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In this fall 2008 issue:

A Deeper Look Into Why Options Go Unexercised

By: Alan Grigoletto

Why do so many in-the-money (ITM) call options go unexercised prior to the ex-dividend date?

Statistics from The Options Clearing Corporation (OCC) show that 55% of all options positions are closed by an offsetting transaction, while 17% are exercised, and the remaining 28%* expire without being exercised. Some portion of the unexercised calls, in fact, should be exercised prior to ex-dividend date (ex-date) because there is clear financial reward to do so.

To understand why this occurs, we first need to understand the mechanics of call options and the dividend process. Dividends are payments by a company to shareholders of record. The dividends are paid out of retained earnings or company profits and may be either cash or additional stock shares. These payments may be regular, predictable, variable or one-time events. Some industries, like tanker or mining companies, pay highly variable dividends based on profitability while others pay a one-time dividend. Of the latter, Microsoft was most notable, paying a one-time dividend of $3 dollars per share in November 2004. Note that dividends are taxable income to shareholders.

** 2007 statistics include both Broker Dealer and customer however, the Broker Dealer portion is an insignificant amount of the 28%.*

continued inside

Alan Grigoletto is Senior Vice President of Business Development and Marketing for the Boston Options Exchange. Grigoletto has been with the Boston Options Exchange since its formation in 2004. Prior to joining the Boston Options Exchange, Grigoletto was a Founding Partner at the investment advisory firm of Chicago Analytic Capital Management.

Grigoletto has more than 30 years experience in trading and investment, being an options market maker, stock specialist, institutional trader and portfolio manager. Grigoletto was the portfolio manager for both the S&P 500 and MidCap 400 portfolios at Hull Transaction Services, a market-neutral arbitrage fund. He has considerable expertise in portfolio risk management as well as strong analytical skills in equity and equity-related (derivative) instruments.

Grigoletto received his degree in Finance from the University of Miami and is an active member of the Securities Traders Association.

BOX
BOSTON OPTIONS EXCHANGE

continued from front

Now that we know a little about dividends, we need to examine the timeline of the dividend process. Option holders need to pay close attention to the declaration date, the date when the board of directors publicly announces when it will pay a dividend. This date should serve to put the option holder on notice to analyze the costs, benefits and risks associated with exercise. The ex-dividend date is the first day that the underlying security will trade without the announced dividend; therefore, the long call option holder must exercise one day prior to this date in order to receive the dividend. The other important dates are the date of record, which is an accounting of those shareholders entitled to the dividend (usually days after the ex-dividend date) and the payment date, which is when the check is mailed to shareholders.

It is also critical that the option holder understand the rights associated with a long call position. Options are designated as either American or European style. European style options can only be exercised at expiration, and accordingly, the seller may not be assigned prior to the expiration date.

"A quick lesson on call option value can be stated as: Total Value = Intrinsic Value + Time Premium."

American style options allow the holder to exercise any time prior to expiration while the call seller may be assigned any time prior to the expiration date. Sellers of call options, when assigned prior to the ex-date, will pay the dividend. All stock options are American style exercise and therefore, will be the focus of this discussion. A quick lesson on call option value can be stated as: Total Option Value = Intrinsic Value + Time Premium. Time premium is comprised of Interest Rate Value + (Volatility Value – Dividend Value). Increases to the intrinsic value, interest rates and

FROM THE Editor

Welcome to the fall 2008 issue of *Options Central* – The Options Industry Council's educational newsletter!

In this issue, we continue the discussion on exercise and assignment for options trading. Alan Grigoletto, an OIC instructor, looks more in depth about the scenarios for when one should or shouldn't exercise. Then in the Bid and Ask section, OIC's Help Desk answers questions regarding bankrupcy and what happens to your options, as well as how volatility affects the order entry in the market. Don't forget to review our Readers' Quotes section where fellow investors share their thoughts.

We hope you enjoy reading this issue of *Options Central* and as always, we welcome your feedback!

