Parameters of Interest

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Housekeeping

Since nearly all of you choose to review experimental studies. Please be sure to read ...

- ▶ Deaton, A. (2010). Instruments, randomization, and learning about development. *Journal of Economic Literature*, 48(2):424–455

- ▶ Imbens, G. W. (2010). Better LATE than nothing: Some comments on Deaton (2009) and Heckman & Urzua (2009). *Journal of Economic Literature*, 48(2):399–423

- ▶ Heckman, J. J. and Urzúa, S. (2010). Comparing IV with structural models: What simple IV can and cannot identify. *Journal of Econometrics*, 156(1):27–37

Student Presentation

- ▶ 20 minutes of presentation and discussion
- ▶ peer-review of presentation

The Generalized Roy Model

Potential Outcomes

$$Y_1 = \mu_1(X) + U_1$$
$$Y_0 = \mu_0(X) + U_0$$

Observed Outcomes

$$Y = DY_1 + (1 - D)Y_0$$

Choice

$$D = \mathrm{I}[\mu_D(X, Z) + U_C]$$
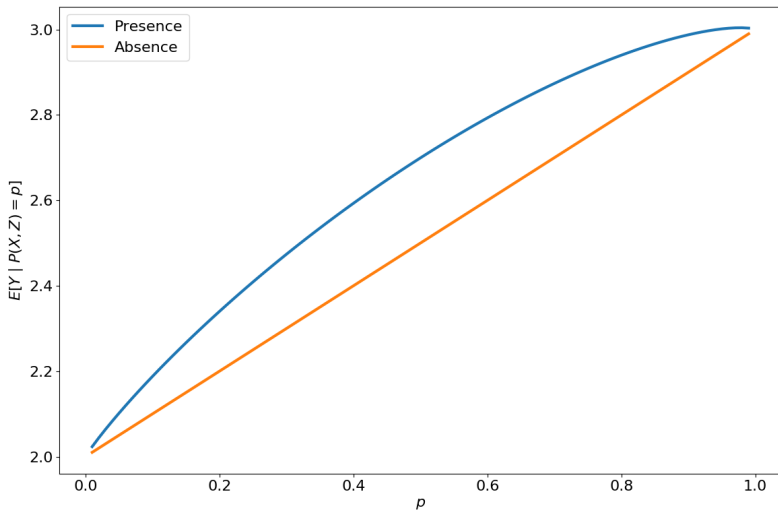
Figure: Conditional Expectation and Essential Heterogeneity

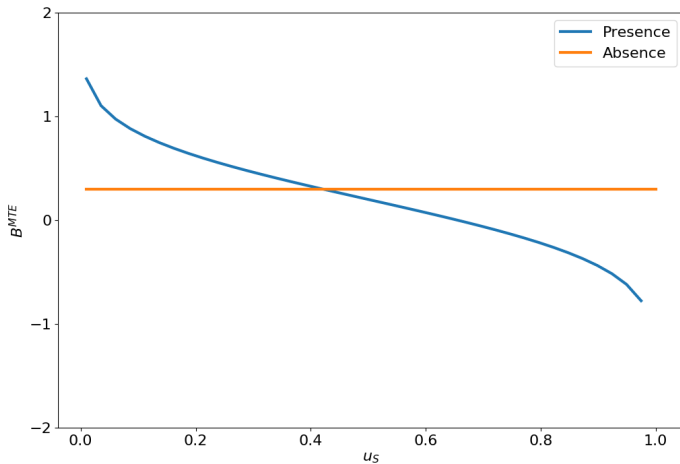Figure: Marginal Treatment Effect and Essential Heterogeneity

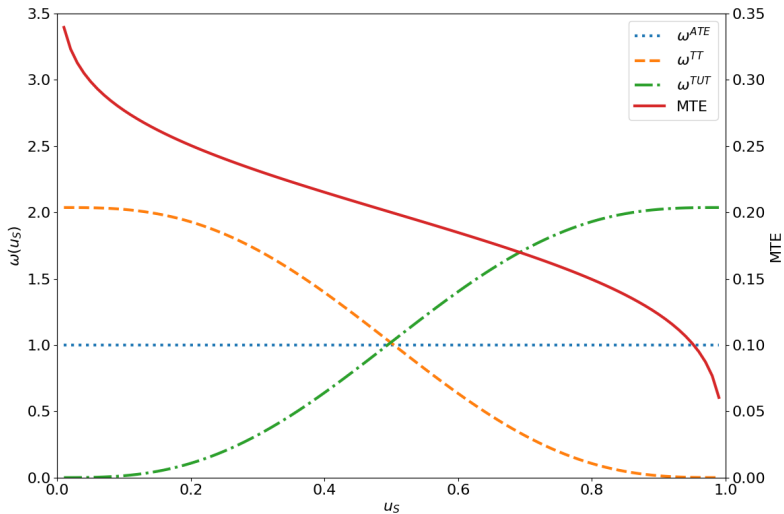Figure: Weights for Conventional Treatment Effect Parameters

