A Role for Hedged Equity in Portfolio Risk Management

By J. Patrick Rogers, CFA®

By all accounts, the past decade has been a difficult one for stock investors. Although stocks performed strongly at times, these periods were counterbalanced by two distinct bear markets during which most investors’ portfolio balances were substantially reduced. For many, especially baby boomers, this could not have come at a worse time.

As a result, many investors have come to doubt the time-honored common wisdom of “stocks for the long run.” In fact, after a period of standing on the sidelines with cash in hand, many investors have piled into bond funds. During 2009–2010, bond funds garnered nearly 80 percent of long-term flows into mutual funds, whereas stock funds captured approximately 20 percent of long-term flows, according to Strategic Insight’s Monthly Fund Industry Review (December 2010; http://www.sionline.com/research/highlights_archive.asp). Bonds continued to experience a strong run, encouraging this trend.

The rush to bonds has been just one reaction to the decade’s mixed markets. In addition to seeking assets perceived as relatively safe, the idea of managing a portfolio’s risk has also come to the fore. But after decades of “set it and forget it,” many are stymied about how best to reduce portfolio risk. There is talk of broader diversification, beyond stocks and bonds. But the recent market downturn spared no asset class, a fact that is not lost on investors. Then there is the matter of returns, which investors want more than ever—not, however, at a high cost.

Best of Both Worlds
This begs the question of how investors can get the best of both worlds—the opportunity to participate in the positive returns that the stock market can offer over longer periods while managing risk. For decades, high-net-worth investors and institutions have availed themselves of hedge fund investments, which can play this dual role in a portfolio. However, private hedge funds are associated with high fees and high volatility and aren’t compatible with the risk profile of the average investor.

How can investors get access to the kinds of risk management techniques that hedge funds offer? Hedged equity funds may provide the way. Hedged equity offers the value proposition of option premium-driven performance in bull and sideways markets, and downside risk mitigation in bear markets; My firm has been using the strategy for more than 30 years.

Hedged Equity in Action
In theory, hedged equity is a relatively simple idea that involves the ability to take both long and short positions in stocks. In practice, however, the strategy requires professional investment management expertise. Gateway’s approach is to apply hedging to the entire portfolio rather than to individual stocks. The strategy involves absolutely no fundamentals-based stock-picking.

The initial portfolio is a diversified basket of stocks chosen to deliver performance characteristics similar to those of a broad market index. The hedging part of the strategy is constructed around the initial portfolio and consists of two elements. First, index call options are constantly sold on the entire portfolio, which gives the purchaser of those options the opportunity (but not the obligation) to buy exposure to the index at a certain pre-determined price at an agreed-upon future date. That means the buyer has the right to any appreciation between the pre-determined price and the realized value of the index on the agreed future date, recognizing that the index call option will be worthless if the realized value of the index is below the exercise price at expiration.

The portfolio earns cash flow from premiums on the sale of these options. This creates the portfolio’s ability to potentially achieve a relative return greater than an unhedged index whenever the market is flat or down. Of course, selling index call options also can limit the strategy’s upside potential during an upmarket cycle by muting the amount it participates in the stock market’s rise. The index call option component of the strategy tends to
Options Exchange Market Volatility Index, or VIX, the implied volatility of index call option premiums on the S&P 500 Index has averaged around the 18–20 level over the past 20 years. While market volatility has been closer to average lately, most investors can clearly remember when it reached a high of more than 80 in late 2008.

How Options Can Provide the Key to Success

The key to the success of a hedged equity strategy is the cash flow earned by the sale of the index call options combined with the protection offered by the purchase of index put options. This way, the portfolio can achieve a unique balance between risk and return. Importantly, the strategy seeks to take advantage of volatility in the marketplace. Volatility is an inherent characteristic of stock investing. Our approach actually uses volatility (selling index call options whose premiums increase as volatility increases) to achieve its risk-adjusted return. We view this as a lower-risk way of participating in equity markets than direct exposure to share price movements.

The strategy also relies on effectively writing options on the entire portfolio through the use of index call options. This differs dramatically from strategies that write options on individual stocks. In our view, while individual call options can offer higher absolute premiums than index call options, they are much less efficient and more costly. Therefore, the relative premiums offered by such strategies may not be as attractive as those offered by a strategy that uses index call options.

