WORRIED ABOUT EQUITY VOLATILITY?

Target Volatility Triggers are an effective means of helping to limit volatility exposure in a straightforward way.
Target Volatility Triggers (TVTs) aim to improve portfolio efficiency by reducing realized volatility while providing a similar return to a strategic benchmark. TVTs can help create portfolios with significantly reduced volatility and better risk-adjusted returns. And, they’re a simple, relatively low-cost and transparent tool that’s designed to provide a measure of protection against the tail risk of another market crash.
WHY YOU SHOULD CONSIDER THEM

The right downside protection strategies can help protect investors against significant losses — important for preserving portfolios and helping to allow maximum participation in future gains.

After the hard lessons of the 2008 Global Financial Crisis, many institutional investors and pension funds are under pressure from their stakeholders to look for better ways of limiting the risks that they face — meaning that downside protection strategies have assumed new importance for many.

And, with a market consensus expectation of increased volatility, even those investors free of such stakeholder pressure are considering ways of locking in the gains of the 5-year equity bull run.

Since 2000 the global equity market has suffered two major crashes: 2000–2 (when the MSCI World Index was down 50%) and 2007–9 (when the MSCI World Index was down 54%).

Such volatile market conditions have brought the need for increased risk protection in investment portfolios to the forefront and clients are increasingly considering how best to manage tail risk and reduce drawdowns.

As pension funds mature, their ability to tolerate drawdowns diminishes because their available recovery horizon is shorter. It’s worth remembering, for example, that a 50% decline requires the market to double just to recover to the starting point.

One straightforward way of protecting against volatility is to use our Target Volatility Triggers. TVTs seek to limit portfolio volatility in order to substantially reduce the effect of markets falls.

HOW THEY WORK

TVT strategies typically overlay an equity exposure. They are straightforward volatility management strategies that forecast future equity volatility (by using historic realized volatility) and then dynamically adjust the equity exposure to target a set level of volatility.

The strategy involves a rules-based implementation, guided by principles of transparency and simplicity. Using a daily measure of volatility to predict the portfolio’s volatility against the set target level, we then increase or decrease the equity exposure of the portfolio.

This ensures that the exposure doesn’t go above the risk target. The strategy does this by holding equities and a risk-reducing asset, normally cash, so that the predicted volatility is in line with the target volatility.

Drawdowns Can Be Deep and Recovery Takes Time

Source: SSGA, as of 30 June 2015. Past performance is not a guarantee of future results. The index returns are unmanaged and do not reflect the deduction of any fees or expenses. The index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.
A TVT strategy can be implemented in two ways:

1. Equity exposure can be reduced through the use of exchange-listed futures, or
2. Through physical exposure of the fund and units in a cash fund.

The advantage of using futures is that they are highly liquid and transaction costs are small (1–2 bps). Listed futures are not available for every benchmark, for example, the FTSE All World used here. The alternative is to use a basket of 8–10 global markets that best represents the benchmark.

These contracts would typically include the S&P, Dow Jones, Euro Stoxx, FTSE, Nikkei, TOPIX, Hang Seng, ASX, and CSI. Currency exposure is similarly matched. If held over the long term there will be the additional cost of rolling forward the contracts.

Selling physical equities and buying cash fund units is the alternative route to implementing this strategy. However, the transaction costs of buying and selling the underlying equities will be greater over short periods as bid-offer spreads are much higher than for futures. Also, the currency exposure is not maintained when equity is derisked into cash.

We expect the strategy will remain 100% invested in the benchmark for the majority of the time. The average equity/cash allocation in the back-test to the right was 77/23% over the observed period.

To illustrate the potential benefits that TVTs can bring, we use an example based on the FTSE All World (GBP) from 1999 to 2014. This index has realized volatility of 15.3% (annualized) over the period and the TVT strategy we illustrate has a trigger level of 11% (around two-thirds of the long-term observed volatility) and the following parameters:

- De-risks out of equity by moving to cash.
- A 10% trading threshold is imposed in order to reduce turnover levels. Trading is only triggered if the existing equity allocation is more than 10% away from the required allocation.
- We conservatively assume trading costs of 10 bps per trade in the back-test.

