

Investment Strategies for Retail Investors Using Put option and Covered Call

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Abstract. The aim of the study is to introduce some common and easy-understanding investment strategies for retail investors. It can bring people a new weapon in investment. However, people may have different reasons of using options. Some are just for speculations, however, for retail investors, investing options can not only bring me profits but also helps them hedge the risks. But in fact, I found that many people around me have a deep misunderstanding of options. They are not only afraid of options because of their high risk, but also sneered at them because of their speculative nature. Options give the impression of being short-term speculative vehicles. And the reason people are afraid of options is because of the fear of the unknown. In my analysis, we will take use of logistic regression, Discriminant analysis and analysis of long call option, short call option, long put option and short put option. Covered call and sell put are good strategies for retail investors to earn stable benefit and hedge the risk at the same time. For investors who are new to use option tools, I recommend covered call strategy.

Keywords: Call Option; Put Option; Covered Call; Sell Put; Naked Put Option.

1. Introduction

This article is aimed to offer some strategies of dealing with options for retail investors and give them some tools for their investment. As we all know, the U.S. stock market is the most liquid and most valuable market in the world. In the US stock market, the ratio of options to underlying shares has reached 1:1.6, which means that on average, 1.6 options will be traded for each lot of stock traded. Options are trading at a higher volume than stocks. In the financial markets of South Korea, Japan, Hong Kong, China and other countries and regions, their options trading volume also exceeds that of stocks. However, there is very few books and articles which is written for retail investors, they either are too difficult to understand for retail investors, or they don't provide the right information for retail investors. In this case, it's necessary to provide a easy-understanding information of such an advanced investment and financial management tool for retail investors.

2. Long and Call Option

2.1 Long Call Option

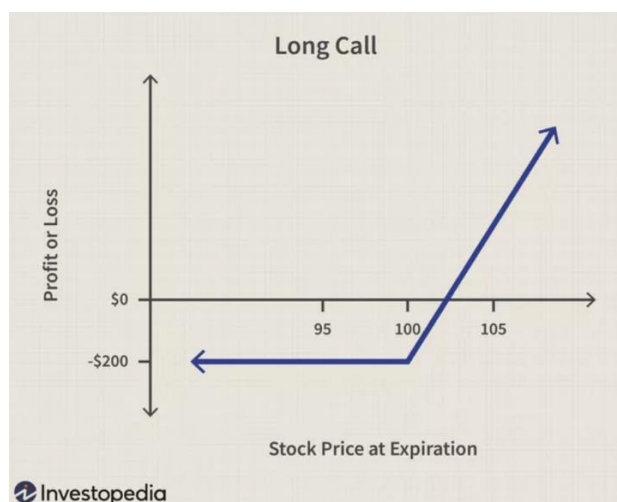


Fig. 1 Image by Sabrina Jiang © Investopedia 2020

“A long call option is, simply, your standard call option in which the buyer has the right, but not the obligation, to buy a stock at a strike price in the future.” (Fernando, 2020). The biggest advantage of long call is to make you buy stock in a cheaper price. When the stock price is rising, theoretically, the profit of long call might be unlimited if the profit is higher than premium. When the stock price doesn’t rise as expected, the only loss is limited by premium

2.2 Short call option

“A short call option is the opposite of a long call option. In a short call option, the seller promises to sell their shares at a fixed strike price in the future” (Segal, 2022). In the real world, we don’t recommend retail investors use short call. Experienced investors who work in investment bank and hedge fund will use this strategy. This reason is that short calls only have very limit profit but have unlimited loss according to the graph. That means it will be dangerous for retail investors.

