Simulated evidence on the distribution of the standardized one-step-ahead prediction errors in ARCH processes

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In statistical modelling contexts, the use of one-step-ahead prediction errors for testing hypotheses on the forecasting ability of an assumed model has been widely considered. Quite often, the testing procedure requires independence in a sequence of recursive standardized prediction errors, which cannot always be readily deduced particularly in the case of econometric modelling. In this paper, the results of a series of Monte Carlo simulations reveal that independence can be assumed to hold.