What If Something Goes Right? Equity Market Risk Signals and the Great Rotation

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EXECUTIVE SUMMARY

Analysts from the BNY Mellon Investment Strategy and Solutions Group deconstruct the defensive behavior of investors since the financial crisis, looking at earnings growth and multiples expansion across equity sectors. They ask whether we might be at an important inflection point in which buyers of equities return to the market at a time when U.S. defined benefit plans are willing sellers who have been waiting for higher equity prices and lower bond prices. This virtuous cycle, they say, might help support a "Great Rotation" out of bonds back into equities, creating a slow upward grind that might not feel like a bull market but would also avoid the extremes of a bubble.

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Ever since the market meltdown of late 2008/early 2009 investors have been so preoccupied with what could go wrong that they've had little time to think about what could go right. The stampede into assets that offer safety and/or income means that growth-oriented assets have been neglected. But this may be changing. As various left tail risks (the U.S. fiscal cliff, the break-up of the eurozone, a hard landing in China, etc.) receded, the equity markets ended 2012 on a strong note and have begun 2013 in the same style. Although the bears will claim that recent market behavior is a sucker's rally, the bulls have been talking about a Great Rotation: a massive flow of funds from bonds back into stocks. We're not foolish enough to predict the direction of the market over the next six months, but we do know that Wall Street climbs a wall of worry. When everyone expects prices to go up, that usually means that everyone is already fully invested; when there are lots of skeptics, there's a lot of potential buying power. And, as we shall see below, the degree of skepticism and risk-aversion that underpins the financial markets is even deeper than one might initially suspect.

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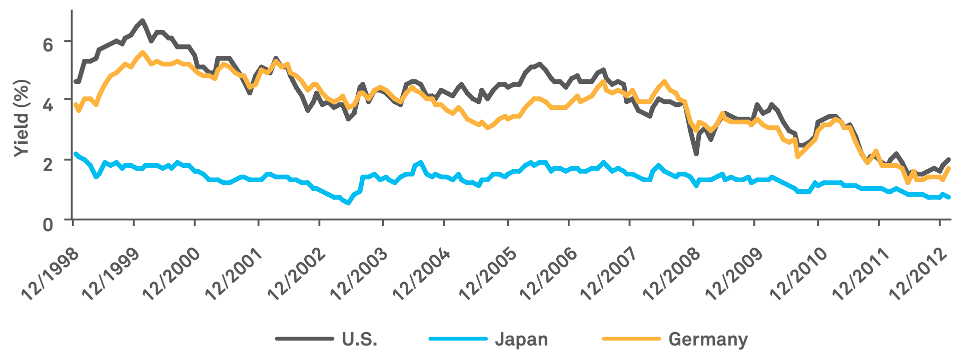
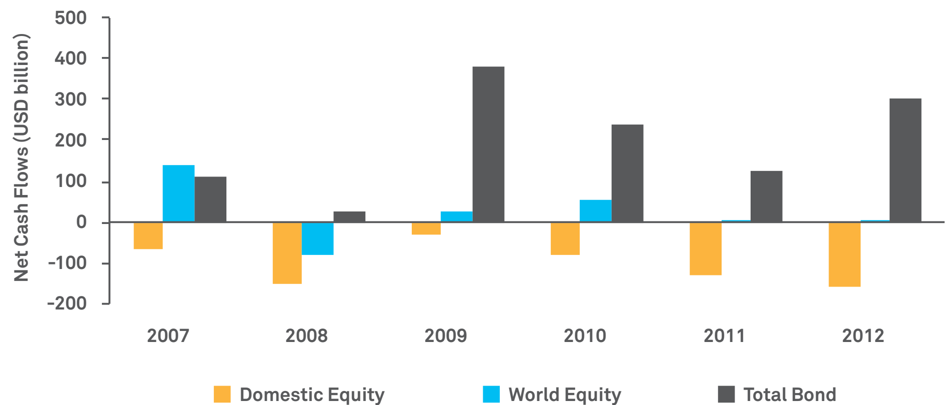
The obvious starting place is the bond market. Exhibit 1 shows that government bond yields in the U.S., Germany, and Japan are at historic lows, as investors willingly accept artificially low interest rates created by aggressive central bank easing. And Exhibits 2 and 3 show U.S. mutual fund investors fleeing stocks to buy bonds. But as Exhibit 3 makes clear, the chronic outflows from U.S. equity mutual funds took place against a background of chronically rising prices. So the question arises: who was buying? We know from the iFlow data collected by our BNY Mellon Global Markets division that non-U.S. investors have been consistent buyers throughout the post-bottom period.

