

The Bull Market: Past Peak Duration?

BY: **ANDREW SPENCE**

Background

The strong performance of market benchmarks and the long duration assets they are built on has made 2016 a difficult year for diversified portfolios and alternatives. A standard 60:40 asset mix has delivered annual returns of 11.0% per year since 2008.

In contrast, many actively managed funds have underperformed traditional asset allocations to stocks and bonds, despite the rise in political and policy uncertainty.

Table One¹:
Active Management Returns 2009-2016

HFR Index	Annual Return
Global Macro	1.50%
Multi Strategy	7.40%
Absolute Return	0.14%

Financial assets discount cash flows, and the extended post crisis decline in discount rates has boosted the present value of long duration assets even as their future expected cash flows have not increased. The longer the life of the asset, or the higher the duration of the asset, the greater has been the gain in the present value of the asset, as discount rates decline.

Thirty year US treasury yields declined by about 160 basis points between March 2009 and their low in July 2016. Over the same period, the S&P 500 has returned 197%. Given that the S&P 500 has an estimated duration of 24 years, the “growth” in the index attributable to a lower discount rate was about 38%. The scope for downside in the face of a higher interest rate move would, if recorded over a short period of time, put the S&P 500 about 1 standard deviation cheaper.² Keep in mind that, looking forward, the probability of a rise in interest rates is greater than the probability that they will continue to decline.

Nearly all assets, whether stocks, bonds or alternatives have gone up in value over time. The exception is commodities, where returns are driven more by global and emerging market growth, and less from changes in discount rates.

Interest rates across the yield curve have declined steadily since September 1981, when thirty year interest rates reached a high of 15.3%³. Thirty year treasuries are currently at 3.0%, and 80% of the distribution lies above this rate.

Moreover, about one-third of the distribution lies between today's rate and the median of 3.9%, while about half the historical observations lie between today's value of 3.1% and the average of 4.6%. See Chart One.

Interest rate and balance sheet activism by the major four central banks has delivered very low bond yields and relatively flat yield curves. Financial market volatility has been suppressed, reducing the opportunity set for active investors, while lower expected returns have raised the cost of active risk management and control.

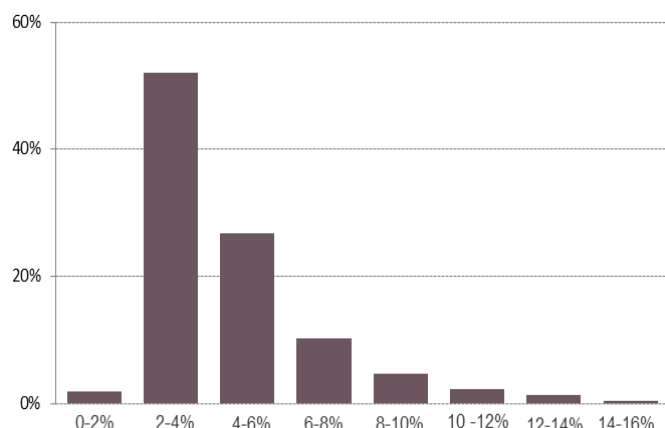
It is thus no surprise that actively managed funds have lagged basic market allocations.

¹ Source: Bloomberg

² Based on SIAM calculations. S&P 500 duration estimates taken from “Equity Duration: Updated Duration of the S&P 500”, Blitzer, D and Dash, S September 2010.

³ Source: Robert Shiller, Online Data

Chart One⁴:
Long-Term US Interest Rate Distribution
1871-2016



Strategic Choice & Investment Horizon

The outperformance of the standard asset allocation has led many investors to question the wisdom of seeking consistent, or risk-adjusted, returns in preference to the raw magnitude of returns. Yet investors should not lose sight of why they sought better risk adjusted returns in the first place; specifically, to maximize the probability of meeting future value goals at the lowest risk of loss.

