

## **Estimating counterfactual distributions through reweighting methods**

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Counterfactual distributions are generally estimated by matching techniques, less frequently by data reweighting. In this study, we investigate this second approach, first by a Monte Carlo study and then by an empirical application to Swiss wages. The main question is to determine if the estimated weights – by a probit model or nonparametrically – are really able to replicate the counterfactual distribution. As the true counterfactual distribution will be never known, a definitive answer is not possible. Nevertheless, thank to the Monte Carlo study a sensitivity analysis shows how a model or a nonparametric approach performs the task. Finally, several counterfactual Swiss wages distributions are estimated and compared each other in order to put in evidence some misspecification errors or biases.

Keywords: matching methods, counterfactual wages distribution, test of distribution.