Exhibit 1 – Historical 10-Year Government Bond Yields



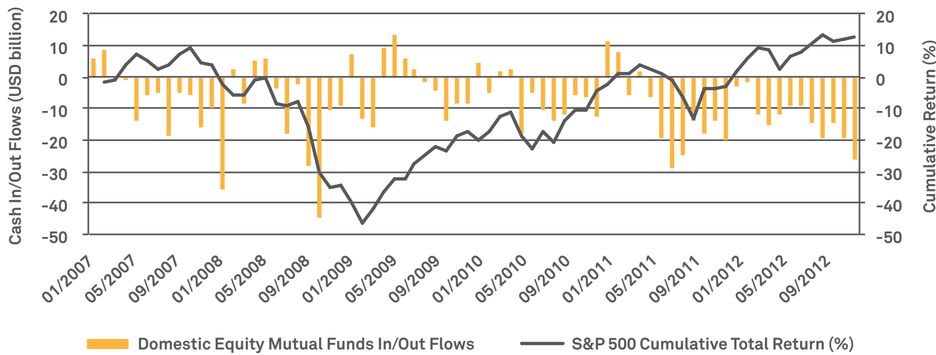
Source: ISSG using data from Bloomberg from December 1998 to January 2013.

Exhibit 2 – Mutual Fund Annual Net Cash Flows



Source: ISSG using data from Bloomberg and ICI from January 2007 to December 2012.

Exhibit 3 – Domestic Equity Mutual Fund Monthly Net Cash Flows vs. S&P 500



Source: ISSG using data from Bloomberg and ICI from January 2007 to December 2012.

We can get another view of the level of risk aversion within the U.S. equity market by looking at the spread between puts and calls in Exhibit 4. Although many investors track the VIX as a rough proxy for the level of fear within the U.S. equity market, the VIX measures the implied volatility of both puts and calls. What's much more informative is to separate the puts from the calls. The exhibit shows clearly that out of the money puts are still quite expensive (though not nearly as expensive as they were at the height of the crisis), while out of the money calls are almost as cheap as they have ever been since December 2004. So the spread between puts and calls, which became anomalously low during the height of the crisis, is now extremely high. We believe this is telling evidence that investors are so concerned with left-tail risk that they are virtually ignoring right-tail risk.

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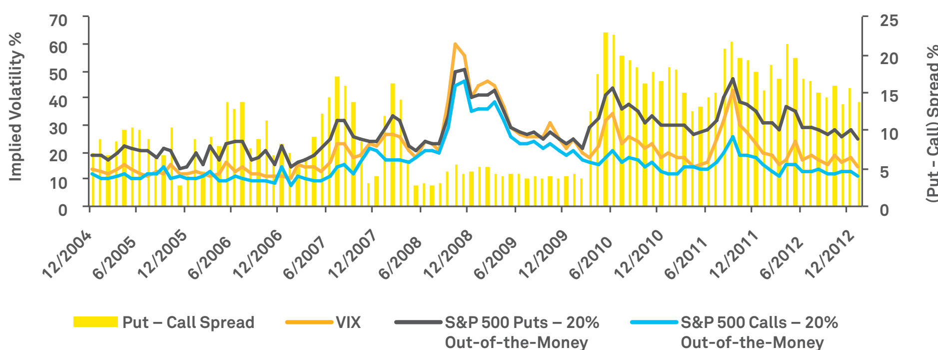
Exhibit 4 – Monthly S&P 500 Out-of-the-Money Option Implied Volatility
December 2004 - January 2013 (3 Month Expiration)