Premiums from this dynamic duo of option strategies historically have helped mitigate losses during sudden stock market downs and periods of heightened market volatility. For example, on May 6, 2010, when stock prices experienced a very sharp, sudden decline, Gateway’s strategy was able to extract profits from index put options while also taking advantage of high volatility by replacing previously sold index call options with new contracts with lower strike prices. In this way, the strategy was able to both offset capital losses and increase potential for higher premium cash flow.

The loss mitigation offered by hedged equity strategies during steep market declines is significant. For example, the Gateway Fund fared considerably better than the S&P 500

Past performance is no guarantee of future results. Performance data represent the reinvestment of distributions, but do not reflect the deduction of taxes paid on distributions or on the redemption of your shares. Performance does not reflect sales charges. If sales charges were included, performance would have been lower. Results can differ substantially when comparing the Gateway Fund to the S&P 500 Index at different time periods. Time period shown represents bear market and recovery through September 30, 2010. Source: Natixis Global Associates

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Feature

Past performance does not guarantee future results. Performance reflects the reinvestment of dividends and capital gains, if any. Performance does not reflect the effect of a sales charge. Performance would have been lower if the sales charge were included.

*As of September 30, 2010, the amount of return, as expressed in percentage points, necessary to break even with pre-decline levels.

Source: Morningstar

FIGURE 2: CAPITAL PROTECTION DURING MARKET DECLINES

<table>
<thead>
<tr>
<th>Period</th>
<th>S&amp;P 500</th>
<th>Gateway Fund</th>
</tr>
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<tbody>
<tr>
<td>6/1/90 to 10/31/90</td>
<td>-14.69%</td>
<td>-4.01%</td>
</tr>
<tr>
<td>7/1/98 to 8/31/98</td>
<td>-15.37%</td>
<td>-5.25%</td>
</tr>
<tr>
<td>9/11/00 to 9/30/02</td>
<td>-18.52%</td>
<td>-44.73%</td>
</tr>
<tr>
<td>11/1/07 to 2/28/09</td>
<td>-24.12%</td>
<td>-50.95%</td>
</tr>
</tbody>
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Recovery time
S&P 500: 4 months
Gateway Fund: 1 month
S&P 500: 3 months
Gateway Fund: 2 months
S&P 500: 49 months
Gateway Fund: 16 months
S&P 500: 26.96%
Gateway Fund: 8.56%

FIGURE 3: HISTORIC VOLATILITY MORE SIMILAR TO BONDS THAN STOCKS

January 1, 1988–September 30, 2010

STOCK/BOND COMPARISON (ANNUALIZED) 1/1/88–9/30/10

<table>
<thead>
<tr>
<th></th>
<th>Citigroup One-Month Treasury Bill Index</th>
<th>BarCap U.S. Aggregate Bond Index</th>
<th>Gateway Fund Class A (at NAV)</th>
<th>BarCap U.S. Long Govt/Credit Index</th>
<th>S&amp;P 500 Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return</td>
<td>3.85%</td>
<td>7.49%</td>
<td>7.56%</td>
<td>9.09%</td>
<td>9.40%</td>
</tr>
<tr>
<td>Risk</td>
<td>0.61</td>
<td>3.95</td>
<td>6.79</td>
<td>8.41</td>
<td>14.95</td>
</tr>
<tr>
<td>Sharpe Ratio*</td>
<td>0.00</td>
<td>0.82</td>
<td>0.51</td>
<td>0.59</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Past performance is no guarantee of future results. Performance data represent the reinvestment of distributions, and assume the reinvestment of distributions, but do not reflect the deduction of taxes paid on distributions or on the redemption of shares. Investment return and principal value of an investment will fluctuate so that shares, when redeemed, may be worth more or less than the average cost. Current performance may be lower or higher than the performance data quoted. Performance does not reflect the deduction of a sales charge. If the sales charge were included performance would have been lower. Risk is measured by standard deviation. Indexes are not actively managed. You may not invest directly in an index.

*Calculated using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe ratio, the better the historical risk-adjusted income.