"The determination to exercise or not must be weighed with all the benefits and costs taken into account."

volatility all contribute to increases in call option value. The volatility value, or time value is any premium in excess of intrinsic value. Increases in dividends have the inverse affect in that they decrease call option value; this is true because it is more desirable to hold the stock than the call option as only shareholders are entitled to the dividend.

The determination to exercise or not must be weighed with all the benefits and costs taken into account; this will require additional homework by the investor. Let's examine the factors that help the investor make the correct decision. One key variable that must be noted is that the stock will lose value by the amount of the dividend on the ex-date. Let's suppose the dividend is 30 cents. You can expect the stock to decline by this amount. There is an obvious incentive to exercise to avoid suffering a net 30 cent loss because the dividend proceeds (30 cents) would offset the decline in stock price. This decision would be an easy one if not for the fact that the option may have premium over and above its intrinsic worth. The time value will be lost upon exercise. Let's look at an example:

- XYZ stock is trading at $100.50
- Long 1 XYZ 100 call at $1.00
- Dividend is 15 cents

The long call has 50 cents of premium over and above its intrinsic value; therefore 15 cents will be gained from exercising the call and capturing the dividend, the stock price will decline by 15 cents and the premium lost from exercising the call option will be 50 cents. This would not be a good trading decision or a good time to exercise!

The most obvious time to exercise is when the call option is at parity, so there is no loss due to time value forfeiture. One easy way to check if your call option is at parity is to check the corresponding put option; it should have no value, or at least, no bid. Another example:

- XYZ stock is trading at $100.50
- Long 1 XYZ 90 call at $10.50
- XYZ 90 put has a 0 bid
- Dividend is 15 cents

The option exerciser avoids a 15 cent loss on the decline of the stock price without sacrificing any excess premium value.

While we examine this simple math we have yet to weigh the additional costs associated with exercise. When you exercise a call option, you pay a commission and you become long stock. There is a cost to carry this stock and you must either pay for it in full or margin it. The retail investor that does not have the funds to do either may want to sell the call option and close out the position. In addition, long stock means you no longer enjoy the limited downside risk that the call option held. And, you have changed your risk profile.

Let's establish some simple guidelines for when you might consider exercising.

1. The retail investor's intent is to own the underlying stock.

2. The call option is "at parity," there is no time premium and the delta is close to 100 or moves

Figure 1: BULL CALL SPREAD

Stock Price	90 Call Price	100 Call Price	Exercise 90 Call	Assigned 100 Call	Long Share
$105.00	15.00	5.10	1	(1)	0
$103.50	13.50	3.65	1	(1)	0
$102.25	12.25	2.55	1	0	100
$101.25	11.25	1.60	1	0	100

Figure 2: BEAR CALL SPREAD

Stock Price	90 Call Price	100 Call Price	Exercise 90 Call	Assigned 100 Call	Long Share
$101.50	11.50	1.65	(1)	1	0
$100.25	10.25	.75	(1)	1*	0
$100.00	10.00	.50	(1)	1*	0
$99.30	9.30	.15	(1)	0	(100)

Figure 3: CALENDAR CALL SPREAD

Stock Price	June 100 Call Price	September 100 Call Price	Risk of Assignment on June Call
$101.50	2.00	4.00	High
$100.25	1.00	3.00	High
$100.00	.50	2.50	High
$99.30	.25	2.00	Low

*Note: In Figure 2 the 100 call, at the stock prices of 100 and $100.25, has premium in excess of the dividend proceeds. Exercising the 100 call in these cases is a defensive maneuver to avoid short stock carrying costs. Non-professionals may also wish to close out the position entirely by simultaneously selling the long call and purchasing the short call. Exercise costs would have to be weighed against the cost of closing out the two positions.

nearly equivalent to the stock price. (This call position is almost equivalent to long stock, so you might as well take the dividend.)

3. The proceeds of the dividend are greater than the value of holding the option (limited risk) and choice to exercise at a later date.

