SSi Investment Management

Convertibles: An investment solution for Insurance portfolios in challenging times

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April 2013

Introduction

In recent years the Federal Reserve has implemented unprecedented monetary policy. In addition to maintaining very low short term interest rates, the Fed has lowered the entire treasury yield curve by aggressively purchasing longer-term treasuries in its quantitative easing program ("QE"). As of this writing, the annual yields on 5- and 10-year treasuries are close to generational lows at 0.71% and 1.75% respectively.

This market distortion has created extraordinary challenges for the insurance industry, which relies heavily on high quality fixed income investments. Not only are yields extraordinarily low; significant price declines in bonds are likely when the Fed ends its buying program. In today's bond market, a 25 basis point rise in the 10-year treasury yield generates a mark-to-market principal loss that wipes out an entire year's yield.

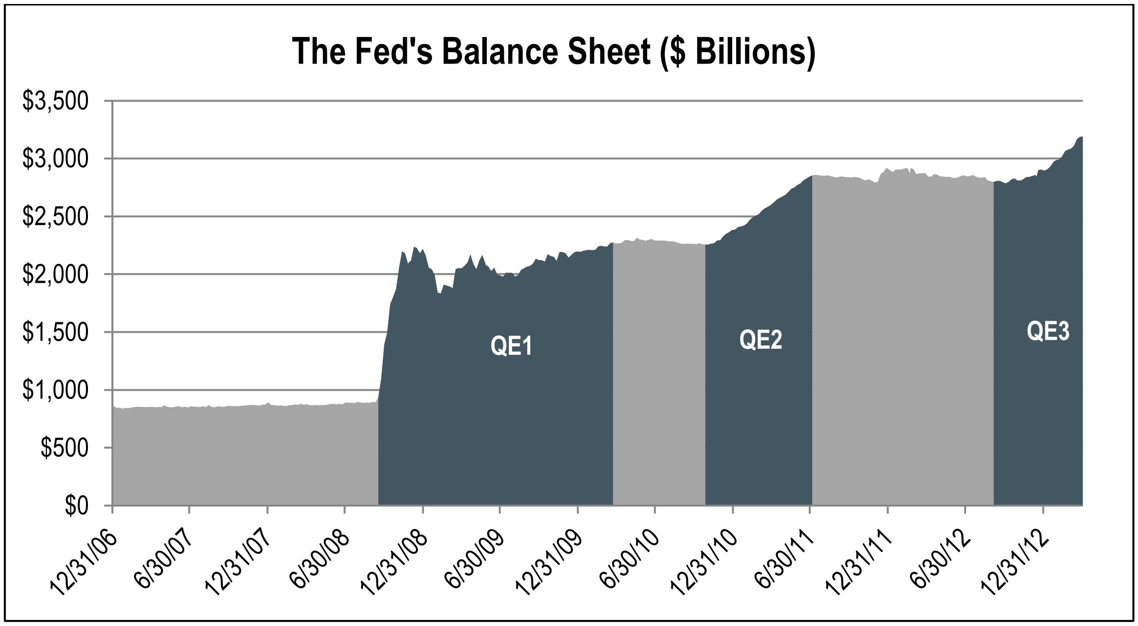
Against this backdrop, convertible securities represent a compelling investment solution. Convertibles combine the investment attributes of bonds and common stock. They offer principal protection with participation in equity returns, resulting in a convex return profile. They also have the advantage of being efficient in the use of capital due to risk based capital rules. Historically, convertibles have generated positive returns in periods of rising interest rates, providing important diversification to fixed income portfolios.

