

# Which model to match?

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The asymptotic efficiency of the indirect estimation methods, such as the efficient method of moments and indirect inference, depends on the choice of the auxiliary model. Up to date, this choice is somehow ad hoc and based on an educated guess of the researcher. In this article we develop three information criteria that help the user to optimize the choice among nested and nonnested auxiliary models. They are the indirect analogues of the widely used Akaike, Bayesian and Hannan-Quinn criteria. A thorough Monte Carlo study based on two simple and illustrative models shows the usefulness of the criteria.