Capital Markets Quarterly

KEY DATA:

ECONOMIC GROWTH:

Stat	1Y	10Y
GDP*	3.6%	4.0%
Real GDP*	2.0%	1.8%
CPI	1.8%	2.4%
Core CPI	1.6%	1.9%

FIXED INCOME (BC AGG):

Index	Now	Avg.**
Yield	2.4%	7.5%
Coupon	3.4%	7.6%
Duration	5.5	4.8
Spread (bps)	61.0	56.0

US EQUITIES (S&P 500):

Index	Now	Avg.**
EPS Growth	4.1%	4.8%
Div. Yield	2.1%	4.5%
P/E (TTM)	17.6	16.1
CAPE	22.7	16.5

INTERNATIONAL EQUITIES (WORLD X US):

Index	Now	Avg.**
EPS Growth	-6.5%	5.3%
Div. Yield	2.8%	2.2%
P/E TTM	15.8	18.7

** Trailing Twelve Months*
** * Represents the average over the entire period data is available*

Introduction

On May 22nd, Ben Bernanke made his routine testimony to Congress. His message was, for the most part, consistent with his previous testimonies. He reiterated that monetary policy would remain accommodative as long as the economic recovery continued on a slow trajectory. His comments deviated from previous testimonies when responding to a question from Congressman Kevin Brady. Brady asked if the Fed would consider ending its asset purchases prior to Labor Day. Bernanke responded "If we see continued improvement and we have confidence that that is going to be sustained, then we could in – in the next few meetings – we could take a step down in our pace of purchases." Markets around the world reacted negatively to this comment, leading to substantial rises in yields for the rest of the second quarter. This quarter's letter will focus on the challenges of the current environment.

Challenging Yield Environment

Today's low yield environment is the result of continuing sluggish economic growth post the global financial crisis and unprecedented monetary actions taken by central banks around the world. **Figure 1.1** shows the long-term trend in yield levels for the broad fixed income markets (by global region). The secular decline in yields has been beneficial for fixed income investments, providing enhanced returns through increased price appreciation (i.e. bond prices go up when yields fall). Difficulty can occur in a low yield environment for two reasons: (1) future returns are lower when cash flows are reinvested at lower yields and (2) prices will fall when yields begin to rise.

Figure 1.1

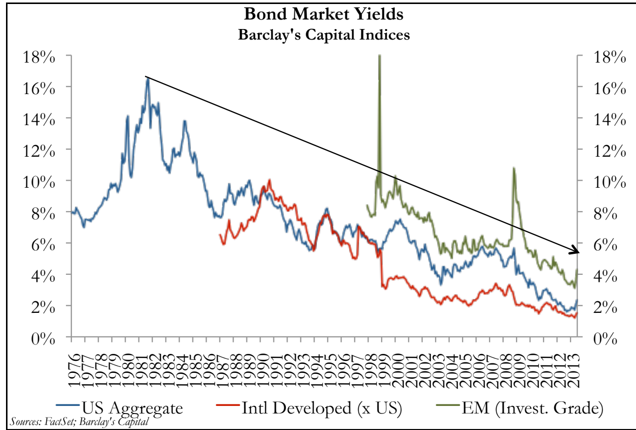
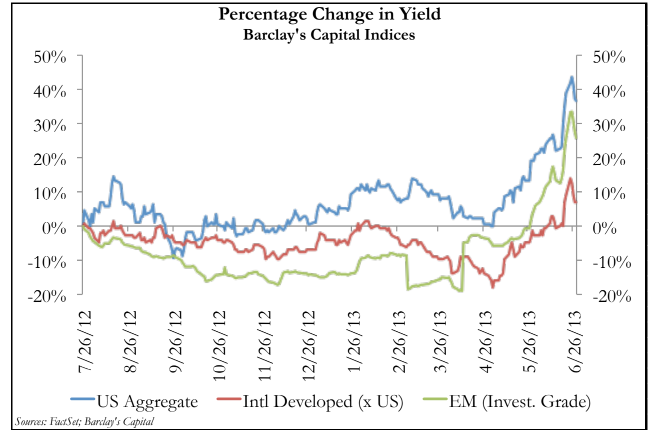


