# OVER-THE-COUNTER FORWARD CONTRACTS AND SPOT PRICE VOLATILITY

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## ABSTRACT

The purpose of the paper is to investigate the impact of the introduction of Forward Freight Agreement (FFA) trading on spot market price volatility in panamax 1, 1A, 2, and 2A trading routes of the dry-bulk shipping industry. The main concern about the impact of derivatives trading emanates from the results of studies that have found that the activities of speculators may destabilise (or stabilise) prices in the spot market. The proposed methodology is considering the link between volatility and information, and of possible asymmetric effects in the conditional volatilities. A GJR-GARCH (Glosten, *et al.*, 1993) process is found to be the most appropriate specification. The results suggest that the onset of FFA trading has had (a) a stabilising impact on the spot price volatility in all investigated routes, (b) an impact on the asymmetry of volatility in routes 2 and 2A, and (c) substantially improved the quality and speed of information flow in routes 1, 1A and 2. However, after including in the conditional variance equation other explanatory variables that may affect spot volatility, the results indicate that only in voyage routes 1 and 2 the reduction in volatility may be a direct consequence of FFA trading. The results suggest that the introduction of FFA trading has not had a detrimental effect on the spot market. It appears that there has been an improvement in the way that information is transmitted into spot prices following the onset of FFA trading.