References for Advanced Econometrics

Core Textbooks

1. Imbens, G. W., & Rubin, D. B. (2015). *Causal Inference in Statistics, Social, and Biomedical Sciences*. Cambridge University Press.
   Emphasizes the potential outcome framework, assignment mechanisms, and experimental design.

2. Wager, S. (2024). *Causal Inference: A Statistical Learning Approach*.
   Concise overview of modern causal research designs.

3. Hansen, B. (2022). *Econometrics*. Princeton University Press.
   Comprehensive reference covering statistical theory, asymptotics, and the algebra of key estimators.

4. Train, K. E. (2009). *Discrete Choice Methods with Simulation*. Cambridge University Press.
   Definitive introduction to discrete choice models, with simulation methods at its core.

5. Angrist, J. D., & Pischke, J. S. (2009). *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press.
   Classic, highly insightful textbook.

Course Materials Consulted

The following resources have implicitly or explicitly shaped my teaching—informing topic selection, organization, conceptual exposition, and stylistic choices (links provided where available).

1. Goldsmith–Pinkham, P. *Applied Empirical Methods* . Available at `https://github.com/paulgp/applied-methods-phd`

2. Xu, Y. *Short Course on Causal Inference with Panel Data*. Available at `https://yiqingxu.org/teaching/`

3. Huang, Z. *Frontier Topics in Empirical Economics*. Available at `https://www.zibinhuang.com/course-material`

4. Wiswall, M. *Econometrics Lecture Slides*.

Lecture-by-Lecture Readings

Lecture 1

1. Imbens, G. W., & Rubin, D. B. (2015). *Causal Inference in Statistics, Social, and Biomedical Sciences*, Chapters 1–2.

2. Lewbel, A. (2019). "The Identification Zoo: Meanings of Identification in Econometrics." *Journal of Economic Literature*, 57(4), 835–903.

Lecture 2

1. Hansen, B. (2022). *Econometrics*, Chapters 2–4.

Lecture 3

1. Hansen, B. (2022). *Econometrics*, Chapters 6–7, 9–10.

2. Imbens, G. W., & Rubin, D. B. (2015). Chapter 5.

Lecture 4

1. Imbens, G. W., & Rubin, D. B. (2015). Chapters 12–13.

2. Pearl, J., & Mackenzie, D. (2018). *The Book of Why*, Chapter 6.

3. Wager, S. (2024). Chapters 2–4.

Lectures 5–6

1. Abadie, A. (2003). "Semiparametric Instrumental Variable Estimation of Treatment Response Models." *Journal of Econometrics*, 113(2), 231–263.

2. Angrist, J. D., & Pischke, J. S. (2009). *Mostly Harmless Econometrics*, Chapter 4.

3. Angrist, J. D., Imbens, G. W., & Rubin, D. B. (1996). "Identification of Causal Effects Using Instrumental Variables." *Journal of the American Statistical Association*, 91(434), 444–455.

4. Angrist, J. D. (2022). "Empirical Strategies in Economics: Illuminating the Path from Cause to Effect." *Econometrica*, 90(6), 2509–2539.

5. Borusyak, K., & Hull, P. (2023). "Nonrandom Exposure to Exogenous Shocks." *Econometrica*, 91(6), 2155–2185.

6. Hansen, B. (2022). Chapters 12–13, 21.

7. Imbens, G., & Angrist, J. (1994). "Identification and Estimation of Local Average Treatment Effects." *Econometrica*, 62, 467–476.

8. Mogstad, M., & Torgovitsky, A. (2024). "Instrumental Variables with Unobserved Heterogeneity in Treatment Effects." In *Handbook of Labor Economics*, Vol. 5, 1–114. Elsevier.

Lectures 7–8

1. Abadie, A. (2021). "Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects." *Journal of Economic Literature*, 59(2), 391–425.

2. Abadie, A. "Synthetic Control Method Lecture." YouTube lecture available at `https://www.youtube.com/watch?v=oDNaOpNK6G4`.

3. Athey, S., & Imbens, G. W. (2022). "Design-based Analysis in Difference-in-Differences Settings with Staggered Adoption." *Journal of Econometrics*, 226(1), 62–79.

4. Borusyak, K., Jaravel, X., & Spiess, J. (2024). "Revisiting Event-Study Designs: Robust and Efficient Estimation." *Review of Economic Studies*, 91(6), 3253–3285.

5. Callaway, B., & Sant'Anna, P. H. (2021). "Difference-in-Differences with Multiple Time Periods." *Journal of Econometrics*, 225(2), 200–230.

6. Goodman-Bacon, A. (2021). "Difference-in-Differences with Variation in Treatment Timing." *Journal of Econometrics*, 225(2), 254–277.

7. Roth, J., Sant'Anna, P. H., Bilinski, A., & Poe, J. (2023). "What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature." *Journal of Econometrics*, 235(2), 2218–2244.

8. Sant'Anna, P. H. "Difference-in-Differences Resources." Available at `https://psantanna.com/did-resources/`.

9. Xu, Y. "Short Course on Causal Inference with Panel Data" Available at `https://yiqingxu.org/teaching/`.

Lecture 9

1. Train, K. E. (2009). Chapters 1–5, 8–10.

Lecture 10

1. French, E., & Taber, C. (2011). "Identification of Models of the Labor Market." In *Handbook of Labor Economics*, Vol. 4, 537–617. Elsevier.

2. Heckman, J. J. (1979). "Sample Selection Bias as a Specification Error." *Econometrica*, 47(1), 153–161.

3. Mogstad, M., & Torgovitsky, A. (2024). "Instrumental Variables with Unobserved Heterogeneity in Treatment Effects." In *Handbook of Labor Economics*, Vol. 5, 1–114. Elsevier.

4. Vytlacil, E. (2002). "Independence, Monotonicity, and Latent Index Models: An Equivalence Result." *Econometrica*, 70(1), 331–341.

Lecture 11

1. Berry, S., & Haile, P. (2016). "Identification in Differentiated Products Markets." *Annual Review of Economics*, 8(1), 27–52.

2. Berry, S. T., & Haile, P. A. (2021). "Foundations of Demand Estimation." In *Handbook of Industrial Organization*, Vol. 4(1), 1–62. Elsevier.

3. Nevo, A., & Pakes, A. (2012). NBER Summer Institute Methods Lectures. Available at `https://conference.nber.org/confer/2012/SI2012/ML/Program.html`

4. Train, K. E. (2009), Chapter 13.

Lecture 12

1. Heckman, J. J. (2010). "Building Bridges Between Structural and Program Evaluation Approaches to Evaluating Policy." *Journal of Economic Literature*, 48(2), 356–398.

2. Todd, P. E., & Wolpin, K. I. (2023). "The Best of Both Worlds: Combining Randomized Controlled Trials with Structural Modeling." *Journal of Economic Literature*, 61(1), 41–85.

3. Todd, P. E., & Wolpin, K. I. (2006). "Assessing the Impact of a School Subsidy Program in Mexico: Using a Social Experiment to Validate a Dynamic Behavioral Model of Child Schooling and Fertility." *American Economic Review*, 96(5), 1384–1417.

4. Allende, C., Gallego, F., & Neilson, C. (2019). "Approximating the Equilibrium Effects"