A Summer Squall
or the Start of Hurricane Season?

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INTRODUCTION

Following the sharp drawdown of August 20-25th, the market is technically in a correction, defined as a drop-off of more than 10% from its highs in May. From here, we believe there are two likely directions the market can take. One, the market can quickly recover from this bout of instability and continue on its upward trajectory as if nothing happened. Alternatively, this sell-off could herald the coming of a long-predicted bear market, following an almost uninterrupted bull market initiated in early March 2009. While it is possible that the markets remain flat and consolidate over the coming months or years, we at Swan do not view that as a likely possibility.

It's been said that history doesn't repeat itself, but it does rhyme. With the luxury of an 18-year track record, the Swan Defined Risk Strategy has seen both types of environments before. The first scenario - a short, sharp, violent correction - has been witnessed three times in the strategy's history, namely:

- The Russian default/Long-Term Capital Management debacle of August 1998
- The "flash crash" of May 6th, 2010
- The Treasury downgrade of August 2011

In addition, the DRS has successfully weathered two exceptionally severe bear markets: the dot-com crash of 2000-02 and the Financial Crisis of 2007-08. It is important to remember that the DRS was designed specifically for the latter scenarios, the big bear markets that wipe out investor wealth. In such environments traditional asset allocation, stock-picking and market timing often fail to adequately address market risk. The DRS was created to outperform over a long period of time, not a short period of time.

It is also important to acknowledge that no strategy will always work in every conceivable environment. Faced with that reality, Swan has strategically chosen to take potential short-term losses from selling short-term options. More often than not such trades are profitable, and help make the long-term, market protection possible. In the short-term, the DRS might appear less appealing than alternative strategies focused on short-term market movements. However, Swan believes a short-term focus to be myopic, distracting, and ultimately detrimental to long-term success.

The graph below highlights why over time it pays to be a seller of short-term options, despite an occasional pain point (red spikes below).

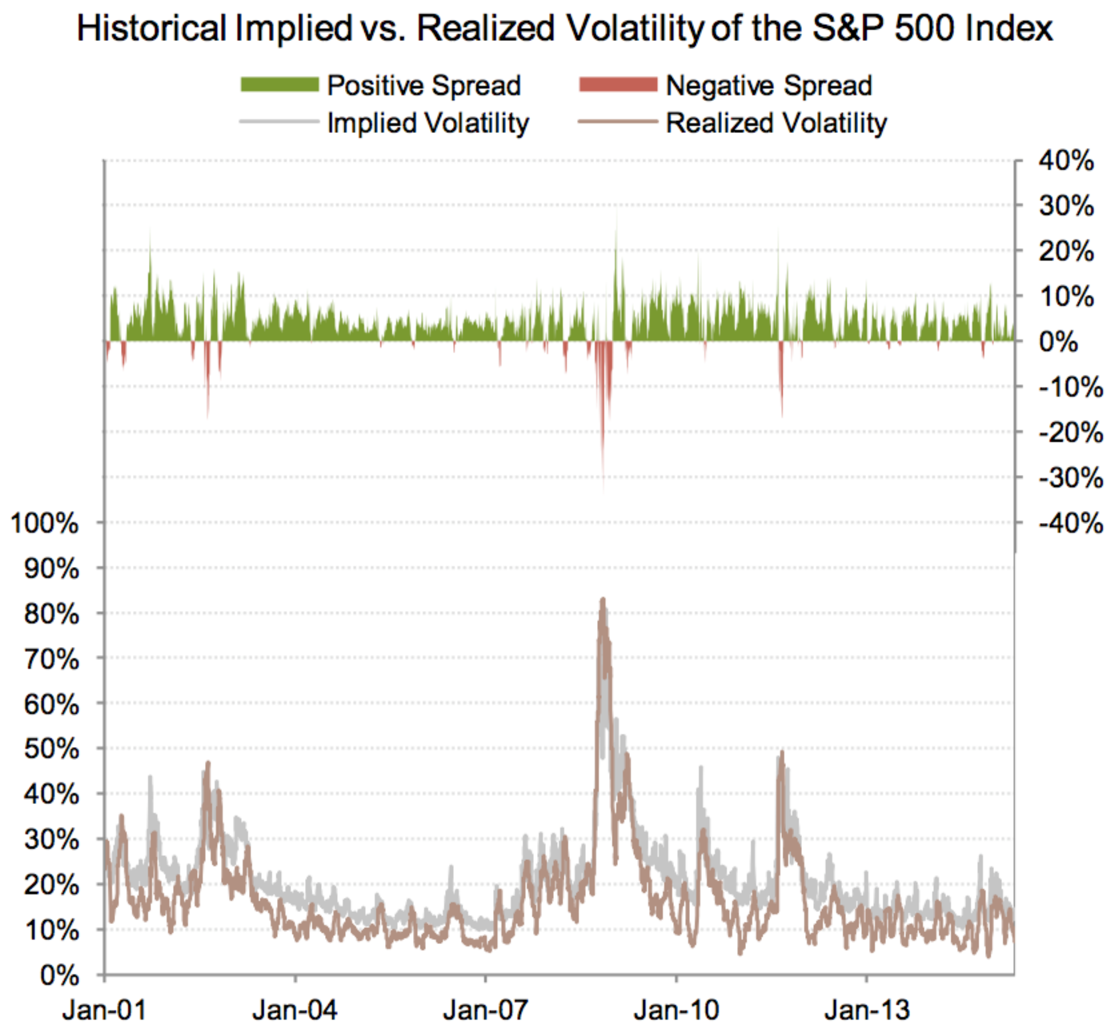

Chart 1

Source: Bloomberg & SG Financial Engineering, from Dec. 1st, 2000 to Apr. 30th, 2015 The historical performance information set forth herein is illustrative and provided for informational purposes only. It should not be read as a guarantee or an indication of the future performance.

