Variance Improved Performance

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Abstract:
We propose a simple and efficient way of forecasting the term structure of swap rates and we demonstrate how an investor might benefit from (i) the variance swap as an asset; (ii) and from the implied information present on the swap rate. We show that the Nelson-Siegel model is enough to capture the dynamics of the swap rate term-structure and that the three factors may be interpreted as the level, slope and curvature of the curve. Further, we show that the expected change in the swap rate predicts the one month forward market return with an OOS r-square of 2.9%. An investment strategy in both the Variance Swap and the underlying yields out-of-sample sharpe ratios around 1.30 which is robust across several different portfolios.