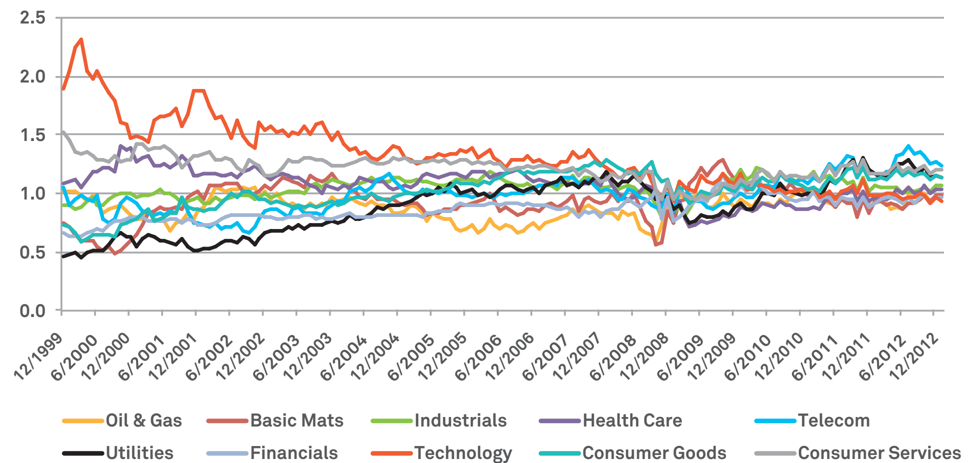


Source: ISSG using Bloomberg data from December 2004 to January 2013.

Additional signs of pronounced risk aversion emerge when we look at the internal structure of the U.S. equity market. To set the stage, Exhibit 5 shows the relative market multiples of the ten U.S. equity market industry sectors. The most dramatic trend over this 13-year period is the convergence of multiples. In the early years, investors made genuine cross-sectoral value judgments. As we move into the later years, these cross-sectoral differences become less important as investors focus more on "the market multiple." The most extreme form of this convergence is the "risk on/risk off" market behavior of the last several years, when investors cared hardly at all about distinctions within the universe of risky assets.

What we have now is an "inverted risk curve": as the chart shows, investors are willing to pay a 25% premium to the market in order to enjoy the safety and income of the telecom and utility sectors while potentially avoiding possibilities of growth.

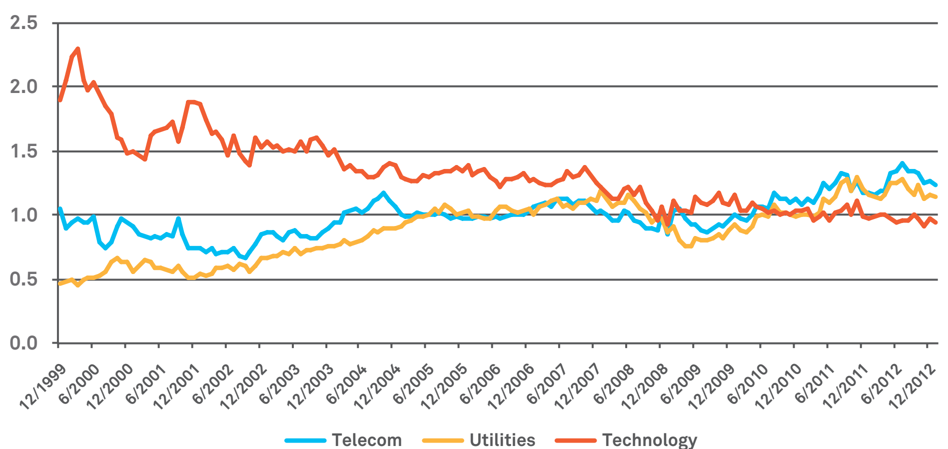
Exhibit 5 – 12 Month Forward P/E Relative to S&P 500



Source: ISSG using DataStream data from December 1999 to January 2013.
Please see appendix for data definitions.

