Market Insights

Understanding Convertible Bonds

07/2013

What investment pays interest and repays principal like a bond, but also can offer appreciation potential, like a stock? The answer may be found in convertible bonds—hybrid securities that can combine the "best of both worlds."

1. What are convertible bonds?

By definition, a convertible bond is a corporate bond that can be exchanged by the holder into a predetermined number of shares of the issuer's common stock. Like other bonds, convertible bonds pay interest at a fixed coupon rate and can be redeemed at the face value (or par value) of the bond. They also fluctuate with changes in interest rates and the credit quality of the issuing company, just like other types of corporate bonds.

In return for the conversion feature, convertible bonds generally carry a lower coupon rate than nonconvertible corporate bonds; however, the interest rate usually offers a yield advantage over the common stock dividend rate. When convertible bonds mature, they can be redeemed at their face value—or at the market value of the underlying common shares—whichever is higher.

The terms of the conversion feature, which are specified when the bond is issued, can be expressed as a ratio or a price.

- The conversion ratio is the number of common shares into which a convertible bond can be exchanged.
- The conversion price is equal to the face value of the bond divided by the conversion ratio.

Once a bond is issued, the amount by which its price exceeds the conversion price is referred to as the conversion premium. The conversion value is equal to the number of shares represented in the conversion ratio, multiplied by the common share price. The example below shows how these terms might apply to an actual convertible bond issue.

EXAMPLE:

- A USD1,000 bond with a conversion ratio of 40:1 would convert into 40 shares of stock at a conversion price of USD25.
- If the stock is trading at USD30, the conversion premium would represent USD5/share, or 20%.
- The conversion value would be USD1,200.

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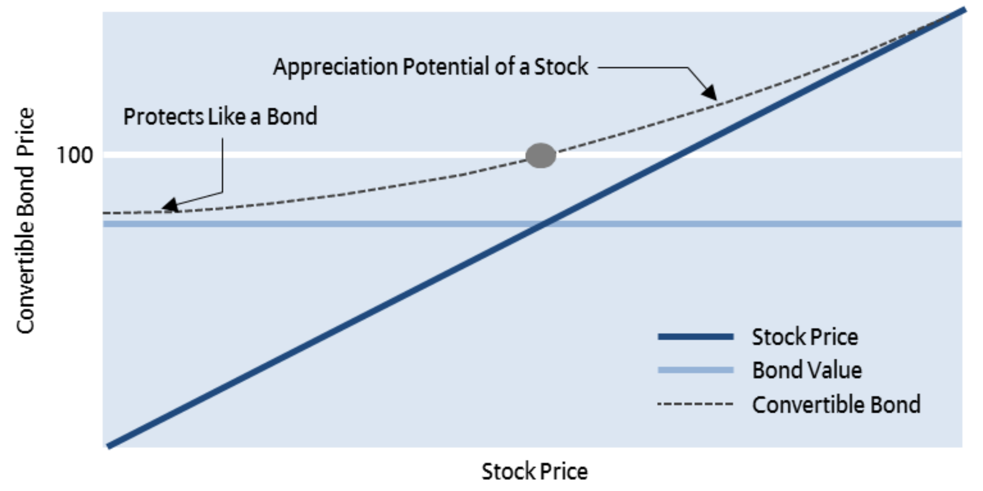
2. Do convertible bonds tend to behave more like stocks or bonds?

At any given point in time, the trading behavior of a convertible bond can take on either stock or bond characteristics, depending upon where it is trading in relation to the bond's conversion price.

As the chart (below) illustrates, the security becomes more stock-like as the price of the common shares rises which means that its participation in the stock's upside potential tends to increase.

As the underlying stock price falls, the convertible bond becomes more bond-like. If the stock price slips below the conversion price, the convertible bond trades just like a bond, effectively putting a price floor under the investment. It is important to note that convertible bonds are also subject to the same risk factors as stocks and bonds including market, interest rate and default risks.

Participation Potential, Volatility Cushioning



For illustrative purposes only. The chart is not meant to imply that the price of a stock will consistently rise during any market environment or that a bond will remain stable.

1. Delta: measures the sensitivity of the convertible bond price on changes to the stock price.
    - A delta below 20% means that the convertible bond price is not very sensitive to stock price and the price of the convertible bonds will behave more like bonds.
    - A delta above 80% means that the convertible bond price is very sensitive to the movement of stock price.
    - A delta between 20% and 80% is considered as "mixed".

