The Application of Spectral Distribution of Product Matrices of Large Dimensional Random Matrices in the Factor Analysis

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Abstract

In the factor analysis model with large cross-section and time-series dimensions ,we propose a new method to estimate the number of factors . Specially if the idiosyncratic terms satisfy a linear time series model, the estimators of the parameters in the time series model can be made . The theoretical properties of the estimators are also explored.A simulation study and an empirical analysis are conducted

*The research of this author was supported partially by Natural Science Foundation of China(No.10471135) E-mail: jbs@ustc.edu.cn