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Frequentist and Bayesian approaches of the p-order integer-valued AR process with zero-inflated innovations

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Abstract

In recent years, there has been considerable interest to study count time series with dependence structure and appearance of excess of zeros values. Such series are commonly encountered in diverse disciplines, such as economics, financial research, environmental science, public health, among others. In this context, we present our research related to the stationary p-order integer-valued autoregressive process, with zero inflated innovations, called the ZINAR(p) times series model, under Bayesian and frequentist approaches. We illustrate the utility of the proposed ZINAR(p) model through simulated and real dataset.

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