

## Convertible Bonds: Stock, Bond, Both Or Neither?

Diversification is to investing as location is to real estate. For those who cannot remember their long-ago SAT's or who have yet to enter the real estate market, the analogy may not be obvious. The three most important things in real estate are location, location and location. Complete the puzzle for investing.

But traders and investors are in some ways more like small children who try to game dinnertime so that they can avoid vegetables en route to dessert. Trading professionals will tell you, every time, a good psychological makeup for trading is far more important than money management, which in turn is far more important than the mechanics of any trading system. Investing professionals will tell you, every time, asset allocation is far more important than individual asset selection. So what do we do? We spend all of our time trying to find the next hot stock or trading system. This might change sometime during this millennium, but do not bet on it.

But how can you diversify when all assets are performing similarly? It's like going into an ice cream shop and finding 31 different kinds of vanilla. This dilemma started to develop during 2003 when a flood of central bank liquidity combined with a global economic boom led by China and other emerging markets propelled everything higher in unison. Stocks rose on increasing profits, bonds rose on the ample liquidity and low inflation of the period, commodities rose on emerging market demand, real estate rose on low financing costs and strong growth, etc. Between mid-2003 and the spring of 2006, the best trading system/diversification combination was to buy everything in equal quantities.

### Enter Convertibles

Convertible bonds can provide a way out of the dilemma, which is a little odd considering they are hybrids of bonds plus call options on the underlying stock. At their most basic, convertibles are bonds which can be turned into the issuer's underlying stock if some combination of price target and maturity are hit. Variations on this theme, including mandatory convertibles wherein the bond must convert, abound, but we will sidestep them.

Convertible securities occupy an interesting niche in the financial ecosystem. Just as Michael Milken's insight that the high-yield bond could provide equity-like return for investors while opening a new source of financing for entrepreneurs and firms otherwise excluded from the capital markets helped pave the way for the 1980s bull market, convertibles have done the same from the early 1990s onwards.

In a twist on Milken's insight, convertible issuers dangle the prospect of future equity before investors rather than higher coupon payments. In fact, many convertibles offer coupon yields well below those for regular corporate bonds. And sometimes issuers get too clever by half: In 1999, Amazon.com issued a 4.75% convertible which they hoped would exceed the strike price quickly so that the coupon payments would disappear and be replaced by non-dividend paying common stock. Those bonds are still costing Amazon.com the coupon.

The motivations of the issuer are critical in understanding convertible bonds. It is important to separate investment-grade (IG) convertible bonds from high-yield (HY) convertible bonds, and we shall do so for the remainder of the discussion. Both the HY and IG return indices are Merrill Lynch's indices of these bonds excluding private placement (Rule 144-A) and mandatory convertible issues.

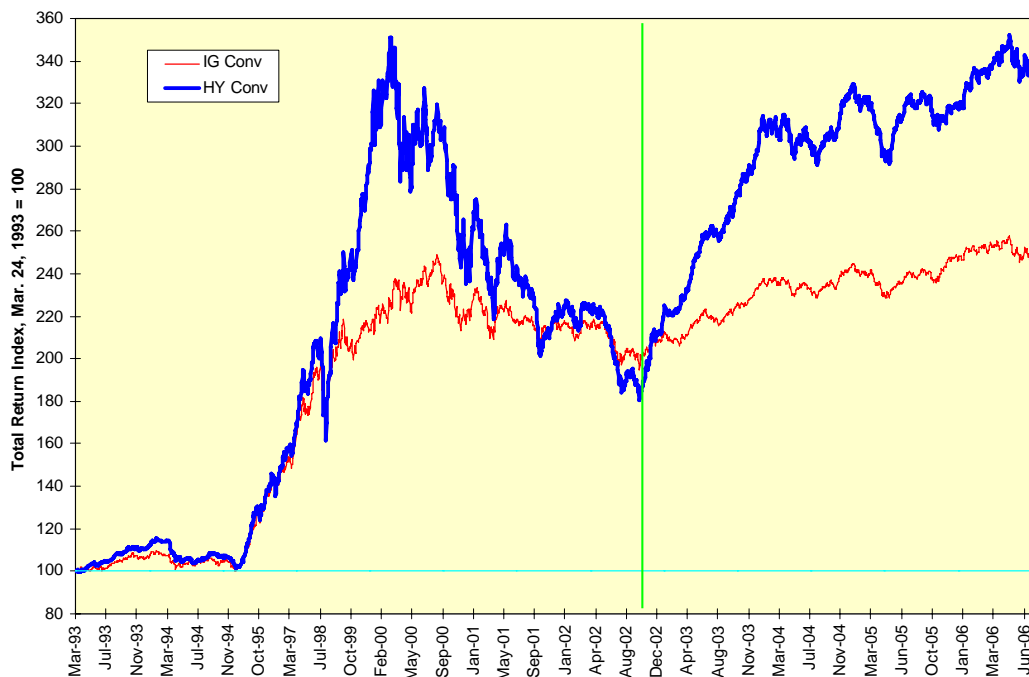
A reasonable expectation would be for the HY bonds to outperform the IG bonds during periods of high financial liquidity, such as 2003-2004, and for the IG bonds to outperform during periods of declining stock market performance and widening credit spreads. Let's see how performance has unfolded over time in relation to these expectations.

