

Title:

**Formalized Data Snooping Based on Generalized Error Rates**

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**Abstract:**

It is common in econometric applications that several hypothesis tests are carried out at the same time. The problem then becomes how to decide which hypotheses to reject, accounting for the multitude of tests. The classical approach is to control the familywise error rate (FWE), that is, the probability of one or more false rejections. But when the number of hypotheses under consideration is large, control of the FWE can become too demanding. As a result, the number of false hypotheses rejected may be small or even zero. This suggests replacing control of the FWE by a more liberal measure. To this end, we review a number of proposals from the statistical literature. We briefly discuss how these procedures apply to the general problem of model selection. A simulation study and two empirical applications illustrate the methods.