Positioning for Rising Inflation and Interest Rates

An Update and Interview with Bill Zox, CFA

By William P. Zox, CFA
April 29, 2011
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On April 28, 2010 Bill Zox, CFA, Portfolio Manager of the Diamond Hill Strategic Income Strategy published a piece titled “Positioning for Rising Inflation and Interest Rates.” This subject is still topical one year later. In the following conversation, Bill provides an update on his views on rising inflation and interest rates. For reference, the original investment letter follows.

Q: What has happened to inflation and interest rates since you wrote the piece one year ago?

Zox: Inflation as measured by the PCE Price Index was 2.5% at the end of the first quarter of 2010 declining to 1.8% at the end of the first quarter of 2011. This measure was as low as 1.0% in November but it has increased in each subsequent month. The Core PCE Index (excluding food and energy) has declined from 1.8% to 0.9% over the last year.

The long-run inflation expectation as measured by the Federal Reserve’s Five-to-Ten Year Forward Breakeven Inflation Rate was 3.0% one year ago. This measure declined to 2.2% in August when the Fed began to signal a second round of quantitative easing (QE2) and it has since rebounded to 3.0%.

The 10-year Treasury yield has declined from 3.8% to 3.3% over the last year while the 10-year TIP (Treasury Inflation-Protected Securities) yield has declined from 1.4% to 0.8%. The 10-year Treasury yield was as low as 2.4% and the 10-year TIP yield was as low as 0.4% in October.

Thus, inflation and interest rates have declined over the last year but have rebounded dramatically from the very low levels that, in part, precipitated QE2.

Q: Do you still consider inflation and interest rates important risks?

Zox: One year ago, I wrote “[a]lthough the timing and magnitude are difficult to predict, we believe that rising inflation and interest rates are two of the more important risks over our five-year investment horizon.” While these risks did not materialize over the last year, they remain two of the more important risks over our five-year investment horizon. In fact, the risks are heightened after an additional year of a zero percent Fed funds rate and the expansion of the Fed’s total assets from $2.38 trillion to $2.73 trillion, compared to about $900 billion prior to the financial crisis. In addition, the U.S. Federal government debt has increased by about $1.4 trillion over the last year.

Q: You did not say much about the U.S. dollar in last year’s piece. What are your thoughts currently?

Zox: The NYBOT U.S. Dollar Index has declined about 11% over the past year (see Exhibit 1 below). Brent Crude oil prices have increased 36% over the last year. While the strength of the global economy and the turmoil in the Middle East and North Africa have been important contributing factors, we seem to be in a cycle in which higher oil prices lead to tighter monetary policies in much of the world but not in the U.S. As a result, the dollar weakens leading to even higher oil prices and an even greater differential in U.S. interest rates compared to interest rates elsewhere. So far, the declining dollar has not pushed actual inflation or long-run inflation expectations outside of the Fed’s comfort zone and the U.S. continues to borrow at very attractive rates. However, these conditions could change rapidly and could lead to higher inflation and interest rates.
Q: Has your outlook for inflation and interest rates changed from one year ago?

Zox: One year ago, I wrote that rising interest rates may initially be a result of higher real yields rather than higher inflation. In simple terms, the yield of a Treasury bond can be broken down into (1) an expected future inflation rate and (2) a real yield that will grow the investor’s purchasing power and compensate the investor for various risks (e.g., unanticipated inflation, illiquidity). As mentioned previously, one measure of the real yield, the 10-year TIP yield, has declined from 1.4% to 0.8% over the last year. I continue to believe that it is prudent to plan for much higher real yields in the future, at least as much as 2 – 2.5 percentage points higher than current levels. In the near term, we may have reached an inflection point where the private demand for debt capital in the U.S. is beginning to grow again (see Exhibits 2 and 3 below). Over the long-run, an investment boom in the developing economies should also lead to much higher real yields (see “Farewell to cheap capital? The implications of long-term shifts in global investment and saving”, McKinsey Global Institute (December 2010) at www.mckinsey.com/mgi/publications/farewell_cheap_capital/index.asp).
QE2 demonstrated the Fed’s resolve to avoid deflation and leads me to conclude that the Fed’s target of 2% inflation is more of a floor than a ceiling. With unemployment still high and a significant decline in the deficit likely, the Fed probably wants to remain accommodative for as long as the bond market will allow. Thus, inflationary pressures are likely to build.