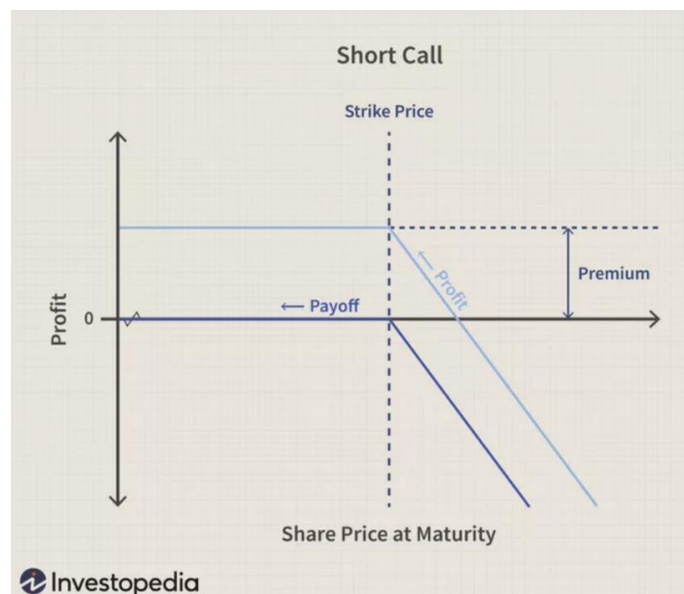


Fig. 2 Image by Sabrina Jiang © Investopedia 2020

2.3 Long put option

“A long put refers to buying a put option, typically in anticipation of a decline in the underlying asset. A long put is a position when somebody buys a put option. It is in and of itself, however, a bearish position in the market Investors may go long put options to speculate on price drops or to hedge a portfolio against downside losses” (Smith, 2021).

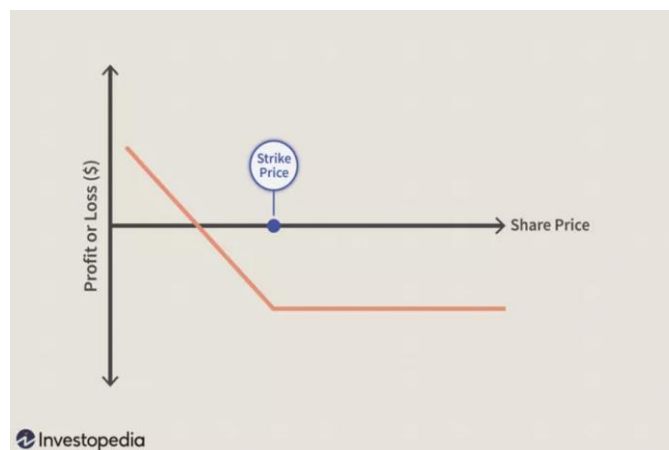


Fig. 3. Image by Julie Bang © Investopedia 2019

People may buy long put for speculation. They probably just want to buy a long put and sell it in a higher price. What they expect is the stock price will drop and the value of the put value will increase.

2.4 Short put option

“A short put is when a trader sells or writes a put option on a security. The idea behind the short put is to profit from an increase in the stock's price by collecting the premium associated with a sale in a short put. Consequently, a decline in price will incur losses for the option writer.” (Chen, 2022)