Figure 1.2

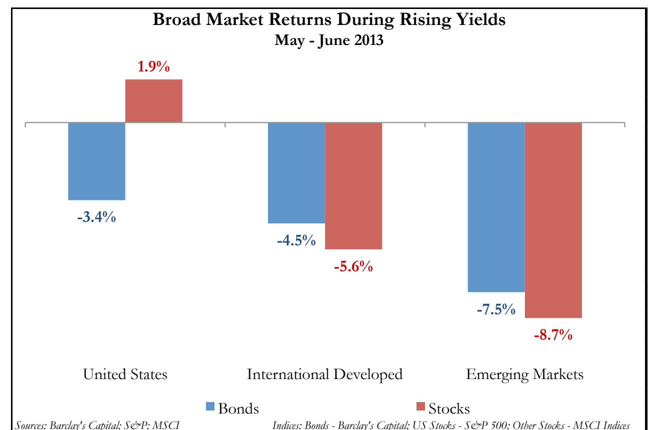


Fixed income investments are not the only investments that are effected by falling yields. Stocks also benefit from a secular decline in yields for two distinct reasons: (1) low/declining interest rates increase the opportunity cost for investors seeking safety and (2) declining yields increase the present value of equities when utilizing a present value model (see our first quarter 2010 issue of "Capital Markets Quarterly" for further detail). Just as with fixed income, a reversal of the yield trend can be a headwind for future returns although equities can also benefit from rising rates in ways fixed income cannot.

The second quarter provided a good example of how a changing yield environment can have profound effects on the investment markets. **Figure 1.2** points out the cumulative change in interest rates over the past year. This chart shows how yields were relatively unchanged (slightly lower outside the U.S.) until Bernanke's testimony to Congress. During the quarter, yields in the U.S. increased by 32.8 percent before settling back down. The increase was much higher for emerging markets, as yields rose by 47.8 percent during the quarter.

Figure 1.3 shows how the broad fixed income and stock markets performed during the rising rate environment of May and June. All of the markets (except U.S. stocks) experienced a decline. Although the U.S. stock market was positive over this two month span, it was not immune from the impact. During these two months, the U.S. stock market did experience a 5.6 percent decline from May 22nd through June 24th, which was the period of time in which yields increased the most.

Figure 1.3



The Fed testimony was a shock to investment markets. They tended to decline in proportion to riskiness (e.g. emerging market equities fell further than domestic bonds). This type of market was an example of investors reviewing every word of the chairman to try and glean the future direction of monetary policy. Prior to May, unprecedented and extreme monetary tools being utilized by central

banks around the globe benefited more aggressive investment strategies (i.e. use of leverage, concentration, etc.). This produces a capital market environment in which prices ebb and flow based more and more on liquidity being pumped into the system and less on fundamental valuations of underlying investments. Evidence of this reliance on central bank policy was observed by markets rebounding after several Fed governors came out and stated that accommodative policies would remain in place. This environment can produce many different outcomes:

- Sustained low yields as central banks continue accommodative policies amidst a slow, recovering global economy
- Sharply rising rates due to a reversal of central bank policy and strong economic growth
- Sharply rising rates due to a loss of investor confidence in central bank policies
- Falling yields due to a deterioration of global economic environment

Although these are only a few of the possible outcomes, it is important for investors to understand how their investments will perform under various scenarios. This is an important step in portfolio risk management and constructing a portfolio to achieve one's objectives.

