Co-integration for Soft Commodities with Non-Constant Volatility

Authors : E. Channol, O. Collet, N. Kostyuchyk, T. Mesbah, Quoc Hoang Long Nguyen

Abstract : In this paper, a pricing model is proposed for co-integrated commodities extending Larsson model. The futures formulae have been derived and tests have been performed with non-constant volatility. The model has been applied to energy commodities (gas, CO2, energy) and soft commodities (corn, wheat). Results show that non-constant volatility leads to more accurate short term prices, which provides better evaluation of value-at-risk and more generally improve the risk management.

Keywords : co-integration, soft commodities, risk management, value-at-risk
Conference Title : ICEBFM 2014 : International Conference on Economics, Business, Finance and Management
Conference Location : Rome, Italy
Conference Dates : September 18-19, 2014