2. Delta-adjusted exposure: is often used by investment managers to determine the convertible bond sensitively to stock on an individual security or sector levels. In determining the delta-adjusted exposure, investment managers apply the delta onto the portfolio weighting of a bond or a sector.

Example:

The delta for the financial sector of the portfolio and benchmark are 55% and 41% respectively.

- Absolute weight of the financial sector:
  16.1% (portfolio) vs. 19.9% (benchmark)
- Delta-adjusted weight of the financial sector:
  8.9% (55% x 16.1) vs. 8.2% (41% x 19.9)

On an absolute basis, the portfolio is underweighting the financial sector, but on a delta adjusted basis, the portfolio is overweighting the sector. This is because the delta for the financial sector of the portfolio is higher than the same sector in the benchmark. Therefore by using delta-adjusted weights, we can better quantify our exposure and risk as it relates to equity sensitivity.

3. Is there a limitation to the upside potential provided through the conversion feature of a convertible bond?

Many companies issue convertible bonds with a call option that gives them the right to repurchase the convertible bond from the holder at a specified price (usually the par value of the bond). In effect, this call option can limit the bond's upside potential from the appreciation of the underlying common stock.

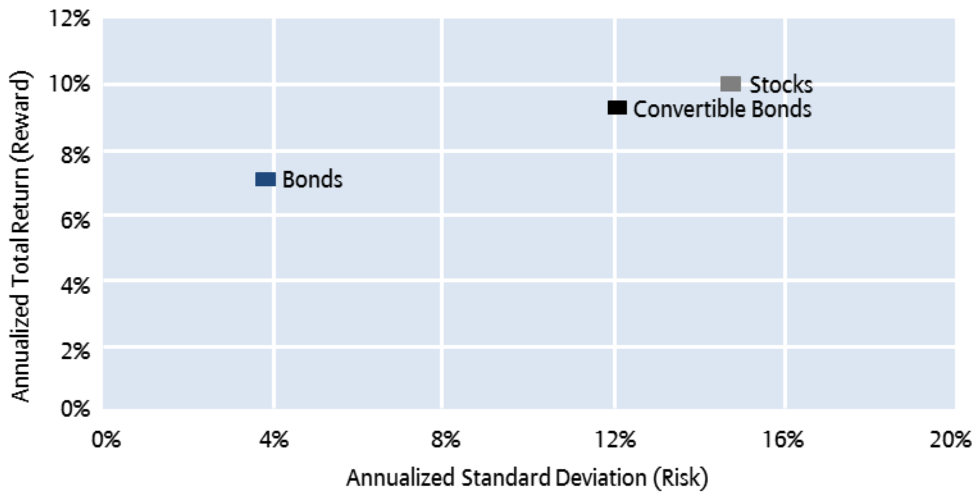
If the bond is structured with a put option, the holder has the right to sell the bond to the issuer on a specified date, usually at the par value of the bond. For the bond holder, this type of feature can limit risk should the stock price drop sharply.

4. Over the long term, how have convertible bonds performed relative to stocks and bonds?

Historically, they have delivered attractive asymmetric returns—that is, they have participated in more of the underlying stock's upside than its downside. Since 1988, convertibles have posted returns that were similar to stocks but with reduced downside volatility.

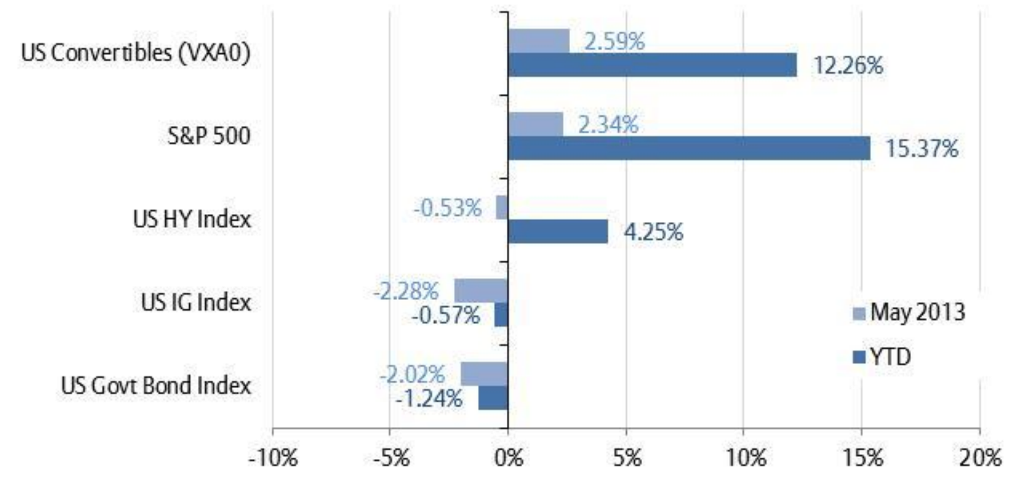
Convertible bonds have a favorable risk/reward profile relative to more traditional asset classes

