Hope for the Best and Prepare for the Worst

Portfolio Protection Starts with Understanding Bear Markets and Black Swans

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Executive Summary

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INTRODUCTION

Since bottoming out in early 2009, markets have recovered all of their losses and more- throughout the first half of 2015 U.S. equity markets were setting all-time highs. That said, nothing lasts forever. For many investors, now is a good time to ask if they are any better prepared for the next market downturn.

"Am I making the same mistakes now that I made prior to the financial crisis?"

What were the mistakes that intelligent, well-meaning investors made prior to the financial crisis of 2007-08? First, many investors assumed that extreme market corrections are rare, infrequent events. Second, investors diversified across asset classes and styles that were highly correlated. Finally, when risk was addressed it was usually in terms of volatility.

At Swan Global Investments we address these mistakes with these three lessons:

1. So-called "black swans" are more frequent and more extreme than many people expect.
2. Diversification only works if the returns of investments are truly different.
3. Capital preservation is a better way of defining risk.

Here is why we hold these beliefs:

I. BLACK SWANS

The terms used to describe extreme market events – black swans, thousand-year storms, tail events, et cetera – imply that these types of markets should be few and far between. Sadly, the last three decades have seen more than their fair share of crises. The table below lists several crisis and the peak-to-trough losses of the S&P 500 during those time frames.

Crisis	Time Frame	Losses
Black Monday:	Sep 87- Nov 87	-29.58%
Kuwait Invasion:	Aug 90 – Sep 90	-13.47%
Russian default/LTCM:	Aug 98	-14.46%
Dot-com bust/Sept 11th :	Sep 00 – Sep 02	-44.73%
Credit crisis:	Nov 07 – Feb 09	-50.95%
Euro Crisis/US Credit Downgrade:	May 11 – Sep 11	-16.26%

Source: Zephyr StyleADVISOR

If one accepts the idea that black swans are more frequent and more extreme than expected, the bigger question remains: "How does one deal with them? How does one invest in order to protect oneself if this is the reality of most markets?"

II. DIVERSIFICATION

Many investors seek to mitigate risks by spreading their wealth amongst many different asset classes and styles. The idea is that by diversifying across uncorrelated asset classes overall portfolio volatility is reduced. While attractive in principle, in reality many investors saw the value of their portfolios plunge during the crisis as correlations between asset classes spiked. The table below shows correlations between major asset classes prior to and during the credit crisis.

	Long-term Correlation Matrix: January 1988 - July 2007						Crisis Correlation Matrix: August 2007 – February 2009					
	1	2	3	4	5	6	1	2	3	4	5	6
1) Russell 3000	1.00	0.62	0.61	0.52	0.41	-0.08	1.00	0.92	0.83	0.75	0.86	0.59
2) MSCI EAFE Index	0.62	1.00	0.58	0.35	0.25	0.01	0.92	1.00	0.94	0.73	0.74	0.63
3) MSCI Emerging Markets	0.61	0.58	1.00	0.43	0.30	0.04	0.83	0.94	1.00	0.75	0.62	0.69
4) Barclays U.S. Corp High Yield	0.52	0.35	0.43	1.00	0.44	-0.11	0.75	0.73	0.75	1.00	0.70	0.50
5) FTSE Narelt All REITs	0.41	0.25	0.30	0.44	1.00	-0.10	0.86	0.74	0.62	0.70	1.00	0.41
6) S&P GSCI	-0.08	0.01	0.04	-0.11	-0.10	1.00	0.59	0.63	0.69	0.50	0.41	1.00
Less than 0.50												
Between 0.50 and 0.70												
Between 0.70 and 0.80												
Between 0.80 and 0.90												
Over 0.90												

Source: Zephyr StyleADVISOR

Unfortunately, traditional diversification failed when investors needed it most. During the credit crisis many different asset classes fell in lock-step with one another. In order to be truly diversified, losses in one segment of the portfolio should be offset by gains in another.