Macro Environment

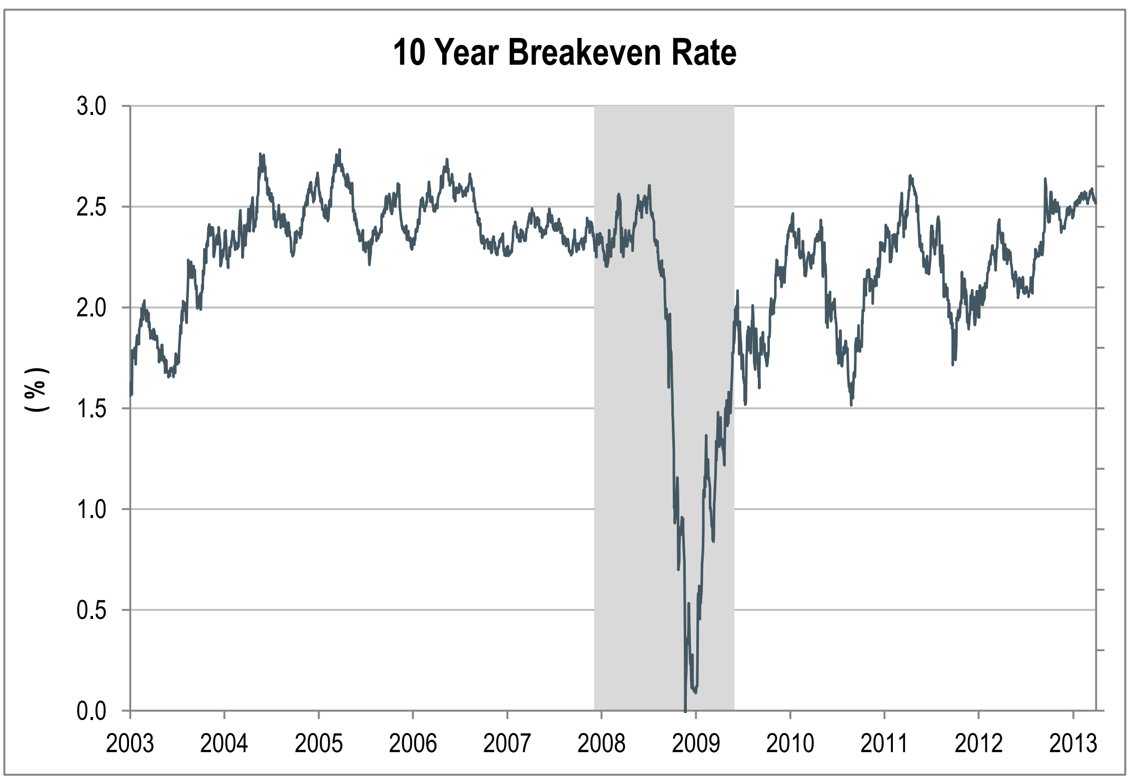
Exceptionally low yields combined with increasing risks of capital loss in fixed income portfolios provide a challenging backdrop to fixed income investors.

The Federal Reserve has conducted massive quantitative easing in three stages. The most recent stage commenced in September 2012. This stage was an addition to Operation Twist and now accounts for a total of $85 billion of purchases per month. These actions have lifted the size of Fed's balance sheet in an unprecedented fashion from $869 billion on August 8, 2007 to over $3.1 trillion at the end of March 2013.

QE has had the effect of drastically lowering 10 year bond yields from 5% to less than 2%. With divisions emerging in the Fed as reflected in the minutes of the last meeting, and the10 year breakeven inflation rate (as reflected by TIPS spread) heading to 2.5%, we believe the risk is that QE may be wound down as the year draws to a close. The Fed has explicitly spelled out that it will end the zero interest rate policy when either the unemployment rate touches 6.5% or inflation touches 2.5%. As it is, 10 year yields have crept up since November despite the Federal Reserve's easing stance. Given the evidence, we believe that the 30 year long secular bull market in bonds is coming to an end.



Source: http://clevelandfed.org/research/data/credit_easing/index.cfm



Source: Bloomberg & National Bureau of Economic Research, as of 3/31/2013.
Shaded area indicates U.S. recession

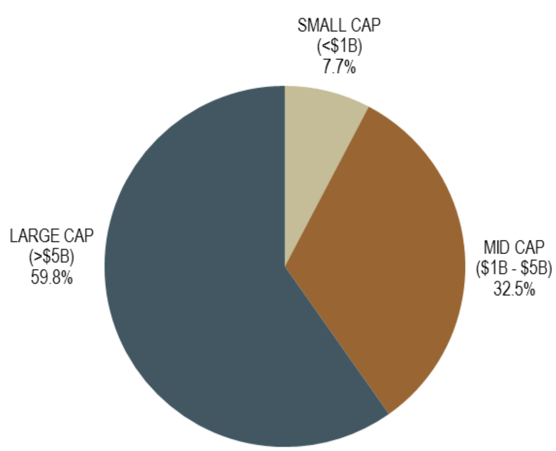
Opportunity Set

Issuers in the convertible securities market include a wide range of market capitalization and industry groups. Currently, large cap issuers occupy the largest segment of the market, but mid and small cap issuers are also well represented. The most well represented sectors in the convertible universe include Technology, Healthcare, Financials, Consumer Discretionary and Energy. In general, issuers in the convertibles market tend to have strong credit profiles particularly in relation to their credit ratings assigned by the NRSROs.

