

Nonparametric estimation of finite-mixture models

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The aim of this paper is to provide simple nonparametric methods to estimate finite-mixture models from data with repeated measurements. Three measurements suffice for the mixtures to be fully identified and so our approach can be used even with very short panel data. We provide distribution theory for estimators of the number of mixture components, the mixing proportions, as well as of the mixture distributions and various functionals thereof. These estimators are found to perform well in a series of Monte Carlo exercises. We apply our techniques to document heterogeneity in log annual earnings using PSID data spanning the period 1969-1998. (joint avec Stéphane Bonhomme et Jean-Marc Robin)