

Empirical Likelihood in Infinite Parameter Space

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KEY WORDS: Infinite dimensional parameter, Sieve empirical likelihood, Asymptotic theory

MATHEMATICAL SUBJECT CLASSIFICATION: 62G20

Abstract: The method of empirical likelihood is commonly employed to deal with the possible modelling bias of parametric likelihood. However this method cannot be used directly sometimes when an infinite dimensional parameter of interest is involved. To overcome this difficulty we proposed the sieve empirical likelihood by incorporating a sieve approximation into the framework of empirical likelihood. Based this new idea, a unified procedure has been developed for estimation and testing of semi- and non-parametric models with unspecified error distributions. In this talk, we will provide both asymptotic theory and simulation results with applications to econometrics.