Risk vs. Reward January 1988 – June 2013



Source: BofA Merrill Lynch, FactSet
Monthly data as at 30 June 2013. Past performance is no guarantee of future results. The chart on this page is not representative of any specific investments and is not indicative of the past or future performance of a specific investment. It is not possible to invest directly in an index. Unless otherwise noted, index returns reflect the reinvestment of income dividends and capital gains, if any, but do not reflect fees, brokerage commissions or other expenses of investing. For the chart on this page, stocks are represented by the S&P 500 Index, convertibles are represented by the BofA ML All Convertibles All Qualities Index and bonds are represented by the Barclays US Aggregate Index.

Performance of different US asset classes, as at 31 May 2013

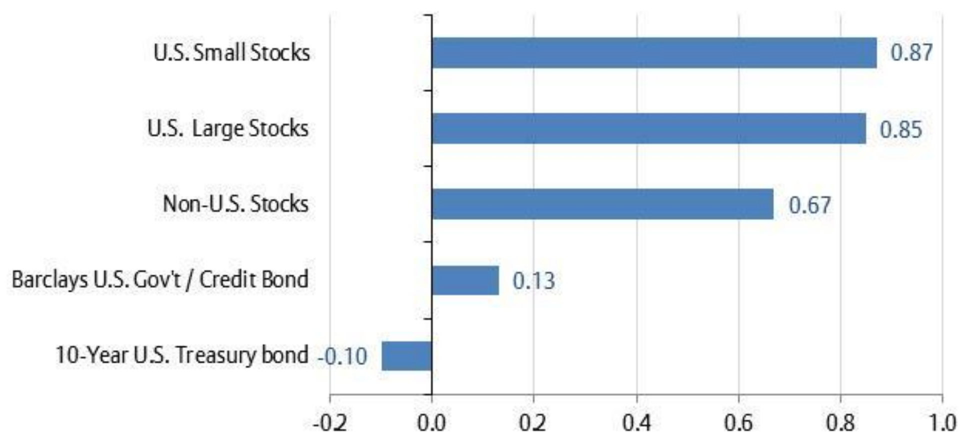


Source: BofA Merrill Lynch Convertibles Research (5 June 2013).

V. How have convertible bonds performed in rising interest rate environments?

Convertible bonds have historically exhibited negative to low correlations to interest-rate-sensitive US Treasury bonds. As a result, they have traditionally exhibited attractive prices in rising interest rate environments.

Convertibles bonds have higher correlations to equities compared to Treasury bonds



US Large Stocks: Russell 1000 Index, US Small Stocks: Russell 2000 Index, 10-year Treasuries: BofA Merrill Lynch U.S. Treasury Current 10 Year Index, Non-US Stocks: MSCI EAFE Index

Source: Barclays; BofA Merrill Lynch; FactSet; Allianz Global Investors. Figures as at 31 March 2013.

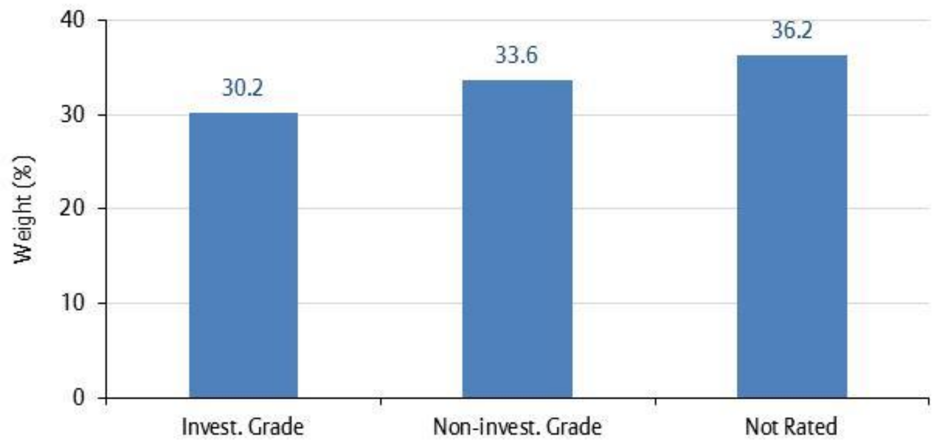
6. What are the risks of investing?

