Economics 281B Topics in Empirical Macroeconomics

Overview of Course

The goals for this course are the following:

- (i) Introduce students to important papers and research questions with high empirical content and relevance to macroeconomics, broadly defined.
- (ii) Introduce students to a variety of empirical methods and data sources that can be used to test, calibrate and develop models of interest for macroeconomics and related fields.
- (iii) Inspire students to think hard about best practices in empirical work, and how to combine creativity, tools, and high standards to produce successful research.

Course assignments and grading policy for 281a and 281b

- 50% of the grade will be based on a written paper related to material covered in either 281a or 281b. This needs to be double-spaced with 1.50-inch right-hand margin. Include a brief summary of the literature on the topic and relevance of your contribution with references in AER format. A project that does no more than replicate a study on a different or extended data set would be acceptable, but it nevertheless needs to be written as if it were an article to be submitted to AER and include a self-contained explanation of the methodology. Students are strongly encouraged to meet with Professor Hamilton to discuss their topic before beginning the paper. The paper should be turned in to Hamilton's mailbox no later than Friday, March 14.
- The other 50% of the grade will be based on three short projects related to material from the second half of the course (281b), consisting of programming and estimation of models, as well as questions about the readings.

Resources for Class

We will be doing some "real-time" programming, model simulation, and empirical estimation in class, so if you have a laptop please bring it. (If not, you can share with someone who brings a laptop.) It would be useful for you to have some of the following software loaded:

- 1. Matlab
- 2. Dynare (available for free at: http://www.dynare.org/)
- 3. Harald Uhlig's Smets-Wouter Simulator (available for free at: http://www2.wiwi.hu-berlin.de/wpol/html/toolkit/MacAppSoft/Smets Wouters DYNARE CODE IN TOOLKIT installer.exe
- 4. Software for empirical estimation (such as Matlab, Stata, Eviews, etc.)

The following reading list includes many papers on each topic. I expect you to read some, but certainly not the majority of the papers. This reading list is meant to be a useful bibliographic reference so that you may concentrate on topics that interest you.

I. Credibility in Macroeconomic Empirical Work

- Sims, Christopher, "Macroeconomics and Reality," *Econometrica* 48 (January 1980): 1-48.
- Uhlig, Harald, "Economics and Reality," *Journal of Macroeconomics* 34 (March 2012): 29-41.
- Cochrane, John, "Shocks," Carnegie-Rochester Conference Series on Public Policy, 41 (December 1994): 295-364.
- "Symposium: Con out of Economics," *Journal of Economic Perspectives*, Spring 2010, in particular: (i) Angrist, Joshua D., and Jörn-Steffen Pischke. 2010. "The Credibility Revolution in Empirical Economics: How Better Research Design Is Taking the Con out of Econometrics." *Journal of Economic Perspectives*, 24(2): 3-30. (ii) Sims, Christopher A., Spring 2010. "But Economics Is Not an Experimental Science." *Journal of Economic Perspectives*, 24(2): 59-68.

Canova, Fabio and Luca Sala, "Back to Square One: Identification Issues in DSGE Models," *Journal of Monetary Economics* 56 (May 2009): 431-449.

II. The Effects of Government Spending and Taxes

A. Theory

1. Neoclassical Models

- Aiyagari, Rao, Laurence Christiano, and Martin Eichenbaum, "The Output, Employment and Interest Rate Effects of Government Consumption," *Journal of Monetary Economics*, 30 (1992), 73–86.
- Baxter, Marianne, and Robert G. King, "Fiscal Policy in General Equilibrium," *American Economic Review*, 83 (1993), 315–334.
- Atkeson, Andrew, V.V. Chari and Patrick Kehoe, "Taxing Capital Income: A Bad Idea," *Federal Reserve Bank of Minneapolis Quarterly Review*, Summer 1999.

2. New Keynesian Models

- Gali, Jordi, J. David López-Salido, and Javier Vallés, "Understanding the Effects of Government Spending on Consumption," *Journal of the European Economic Association*, 5 (2007): 227-270.
- Drautzburg, Thorsten and Harald Uhlig, "Fiscal Stimulus and Distortionary Taxation," NBER Working Paper No. 17111, June 2011.
- Eggertsson, Gauti, "What Fiscal Policy is Effective at Zero Interest Rates?" *NBER Macroeconomics Annual 2010*.

B. Measuring the Aggregate Effects of Government Spending

- Rotemberg, Julio, and Woodford, Michael, "Oligopolistic Pricing and the Effects of Aggregate Demand on Economic Activity," *Journal of Political Economy*, 100 (1992), 1153–1297.
- Ramey, Valerie A. and Matthew Shapiro, "Costly Capital Reallocation and the Effects of Government Spending," *Carnegie Rochester Conference on Public Policy* (1998).
- Blanchard, Olivier, and Roberto Perotti, "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output," *Quarterly Journal of Economics*, 117 (2002), 1329-1368.
- Mountford, Andrew and Harald Uhlig, "What are the Effects of Fiscal Policy Shocks? Journal of Applied Econometrics 24 (September/October 2009): 960-992.
- Ramey, Valerie A., "Defense News Shocks, 1939-2008: An Analysis Based on News Sources," UCSD manuscript, 2009a. http://econ.ucsd.edu/~vramey/research/Defense_News_Narrative.pdf.

