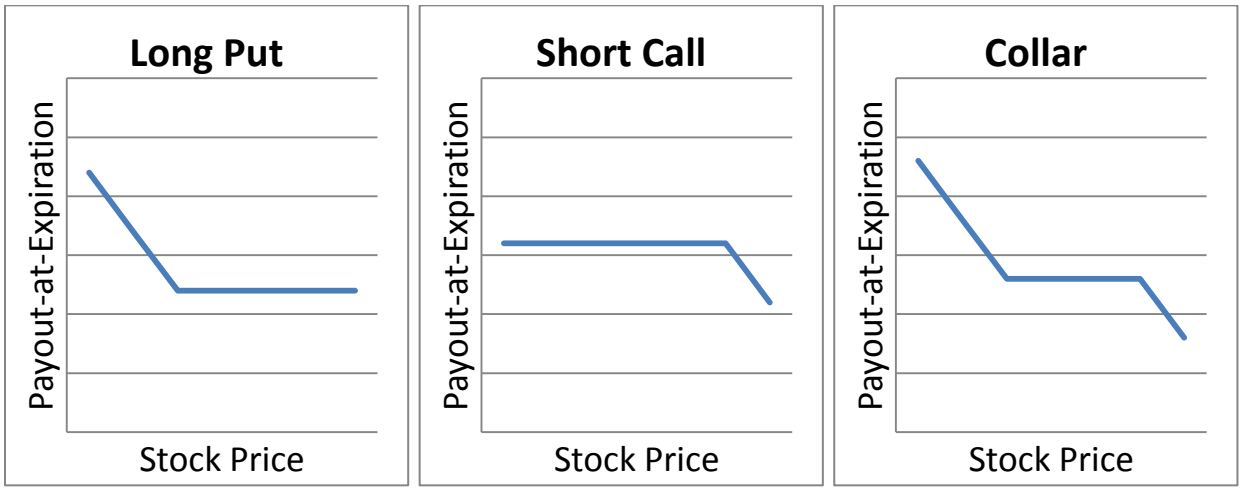
ABR Dynamic Funds' Portfolio Construction Series: Part 11

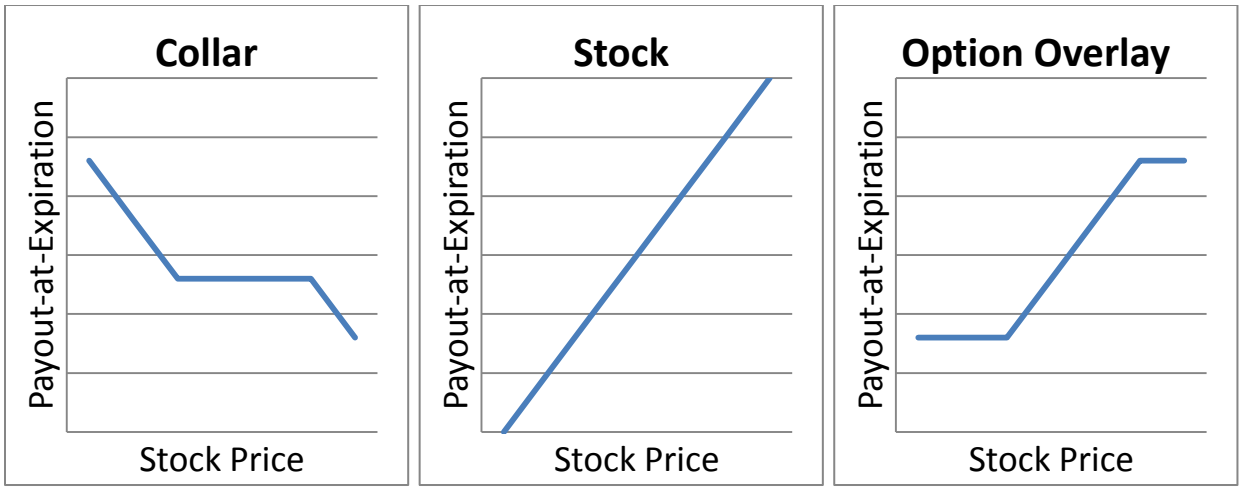
Fooled by the Wrapper IV: Option collar overlay strategies may be worse than just selling stock

