SSI Investment Management

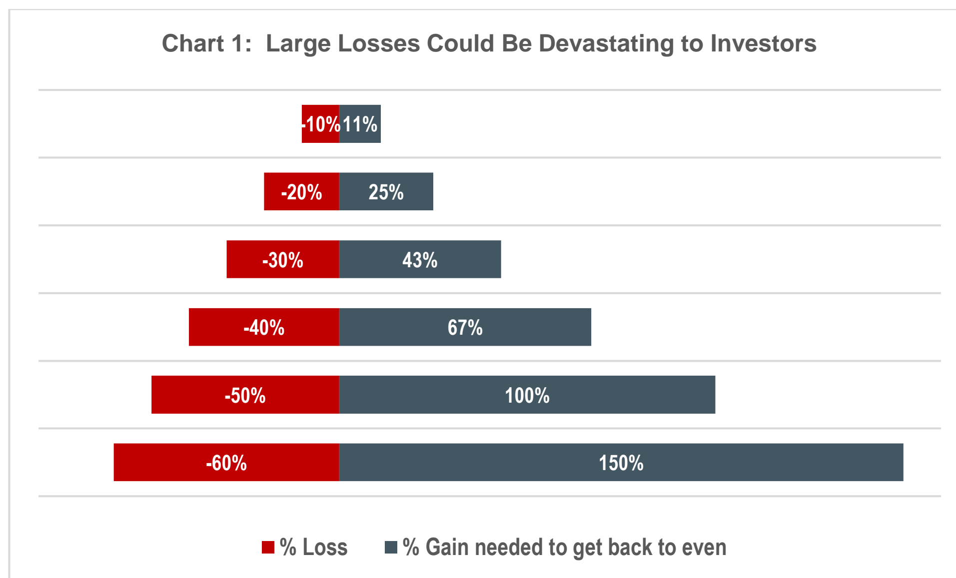
Risk Mitigation Focus

By: Ken Raguse, CFA, Portfolio Manager

> *Any uncertainty that has the potential to prevent investors from reaching their objective can be considered risk.*
>
> *Risk mitigation is anything that reduces this uncertainty.*

Investors are motivated by their desire to achieve an objective. In most cases they are trying to improve their future, the future of loved ones, or the financial health of the institutions they represent. As opportunities are considered, positive outcomes are weighed, along with potential negatives related to the investment. Any uncertainty that has the potential to prevent investors from reaching their objective can be considered risk. Risk mitigation is anything that reduces this uncertainty.

Although not capturing all the potential upside in strong periods can be disappointing, the largest impediment to investors meeting their objective is suffering substantial losses. As Chart 1 below shows, large losses require an outsized gain just to get back to where the investor started. As a result, risk mitigation usually refers to attempting to avoid the large losses associated with an investor failing to meet their objective.



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Risk Misconceptions

Risk is usually evaluated in the framework of modern portfolio theory, which breaks overall risk down into two categories: systematic and idiosyncratic or security specific risk. The systematic component is most often in reference or relative to a “market”, such as the S&P 500 as an example, and its risk is assumed to be relatively constant. Idiosyncratic or security specific risk, on the other hand, is particular to the individual security, and is believed to be reduced through portfolio diversification. These principles are appealing on a theoretical level, but fail to consider opportunities available in the marketplace, which may significantly truncate downside risk and improve the portfolio’s risk/return profile:

1. **Multiple Markets** – Across the investment landscape, there are differentiated securities with idiosyncratic risk/return characteristics, which are bought and sold in segmented markets. Some of these securities may have risk-adjusted return expectations which are preferable to those available in more traditional markets. For example, convertible bonds have historically offered more upside capture than downside participation in comparison to equities, as depicted in Chart 2 below:

