

ZMATH 2006f.03873

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R^2 -based bootstrap tests for nonnested hypotheses in regression models.

InterStat, No. 8, 20 p. (2006).

This paper utilizes the bootstrap to construct tests using R^2 for nonnested regression models. The bootstrap enables us to compute the statistical significance of the differences in R^2 's and to formally test about nonnested regression models. Bootstrapped R^2 tests that this paper proposes are expected to show better finite sample properties since they do not have such cumulated errors in the computation process. Moreover, bootstrapped R^2 tests will remove the possibility of inconsistent test results that the previous tests suffer from. Because bootstrapped R^2 tests only evaluate if a model has a significantly higher explanatory power than the other model, there is no possibility for inconsistent results. This study presents Monte Carlo simulation results to compare the finite sample properties of the proposed tests with the previous tests such as Cox test and J -test. (orig.)

Classification: K85

Keywords: nonnested regression models; bootstrap; comparison of R^2 tests; Monte Carlo simulation; Cox test; J -test