Analysis of the Three Largest Drawdowns for the Defined Risk Strategy

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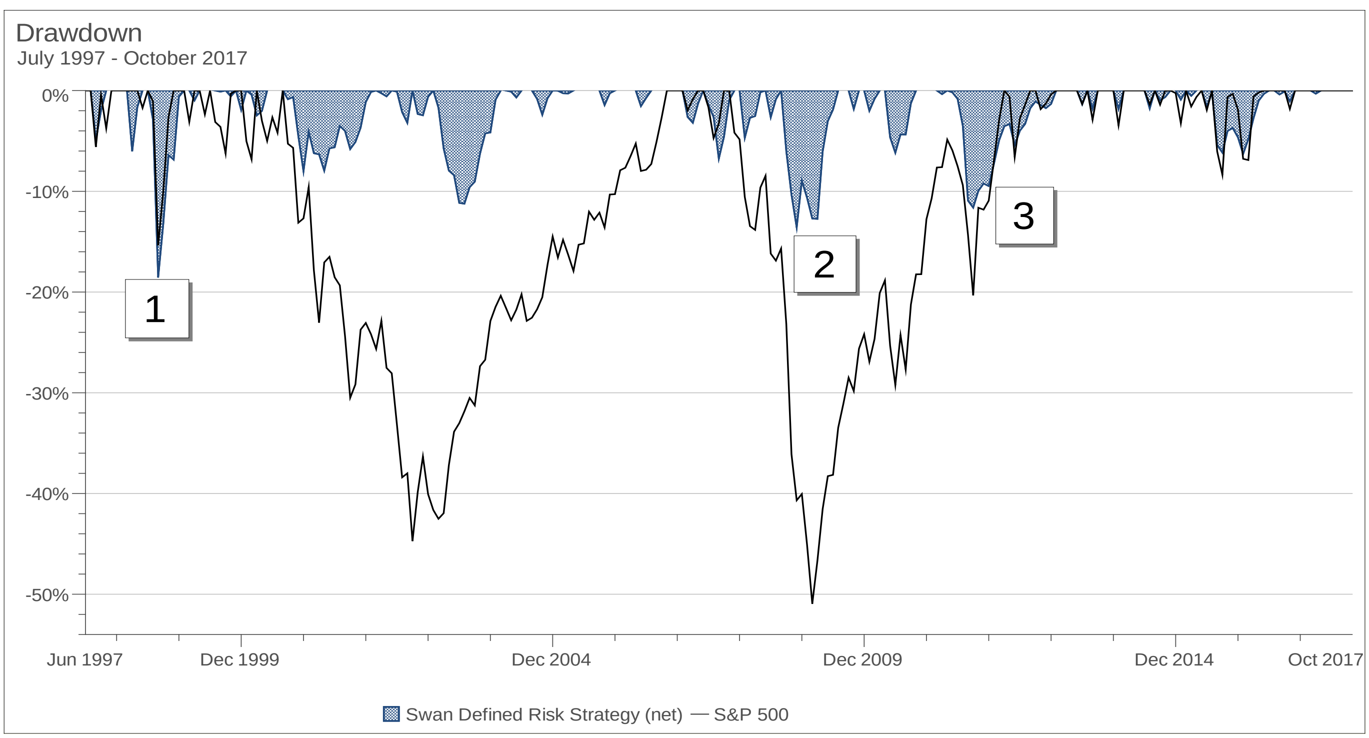
It has been almost ten years since the Global Financial Crisis. Memories have started to fade and lessons learned are being forgotten. A sense of complacency has crept into the markets. Throughout 2017 one of the dominant stories has been the lack of volatility in the market. The VIX, commonly described as "the fear gauge", has been at all-time lows. In our opinion, now is the perfect time to discuss what might happen when markets sell-off.

The Swan Defined Risk Strategy (DRS) was designed over 20 years ago as a full market solution. It seeks to participate in up markets and protect in down markets. While the DRS is intended to protect during bear markets, it should be made perfectly clear that the DRS is not completely insulated from periods of loss.

There have been periods of loss before and there will be periods of loss again. We believe it is important for investors in the DRS to have proper expectations for the next sell-off in the market. A common thread through three of the worst historic drawdowns of the DRS was the negative impact of a major volatility spike. While the market-neutral income trades typically require a modest amount of market volatility in order to be profitable, too much sudden volatility is actually detrimental to the DRS's premium collection trades. Depending upon the speed and the magnitude of a volatility spike, losses on an income trade can potentially generate losses which offset some or all of the gains of the longer-term hedge until such time that Swan executes predefined adjustments. After such losses and adjustment of the Income trade, the DRS has historically recovered quickly given increased profits and probability of profit in the Income component at higher volatility levels in the wake of the event, but it is important to keep in mind this component of the strategy that has always been present and how it works through a market sell off.



