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Lesser Known Option Trading Strategies

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Abstract

Options are bought to hedge (insure) or to speculate on securities. This article examines instead the sale of options in a conservative approach (in lieu of limit orders) and in an aggressive approach (in lieu of margin interest expense). Many know that an investor can use options to increase or decrease risk. This article will explore aspects of options that are lesser known in terms of option level approvals, option use in lieu of limit orders, and no interest expense versions of speculative leverage.

I. INTRODUCTION

An option is a contract to buy (a call) or sell (a put) on an underlying security. Call and put options can either be bought or sold. A call option has an intrinsic value of C = S - X > 0 where C is the intrinsic value of a call option, S is the security price, and X is the exercise (strike) price of the option. A put option has an intrinsic value of $P = X - S \ge 0$ where P is the intrinsic value of a put option. The option owner is on the positive side and the option seller is on the negative side of this same valuation. When the calculated nominal intrinsic value would be negative, it is normally zero in that, unlike a futures contract, an option owner can walk away from the Also see/hear mv DrCinvests video option mechanics contract on at: http://www.youtube.com/user/drcinvests#p/u/6/HZ88KdCLJVY. It is important to note that an option contract represents one hundred shares but is priced and quoted per share that is a dollar value 100 times the quoted price. The standardized strike/exercise price, which is generally in 5 dollar multiples above 25 dollars and in 2.5 dollars multiples below 25 dollars, is sometimes in 1 dollar multiples for some index/ETF securities. The theoretical value can be slightly negative for in the money options near expiration dates reflecting contemplated transaction costs. Transactions costs for options have dropped substantially in the last decade. For example, Charles Schwab & Co. (a discount broker as distinguished from a deep discount broker) charges \$8.95 plus \$.75 per option for options contracts and \$8.95 (or free for Schwab ETFs) for securities of 100 shares when traded on the internet (an extra \$5.00 or \$25.00 charge exists for automated telephone and broker assisted trades).

Options generally have an excess premium above the intrinsic value. The excess premium is a function of time to expiration, volatility of the underlying security, interest rates, expectations, and the moneyness of the option. The Black-Scholes option pricing model¹ can be used to theoretically price a call option. There currently is no theoretical model for put options given that a call option is unbounded upward in terms of the underlying security price movement, whereas for a put option the underlying security is bounded by a zero price. Some argue that there is a put-call parity, but do be reminded that such a parity is confounded by a generally positive market rate of return (which would make call options greater in value), as well as expected ex-dividend dates (which may make put options greater in value). Regardless, the time to expiration will generally decrease the excess premium by the square root of time for an at the money option-an expiration a year from now will generally have twice the excess premium of an option expiring three months from now. Volatility, per my own work including simulations and research, creates the highest annualized excess premiums for out of the money options at about one year expirations for strike/exercise prices beyond the security price at about one-half of the annual standard deviation. Interest rates affect call option valuations in that the expected payoff in the future is discounted back to a current present value. Expectations for the underlying security are particularly relevant to option valuation, and more so for put options if an ex-dividend date is approaching. The moneyness of an option refers to whether the intrinsic

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value is positive (in the money), nominally negative (out of the money), or nominally near zero (at the money); at the money options have the greatest excess premiums.

Recent events have changed the nature of option trading. These have included a revised symbol system going from alphabetic characters for strike prices and expiration dates to numeric symbols with the security symbol (special option root symbols are no longer needed), then the date of expiration, strike price in dollars and cents, and a C for a call or a P for a put (some brokers may vary the specific sequence of these). Trading these is relatively easy given an examination of option chains in one's brokerage account which will list option choices for a particular security which then allow one to trade a particular option. Some options trade in smaller increments (pennies then nickels instead of nickels then dimes for options below and above 3 dollars in price or in pennies for some ETFs). A recent change is the advent of weekly and quarterly options in addition to monthly and yearly (leap) options. Quarterly options cease trading after the last business day of a quarter; the others cease trading after the respective last Friday. Monthly options expire after the third Friday of the month, and the yearly leap options expire after the third Friday of January of a particular year. Monthly options are minimally offered one and two months out with the next being often in a month containing an expected exdividend date. Also be advised that option transactions will be reported as such to the U.S. Internal Revenue Service starting in 2013.