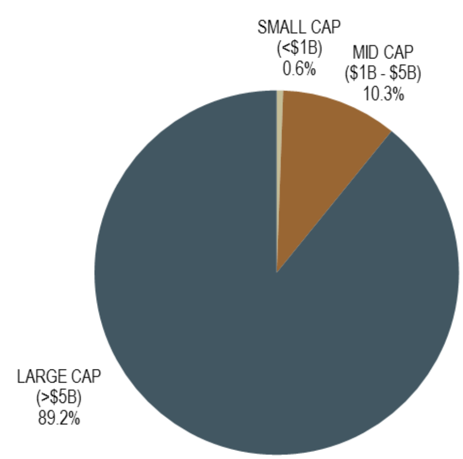
Sector Allocation (as of 3/31/2013)	VXA0	V0S1
Consumer Discretionary	10.7%	1.9%
Consumer Staples	2.3%	5.0%
Energy	7.7%	2.1%
Financials	20.3%	18.4%
Healthcare	16.8%	27.1%
Industrials	5.3%	3.0%
Materials	4.4%	5.3%
Media	2.4%	1.6%
Technology	23.1%	34.3%
Telecommunication	2.4%	0.0%
Transportation	2.1%	0.3%
Utilities	2.5%	1.0%

VXA0 – BofA ML All US Convertibles Index
V0S1 – BofA ML US Investment Grade Convertible Bonds