Exhibit 6 is an especially vivid portrait of risk aversion inside the U.S. equity market. At the height of the tech bubble, the technology sector traded at twice the market multiple, while boring old utility stocks traded at one half the market multiple. The valuations of the two sectors moved much closer together from late 2007 to late 2010, then utilities pulled ahead decisively in the last several years as the search for income and safety accelerated. What we have now is an "inverted risk curve": as the chart shows, investors are willing to pay a 25% premium to the market in order to enjoy the safety and income of the telecom and utility sectors while potentially avoiding possibilities of growth.

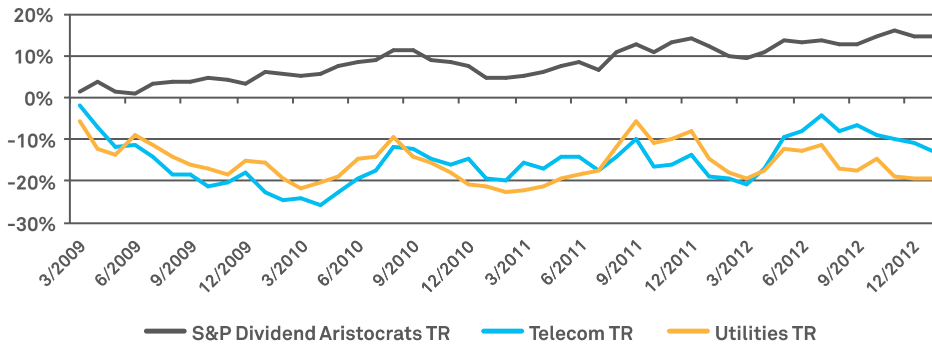
Exhibit 6 – 12 Months Forward P/E Relative to S&P 500



Source: ISSG using DataStream data from December 1999 to January 2013.
Please see appendix for data definitions.

While utility stocks deliver a high yield, the real darlings of the stock market have been the stocks that offer a lower yield but have a long history of increasing their dividends. The widely followed S&P 500 Dividend Aristocrats Index has a mere 4% exposure to the traditional high-yield sectors, utilities and telecom, but has a 41% exposure to consumer staples and consumer discretionary stocks. As demonstrated in Exhibit 7, the Dividend Aristocrats have handily outperformed the broad market as well as the higher yielding sectors.

Exhibit 7 – Performance Relative to S&P 500

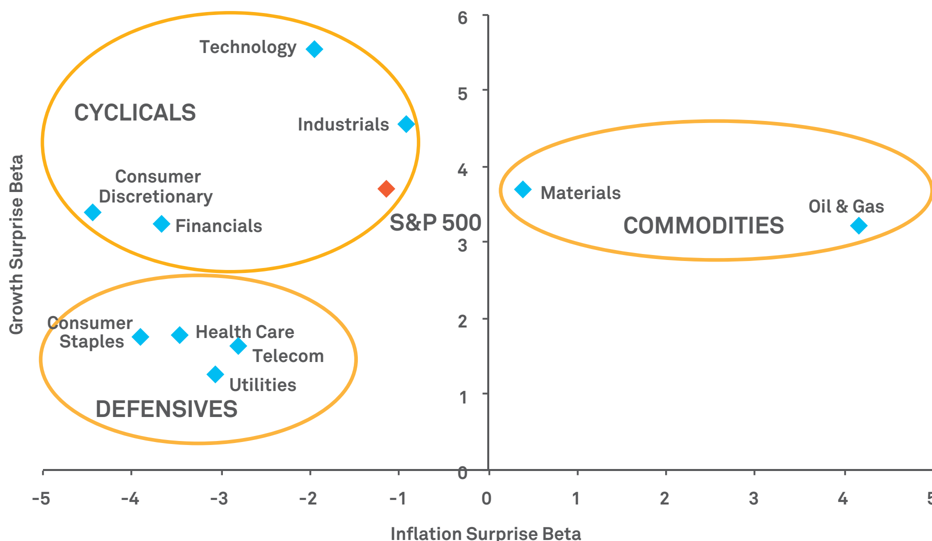


Source: ISSG using Bloomberg data, GICS sectors from March 2009 to January 2013.
Please see appendix for data definitions.

If you believe in a low-growth "new normal" environment, you want to own the defensive sectors, not the growth sectors.