Convertible bonds are subject to the risks of both stocks and bonds and are not suitable for all investors. These bonds can fluctuate in value with the price changes of the company's underlying stock. If interest rates rise, the value of the corresponding convertible bond will fall. Many of the companies that issue convertible bonds are below investment grade, which means these bonds can be more risky than investment-grade issues. Convertible bonds are often issued by smaller companies and may be more volatile than securities issued by larger companies.

7. What is the credit quality of US convertible bonds?

Within the US convertible bonds universe, the numbers of investment grade issuers versus non-investment grade issuers are quite evenly mixed. However, we have seen a steady increase of non-rated issuers in the past year. As many of these companies have very clean balance sheets (i.e., little or no debt) and / or do not have complex capital structures, these companies do not want or need to pay Moody's and Standard & Poor's (S&P) to rate their securities.

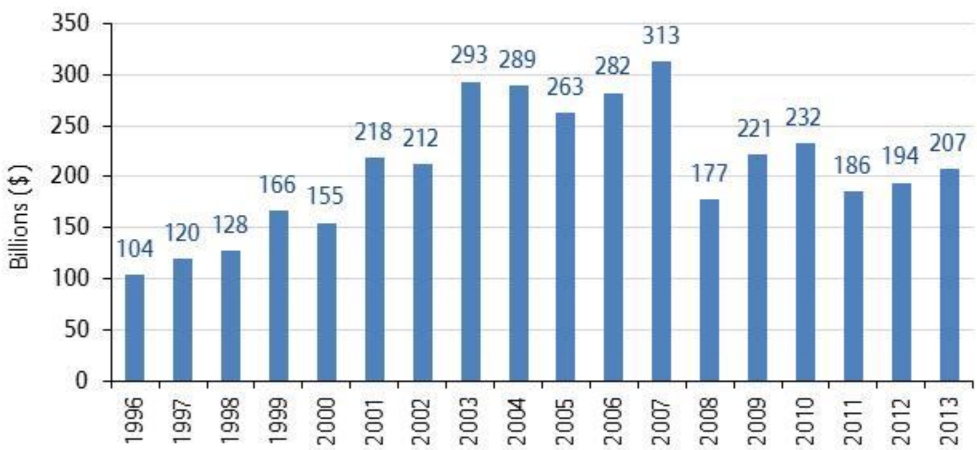
Credit Quality : US Convertible Bonds



Source: BofA Merrill Lynch; as at 31 March 2013. US convertible bonds universe is represented by BofA Merrill Lynch All US Convertibles.

8. What is the size of US convertible bond market?

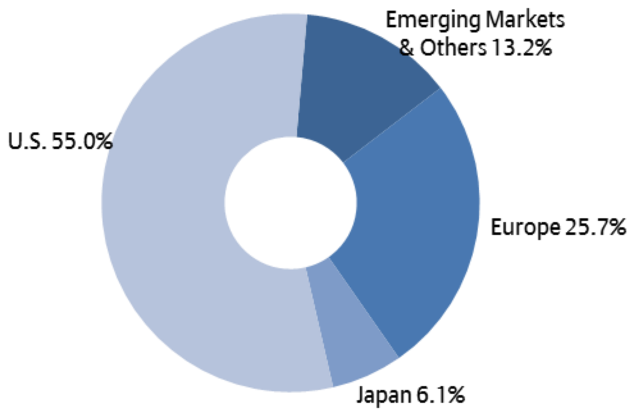
Size of Convertible Bond Universe



Source: BofA Merrill Lynch, as at 31 March 2013

The size of the US convertible bond market has grown steadily to the size of 207 billion as at March 2013. By comparison, the US convertible bond market is also the largest in the world of convertible bonds.

The global convertible bond market (by market value)



Source: BofA Merrill Lynch, 31 March 2013