- Ramey, Valerie A., "Identifying Government Spending Shocks: It's All in the Timing," *Quarterly Journal of Economics*, 126 (February 2011): 1-50.
- Burnside, Craig, Martin Eichenbaum, and Jonas Fisher, "Fiscal Shocks and their Consequences," *Journal of Economic Theory*, 115 (2004), 89-117.
- Fisher, Jonas D.M., and Ryan Peters, "Using Stock Returns to Identify Government Spending Shocks," *The Economic Journal*, 120 (May 2010): 414-436.
- Ilzetski, Ethan, Enrique G. Mendoza, Carlos A. Végh, "How Big (Small?) are Fiscal Multipliers?" 2013. "How big (small?) are fiscal multipliers?," Journal of Monetary Economics, Elsevier, vol. 60(2), pages 239-254.
- Blanchard, Olivier J., and Daniel Leigh. 2013. "Growth Forecast Errors and Fiscal Multipliers." *American Economic Review*, 103(3): 117-20.
- Auerbach, Alan and Yuriy Gorodnichenko. 2012a. "Measuring the Output Responses to Fiscal Policy." *American Economic Journal: Economic Policy* 4 (2): 1-27.
- Auerbach, Alan and Yuriy Gorodnichenko. 2012b. "Fiscal Multipliers in Recession and Expansion" forthcoming in *Fiscal Policy After the Financial Crisis*, eds. Alberto Alesina and Francesco Giavazzi, University of Chicago Press.
- Ramey, Valerie A. and Sarah Zubairy, "Government Spending Multipliers in Good Times and in Bad: Evidence from 20th Century Historical Data," October 2013 working paper.

C. Measuring the Aggregate Effects of Taxes

- Blanchard, Olivier, and Roberto Perotti, "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output," *Quarterly Journal of Economics*, 117 (2002), 1329-1368.
- Romer, Christina D., and David H. Romer, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks," *American Economic Review*, 100 (June 2010): 763-801.
- Barro, Robert J., and Charles J. Redlick. 2011. "Macroeconomic Effects from Government Purchases and Taxes." *Quarterly Journal of Economics* 126 (1): 51-102.
- Leeper, Eric M., Todd B. Walker, Shu-Chun Susan Yang, "Fiscal Foresight and Information Flows," *Econometrica* 81 (3) May 2013: 1115-1145.

- House, Christopher L., and Matthew D. Shapiro. 2006. "Phased-In Tax Cuts and Economic Activity." *American Economic Review*, 96(5): 1835-1849.
- Mertens, Karel, and Morten O. Ravn. 2012. "Empirical Evidence on the Aggregate Effects of Anticipated and Unanticipated US Tax Policy Shocks." *American Economic Journal: Economic Policy*, 4(2): 145-81.
- Mertens, Karel, and Morten O. Ravn., "A Reconciliation of SVAR and Narrative Estimates of Tax Multipliers," *Journal of Monetary Economics* in press, available online.
- Mertens, Karel, and Morten O. Ravn. 2013. "The Dynamic Effects of Personal and Corporate Income Tax Changes in the United States." *American Economic Review*, 103(4): 1212-47.

D. Cross-Sectional and Panel Data: Theory and Evidence

- Chodorow-Reich, Gabriel, Laura Feiveson, Zachary Liscow, and William Gui Woolston. 2012. Does State Fiscal Relief During Recessions Increase Employment? Evidence from the American Recovery and Reinvestment Act. *American Economic Journal: Economic Policy* 4, no. 3: 118-145.
- Nakamura, Emi and Jón Steinsson, "Fiscal Stimulus in a Monetary Union: Evidence from U.S. Regions," *American Economic Review* forthcoming.
- Farhi, Emmanuel and Iván Werning, "Fiscal Multipliers: Liquidity Traps and Currency Unions," NBER Working Paper No. 18381, Sept. 2012.
- Nekarda, Christopher J. and Valerie A. Ramey, "Industry Evidence on the Effects of Government Spending," *American Economic Journal: Macroeconomics*: Vol. 3 No. 1 (January 2011).
- Kueng, Lorenz, "Tax News: Identifying the Household Consumption Response to Tax Expectations using Municipal Bond Prices," 2012 working paper.
- Mertens, Karel, "Marginal Tax Rates and Income: New Time Series Evidence," NBER Working paper 19171, June 2013.

