

## Achieving Targets in a Low Market Return Environment



*Three core fundamentals can enhance portfolio performance regardless of market conditions: capital preservation, yield generation and beta exposure.*

**by David Guarasci, CFA**

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**E**conomist Larry Summers once commented that there are two types of economic forecasters: the ones who know they don't know, and the ones who don't know they don't know.

While we know we don't know whether we're entering a low market return environment, our assessment of current market conditions certainly suggests there is a higher than normal probability that we are.

With the yield on ten-year U.S. Treasuries less than 3% and corporate spreads tightening, the fixed income portion of any portfolio is definitely facing a low return environment. Equity markets are much more difficult to predict, and the current economic situation is highly uncertain. The long-term effects of the Federal Reserve's unprecedented monetary stimulus are unclear and the economy faces strong headwinds in the form of persistent high unemployment, a weak real estate market (both residential and com-

mercial), private sector deleveraging, increased regulation, high levels of government debt (approaching crisis levels in the peripheral European states), austerity measures and demographic changes that are likely to exacerbate these problems.

In this environment investors are backed into a corner, faced with either extremely low returns in fixed income or high volatility in equity markets. Even with an implicit backstop in the form of unprecedented levels of monetary easing, the choice is clearly not easy. This is evidenced by a significant number of investors choosing to maintain or even increase their fixed income exposure despite the minimal upside and significant downside these investments offer at current interest rate levels.

If investors are to have a chance of hitting return targets, they will have to have significant exposure to equities and other risk assets. Rather than accepting the volatility inherent in these products, there are a number of hedging tools investors can use to systematically manage exposure and risk, allowing them to achieve superior risk-adjusted returns.

Although this article focuses on achieving targets in a low return environment, the three core fundamentals discussed here can enhance portfolio performance regardless of market conditions. These core fundamentals in order of

importance are capital preservation, yield generation and beta exposure.

### Capital Preservation

The financial crisis of 2008 provided an excellent reminder of the importance of capital preservation. The primary reason why it is important to preserve capital is that the difficulty of recovering from large drawdowns is compounded by the fact that losses and gains are not mathematically symmetric.

This is known as Siegel's Paradox—an example of which is that a 50% decline in assets requires a 100% return to recover.

More than two years after the credit crisis, the S&P 500 still requires a 30% gain to recover to its pre-crisis highs. With return targets in the 6% to 8% range, this leaves most unhedged pension plans more than 40% below where they had forecast for their equity allocation.

Another consequence of large drawdowns is known as "sequence of returns risk." This affects funds that are actively drawing income from their portfolios. Large drawdowns, compounded by the drawing of income, erode the capital base of the fund rendering full capital recovery extremely difficult, if not impossible, to achieve.

There can also be a large opportunity cost to drawdowns. Rather than making constructive decisions to increase exposure when risk/reward scenarios turn positive, investors who have suffered large losses often lack the courage (and capital) to buy at market lows, and in fact may even feel compelled to sell.

We have back tested scores of model returns, and time after time our testing has revealed that finding a way to limit losses during market declines is the single most important thing an investor can do. Accordingly, we focus on building hedging strategies that allow us to reduce and manage down market volatility. We feel that not addressing down market volatility is analogous to purchasing real estate in an area that is vulnerable to hurricanes or fires, and not insuring it.

### Yield Generation

Having a yield-generating component to your portfolio is particularly important in a low return environment. Without a strategy that generates returns in flat market scenarios, investment managers will not be able to achieve targets if market returns fail to materialize.

In Japan, debt-fueled overconsumption in the 1980s eventually resulted in a prolonged period of economic stagnation and flat (post-crash) equity market returns. If this scenario repeats itself in the United States and Canada, even if only on a smaller scale or over a shorter time frame, it will be essential to have an investment strategy that generates yield. Yield-generating strategies have the additional benefit of adding a layer of protection to a portfolio in the event of market declines. They also ensure you have more capital to deploy when markets turn positive.

### Beta Exposure

Beta exposure (meaning equity market exposure) is key to long-term investment success because equity markets have historically outperformed all other asset classes over the long term. It is therefore crucial to have an asset allocation that allows you to participate in the next bull market, whenever it occurs.

