

Escola de Economia de São Paulo - Fundação Getulio Vargas

Course: Microeconometria 2

Instructor: Bruno Ferman and Vitor Possebom

Problem Set: Lecture 1

Total = 200 points

Question 1 (Lecture 1: One-sided Non-compliance - 100 points)

Show that the Wald Estimand is equal to the Average Treatment Effect on the Treated when you have an experiment with one-sided non-compliance.

$$\text{Wald} = \text{LATE}$$

$$\text{LATE} = \text{ATE}|_{\text{LNC}} \text{ (use LIE)}$$

Question 2 (Lecture 1: IV Regression with Covariates - 100 points)

Prove and discuss Theorem 3.3 and Corollary 3.4 by Słoczyński (2022, https://people.brandeis.edu/~tslocz/Słoczyński_paper_LATE.pdf).