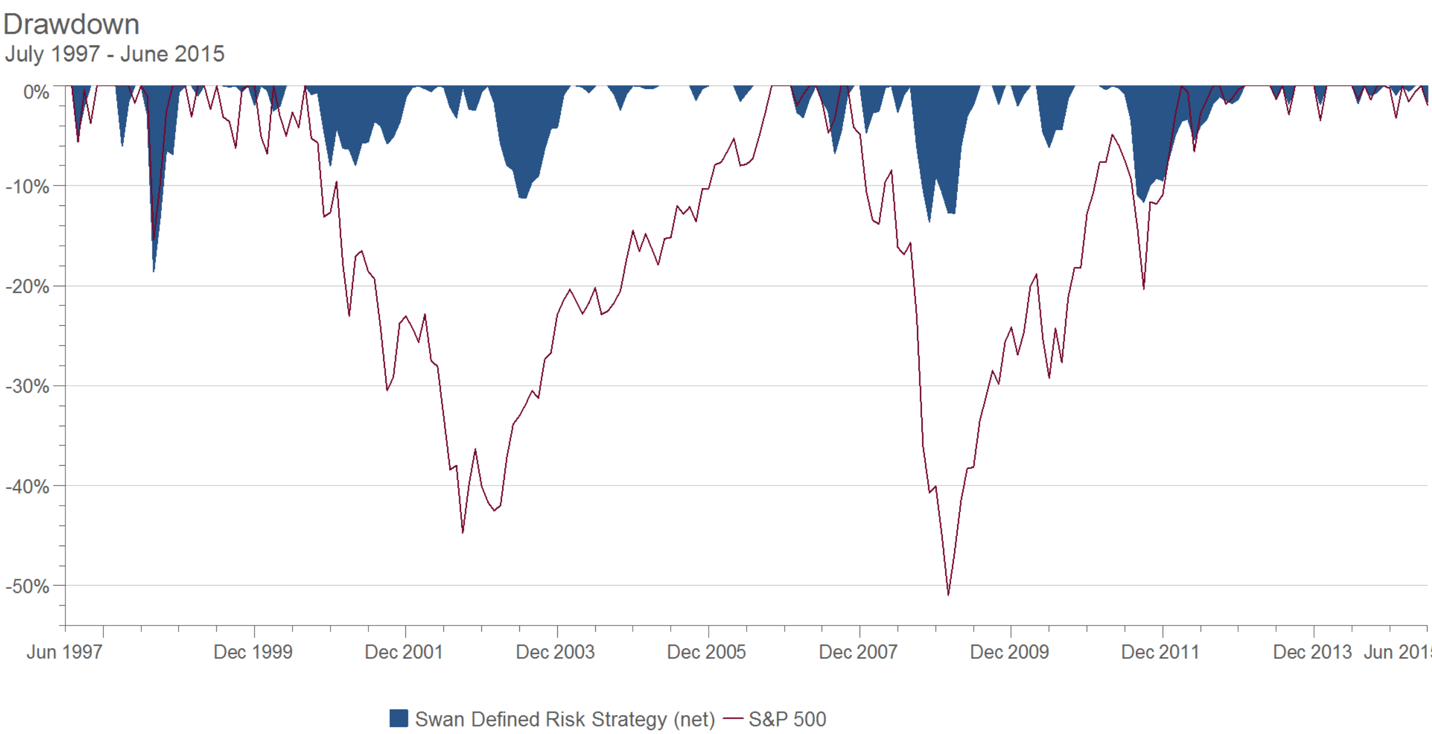
Put options are designed to increase in value the more an underlying asset depreciates. Using puts options as an "insurance policy" on the value of their portfolio, investors can hedge against losses of wealth. For many investors, the risk of losses is their true definition of risk.

III. VOLATILITY

Financial professionals typically quantify risk in terms of volatility, using standard deviation as their measure. However, standard deviation has several limitations. First, standard deviation makes no distinction between "good" upside volatility and "bad" downside volatility. Both upside and downside volatility are combined in a single number called standard deviation.