This paper will differentiate between short-term corrections and long-term bear markets and discuss how and why the DRS has historically performed the way it has through both. Swan, like every other participant in the market, does not know what the market will do tomorrow, next week, or over the next year. As you read this paper, we would ask you to keep in mind the following:

- Which is more worrisome: a short, violent correction or a steep, protracted bear market?
- Which of the two is more likely going forward?
- If the market does collapse by 30%, 40%, or 50%, is the DRS with its long-term hedging still the best strategy to weather such a catastrophe?

REVIEW OF DEFINED RISK STRATEGY

In order to understand how either of these scenarios might impact the Swan DRS, a quick review of the Defined Risk Strategy is in order. The DRS consists of three separate but complimentary components, namely:

1. Equity- the majority of the strategy's assets is held in passively managed, buy-and-hold positions in broad market ETFs. The equity position typically represents 85-90% of the portfolio.
2. Hedge- typically 10-15% of the strategy's assets are in long-term put options, designed to limit the impact of large market sell-offs.
3. Market-neutral income trade- the DRS also systematically engages in short-term option-selling trades to collect premium. The intent of the third component is to subsidize the cost of the hedge, as well as provide a source of non-market directional returns.

Most importantly, the Defined Risk Strategy was designed to work over a full market cycle. A full market cycle is defined in terms of years, not days. While the last few days have been painful, such volatility spikes are not unprecedented. In order to implement the proven, long-term strategy, certain short-term risks must be taken. Swan believes in the big picture, and that the strategic benefits of the DRS far outweigh short-term periods of underperformance.

CORRECTION SCENARIO

In the correction scenario the market is blindsided by a sharp, violent sell-off, often due to a reason that has very little or nothing to do with the underlying health of the economies and the markets. While the losses were very real, there wasn't always a good explanation for them. Moreover, the markets tended to quickly recover their losses.

- The August 1998 correction was caused by the Russian default on its sovereign debt spilling over and impacting the liquidity of an over-leveraged hedge fund. Between July 18 and August 31 the S&P had lost 19.2%, but by November 23 it had recovered all of its losses [1].
- The U.S. sovereign debt downgrade in August 2011 was due to political posturing and brinksmanship. From July 8th to October 3rd the S&P shed 18.4%, but was back in the black by February 3, 2012[2].
- To this day, no one is certain what exactly caused the flash crash of May 2010. The flash crash was particularly bizarre, in the sense that the drop-off all happened intra-day. At one point the Dow had lost almost 1,000 points, or 9.2%, before recovering to end the day down 3.2%[3].

What all three of these corrections have in common is their impact on the VIX, commonly known as the "fear index". A broad proxy for volatility in the market, the graph below shows six months of daily VIX prices, each centered around the peak, central event in the crisis[4]. Three months preceding and three months following the central event are displayed.

[1] Source: Morningstar Direct.

[2] Source: Morningstar Direct.

[3] Source: Wikipedia.