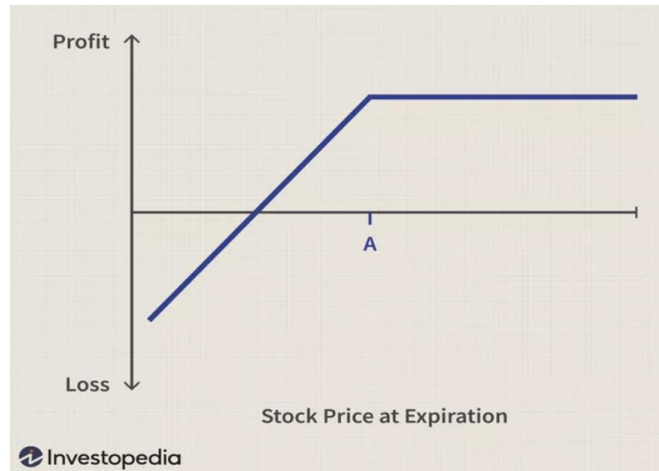


Fig. 4 Image by Sabrina Jiang © Investopedia 2020

3. Investment Strategy

3.1 Covered Call

The situation in the stock market is complicated, and the changes in the market are also changing rapidly, and no one can predict the situation in the stock market. I'm just making theoretical speculations here. The following analysis is based on assumptions and results obtained from theoretical analysis. The composition of a covered call strategy is not complicated. One part is holding 100 shares and the other part is selling a call option based on the underlying stock. The most basic logic of this is that when I hold a call on the stock, I will collect a portion of the call option, and by doing so I can collect my premium. Let's say I currently own Apple at \$160, and let's say at this point I can sell a call option expiring in 1 month with a strike price of \$170 for a roughly \$3 premium. In doing so, my expectation is that Apple's stock price won't rise above \$170 in a month. If it doesn't go up \$170, I'll get roughly a \$2 premium, but if Apple's stock price goes up more than \$170, let's say \$172, then I can sell 100 shares on the contract at \$170, so this week, I can still earn the \$10 increase plus the \$2 premium, but anything over \$170 probably won't. So, in a covered call strategy, there is a possibility that we don't lose money and at least we just make less money. Therefore, a covered call strategy would cost us the potential for upside in the stock in exchange for the premium gained by selling the call.

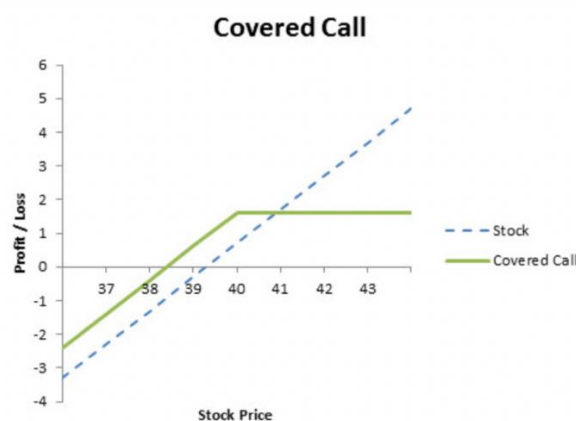


Fig. 5 Profit Curve of Covered Call

From the yield curve, we can more intuitively understand the investment logic of covered calls. In my hypothetical or ideal state, when the stock price is below the strike price, the covered subscription return will rise with the stock price, but when the stock price exceeds the strike price, the covered subscription return will remain the same no matter how the stock price rises. So ideally this strategy is a strategy with a return and an upper limit, and this turning point is our strike price

In Figure 5, we can intuitively find that the Covered Call strategy has two key points, one is the maximum profit point, and the other is the break-even point. In our hypothetical last example, the biggest benefit of this strategy is that when the stock goes up to the strike price, when the stock goes above \$170, we need to sell the stock at \$170 whether or not it goes up. What is the breakeven point? At this point, pay attention to the premium. In the last example, let's say our premium is \$2 under hypothetical conditions, when the stock falls by \$2, the premium can cover the decline in the stock, and when the stock falls by more than \$3, it starts to lose money, so the breakeven point is \$158. But how should insured calls be applied? First, we can be bullish on this stock. Ideally, while the premium would hedge some of the downside risk, the strategy would still lose money when the market begins to fall sharply. Moreover, there will be an upper limit on the return of covered call options, so we try not to choose companies whose share prices are rising rapidly. It is not worth sacrificing the upside potential to charge premiums.