4. The dividend is greater than the cost to exercise, plus all commissions and carrying costs.

5. The underlying stock is not volatile and the bid ask spread is narrow, allowing the shareholder an additional choice to exit by selling the stock (after exercise) without suffering additional market impact risk.

Conversely, one should not exercise when:

1. The option holder does not wish to hold the stock.

2. The call option has time premium that is greater than the dividend amount. The forfeiture of the time premium, the related commissions and carrying costs and risks associated with being long only stock exceed the dividend proceeds.

3. The investor does not have the necessary funds to carry the long stock.

4. The underlying stock is volatile and would expose the stockholder to increased risk while the bid ask spread in the underlying is wide, adding to the overall cost of the exercise.

5. The downside risk of long stock is greater than the limited risk of the call option.

Now that we have examined single options and exercise, we need to talk about what to do when you have a spread position. We will examine three common spread strategies and what the decision making process should be for each.

Bull Call Spread

The bull call spread involves the purchase of one call and the sale of another call with a higher strike price on the same underlying stock. Example:

- Long 1 XYZ 90 call at $10.10
- Short 1 XYZ 100 call at $2.10
- Net cost is $8.00

Let's look at Figure 1 with four possible scenarios with XYZ stock trading between $101.25 and $105; the ex-date is 10 days prior to expiration; and the dividend is 15 cents.

The investor should consider exercising the parity call in all cases and should expect to be assigned on the 100 call when the stock is trading $103.5 and higher. At 102.25 and below, the call option has time premium in excess of the dividend proceeds. The delta is not at or near 100 and therefore may escape assignment, although the call seller should anticipate that assignment can come anytime prior to expiration.

The long stockholder should be satisfied with holding a long stock position or should contemplate closing out the entire position prior to the ex-date.

Bear Call Spread

The bear call spread involves the sale of one call and the purchase of another call with a higher strike price on the same underlying stock.

“An investor long the option must weigh all the costs associated with exercise, including all commissions and costs to carry the underlying.”

Let’s review the following example in Figure 2:

- Sell 1 XYZ 90 call at $10.10
- Buy 1 XYZ 100 call at $2.10
- Dividend is 15 cents
- Net credit is $8.00

The investor can expect assignment on the 90 call in all cases and therefore will have to pay the 15 cent dividend. To avoid paying the dividend, the investor can exercise the corresponding long call negating the position.

Calendar Call Spread

The calendar call spread involves the selling of a call option with a nearby expiration against the purchase of a call option with a longer expiration date. Both options have the same strike price and underlying. Reference Figure 3 to review the following example:

- Sell 1 June XYZ call at $2.00
- Buy 1 September XYZ call at $3.50
- Net debit is $1.50
- Dividend is 75 cents payable 5 days prior to expiration
- Short 1 June XYZ 100 call at $2.00
- Long 1 Sept XYZ 100 call at $1.50

The investor should anticipate assignment of the short call when it is ITM and the remaining time premium is less than the dividend. The investor will pay the dividend if assigned prior to ex-date. The associated margin costs of the assigned call (now short stock) may be greater than the short call position. Investors should consider rolling the spread up to a higher strike price or out to a later expiration date, as exercising the September call would cause a substantial loss due to premium forfeiture.

The professional trader is able to capture dividends more effectively. The professional maintains lower execution and clearing costs than that of the retail investor. Professional fees are “capped” on certain dividend capture spreads. This is the equivalent of paying for one lottery ticket and getting the next 100 free – who wouldn’t do that?

Professionals may typically buy and sell the same deep-ITM option in large quantities when there is a large dividend. Then, they exercise the long side while statistically avoiding assignment on a small percentage of the short call position. Professionals may also purchase a deep-ITM spread. Example:

- XYZ is trading at $100
- Buy 5,000 XYZ 70 calls at $30.00
- Sell 5,000 XYZ 75 calls at $25.00

In this example, our professional trader exercises all 5,000 70 calls while anticipating that he will be assigned on less than 5,000 75 calls. This strategy is referred to as a “dividend play.” Professionals execute the majority of all dividend plays.