To refine our thinking about the various sectors of the equity market, Exhibit 8 shows the sensitivity of the ten sectors to growth surprises and inflation surprises.[1] We measure the sensitivity of assets to growth or inflation surprises with a metric called the growth surprise beta or inflation surprise beta. Not surprisingly, the broad market and eight of the ten sectors have negative inflation surprise betas: if inflation is higher than expected, returns are negative. The two exceptions are the materials sector and the oil and gas sector, which are appropriately viewed as inflation hedges. Within the remaining eight sectors, there is a natural split between the defensive sectors, which have a lower growth surprise beta, and the cyclical sectors, with a higher growth surprise beta. In other words, if you believe in a low-growth "new normal" environment, you want to own the defensive sectors, not the growth sectors.

Exhibit 8

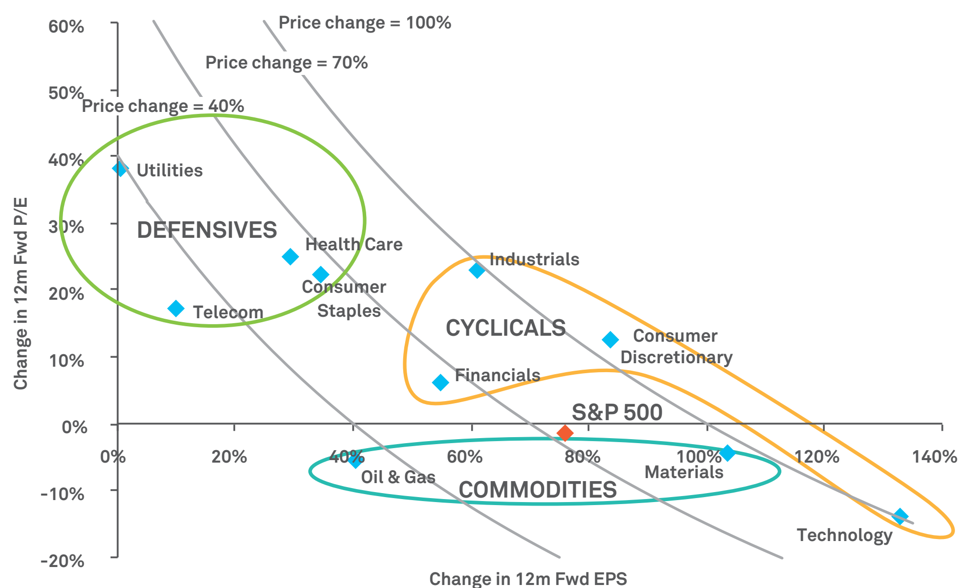


Source: ISSG using DataStream sector data from December 1973 to January 2013. Please see appendix for data definitions and additional information about growth and inflation surprise beta.

1 We define growth or inflation surprises as a combination of unexpected growth or inflation versus history and revisions to forecasts of future growth or inflation.

As we look at the performance of the various sectors since the market bottom of 2009, it is not enough to look at total return. We need to resolve total return into its three components: dividend yield, change in earnings, and change in the P/E ratio. (Note: for this analysis, we use forward earnings, not trailing earnings.) Since yield is the smallest and least volatile of the three components, we'll focus on earnings growth and multiple expansion, which dominate the results. Exhibit 9 tells the story. The horizontal axis shows earnings growth, the vertical axis shows multiple expansion, and the curved lines (from upper left to lower right) are "equal return" lines: if two sectors fall on the same line, then they experienced the same price change. For example, the technology sector and the industrial sector both fall very close to the 100% line, but they get there in different ways. The technology sector combined explosive earnings growth with some multiple contraction, while the industrials had non-explosive growth and healthy multiple expansion.

Exhibit 9



Source: ISSG using DataStream data from March 2009 to January 2013.
Please see appendix for data definitions.

The most important lesson from Exhibit 9 is the clustering of the four defensive sectors at the upper left. These sectors have the least amount of growth and the greatest amount of multiple expansion. The poster child for this phenomenon is the utility sector, with no earnings growth and a 40% multiple expansion, more than any other sector. At the opposite end of the spectrum we have the technology sector, with the most explosive earnings growth and the greatest multiple compression. Exhibit 8 is thus another symptom of the inverted risk curve that we first saw in Exhibit 6.

