

Estimating causal parameters from a high dimensional model using the lasso in Stata

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Friends House, London

Programme

09:00-09:30 Registration and coffees

09:30-11:00 - Part 1

Part 1 (1.5 hours)

This part provides an introduction to estimating causal parameters in high-dimensional models. It uses a real-data example to discuss the promises and perils of high-dimensional models. The discussion highlights the trade offs involved in estimating causal parameters from high-dimensional model. It also discusses the role of the lasso in estimation and it outlines some of the estimation methods.

11:00- 11:15 Coffees

11:15- 12:45 - Part 2

Part 2 (1.5 hours)

This part provides an in depth introduction to the implementation of the lasso in Stata and quick introduction to the relevant underlying theory. This part also discusses how to use the Stata lasso commands for prediction.

12:45- 13:45 Lunch

13:45- 15:15 - Part 3

Part 3 (1.5 hours)

This part begin to introduce the commands in Stata for estimating causal parameters from a high dimensional model. It provides an in-depth introduction to the commands for linear models, logit models, and for Poisson models with exogenous variables. An overview of the relevant theory is included in the discussion.

15:15-15:30 **coffees**

15:30-17:00 Part 4

Part 4 (1.5 hours)

This part continues the introduction begun in part 3 and illustrates how to implement some extensions. In particular, this part covers commands and methods for linear models with endogenous variables. It also discusses how to use the lasso tools to estimate average treatment effects under exogenous assignment.

Finish 17:00