VXA0 Equity Market Cap Breakdown



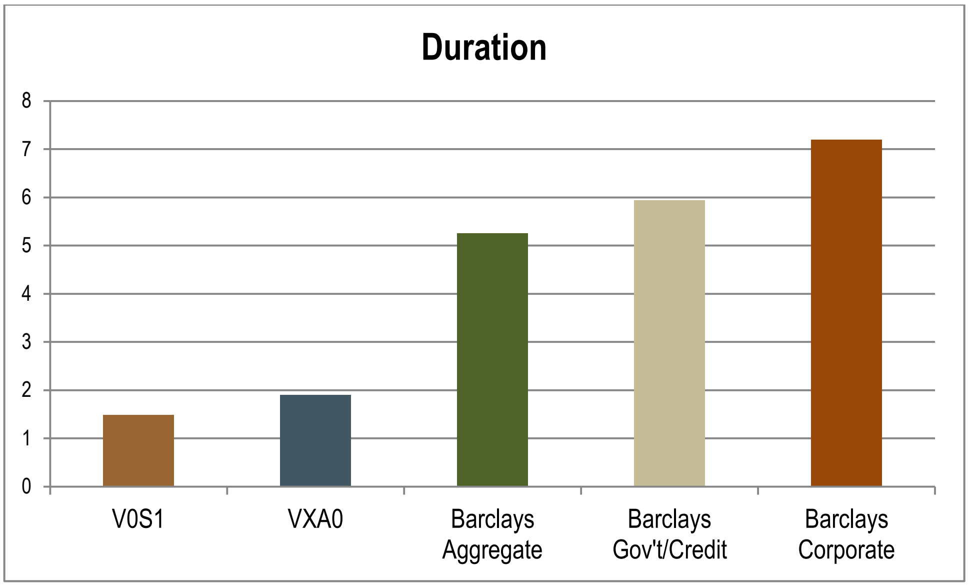
V0S1 Equity Market Cap Breakdown



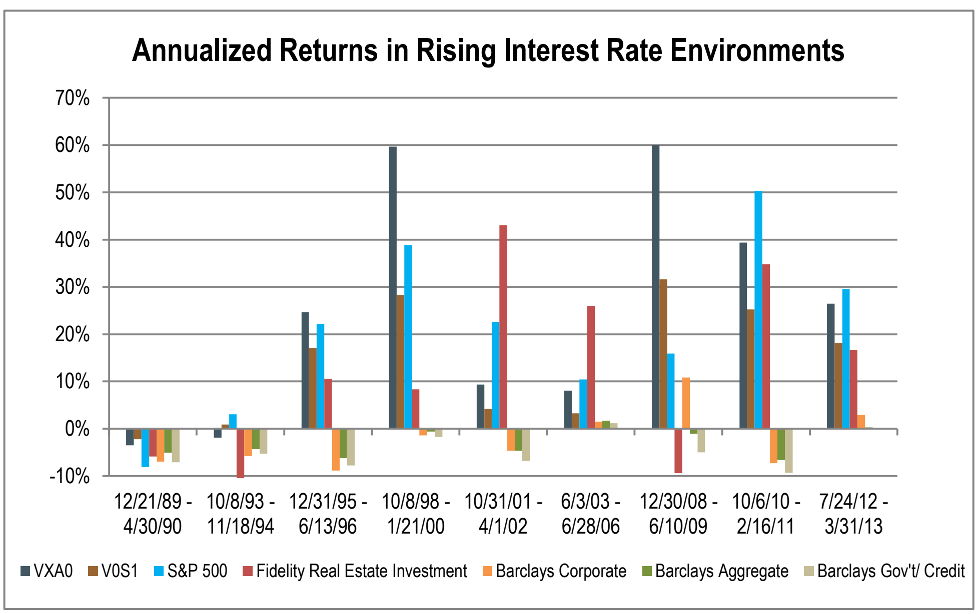
Source: BofA Merrill Lynch Convertible Research. Data as of 3/31/2013.

Performance of Convertibles in Rising Rate Environments

Convertibles significantly outperform their fixed income counterparts in rising rate environments. This is primarily due to two factors. First, equities provide much better protection in periods of rising interest rates, appreciating in nominal terms as they represent a participatory interest in a real business. The equity option imbedded in convertible bonds appreciates in a similar manner, participating in the upside of the underlying equity. Second, the effective duration of convertibles, currently less than 2 years, is very small relative to most fixed income assets. This leads to a relatively small downside impact resulting from a rise in interest rates and that impact is partially offset by the rise in value of the underlying equity. The end result is that convertibles, similar to equities, have provided positive returns to investors in periods of rising rates when most fixed income assets have led to losses.



Source: BofA Merrill Lynch Convertible Research; Barclays; data as of 3/31/2013
VXA0 – BofA ML All US Convertibles Index
V0S1 – BofA ML US Investment Grade Convertible Bonds



Notes for previous graph:
VXA0 – BofA ML All US Convertibles Index
V0S1 – BofA ML US Investment Grade Convertible Bonds

Source: SSI internal research; BofA ML Convertible Research; Bloomberg; Barclays. Rising interest rate environment periods based on SSI internal research/evaluation where the 10-Year Treasury rises at least 100 bps in a twelve-month rolling period.

Convertibles provide Equity-like returns with less risk

In comparison with their underlying stock, convertibles generally provide higher yields, greater downside protection, and seniority over common equity in liquidation. As a result convertibles offer superior risk-adjusted returns compared with equities over full market cycles. The Table below presents the historical risk adjusted returns for the US market:

US Risk Adjusted Returns Jan. 1990 – Mar. 2013

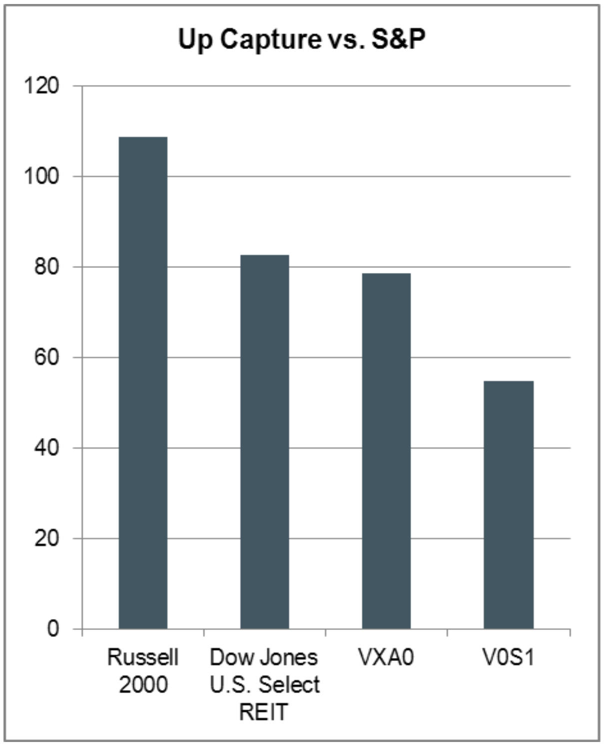
	Annualized Return	Standard Deviation	Sharpe Ratio
BofA ML All Traditional Convertibles (V0A0)	9.46%	12.33%	0.49
BofA ML All Traditional Investment Grade Convertibles (V0A1)	7.22%	9.09%	0.42
BofA All Traditional Speculative Grade Convertibles (V0A2)	9.99%	15.37%	0.43
S&P 500	8.93%	15.00%	0.37
Russell 2000	9.29%	19.55%	0.30

