On the Analysis of Food and Oil Markets in Nigeria: What Prices Tell Us from Asymmetric and Partial Structural Change Modeling?

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**Abstract:** The relationship between energy price and food price has been dominated by co-movement debate among empirical submissions. However, these are widely criticized based on economic structure and uncertain economic events. In this paper, using data spanning from January 2000 to September 2019, we applied asymmetric and partial structural change models to examine the impact of oil price on food prices in Nigeria. Results from the asymmetric model showed that positive margins in crude oil price reduce the price of food, while negative margins co-move with food price in the long-run. The story is different in the short-run, where both positive and negative changes in oil price exert positive effects on food price. Thus, margins in the oil price are a source of incentives/disincentives to stabilize food price through supply channels in Nigeria. However, results of the partial structural change regression suggest that, in isolation, oil price co-moves with food price in regimes 1 and 4 (slump in oil price), while the impact is negative during regimes 2 and 3 (stable oil price). Therefore, the paper argues that the relationship between food price and oil price depends on timely events and the structure of the economy in question, and accounting for these events (regimes) improves timely and appropriate policies on food security and price stability.

**Keywords:** food price; oil price; asymmetry; breakpoints; partial structural change model (PSCM)

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