Tips for Investors

To summarize and perhaps reduce the portion of options that go unexercised, retail investors should consider doing the following:

Monitor the ex-date and the amount of the dividend. Information is readily available in the media, like *The Wall Street Journal*, on the Internet or can be obtained via your financial advisor.

Investors who are long the option should consider exercising when the option has a delta near 100 and zero time premium.

An investor long the option must weigh all the costs associated with exercise, including all commissions and costs to carry the underlying. Additionally, investors must monitor the bid/ask spread of the stock and its associated volatility as a possible cost when selling the stock.

Retail investors who are short the option should anticipate assignment when the call is ITM, the ex-date is close to expiration, and the time premium is less than the value of the dividend.

Investors who are short the option must plan on closing out the short option or rolling to another strike or expiration date to be more confident of avoiding an assignment.

Retail investors involved in a bull call spread must weigh the limited risk of holding the option versus the value of the dividend. Additionally, the associated costs of exercise and the greater risk of holding the stock should be considered.

Retail investors involved in a bear call spread should anticipate assignment on a short option when the call is ITM, the ex-date is close to expiration, and the time premium is less than the value of the dividend. Additionally, they must have an exit strategy for both the short call and the long call of the spread. In some cases, closing out the spread may be the best choice.

Investors involved in a calendar spread should anticipate assignment when the call is ITM, the ex-date is close to expiration, and the time premium is less than the value of the dividend. The investor may wish to close out the position or "roll up" to higher strikes or "roll out" to later expiration dates.

Perhaps now it is easier to understand why some portion of that 28% of all options go unexercised. It may be attributable to transaction costs associated with the exercise, investors not monitoring both their position and ex-date or not understanding the option mechanics. Armed with a little better understanding of the dividend process, the investor can make an informed decision about exercising or not exercising ITM long calls.

To simplify the computations, the examples in this article do not include commissions or transaction costs. Commissions and transaction costs will affect the outcome of all stock and options transactions and must be considered prior to entering into any transaction. Investors considering options should consult their tax advisors as to how taxes may affect the outcome of contemplated options transactions.

Common Options Terms

Assignment
Notification by The Options Clearing Corporation (OCC) to a clearing member that an owner of an option has exercised his or her rights thereunder. For equity and index options, assignments are made on a random basis by OCC.

Delta
A measure of the rate of change in an option's theoretical value for a one-unit change in the price of the underlying stock.

Ex-Dividend Date
The day before which an investor must have purchased the stock in order to receive the dividend. On the ex-dividend date, the previous day's closing price is reduced by the amount of the dividend (rounded up to the nearest eighth) because purchasers of the stock on the ex-dividend date will not receive the dividend payment. This date is sometimes referred to simply as the 'ex-date,' and can apply to other situations.

Exercise
To invoke the rights granted to the owner of an option contract. In the case of a call, the option owner buys the underlying stock. In the case of a put, the option owner sells the underlying stock.

In-the-Money (ITM)
An adjective used to describe an option with intrinsic value. A call option is in-the-money if the stock price is above the strike price. A put option is in-the-money if the stock price is below the strike price.

Parity
A term used to describe an option contract's total premium when that premium is the same amount as its intrinsic value. For example, when an option's theoretical value is equal to its intrinsic value, it is said to be 'worth parity.' When an option is trading for only its intrinsic value, it is said to be 'trading for parity.' Parity may be measured against the stock's last sale, bid or offer.

Premium (Time Premium)
The total price of an option: intrinsic value plus time value. Often (erroneously) this word is used to mean the same as time value.

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Bid AND Ask

Q: If I have an option position in a company that goes bankrupt, what happens to my options?