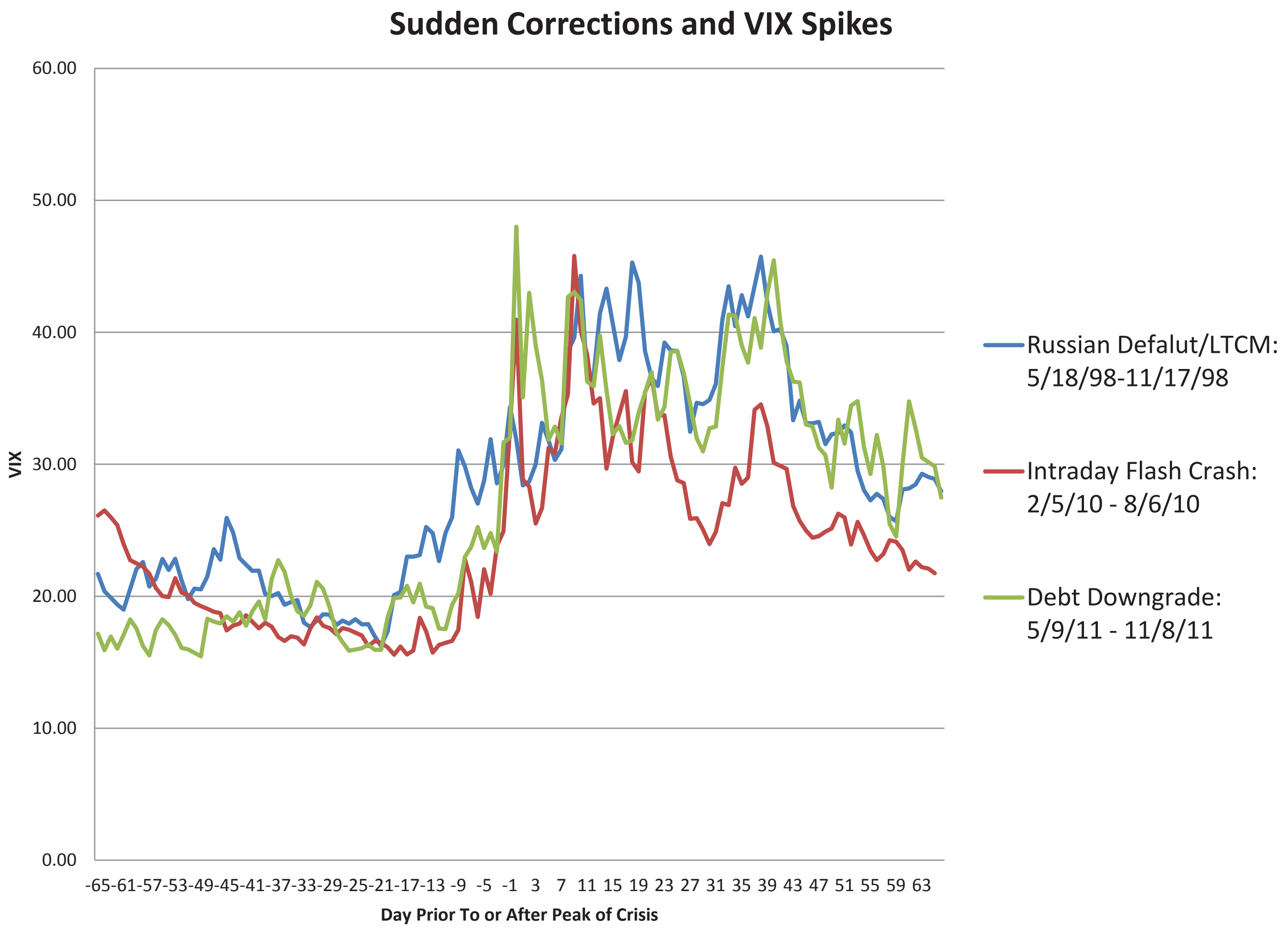

Chart 2
Source: CBOE

There are two takeaways. First, each correction had an extreme impact on the VIX, the levels typically doubling in a very short span of time. The second is the “hangover effect”, where VIX remains high and erratic for several months afterwards.

These phenomena have two consequences on the DRS; one negative, one positive. In the short term, a sharp spike in volatility hurts the existing short option positions when the spike occurs. The DRS likely has to close out the trade in order to avoid a breaching put strike, typically at a loss. In the medium term, this increase in volatility helps the DRS collect higher levels of premium as new trades are initiated in subsequent months.

[4] August 17th, 1998: date of Russian default. May 6th, 2010: date of flash crash. August 5th, 2011: date of Standard & Poors downgrade of U.S. sovereign debt.

VIX: Largest 5-day Percent Gains (since 1990)

VIX Spikes				Return During Spike		Return Post Spike	
End Date	Starting VIX	Ending VIX	5-day Gain	DRS in Same Month	S&P 500 Same Month	DRS Following Month	S&P 500 Following Month
8/21/2015	12.83	28.03	118.50%	-5.22%	-6.03%	-0.80%	-2.47%
8/8/2011	23.66	48	102.90%	-7.69%	-5.43%	-0.78%	-7.03%
5/7/2010	22.05	40.95	85.70%	-4.64%	-7.99%	-1.61%	-5.23%
8/10/2011	22.38	42.99	92.10%	-7.69%	-5.43%	-0.78%	-7.03%
2/27/2007	10.24	18.31	78.80%	-2.63%	-1.96%	-0.59%	1.12%
12/12/2014	11.82	21.08	78.30%	0.43%	-0.25%	-0.90%	-3.00%
5/6/2010	18.44	32.8	77.90%	-4.64%	-7.99%	-1.61%	-5.23%

Table 1

Source: CBOE, Morningstar, Swan Global Investments

So yes, in these correction scenarios the income trades have experienced pain, but through adjustments to the original trade and subsequent new trades at higher premium levels the strategy has been able to claw some or all of its losses and even end up in positive income territory for the year. For example, while Swan saw significant and similar single trade losses during the Flash Crash of 2010, the DRS finished the year with a positive return from income trades. Swan's DRS has only lost money on an annual basis in the income component in 3 years out of 18. We believe accepting this type of risk in order to have a better-balanced strategy over the long-term is worth the occasional, rare, temporary pain.

BEAR MARKET SCENARIO

Under this scenario, the markets are in for a pronounced drawdown exceeding 20% and extending over a period of months or even years.

The current bull market has been extraordinary in both its duration and its gains. Following the Financial Crisis the S&P 500 went from a low of 676.53 on March 9th, 2009 to a high of 2130.82 on May 21st, 2015. During that six-year-plus run the S&P 500 was up a cumulative 255% percent. While there were two corrections in 2010 and 2011, both were short-lived and neither pushed the S&P 500 in to the bear market territory of a +20% loss (as discussed in the above section). Over the last three years through July 31st, the worst single month was January 2014, when the S&P 500 returned -3.46%. This is, or perhaps was, one of the longest bull markets in history.

