## You Do Not Get Rewarded For Risk

"If you want a drink of water / you got to get it from a well
If you want to get to heaven / you got to raise a little hell" - Ozark Mountain Daredevils
The past quarter-century in markets should have told us when we hold truths to be self-evident, they probably are not true and the only thing self-evident is the asserter failed to do any homework. Consider a few prominent examples, such as the connection between the Federal Reserve's target federal funds rate and the stock market. For years, the Pavlovian response to rate cuts has been for the market to rally, often quite violently, on either the cut or a rumor thereof. And yet both bear markets of this past decade came in the midst of a sequence of rate cuts, first to $1 \%$ in 2003 and then to near- $0 \%$ in 2008. The intervening rally between 2003 and 2007came during and after a series of seventeen consecutive rate hikes.

Pavlov's dogs had a more intelligent response to a repeated stimulus. At least they got fed for their troubles. What we will see below should humble both two generations of financial theorists and the Ozark Mountain Daredevils themselves: The untested assumption, that expected returns increase with accepted risk, has been turned upside down in practice, and not over a short period of time, either.

## The Tortoise And The Hare

We teach children Aesop's fable of the tortoise and the hare for good reason; traders who wish to remain in business learn the hard way this is a marathon and not a sprint. By the mid-1990s', stock market investing had become a national pastime; you could find stock quotes anywhere and everywhere you turned. The creation of the 401-k defined contribution plan in 1978 shifted the burden of retirement planning from defined benefit schemes managed by sponsoring corporations to the individual. Once the greatest bull market in American history took off in 1982 with the fall in long-term interest rates and declining inflation, individuals who were nothing more than long-term trend-followers began to fancy themselves as sophisticated investors.

Like Aesop's hare, they enjoyed the ride, and seemed to thrill at buying the bull market dips of the 1990s and even hanging on after the dotcom bust of 2000-2002. But if we compare total returns of the Morgan Stanley Capital International U.S. index and the Merrill Lynch three-month Treasury bill index, both re-indexed to September 2009, we find Treasury bills, the very definition of the theorists' risk-free return, beat equities at any time after June 1997. Go, tortoise, go.

## The Tortoise And The Hare



Whether Wall Street wants to admit it or not, the dominant feature of the chart above is the retracement of gains risk-takers have suffered in stocks. If we map the history of these retracements, the percentage retreats from the last new highs in total returns against the risk-adjusted excess return of stocks to Treasury bills, we find only two periods
where U.S. equities have been "stochastically superior" to the risk-free rate since the end of 1995, the post-March 2009 rally not included. Restated, all stock market investors got for their troubles was a masochistic entertainment.

Retracement Of Gain And Risk-Adjusted Excess Return


If we really want to rub salt into this wound, and we do, the tortoise has only one month of negative returns in its history since 1977, and that was January 2009. Treasury bill rates had fallen to near-zero in December 2008, and this made even the small rise in rates during January sufficient to produce a negative return. The key takeaway, however, is stocks underperformed Treasury bills during an era when the Federal Reserve did everything possible to push those returns down to zero.

January 2009 Three-Month Treasury Bill Returns Define Extreme


## Other Assets

Now let's extend the analysis to various classes of corporate bonds such as A-rated, high-yield and convertible issues and switch the basis of comparison from three-month T-bills to the Merrill Lynch Government Master index to account for the large changes in return attributable not only to ordinal interest rate levels but to changes in the yield curve.

We should expect in a risk-creates-return world to see the excess total return of stocks beat the Government Master by the greatest margin, followed by the equity-linked convertible issues, the equity-like high-yield issues and Arated bonds, in that order.

This had been true in the bull market phases of the late 1990s and 2003-2007, but then the relationship fell apart and fell apart badly once the financial crisis of 2007-2009 got underway (see "Crisis Trading," January 2010). By September 2009, stocks had underperformed convertible bonds by the largest margin, followed by high-yield and Arated issues. The return world not only was turned upside-down, but it was positively jumbled during the financial crisis of 2007-2009. Any sort of predictable relationship between risk and return had been demolished.

## Beating The Government



If we map the excess total return of convertible and high-yield bonds to the S\&P 500, we find both of them rose from massive underperformance at the height of the late 1990s stock bubble to outperformance by the end of the 2000-2002 and 2007-2009 bear markets.

Beating The S\&P 500


Nothing Intrinsic In Risk-Return Relationship

We are left with a deeply unsatisfying conclusion. The relationship between risk and return is not something intrinsic to the asset classes themselves but rather to the underlying market condition. We cannot say an investor's expected return is an a priori function of risk; no, it is an a priori function of risk acceptance. If we knew in advance our fellow investors would throw caution to the wind and bid up the price of garbage, then our rational response should be to bid up the price of garbage ourselves. The opposite holds true, too: If our fellow investors flee en masse, then we should forget about those quaint notions of buying value and other Wall Street gibberish and sell with similarly reckless abandon.

In hindsight, all financial theorists have told us is we should act as a mindless derivative of our fellow investors’ worst excesses. All that hokum of expected return being a function of risk is just that, hokum, and that is as polite as we can get. To say you have a theory that works in a bull market but fails in a bear market, but have no insights as to when, where and for how long those bull and bear cycles will endure is uselessness of the first order. To paraphrase Churchill's paean to the Royal Air Force, "never before have so many done so little for so much."