Crisis/Deflation Hedging Strategies

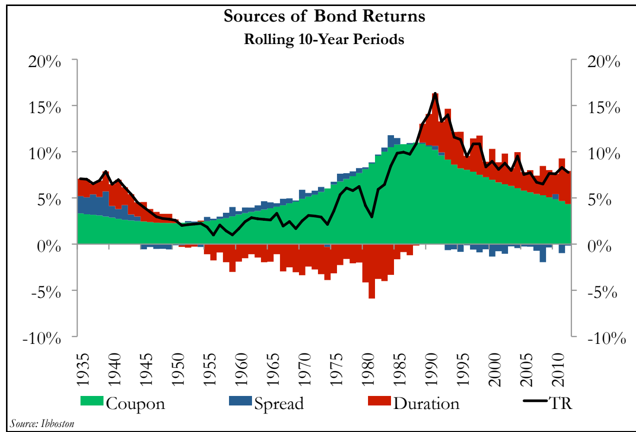
While investors can utilize various types of investments for Crisis/Deflation Hedging Strategies (i.e. options, precious metals, cash; fixed income, etc.), most use fixed income investments in this portion of their asset allocation. This section will focus on how fixed income investments perform in the various scenarios mentioned previously.

The scenario of declining yields was covered in the prior section. Highland has also covered the long drawn out low yield scenario previously with two white papers. The first, "The Future of the U.S. Bond Market", concluded that low yield environments following a financial crisis can persist for very long periods of time. This produces a bond market that earns below average returns; therefore, investors benefit from underweighting fixed income investments. The second paper, "The Future of the U.S. Bond Market Part II", concluded that investors who must invest in fixed income during this type of yield environment should invest in longer duration securities because the yield advantage produced better risk-adjusted returns for their portfolio.

A rising yield environment for fixed income investors seems to be a difficult position to be in because of the inverse relationship with bond returns and yield changes. Because rising yields hurt bond returns in the short-term, bond investors should be concerned over rising yields (as witnessed in **Figure 1.3**). Understanding this relationship is important, but equally important is understanding the sources of a bond's long-term return in order to come to a reasonable conclusion.

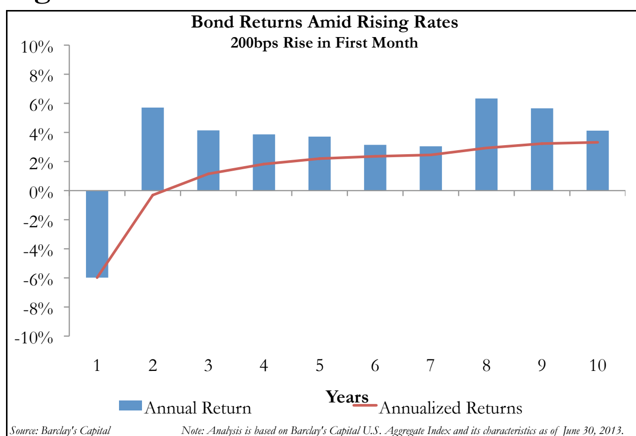
Figure 2.1 illustrates the sources of the bond market's return since 1926. This chart uses Ibbotson's data for both U.S. government bonds and U.S. corporate bonds as a proxy for the U.S. bond market. The chart examines rolling ten-year returns and analyzes the contribution of coupons, spread (i.e. corporate yield minus U.S. government yield), and duration (i.e. price movements due to changing yields). Over all of the periods, coupons have been the largest overall contributor to returns. Duration goes through long periods of either detracting (1951 – 1988) from returns or adding (1989 – present) to returns.

