

# Data-driven sensitivity analysis for Matching estimator

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## **Abstract**

This paper proposes a sensitivity test to unobservable selection for Matching estimators based on a leave-one-covariate-out (LOCO) algorithm. Rooted in the machine learning literature, this sensitivity test recalls a bootstrap over different subsets of covariates, and simulates various estimation scenarios to be compared with the baseline Matching results. We provide an application on real data, comparing results with more traditional sensitivity tests. Finally, the appendix introduces `sensimatch`, the Stata routine I developed to run the LOCO algorithm.