Since the start of the new millennium there have been two major bear markets. In fact, the dot-com bust and financial crisis were the two deepest bear markets since World War II. The S&P 500 lost 55.25% between October 10, 2007 and March 9, 2009 and did not fully recover until early April 2012. The dot com bust saw the S&P lose not as much, 47.41%, but over a longer, more protracted time period from September 2, 2000 to October 9, 2002. The S&P did not dig itself out of that hole until October 23, 2006.[5] Whether a deeper drawdown or a longer drawdown is more favorable is a conversation most investors would rather not have. The chart below shows both bear markets on the same scale.

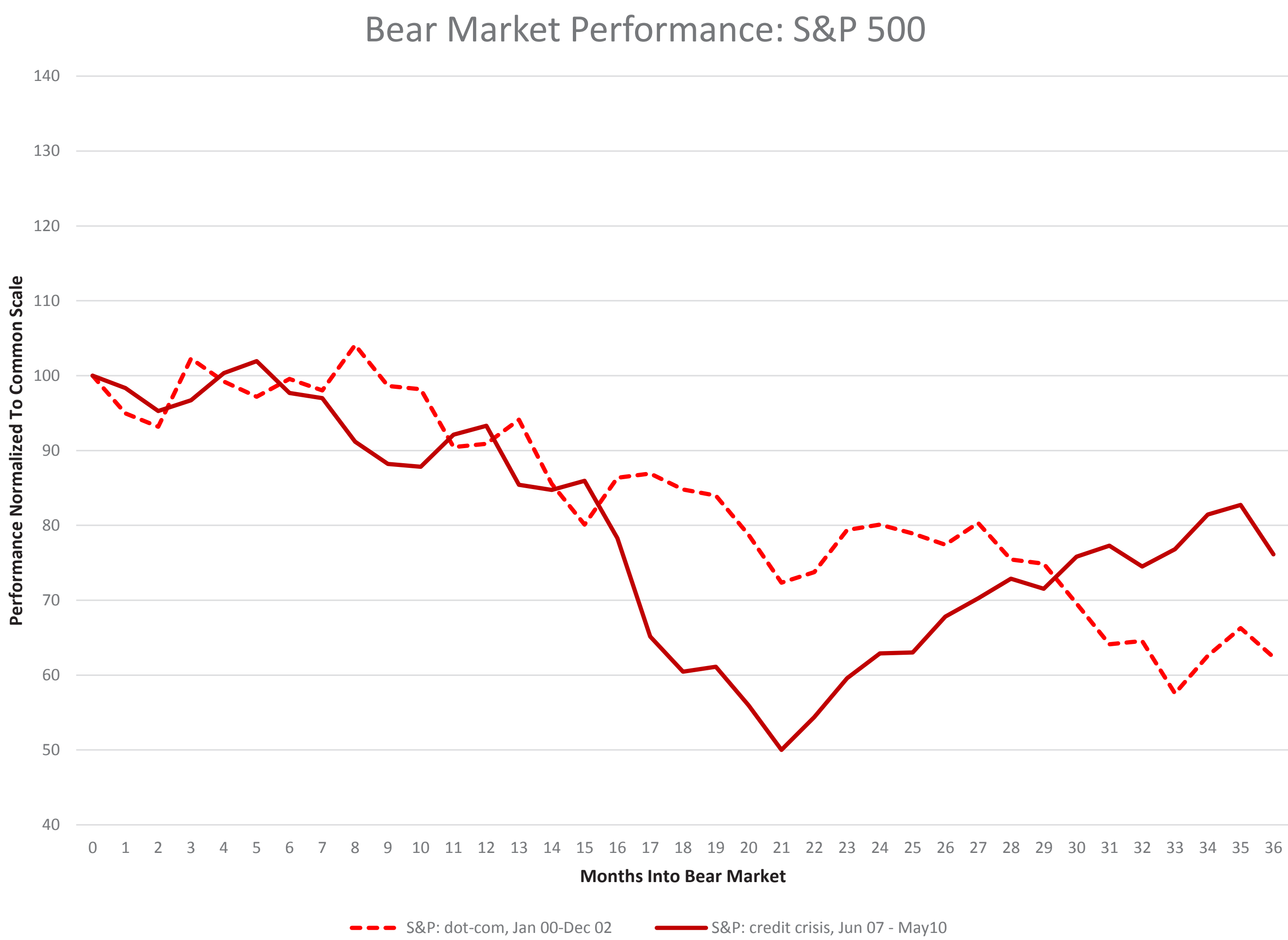

Chart 3

Source: Zephyr StyleADVISOR

It is in these environments that the Swan Defined Risk Strategy really shines. Two of the three components of the DRS have historically performed quite well during bear markets; the hedge and the market neutral income trades. It is intuitive that the hedge would perform well, after all, the put moves in the opposite direction of the market and gains in value while the market sinks. What might not be as apparent is how the income trades profit during bear markets.

