



On the Possibility of Using Multivariate Singular Spectrum Analysis for the Mortality Forecasting

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In this paper, we investigate the possibility of using multivariate singular spectrum analysis (SSA), which is a non-parametric technique in the field of time series analysis, for mortality forecasting. In order to do that, we consider real data from nine European countries: Belgium, Denmark, Finland, France, Italy, Netherlands, Norway, Sweden and Switzerland, over the period 1900-2009. The results show the superiority of multivariate SSA in comparison with the univariate SSA, in terms of forecasting accuracy.

Keywords: Multivariate Singular Spectrum Analysis; Mortality forecasting; European countries; Accuracy measures.