Source: Zephyr StyleADVISOR, Swan Global Investments. All numbers utilize monthly returns and the DRS Select Composite.

One of the best ways to understand the DRS is to examine what has occurred in previous periods of market duress. The image above and table below detail previous periods of losses for the Defined Risk Strategy as well as the market, as defined by the S&P 500 Index. The three worst drawdowns are written up in detail below, but keep in mind that potential results can always be worse than historic maximum drawdowns.

	Start	**Bottom**	**DRS Drawdown**	**S&P 500 return during period**	**DRS Recovery Date**
1	Jul-98	Aug-98	-18.56%	-15.37%	Jan-99
2	Sep-08	Nov-08	-13.59%	-29.65%	Jul-09
3	May-11	Sep-11	-11.62%	-16.26%	Jan-13

Source: Zephyr StyleADVISOR, Swan Global Investments. All numbers utilize monthly returns and the DRS Select Composite.

#1. The largest drawdown in the DRS's history was -18.56% and came during the Long Term Capital Management (LTCM) crisis in 1998. The drawdown was impacted by the market running up 16% by the end of July, only to suddenly fall -14% in August. The core equity had moved far above the strike price of the hedge and Swan did not re-hedge its intra-year gains. This meant the market had to sell off significantly before the hedge could offer substantial protection. In addition, markets were quite volatile during the period when the Fed was organizing the LTCM rescue. The DRS's trades do best when the markets stay within a "normal" trading range; the "whipsaw" conditions seen in August 1998 were the opposite of that.

It should be noted that the DRS recovered quickly after this steep sell-off. The factors that worked against the DRS in August, worked in its favor for the remainder of the year. For the calendar year 1998 the DRS was up 11.55% and by January 1999 the DRS had recovered all of its decline.

#2. In 2008, Swan experienced a peak-to-trough drawdown of -13.59% during the Global Financial Crisis. There were two reasons for this. First, the spike in volatility during the worst moments of the crisis was harmful to the premium collection trades. Although the DRS would profit handsomely from the elevated risk premium in the market in the aftermath of the crisis, the initial shock of the crisis hurt those initial positions.

The second contributor to the drawdown during the GFC was the re-hedging of the portfolio. As the markets went into freefall, the put options used as hedges performed exceptionally well. The more markets sold off, the more valuable the hedges became, just as intended. Swan initiated its "sell high, buy low" re-hedge process, in which it sold the put options at a large profit, re-hedged the portfolio at existing market levels, and purchased exposure to the market at a discount. However, the markets continued to descend for the next several months, which contributed to the overall losses.

Swan was able to initiate a second re-hedge in early 2009, which boosted its performance when markets recovered. By July 2009 the DRS was back to positive, whereas the S&P 500 would not recover its losses until March 2012. For the year 2008 the DRS had a -4.50% return versus a -37.00% return in the S&P 500.

#3. In 2011, the DRS had its third-worst drawdown of -11.62%. The third quarter of 2011 was marked by "headline risk". News at the time was dominated by the possibility of the euro unraveling and the brinksmanship in Washington D.C. regarding fiscal policy and the debt ceiling. Raising the specter of a catastrophic debt default, politicians played a dangerous game of chicken with the integrity of the U.S. Treasury obligations. Markets whipsawed up and down on every rumor or morsel of news.

As discussed previously, the DRS struggles when volatility spikes. With the markets wildly fluctuating up and down as the U.S.'s Treasury debt was downgraded from AAA to AA, it was difficult to establish any kind of position that wasn't immediately blown out by market moves. This very trying environment led to losses for the income component of the DRS during the third quarter.

That said, there are three things to remember. First of all, most other types of alternative or hedge fund strategies also performed quite poorly in 2011's risk-on/risk-off environment. Second, the DRS recovered its losses by January 2013. Finally, while 2011's loss of -5.38% is its worst calendar year performance, it is very modest and should be bearable to most investors.

Summary

It is important to keep in mind that no investment strategy will work well under every conceivable market condition. There will always be some form of risk in any investment strategy. The strategy is intended and designed to avoid large losses, but there is no guarantee. We believe the key to successful investing is to understand the risks you take and attempt to maximize the risk/return trade-off.

The Defined Risk Strategy has been in existence for over 20 years. During that time we've experienced just about every market environment imaginable. The two largest bear markets since World War II as well as the second-longest bull market is U.S. history. Losses of 50% as well as gains in excess of 300%. Short-term shocks and corrections. Two wars and an attack on American soil. A reversal in the multilateral, collaborative, post-World War II order. The DRS has withstood all of these events, and even profited from them after the dust had settled. We believe that the ultimate stress-test is reality, and that the DRS has navigated the last 20 years quite well.

Important Notes & Disclosures

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