[5] Source: Morningstar Direct

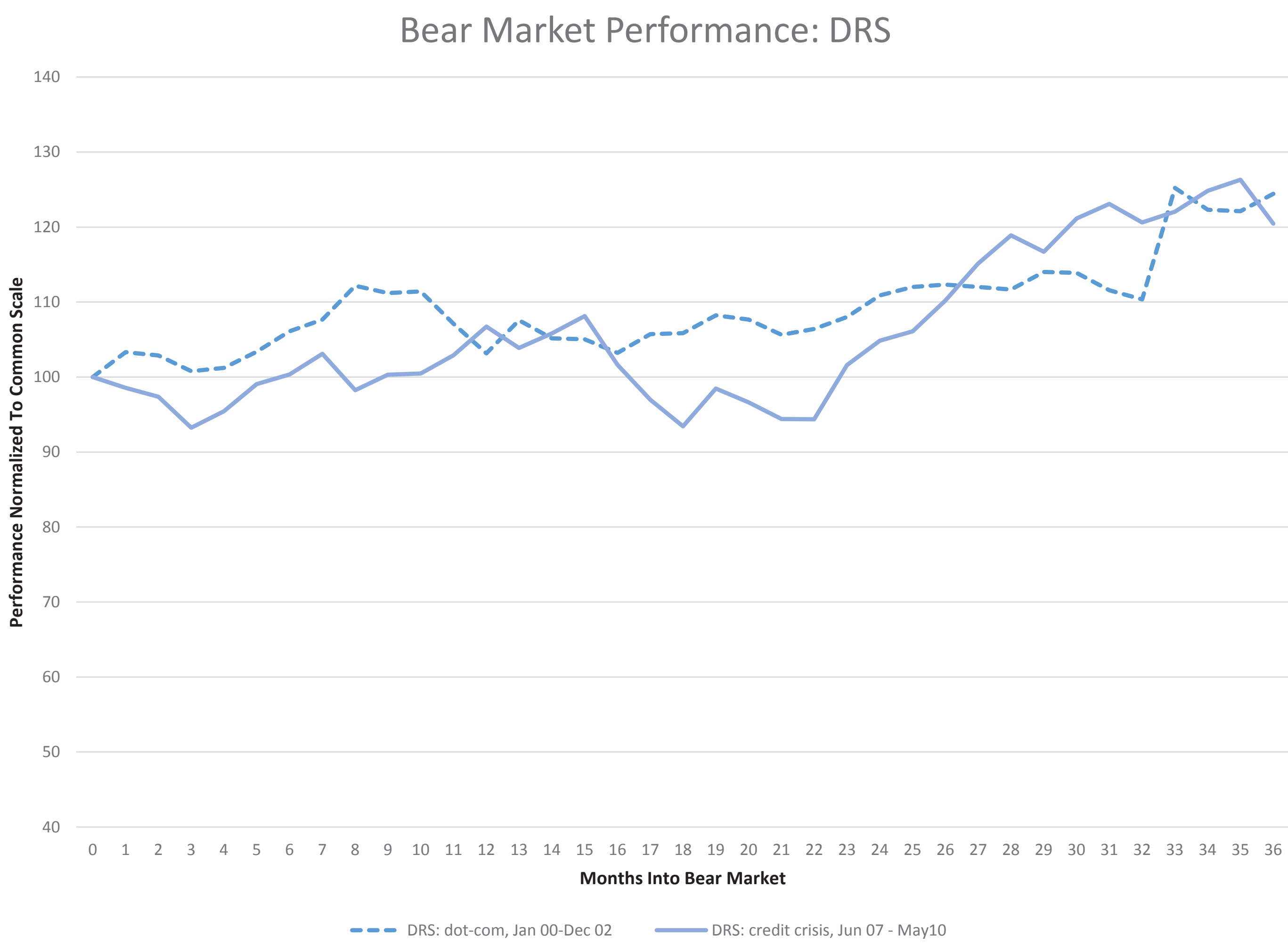

Chart 4

Source: Zephyr StyleADVISOR

It is important to reflect on the psychology of investors during bear markets, when "fear" overpowers "greed". When fear dominates investors typically start hedging their portfolio with options. Those on the other side of the trade, those taking on the volatility risk, are typically able to collect much higher premiums in such environments.

The DRS was designed to exploit this. Even during the bear markets of 2000-02 and 2007-08, the DRS was systematically selling options, collecting premium, and accepting short-term risk, in what were more often than not, profitable trades.

However, to get to that point investors need to experience a dramatic psychological shift of bull market greed turning to bear market fear. At that tipping point or that switch, we typically see a spike in volatility. These spikes are quick, sudden, and can only be seen in the daily data. The below graphs show three stages of the VIX "fear index" prior to, during, and after the Financial Crisis of 2007-08.