If longer-term interest rates (over which the Fed has less control) begin to increase because of concerns about actual or expected inflation or a disorderly decline in the dollar, the Fed may have to sell assets and/or raise short-term interest rates much faster than the market currently anticipates. If the Fed is successful, inflation will be contained but real and nominal Treasury yields may be much higher than current levels.

Q: Have your views on positioning portfolios for the risks of rising inflation and interest rates changed from one year ago?

Zox: As I wrote one year ago, I continue to “expect that the stocks that will suffer the most in a rising inflation and interest rate environment will have two characteristics: (1) price-to-earnings multiples that are higher than warranted as interest rates begin to rise and (2) earnings that come under pressure in an inflationary environment.” I highlighted the retail industry as being particularly exposed to rising inflation and interest rates. Retail stocks have continued to perform quite well over the last year but the risk that rising inflation and interest rates could pressure retailer earnings and multiples is even greater today. This is one example of the market’s focus on the cyclical recovery of earnings over the last two years rather than the strong balance sheets and long-run pricing power that will prove to be the best defenses against rising inflation and interest rates.

I also continue to believe that “[j]ust as stocks are exposed to interest rate risk, corporate bonds may give investors exposure to equity risk, with a lower risk of a permanent loss of capital.” Because there are scenarios in which stocks might do poorly, it is important to emphasize capital preservation for a portion of most portfolios. Corporate bonds have continued to perform quite well over the last year so it is even more important to concentrate in shorter duration corporate bonds that are less exposed to rising inflation and interest rates.

I want to conclude with a comment on precious metals. Rising real yields may prove very damaging to the price of precious metals as the opportunity cost of holding such non-income producing assets will increase from the very low levels of the last several years. While Diamond Hill has not invested directly in precious metals markets, the potential impact of higher real yields is something all investors who participate in such markets should monitor carefully.
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The PCE Price Index is a nation-wide indicator of the average increase in prices for all domestic personal consumption. It is indexed to a base of 100 in 1992.

The breakeven inflation rate is the difference between the nominal and TIPS (Treasury inflation-protected securities) yields of comparable maturities. It is one real-time, market based measure of inflation expectations. The Fed's Five-Year Forward Breakeven Inflation Rate is a measure of inflation expectations starting in five years and running five years from that date.

The U.S. Dollar Index, as computed by the New York Board of Trade (NYBT), indicates the general international value of the U.S. dollar by averaging the exchange rates between the U.S. dollar and six major world currencies.

Treasury securities are the debt financing instruments of the United States Federal government, often referred to simply as Treasuries.

Treasury Inflation-Protected Securities (or TIPS) are the inflation-indexed bonds issued by the U.S. Treasury. The principal is adjusted to the Consumer Price Index, the commonly used measure of inflation.
“[Rising inflation and interest rates] remain two of the more important risks over our five-year investment horizon.”

– William P. Zox, CFA
Portfolio Manager

ABOUT THE AUTHOR

Bill serves as a Portfolio Manager and Analyst for Diamond Hill Capital Management, Inc. He joined Diamond Hill in 2001. From 2000 to 2001, Bill was a Tax Partner at Schottenstein, Zox & Dunn, Co., LPA. From 1993 to 1999, Bill was an Associate at Schottenstein, Zox & Dunn, Co., LPA. Bill has a Bachelor of Arts in Political Science from Williams College, a Juris Doctor from The Ohio State University (with honors), a Master of Law in Taxation from University of Florida College of Law, and holds the CFA designation.

William P. Zox, CFA
Diamond Hill Capital Management, Inc.
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April 28, 2010
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Investor concern about rising inflation and interest rates has continued to grow as the recovery in the markets and real economy has progressed. Although the timing and magnitude are difficult to predict, we believe that rising inflation and interest rates are two of the more important risks over our five-year investment horizon. The reserve currency status of the U.S. dollar and the depth and liquidity of our capital markets are once again attracting investment, as investors fret over sovereign debt concerns in the euro area. However, the U.S. debt situation could at some point lead to the same kind of pressures that have led to higher interest rates in certain euro area countries.

The crosscurrents in the markets today are striking. On the one hand, we are in the midst of a powerful rebound in the economy. On the other hand, a litany of longer term factors could restrain growth over the next five years including: (1) the U.S. consumer is in the early stages of what we expect to be a multi-year period of deleveraging (Exhibit 1), (2) higher tax rates, (3) increased government regulation, (4) excess supply of housing, (5) pressure on the budgets of state and local governments, (6) intensive fiscal austerity measures in the euro area that will inhibit growth of an important trading partner, (7) a sharp slowdown in growth in China due to a policy mistake and/or bursting asset bubbles, and (8) the possibility that the U.S. government will be forced to accelerate its balance sheet repair relative to current expectations.