Chart 2: Attractive Attributes for the Market We Expect	Avg. Return in Negative Equity Months*	Avg. Return in Normal Equity Months 0-2%*	Avg. Return in Strong Equity Months >2%*
S&P 500 Index	-3.38%	1.03%	4.51%
ICE BofA ML All US Convertible Index (VXA0)	**-2.28%**	**1.05%**	**3.26%**
Capture Rate VXA0 vs. S&P	67%	102%	72%

**Returns from 1/1/1988-9/30/2018. Source: Bloomberg. Returns sorted and categorized based on S&P 500 Index returns. Total # of months: 369, # of negative equity months: 125, # of normal equity months: 95, # of strong equity months: 149.*

2. **Expected Returns are Not Static** – As the risk and return expectations of a potential investment evolve, the optimal portfolio mix changes. Multi-asset portfolios are designed to adapt to changes in expected returns, often allocating away from asset classes with rising risk.

Traditional Measures of Risk

The most common measure of risk in the investment world is standard deviation, which measures the volatility of historical returns. Although standard deviation can be a useful tool when comparing similar investment strategies, it struggles to accurately assess the likelihood of suffering large losses:

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1. **Non-Normal Distribution** - Standard deviation assumes returns are normally distributed. Historically, however, asset class returns have not consistently been normally distributed. Equities, in particular, have demonstrated negative skewness, with many more extreme losses than would be expected by a normal distribution. This is commonly referred to as a "fat left tail."

2. **Upside/Downside** - Standard deviation treats returns that exceed mean returns as contributing as much to risk as returns that are below the mean. Therefore, a strategy with positive deviations has a higher standard deviation, even though upside deviations don't necessarily lead to an increase in downside deviations. For investors, only downside returns are an actual risk.

Given that standard deviation has significant weaknesses, other risk measures, like downside deviation, have been developed, which do a better job of addressing some of these issues. However, historical returns, which are the basis of most standard risk measures, are often ineffective in evaluating investment performance in unusual periods when markets are stressed. This is especially disconcerting because it is at these times that the risk of substantial losses is elevated.

Evaluating the Risk Mitigation of Investment Managers

Assessing risk is one of the most important, and challenging, aspects of investing. While historical returns are useful, there is no statistic that accurately assesses the level of risk mitigation in an investment strategy or portfolio. As a result, the most effective way for investors to evaluate how a portfolio will respond in periods of high market stress is to conduct thorough due diligence, and understand the investment manager and their process as much as possible. Among the key questions that need to be answered:

Is there a systematic, disciplined process in place to mitigate risk?

Are there safety nets built into the portfolio which provide downside protection?

Is the manager committed to protecting capital, or are they incentivized to take risks intended to help them capture all the upside?

SSI Investment Management was founded over 40 years ago on four key principles; safety, consistency, good returns, and preservation of capital. We have always believed that one of a money manager's most important responsibilities is shielding investors from sizable losses, which can prevent them from achieving their investment objective. As a result, risk mitigation is integrated into each of our strategies:

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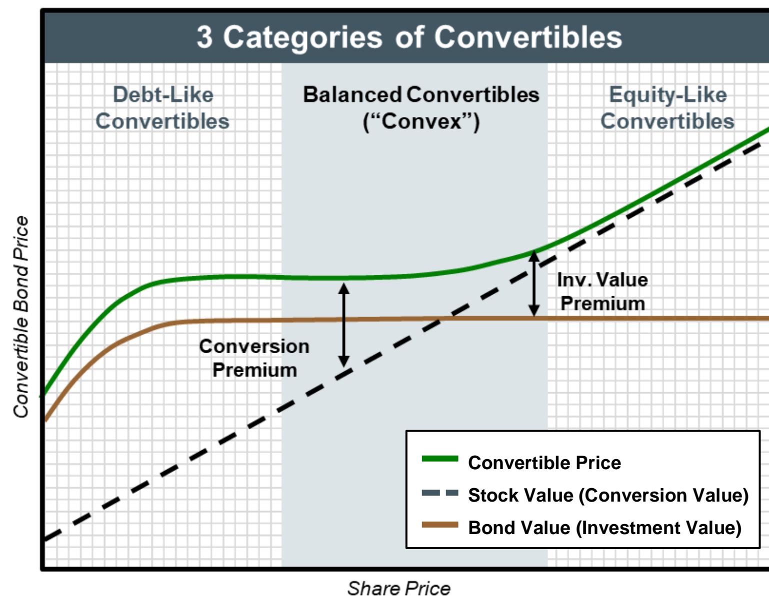
1. **SSI's Convertible Investment Strategy** *(defensive equity substitute or a fixed income diversifier)* is a portfolio of convertible securities with attractive risk/return characteristics. Risk is mitigated by the bond floor of convertibles. As demonstrated in Chart 3 below, if the underlying equity does well, the bond participates in the equity upside because of the conversion feature. However, if the underlying equity declines, the bond floor offers downside protection enabling the convertible security to hold up better than the equity.

