

## **2. Integrating Research Designs into Structural Models (MB)**

This part of the course showcases how (ex-ante) micro-econometric tools can be combined with (ex-post) research-design approaches in order to better assess and characterize the effects of public policies. We cover several instances by which complementarities arise between these two approaches through the exposition of workhorse models used in different fields of empirical research. Papers denoted with \* are required readings and will be covered during the lectures. Students are strongly encouraged to read them before the corresponding lecture.

### **2.1 Ex-ante and ex-post policy evaluation**

\*Wolpin, Kenneth (2013). Chapter 2 in « The limits of inference without theory,” MIT Press, Cambridge.

Todd Petra E. and Kenneth I. Wolpin (2021). « The Best of Both Worlds: Combining RCTs with Structural Modeling,” Journal of Economic Literature, forthcoming

Galiani Sebastian and Juan Pantano (2021). “Structural Models: Inception and Frontier,” NBER working paper 28698, National Bureau of Economic Research Working Paper Series, April 2021.

### **2.2 Dynamic discrete choice models**

Keane, Michael, Todd, Petra and Wolpin, Kenneth I., (2011). “The Structural Estimation of Behavioral Models: Discrete Choice Dynamic Programming Methods and Applications,” Handbook of Labor Economics, ch 4, p. 331-461, Ashenfelter, O. and Card, D. eds., Elsevier.

\*Todd Petra E. and Kenneth I. Wolpin (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, vol. 96(5), pages 1384-1417, December.

\*Attanasio Orazio P., Costas Meghir and Ana Santiago (2012). “Education Choices in Mexico: Using a Structural Model and a Randomized Experiment to Evaluate PROGRESA,” Review of Economic Studies, vol. 79(1), pages 37-66.

### **2.3 Matching market models**

Agarwal, Nikhil and Paulo Somaini (2020). “Revealed Preference Analysis of School Choice Models,” Annual Review of Economics, 12 (1), 471–501.

\*Bobba, Matteo, Tim Ederer, Gianmarco Leon, Chris Neilson, and Marco Nieddu (2021). « Teacher Compensation and Structural Inequality: Evidence from Centralized Teacher School Choice in Peru » NBER working paper 29068, July 2021.

## **2.4 Dynamic latent factor models**

Cunha, F., Heckman, J., and Schennach, S. (2010). "Estimating the technology of cognitive and non-cognitive skill formation," *Econometrica* 78(3), 883-931.

\*Attanasio, Orazio, Cattan, Sarah, Fitzsimons, Emla, Meghir, Costas and Rubio-Codina, 56 Marta (2020). "Estimating the Production Function for Human Capital: Results from a Randomized Control Trial in Colombia," in *American Economic Review*, 110(1): 48-85.

## **2.5 Job search models**

Flinn, C, and J. Heckman (1982). "New methods for analyzing structural models of labor force dynamics". *Journal of Econometrics*, vol. 18, issue 1, 115-168.

\*Bobba, M., L. Flabbi, and S. Levy (2021). "Labor Market Search, Informality, and Schooling Investments." *International Economic Review*, forthcoming

## **2.6 Other recent papers integrating research designs into structural models (pick one for referee report)**

Allende, Claudia, Francisco Gallego, and Neilson Christopher (2019). "Approximating the Equilibrium Effects of Informed School Choice," *IRS Working Paper*, No 628.

Agostinelli, Francesco, Emilio Borghesan, Giuseppe Sorrenti, 2020. "Welfare, Workfare and Labor Supply: A Unified Evaluation," *Working Papers 2020-083*, Human Capital and Economic Opportunity Working Group.

Bergman, Peter, Adam Kapor and Eric Chan (2020). *Housing Search Frictions: Evidence from Detailed Search Data and a Field Experiment*. NBER WP #27209.

Bobba, Frisanchio and Pariguana (2021). *Perceived Ability and School Choices*, TSE Working Paper, n. 16-660.

Chaparro, Sojourner and Wiswall (2020) "Early Childhood Care and Cognitive Development", NBER Working Paper 26813

Conti, Gabriella & Rita Ginja & Renata Narita (2018). "The value of health insurance: a household job search approach," *IFS Working Papers W18/20*, Institute for Fiscal Studies.

Dinerstein, Neilson and Otero (2020). *The Equilibrium Effects of Public Provision in Education Markets: Evidence from a Public School Expansion Policy*

Franklin, Imbert, Abebe & Mejia-Mantilla (2021), "Urban Public Works in Spatial Equilibrium: Experimental Evidence from Ethiopia".

Foster, Gehrke (2020). "Start What you Finish! Ex-Ante Risk and Schooling Investments in the Presence of Dynamic Complementarities. NBER Working Papers 24041

Hamish Low & Costas Meghir & Luigi Pistaferri & Alessandra Voena (2018). "Marriage, Labor Supply and the Dynamics of the Social Safety Net, "NBER Working Papers 24356

Kreindler, Gabriel (2020) Peak-Hour Road Congestion Pricing: Experimental Evidence and Equilibrium Implications

Mullins, Joseph (2020) A Structural Meta-analysis of Welfare Reform Experiments and Their Impacts on Children

Neilson (2021) Targeted Vouchers, Competition Among Schools and the Academic Achievement of Poor Students

**Distance learning :**

- Interactive virtual classrooms
- MCQ tests and other online exercises / assignments
- Chatrooms