**EXHIBIT 1: CONSUMER DELEVERAGING STILL IN EARLY STAGES**

Household Debt as a % of Disposable Personal Income (Household Debt Includes: Home Mortgage and Consumer Credit)

Data subject to revisions by the Federal Reserve Board.

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While we believe that the longer term factors will dominate, we cannot ignore the strength of the near term economic recovery. Historic levels of monetary and fiscal stimulus led to a powerful turn in the inventory cycle. The impact of fiscal stimulus and the inventory cycle may have contributed 3–6 percentage points of GDP growth during each of the last three quarters (see Exhibit 2). The contribution from these factors should be nominal in the 2010 third quarter and then negative during the fourth quarter and all of 2011. This transition will be a material headwind to growth, but the virtuous cycle of production, income, and consumption growth may be taking hold this quarter, making the waning of fiscal stimulus and inventories less consequential. In this case, the economy could achieve “escape velocity” or self-sustaining growth in the near future. Since February 8, 2010, the stock and corporate bond markets seem to be discounting this view, with the S&P 500 Index up 12% and the Merrill Lynch U.S. High Yield Master II Index up 6%, since that date. In contrast, while Treasuries have sold off, the reaction in that market has been muted. Since February 8, 2010, the 10-year Treasury yield has increased from 3.56% to 3.73%, while the 2-year Treasury yield has increased from 0.76% to 1.02%.

EXHIBIT 2: IMPACT OF FISCAL STIMULUS AND INVENTORIES WANING

Percentage Points, Annual Rate

*Includes second round (multiplier) rates on spending.
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If the virtuous cycle does take hold, the next question is whether the economy can withstand higher interest rates. Within a quarter or two, it is likely that banks will be more certain about regulation and more confident in the economic recovery. To grow production, businesses will have to hire employees and invest in working capital and capital equipment. This could lead to an important inflection point where private market participants will begin to compete at the margin with the government for debt capital. The market would then likely test higher interest rates. For a time, it is possible that higher interest rates will be self-correcting, leading to another leg down in housing and business and consumer confidence. At some point, however, the economy will be better able to withstand higher interest rates.

Inflation typically lags the start of an economic recovery by about two years. Extreme levels of unemployment and excess capacity may lead to an even longer lag in this cycle, so inflation could continue to moderate even as the economy achieves escape velocity. In this case, rising interest rates would initially be a result of higher real yields, rather than higher inflation. (In simple terms, the yield of a Treasury bond can be broken down into (1) an expected future inflation rate and (2) a real yield that will grow the investor’s purchasing power and compensate the investor for various risks (e.g., unanticipated inflation, liquidity)). If our longer term concerns lead to normal real GDP growth of 2–3%, it is prudent to plan for real yields of 3% or so, which is still below the long-run average of 3.5% but well above today’s level (see Exhibit 3).

EXHIBIT 3: REAL INTEREST RATES SHOULD RISE

10-year Treasury yield less year-over-year percent change in core CPI (percent)

Note: March 2010–December 2011 values represent Morgan Stanley Research estimates.
Sources: Federal Reserve Board, Bureau of Labor Statistics, Morgan Stanley Research
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Market-based indicators of future inflation look past the current moderation, but they do not price inflation five years out materially higher than the range experienced over the last five years (see Exhibit 4). There are reasons why inflation may surprise to the upside. The stabilization and then reduction of U.S. debt as a percentage of GDP will probably require a combination of higher taxes, lower spending, and inflation. Higher taxes and lower spending will require far more political will than the more stealth method of inflation. Moreover, deflation only exacerbates the debt problem, and the threat of deflation makes the Federal Reserve more likely to err on the side of higher inflation. Finally, capacity destruction is difficult to measure, so it is possible that excess capacity could be overstated at any point in time.

EXHIBIT 4: FORWARD INFLATION MEASURES RISING

Basis Points

Sources: Federal Reserve Board, Macroeconomic Advisors, Haver Analytics, © 2010 Morgan Stanley
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How should this macroeconomic backdrop impact portfolios? It is too simplistic to position for the possibility of rising inflation and interest rates by broadly selling bonds and buying stocks. After the tremendous rally in risk assets over the last 14 months, investors must be selective about which bonds to sell and which stocks to buy.