Investors who, concerned by the losses incurred in 2008, decreased their equity exposure at that time (or in early 2009) missed a large part of the recovery that occurred in the latter half of 2009. It is important not to underestimate the significance of beta—if we get an inflation-fueled 10% to 15% compounded annual equity market return over the coming years (and the fixed income portion of your portfolio suffers as a result), pension fund managers will have to participate in those returns significantly if they want to achieve their long-term investment targets.

Obviously, the challenge with having a greater beta exposure is the accompanying volatility. By focusing on capital preservation and yield generation, it is possible to decrease market volatility by 50% or more.

### Achieving Superior Beta

The optimal long-term investment profile will provide the three fundamentals discussed above: capital preservation, yield generation and beta exposure. We refer to an investment profile that provides all three as "superior beta." Through long-term experience managing both equity and options portfolios, we have learned that the optimal way to achieve a superior beta profile is to overlay a protective, yield-generating options portfolio onto a high-quality and liquid equity portfolio.

Options are an excellent tool for managing volatility and spreading risk—they allow you to optimize risk/return scenarios while managing downside risk. Purchasing put options provides protection to a portfolio. Puts are a true hedge: as equity values go down, put values rise. The problem with completely protecting a portfolio with put options is that in most scenarios, the cost of purchasing put protection provides a significant drag on returns. However, managers experienced in the use of options can use spreads and other dynamic strategies that minimize the cost, and can even set up structures that bring in net positive options premium, thereby providing both protection and yield. These kinds of trades require active management, and it is important to have a process-driven system for managing the positions as conditions dictate.

Selling options can provide portfolios an additional yield-generating component. Selling out-of-the-money calls and puts is a simple example of binary noncorrelated risk. It is analogous to an insurance company insuring a municipality for excess snow and insuring a ski hill for the

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| Index Returns | 50% Equity Returns | 50% Short Puts Returns    | Net Portfolio Returns |
|---------------|--------------------|---------------------------|-----------------------|
| -15%          | -15%               | 2% (7% premium - 5% loss) | -6.5%                 |
| -10%          | -10%               | 7%                        | -1.5%                 |
| 0%            | 0%                 | 7%                        | 3.5%                  |
| 10%           | 10%                | 7%                        | 8.5%                  |
| 15%           | 15%                | 7%                        | 11.0%                 |

absence of snow—both scenarios cannot occur, and it is possible that neither occur. Another benefit of selling options is that it allows you to systematically increase or reduce exposure at desired levels while generating yield in flat market scenarios. Using some of the proceeds from options sales to purchase protection for the portfolio will further contribute to minimizing downside volatility and achieving the superior beta profile.

As a simple example of how options can reduce downside volatility and increase yield, consider replacing a 100% invested equity allocation with a 50% invested allocation and selling one-year 10% out-of-the-money put options on an equity index in the amount of the remaining 50% exposure. Depending on volatility levels, the premium for those options could yield approximately 7%. This would result in the returns scenario shown above.

This is a simple, static example—using a more dynamic approach will achieve even better results. Combining these with other options structures can increase both the yield-generating and protective aspects of the portfolio, and further improve performance. Anytime you can build protection into an investment, especially with minimal cost, it will have a very beneficial effect on your portfolio.

Whether you achieve it through options or otherwise, we believe it is important to develop a strategy that addresses these three fundamentals: protection, yield and equity market participation. The most critical aspect is to have a plan for managing downside volatility.

As investment managers, it is important to look ahead, plan for all scenarios and have a realistic understanding of how your portfolio will behave in each scenario. Ask yourself, what will my returns be if we get a Japan-like period of low interest rates and stagnant equity market returns? If we get an inflation-induced upswing, how much will I participate? Or if we fall back into another 2008 scenario, how will my portfolio perform?

It is important to have an understanding of what you can achieve in different market conditions and a firm grasp of what your risks are. We firmly believe the key to finding satisfactory answers to these questions lies in addressing the core principles of protection, yield and beta. •



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