

This research focuses on a special type of time series data where a significant proportion of values is zero. The aim is to develop a statistical model that accurately captures the behavior of such data. By exploring existing theories on GARCH and MEM models, new models together with derivation of important theoretical properties are proposed. To assess their effectiveness, they are tested on real-world data. This evaluation reveals that each model has its own strengths and weaknesses. The overall results are promising, proving the models' validity and real-world applicability, opening doors for further exploration in this area.