We can see in Chart 1 how the HY index outperformed as expected during the last year of the 1990s bull market, and by a considerable margin. Many of the bonds were issued by marginal technology firms who were doing the same thing as Amazon.com, issuing paper with a call option attached in the fervent hope the

call option would be exercised as soon as possible. Many of these same firms were paying everyone, from their employees to their landlords, in options without any intention of either booking them as an expense or protecting existing shareholders from the future dilution of equity. The road to Hell may be paved with good intentions, but as we have seen in numerous instances of corporate wrongdoing, the road's bedrock is composed of options.

Once the party ended in March 2002, the combination of a bear market in stocks and widening credit spreads led to a substantial period of underperformance by the HY bonds. This persisted all the way into the October 2002 bear market low. While convertibles often are pitched to investors as combining the safety and yield of a bond with the upside potential of a stock, they do have their downside. Many of the issuers' stocks fell so far the conversion option was worthless and you were left with the corporate credit of a company last seen trying to peddle dog food over the Internet.

**Chart 1: High-Yield Convertibles Outperformed After Bear Market Ended**

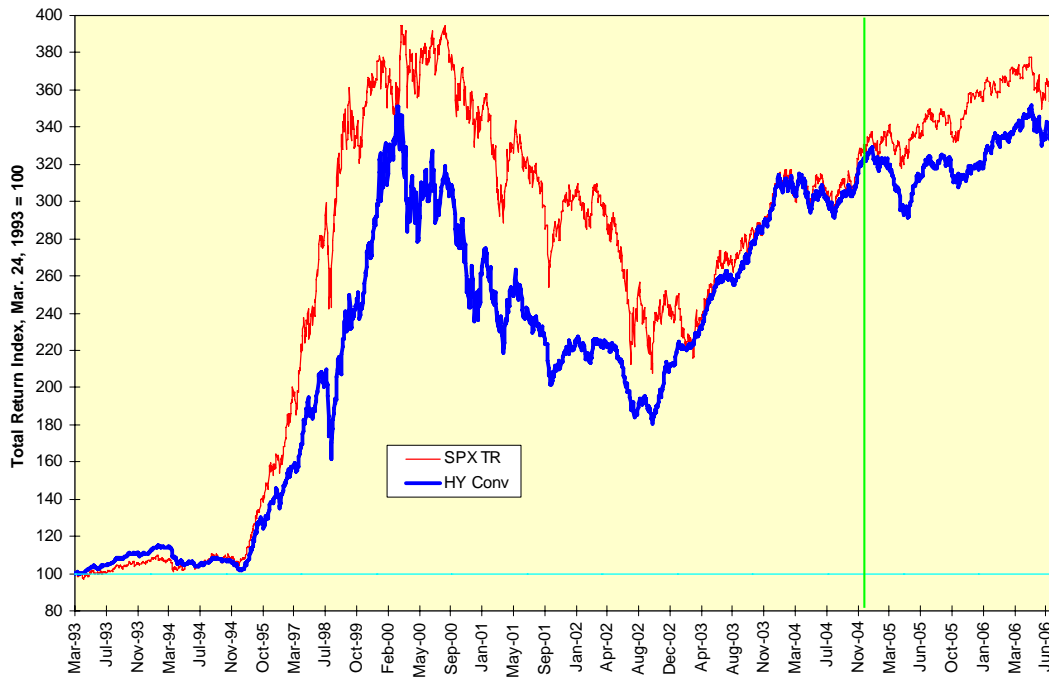


### Stock Linkage

Once the bear market ended and the survivors started to make money, the remaining HY bonds took off under the combination of rising stock prices and narrower credit spreads. Once convertibles approach or exceed their strike prices, they increasingly start to act like the underlying stock and less like a bond.

