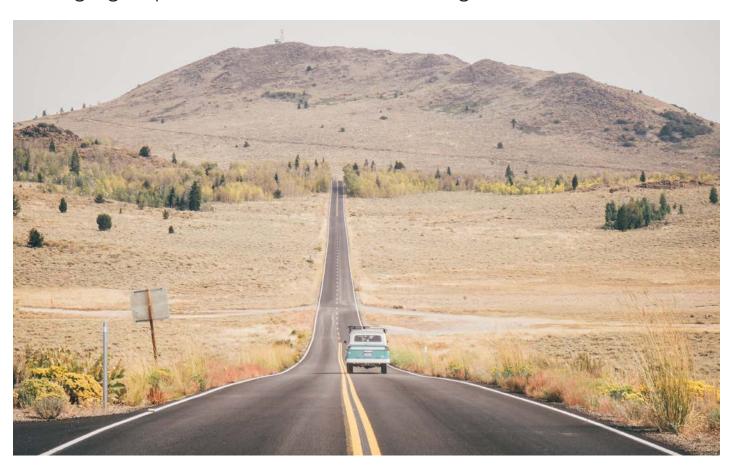


# **Duration Matters**

Managing Expectations for the DRS during Drawdowns



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This is the final of three blog posts in which we explore the variables that will impact the DRS's performance during a downturn. Those three primary variables are:

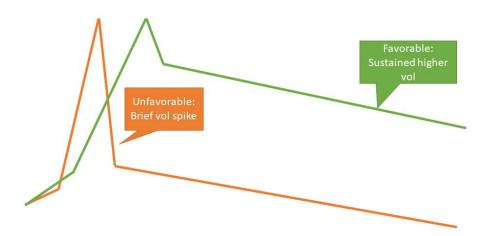
- 1. The speed of the sell-off,
- 2. The magnitude of the sell-off, and
- 3. The duration of the sell-off

With <u>speed</u> and <u>magnitude</u> already discussed, the final topic on our list is duration.

#### Duration of the Sell-Off

The duration of a market downturn typically impacts the profitability of the <u>harvesting of option premium trades</u>. Usually during market sell-offs there is a heightened level of market volatility. During these environments, option premium is often described as "rich." In other words, it's a seller's market and the price of options is high for those willing to write them. The DRS prefers that the duration of the sell-off last longer, so that we can execute multiple trades at these rich levels of premium. Conversely, if a sell-off is short-lived and quickly forgotten, we aren't able to collect as much premium as we would have liked for as long as we would have liked.

It is certainly possible to profitably harvest option premium during periods of low volatility because the primary driver of an income trade is the gap between implied and realized volatility. However, the "sweet spot" for the DRS is moderate levels of volatility, with VIX levels in the mid-teens to low-20s range.



Source: Swan Global Investments; hypothetical representation

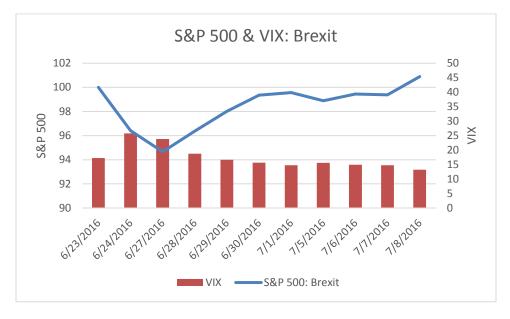
### Unfavorable Scenario: June 2016, Brexit.

On June 23rd, 2016, voters in the United Kingdom shocked the political establishment by voting in favor of "Brexit"—the departure of Great Britain from the European Union. Markets responded negatively at first, but then quickly rallied. Although the sell-off was worse in European markets, the S&P 500 was down 5.34% over the two trading days of June 24th and 27th. The VIX spiked from 17.25 on June 23rd to 25.76 the following day.

However, markets quickly brushed off its concerns about Brexit. Markets trended back upwards and by July 8th had recovered all of the losses sustained following the Brexit vote. By July 8th the VIX was down to 13.20, lower than where it was before Brexit.

During this short sell-off the DRS did well due to the hedge position, losing less than half of the market over June 24th-27th. However, we would have preferred that the VIX stay at elevated levels in the high-teens or low-20s for the opportunity to execute

more trades and collect more premium. Instead, it dropped back to the depressed levels in the low-teens where the VIX spent most of 2016 and 2017.



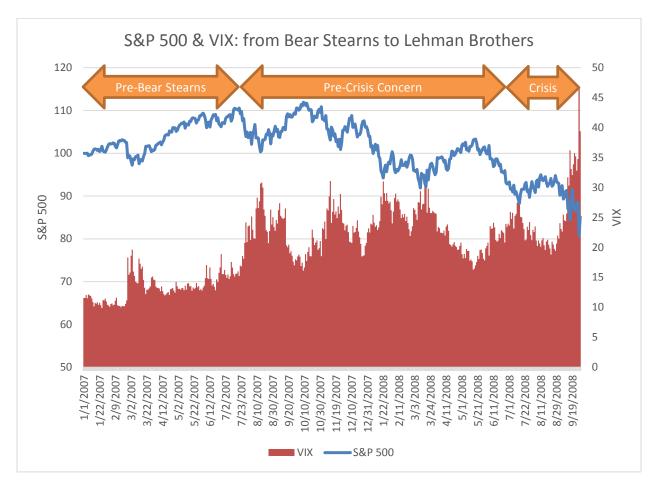
Source: Morningstar Direct, Bloomberg

## Favorable Scenario: 2007-08, Bear Stearns to Lehman Brothers.

During the first half of 2007, markets were up a healthy amount. By mid-July the S&P 500 was up over 10% and the VIX spent most of the year in the 12-14 range. However, on July 16, 2007, Bear Stearns disclosed that two of their hedge funds that focused on subprime mortgages were all but wiped out.

In the year following Bear Stearns' revelation, the S&P 500 trended nervously downwards, losing almost 18% of its value. More important to the DRS was the fact that the VIX entered a new trading regime, spending most of its time in the high teens or 20s. As stated previously, this is the "sweet spot" for the DRS, where option premium is both rich and sustained. The DRS did quite well with its harvesting of option premium during this period, the lead-up to the Global Financial Crisis<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Note to Pre-Financial Crisis: During the first half of 2008, the DRS also benefitted from the increase in the volatility premium of its hedge and the fact that the hedges spent most of 2008 in-the-money.



Source: Morningstar Direct, Bloomberg

In a related note, the start of 2018 bears a striking resemblance to the start of 2007. VIX was at similarly low levels to start the year. However, 2018 has seen numerous concerns rattle the markets—the end of the easy money period, rising inflation, a potential trade war, etc. Will we see the markets shift from a low volatility regime to a mid-volatility regime, which the DRS prefers? Time will tell.

This recent series of blog posts provided an executive summary version of the three primary drivers of DRS performance during downturns. For a more in-depth exploration, please refer to the white paper "Managing Expectations: Drawdown Scenarios and Swan DRS Performance Analysis." In addition to these three primary factors, the paper discusses various special situations like V-shaped recoveries, extended declines from heightened volatility, whipsaws, and the differences in volatility regimes.

## About the Author:



Marc Odo, CFA®, CAIA®, CIPM®, CFP®, Client Portfolio Manager, 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 at Zephyr Associates for 11 years.

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