Increasing Trends in the Excess Comovement of Commodity Prices*

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Abstract

We generalize the model of excess comovement originated by Pindyck and Rotemberg (1990) and extended by Deb, Trivedi, and Varangis (1996) to investigate whether and how excess correlations among seemingly unrelated commodity returns has increased recently. To this end, we develop the STDCC model to capture the long-run trends and the short-run dynamics of excess comovement. Using the commodity-return data from 1983 to 2011, in all pairs of agricultural raw materials, beverage, metal, and oil, we find the gradual increasing long-run trends since 2000. We also confirm that the increasing trend in excess comovement is not an artifact by the recent financial crisis. Finally, we show that the dynamics of excess comovement in off-index commodity is quite different, which may be taken as an additional evidence for the financialization of commodities.

JEL classification: C32, C51, G15

Key Words: Smooth transition model; DCC model; time-varying correlation

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