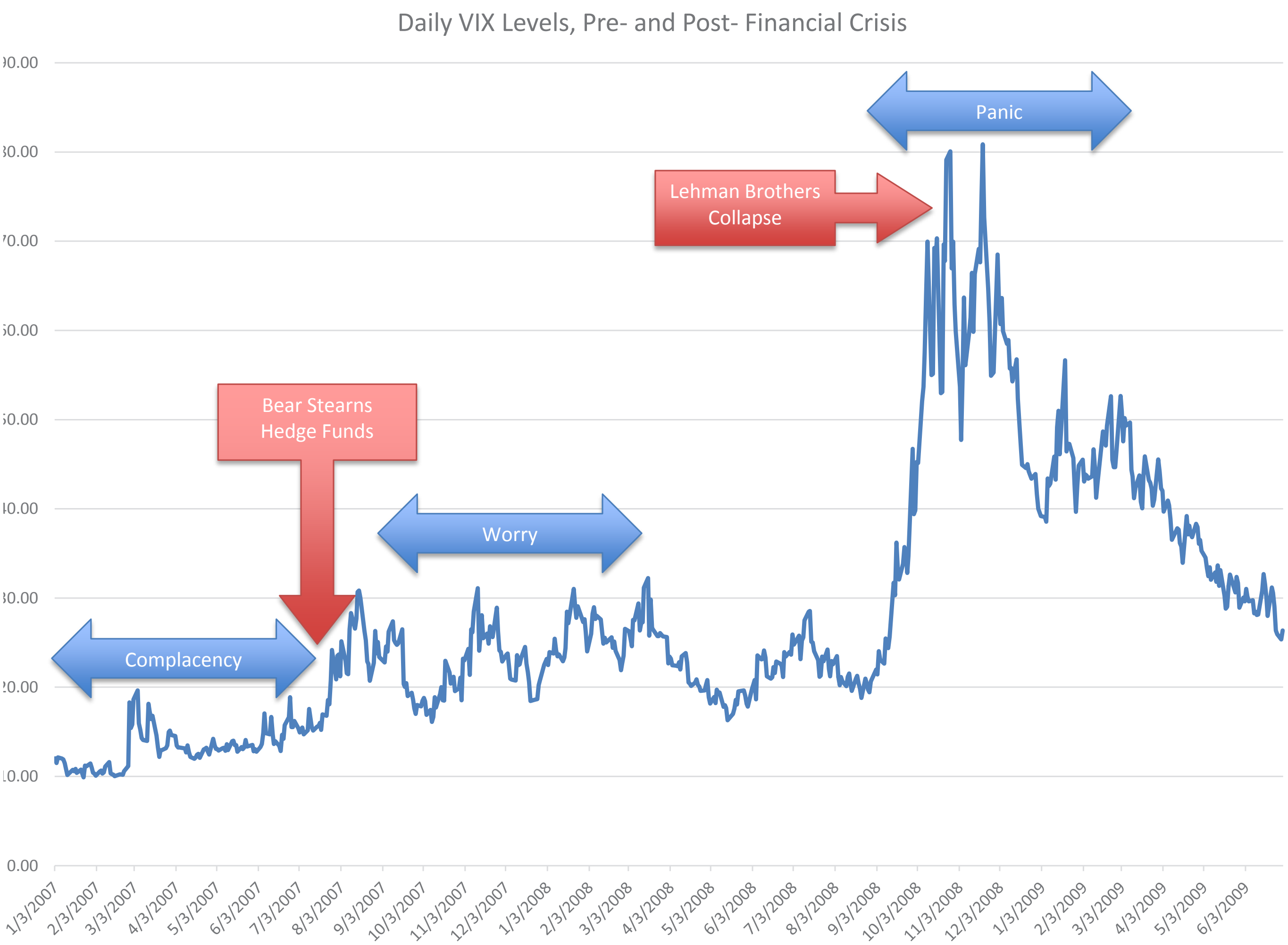

Chart 5

Source: CBOE

The first stage, the first half of 2007, investors were extremely complacent about risk, with VIX levels never exceeding 20. Between March 2003 and December 2006 the market had increased by 80.7%; investors were happy. However, in June and July of 2007 Bear Stearns had two hedge funds focused upon subprime mortgages collapse. This event is widely considered to be the “canary in the coal mine” that precipitated the turmoil to come. For most of the next 12 months the VIX was at elevated levels in the upper 20’s. In the third quarter of 2008 the crisis really unfolded and VIX levels spiked to 80 a couple times and hovered in the 40-60 range for many months.

During both of these “phase shift” or “tipping point” months, the DRS did post negative returns. A sharp spike in volatility pushes the trades towards their trigger points. While such trades are usually profitable, in these environments trades sometimes have to be closed out at a loss. From June 07 to August 07 the three month return was a -6.77% for the DRS relative to a -3.28% loss in the S&P 500. Between September 08 and November 08 the DRS lost 13.59% versus the 29.65% loss in the S&P 500. However, as markets continued to worsen, the value of the hedge and increased premiums collected in the income trades started to pay off.