With the financial crisis now more than eight years behind us, investors apparently suffer from disaster myopia. We all slow down when we witness a roadside traffic accident, but when a relatively short distance has passed we again travel at a high rate of speed to shorten our journey. Correspondingly, the lengthening period of positive market activity since the drawdowns of 2008 has led many investors to undervalue consistent returns and overvalue the magnitude of recent absolute returns.

The desired outcomes from strategic investment decisions accrue over very long time horizons. Defined benefit plans must ensure that the plan is both viable and affordable, balancing future benefits against intergenerational equity.

Meanwhile, defined contribution plans must ensure that future standard of living goals can be met, by minimizing the potential downside to asset values. Each type of plan strives for the best potential risk-adjusted returns, and should stress the importance of diversification and

drawdown control, regardless of the most recent market action.

The long horizon is composed of multiple short horizons, and return outcomes within any number of short horizons can cast long horizon strategies in a relatively dim light. Concentrated investment portfolios can and often do beat more diversified portfolios, but usually over short periods of time. Moreover, to applaud a short-horizon, concentrated portfolio that has outperformed the long horizon portfolio, is to make the assumption that actual future returns will equal today's expected returns **with certainty**.

Often, market expectations are subsequently not proven. Diversification and downside control is at its most valuable in the period after a run-up, when prior high expected returns are no longer met, and prices must adjust down.

What's left to drive asset market prices higher?

Since the financial crisis of 2008, risk assets have experienced some extreme draw-downs, but central banks have time and again driven market recovery, either by lowering discount rates where they had the room to do so, or by additional quantitative easing. This replaces high quality collateral with low yielding cash that is quickly "chased" into higher yielding risk assets.

Central banks have forced investors to take risk, and then watched their backs, because higher asset prices were not an end in themselves, but rather a means to an end: stronger economic growth.

With economic growth gathering pace and interest rates unsustainably low, there is a limit to the willingness and ability of central banks to support asset prices. Without some increase in expected future value accruing from higher economic growth, there would appear to be little room left for monetary policy to underwrite the asset market performance of the past eight years.

Who's comfortable outsourcing risk management to central banks?

Investors who chase market-based returns are implicitly assuming that central banks are both willing and able to support the market on the upside and put in a floor on the downside. Yet, central bankers have signalled that there is little more they can do to manage the economy and are ready to pass the baton to fiscal policy, keeping in mind that higher asset prices were a policy means to an economic growth end.

⁴ Robert Shiller, Online Data

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Instead of relying on a central bank that may be neither willing nor able to help, investors should think more carefully about how they are going to manage their own downside risk.

Managing one's own risk must start with additional diversification, but in the face of a market shock – such as a trend increase in asset discount rates - return correlations will converge towards “one”, eliminating diversification. A focus on drawdown management is necessary to protect asset values in times of such stress, and adequate protection of downside will facilitate faster asset value recovery when the market stabilizes.

When, and it is when rather than if, interest rates break out of the low post financial crisis range, investors will experience a prolonged interest rate bear market, and some of the post-crisis “present value gains” will unwind. Assuming some long duration bonds have remaining life, their value will decline.

The performance of equities is more difficult to judge. If discount rates are rising because economic growth has stepped-up, and firms are able to grow productivity, then an increase in expected earnings may blunt some of the reduction in present value associated with the higher discount rate. However, if all discount rates are rising, and all asset values are declining, then the expected diversification benefit may be smaller than expected.

What if interest rates don't increase? Even if it takes a substantial period before interest rates begin rising, many fixed income assets will approach their maturity. The pull to par will then begin to erode the capital value of the bond, given that the original coupon on the bond did not change, and present value will converge to the expected value at the time the asset was accumulated.

Alternative managers tackle their own risk

An active manager provides the best possible risk management in accordance with the investor's risk tolerances, usually by maximizing diversification through careful portfolio construction, as well as actively managing drawdowns or the maximum expected loss.

As discount rates rise, the **present value** of the asset is likely to fall equal to the unwinding of the duration effect. Of the 17% annual return in the S&P 500 since March 2009, 4.7% per year is attributable to the fall in interest rates. The remainder of the return came from multiple expansion. Meanwhile, current earnings growth and the

dividend yield remain low, and valuation measures are rich across most assets.