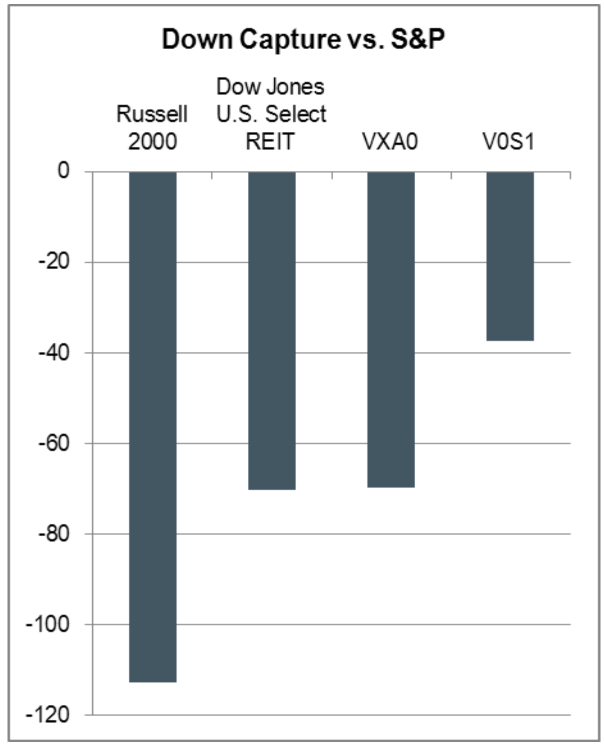
Source: Zephyr StyleADVISOR

Convertibles are a highly capital efficient way to capture the equity market's upside

The upside capture of the equity market (S&P 500) by the convertible security universe over the entire period that clean data is available has averaged over 70%. For investment grade convertible bonds it has exceeded 50%, considerably better than the capture rate for straight fixed income assets.

For Life Insurance companies, the risk based capital charge for investment grade convertible bonds and convertible preferred stock is less than 5% the corresponding charge for common stocks. For Property and Casualty as well as Health Insurance companies, the risk based capital charge for investment grade convertibles is less than 7% the corresponding charge for common stocks. Relative to common stock, even BB rated convertible bonds provide a considerable advantage in terms of being a capital efficient way to participate in the upside of the equity market. Both types of convertible instruments present the additional advantage of convexity i.e. greater participation in the upside of the underlying stock than in the downside.





Source: Zephyr Style Advisor 12/31/1987–3/31/2013
VXA0 – BofA ML All US Convertibles Index
V0S1 – BofA ML US Investment Grade Convertible Bonds

NAIC Life, P&C and Health RBC Charges

BONDS & PREFERREDS	LIFE	P&C	HEALTH
NAIC Class 1 (AAA/Aaa, AA/Aa, A/a)	0.40%	0.30%	0.30%
NAIC Class 2 (BBB/Baa)	1.30%	1.00%	1.00%
NAIC Class 3 (BB/Ba)	4.60%	2.00%	2.00%
COMMON STOCKS	**LIFE**	**P&C**	**HEALTH**
Common	22.5% - 45%[1]	15.00%	15.00%[2]

Source: NAIC.org as of March 15, 2013
[1] 30% ß-weighted (min 22.5%, max 45%)
[2] Charge for Federal Home Loan Bank Common Stock = 2.3%

Conclusion

In an environment of ultra and artificially low interest rates, risk averse insurance company asset managers feel increasingly challenged generating a 3%+ return in their investments to cover their liabilities utilizing only short duration, high quality, fixed income assets. Convertibles provide an attractive avenue for meeting that threshold by participating in the upside of the equity market in a risk controlled way while also being highly efficient in the deployment of capital.

SSI Investment Management, a specialist in convertible investing, offers customized investment solutions to help Insurance companies weather these extraordinary and challenging times in the bond markets. We work with clients to develop solutions that help achieve investment objectives while meeting risk management requirements and preserving capital. We have 17 years of experience in managing convertible securities portfolios for Insurance companies.