Blair, Bevan J.; **Poon, Ser-Huang**; **Taylor, Stephen J.**

Forecasting S&P 100 volatility: The incremental information content of implied volatilities and high-frequency index returns. (English) Zbl 0980.62097

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Summary: The information content of implied volatilities and intraday returns is compared, in the context of forecasting index volatility over horizons from 1 to 20 days. Forecasts of two measures of realised volatility are obtained after estimating ARCH models using daily index returns, daily observations of the VIX index of implied volatility and sums of squares of 5-min index returns. The in-sample estimates show that nearly all relevant information is provided by the VIX index and hence there is not much incremental information in high-frequency index returns. For out-of-sample forecasting, the VIX index provides the most accurate forecasts for all forecast horizons and performance measures considered. The evidence for incremental forecasting information in intraday returns is insignificant.

MSC:

62P05	Applications of statistics to actuarial sciences and financial mathematics	Cited in **21** Documents
91B84	Economic time series analysis	
62M20	Inference from stochastic processes and prediction	
91B28	Finance etc. (MSC2000)	

Keywords:

high-frequency returns; implied volatility; stock index volatility; forecasting; ARCH models

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