Chart 3: Convertible Categories



For illustration purposes only.

2. **SSI's Convertible Income Strategy** *(fixed income alternative)* is a hedged portfolio of convertible securities with attractive yields and valuations. Risk is mitigated by hedging. The portfolio is structured to benefit from volatility, and capture the income generated (currently approximately 4%) regardless of the performance of the underlying equity. Due to the nature of the income stream, the strategy has historically performed well in rising interest rates environments, when other fixed income investments struggle, as illustrated in Chart 4 below:

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Chart 4: Performance in Down Markets

QTR/Year	Bloomberg Barclays Intermediate Treasury Bond	SSI Convertible Income Strategy
1Q 1996	-0.7%	2.3%
1Q 1997	-0.1%	1.5%
1Q 1999	-0.4%	2.1%
2Q 1999	-0.2%	2.1%
4Q 1999	-0.1%	0.2%
4Q 2001	-0.1%	1.6%
1Q 2002	-0.4%	1.0%
3Q 2003	-0.02%	-1.2%
4Q 2003	-0.3%	2.6%
2Q 2004	-2.3%	-1.0%
1Q 2005	-0.8%	-2.6%
3Q 2005	-0.6%	1.6%
1Q 2006	-0.5%	3.3%
2Q 2007	-0.03%	0.8%
2Q 2008	-2.1%	1.2%

QTR/Year	Bloomberg Barclays Intermediate Treasury Bond	SSI Convertible Income Strategy
1Q 2009	-0.3%	5.0%
2Q 2009	-2.1%	7.9%
4Q 2009	-0.6%	2.3%
4Q 2010	-1.8%	2.1%
1Q 2011	-0.04%	2.9%
1Q 2012	-0.5%	3.4%
2Q 2013	-1.4%	0.3%
4Q 2013	-0.5%	0.7%
2Q 2015	-0.5%	0.6%
4Q 2015	-0.9%	-0.8%
3Q 2016	-0.3%	2.9%
4Q 2016	-2.3%	0.6%
4Q 2017	-0.4%	1.0%
1Q 2018	-0.8%	0.8%
3Q 2018	-0.1%	0.8%

Past performance is not necessarily indicative of future results. Performance results for September 2018 are preliminary. All strategy performance returns above are presented gross of management fee. Depicts all down quarters for the Intermediate Treasury Bonds over the last 22 years. The above information is supplemental information to SSI's composite presentation. Please see disclosure at the end of this document.

3. **SSI's Flexible Allocation Strategy** *(multi-asset portfolio)* is a portfolio of Exchange Traded Funds designed to participate in favorable market environments, while also protecting capital in times of financial stress. Risk is mitigated by our Tactical Asset Allocation model (TAA), which systematically reduces equity exposure as the environment deteriorates. The TAA model incorporates macro-economic factors, market based indicators and investor psychology to protect investors from significant losses in adverse market environments.

The following chart (Chart 5) shows the strong performance of the S&P 500 over the last 9+ years. As you can see, the current bull market is among the longest and most powerful in history.

