

Development and Emerging Risks in the Derivative Market: A Comparison of Impact of Futures Trading on Spot Price Volatility and a Case of Developed, Emerging and Less Developed Economies

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Abstract : This study examines the impact of introduction of futures trading on the spot price volatility in the commodity market. The paper considers the United States of America, South Africa and Ethiopian economies. Three commodities i.e. coffee, maize and wheat from New York Merchantile Exchange, South African Futures Exchange and Ethiopian Commodity Exchange are analyzed. ARCH LM test is used to check for heteroskedasticity and GARCH and EGARCH are used to check for the behavior of volatility between the pre- and post-futures periods. For all the three economies, the results indicate presence of the ARCH effect in the log returns. For conditional and unconditional variances; spot price volatility for coffee has decreased after futures trading in all the economies and the EGARCH has also shown reduction in persistence of volatility in the post-futures period in the three economies; while that of maize has reduced for the Ethiopian economy while there has been an increase in both the US and South African economies. For wheat, the conditional variance has been found to rise in the post-futures period in all the three economies.

Keywords : derivatives, futures exchange, agricultural commodities, spot price volatility

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