

This thesis deals with a dynamic panel data model and parameters estimation in these models. First, estimation of parameters in linear regression models is revised as well as generalized method of moments. Second, classical estimation methods for panel data model are considered and it is shown why they are inappropriate to use for dynamic panel data model. Subsequently, two-stage least squares estimation method and estimators based on generalized method of moments are presented, namely Arellano-Bond, Arellano-Bover and Ahn-Schmidt estimators. Some of the theoretical results are illustrated in a Monte Carlo simulation study, which also compares behaviour of the presented estimators under various settings.