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**Volume 28, Issue 13****Research Announcement****Nonlinear Mean Reversion and Arbitrage in the Gold Futures Market**

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Previous literatures take transaction costs as being negligible when analyzing the futures basis behavior in linear dynamic framework. However, we argue that the relationship between the futures and spot prices with the conventional linear cointegration approach may not be appropriate after taking transaction costs into account. In this paper, an incorporation of transaction costs presented by Dumas (1992) and Michael (1997) into the exponential smooth transition autoregressive (ESTAR) model developed by Granger and Terasvita (1993) is motivated to examine the dynamic relationship between daily gold futures and spot prices and the nonlinear behavior of the gold futures basis. Transaction costs may lead to the existence of neutral band for futures market speculation within which profitable trading opportunities are impossible. Further, our results indicate that the ESTAR model provides higher forecasting power than the linear AR(1) model.

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