

GARCH-Type Models on the Volatility of China Commodity Futures Market

Hongyan Duan¹, Nachatchapong Kaewsompong² and Chukiat Chaiboonsri³

¹Faculty of Economics, Chiang Mai University
E-mail: dhyhoye@gmail.com

² Faculty of Economics, Chiang Mai University
E-mail: Nachat_flysky@hotmail.com

³Faculty of Economics, Chiang Mai University
E-mail: chukiat1973@hotmail.com

Abstract

In this paper, three major commodity futures of agricultural products, metal products and energy products are used as the classification standard. Through GARCH-type model, the best model suitable for forecasting volatility of commodity futures of this type is selected from GARCH, EGARCH, TGARCH, IGARCH, GJR-GARCH and AVGARCH. The empirical results show that, for agricultural commodity futures, AVGARCH (1,1) model has a better prediction performance; for metal commodity futures, IGARCH (1,1) performs better; generally speaking, for energy commodity futures, GJR-GARCH (1,1) model has a better effect. Overall, the GARCH-type model is generally more advantageous than the ordinary GARCH model.

Keywords: Volatility, GARCH-type, Commodity Futures, Error Statistic Criteria

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