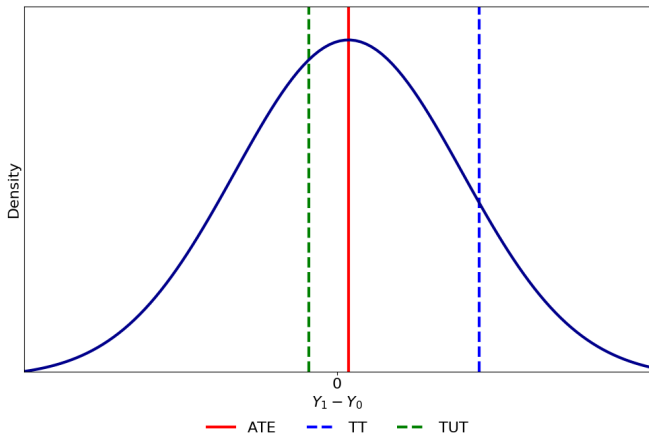Figure: Distribution of Conventional Effects

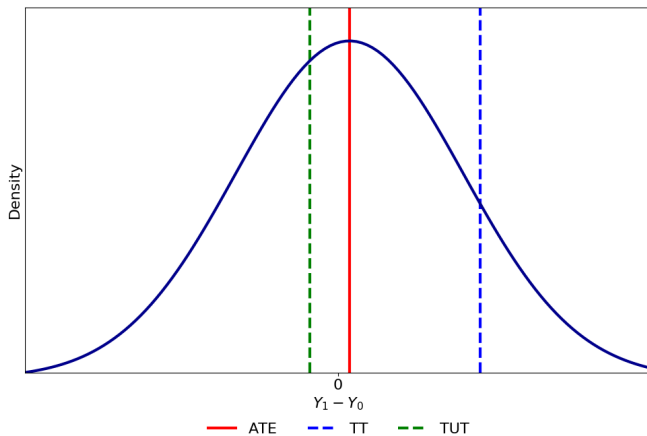# Figure: Distribution of Effects with Essential Heterogeneity

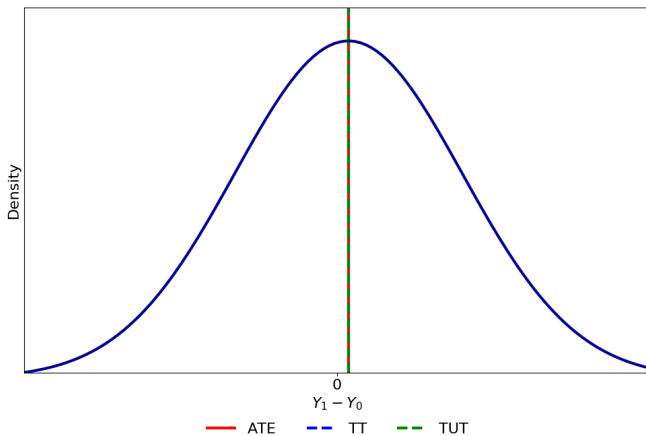# Figure: Distribution of Effects without Essential Heterogeneity
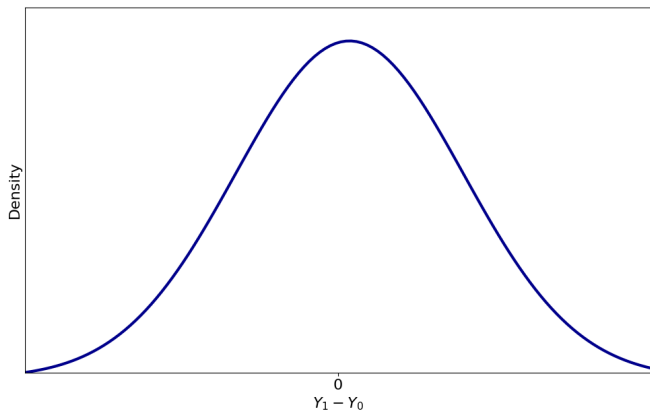
Figure: Distribution of Benefits