II. News

- Beaudry, Paul and Frank Portier, "Stock Prices, News, and Economic Fluctuations," *American Economic Review*, 2006, 96(4), 1293-1307.
- Olivier J. Blanchard & Jean-Paul L'Huillier & Guido Lorenzoni, 2013. "News, Noise, and Fluctuations: An Empirical Exploration," *American Economic Review*, vol. 103(7), pages 3045-70, December.
- Jaimovich, Nir and Sergio Rebelo, "Can News about the Future Drive the Business Cycle?" *American Economic Review*, 99(4) 2009, 1097-1118.
- Barsky, R. B., and E. R. Sims (2011): \News shocks and business cycles," Journal of Monetary Economics, 58(3), 273-289.
- Barsky, Robert. B. and Eric Sims, "Information, Animal Spirits, and the Meaning of Innovations in Consumer Confidence," *American Economic Review*, 102(4), 2012.
- Beaudry, Paul and Frank Portier, "News Driven Business Cycles: Insights and Challenges," July 2013 working paper.
- Miyamoto, Wataru and Nguyen, Thuy Lan, "News Shocks and Business Cycles: Evidence from Forecast Data," Columbia University, Nov. 2013.
- Crouzet, Nicolas and Oh, Hyunseung, "What Do Inventories tell us about News-Driven Business Cycles?" Columbia University, November 2013.

III. Time Use, Demographics, and Macroeconomics

A. Theory

- Benhabib, J, Richard Rogerson, and Randy Wright (1991), "Homework in Macroeconomics: Household Production and Aggregate Fluctuations", Journal of Political Economy, 99, 1166-87.
- Greenwood, Jeremy, Richard Rogerson, and Randall Wright. 1995. "Household Production in Real Business Cycle Theory." In *Frontiers of Business Cycle Research*, ed. Thomas F. Cooley, 157–74. Princeton: Princeton University Press.

B. Long-Term Trends

Keynes, John Maynard, "Economic Possibilities for Our Grandchildren" in *Essays in Persuasion*, London: The MacMillan Press Ltd., 1972, originally published 1931.

- Greenwood, Jeremy, Ananth Seshadri, and Mehmet Yorukoglu, "Engines of Liberation," *Review of Economic Studies* (2005) 72 (1): 109-133.
- Greenwood, Jeremy and Ananth Seshadri, and Guillaume Vandenbroucke, "The Baby Boom and the Baby Bust," *The American Economic Review*, Volume 95, Number 1, March 2005, pp. 183-207(25)
- Ramey, Valerie A., "Time Spent in Home Production in the 20th Century United States," *The Journal of Economic History*, March 2009.
- Ramey, Valerie A. and Neville Francis, "A Century of Work and Leisure," *American Economic Journal Macroeconomics*, July 2009.
- Bailey, Martha J.; Collins, William J. "Did Improvements in Household Technology Cause the Baby Boom? Evidence from Electrification, Appliance Diffusion, and the Amish," *American Economic Journal: Macroeconomics* 3(April 2011): 189-217.
- Fogli, Alessandra and Laura Veldkamp, "Nature or Nurture? Learning and the Geography of Female Labor Force Participation, *Econometrica, July 2011*, v.79(4), p.1103-1138.

C. Recent Trends

- Francis, Neville and Valerie A. Ramey, "Measures of Per Capita Hours and Their Implications for the Technology-Hours Debate," *Journal of Money, Credit, and Banking*, September 2009.
- Moffitt, Robert (2012). "The U.S. Employment-Population Reversal in the 2000s: Facts and Explanations", Brookings Papers on Economic Activity, Fall.
- Fujita, Shigeru, "On the Causes of the Declines in the Labor Force Participation Rate," Philadelphia Federal Reserve Research Rap, November 2013.

http://www.philadelphiafed.org/research-and-data/publications/research-rap/2013/on-the-causes-of-declines-in-the-labor-force-participation-rate.pdf

D. Life-Cycle Changes

- Aguiar, Mark and Erik Hurst (2005). "Consumption versus Expenditure", *Journal of Political Economy*, 113(5), 919-948.
- Aguiar, Mark and Erik Hurst (2007), "Life-Cycle Prices and Production," *American Economic Review* 97 (December 2007): 1533-1559.

Aguiar, Mark and Erik Hurst (2012). "Deconstruction Life Cycle Consumption", *Journal of Political Economy*, 121(3), 437-92.

E. Business Cycle Changes

- Krueger, Alan B. and Andreas Mueller, "Job Search and Unemployment Insurance: New Evidence from Time Use Data," Journal of Public Economics 94 (April 2010): 298-307.
- Krueger, Alan B. and Andreas Mueller, "Job Search, Emotional Well-Being, and Job Finding in a Period of Mass Unemployment: Evidence from High Frequency Longitudinal Data," *Brookings Papers on Economic Activity* Spring 2011.
- Aguiar, Mark, Erik Hurst and Loukas Karabarbounis (2012). "Time Use During the Great Recession," *American Economic Review*, 103(5), 1664-96.

V. The Impact of Uncertainty (only if time permits)

Bloom, Nicholas, "The Impact of Uncertainty Shocks," Econometrica 2009.

Bloom, Nicholas, "Fluctuations in Uncertainty," NBER working paper 19714.

- Bloom, Nicholas, Scott Baker and Steve Davis, "Measuring Economic Policy Uncertainty," June 2013 working paper.
- Ramey, Garey and Valerie Ramey, "Cross-Country Evidence on the Link between Volatility and Growth," *American Economic Review* 85 (December 1995).
- Bloom, Nicholas and Scott Baker, "Does Uncertainty Reduce Growth? Using Disasters as Natural Experiments," NBER working paper 19475, September 2013.