Option collar overlay managers have a great sounding pitch: "Purchasing a put option defines and limits downside risk. Selling a call option finances the purchase of the put option. That way, a long stock position can have defined, limited downside risk as a long-term investment strategy." These pitches usually come with good looking payout-at-option-expiration diagrams:

Long Put + Short Call = Collar



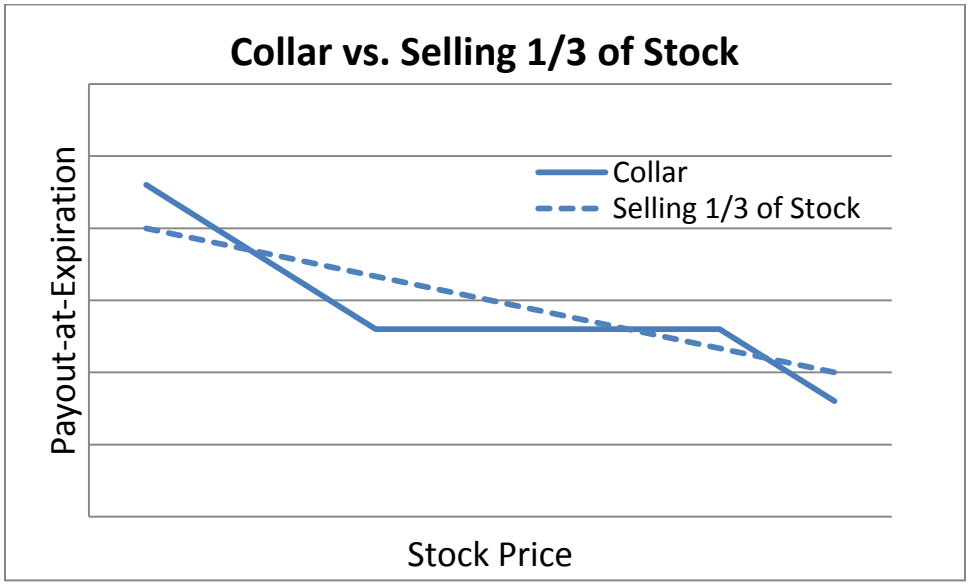
Collar + Stock = Option Overlay Strategy



The "option overlay" graph may be appealing at first glance. It looks like it should protect investors in any meaningful drop while allowing participation in most rallies. **However, as with the first three "Fooled by the Wrapper" installments, option collar overlay strategies are usually just an inefficient way to gain market exposure. Let's dig a little deeper into this version of expensive beta.**

A "collar" is also known as a "risk reversal" because it reverses the risk of the stock. But, of course, another way to reverse part of the risk of the stock is simply to sell some of the stock. The following graph recreates the above payout-at-expiration diagram for the "collar," but it also shows the payout diagram from selling 1/3 of the stock. The diagrams are quite similar, and the similarity sheds some light