Second, standard deviation does not take into account the timing of bad returns. Standard deviation cannot tell you whether a market's bad periods were randomly scattered across the calendar or if they happened in bunches. The reality of the market is that during a crisis bad news typically follows bad, and losses start compounding. And when this happens, investors no longer care about volatility. They care about capital preservation.

The chart below illustrates the losses the S&P 500 experienced during the two big bear markets in the new millennium. The peak-to-trough loss on the S&P 500 was -44.73% during the dot-com bust, followed by a peak-to-trough loss of -50.95% during the credit crisis. Furthermore, one can also see the duration of the losses: it took six years and two months for the S&P 500 to recover its losses during the dot-com bust and four years and five months for it to recover to its pre-credit crisis highs.



Source: Zephyr StyleADVISOR

In blue we see the downside protection offered by Swan Global Investments' Defined Risk Strategy (DRS). Swan uses put options on the S&P 500 index ETF or sector ETFs to protect against catastrophic losses in the market. As a result, the depth, duration, and frequency of losses of Swan's DRS has been roughly one-sixth of the losses seen in the S&P 500 from July 1997 to June 2015.

CONCLUSION

The Swan Defined Risk Strategy was designed to address the three fatal flaws in mainstream portfolio thinking. Recognizing that 1) traumatic events do occur with alarming frequency, 2) a truly different type of return is needed to diversify risk, and 3) risk should not be solely defined by volatility. The Swan Defined Risk Strategy was built to provide capital preservation during periods of market turmoil. In addition, Swan's Defined Risk Strategy was designed to capture a good portion of up markets as well. With a GIPS®-compliant track record stretching back to July 1997, the Swan Defined Risk Strategy has successfully weathered two exceptionally painful bear markets.

July 1997- June 2015	Swan DRS (Inception 1997)	S&P 500
Return, Annualized	8.91%	6.76%
Return, Cumulative	364.71%	224.87%
Standard Deviation	9.85%	15.47%
Beta	0.29	1.00
Pain Index	2.32%	12.87%
Up Capture	41.39%	100.00%
Down Capture	18.88%	100.00%

Source: Zephyr StyleADVISOR

To find out more about Swan, please visit swanglobalinvestments.com. As the old saying goes, "Those who do not learn from history are doomed to repeat it."

FOOTNOTES

Important Disclosures:

Swan Global Investments, LLC is a SEC registered investment advisor providing asset management services utilizing the proprietary Swan Defined Risk Strategy, allowing our clients to grow wealth while protecting capital. Note that being an SEC registered Investment Adviser does not denote any special qualification or training. Swan offers and manages the proprietary Defined Risk Strategy ("DRS") through multiple product offerings for its clients including individuals, institutions and other investment advisor firms. Information is this communication is aggregated from Swan affiliated companies. Swan Global Investments, LLC, Swan Capital Management, LLC, Swan Global Management, LLC and Swan Wealth Management, LLC are affiliated entities. More information about Swan and Swan's DRS can be found at www.swanglobalinvestments.com or by contacting Swan at sales@swanglobalinvestments.com, Swan Global Investments, LLC. 277 East 3rd Ave, Durango CO 81301. (970) 382-8901

Any historical numbers, awards and recognitions presented are based on the performance of a (GIPS®) composite, Swan's DRS Select Composite, of managed accounts which include all discretionary accounts invested in since inception, July 1997. Swan claims compliance with the Global Investment Performance Standards (GIPS®). The verification and performance reports are available upon request. This composite is a combination of accounts utilizing margin and accounts not utilizing margin. Further information may be obtained by contacting the company directly at 970-382-8901 or www.swanglobalinvestments.com.

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The S&P 500 Index represents the top 500 publicly traded companies in the U.S. S&P is a registered trademark of the McGraw-Hill Companies, Inc. Indexes are unmanaged and have no fees or expenses. An investment cannot be made directly in an index. Accordingly, comparing results shown to those of such indexes may be of limited use. Swan makes no representation regarding the accuracy or propriety of the information received from any other third party. 033-SGI-042715

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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