

# Answer Macro Questions with Micro Data & Methods

Xavier Jaravel, LSE

## Course Syllabus

**Course outline:** In this course we will study recent research that sheds new light on macroeconomic questions using data and tools from applied microeconomics. We will cover four styles of empirical work: (1) “reduced-form” approaches (including difference-in-differences, event studies, instrumental variables, Bartik, and value-added research designs); (2) structural models estimated using detailed micro data; (3) “sufficient statistics” research designs, at the intersection of structural and reduced-form methods; and (4) machine learning techniques. Using these tools, we will examine various questions from macroeconomics, outlined below.

**Lectures:** 5 three-hours. Students are expected to have skimmed all papers for the relevant lecture, as indicated below.

## Readings for Lectures

### Lecture 1: Answering Macro Questions using Data and Methods from Applied Micro --- Advances and Challenges

1. Jiménez, G., Ongena, S., Peydró, J.L. and Saurina, J., 2014. Hazardous Times for Monetary Policy: What Do Twenty-Three Million Bank Loans Say About the Effects of Monetary Policy on Credit Risk-Taking?. *Econometrica*, 82(2), pp.463-505.
2. Mian, Atif, and Amir Sufi. "House prices, home equity-based borrowing, and the US household leverage crisis." *The American Economic Review* 101.5 (2011): 2132-2156.
3. Gourinchas, P.O. and Parker, J.A., 2002. "Consumption over the life cycle." *Econometrica*, 70(1), pp.47-89.

### Lecture 2: How Effective is Fiscal Stimulus?

1. Parker, J.A., Souleles, N.S., Johnson, D.S. and McClelland, R., 2013. "Consumer spending and the economic stimulus payments of 2008." *The American Economic Review*, 103(6), pp.2530-2553.
2. Broda, C. and Parker, J.A., 2014. The economic stimulus payments of 2008 and the aggregate demand for consumption. *Journal of Monetary Economics*, 68, pp.S20-S36.

### Lecture 3: Is Inflation Biased?

1. Broda, C. and Weinstein, D., 2010. "Product creation and destruction: Evidence and price implications." *The American Economic Review*, 100(3), pp.691-723.
2. Jaravel, X., 2019. "The unequal gains from product innovations: Evidence from the U.S. retail sector". *The Quarterly Journal of Economics*, Volume 134, Issue 2, May 2019, pp 715–783.

### Lecture 4: How Large are the Gains from Trade and How are They Distributed in Society?

1. Arkolakis, C., Costinot, A. and Rodríguez-Clare, A., 2012. "New trade models, same old gains?." *The American Economic Review*, 102(1), pp.94-130.
2. David, H., Dorn, D. and Hanson, G.H., 2013. "The China syndrome: Local labor market effects of import competition in the United States." *The American Economic Review*, 103(6), pp.2121-2168.

3. Borusyak, K., and Jaravel, X., 2017. "The distributional effects from trade: theory and evidence from the US". *Working paper* ([link](#)).

#### **Lecture 5: How Will Artificial Intelligence Affect the Labor Market?**

1. Mullainathan, S. and Spiess, J., 2017. "Machine learning: an applied econometric approach." *Journal of Economic Perspectives*, 31(2), pp.87-106.
2. Mullainathan, S. and Ludwig, J., 2022. "Algorithmic Behavioral Science: Machine Learning as a Tool for Scientific Discovery". *Working paper*.
3. Webb M., 2020. "The Impact of Artificial Intelligence on the Labor Market". *Working paper* ([link](#)).