

Time series analysis under model uncertainty

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Propositions accompanying the thesis

Time Series Analysis under Model Uncertainty

by Jan Lohmeyer

1. In a local misspecification framework the squared omitted variable biases and variances of estimators are of the same order of magnitude asymptotically. This makes this framework suitable for discussing and comparing asymptotic mean squared errors of submodel estimators. (Chapter 2)
2. When deciding on the size of a model the focus of the analysis should be taken into account. (Chapter 2)
3. For both information criteria, the Akaike information criterion (AIC) and the Bayesian information criterion (BIC), a weight scaling parameter defines a class of smoothed model averaging estimators. (Chapter 3)
4. The AIC and BIC smoothed model averaging estimators have similar properties as their model selection counterparts for certain choices of the weight scaling parameter. (Chapter 3)
5. All models are wrong; the practical question is how wrong do they have to be to not be useful. *George Box*
6. The responsibility of selecting an appropriate model, checking its adequacy for the data at hand, and correctly interpreting its estimates lies with the user.
7. One approach to take in the face of model uncertainty is to employ model averaging.
8. Even small gains in precision have large economic effects for estimators used by central bank decision makers.
9. The first university statistics department in the world was only established a little more than 100 years ago, and scientific progress keeps happening. But even today's statisticians cannot forecast what problems statistics will be able to help us solve 100 years from today.
10. Financial regulation is a form of job creation (for economists).
11. The egg came first.