In early 2012 we wrote a paper arguing that the search for safety and income in a "new normal" environment had made "new normal assets" prohibitively expensive.[2] We still feel the same way, but now we face a new question: Is the recent strength in the equity markets just a flash in the pan, or does it portend a real change,

2 Robert Jaeger and Stephen Kolano, "A Radical Proposal for a Square-Root Recovery: Don't Forget the Right Tail," BNY Mellon ISSG, January 2012.

possibly even the eagerly awaited Great Rotation? Like everyone else, we don't know the answer to that question, but we come back to the truism about the wall of worry. Current valuations are built on deep pilings of worry, and that level of worry represents an impressive amount of potential buying power.

If there is a Great Rotation, the familiar risk is that everybody moves to the same side of the boat and the boat capsizes. But — although these are dangerous words — this time may be different, thanks to the current situation of U.S. corporate defined benefit plans. As defined benefit plans become increasingly concerned about hedging their liabilities, their basic ambition is to reduce their equity exposure (preferably at higher prices) and increase their bond exposure (preferably at lower prices). The typical U.S. defined benefit plan is thus a temporary, and rather reluctant, owner of equities, waiting for higher equity prices and lower bond prices. This means that the defined benefit community has a strong interest in taking the other side of the Great Rotation trade.

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Since the theme of this paper is to think about what could go right, we'll conclude by contemplating, at least for a moment, the rosiest of all scenarios: as buyers regain their risk appetite, they encounter sellers who have non-economic reasons for selling, thus creating a slow upward grind that might not feel like a bull market and definitely wouldn't feel like a bubble.

INDEX DEFINITIONS

CBOE Volatility Index (VIX) reflects a market estimate of future volatility for the S&P 500 Index based on a weighted average of the implied volatilities for a wide range of option strikes.

S&P 500 – The S&P 500 is an index designed to track the performance of the largest 500 US companies.

S&P 500 Dividend Aristocrats – The S&P 500 Dividend Aristocrats index measures the performance of large cap, blue chip companies within the S&P 500 that have followed a policy of increasing dividends every year for at least 25 consecutive years.

The indexes are trademarks of the foregoing licensers are used herein solely for comparative purposes. The foregoing index licensers do not sponsor, endorse, sell or promote the investment strategies or products mentioned in this paper, and they make so representation regarding the advisability of investing in the products or strategies described herein.

DATA DEFINITIONS

- **Datastream Sectors:** Oil & Gas, Materials, Telecom, Utilities, Financials, Industrials, Health Care, Technology, Consumer Services, and Consumer Goods Total Return Indices are designed by Datastream, a subsidiary of Thomson Reuters, to track the performance of publicly traded US equity sectors with dividends reinvested. Consumer Staples and Consumer Discretionary sectors were created by rearranging the industries comprising Consumer Goods and Consumer Services sectors.
- The **Global Industry Classification Standard (GICS)** methodology has been widely accepted as an industry analysis framework for investment research, portfolio management and asset allocation. The GICS structure consists of 10 sectors, 24 industry groups, 68 industries and 154 sub-industries.
- The **Survey of Professional Forecasters** is the oldest quarterly survey of macroeconomic forecasts in the United States. The survey began in 1968 and was conducted by the American Statistical Association and the National Bureau of Economic Research. The Federal Reserve Bank of Philadelphia took over the survey in 1990. The forecasted annual CPI inflation is an aggregation of the forecasted CPI inflation rate for each of the next four quarters.

GROWTH AND INFLATION SURPRISE BETAS

- **Inflation Surprise Beta** is based on a regression of asset class returns to revisions in the Survey of Professional Forecasters inflation forecast and the difference between reported monthly core inflation and core inflation measured over the previous three months.
- **Growth Surprise Beta** is based on a regression of asset class returns to revisions in the Survey of Professional Forecasters GDP growth forecast and the difference between reported monthly GDP growth and GDP growth measured over the previous three months.

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