Figure 2.1



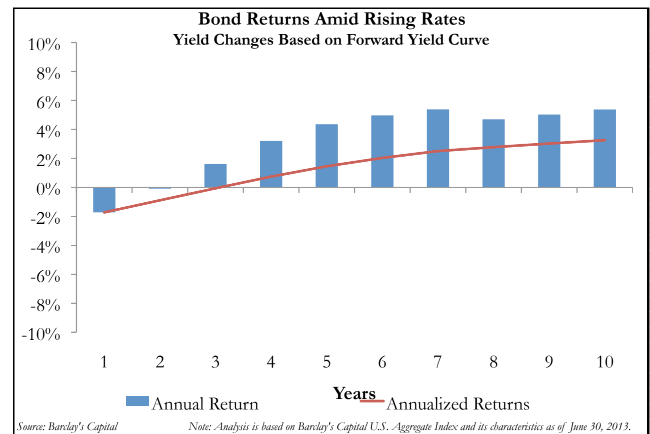
Knowing that coupon has an important role in the bond investor's long-term return can help frame the expectations for the future. **Figure 2.2** shows the future ten-year return of the Barclay's Capital U.S. Aggregate Bond Index if yields were to rise by 200 basis points on the first day of investment and then stabilized for the remainder of the ten-years[1]. The initial drawdown in year one is lessened by the coupon received and break-even can be achieved early in the third year of investment. In the eighth year, the long-term investor experiences a boost in returns, as he/she receives the par value of the bond (thus unwinding the market-to-market losses caused by higher market yields) and is able to re-invest at higher rates.

Figure 2.2



The previous example is an extreme movement in yields. **Figure 2.3** shows the same analysis, but the yield changes are based on the forward yield curve. The forward yield curve is an unbiased look at future interest rates. It takes today's yield curve and shows the yield investors are anticipating in the future. Using these rates, analysis produces an almost identical ten-year return; however, the rise in yield occurs over several years. This spreads the mark-to-market losses out and allows the coupon to cushion the investor from the rising yields.

Figure 2.3



The conclusion is that long-term oriented investors can earn the yield purchased, even though rising rates can cause short-term mark-to-market losses. During a sustained rising yield environment, long-term investors' returns will rise with yields over time; however, the duration effect will cause investors to earn a return lower than the market yield (see 1951 – 1988 in **Figure 2.1**).

Growth Strategies

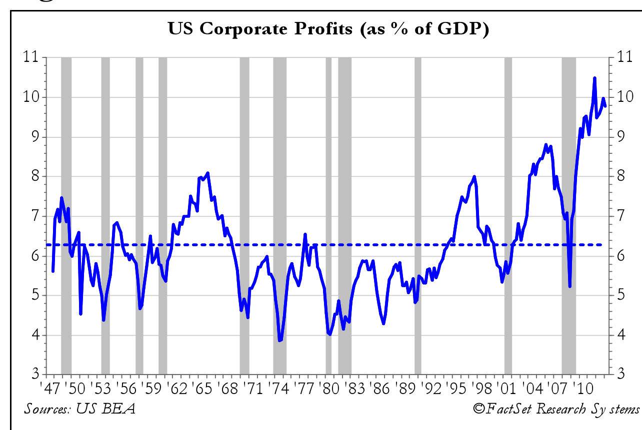
Unlike fixed income investments, whose future returns are mathematical (based on contractual cash flows), equity market returns (both public and private) are more complex. In order to calculate future expectations, one must assume some important variables: (1) earnings growth; (2) dividends; and (3) price-to-earnings multiples. Interest rates can have an impact on each one of these variables, thus making it much more difficult to predict how equities will react in a rising interest rate environment.

To determine forward expectations for equity investments, Highland analyzes the current fundamentals of the market and applies reasonable assumptions based on seasoned judgment and an interpretation of history. For the U.S. equity market (as measured by the S&P 500 Index), the fundamentals of the market as of June 30th were:

- Earnings per share (trailing twelve months or TTM) = $91.53
- Dividends per share (TTM) = $33.43
- Price = $1,606.28

