mid-channel, end-of-day prices, we get our position sizing, as well as, our target underlying symbol buy price, target call sell price, the analysis profit zone (the zone between the cost basis and the strike price), and the analysis trade zone (the zone between the bail-out price and the strike price).

Although we haven't mentioned it yet, it is imperative to factor broker's commission fees into our scenario analysis. A commission can make the difference in economics for a trade that squeaks by with profit, to a trade that loses.

Successful traders armed with position size and the target prices from their scenario analysis, first, patiently wait for the underlying symbol to test its channel support to buy at a lower price than the target underlying buy price, and second, patiently wait for the underlying symbol to test its channel resistance, and sell the call at a higher price than the target call sell price. The underlying symbol can be purchased at any time. Underlying symbols are not affected by time passing by. Compromises on when

the call is sold are made as the expiration date approaches, however, successful traders never settle for less than their scenario analysis target price.

Successful traders leg into covered calls. By focusing and beating their target prices in a two-step process, maintaining the position size, the cost basis is lower than initially calculated, increasing max profit and reducing max risk. Often, the cost basis can be lower than the bail-out price creating a profit zone that is the same as the trade zone. This is the optimal situation.

### **The Diagonal Spread Variant**

A way to increase the return on invested capital potential of a trade is to reduce the initial investment. Recall that an option price is the sum of its intrinsic and extrinsic value. Recall that the extrinsic value is greatest when the option is at-the-money and then tapers to zero on either side. To create an underlying symbol replacement, we can use deep in-the-money call options. The ideal would be to have call options trading at parity. A call option trading at parity has zero extrinsic value, and therefore trades dollar-for-dollar with its underlying symbol. In a hypothetical example, if an underlying symbol increases from \$100 to \$102, an ideal deep in-the-money call option, trading at parity, would increase from \$30 to \$32.

Recall that it is probable that this trade could last four to five cycles and, in the extreme case, may last 14 cycles or more. We use far out-in-time options for this reason. The ideal would be to have a call option expiring at a date later than 14 cycles. If available, we purchase LEAPS a couple of years out.

Our ideal underlying symbol replacement is a call option far out-in-time, deep in-the-money. Liquidity is a factor. We want some open interest should we need to bail-out.

A good test for if you are deep in the money is to calculate how much extrinsic value there is.

$$value_{extrinsic} = price_{option} - value_{intrinsic}$$

$$value_{intrinsic} = price_{symbol} - price_{strike}$$

therefore

$$value_{extrinsic} = price_{option} - price_{symbol} + price_{strike}$$

If the extrinsic value is not zero, we calculate what its percentage is of the option price.

$$\%_{extrinsic\ value} = \frac{value_{extrinsic}}{price_{option}}$$

We look for the percentage of extrinsic value to be 5% or less.

In our scenario analysis, there are modifications necessary.

Max profit is no longer at the strike of the sold call option. Recall, when you sell a call option, you have the obligation to give the buyer of it, the underlying symbol, if they give you the strike price, at any time before or at expiration. When you purchase a far out-in-time, deep in-the-money call option as an underlying replacement, you do not own the underlying. (You cannot lay claim to dividends; something to factor in.) But, as the buyer of that far out-in-time, deep in-the-money call option, you have the right to hand over the strike price at any time before or at expiration, and receive the underlying symbol in

return. In other words, our max profit is the difference between the strike prices of the two call options in our diagonal spread. If we get called out of our sold call, our brokers will handle the exercising of our bought call. For us, we simply need to know that our max profit is now at the difference between the front month and back month strikes.

Max risk is no longer at the bail out price of the underlying symbol. Because we are using a call option close to parity as our underlying symbol replacement, the difference between the underlying symbol price and our bail-out price can be the same difference between our stock replacement price and our stock replacement bail out price.

$$price_{\text{underlying replacement bail-out}} = price_{\text{underlying replacement}} - price_{\text{underlying}} + price_{\text{underlying bail-out}}$$

From there, all other calculations in our scenario analysis are the same. The trade execution is the same. We are simply using an underlying symbol replacement. This creates a diagonal debit spread. This trade can be done in a cash account. It does not require margin.

Many folks are overwhelmed by the thought of a diagonal spread. They get hung up on using two call options with different strike prices and different expiration dates. When we realize strategically selecting call options changes their behavior dramatically, we become more comfortable. A back-month, far out-in-time, deep in-the-money call option responds to underlying symbol movement. It is an underlying symbol replacement. A front-month, near-term, at-the-money call option responds to time passing by. It is the premium we are selling. The broker will handle the unwinding if we get called out. We can use the same combinations of stop losses, contingent sell orders, protective put options and contingent buy-to-close orders for the front-month call, to protect our downside. It's a viable and lucrative alternative.

### An Example

As part of our 6% Protocol program we regularly leg into diagonal debit spreads. One example started with purchasing four contracts of KSS Jan19 25 Calls on May 19, 2017 for \$12.90, when the underlying symbol was trading at \$37.40, just off channel support. Kohl's has been a great example of a sideways moving symbol. Notice we used 2019 leaps; far out-in-time. Notice we used \$25 strike price; deep in-the-money. The extrinsic value was 50 cents or 3.9% of the leaps price.



We sold four contracts of KSS Jun 40 Calls on June 2, 2017 for 70 cents, when Kohl's was trading at \$39.90, just off channel resistance. That reduced our cost basis from \$12.90 to \$12.20. On June 16, 2017, Kohl's closed at \$37.38. Our option expired worthless. We sold four contracts of KSS Jul 40 Calls on July 5, 2017 for \$1.25, again, when Kohl's was trading at \$39.90, just off channel resistance. That reduced our cost basis from \$12.20 to \$10.95. On July 21, 2017, Kohl's closed at \$40.46. We were called out at \$40. Our broker automatically exercised our LEAPS at \$25. We kept the \$15 spread. In just over two months, we walked away with a return on invested capital of 36.8% after commissions.

Diagonal debit spreads constructed as covered call variants, where the back-month call options are far out-in-time, deep in-the-money underlying symbol replacements, are viable and lucrative alternatives. Diagonal debit spreads are fundamental to what we teach in our 6% Protocol program. They are premium selling option strategies that require little effort to transact and manage. And, after this writing, they should require little additional comprehension. They should be at the top of all our tool boxes. Sign up here for instant access to our 6% Protocol detailed video series and live weekly workshops and trainings. No wait. No hassle. Watch all the videos immediately at once.

<https://6pp.today/videoseriesnow>