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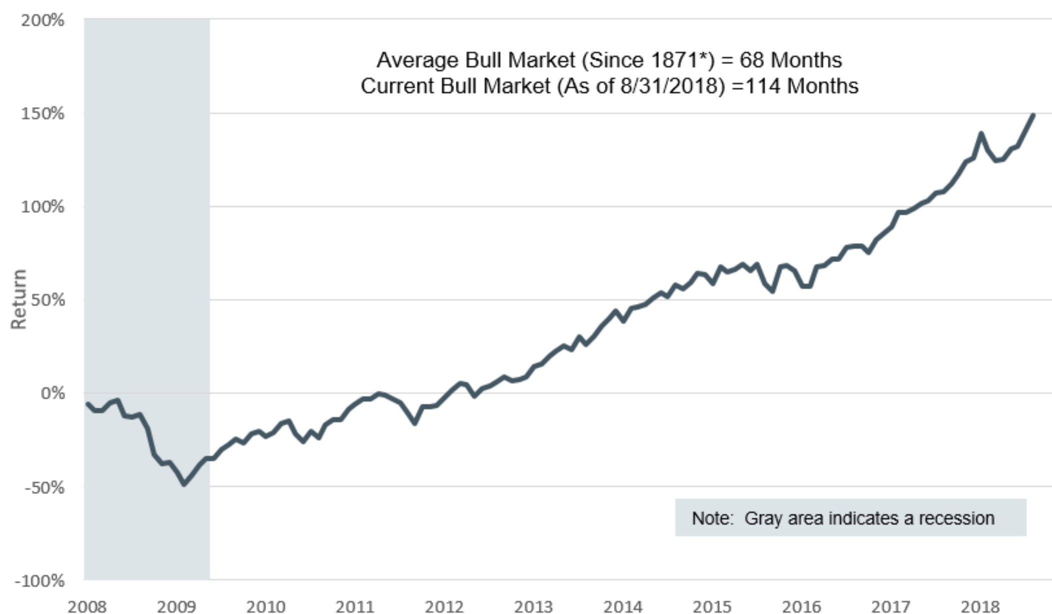
Chart 5: The Current Bull Market



Source: Bloomberg

Conclusion:

As the Great Financial Crisis becomes more of a distant memory, many investors have de-emphasized risk mitigation in an attempt to capture more of the market upside. Although we are not expecting an end to the Bull Market in the near future, investors should remember that the market goes in cycles, and, eventually, there will be another market downturn. The performance of your portfolio, when the inevitable decline happens, will likely have a great impact on your ability to meet your investment objectives. As a result, we encourage investors to maintain a focus on risk mitigation as they attempt to reach their financial goals.

About SSI Investment Management

- Headquartered in Los Angeles, CA
- Founded in 1973
- 13 Investment Professionals
- 100% Employee Owned
- $1.8 Billion AUM
- 37 Employees

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Compliance Statement

SSI Investment Management, Inc. ("SSI") claims compliance with the Global Investment Performance Standards (GIPS®).

Definition of the Firm

SSI was established in 1973 and is a Registered Investment Advisor based in Los Angeles, CA. SSI manages assets in domestic and global capital markets. SSI acquired the assets of Froley, Revy Investment Co., Inc. ("Froley Revy") and its composites as of March 1, 2009. SSI is 100% employee owned and is not affiliated with any parent organization nor does SSI have any subsidiaries. SSI applies quantitative disciplines and fundamental research in its management of alternative and traditional portfolios for institutional and high net-worth investors. SSI manages separate accounts, limited partnerships and acts as sub-advisor to mutual funds.

Policies

SSI's policies for valuing portfolios, calculating performance, and preparing compliant presentations is available upon request.