**WHAT THEY CAN ACHIEVE**

The invested equity allocation over the back-test period ranges between 25% and 100%. Around the time of the Global Financial Crisis — when volatility spiked — equity exposure was ratcheted down to its lowest point, precisely in order to limit the damaging effects of the volatility.

The strategy, however, stays fully invested in the benchmark at times of low volatility such as in 2004 and 2014. When predicted volatility is high, the equity exposure is reduced, and vice versa.

In this respect, one key characteristic of TVTs is that they aren’t a strategy that continually holds a risk-off position. Only a pick-up in volatility triggers de-risking the portfolio. This characteristic may allow improved upside participation.
As schemes mature their time horizons necessarily shorten; drawdowns are of particular relevance since they impact the solvency of the scheme and its ability to recover from a market shock. The benchmark experiences a drawdown of over 50% at its worst over the observed period, whereas the TVT strategy successfully limits this to around 33%.

Looking at the daily realized volatility (over a 1-year rolling window) shows that the strategy clearly reduced volatility over the period.

The strategy tracks the benchmark return consistently, and provides very similar returns to the unconstrained benchmark over the long term. The strategy successfully smooths returns over the market declines in 2002 and 2009.

Reduced Drawdowns

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In our example, targeting volatility of approximately two-thirds of the expected long-term volatility of the underlying equity benchmark results in the capture of the majority of the annual return of the equity asset class, while delivering the desired lower risk (by a third) and far lower drawdown than the benchmark. Of course clients with different time horizons may choose different volatility targets and have a greater or lesser tolerance of volatility.

Long-horizon investors who are less concerned with downside protection may favor a higher volatility target to better meet return objectives. Conversely, more risk-averse investors seeking greater downside protection might prefer lower target volatility and less tail risk.

A volatility target of roughly three-quarters to two-thirds that of the benchmark has historically achieved effective downside protection while maintaining benchmark like returns.

Source: SSGA, as of 30 June 2015. Past performance is not a guarantee of future results. Data is from 31 Dec 1998 to 31 Dec 2014. The data displayed is a hypothetical example of back-tested performance for illustrative purposes only and is not indicative of the past or future performance of any SSGA product. Back-tested performance does not represent the results of actual trading but is achieved by means of the retroactive application of a model designed with the benefit of hindsight. Actual performance results could differ substantially, and there is the potential for loss as well as profit. The performance may not take into account material economic and market factors that would impact the adviser’s actual decision-making. The performance does not reflect management fees, transaction costs, and other fees or expenses a client would have to pay, which would reduce returns. Please refer to the back page for the model methodology and other important disclosures.
Implementing a TVT strategy is beneficial in lowering volatility and helping to improve potential risk-adjusted returns. We believe that TVTs are a simple yet highly effective strategy in limiting drawdowns and smoothing returns. Such strategies are designed to achieve a comparable return to the benchmark but with lower volatility levels and reduced drawdowns.

Any tail-risk protection strategy can be expected to suffer some degree of performance drag when it comes to upside participation but TVTs aim to enable good participation in rising markets as well as helping to reduce the impact of market declines.

TVTs are flexible, customizable strategies. The targeted volatility can be adjusted to suit a client’s specific equity risk appetite and the equity exposure itself is flexible.

Our Team

Our Target Volatility Triggers are managed by our Investment Solutions Group, a 60+ strong team of investment specialists across investment centers in Boston, London, Hong Kong, Paris, Sydney, Dublin and Tokyo. Team members have an average of 15 years’ experience and can draw on the in-depth industry knowledge of more than 400 investment professionals as well as SSGA’s risk and compliance specialists.

This experienced team manages £6.4 billion* in tactical asset allocation strategies, both benchmark-oriented and absolute return, across a growing range of innovative multi-asset benchmark-relative and absolute return strategies.

* As of 30 June 2015.
SIMPLE, SYSTEMATIC AND TRANSPARENT

MAINTAINS STABLE VOLATILITY IN THE PORTFOLIO

HIGHLY CUSTOMIZABLE TO CLIENT REQUIREMENTS

DRAWDOWN PROTECTION

LONG ONLY AND UNLEVERAGED

BETTER RISK-ADJUSTED RETURNS