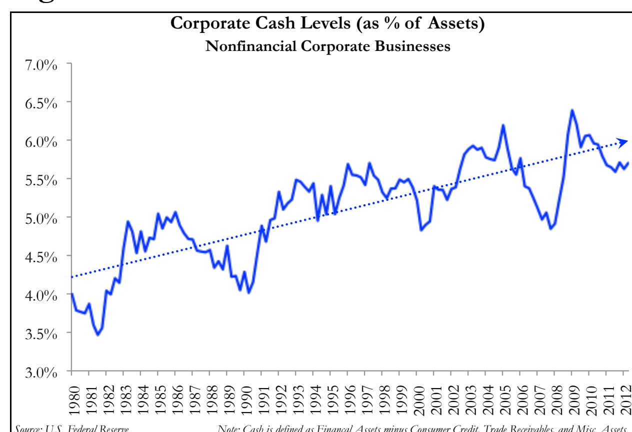
Analyzing the earnings, the current profit margins of U.S. corporations are high compared to their long-term history. Earnings growth over the past decade has also been much higher (+10.2 percent per year) versus its long-term history (+4.9 percent per year). Corporate profits, as a percentage of gross domestic product (GDP), are also at an all-time high (see **Figure 3.1**), which suggest that businesses will have a tough time protecting their interests against political changes (i.e. increased taxes, increased regulations, etc.). All of these factors will make it difficult for U.S. corporations to continue growing earnings at the current pace; therefore, we expect earnings growth to decline to a level more in-line with the historical growth rate.

Figure 3.1



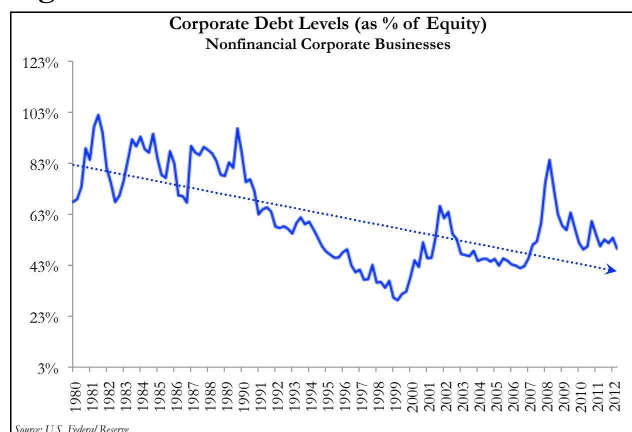
Although earnings growth could decline going forward, businesses have used the financial crisis to build stronger balance sheets, which could be extremely beneficial to investors going forward. Corporate cash levels have been on an upward trend (see **Figure 3.2**). This cash can be used for a number of shareholder friendly ways (i.e. increase dividends, fund capital projects, pay down debt, repurchase shares, etc.), which increases a business's ability to function in a declining earnings growth environment.

Figure 3.2



On the liability side of the balance sheet, businesses have been restructuring and reducing debt. **Figure 3.3** shows how debt-to-equity levels have been on a long-term decline. As with cash levels, the reduction of debt allows a business the flexibility to adapt to lower growth rates.

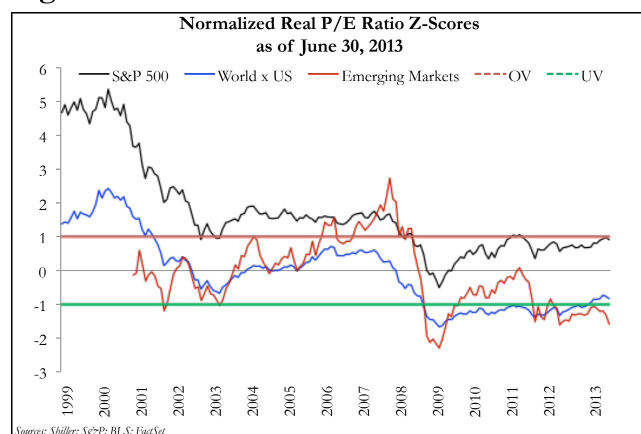
Figure 3.3



The price-to-earnings ratio on the equity market is often volatile and difficult to predict. Because of

this, we utilize a normalized ratio based on ten-year real earnings growth (based on research by Robert Shiller of Yale University). At the end of the quarter, the U.S. normalized real P/E was elevated versus its historical average (see **Figure 3.4**). This elevated ratio leads to the expectation that the P/E ratio will be a drag on future performance.