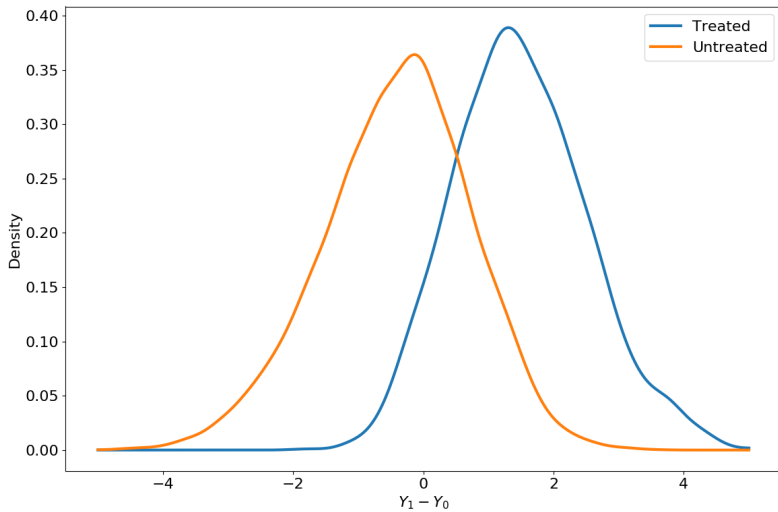Figure: Distribution of Benefits by Treatment Status
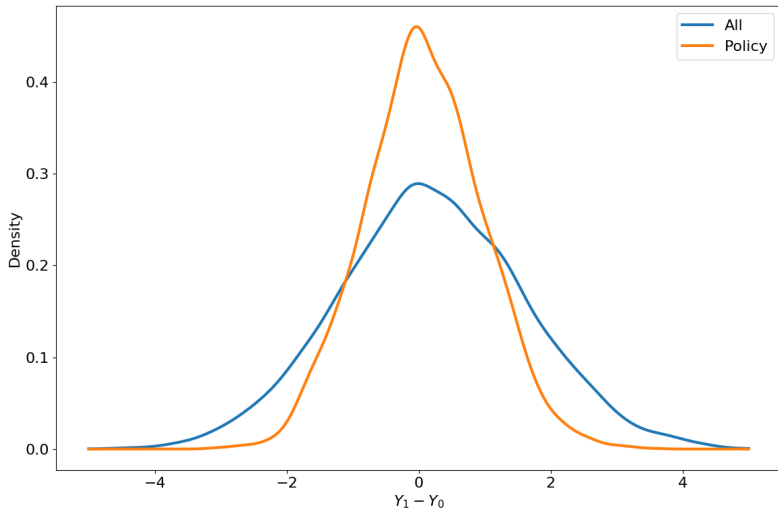
Figure: Distribution of Benefits by Policy

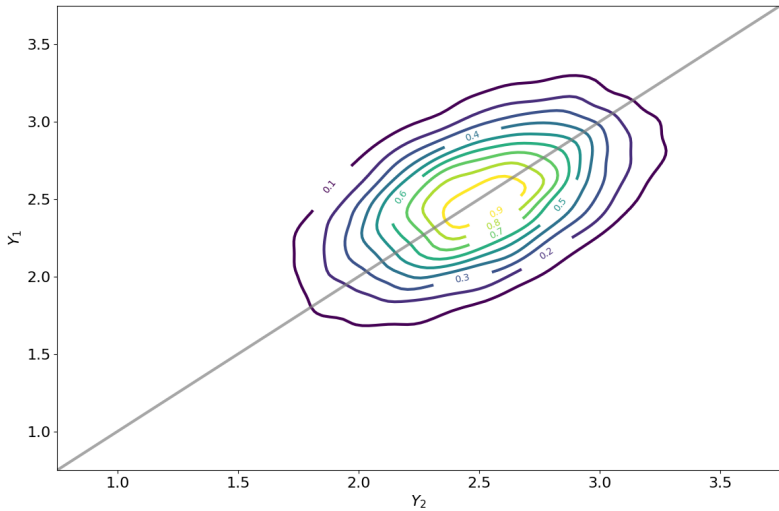# Figure: Distribution of Potential Outcomes

