

Micro to Macro Minicourse

Syllabus

Per Krusell & Kurt Mitman

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Location: "Fama" Room at SHoF

Dates:

- Oct 24 & 25 14.30-17.00
- Oct 31 14.30-17.00, Nov 1 9.00-11.30
- Nov 7 & 8 9.00-11.30

Aim of the course: Go over models and empirical analysis of macroeconomics and inequality.

Course plan: Here is a rough outline for the six lectures of the course:

- Introduction, covering a key method: recursive competitive equilibrium. Different macroeconomic household structures: OG vs. dynastic vs. in-between, heterogeneity in one or more dimensions.
- Wealth inequality: models with complete markets, and a discussion of facts surrounding the distribution of wealth, income and consumption.
- Models with (exogenously) incomplete markets: equilibrium determination of wealth inequality. Discussion of models with endogenous default. Short discussion of frictions in the labor markets.
- Aggregate uncertainty. Models and questions: Ricardian equivalence, the welfare costs of business cycles, asset pricing, portfolio choice, aggregate labor supply, and other applications.
- Heterogeneity and macroeconomic policy: implications of heterogeneity for the transmission and efficacy of monetary and fiscal policy.
- Computation of incomplete markets models: steady states, MIT shocks and aggregate uncertainty.

Office hours: By appointment

Course Topics

1. Incomplete markets, no aggregate uncertainty

- Aiyagari, S.R. (1993), Explaining Financial Market Facts: the Importance of Incomplete Markets and Transaction Costs, Federal Reserve Bank of Minneapolis Quarterly Review 17 (No. 1), 1731.
- Aiyagari, S.R. (1994), Uninsured Idiosyncratic Risk and Aggregate Saving, Quarterly Journal of Economics 109, 659684.
- Castañeda, A., J. Díaz-Giménez, and J.-V. Ríos-Rull (2003), Accounting for the U.S. Earnings and Wealth Inequality, Journal of Political Economy 111, 814857.
- Covas, F. (2005), Uninsured Idiosyncratic Production Risk with Borrowing Constraints, manuscript (forthcoming in the Journal of Economic Dynamics and Control).
- Deaton, A. (1991), Saving and Liquidity Constraints, Econometrica 59, 12211248.
- Huggett, M. (1993), The Risk-Free Rate in Heterogeneous-Agents, Incomplete Markets Economies, Journal of Economic Dynamics and Control 17, 953969.
- Huggett, M. (1997), The One-Sector Growth Model with Idiosyncratic Shocks: Steady States and Dynamics, Journal of Monetary Economics 39, 385403.
- Ljungqvist, L. and T.J. Sargent (2004), Chapters 16 and 17 in Recursive Macroeconomic Theory (Second Edition), MIT Press.
- Storesletten, K., C. Telmer, and A. Yaron (2004), Consumption and Risk Sharing over the Life Cycle, Journal of Monetary Economics 51, 609633.

2. Heterogeneity and business cycle analysis

- Den Haan, W. (2001) The Importance of the Number of Different Agents in a Heterogeneous Asset-Pricing Model, Journal of Economic Dynamics and Control 25, 721746.
- Heaton, J. and D.J. Lucas (1996), Evaluating the Effects of Incomplete Markets on Risk Sharing and Asset Pricing, Journal of Political Economy 104, 443487.
- Krusell, P. and A.A. Smith, Jr. (1997), Income and Wealth Heterogeneity, Portfolio Selection, and Equilibrium Asset Returns, Macroeconomic Dynamics 1, 387422.
- Krusell, P. and Smith, A. A. (1998). Income and wealth heterogeneity in the macroeconomy. *Journal of Political Economy*, 106(5):867–896
- Krusell, P. and A.A. Smith, Jr. (2006), Quantitative Macroeconomic Models with Heterogeneous Agents (joint with Anthony A. Smith, Jr.); forthcoming in Blundell, R., Newey, W., and Persson, T. (eds), *Advances in Economics and Econometrics: Theory and Applications*, Ninth World Congress, Cambridge University Press.
- Krueger, D., Mitman, K., and Perri, F. (2016). Macroeconomics and heterogeneity, including inequality. In Taylor, J. and Uhlig, H., editors, *Handbook of Macroeconomics, second edition*. Elsevier