Figure 3.4



Summarizing the U.S. market, we see that earnings growth is high and likely to decline in the coming decade, balance sheets are in a strong position to sustain a low growth period, and the normalized P/E ratio is likely to be a detractor of returns going forward. This leads us to a future expectation that the U.S. equity market will have a below average return over the next decade. We also believe that volatility will be elevated as markets digest new growth levels and possible political headwinds.

Overseas corporations have a similar profile as U.S. companies, but they are not in as strong of a position. However, the normalized P/E ratios (see **Figure 3.4**) are at much lower levels, making them more attractive from a pricing standpoint. The risks associated with overseas investment are real and can be a drag on future returns; therefore, investors must remain cognizant of the possible downside (i.e. European debt restructuring, slowing growth in emerging markets, political instability in the Middle East, etc.) when investing.

Volatility Control Strategies

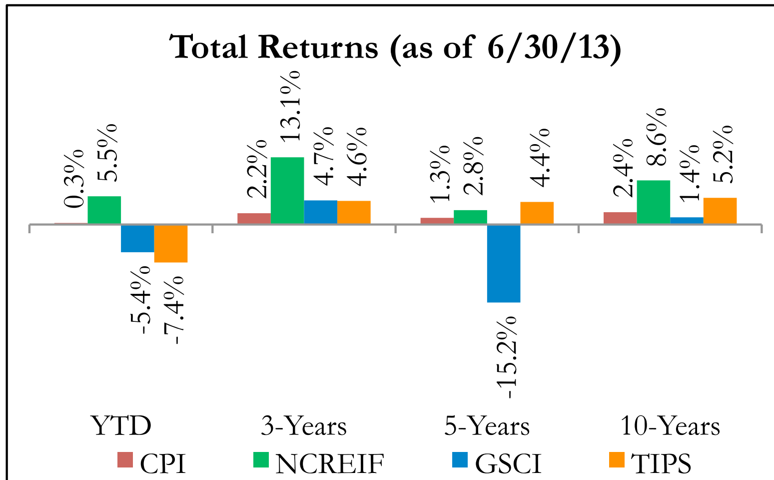
As reported in previous letters, we believe investors should utilize hedged equity strategies to control the overall volatility in their portfolio. This allows investors to not only lower the overall volatility of the portfolio, but also to invest in strategies that aim to achieve the same level of returns as growth strategies over the long-term. In the past, strategies that utilize fixed income securities (i.e. convertible bonds, fixed income arbitrage, credit oriented fixed income, etc.) have been useful, cost effective tools to achieve this mandate. The current and possible future yield environment makes it difficult to justify these types of strategies going forward. Consequently, Highland believes that the use of long/short equity and multi-strategy alternative funds (both liquid and illiquid) provides the best possible opportunity to lower volatility and achieve returns consistent with growth strategies over the long-term.

Inflation Hedging Strategies

As discussed earlier, the world's central banks are experimenting with unprecedented and potentially dangerous monetary policies. While the goals of these policies are to encourage growth, the threat is that the current liquidity injected into the global economy generates higher than expected levels of inflation.

Recognizing that there are very few assets that perfectly follow inflation, Highland utilizes a basket of assets (i.e. private real estate, inflation-linked bonds, commodities, etc.) to achieve this exposure. The benefit of using a basket approach is that the investor can benefit from various types of inflation environments. **Figure 4.1** shows how an investor during a period of tepid inflation can still achieve attractive returns.

Figure 4.1



Conclusion

The current environment can be very difficult for investors to navigate. Fundamentals are being overshadowed by central bank policies, which can have unintended consequences/risks to investment markets (i.e. rising yields, inflation, elevated inflation, etc.). Each one of these consequences/risks can cause havoc for investors who focus on the short-term. Those who keep a long-term orientation can afford to focus on fundamentals and position portfolios prudently during times of uncertainty.

Endnotes

[1] This analysis assumes that an index acts in the same manner as a single bond. The total return analysis is based on the index characteristics as of 6/30/13. The average maturity was 7.45 years; however, this analysis used 7.00 years in order to simplify the analysis.

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