Figure: Distribution of Benefits and Surplus

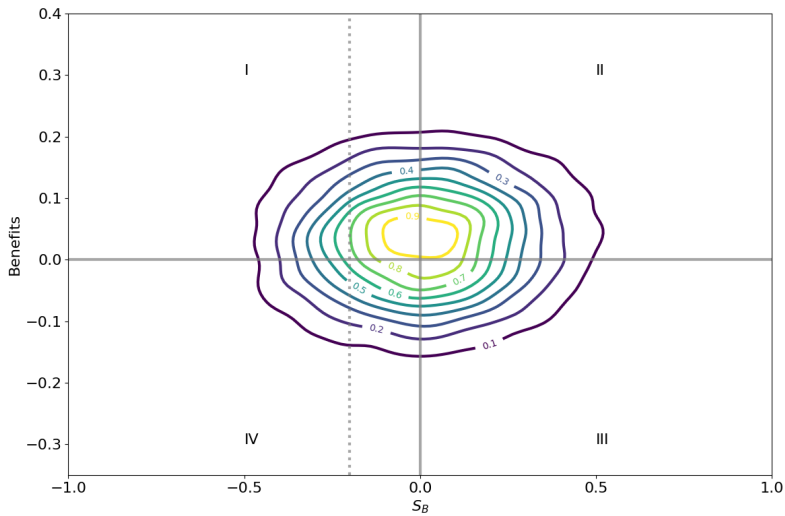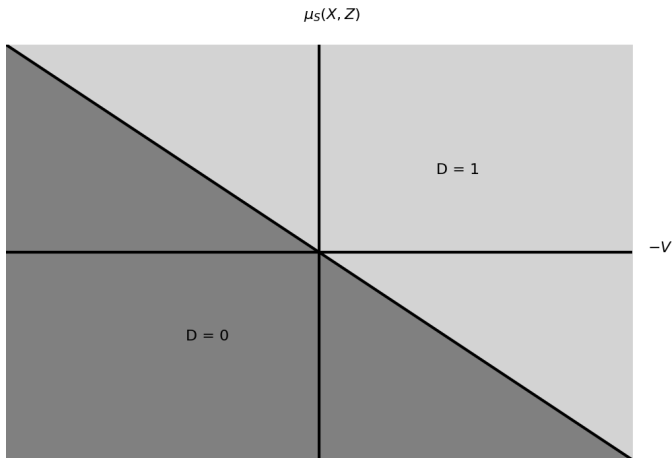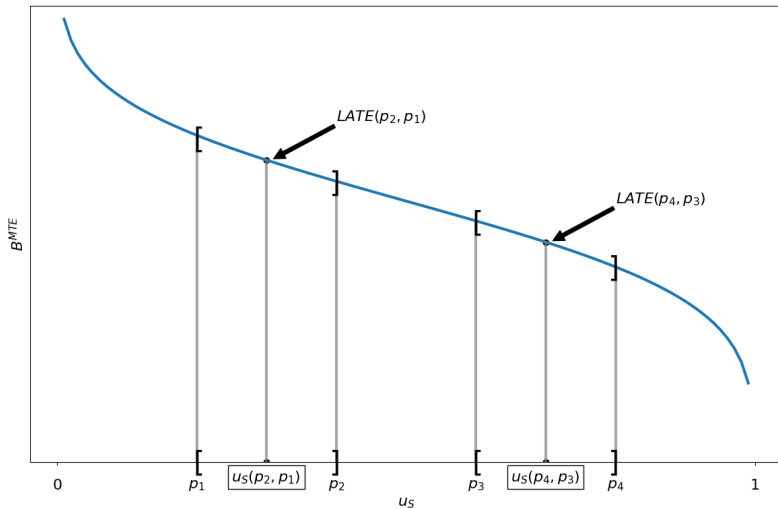# Figure: Margin of Indifference

Figure: Local Average Treatment Effect

Appendix

References

Carneiro, P., Heckman, J. J., and Vytlacil, E. J. (2011). Estimating marginal returns to education. *American Economic Review*, 101(6):2754–2781.

Deaton, A. (2010). Instruments, randomization, and learning about development. *Journal of Economic Literature*, 48(2):424–455.

Heckman, J. J. (1990). Selection bias and self-selection. In Eatwell, J., Milgate, M., and Newman, P., editors, *Econometrics*, The New Palgrave Economics Collection, pages 201–224. Palgrave Macmillan, London.

Heckman, J. J. and Taber, C. (2010). Roy model. In Blume, L. E. and Durlauf, S. N., editors, *Microeconometrics*, The New Palgrave Economics Collection, pages 221–228. Palgrave Macmillan, London.

Heckman, J. J. and Urzúa, S. (2010). Comparing IV with structural models: What simple IV can and cannot identify. *Journal of Econometrics*, 156(1):27–37.

Imbens, G. W. (2010). Better LATE than nothing: Some comments on Deaton (2009) and Heckman & Urzua (2009). *Journal of Economic Literature*, 48(2):399–423.