As we can see in Chart 2, whenever this happens, you might as well be holding the stock. By late 2004 it was apparent the Federal Reserve was going to persist in withdrawing liquidity from the financial markets. The total return on the HY bonds, which had been tracking that of the S&P 500 for nearly 18 months, decoupled quickly and moved to lower but still parallel path.

Chart 2: Will High-Yield Convertibles Lead Next Downturn?



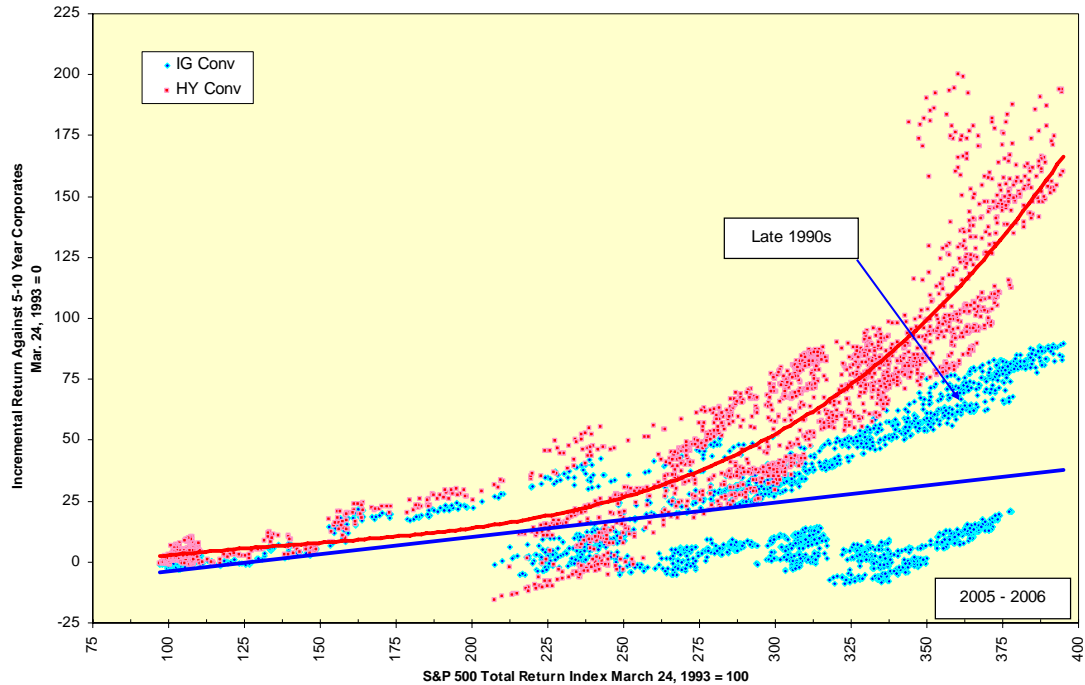
The period of HY underperformance developing since late 2004 should not be taken lightly by equity investors. We always have to ask the question, (see “Stocks Float On A Sea Of Bonds,” December 2005) “Why own the stock if you don’t want to own the bond?” If the credit quality of HY convertibles starts to deteriorate and if the call option embedded in these convertibles starts to become worthless, investors will have an early warning signal for the next bear market in equities.

### Call Options And Rational Exuberance

Does the same admonition apply to the IG bonds? Not to the same extent: We can plot in Chart 3 the incremental total return of both the HY and IG indices to an index of 5-10 year maturity conventional corporate bonds against the total return of the S&P 500. The HY bonds’ incremental return path relative to stocks’ describes the expected call option profit profile.