The Composite & Benchmark

The SSI Convertible Income Strategy (composite created January 1, 1995) invests long in a diversified portfolio of convertible bonds/preferreds and short the underlying common stocks to attempt to achieve an absolute return. The composite contains fully discretionary accounts including those no longer with the firm. With interest rebates on short sales and coupon interest on convertible bonds comprising a consistent and important component of the return of the SSI Convertible Income Strategy, SSI believes a performance comparison versus the 90-Day Treasury Bill is appropriate. The volatility of this strategy is expected to be greater than the volatility of the 90-Day Treasury Bill due to the inclusion of convertible and equity positions. The return, if any, above the 90-Day Treasury Bill is dependent upon higher interest income available in the convertible market and SSI's discretionary management. Any other indices shown are not necessarily comparable to SSI's Convertible Income Strategy. These are widely recognized market indices that are shown for informational purposes only. The composite name was formally known as SSI Hedged Convertible Income Strategy from 1/1/1995 – 6/30/2008 and on 7/1/2008 the new composite name became the SSI Convertible Income Strategy.

Use of Leverage, Derivatives, and Shorts

Leverage is not used in SSI's Convertible Income Strategy and the use of derivatives is not material. The Strategy is generally fully hedged and involves buying a convertible bond/preferred and shorting the underlying common stock in order to reduce the equity exposure. Every long position is hedged with an offsetting short.

Investment Management Fees

Returns are presented gross and net of management fee. Actual results of an individual account may be materially different from the performance shown herein because of differences in inception date, transaction and related costs, restrictions, fees and other factors. All performance is based in U.S. dollars and reflect, on a percentage basis for each of the periods indicated: (a) the net increase (decrease) of all SSI Convertible Income Strategy portfolios, dollar-weighted, including adjustments for unrealized gains and losses, the reinvestment of dividends and other earnings, the deduction of investment costs, the deduction of limited partnership and/or mutual fund costs (if any), time-weighted to adjust for additions and withdrawals, and (b) the net increase (decrease) of the 90-Day Treasury bill.

Net performance is reduced by SSI's actual investment management fees and model fees (1995-2014). 1% annual fee is used for any model fees. Gross performance does not include deduction of SSI's investment management fees.

If performance is gross of management fees, client's actual return will be reduced by the management fees and any other expenses which may be incurred in the management of an investment advisory account. See SSI's Form ADV, Part 2A for a complete description of the investment advisory fees customarily charged by SSI. As an example, an account with an initial $1,000,000 investment on January 1, 2003, earning a recurring 5% semi-annual gross return (10.25% annualized), and paying a .5% semi-annual management fee (1% annual fee) would have grown to $1,340,096 on a gross of fees basis and $1,300,392 on a net of fees basis by December 31, 2005 (3 years).

List of Composites

A list of the Firm's composite descriptions and/or compliant presentations are available upon request. Please contact juliea@ssi-invest.com.

Additional Disclosure

When representative portfolio information is shown the representative portfolio is selected by comparing any one (but not limited to) the following criteria: most in line with composite investment objectives /consistency of investment strategy, investment restrictions, fee structure, time frame managed, type of client, size of account.

SSI acquired Froley Revy and its composites as of March 1, 2009. Prior to the acquisition, Froley Revy claimed GIPS compliance for the periods of 1983-2008 and was independently verified by Ashland Partners & Co.

Investors must assess the suitability of any particular investment opportunity and carry out any due diligence that they require in relation to the strategy or investments or individual holdings of the strategies that SSI manages. In doing this, investors should seek separate advice. It should not be assumed that recommendations made will be profitable and any investment is at risk of loss. This summary represents the views of the portfolio managers as of the date noted at the beginning of this document. Any holdings mentioned in the accompanying summary are from its stated strategy. Portfolio holdings are subject to change without notice and are not intended as recommendations of individual securities. The information in this article is not intended to be personalized recommendations to buy, hold or sell investments. The information, statements, views and opinions included in this article are based on sources (both internal and external sources) considered to be reliable, but no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness. Such information, statements, views and opinions are expressed as of the date of this article, are subject to change without further notice and do not constitute a solicitation for the purchase or sale of any investment referenced in the article.

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