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SEMINAR

"Evaluating the effect of training on wages in the presence of noncompliance and missing outcome data"

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Abstract:

The effects of a training program on employment and wages are evaluated, using data from a randomized study, the National Job Corps Study, and the principal stratification approach to simultaneously address the complications of noncompliance, truncation of wages by nonemployment, and missing outcomes. We conduct a likelihood-based analysis, proposing different ways of improving computational efficiency and identifiability using the theory of finite mixture models and exploiting the EM algorithm. We maintain an IV exclusion restriction assumption on the outcomes, while monotonicity of compliance holds by design. We provide estimates with and without assuming monotonicity of the truncation of wages, under the Missing at Random assumption of outcome missingness. For compliers, results show that the effect on employment is generally positive; however, there is a subgroup of complying participants for whom the program is detrimental on employment in the short term, although this effect becomes negligible in the long term. For the subgroup of always-employed compliers, that is, those who would be employed whether trained or not, the effect of the training on wages is generally positive.

Joint work with P. Frumento, B. Pacini, and D.B. Rubin.