

PRICE DISCOVERY AND CAUSALITY OF TURMERIC FUTURES AND SPOT PRICES - EVIDENCE FROM NATIONAL COMMODITY AND DERIVATIVES EXCHANGE LTD. (NCDEX)

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ABSTRACT

India's growth story in the coming years would be commodity intensive. Volatile price movement, uncertainty in the demand-supply situation and lack of information about the availability of a commodity could be issue of concern for every stakeholder in the supply chain. Commodity futures trading would help hedge against price risk. India is the largest producer, consumer and exporter of turmeric in the world. Indian turmeric is considered to be the best in the world market because of its high cur cumin content. India accounts for about 80 per cent of world turmeric production and 60 per cent of world exports. The paper presented turmeric production, export and import trends and present scenario of Erode Turmeric Regulated Market. It also examined the price discovery mechanism and causality between turmeric spot and futures markets using Co integration and Vector Error Correction Model (VECM) for the period from 1st April 2007 to 31st March 2013 dividing into three panels of data for the National Commodity and Derivatives Exchange Ltd. Turmeric futures price movements are much wider than spot price movements in all the three panels of data. Data were used to determine the stationarity of the spot and futures market by using Augmented Dickey Fuller (ADF) and Phillip Perron (PP) and Kwiatkowski Phillips Schmidt Shins (KPSS) tests. The study reveals that all the series all non- stationary at level, but attains stationarity at first difference. The study employs Johansen's Co integration test, Vector Error Correction Model (VECM) and Granger causality test to explore the long run relationship between the variables and its direction. The findings suggest that there is only one co-integration relationship that exists between futures and spot turmeric prices for the first two panels, 2007-10 and 2010-13, the causality does not exist but for the third panel 2007-13, the causality is bidirectional. The results indicate that there is no clear evidence that which market leads the other in long run. Further, the volatility of turmeric spot returns in comparison with futures returns is less from 2007 to 2013. Finally investors and hedgers prefer spot market than entering into futures market. Therefore, hedgers can use the spot market for price discovery in the both short and long term.

KEYWORD: Commodity futures market, Turmeric futures, Volatility, price discovery, Co integration, Causality, VECM, NCDEX.
