Advances in Modeling of Financial Series

Gary G. Venter, ASA, CERA, FCAS, MAAA

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Abstract

There have been continual advances in the modeling of financial series but most are aimed at the pricing of derivatives. Different criteria are needed for development of scenarios for risk management. Some recent methods will be reviewed with an eye on risk-management applications, including using the simulated method of moments to parameterize multifactor models, fractional differencing and other methods to model series with persistent autocorrelation, and models to flatten out the volatility smile, such as jump-diffusion models. These methods will be illustrated with applications to inflation, interest rates, equity prices and exchange rates.

Keywords: Interest Rates; Inflation; Autocorrelation; Multifactor Models.