Source: Natixis Global Associates

Index during the past decade, which included two bear markets. From April 1, 2000 (the beginning of the first bear market) through September 30, 2010, the fund rebounded more quickly and posted a cumulative return of 31.15 percent compared to –7.68 percent for the Index (see figure 1). Looking back further, the hedges have helped the Gateway fund recover more quickly than the stock market as a whole during multiple market declines, including two during the 1990s (see figure 2).

Option-writing strategies cannot assure investors of a gain or protect...
them from loss, especially over brief time periods. However, in today’s market environment, investors face the challenge of finding opportunities for long-term growth at tolerable risk levels.

An Alternative to Bonds

With a focus on a risk profile more similar to intermediate- to long-term bonds than stocks, hedged equity may deserve consideration as a bond-position diversifier. Although classical asset allocation approaches have used bonds as an investment volatility reducer, prospective trends in bond markets may reduce the effectiveness of that approach. Given today’s market environment, investors may wish to avail themselves of such opportunities to diversify away from a bond-heavy allocation.

Over the past 20 years interest rates have declined steadily, driving strong returns for fixed-income assets. This has led investors to believe that bond prices only go one direction—up. The trouble is that the benign environment for bonds isn’t likely to last.

In addition to providing a hedge against market downturns, hedged equity also offers a path to reduced return volatility comparable to the expected effect of an intermediate- to long-term fixed income position in an investor's portfolio. With historic volatility less than half that of stocks, our hedged equity strategy can provide investors with similar benefits to those offered by intermediate- to long-term bonds. Figure 3 shows the risk/return continuum for the period January 1, 1988–September 30, 2010, and shows that a hedged equity strategy (represented by Gateway Fund) occupies a position in the middle of the continuum between the Barclays Capital U.S. Aggregate Bond Index and the Barclays Capital U.S. Long Government/Credit Index.

Not only can hedged equity produce a similar effect to that of bonds in reducing overall volatility in a portfolio, but there is also the matter of keeping pace with inflation. Hedged equity historically has generated positive returns in periods when the 10-year U.S. Treasury yield—a common measure for interest rate changes—has risen 20 basis points (0.2 percent) or more. Figure 4 shows Gateway Fund's positive returns during periods over the past decade when the 10-year U.S. Treasury yield rose 20 basis points or more. Moreover, the correlation between hedged equity and Barclays Capital U.S. Aggregate Bond Index has been relatively low over time.

Application of Hedged Equity Strategies

Investors of all kinds can benefit from the risk-managed approach that hedged equity offers. The strategy can play one of three specific roles in individual portfolios as follows:

A strategic role in an equity-oriented portfolio allocation. Hedged equity offers an alternative to fixed income in a stock-heavy portfolio that seeks to reduce volatility with a risk profile similar to intermediate- to long-term bonds while preserving the opportunity to participate in the equity markets. With increased concern being directed to managing the risk of extreme negative equity returns (i.e., equity tail-risk), such a strategy that focuses on mitigating downside risk may be timely.

A tactical role in an equity-oriented portfolio allocation. When implied market volatility is elevated and/or equity valuations are high, portfolios with a significant percentage invested in stocks may benefit from the downside protection offered by a hedged equity strategy.

An alternative to fixed-income. In a bond-heavy portfolio allocation, hedged equity offers low volatility exposure to the long-term return potential of equities.

No matter the application, hedged equity may present an attractive investment opportunity for investors who are beginning retirement and starting to draw on savings. These investors need to preserve the ability to grow their assets and ensure that they don’t outlive them. They also need a
steady income stream, all without fully exposing their savings to market risk.

Conclusion

As evaluating risk becomes the starting point for discussions around asset allocation, hedged equity quickly asserts itself as an effective risk-budgeting tool. The strategy offers all of the hallmark characteristics that can help investors effectively manage risk while maintaining exposure to the stock market:

- It provides comparable rate of return on a risk-adjusted basis when conditions are normal to favorable for stocks and bonds.
- It has a limited level of volatility.
- It has a focus on limiting large losses in sudden equity market downturns.

As the emphasis shifts to risk-adjusted returns, a hedged equity strategy can provide an invaluable alternative to hedge funds by effectively protecting against downside risk over short periods of time, thus limiting loss of capital over longer periods. With a history of performing consistently across all market types and in all interest-rate environments, hedged equity may help investors experience a smoother journey on the road ahead.

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