

## Making Money in Flat Markets

Harvesting Risk Premia in the Defined Risk Strategy



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Most people know the Defined Risk Strategy by our motto: "Always Invested, Always Hedged." The first two primary components of the DRS seek to balance each other out, like the different sides of a seesaw, with the equity portion being #1 ("Always Invested") and the hedge portion being #2 ("Always Hedged"):



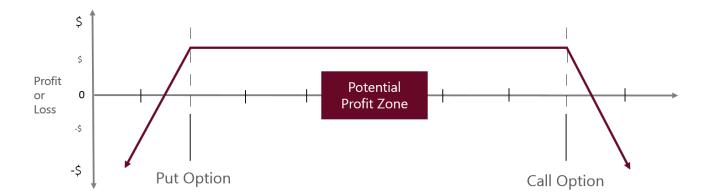
When the markets are down, the equity portion of the DRS is down, but the hedge portion is up and does well and vice versa.

While we believe it is prudent to always be prepared for a bear market, there is a problem with being "always hedged"—the carrying cost. Even though we do what we can to minimize the carrying cost of the hedge and even though we have large market exposure, the hedge will be a drag on performance in up markets. That's where the third leg of the DRS stool comes into play.

### **Potential Profit Zone**

Unlike the first two components of the strategy, which are very long-term in nature, the income/premium collection trades are short-term in nature. What we typically do is simultaneously sell both a call and a put, out-of-the-money, and collect the premiums from both. Known as a Short Strangle, these trades are set up to be market neutral, so that initially the risks are equally balanced between the upside and the downside.

The idea is that we bracket the market, and if the market stays within this range over several weeks, we will be able to close out the trade and repeat the process 12-15 times a year.



Source: Swan Global Investments

We have rather modest goals for each trade, hoping to collect somewhere between 0.30% and 0.50% per trade. If we do this successfully, we hope to generate enough return to help offset some, or all, of the carrying cost of the hedge in a flat or slightly rising market.

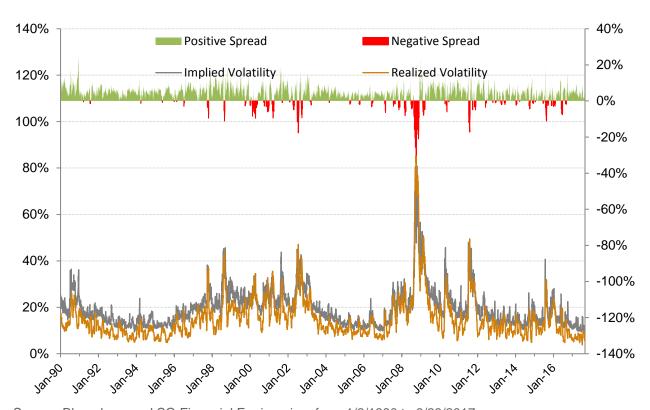
The risk in this trade, however, is if the market moves too far in either direction and starts getting close to those strike prices. We are very cognizant of those risks, and this is where our active management comes into play.

The vast majority of our portfolio management team—the traders, the risk officers, the PMs themselves—are dedicated to working this trade and keeping this trade within acceptable risk boundaries. If the market does move too far up or down we will implement additional adjustment trades to help mitigate risk, keep the trade market neutral, and try to claw back any losses an individual trade might incur.

### The Gap Advantage

The dynamic that these premium collection trades are trying to exploit is the <u>gap between implied</u> <u>volatility and realized volatility</u>. Implied volatility is what drives the price of the options we sell, whereas realized volatility is what actually happens in the market. Often, this spread is positive, which means people tend to overpay for short-term protection giving us the opportunity to seek profitable income trades by selling short-term calls and puts.

## Implied Volatility vs. Realized Volatility



Source: Bloomberg and SG Financial Engineering, from 1/2/1990 to 9/29/2017

The analogy is much like car renter's insurance. When renting a car from Hertz or Alamo, people tend to overpay for the short-term protection the company offers, even though the probability of them getting in an accident in a single day or week is quite low. Car rental companies "harvest" this premium from their wide number of renters. Yes, occasionally, they may have to pay out a claim, but more often than not selling short term insurance across a wide client base is a very profitable activity for them.

We have a similar dynamic with these trades. Like the car rental company, we sell potential protection to people who fear a major downtown. When they don't exercise their option, we make a profit.

Usually, the spread between implied and realized volatility is positive (displayed in green in the graph above), and we try to capture that. That spread exists during periods of both high and low volatility. Occasionally, it does go negative, and yes, we will lose on these trades from time to time, but overall this has been a profitable endeavor for us and an important diversifying part of the strategy when combined with long equity and put options.

## A Synergistic Approach

By incorporating the premium collection into the DRS, we hope to accomplish three things:

- 1. Increase up capture in rising markets
- 2. Subsidize the cost of the hedge in flat markets
- 3. Profit from panic and overreaction in down markets

While the premium collection trades are managed separately from the equity and hedge positions, it is important to remember that the DRS is designed so that the three elements complement each other: The equity position is meant to participate in up markets; the hedge position protects in down markets; and the premium collection trades tend to do well in flat markets.

# Establish Equities

- Purchase exposure to asset class, such as S&P 500
- Invested at all times

## 2 Create Hedge

- Buy puts on the underlying equity
- At or Near-the-Money
- Long-term generally one to two years, initially

## Generate Income

- Seek to sell shorterterm options
- Market-neutral, non-directional trading strategies

## 4 Monitor & Adjust

- Daily monitoring
- Rebalance as required
- Re-hedge annually

It is highly unlikely, if not impossible, to imagine a scenario when all three legs of the stool are positive at the same time. By the same token, it is hard to conceive of a market environment when all three elements are negative at the same time. This is all by design, as the three elements are designed as "checks and balances" on each other. By combining the equity, the hedge, and the premium collection the goal of the DRS is to have the whole be greater than the sum of its parts.

### About the Author:



Marc Odo, CFA®, CAIA®, CIPM®, CFP®, Director of Investment Solutions, is responsible for helping clients and prospects gain a detailed understanding of Swan's Defined Risk Strategy, including how it fits into an overall investment strategy. Formerly, Marc was the Director of Research for 11 years at Zephyr Associates.

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