The Growth Curve model under high dimensions

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Abstract

The Growth Curve model is a bilinear model useful for studying short balanced time series. In high dimensions the mean parameter space is fixed but the size of the dispersion matrix becomes large, meaning that there are an infinite number of nuisance parameters. Estimators of mean parameters are derived under high dimensional assumptions. The proposed estimator is unbiased and an upper error bound for its dispersion is given.

Keywords

Growth Curve model, Kolmogorov asymptotic, Moment calculations.