It is important to recognize that stocks are exposed to interest rate risk. We expect that the stocks that will suffer the most in a rising inflation and interest rate environment will have two characteristics: (1) price-to-earnings multiples that are higher than warranted as interest rates begin to rise and (2) earnings that come under pressure in an inflationary environment. In contrast, stocks that begin with reasonable price-to-earnings multiples and earnings that more readily grow in an inflationary environment should be much better hedges against rising inflation and interest rates.

One industry that is particularly exposed to rising inflation and interest rates is the retail industry. While retailers have been a prime beneficiary of the strong rebound in the economy, they will be under pressure for years until the long-term deleveraging of the consumer sector is complete. At the same time, the market is placing a relatively high multiple on projected margins and earnings which are both approaching peak levels (see Exhibit 5). Rising inflation and interest rates could pressure retailer earnings and multiples, the mirror image of the factors that have produced their strong performance over the last year.

EXHIBIT 5: RETAILERS: MULTIPLES AND MARGINS COULD COME UNDER PRESSURE

Sources: Bloomberg L.P., equal weighted composite of 89 retailers created by Diamond Hill Capital Management, Inc.
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Unlike retailers, low cost oil and gas producers sell at low price-to-earnings multiples. Further, commodities such as oil and gas are priced off the marginal costs of production, so oil and gas producers should be able to offset rising costs with higher prices (see Exhibit 6). Thus, we expect that they will perform relatively well in a rising inflation and interest rate environment.

EXHIBIT 6: OIL AND GAS STOCKS SHOULD RISE WITH INFLATION

Energy Stocks and Energy Prices

* Bloomberg 3M Energy Price Index
Source: Data stream, Morgan Stanley Research
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Just as stocks are exposed to interest rate risk, corporate bonds may give investors exposure to equity risk, with a lower risk of a permanent loss of capital. While low-yield, longer maturity Treasuries are most exposed to rising inflation and interest rates, shorter maturity corporate bonds (e.g., maturities inside of seven years) may be a reasonable place to generate yield while waiting for the macroeconomic situation to play out.

The table below (Exhibit 7) shows how corporate bonds performed compared to the S&P 500 Index during the recent crisis, as well as during the trailing 5-, 10-, and 20-year periods.

<table>
<thead>
<tr>
<th></th>
<th>BEAR MARKET (12/31/07-3/9/09)</th>
<th>5 YRS ENDING 3/31/10 ANNUALIZED</th>
<th>10 YRS ENDING 3/31/10 ANNUALIZED</th>
<th>20 YRS ENDING 3/31/10 ANNUALIZED</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500 Index</td>
<td>–52.5%</td>
<td>1.9%</td>
<td>–0.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Merrill Lynch U.S. Corporates BBB Rated Index</td>
<td>–10.0</td>
<td>6.2</td>
<td>7.1</td>
<td>7.9</td>
</tr>
<tr>
<td>Merrill Lynch U.S. High Yield Master II Index</td>
<td>–28.1</td>
<td>7.7</td>
<td>7.2</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Source: Bloomberg L.P.
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While past performance does not dictate the future, the most recent crisis was as good a stress test as we have seen since the Great Depression. Compared to a loss of 53% for the S&P 500 Index, BBB-rated corporate bonds lost 10% and high yield bonds lost 28% from the end of 2007 until March 9, 2009. Yet returns from both BBB-rated bonds and high yield bonds have been much better than stocks for the five and ten years through March 31, 2010 and have been comparable for the twenty years through March 31, 2010.

To summarize, we believe that investors should position their portfolios for the possibility of rising inflation and interest rates over a five-year time horizon and beyond. Stocks with reasonable valuations and the ability to offset rising costs with higher prices should do relatively well, while stocks with high multiples and weak pricing power may prove vulnerable. Also, shorter maturity corporate bonds may be a reasonable place to generate yield while waiting for other markets to price in rising inflation and interest rates.

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The Standard and Poor’s 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The Merrill Lynch U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar denominated corporate bonds publicly issued in the U.S. domestic market.

The Merrill Lynch U.S. Corporates BBB Rated Index is a subset of the Merrill Lynch U.S. Corporate Index including all securities rated BBB1 through BBB3, inclusive.

The Merrill Lynch U.S. Corporate Index tracks the performance of U.S dollar-denominated investment grade corporate debt publicly issued in the U.S. market.
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