

## Abstract

Starting with the assumption that different investors have different investment time preferences and different risk tolerances within their given investment time-frames, this paper investigates the value of employing multiresolution analysis to model volatility and risk-pricing. In terms of estimation and forecasting performance we were able to reduce by at least half the volatility forecasting errors, with even better results at longer horizons. In regards to risk pricing we learn that extreme aggregate volatility (i.e. tail risk) is priced but regular volatility is not. Additionally we find that whilst aggregate volatility is generally more important over the long-horizon, during periods of market turmoil it is much more significant over the short-horizon. Finally we show that stocks with high sensitivity to aggregate volatility have lower subsequent returns supporting the idea that they become attractive as a hedge against market volatility.

**JEL Classification** C12, C13, C21, C22, C31, C32, C51, C52, C53  
**Keywords** Realized Volatility, Wavelet, Long-Memory Models, Cross-Section, Volatility Forecast, High-Frequency Data

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