The IG bonds’ incremental return not only fails to describe the expected call option, but it is split into two distinct time periods. Incremental returns for IG convertibles were much higher during the late 1990s bull market than they have been during the rate-hike campaign of 2005-2006. Whatever gain investors could see from the call option during what has been a struggling bull market in stocks has been offset by lower coupon returns on IG convertibles versus those available on conventional corporate bonds. This subdued valuation of the embedded call option for IG issuers does suggest investors have, for once, kept their heads about them in reaching for returns.

Chart 3: High-Yield, Not Investment-Grade Convertibles Embed Call Option

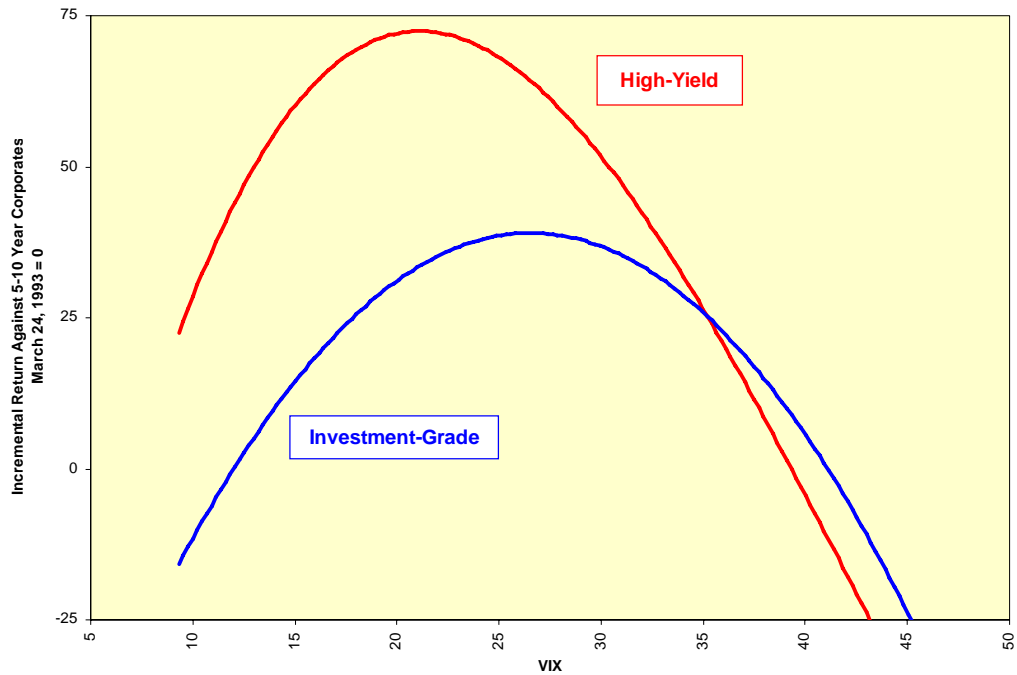


### Incorporating Volatility

We can ask why convertibles do not outperform either stocks or conventional corporate bonds during sharp market downturns. Stock market volatility tends to rise, often substantially, during selloffs, and all else held equal, higher volatility should increase the value of the long call option embedded in the convertible bond. But all else is not held equal: The price sensitivity of the options, their delta, overwhelms the volatility sensitivity of the options, their vega.

As we can see in Chart 4, the incremental return of both HY and IG convertible bonds relative to 5-10 year conventional corporate bonds “bends backwards” against volatility as measured by the VIX. A little bit of volatility is good; a lot of volatility is bad. If we enter a repeat of 2001-2002, which is simply a statement and not a forecast, we should expect both convertible bond classes to suffer even as higher volatility works in their favor.

Chart 4: Incremental Returns To Corporate Bonds Are Backward-Bending Against Volatility  
Trendlines-Only Shown For Clarity



### Trading Volatility

Convertible bonds, much like real estate investment trusts (REITs), fall sufficiently far between stocks and bonds in their risk and return characteristics so that we can argue they are a separate asset class. This is despite their issuance by the same set of corporations. The bonds ultimately act as a claim on those corporations' cash flows.

Convertibles also embed volatility, noted in Chart 4 above, an attribute of many asset classes some are trying to peddle as an asset class in and of itself. We will turn to the topic of trading volatility next month.