

PRICE GENERATING PROCESS AND VOLATILITY IN THE NIGERIAN AGRICULTURAL COMMODITIES MARKET

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ABSTRACT

The study examined the price generating process and volatility of Nigerian agricultural commodities market using secondary data for price series on meat, cereals, sugar, dairy and food for the period of January 1990 to February 2014. The data were analysed using both descriptive and inferential statistics. The descriptive statistics used the coefficient of variation while the inferential statistics used the linear Gaussian State-Space (SS) model. The results of the descriptive statistics showed that the coefficients of variation for cereals (39.88 %), food (32.65 %) and dairy price (43.08 %) were respectively higher during the overall time period (January 1990 to February 2014) than during the first (January 1990 to January 2002) and second (February 2002 to February 2014) sub-time periods. The results of the inferential statistics showed that autoregressive moving average (ARMA) model is the most selected Nigeria agricultural commodity price generating model for the time periods, and that the final states of their unobserved component of cereals, meat, dairy and sugar prices were 6317.86, 2.06, 34.45 and 10.24 respectively. The prices of cereals, meat, dairy, sugar and food in general were generated and most fitted by the ARMA in Nigeria. Also the prices have been on the increase and have exhibited high volatility. The volatility, process and the determinants of the Nigerian food commodities prices can best be described by the simple (ARMA) model.

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