A: Prior to being declared bankrupt, stock exchanges typically delist the security. The shares generally begin to trade OTC (over-the-counter via the pink sheets or bulletin board). When this occurs, the options exchanges normally continue to trade the options, but allow "only closing transactions" and will not add any new expiration months or strikes. As long as the shares continue to exist, exercise and assignment activity results in the delivery of the underlying shares as normal. Once a company is declared bankrupt by the courts and common shareholders receive nothing (shareholders equity becomes zero), any remaining options will typically be adjusted to call for delivery of cash equal to the strike price upon exercise. For example, one who exercises a $5 put option, would take delivery of $500 (the strike price times 100) and deliver nothing in return. When such an action occurs, The Options Clearing Corporation (OCC) will post a memo to its site.

Q: When I enter an order in volatile market conditions, does it make a difference what kind of order I enter?

A: During times of extreme market volatility, it is imperative for investors and their brokers to fully understand the risks of entering market orders. A market order is more time sensitive than price sensitive. If one enters an order "at the market," especially a large order, there may be a chance that the market for that security will change quickly once that order is submitted to the market place. Furthermore, investors should use extreme caution when entering market orders prior to the opening of the markets or after the markets close. As prices can change rapidly, especially in today's market, understand the parameters of the orders you are submitting and invest accordingly.

Readers' Quotes

"Thank you very much for such a clear and precise explanation in layman's terms. I completely understand writing a put now thanks to you and I appreciate the time you have taken to educate me. I think the OIC provides an invaluable service to both the experienced and novice investor. The response to any question exceeds my expectations and are not only clear and concise, but the answer is not from a choice of templates – these are actual answers by experts in the Options field."

Doug Kay - Monticello, NY

"The Investor Education Day (IED) was a great forum to talk with instructors face to face. I've seen them on the webcasts and podcasts but it gave a totally different perspective."

IED participant - New York City, NY

Want to let others know about a strategy that worked great for your portfolio? Have an experience to share about an educational tool that gave you some insight into options trading?

The Options Industry Council invites you to submit your options experiences to be featured in *Options Central*. Send us your testimonials to be featured in our Readers' Quotes section for our next issue!

Options Central welcomes letters and questions that address articles or other options items. Submit letters to optionscentral@theocc.com.

Letter submissions may be edited for space. By submitting any letter, you consent to its publication along with your name. *Options Central* is under no obligation to print all pieces submitted.

Editor's Note - An options investor may not have typical results as stated above as there are multiple, different outcomes from strategies in options trading.

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The concept of volatility might seem mysterious or perplexing to many options investors, even experienced ones. In this seminar, an options professional will cut through the complexities of volatility and clarify any misconceptions you might have about this important topic. You'll learn:

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- How volatility is measured and what that measurement means
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- A solid understanding of options fundamentals
- A firm comprehension of options pricing
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- Experience with both buying and selling options
- Tolerance for some statistical mathematics

Upcoming Classes

Nov. 18
New York Midtown

Nov. 19
Santa Ana

Nov. 20
Detroit

Upcoming Seminars

Check out www.OptionsEducation.org for a complete description and schedule of fall 2008 OIC seminars.

November

5	Baltimore - Basic
6	Baltimore - Intermediate
18	New York Midtown - Volatility
19	Santa Ana, CA - Volatility
20	Detroit - Volatility

Just Added!

Registration is required. The seminars listed here are FREE and held from 6 p.m. - 9 p.m. To register for a seminar or order educational materials, call 1-888-OPTIONS or visit www.OptionsEducation.org.

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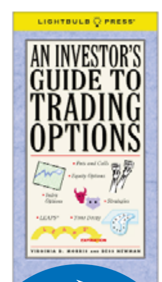

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FOR MORE INFORMATION

If you have additional questions about options, contact your financial advisor or one of the exchanges listed here.

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1-800-THE-AMEX; www.amex.com

Boston Options Exchange
1-617-235-2000; www.bostonoptions.com

Chicago Board Options Exchange
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International Securities Exchange
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