- Kubler, F. and K. Schmedders (2002), Recursive Equilibria in Economies with Incomplete Markets, *Macroeconomic Dynamics* 6, 284306.
 - Miao, J. (2003), Competitive Equilibria of Economies with a Continuum of Consumers and Aggregate Shocks, manuscript (troi.cc.rochester.edu/mias/shockag13.pdf).
 - Telmer, C. (1993), Asset Pricing Puzzles and Incomplete Markets, *Journal of Finance* 48, 18031832.
3. Precautionary savings, Labor market risk and Aggregate Fluctuations
- Ravn, M. O. and Sterk, V. (2018). Macroeconomic fluctuations with hank & sam: an analytical approach. Working paper
 - Bayer, C., Lüttinge, R., Pham-Dao, L., and Tjaden, V. (2015). Precautionary savings, illiquid assets, and the aggregate consequences of shocks to household income risk. Working paper. Revise and resubmit, *Econometrica*
 - Den Haan, W., Rendahl, P., and Riegler, M. (2015). Unemployment (fears) and deflationary spirals. CEPR Discussion Paper 10814
 - Ravn, M. O. and Sterk, V. (2013). Job uncertainty and deep recessions. Working paper. conditionally accepted, *Journal of Monetary Economics*
 - Guerrieri, V. and Lorenzoni, G. (2015). Credit crises, precautionary savings, and the liquidity trap. mimeo
4. Incomplete markets, heterogeneity, and monetary policy
- Gornemann, N., Kuester, K., and Nakajima, M. (2012). Monetary policy with heterogeneous agents. Working paper 12-21, Federal Reserve Bank of Philadelphia
 - Kaplan, G., Moll, B., and Violante, G. (2016). Monetary policy according to hank. Working paper
 - Werning, I. (2015). Incomplete markets and aggregate demand. Working paper
 - Auclert, A. (2016). Monetary policy and the redistribution channel. Working paper
 - Lüttinge, R. (2015). Transmission of monetary policy with heterogeneity in household portfolios. Working paper
 - Hagedorn, M., Manovskii, I., and Mitman, K. (2017). Monetary policy in incomplete market models: Theory and evidence. mimeo
5. Fiscal Policy and Unconventional Monetary Policy
- McKay, A., Nakamura, E., and Steinsson, J. (2015). The power of forward guidance revisited. Working paper. forthcoming, *American Economic Review*
 - Hagedorn, M., Manovskii, I., Luo, J., and Mitman, K. (2018a). Forward guidance. mimeo
 - Cochrane, J. H. (2015). The new-keynesian liquidity trap. Working paper, University of Chicago Booth School of Business
 - Hagedorn, M., Manovskii, I., and Mitman, K. (2018b). The fiscal multiplier. available at <http://papers.nber.org/sched/efgw18>
 - Brinca, P., Holter, H. A., Krusell, P., and Malafry, L. (2016). Fiscal multipliers in the 21st century. *Journal of Monetary Economics*, 77:53 – 69

- Oh, H. and Reis, R. (2012). Targeted transfers and the fiscal response to the great recession. *Journal of Monetary Economics*, 59, Supplement:50 – 64
- McKay, A. and Reis, R. (Forthcoming). The role of automatic stabilizers in the u.s. business cycle. *Econometrica*
- Farhi, E. and Werning, I. (2013). Fiscal multipliers: Liquidity traps and currency unions. mimeo
- Bhandari, A., Evans, D., Golosov, M., and Sargent, T. (2017). Fiscal policy and debt management with incomplete markets. *Quarterly Journal of Economics*
- Bhandari, A., Evans, D., Golosov, M., and Sargent, T. (2018). Inequality, business cycles and monetary-fiscal- policy

6. Housing and Aggregate Fluctuations

- Kaplan, G., Mitman, K., and Violante, G. (2017). The housing boom and bust: Model meets evidence. Working paper
- Hedlund, A. (2015). Failure to launch: Housing, debt overhang, and the inflation option during the great recession
- Hedlund, A., Karahan, F., Mitman, K., and Ozkan, S. (2016). Monetary policy, heterogeneity and the housing channel. Working paper