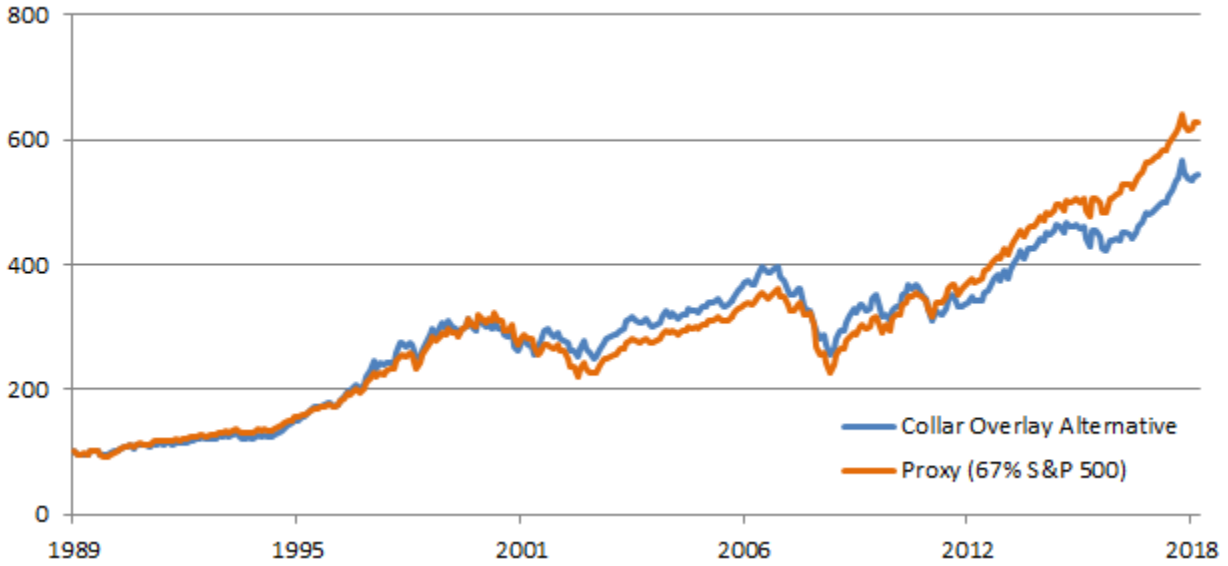
on why overlaying an option collar onto a stock portfolio is a lot like simply selling some of the stock portfolio. Simply put, the fancy solid line is *effectively* just the simple dotted line:



We hope that the above discussion provided insight into option collar overlay strategies and provided a theoretical understanding that helped to strip away the "wrapper" on these strategies. However, there is also concrete way to view the results and confirm the above insights. The CBOE publishes an option collar overlay index, the CBOE S&P 500 95-110 Collar Index (CLL), going back three decades. The following graph compares CLL to a proxy which is just 2/3 exposure to the S&P 500 (2/3 based on the hypothesis from the above graph that a collar overlay is roughly equivalent to selling 1/3 of the stock it overlays). The hypothesis is well-supported by the results.

- **Option Collar Overlay Strategy vs. Proxy**
  - Proxy Allocations:
    - 67% equity behavior (SPY – S&P 500 ETF)
    - 33% idle capital

Figure 22: Results from Jan 1990 to Jun 2018



Source: ABR white paper (data from Bloomberg)

The proxy required only 2/3 of the capital to achieve very similar results. The following excerpt from ABR's white paper on portfolio construction discusses the shortcomings of so-called alternatives that can easily be mimicked with core exposures, especially with reduced amounts of core exposures. It will be familiar to readers who have been following this series on portfolio construction.

Excerpt from ABR's white paper on portfolio construction

Perhaps most importantly, the proxies for typical forms of many of these "alternative" strategies use *reduced amounts* of core exposure to achieve results similar to the "alternative" strategies. This feature, while touted by some managers as a benefit in the form of volatility reduction, is actually quite detrimental to investors.

For example, consider an "alternative" that always moved half as much as equity behavior (0.50 beta), in the same direction as equity behavior (1.00 correlation). This hypothetical alternative:

- Tied up twice as much capital as direct exposure to the equity behavior it mimicked.
    - That capital should have been hard at work elsewhere. Diluting exposure to equity, or any other, behavior only serves to tie up more capital and require more leverage to reach the target exposure level.

- Provided no diversification value whatsoever to the equity behavior it mimicked.
    - It lost every time equity behavior lost, totally eliminating the only free lunch in investing.

- Generated a diluted return compared to the equity behavior it mimicked.
    - Diluted equity returns may have been a luxury investors could afford in a raging bull market, but what if future S&P 500 returns are much lower? How will investors feel about diluting already low returns?

We wish to note that this example should not be taken to mean that all forms of option overlay strategies are bad. The ones that carry the features just discussed may be, but that is not intended as a criticism of the ones that do not.

Next Week's Preview: Private equity and debt haven't done much to diversify public equity and debt.