3.2 Sell Put

Selling a put strategy is usually a strategy that is bullish on the stock, or a strategy that is not bearish on the stock. Ideally, if the stock doesn't fall sharply, rises sharply, rises slightly, doesn't rise or even falls slightly, selling puts can make money. Of course this is only a theoretical assumption. Take Apple for example. Apple is currently trading at \$160. If I sell the put option with a strike price of \$150, I will receive a premium of \$6. My expectation is that Apple's stock won't fall below \$150 this month, earning a premium of \$600 at expiration whether it rises or falls. If the share price falls by more than \$150 at expiration, I need to bear the possibility of reduced profits or even losses

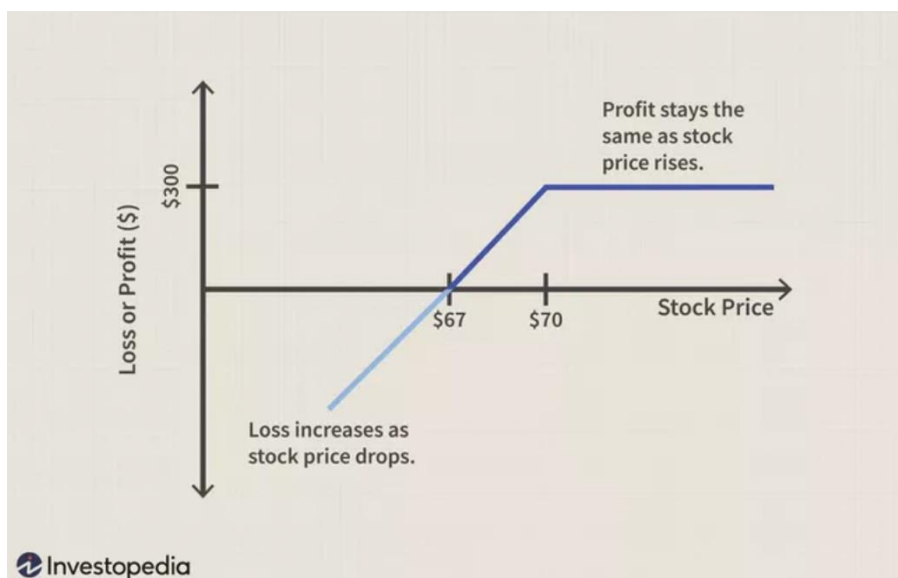


Fig. 6. The Profit of Selling Put

3.3 Naked Put Option

When we look at Figure 6, ideally, the turning point of this line is the strike price of the put option. Selling a put option can achieve its maximum profit when the stock price exceeds the strike price, and the profit is the same no matter how much the stock price exceeds. Sell put gains will follow when the stock falls below the strike price, but if the stock falls too far, the strategy will start to lose money. If the stock price falls to 0, the strategy reaches its maximum loss. Another critical juncture for selling put options is the breakeven point. In Apple's case, the breakeven point is not \$150 at strike

price, but $\$150 - \$6 = \$144$. This is equivalent to opening a position of $\$160$ and then losing more than $\$16$ and then starting to lose money. From a delta perspective, this probability is small, so selling a put is a strategy with a higher success rate. Of course, these are only predictions based on the yield curve, and then various conditions in the market are changing rapidly. When the key influencing factors of the market change, the results will also change unpredictably.

4. Contribution

Most articles which talk about options are for professionals, however, this article is for retail investors. It introduces retail investors another powerful investing tools. Also, unlike others articles, they use a lot formulas to explain the problem, I use graph and simple examples and make it a lot easier for retail investors to understand.

5. Conclusion

The covered call strategy should be the most useful strategy to implementing option tools for retail investors. Compared to other methods like simply buying call or selling put, covered call can help retail investors to make stable income in most situation. Usually, when the stock price didn't touch the strike price of the call option, so we can periodically reap an income. Occasionally the stock price exceeds the strike price, and it does not matter if the option is exercised. It's safe because you have stock on hand. If people are not happy about the stock was bought. You can also buy the stock back. However, the risk of using covered call also needs to be noticed. When the price of stock fell sharply, covered call strategy may cause big lose.

Acknowledgments

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