

Can Options Help Retirees Reach their Investment Goals?

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by Michael Edesess

Can options cost-effectively enhance investment returns? The answer depends partly on whether the investment manager takes an active view and partly on whether the options can be used efficiently to address an investor's risk preferences.

Advisor Perspectives has published three interviews in recent months with executives at investment companies who employ options strategies to control risk, to enhance return or both.[1] These investment managers believe their uses of options are effective and beneficial for investors.

Let's look at the strategies each of these managers advocated, with an eye toward determining the likelihood that they will outperform a naïve, passive strategy and offer retirement-oriented investors the type of risk protection they truly need.

Use of options to leverage an active view

YCG Investments' Brian Yacktman, interviewed May 16, says they use options to get a better after-tax return on investing in a company that they want to buy than they would get by purchasing its stock outright -- if, that is, their view on the future price of the company's stock is correct. If instead of buying the stock you write an out-of-the-money put on the stock (the strike price is lower than the current price), it's similar to placing a limit order to buy the stock -- but you get the put premium too. This is fine if the stock doesn't keep on going down.

Writing an in-the-money put can have a similar limit-order effect if the put premium is taken into account in the purchase price. But you have to place a substantial amount of cash in reserve to back up the put's promise to purchase the stock; therefore, the put premium plus prospective stock rise after purchase has to be enough to beat purchasing the stock itself. Yacktman says that, in almost every case they analyze, the reward is greater for writing the option.

This may be true, but is this just analogous to a leveraged stock position? If the stock or ETF closes below the strike price, yes, you get it for the price you wanted, but at that time it may be worth a lot less than that. Just as the upside may be better than buying the stock, the downside may be worse. An efficient market theorist would say that you're unlikely to get a free lunch out of this. However, one aspect of YCG's strategy might produce good after-tax performance even in a perfectly efficient market, if it is tailored to the investor. Besides writing puts on a security instead of buying it, YCG sells covered calls on a security they own instead of selling it. They do both this and their put-writing, Yacktman says, in such a way as to reduce taxes.

Is it possible that a diligent and skilled analyst could navigate the shoals of the options markets and pull out more upside than down? It is certainly conceivable. There are many options available, and at any time there may be what our efficient market theorist would call a "market inefficiency." But the options navigator will be competing with numerous other skilled (and unskilled) options traders and bots. And of course there will be a cost to the investor, a cost in investment management. And it will be very difficult -- extraordinarily difficult, if not impossible -- for the investor to assess whether the benefit, if any, of hiring this investment manager exceeds that cost.

This is the dilemma of the modern investor, and why, until the standard of compensation for active investment managers becomes much, much lower, it is advisable for the investor to opt for the simplest, lowest-cost approach. Nevertheless, this admonishment does not rule out the possibility that in some cases -- most likely very rare ones -- even with highly compensated managers the benefit may exceed the cost -- *if*, that is, one does not include the cost for the investor to accurately glean the information as to which manager can so perform. This cost may become virtually infinite, because the information content of the data available to evaluate investment management is vanishingly small.

Use of options to fit an investor's risk preferences

Without taking an active view about the prospective price of a security or of the market, one can use options to shape the risk profile of the range of possible results – what I think of as their probability distribution. This is what, in different ways, both Jerry Miccolis of Giralda Advisors, interviewed May 9, and Jeff Chang of Vest Financial Group, interviewed May 31, do. (Chang’s company also uses them, in some cases, to enable customers to pursue their own active view.)

The pitfall that lurks in this process is one that infests much of investment strategy planning: confusion of long-term goals with short-term goals. Most investment goals are long-term, with horizons on the order of 30 or 40 years or more, both for individuals and institutions. The goal of downside protection is one that properly applies at that horizon.

Nevertheless, many investors and their advisors improperly set risk and return goals at a short horizon, on the order of one year. This may be appropriate only if the goal of risk policy is the avoidance of panic, rather than of a shortfall in ultimate wealth accumulation.

Unfortunately, most options available for the reshaping of risk and return also have short horizons, a few months to a year or two. To illustrate what pitfalls can await the use of these short-term options to achieve long-term goals, I will use two of the simplest common option strategies: covered call writing for return enhancement and the purchase of puts to limit the downside.

The pitfalls of covered call writing

If one owns a stock or an ETF like SPY – the investable S&P 500 surrogate on which many options are available – one can write, i.e. originate, call options on the security and sell them to other investors through the options exchange. For example, if the security is priced at 200, one can sell an option to buy it at 230, for a price of, say, \$5. The owner of the security thus reaps an income of \$5; in exchange, they must sell the security to the option holder for \$230 at maturity if the option holder so demands. This will happen if the security closes above 230. Thus, the option writer caps their security’s upside at 230, a cap at a 15% gain. If the security closes at 250, the option writer will have lost a net \$15, after deducting the \$5 premium paid for the option from the \$20 loss of upside due to selling the security at \$230 rather than its market price of \$250.

But what if the investor’s utility function doesn’t care much about returns above 15%? Then perhaps they don’t care if their return is capped at 15%, and therefore the \$5 income from selling the option is all gravy. As Vest Financial Group’s Jeff Chang says, “This is really good for individuals, clients who aren’t looking to make 20% to 30% outsized returns in a given year.”

But here’s the rub. You generally don’t accumulate the desired average annual return of, say, 7% or 8% on equities over the long term by having your annual return capped at 15%. You accumulate it by having many up and down years, some of those ups and downs fairly extreme; without some ups of significantly more than 15% you won’t make 7% or 8% on average. Those occasional annual ups that are greater than 15% are crucial.