Similarly, the expected returns from investing in corporate bonds are low. Even though the duration of a corporate bond index is approximately one-third of the S&P 500, corporate spreads are very tight, and corporate bonds are vulnerable to liquidity shocks, especially when central banks are in a trend tightening in interest rates in response to higher, sustainable economic demand.

Finally, as the financial and economic expansion matures, and as the passage of time progresses, the probability that a market-based portfolio will suffer a capital loss grows simply as a function of time.

What's an investor to do?

Investors can choose between either acting pre-emptively by explicitly managing their risk, or reacting defensively. The former decision frees investors from the stress of attempting to achieve capital preservation in a period of market distress, while capturing the benefit from market corrections. Returns to liquidity are at their highest in market downturns, and responding defensively to market stress by liquidating at what might be the bottom of the market puts these high returns out of reach.

Failing to act pre-emptively presents investors with the choice of either taking the capital loss and waiting for the new and higher-paying cash flows to rebuild the value of the portfolio, or reacting defensively and possibly exiting the market at just the wrong time.

An alternative to maximizing diversification and managing drawdowns is to convert existing assets to cash, and then wait for interest rates to back-up. This strategy will require an exquisite sense of timing, an act few are able to execute perfectly. Meanwhile, cash returns remain very low, with real returns deeply negative.

Investors can secure superior alternative return sources relative to cash for a manageable and acceptable capital drawdown through careful fund selection. Many absolute return funds offer a better-than-cash return with diversification, but funds that offer enhanced drawdown protection are the most valuable in the face of a potential market drawdown.

A capital drawdown, defined as the loss of capital relative to the investment's peak value (high-water mark), is an objective measure of an investor's well-

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being. Drawdowns can be measured in absolute terms, but they also should be thought of in terms of their duration or how long it takes the capital value to return to the high-water mark. Good managers will seek to maximize the return-to-drawdown ratio, and seek the fastest recovery once the drawdown is experienced.

Drawdown is a function of expected return and volatility for a given investment horizon. Typically, the higher the return for a given volatility, the smaller the expected maximum drawdown. In the current environment, where expected returns are quite low, the expected drawdown will be correspondingly higher for a given volatility than if returns were higher.

We feel that the maximum drawdown of a passively managed portfolio will typically be about twice the portfolio's volatility.

Our own MAG Fund targets an average drawdown of about 5% for an annual return volatility of about 8%, and in 2016 the maximum drawdown was 6.0%. This is consistent with the drawdowns of similar absolute return funds, and 9.3% for the S&P 500.

Since 1988 the S&P 500 has had an annual volatility of about 18%, and a 60:40 Asset Mix has had an annual volatility of about 12%. This suggests that potential drawdowns of up to, and perhaps beyond, 36% are potentially ahead.

Investors should position themselves to protect their downside now, rather than after the fact. Managing the downside not only protects your capital, it also makes subsequent recovery faster, positioning you well for the next leg up.

Andrew Spence

VP and Head of Liquid Alternatives
andrew.spence@scotiabank.com



Andrew joined the firm in 2014 and is responsible for the development and management of SIAM's Liquid Alternative funds and investor solutions.

Prior to this, Andrew was a Managing Director at OMERS Capital Markets, where he developed and managed the Global Macro Portfolio and the Quantitative Investments program. He has also held senior roles at TD Securities and Ontario Teachers' Pension Plan, where he was Managing Director, Global Head of Research, and Vice-President, Chief Economist respectively.

He holds an MPhil in Economics from the University of Bath, England. He is also a Senior Fellow at the C.D. Howe Institute and an ad hoc lecturer at the Munk School of Global Affairs at the University of Toronto

For more information, please contact:

Simone Edwards, CFA

Director, Institutional Business Development

Email: simone.edwards@scotiabank.com

Phone: 416-350-3299

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