

## Modelling Impacts of Global Financial Crises on Stock Volatility of Nigeria Banks

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**Abstract :** This research aimed at determining most appropriate heteroskedastic model to predicting volatility of 10 major Nigerian banks: Access, United Bank for Africa (UBA), Guaranty Trust, Skye, Diamond, Fidelity, Sterling, Union, ETI and Zenith banks using daily closing stock prices of each of the banks from 2004 to 2014. The models employed include ARCH (1), GARCH (1, 1), EGARCH (1, 1) and TARCH (1, 1). The results show that all the banks returns are highly leptokurtic, significantly skewed and thus non-normal across the four periods except for Fidelity bank during financial crises; findings similar to those of other global markets. There is also strong evidence for the presence of heteroscedasticity, and that volatility persistence during crisis is higher than before the crisis across the 10 banks, with that of UBA taking the lead, about 11 times higher during the crisis. Findings further revealed that Asymmetric GARCH models became dominant especially during financial crises and post crises when the second reforms were introduced into the banking industry by the Central Bank of Nigeria (CBN). Generally, one could say that Nigerian banks returns are volatility persistent during and after the crises, and characterised by leverage effects of negative and positive shocks during these periods

**Keywords :** global financial crisis, leverage effect, persistence, volatility clustering

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