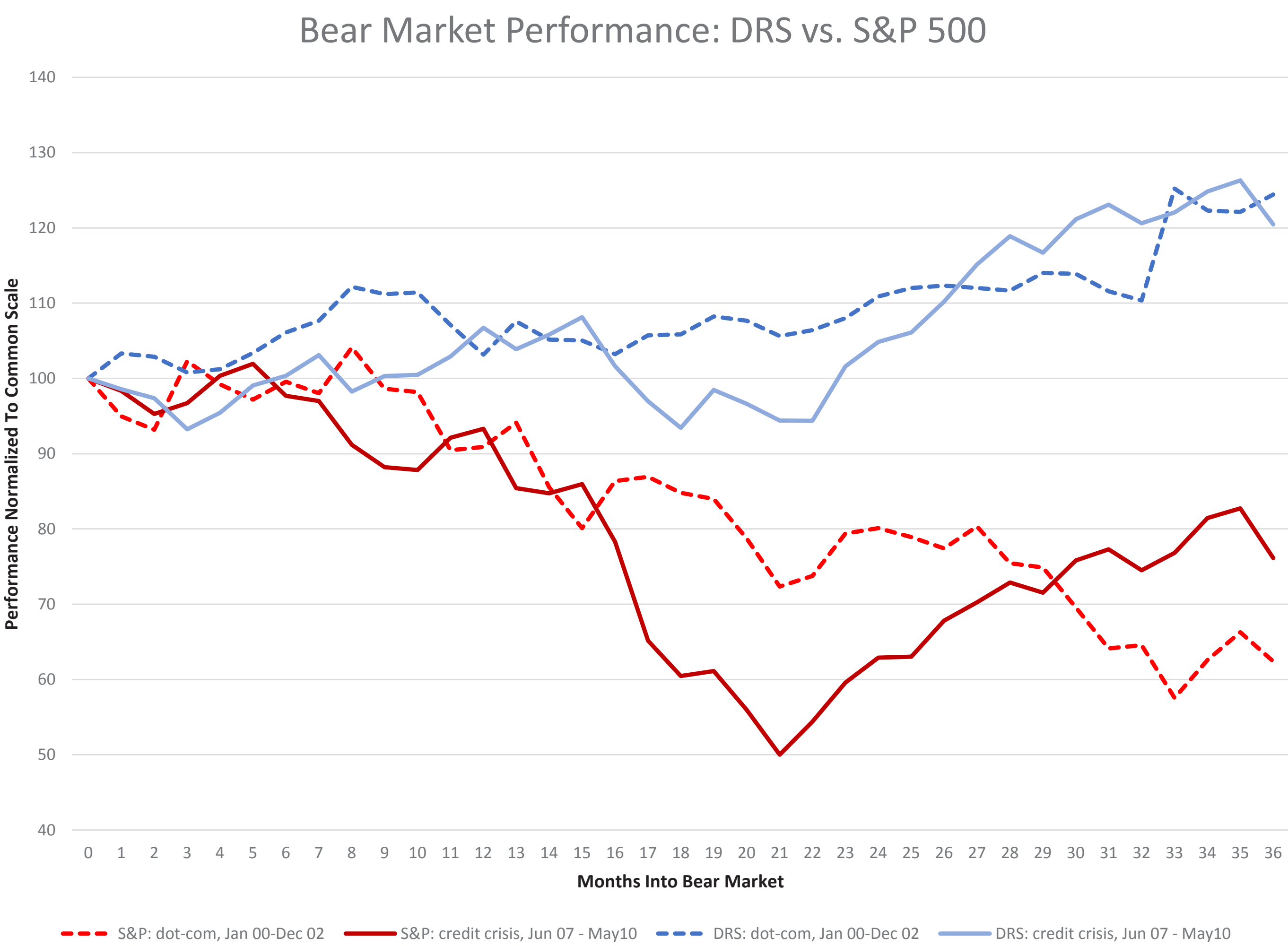

Chart 6

Source: Zephyr StyleADVISOR

A few final points on how bear markets typically play out. Historically, Swan has used market sell-offs of 20% or more as an opportunity to realize gains and increase exposure to the markets when the markets are at depressed levels. By re-investing profits from the hedge into the equity component, the DRS sets up well for eventual market rebounds.

Finally, when it comes to the income trades, there is typically a “hangover effect” following the bottom of a bear market. Volatility and premiums remain high in months following the market bottom, and income trades can be more profitable, as investors are fearful of a market reversal. As a matter of fact, these post-bear environments have historically been some of the most profitable for the DRS.

CONCLUSION

So, where does August 2015 rank amongst the historical corrections and bear markets? The truth is no one knows what will follow, just as investors in August 1998, March 2000, July 2007, or August 2011 had no way of knowing whether they were at the bottom of the market. No one knew whether a recovery was a few months or several years away, and what would happen in-between.

The Swan Defined Risk Strategy has weathered such storms before - both corrections and bear markets. Below is a table of the five worst drawdowns in the SMA composite's history:

Rank	Start of Draw-down (Peak)	Lowest Point of Drawdown (Trough)	End of Draw-down (Recovery)	Size of Peak-to-Trough Drawdown	Size of S&P 500 Draw-down - Same Period	Peak-to-Trough Length (Months)	Trough-to-Recovery Length (Months)	Peak-to-Recovery Length (Months)
1	Jul-98	Aug-98	Jan-99	-18.56%	-15.37%	2	5	7
2	Sep-08	Nov-08	Jul-09	-13.59%	-41.82%	3	8	11
3	May-11	Sep-11	Jan-13	-11.62%	-16.26%	5	16	21
4	Feb-03	Jul-03	Feb-04	-11.24%	-1.50%	6	7	13
5	Sep-00	Dec-00	Feb-02	-8.01%	-30.49%	4	14	18

Table 2

Yet in spite of these setbacks, the Swan DRS has outperformed all of its benchmarks by a wide margin.

It cannot be overemphasized that the DRS is designed as a long-term, strategic investment solution. The advantages to investing in the DRS are realized by those with a long-term time horizon and an understanding of how the interlocking pieces operate in different market environments. No strategy will always work, all the time.

Swan has successfully weathered short, sharp corrections as well as severe bear markets over the last 18 years.