Options can be traded at various authorized levels ranging from 1 (safer) to 4 (riskier)² noting that "Option level approval is a commonly overlooked area of option trading."³ Level 1 is for covered calls (sell a call on an owned underlying security) and the purchase of protective/hedged puts; level 2 is for long call and put positions; level 3 is for spreads; and level 4 is for selling uncovered/naked calls and the selling of puts. Qualification for riskier authorized option trading levels requires approval from a broker, requires sufficient near cash reserves, experience and/or training, and a written authorization including an acknowledgment of the requirements and risks associated thereto.

II. STRATEGIES

A Conservative Strategy

A conservative strategy is to not buy options to hedge/insure nor to buy them as speculative contracts but instead to sell them in lieu of limit orders. Given that the annualized excess premiums on options can be quite high, the selling of options (instead buying options) accrues the excess premium to the portfolio and is a source of revenue (instead of a payment to hedge or speculate). A limit order to buy a security is generally below the current price and a limit order to sell a security is generally above the current price. Selling a call option on an owned security (a covered call) in a portfolio is like a limit order to sell an owned security and is generally regarding as safe, conservative, and often recommended if the call option is out of the money which allows an additional capital gain added to a possible dividend income and the accrued excess premium on the option. For a covered call, if the security does (or does not) rise above the strike/exercise price by the expiration date, it will (or will not) be exercised/assigned and differs from a limit order to sell a security in that now you have received the excess premium of the call option regardless of whether the option was assigned. Note that assignments default to be exercised to sell the security for a call if the option remains open and is in the money. If the call option expires out of the money it will default to being unexercised and would be worthless. If the call option expires unexercised, another call option may be sold with a new future expiration date and perhaps with a different strike/exercise price. The covered call provides less

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investor vigilance in that a good-until-cancelled (GTC) order will normally expire in 60 days whereas the covered call will remain in force during the course of the option's life. In another vein, deep discount brokers may charge extra for GTC orders. One should be reminded that call options rise (and put options fall) theoretically point per point when in the money and substantially less so otherwise; this is often called an option's delta.

An Aggressive Strategy

If one were to contemplate an aggressive investment approach, it might include buying a security on margin or the shorting of a security. The buying of a security on margin would incur an investment interest expense which without proper planning may not be tax deductible given the qualified dividend provision in the U.S. income tax code which acts to preclude the deduction for same unless fully taxable investment income exists. Consider the sale of a put in lieu of long margin borrowing or consider the sale of a naked call (an uncovered position without owning the underlying security) in lieu of shorting the security. Again, the annualized excess premiums on options can be quite high, the selling of options instead accrues the excess premium to the portfolio and is a source of revenue instead of a payment to hedge or speculate. The less risky version is the sale of calls or puts that are out of the money. The more risky version is the sale of options that are in the money which also receive more cash. The movements of the underlying security prices for options that are in the money are more significant to the seller of calls and puts than would be security price movements for options out of the money.

Buying stocks on margin requires at least 50 percent spare equity (or more per Federal Reserve Bank requirements for some volatile securities). On the other hand, the set aside requirements for the sale of naked/ uncovered calls and for the sale of puts can be at approximately one-third (the requirements are in fact more complex²) and is free from interest expense. Selling a put option is like a limit order to buy a security. If the security does (or does not) fall below the strike/exercise price by the expiration date, it will (or will not) be exercised/assigned and differs from a limit order to buy in that you have received the excess premium of the put option regardless of assignment. Assignments will default to be exercised (purchase the security) if the put option is in the money. If the put option expires out of the money it will default to being unexercised and again would be worthless. If the put option expires unexercised, another put option may be sold with a new future expiration date and perhaps a different strike/exercise price. The proceeds from option sales increase the cash position of a portfolio, and one should be wary if considering the immediate usage of said proceeds even if the account appears to have sufficient proceeds and margin availability; there are rules which restrict such immediate usage.

