

Testing for Overconfidence Statistically: A Moment Inequality Approach

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Abstract

We propose an econometric procedure to test for the presence of overconfidence using data collected by “ranking experiments.” Our approach applies the techniques from the moment inequality literature. Although a ranking experiment is a typical way to collect data for analyzing overconfidence, [Benoît and Dubra \(2011\)](#) show that a ranking experiment may generate data that indicate overconfidence even if participants are purely rational Bayesian updaters. Instead, they provide a set of inequalities that are consistent with purely rational Bayesian updaters. We propose to apply the tests of moment inequalities developed by [Romano et al. \(2014\)](#) to test such a set of inequalities. Then, we examine the data from [Svenson \(1981\)](#) on driving safety. Our results indicate the presence of overconfidence on safety among the US subjects tested by Svenson. However, the other cases tested do not show evidence of overconfidence.

Keywords: overconfidence; ranking experiments; moment inequality; driving safety.

JEL Classification: C12; D03; D81; R41.

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