July 1997 - September 2015: Summary Statistics	Ann. Return	Cumulative Return	Std Dev	Dot Com Bear Market (4/00-3/03)	Credit Crisis Bear Market (10/07-2/09)	Sharpe Ratio
Swan Defined Risk Strategy (net)	8.50%	343.13%	9.91%	20.63%	-1.09%	0.63
Russell 3000	6.61%	221.64%	15.83%	-40.39%	-50.30%	0.28
60% S&P 500/40% Barclays Agg	6.31%	205.35%	9.32%	-17.15%	-31.65%	0.44
HFRI Fund Weighted Composite Index	6.73%	228.35%	7.00%	1.20%	-19.18%	0.64
S&P 500	6.28%	203.95%	15.50%	-40.93%	-50.17%	0.26

Table 3

Source: Zephyr StyleADVISOR

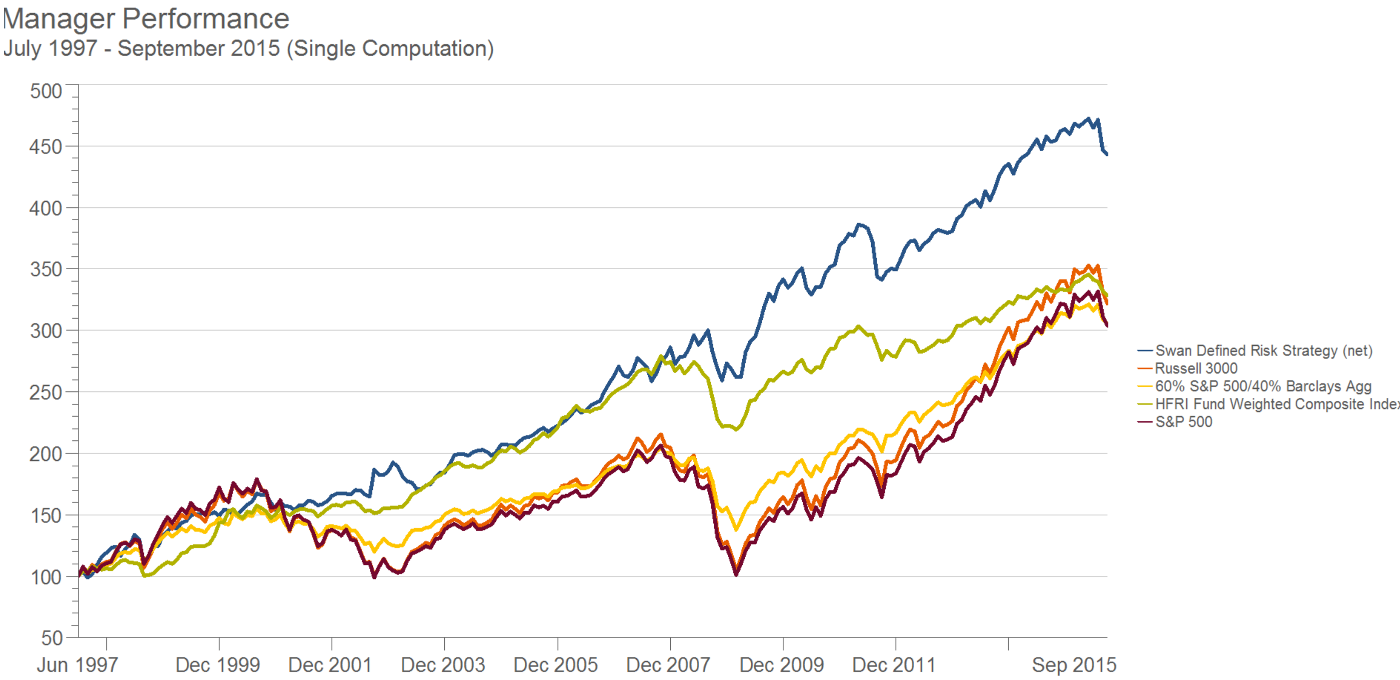

Chart 7

While no one is sure how the coming weeks, months and possibly years might play out, Swan Global Investment is confident the Defined Risk Strategy will continue over the long-term to be the best way for investors to grow their wealth in a way that seeks to protect from large market sell-offs.

We appreciate your confidence in investing with Swan.

For more information, please visit swanglobalinvestments.com or call 970.382.8901.

FOOTNOTES

Important Disclosures:

S&P 500- The S&P 500 Index is a market cap weighted index of 500 widely held stocks often used as a proxy for the overall U.S. equity market.

Russell 3000: Russell produces a family of market cap-weighted U.S. equity indexes. All U.S. indexes are subsets of the Russell 3000 Index, which represents approximately 99% of the U.S. equity market. Russell ranks the U.S. common stocks from largest to smallest market capitalization at each annual reconstitution period (May 31). Top 3,000 stocks become the Russell 3000 Index.

Barclays US Aggregate: The Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).

60% S&P 500-40% Barclays US Bond Aggregate: The 60/40 benchmark is a blended composite, weighted 60% in the aforementioned S&P 500 Index and 40% in the Barclays US Aggregate Bond Index to represent balanced portfolios. It is rebalanced quarterly.

HFRI Fund Weighted Composite Index: The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

The CBOE Market Volatility® Index (VIX) shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options. This volatility is meant to be forward looking and is calculated from both calls and puts. The VIX is a widely used measure of market risk and is often referred to as the "investor fear gauge".

Source for VIX and S&P 500 data: CBOE and Morningstar

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ABOUT SWAN GLOBAL INVESTMENTS

Randy Swan started Swan Global Investments in 1997 looking to supply investment management services that were not available to most investors. Early in his financial career, Randy saw that options provided an opportunity to minimize investment risk.

His innovative solution was the proprietary Swan Defined Risk Strategy, which has provided market leading, risk-adjusted return opportunities through a combination of techniques that seek to hedge the market and generate market-neutral income.

SWAN GLOBAL INVESTMENTS

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