Behavioral Considerations

One may also consider that some portfolio owners have the need to "touch the wet paint." That is, there are studies which note that males trade on average 45 percent more often than females⁴, and often with a lesser level of relative performance compared to females.⁵ Perhaps a more useful strategy would be one that takes advantage of the heightened vigilance, fulfilling the need to monitor the portfolio closely, but also with the concomitant increased premium returns from option sales in lieu of limit orders. Likewise, consider that the sale of covered calls (conservative) or the sale of naked/uncovered calls and the sale of puts (aggressive) and that in either case can be left alone and do not need renewals as would GTC limit orders.

An aggressive strategy could focus on the greatest annualized premiums associated with out of the money options. These may change their moneyness during their remaining life to expiration. Should earlier option positions move toward being more so out of the money, one could place orders to close the open option orders in order to accrue higher annualized premiums on another

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option position? On the other hand, one should be prepared to close out adverse price movements for options if now in the money or be ready to purchase the underlying security in the case of previously sold puts or be ready to sell an underlying security in the case of covered calls. Remember that these do not differ from limit orders (had the underlying security price passed through one's limit price) but do differ with the additional receipt of the option's excess premium. Another possibility is to replace a now in-the-money option position with a later expiration and at a farther away strike/exercise price. The longer expiration option will have a relatively greater excess premium which will offset the replacement of the higher valuation of the now in the money shorter expiration option and would also free up some set aside funds. The decreasing time to expiration may eventually trigger an order to close an open option position (if placed prior) as the option's price decreases toward expiration. In this case, one could place steadily increasing limit pricing for buy-to-close orders on the option position. One should also consider the usage of multiple orders to "staircase" positions fractionally albeit with higher aggregate transaction costs. These considerations could be a constructive substitute for those who like to trade securities frequently fulfilling the need to adjust one's portfolio without increasing the underlying security turnover.

A coherent strategy theme here could be one such as value investing; that is focusing on securities having high dividend yields. The high dividend yield may be favored given qualified dividend tax treatment if the underlying security is acquired in the case of selling puts or in the case for selling covered calls against owned securities. Moreover, the high dividend yield acts to dampen any further fall of a security's price. Of course, there are no guarantees in that some security prices fall with higher dividend yields only to have its dividend subsequently being cut or eliminated soon thereafter.

CONCLUSION

Options are risky and can be expensive. They can also be useful source of income. Just as gamblers have relationships with casinos and people who buy insurance have relationships with insurance companies, with the sale of options, one can choose to be the casino or insurance company instead. Considering that a gambler's or insured's payments to a casino or insurance company may have an expected value greater than the expected returned proceeds, one should at least examine possibility of acting like a casino or insurance company in the long run. Moreover, if one could create option positions that one would place otherwise with limit orders, and in addition getting paid to do so, then one would have not increased their risk but still increased their return. To be clear, this would be where one does not exceed the ultimate capacity of the portfolio meaning one uses considerably less than the set aside available in the account.

References

http://en.wikipedia.org/wiki/Black%E2%80%93Scholes

- Nick Atkeson and Andrew Houghton, editors Big Money Options, April 23, 2010, http://www.investorplace.com/5769/margin-requirements-for-selling-naked-puts/
- Josip Causic, March 31, 2009, http://www.investorplace.com/5503/option-approval-levels-explained/]

www.gsm.ucdavis.edu/Investorwelfare/files/WhyInvestors.pdf

http://www.virtuailes.com/THE-INVESTMENT-ENVIRONMENT/investment-overconfidenceand-trade-frequency.html