Testing for distributional features in varying coefficient panel data models

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Abstract

This paper provides several tests for skewness, kurtosis, and normality for the heterogeneity and the idiosyncratic error terms in a one-way component varying coefficient panel data model. However, the methodology is rather general and it can be applied to other models of interest. Using nonparametric residuals, the test statistics are derived in a moment condition framework. As in order to obtain these test statistics calculation of higher order moments are needed, we also propose an alternative technique to estimate them. Finally, and as a by-product, to obtain the nonparametric residuals we propose a local constant estimator that is based on a pairwise differencing transformation of the

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