That said, the practice of covered call writing is not necessarily an inferior strategy in the long run. I ran a simulation of annual covered call writing using the S&P 500 returns for the 90 years from 1926 to 2015, together with the price of today’s out-of-the-money calls on the SPY and Charles Schwab’s commission schedule (but without any added fee for management of the options strategy). Although the analysis is highly sensitive to the price of the options, it is inconclusive as to whether the performance for the three 30-year periods is better or worse with the call writing than without.

The pitfalls of put purchase for downside protection

For annual put purchase, the results are much clearer. An investor might hold the SPY priced at 200 and want protection against its price dropping more than 10%, to below 180, by the end of the coming year. To do that, the investor can purchase a 180 put option for about \$5.

But unless the investor plans to spend all their money at year-end, much of this protection is wasted. To see why, consider the following scenario. A prospective retiree who is 60 years old wishes to secure a guaranteed annual income beginning at age 70. There are two possibilities. The future retiree could purchase from an insurance company a deferred annuity beginning at age 70. This is, in effect, insurance against the contingency of being alive and consuming at ages 70, 71, 72 and so on.

A second possibility assumes a little cunning innovation on the part of an insurance company. Let us suppose the annuity would cost \$500,000 if purchased now at age 60, \$550,000 if purchased at age 61, \$600,000 if purchased at age 62 and so on up to \$1,000,000 if purchased at age 70. The insurance company could sell the future retiree a guarantee that she will have the needed \$550,000 at age 61 if alive; a guarantee that she will have \$600,000 at age 62 if alive; and so on.

This is over-insurance. It will cost more than purchasing only the guarantee of income at ages 70 and up. It will be good for the insurance company but bad for the future retiree.

What the investor with a 30- or 40-year time horizon wants is a long-term option that protects against a loss at the horizon – or more likely, not protection against a loss, but protection against doing as badly as, say, less than 3% annualized (i.e., keeping up with the approximate historical rate of inflation). But such long-term options are not available. (Goldman Sachs would probably sell you one if you asked and had enough money to make it worth their while, but the price would not be advantageous for the purchaser.) Buying a series of one-year put options is paying too much for over-insurance.

A simulation of annual put options purchases using the historical S&P 500 data bears this out. Buying puts for either the three 30-year periods or the two 45-year periods in the 90-year history results in underperformance of a simple strategy of buying the market by about two to three percent annualized.

How do Chang and Miccolis avoid this overpayment?

Vest's co-founder Chang and Giralda's CIO Miccolis are aware of this danger. Miccolis says, "It's very easy to lose a lot of money holding hedges. We have developed a very cost-effective way to do that."

In Vest's case they ask, "How do you pay for that protection?" The answer is to give up some of the upside by writing out-of-the-money call options. This is what caused Chang to say this is really good for clients "who aren't looking to make 20% or 30% outsized returns in a given year."

But however you're paying for it, it's still paying for more insurance than is really needed to achieve the long-term risk avoidance goal. Some of this insurance is merely to cover the short-term goal of averting panic when the market drops significantly in a single year.

Is there a lower-cost way to achieve both the long-term risk avoidance goal and the short-term one? There is, but it requires a departure from established investment thinking. One can set a 30-year minimum floor on wealth and purchase enough Treasury bonds or TIPS to achieve it. The rest (assuming there is a "rest") can be invested in stocks, or if one desires a more highly-leveraged strategy for one's aspirational investments, in stock or ETF options. This strategy was proposed by Zvi Bodie of Boston University, coauthor of one of the most widely used investment textbooks, in a 2007 book titled *Worry-free Investing*.

Giralda's approach appears different from Vest's but is not necessarily very different. Miccolis says that Giralda's approach to keeping the cost of hedging low is to invest in volatility – that is, to make hedging investments that go up in value when market volatility increases. Because a rise in market volatility usually accompanies or can even precede a sharp downturn, hedging by investing in volatility will produce gains in a market drop that will mitigate the losses.

However, investing in volatility is often done through a combination of purchasing and shorting different options. Some options will rise in value and some will fall when volatility rises. By combining the purchase and sale of such options, one can keep the cost low. But the result may be not very dissimilar from Vest's combination of the purchase and sale of put and call options to limit the downside while capping the upside.

Conclusions

There are so many options available in the market and so many ways to combine them that it might seem – hypothetically at least – that you could deploy them to precisely fit the risk preferences of any investor, perhaps even to outperform in the long run a plain vanilla strategy. No investor's risk preferences, however, can be so precisely stated; thus, the idea of fitting them precisely is a chimera. And, options are generally available only to address short-term risk preferences. When short-term risk preferences are conflated with long-term risk preferences, funds can be squandered on over-insurance to meet an overabundance and redundancy of short-term rather than long-term risk goals. Furthermore, the use of options introduces complexity that can increase management costs.

As stated earlier, the usual caveat holds: unless investment management costs (and the cost of advisors who recommend that management) falls very substantially from its current levels, it is advisable to keep things as simple as possible in order to keep costs low. But if a smart investment management company that employs an options strategy were to charge a truly low total fee, it would be prudent to consider their case.

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by Berrett-Koehler in June 2014.

[1] The three articles were A Distinctive Risk-Managed Equity Strategy, An Options-Enhanced Value Strategy and A New Strategy for Downside Protection or Yield Enhancement.